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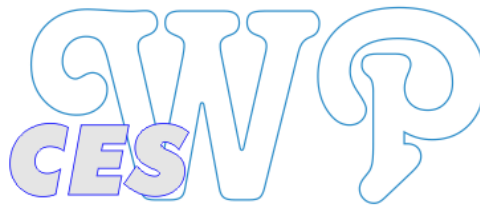
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Volume X, Issue 2, 2018

Table of contents

Effects of US Monetary Policy on Eastern European Financial Markets	149
<i>Viorica CHIRILA, Ciprian CHIRILA</i>	

Conceptualization of economic security in the context of energy markets' integration	167
<i>Uliana BIHUN</i>	

The new economic governance framework of the European Union	182
<i>Ioana - Sorina MIHUȚ</i>	

Organizational learning: cognitive and behavioural changes and implications in higher education institutions	198
<i>Alexandra Luciana GUȚĂ</i>	

International terrorism and the basic ways to deal with it at the present stage	213
<i>Sergey Anatolievich VAVRENYUK</i>	

The anatomy of Russia's grip on Armenia: bound to persist?	234
<i>Aram TERZIAN</i>	

Effects of US Monetary Policy on Eastern European Financial Markets

Viorica CHIRILA*, Ciprian CHIRILA**

Abstract

The announcement made by the Fed Chairman, Ben Bernanke, on May 22, 2013 regarding the reduction of the quantitative easing programme that took by storm the financial markets determined the significant volatility increase of the US markets and it was not limited to it. The financial markets in the emerging countries that benefited from an increase in their financial flows during the quantitative easing programme were the most affected by this announcement through the volatility increase, depreciation of exchange rate and massive capital outflows. The current paper tackles volatility and volatility transmission from the US market determined by the change of monetary policy to the Eastern European markets. To study the volatility of each stock and bond market of the countries in Eastern Europe, we used univariate heteroscedastic models while for the analysis of volatility transmission from the US market to the Eastern European markets we used the multivariate heteroscedastic models. The results obtained confirm the volatility transmission both on the stock markets, with the exception of Latvia and Lithuania, and on the bond markets in Eastern Europe.

Keywords: stock market, bond markets, return spillover, volatility spillover, multivariate heteroscedastic model

Introduction

After the latest economic and financial crisis from 2008-2009, USA has adopted a relaxed monetary policy known as quantitative easing (QE). The programme has aimed to reach performance on the financial markets. This programme has translated into the monthly purchase of long-term financial assets with a total worth of 85 billion in 2013. The effects of this policy are embodied in the growth of the monetary basis, the decrease in the deflation pressure (occurred due to the crisis), very low interest rates, the flattening of the return curve. All these have determined the improvement of the economic activity in the USA. Yet, the low returns have caused great capital inflows in emerging countries whose attractive feature is the higher return obtained with a higher risk (Aizenman *et al.*, 2014). Even if the emerging countries were characterised during the QE by current account deficit,

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slow economic growth, high inflation, budget deficit and important public debt relative to GDP, they received significant short-term international financial flows.

On the 22nd of May 2013, the Chairman of the Federal Reserve (Fed), Ben Bernanke, makes an unexpected declaration in the Congress regarding the tapering of the quantitative easing programme. At that moment, the conclusion that the economy had become strong enough in order not to need stimulation anymore had been reached. The tapering talk surprised both the USA and the emerging markets. This unforeseen information determined an increase in the volatility of the markets and significant changes of the emerging markets. The anticipation of the interest rate growth in the USA determines massive capital outflows from the emerging markets (Cevik *et al.*, 2016).

Gosh and Saggur (2017) study the transmission of volatility determined by Bernanke's announcement regarding QE tapering towards the financial markets of the following emerging countries: Brazil, Russia, China, India, South Africa, Indonesia, Malaysia and Thailand. The results obtained confirm the significant transmission of volatility from the USA to the emerging countries studied.

Volatility transmission, in a globalised world, plays an important role in the diversification of financial asset portfolios. This is the reason why before the previously mentioned study, the volatility transmission among the capital markets drew the attention of many researchers and investors. The literature contains studies conducted regarding volatility transmission among the capital markets, between developed and emerging capital markets, among different capital markets of the same country, among the capital markets of countries which have common economic, financial and even monetary features.

Volatility transmission among developed capital markets appears in the studies conducted by Tanizaki and Hamori (2009), In (2007), Diebold and Yilmaz (2012), Baele (2005). The study of volatility transmission among the stock markets in Japan, UK and USA made by Tanizaki and Hamori (2009) highlights that there is bidirectional transmission between the stock markets in Japan and the USA, respectively between UK and the USA during April 2, 1984 - February 2, 2007. In (2007) approaches the swap markets from the same countries and identifies a significant bidirectional volatility transmission between Japan and UK during January 8, 1996 - June 29, 2001.

Diebold and Yilmaz (2012) study volatility transmission among the stock market, bond market, stock exchange market and goods markets in the USA during January 1999 – January 2010. The results obtained confirm a limited transmission of volatility until the global financial crisis in 2007 even if the markets are characterised by important volatility and at the same time a volatility transmission that intensifies during the crisis. The stock market has the most significant volatility transmission towards other markets.

Volatility transmission among the EU countries and especially West European countries represented Baele (2005)'s research topic. Volatility transmission was studied in those countries that went through a growth of economic, financial and monetary integration. The results obtained confirm the increase in volatility transmission along with the integration growth, both from the US markets to the European markets and the shocks of the European Union towards the individual markets of the composing countries. This study also confirms the lack of a constant volatility transmission, result also confirmed by the study belonging to Diebold and Yilmaz (2012), which mentions the explosive nature of volatility transmission.

Chirilă, Turturean and Chirilă (2015) study the volatility transmission between the stock markets from Eastern European countries: Romania, Hungary, Czech Republic, Bulgaria and Poland and the Euro Zone stock market. The results obtained for the period December 31, 2014 – April 21, 2015 confirm that volatility transmission from the Euro zone to the Eastern European markets is unidirectional and is performed to a little extent, while the volatility transmission between the Eastern European countries is bidirectional and more significant.

Diebold and Yilmaz (2009) identify the crises that could generate volatility transmission and they group them in major events and additional important events. The results obtained confirm the volatility transmission determined both by major events and by additional events. Among the major economic events they include: the currency exchange crisis from Eastern Asia in 1997, the crisis in Russia during June-August 1998, the change of capital flows on the emerging markets from May-June 2006 and the turmoil caused by the real estate loan market started in 2007. Among the additional events they count: the Brazil crisis in 1999, the terrorist attack in 2001 and the dollar crisis in 2005.

The studies of volatility transmission was especially performed during the economic and financial crises. After the announcement made by Ben Bernanke regarding the QE tapering, Gosh and Sagggar (2017) underline the need to study the volatility transmission determined by the change of policies and problems of advanced economies towards the economies of emerging markets.

The aim of the current study is to contribute to the existing literature on the analysis of volatility transmission from the US market to the Eastern European countries, volatility determined on the US markets by the changes in the monetary policy. Since the US decision affected especially the emerging countries, the current paper aims to determine to which extent the volatility caused in the USA by the unexpected notice of QE tapering affected the Eastern European capital markets and if this volatility was transmitted both on the stock and bond markets. Therefore, this study will answer the following questions: Has the volatility of US markets transmitted to the stock and bond markets in the Eastern European countries? Are the shocks or the new information that occur on the US market

transmitted to the stock and bond markets in the Eastern European countries? Is the return of the US markets transmitted to the stock and bond markets in the Eastern European countries?

To answer these questions, we used univariate heteroscedastic models and namely, the GARCH(1,1) model in order to estimate the conditional volatility of stock and bond markets. We also used multivariate heteroscedastic models in order to estimate the transmission from the US market to the Eastern European markets both of shocks and volatility. The estimated models offered information also on the reactions of the markets to their own shocks and volatility.

The results obtained highlight cross-mean spillovers effects on the stock markets from Hungary, Bulgaria and Poland and volatility spillovers from the US market to the Eastern European stock markets with the exception of Latvia and Lithuania. The volatility of the US market is also transmitted to the bond market in Eastern Europe.

1. Literature review

The studies related to the change of monetary policy in the USA focused on: the impact determined by Fed tapering announcements on the economies of emerging markets by means of the macroeconomic indicators (Mishra *et al.*, 2014) the in-depth study of one of the most affected emerging country, India, by Basu, Eichengreen and Gupta (2014), the study of volatility transmission from the US markets to Brazil, India, China, South Africa, Indonesia, Thailand, Malaysia (emerging countries) performed by Gosh and Saggur (2017).

Mishra, Moriyama, N'Diaye and Nguyen (2014) study the reaction of the 21 emerging markets. The results obtained by the researchers demonstrate that the market reaction is different and is influenced by several factors such as: the economic and financial structure, the value of basic macroeconomic indicators, the type of the macroprudential policy and the economic ties with China. The countries that were characterised by strong macroeconomic indicators, financial depth and more restrictive macroprudential policies had markets less affected by Fed tapering. The countries that had commercial trading with China were also less affected by the change of the US monetary policy.

A detailed analysis of the impact the change of the US monetary policy had on India is conducted by Basu, Eichengreen and Gupta (2014). India was the most affected emerging country. The national currency reduced by 18% and the currency exchange reserves, the bond and stock prices greatly increased. The existence of a difficult economic situation three years before the USA event which translated into the decrease of macroeconomic indicators, the previous occurrence of important flows of foreign capital, great gold imports, the current account deficit, over-assessed currency exchange are among the causes identified by Basu, Eichengreen and Gupta (2014).

Aizenman, Binici and Hutchinson (2014) determine the impact of the tapering announcement made by Fed Chairman Bernanke on the financial markets in the emerging countries. The results obtained confirm differentiated effects on the emerging markets. Aizenman, Binici and Hutchinson (2014) group the emerging countries in two categories: a group of countries with “robust” fundamentals characterised by low external debits, current account excess and great international reserves and another group with “fragile” fundamentals. The countries in the first group have more developed financial markets and are more affected by tapering than the countries with “fragile” fundamentals. We would like to mention in the second group the following countries in the Eastern Europe: Romania, Poland, Lithuania, Latvia, and Czech Republic while Hungary and Bulgaria are part of the group with “robust” fundamentals.

2. Methodology

For the estimation of stock and bond market volatility, we used the autoregressive conditional models. The univariate GARCH models were developed after the first papers published by Engle (1982) and Bollerslev (1986). Being adapted to the statistical characteristics specific to financial time series, the use of autoregressive heteroscedastic models within the univariate frame, can provide information only about an individual capital market. The heteroscedastic models within the multivariate frame (MGARCH) Bollerslev, Engle and Nelson (1994) appeared very quickly and can be used to complete an overall perspective of the common evolution of capital markets. These models allow the modelling of volatility transmission among markets providing information both for volatilities and for co-volatilities in the markets analysed.

To estimate the volatility of stock and bond markets we used the GARCH(1,1) model which is the most adequate for volatility modelling according to the works of Bollerslev *et al.* (1994), Charles and Darné (2006), Nikkinena *et al.* (2008) and Ramlall (2010). The GARCH model allows the modelling of volatility variation in time, of the leptokurtic characteristic of financial variables and the cluster presentation of volatility. A heteroscedastic process is represented by two equations, the mean equation and the conditional variance equation.

The Augmented Dickey-Fuller and Philips Perron tests were used to test the stationarity of the variables. Since these tests show that the variables, the variation of the stock price and interest rate for governmental bonds, are stationary, we can estimate heteroscedastic models where the mean equation should be represented by ARMA(p,q).

The Generalized ARCH (GARCH) model is sufficient to capture the volatility clustering (Brooks, 2014)

The equation of the mean of univariate model GARCH(1,1) has the general ARMA(p,q) form:

$$r_t = \alpha_0 + \alpha_1 r_{t-1} + \dots + \alpha_p r_{t-p} + \varepsilon_t + \beta_1 \varepsilon_{t-1} + \dots + \beta_q \varepsilon_{t-q}, \quad \varepsilon_t = \sigma_t z_t \quad (1)$$

The equation of the conditional variance specific to the GARCH(1,1) model has the form:

$$\sigma_t^2 = \delta_0 + \delta_1 \varepsilon_{t-1}^2 + \phi_1 \sigma_{t-1}^2 \quad (2)$$

where: r_t - log returns of a stock market between the moment t-1 and t; ε_t - residual variable; σ_t^2 , σ_{t-1}^2 - conditional variance at moment t, respectively t-1; z_t - identically distributed standardized residuals.

In order for the variance σ_t^2 to be positive the parameters of the equation of conditional variance $\delta_0, \delta_1, \phi_1$ are non-negative and meet the condition $\delta_1 + \phi_1 < 1$. A lot of financial series have $\delta_1 + \phi_1$ close to 1, which means that they have persistence in volatility.

To determine the spillovers volatility from the US stock market to the Central and Eastern European capital markets we used the heteroscedastic autoregressive multivariate models. If the autoregressive univariate models allow the consideration of volatility clustering characteristic on an individual market of a country or for a financial asset, autoregressive multivariate models allow modelling the volatility transmission between markets or financial assets. We can thus analyse co-volatilities on at least Eastern two markets.

The VECH multivariate heteroscedastic model was proposed by Bollerslev *et al.* (1988). It is one of the most frequently used models because, unlike others, has a reduced number of parameters. The admissibility and stationarity conditions are also simple (Scherrer and Ribarits, 2007)

The equation of the mean within the VECH model is specified as follows:

$$R_{it} = \mu_i + u_{it}, \quad (i = 1, 2) \text{ and } u_t / I_{t-1} \square N(0, H_t) \quad (3)$$

where: u_{it} - is the conditional residual term; H_t - the conditional variance at time t.

The VECH model according to Engle and Wooldridge (1988)'s proposal can be presented as follows:

$$VECH(H_t) = C + A \times VECH(\Xi_t, \Xi'_{t-1}) + B \times VECH(H_{t-1}) \quad (4)$$

where: H_t - a $N \times N$ conditional variance-covariance matrix; ε_t - a $N \times 1$ disturbance vector; I_{t-1} - the information at the moment $t-1$; C - dimensional vector with $n(n+1)/2$ parameters; A, B square matrices with $n(n+1)/2$ parameters;

For $N=2$ Brooks (2014) defines the elements of the VECH model as follows:

$$H_t = \begin{bmatrix} h_{11t} & h_{12t} \\ h_{21t} & h_{22t} \end{bmatrix}, \quad \varepsilon_t = \begin{bmatrix} u_{1t} \\ u_{2t} \end{bmatrix}, \quad C = \begin{bmatrix} c_{11} \\ c_{21} \\ c_{31} \end{bmatrix}$$

$$A = \begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{bmatrix}, \quad B = \begin{bmatrix} b_{11} & b_{12} & b_{13} \\ b_{21} & b_{22} & b_{23} \\ b_{31} & b_{32} & b_{33} \end{bmatrix}$$

The $VECH(H_t)$ operator implies taking into account the 'upper triangular' part of the matrix and stacks each element into a vector with a column. In the case of $N=2$ $VECH(H_t)$ becomes:

$$VECH(H_t) = \begin{bmatrix} h_{11t} \\ h_{22t} \\ h_{12t} \end{bmatrix}$$

where h_{iii} represents the conditional variances at the moment t of two returns of the markets, h_{ijt} when $i \neq j$ represents the conditional co-variances between the stock markets.

If we have the returns of two capital markets by means of the VECH model 21 parameters can be estimated. In order to reduce the number of parameters, Bollerslev, Engle and Wooldridge (1988) assume A and B to be diagonal. The model, known as diagonal VECH, (DVECH), is:

$$h_{ij,t} = c_{ij} + f_{ij}u_{i,t-1}u_{j,t-1} + g_{ij}h_{ij,t-1} \quad \text{for } j, i = 1, 2 \tag{5}$$

The equations of the diagonal model are:

$$\begin{aligned} h_{11,t} &= c_{11} + f_{11}u_{1,t-1}^2 + g_{11}h_{11,t-1} \\ h_{12,t} &= c_{12} + f_{12}u_{1,t-1}u_{2,t-1} + g_{12}h_{12,t-1} \\ h_{22,t} &= c_{22} + f_{22}u_{2,t-1}^2 + g_{22}h_{22,t-1} \end{aligned} \tag{6}$$

The parameters of the GARCH multivariate models, under the assumption of conditional normality can be estimated by maximising the log-likelihood function:

$$\ell(\theta) = -\frac{TN}{2} \log 2\pi - \frac{1}{2} \sum_{t=1}^T (\log |H_t| + \varepsilon_t' H_t^{-1} \varepsilon_t) \tag{7}$$

where: θ are all the parameters to be estimated, N the number of the return series of the markets and T the number of observations.

To obtain optimal values of the parameters we use the BHHH algorithm (Berndt *et al.* 1974).

The shocks determined by the own volatility of a market are measured by means of the elements on the diagonal of the A matrix which are marked with a_{11} and a_{22} . The parameters which are not on the diagonal, a_{ij} , for which $i \neq j$, indicate cross-volatility shocks. The elements on the diagonal of the B matrix, b_{11} and b_{22} show own-volatility spillovers or, in other words, show the previous volatility transmission on the current volatilities of a market. The elements that are not on the diagonal of the B matrix, b_{ij} , where $i \neq j$ highlight cross-volatility spillovers and signify the volatility transmission between the capital markets.

3. Empirical Study

The markets considered in this study are from the following emerging countries in the Central and Eastern Europe: Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia, while the period under consideration is January 1, 2012 – July 31, 2014.

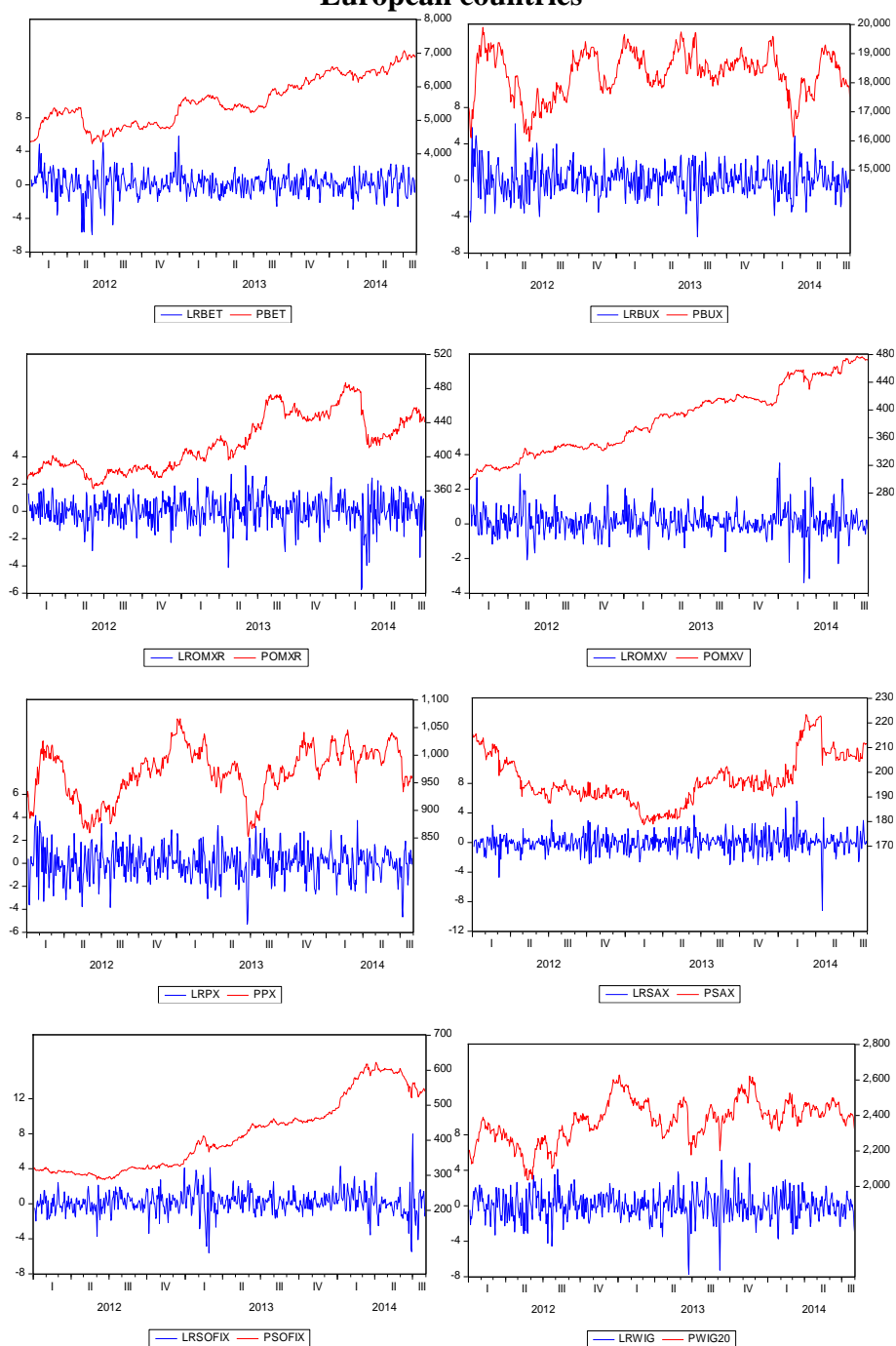
The variables needed for the empirical study of this paper are registered on a daily basis and are represented by: the values of the blue-chip indices of the stock exchanges in the countries analysed and the interest rate for the treasury certificates issued on a 10-year period. The blue-chip indices of these countries are SOFIX, PX, BUX, OMXR, OMXV, WIG 20, BET and respectively SAX. In order to test the volatility transmission during taper talk, we took into consideration the index S&P 100 for the US.

The daily relative variation of the markets under consideration was computed according to the formula corresponding to log-returns as follows:

$$r_t = (\ln(P_t) - \ln(P_{t-1})) \cdot 100 \quad (7)$$

where: P_t , P_{t-1} represents the value of the index at the moment t, respectively t-1.

Figure 1. The evolution of indices value and the returns of capital markets in the Eastern European countries



Note: a) PBET; PBUX; POMXR; POMXV; PPX; PSAX; PSOFIX; PWIG20 represent the values of the indices of the stock markets in Romania, Hungary, Lithuania, Latvia, Czech Republic, Slovakia, Bulgaria and Poland; b) LRBET; LRBUX; LROMXR; LROMXV; LRPX; LRSAX; LRSOFIX; LRWIG20 represent the returns of the stock markets in Romania, Hungary, Lithuania, Latvia, Czech Republic, Slovakia, Bulgaria and respectively Poland.

The graphical representation of the evolution of stock markets in Eastern Europe as well as of their returns is presented in Figure 1. It shows that returns and volatilities of the Eastern European markets have characteristics specific to the financial time series. Volatilities are presented by clusters which shows that a new information determines volatility which persists in time. We also notice the increase in volatility during the downturn periods of the markets and reduction of volatility during the growth periods of the markets. The figure also suggests that the average returns of the markets are stationary. The fact that market volatilities are within certain limits and do not increase infinitely makes us ascertain that volatilities are stationary.

The daily returns of the stock markets considered and the statistical descriptive indicators are presented in table 1.

Table 1. The statistical descriptive indicators for the returns of the stock markets in Central and Eastern Europe during 1.01.2012 – 7/31/2014

	LRBET	LRBUX	LR0MXR	LR0MXV	LRPX	LR0SAX	LR0SOFIX	LRWIG
Mean	0.06917	0.00327	0.02480	0.06763	0.00521	-0.00293	0.07697	0.00834
Median	0.04523	0.00000	0.00000	0.01228	0.00000	0.00000	0.02136	0.00544
Maximum	3.41265	4.13239	3.29332	2.91027	3.35807	5.44731	5.63831	3.47861
Minimum	-4.2966	-3.8813	-5.8804	-3.8437	-3.9636	-5.0260	-4.7371	-5.2428
Std. Dev.	0.86182	1.08418	0.80584	0.51932	0.94262	0.95916	0.87992	1.04310
Skewness	-0.5300	0.1353	-0.6805	-0.1547	-0.1906	0.0028	-0.0833	-0.3886
Kurtosis	6.89217	4.11359	8.16262	10.4438	4.08577	8.538438	8.53699	5.49006
Jarque-Bera	456.321	36.827	799.329	1556.49	37.1362	860.159	860.490	190.815
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	673	673	673	673	673	673	673	673

Source: data processed by means of the Eviews

Note: LRBET; LRBUX; LR0MXR; LR0MXV; LRPX; LR0SAX; LR0SOFIX; LRWIG20 represent the returns of the stock markets in Romania, Hungary, Lithuania, Latvia, Czech Republic, Slovakia, Bulgaria and respectively Poland

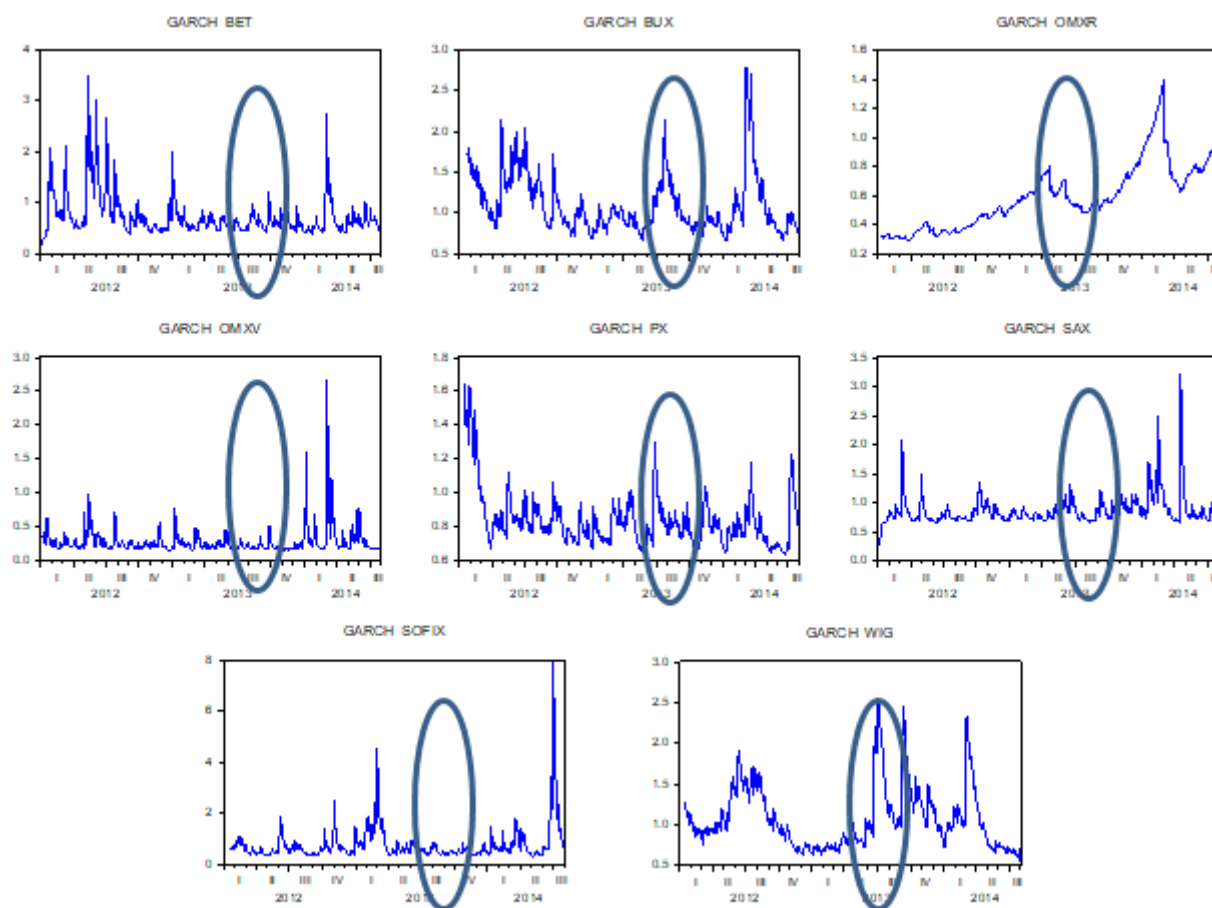
The returns of the capital markets are stationary. The results of the stationarity tests are presented in Appendix. The statistical descriptive indices presented in Table 1 show that investors should expect to get profit on these stock markets with the exception of the Slovak stock market which has a negative average return.

The highest average return belongs to the BET index computed for the Romania's stock market which does not have the highest total risk. The highest risk can be found on the stock market in Hungary where the BUX index is computed. The distributions of all returns are characterised by fat tails, because the values of all kurtosis indices are much higher than 3 and it is obvious that due to this feature it does not follow normal distributions laws as the Jarque-Bera test also indicates.

To estimate the volatility of the stock markets from the countries analysed as well as of the bond markets we used heteroscedastic models and namely the GARCH(1,1) model. The estimation of this model for the returns of the stock markets allows us to estimate the conditional volatility of

the markets studied. The conditional volatilities obtained are graphically represented for both the stock markets and the bond markets in Figure 2 and respectively Figure 3.

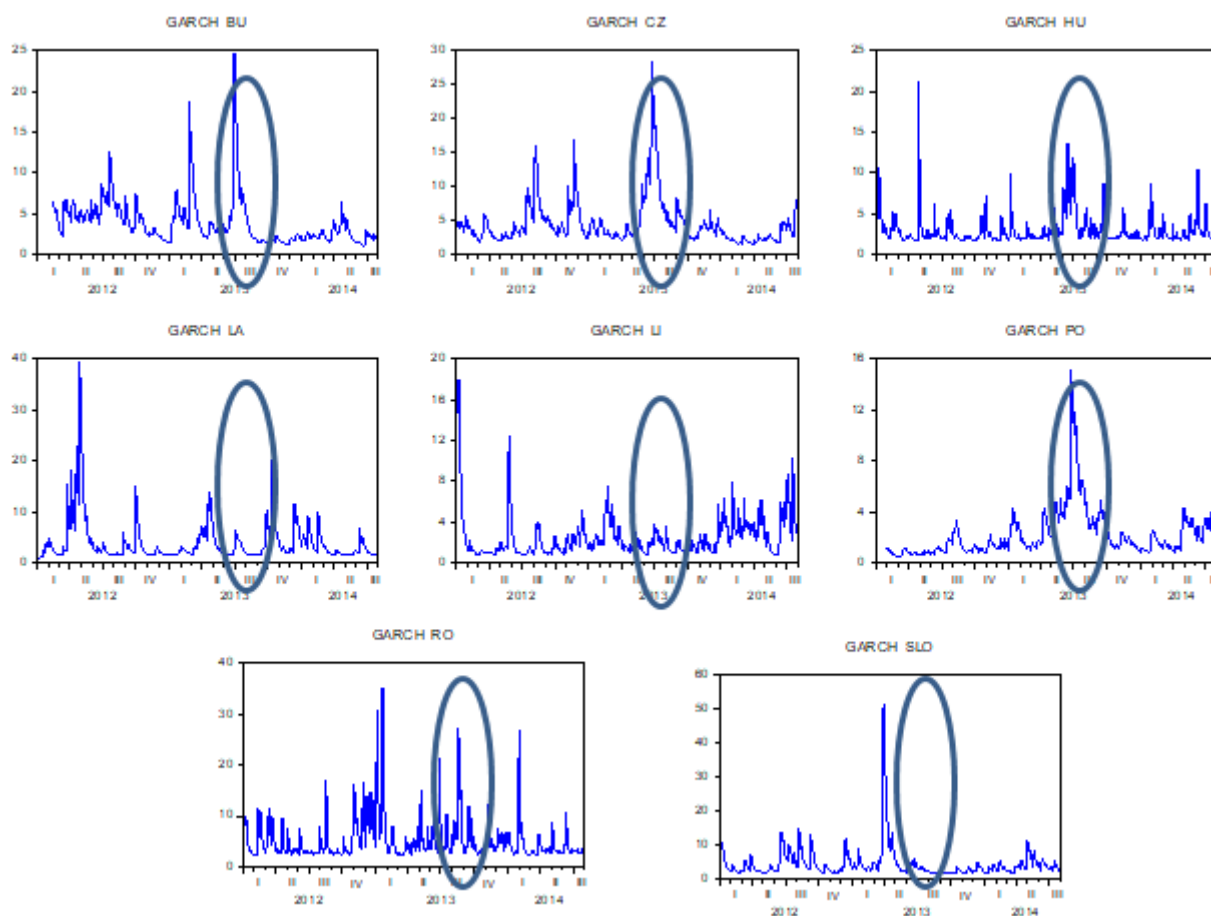
Figure 2. Volatility of stock markets



Note: GARCH_BET, GARCH_BUX, GARCH_OMXR, GARCH_OMXV, GARCH_PX, GARCH_SAX, GARCH_SOFIX, GARCH_WIG represent the volatility of the stock markets estimated through the GARCH(1,1) model from Romania, Hungary, Latvia, Lithuania, Czech Republic, Slovakia, Bulgaria, Poland

The stock markets in Romania, Hungary, Czech Republic, Slovakia and Poland show a significant volatility at the beginning of 2012 which decreases towards the end of the year. After May 22, 2013, the moment when the Chairman of Federal Reserve (Fed), Ben Bernanke, made the announcement, the Eastern European countries have volatility increases but only the stock markets in Hungary, Czech Republic and Poland have the same intensity as that from the start of 2012. Moreover, these stock markets are the most developed in the region which could confirm results previously found according to which more developed emerging capital markets had been more affected by tapering talk. The stock market in Latvia is the only one whose volatility decreases after the announcement about the change of monetary policy in the US but its volatility will increase again by the end of 2013.

Figure 3. Volatility of bond markets in the Eastern European countries



Note: GARCH_BU, GARCH_CZ, GARCH_HU, GARCH_LA, GARCH_LI, GARCH_PO, GARCH_RO, GARCH_SLO represent the volatility of bond markets estimated through the GARCH(1,1) model in Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia

The bonds in the Czech Republic, Hungary, Latvia, Lithuania, and Poland register higher volatility towards the end of 2012, situation also met on the stock markets. After the announcement regarding the change of monetary policy in the US, the bond volatility on all markets registered major growth with just one exception: Lithuania.

For the volatility transmission from the US stock market to the stock and bond markets in the Eastern European countries we estimated multivariate GARCH models where a variable is represented by the return of the US stock market and another variable is represented by the return of a stock market in Eastern Europe. The parameters estimated for the MGARCH model alongside the probabilities associated to the significance tests are presented in Table 2. Since the activity of the markets is influenced by time differences we took into consideration a 1-day lag.

In Table 2 the M(1,1) parameters present own-mean spillovers on the US stock market and respectively M(2,2) on each of the Eastern European markets. All the parameters estimated M(1,1) and M(2,2) are statistically significant therefore they can confirm the transmission of own return both

on the US stock market and on the Eastern European markets. The M(1,2) parameters highlight the volatility transmission from the US stock market to the Eastern Europe markets. We may find the confirmation for positive cross-mean spillovers effects from the US to the markets in Hungary, Bulgaria and Poland. The biggest and most significant cross-mean spillovers impact belongs to Poland (0.09). Most of the Eastern European countries are not affected by a return transmission from the US to these ones during the period under study, therefore previous shocks of the returns of US stock market did not affect greatly the Eastern European stock markets.

Table 2. Volatility spillovers from US to the stock markets in Eastern Europe

	BET	Prob.	BUX	Prob.	OMR	Prob.	OMV	Prob.	PX	Prob.	SAX	Prob.	SOFIX	Prob.	WIG	Prob.
C(1)	0.06	0.00	0.07	0.00	0.07	0.00	0.07	0.00	0.06	0.00	0.07	0.00	0.07	0.02	0.07	0.00
C(2)	0.04	0.15	0.01	0.64	-0.02	0.27	0.04	0.02	0.008	0.80	-0.004	0.89	0.09	0.03	0.02	0.45
M(1,1)	0.08	0.00	0.07	0.00	0.09	0.00	0.09	0.00	0.11	0.00	0.09	0.00	0.09	0.00	0.10	0.00
M(1,2)	-0.0003	0.51	0.004	0.04	0.01	0.31	0.01	0.83	0.02	0.38	-0.0009	0.76	0.05	0.06	0.09	0.01
M(2,2)	0.08	0.00	0.04	0.02	0.006	0.00	0.05	0.00	0.01	0.00	0.13	0.00	0.05	0.00	0.15	0.00
A1(1,1)	0.12	0.00	0.11	0.00	0.13	0.00	0.14	0.00	0.12	0.00	0.13	0.00	0.13	0.00	0.10	0.00
A1(1,2)	-0.02	0.00	0.001	0.92	0.04	0.17	0.009	0.80	0.01	0.45	0.01	0.56	0.09	0.05	0.08	0.00
A1(2,2)	0.13	0.00	0.05	0.00	0.02	0.00	0.13	0.00	0.03	0.00	0.07	0.00	0.14	0.00	0.08	0.00
B1(1,1)	0.70	0.00	0.74	0.00	0.69	0.00	0.67	0.00	0.65	0.00	0.69	0.00	0.67	0.00	0.70	0.00
B1(1,2)	0.91	0.00	0.93	0.00	0.35	0.38	0.79	0.41	0.86	0.00	0.93	0.00	-0.58	0.00	0.58	0.00
B1(2,2)	0.75	0.00	0.89	0.00	0.92	0.00	0.67	0.00	0.91	0.00	0.78	0.00	0.78	0.00	0.77	0.00

Note: a) i=1 for the US market, i=2 for the Eastern European markets; b) BET, BUX, OMR, OMV, PX, SAX, SOFIX, WIG represent the returns of the stock markets in Romania, Hungary, Lithuania, Latvia, Czech Republic, Slovakia, Bulgaria and respectively Poland

Source: data processed by means of the Eviews

The presence of the ARCH effects is highlighted by the estimated parameters $a(1,1)$ and $a(2,2)$. The significant estimations $a(1,1)$ show that the shocks that occur on the US market will have the biggest impact on its future volatility. The estimations $a(2,2)$ show the significant presence of own-volatility shock for all the 8 markets from Eastern Europe. Thus, the presence of the ARCH effects shows that they are more influenced by own shocks, among which the market in Bulgaria holds the first place ($a(2,2)=0,14$). The results obtained are in accordance with the results obtained by Chirilă *et al.* (2015). The new information that appears on the US stock market affects the volatility of the Romanian stock market to a lesser extent than its own shocks, Poland to an equal extent to its own shocks and Bulgaria to a greater extent than its own shocks.

The persistence of stock market volatility is highlighted by the estimations $b(1,1)$ and $b(2,2)$. All the stock markets are characterised by persistent volatilities, therefore volatility maintains in time, the market volatility is influenced by its previous values and that is why it is presented by clusters. The markets from Latvia ($b22=0.92$) and Czech Republic ($b(2,2)=0.91$) are characterised by the highest persistence of volatility while at the opposite spectrum is Lithuania. The existence of volatility spillovers from the US market to the Eastern Europe markets is highlighted by the $b12$ coefficients. These are statistically significant therefore the volatility from the US stock market is transmitted to

almost all Eastern European countries. The only exceptions are the stock markets from Latvia and Lithuania.

Table 3. Volatility spillovers from US to the bond markets in Eastern Europe

	Bul	Prob.	RCeh	Prob.	Hun	Prob.	Lat	Prob.	Lith	Prob.	Pol	Prob.	Rom	Prob.	Slov	Prob.
C(1)	0.07	0.00	0.08	0.00	0.08	0.00	0.08	0.00	0.07	0.00	0.08	0.00	0.07	0.00	0.08	0.00
C(2)	-0.03	0.58	-0.18	0.00	-0.15	0.01	-0.15	0.00	-0.15	0.00	-0.11	0.01	-0.02	0.68	-0.17	0.01
M(1,1)	0.06	0.00	0.06	0.00	0.07	0.00	0.06	0.00	0.06	0.00	0.06	0.00	0.06	0.01	0.06	0.00
M(1,2)	-0.001	0.63	0.003	0.15	-0.008	0.26	-0.005	0.78	-0.0003	0.90	-1E-05	0.98	-0.006	0.17	-0.005	0.24
M(2,2)	0.12	0.00	0.18	0.00	0.65	0.00	0.22	0.00	0.15	0.00	0.02	0.02	0.79	0.00	0.32	0.00
A1(1,1)	0.13	0.00	0.11	0.00	0.10	0.00	0.11	0.00	0.11	0.00	0.11	0.00	0.094	0.00	0.10	0.00
A1(1,2)	0.008	0.51	0.001	0.81	0.01	0.26	0.04	0.45	-0.03	0.19	0.01	0.17	-0.02	0.12	0.01	0.22
A1(2,2)	0.08	0.00	0.09	0.00	0.17	0.00	0.11	0.00	0.16	0.00	0.09	0.00	0.23	0.00	0.13	0.00
B1(1,1)	0.74	0.00	0.76	0.00	0.76	0.00	0.76	0.00	0.76	0.00	0.76	0.00	0.79	0.00	0.77	0.00
B1(1,2)	0.95	0.00	0.97	0.00	0.94	0.00	0.77	0.08	0.92	0.00	0.98	0.00	0.95	0.00	0.95	0.00
B1(2,2)	0.88	0.00	0.86	0.00	0.61	0.00	0.84	0.00	0.77	0.00	0.89	0.00	0.63	0.00	0.79	0.00

Note: a) $i=1$ for the US market, $i=2$ for the Eastern European markets; b) Bul, RCeh, Hun, Lat, Lith, Pol, Rom, Slov represent the returns of the bond markets in Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland Romania and respectively Slovakia.

Source: data processed by means of the Eviews

The same MGARCH models are estimated to determine volatility spillovers to the bond markets in the Eastern European countries.

The results obtained and presented in table 3 prove that the US bond market presents own-mean spillovers because the M(1,1) coefficients are significant. The bond markets from the Eastern European countries are also characterised by own-mean spillovers, Romania and Hungary having the highest coefficients $M(2,2)=0.79$ and $M(2,2)=0.65$, are mostly affected while the bond market from Poland has the smallest coefficient of only 0.02. The bond markets in Eastern Europe, without any exception, are not characterised by cross-mean spillovers; moreover the US market does not transmit return to the bond markets from Eastern Europe.

All the bond markets considered are characterised by the presence of ARCH effects, thus, the shocks or the new information occurring on the markets have impact on their future volatility. The bond market in Romania is the most influenced by its own shocks having the highest significant coefficient of 0.23 while Czech Republic and Poland have the smallest coefficients of 0.09. The shocks from the US market are not transmitted to the Eastern European markets.

The volatility of bond markets in Eastern Europe is persistent, the highest B(2,2) coefficient belonging to Poland (0.89), followed closely by Bulgaria (0.88) while the smallest coefficient belongs to Hungary (0.61). The results presented in table 3 show that there is volatility transmission from the US market to the bond markets in the Eastern European countries analysed without any exception. The highest volatility spillover is felt by Poland (0.89) and Bulgaria (0.88) while Hungary is affected the least and has the smallest coefficient (0.61).

Conclusions

The announcement in the USA about the reduction of quantitative easing programme determined a growth of capital market volatility. The emerging countries were significantly affected by the change of the monetary policy in the USA: the capital markets registered high volatilities, they were faced with great capital outflows, the exchanges rates depreciated etc. Within this framework, we aimed to study volatility and volatility transmission from the USA to the Eastern European emerging countries. The study of volatility transmission caused by the changes of policies and advanced economies in the Eastern European countries has never been conducted before.

To determine the conditional volatility of stock and bond markets we used univariate heteroscedastic models and to test whether there is volatility transmission from the USA to the financial markets of the Eastern European countries we used multivariate heteroscedastic models.

Previous studies prove that emerging countries with more developed financial markets were the most affected. The results obtained from the study of the risk of Eastern European stock markets confirm this hypothesis because the highest volatilities, in comparison with the previous periods, are exposed by Hungary, Czech Republic and Poland. On the bond markets in Eastern Europe countries one can notice a volatility increase excepting Lithuania.

The multivariate heteroscedastic models estimated allow us to answer the research questions proposed. There are cross-mean spillovers effects from SUA only to the stock markets from Hungary, Bulgaria and Poland. The shocks that appear on the US stock market affect the stock markets from Romania, Poland and Bulgaria but they are more strongly influenced by their own shocks. The volatility of the US stock market is also transmitted to almost all Eastern European markets, excepting of Latvia and Lithuania.

As for the bond markets in Eastern Europe the situation is somehow different. The change in the US monetary policy does not determine a transmission of the return from the USA stock market to the Eastern European bond market. At the same time, volatility of the USA stock markets caused by the change of the QE programme is transmitted to all the bond markets from the Eastern European countries.

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Appendix A - Testing the stationarity of the variables

Table A1. Testing the stationarity of the returns for bond markets

Returns	ADF test		PP test	
	Model with intercept	Model without intercept	Model with intercept	Model without intercept
Bulgaria	-18.91291*	-18.86862*	-35.79221*	-35.68904*
Czech Republic	-31.19583*	-31.06842*	-30.79608*	-30.61845*
Hungary	-24.50149*	-24.42297*	-24.45738*	-24.41079*
Latvia	-34.03583*	-33.84042*	-35.21161*	-34.56713*
Lithuania	-25.15310*	-24.66321*	-41.58223*	-39.78899*
Poland	-25.07568*	-25.01773*	-25.04750*	-24.98986*
Romania	-20.39185*	-20.29514*	-40.75950*	-40.34397*
Slovakia	-13.34346*	-13.26763*	-28.41861*	-28.34783*

Source: data processed by means of the Eviews

Note: ADF test. PP test represents Augmented Dickey-Fuller and Philips Perron tests

Table A2. Testing the stationarity of the returns for stock markets

Returns	ADF test		PP test	
	Model with intercept	Model without intercept	Model with intercept t	Model without intercept
LRBET	-22.13823*	-22.03719*	-22.13698*	-22.07179*
LRBUX	-24.70332*	-24.72135*	-24.67618*	-24.69488*
LRMR	-31.15478*	-31.14484*	-30.75179*	-30.73198*
LRMV	-26.25803*	-25.85701*	-26.27325*	-25.86685*
LRPX	-25.70631*	-25.72523*	-25.70692*	-25.72578*
LRSAX	-22.80876*	-22.82558*	-34.95395*	-34.98285*
LRSOFIX	-25.33399*	-25.15499*	-25.32839*	-25.16061*
LRSP	-26.65052*	-26.47364*	-27.05804*	-26.60013*
LRWIG20	-25.32135*	-25.33898*	-25.31398*	-25.33203*

Source: data processed by means of the Eviews

Notes: a) LRBET, LRBUX, LROMXR, LROMXV, LRPX, LRSAX, LRSOFIX, LRSP, LRWIG20 represent the returns of the stock markets in Romania, Hungary, Lithuania, Latvia, Czech Republic, Slovakia, Bulgaria, United States and respectively Poland

b) ADF test. PP test represents Augmented Dickey-Fuller and Philips Perron tests

Conceptualization of economic security in the context of energy markets' integration

Uliana BIHUN*

Abstract

The research includes an analysis of the evolution of fundamental scientific theories regarding security. Based on the systematization of modern definitions the author suggests applying the institutional-transformational approach in order to comprehend the term “economic security of energy market”. The author emphasizes the influence of the theory of risk, the theory of conflict and theory of socio-economic catastrophes on the economic security of energy market. The author studies global trends in the development of the energy sector and determines the positions of Ukraine based on the indicators of the rating “Energy Trilemma Index” In the paper, the conceptual principles of economic security of energy markets, which these take into account peculiarities of integration processes, “acquis communautaire”, and stakeholders' interests, are presented. It gives the possibility to consider both economic and social-political factors of the market environment when establishing market priorities of every hierarchical level in a purpose of sustainable development achievement.

Keywords: theories of security, integration, energy market, economic security

Introduction

Intensification of integration processes is connected, first of all, with the necessity to eliminate disproportions and shortcomings of energy supply on the national energy markets. Therefore, uneven allocation of world energy resources encourages the development of energy diplomacy focused on ensuring economic security.

Solving the issue is closely related to the interaction between a fundamental theory, practical challenges and opportunities. Hence, within the integration process, it is important to consider conceptual principles of economic security when establishing priorities of energy markets on each hierarchical level which are based on the idea of reconciliation of stakeholders' economic interests.

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The aim of the present paper is to define the priorities of energy markets on different hierarchical levels and place them into the framework of economic security, which itself is interwoven with fundamental economic theories and integration imperatives.

To reach the aim of this research requires the fulfilment of the following tasks:

- to examine the evolution of fundamental scientific approaches to the comprehension of security;
- to define the term “economic security of energy markets”;
- to investigate the transformation of security theories into energy markets priorities in the context of their integration.

Indeed, a considerable amount of scientific papers on the framework of the above-mentioned topic makes the present research necessary. Such research encompasses, *inter alia*, Collins (2010), who has examined genesis of the views on security, as well as Yergin (2006), and Chester (2010), who have investigated theoretical principles of ensuring energy security as a fundamental component of economic security. Another example is Dedenkulov’s (2013) paper that is dedicated to the analysis of influence of energy factors on international relations. On a further note, the aspects of structural energy diplomacy were defined by Zhiznin (2007). Additionally, Fray (2006) analyzed the priorities of needs in energy policy that need to be satisfied. Last but not least, the papers of Dolishnii and Petranko (2009) and Zlunitsyna and Zhurlov (2012) outlined the integration of Ukrainian and European energy markets.

Yet, despite the numerous scientific papers, there still is a need to concretize the influence of security theories on the integration process of energy markets as the fundamental principles of modern imperatives.

The methodological basis of this research encompasses the use of the historical and evolutionary, dialectical, systemic and functional approaches. This is done so to intensify the dogmatic of the researched topic as well as to define the term “economic security”. During the course of the present research paper, the author will identify the level of energy security, as well as the level of its risks in national economies by using economic and statistical methods. Further, the author will present inductions, visual and graphical, grouping and generalization methods when investigating the peculiarities of security theories transformation in the context of energy markets integration.

1. The Evolution of Economic Security Theories

When dealing with the problems of energy supply of in some countries in the context of global economic integration, a coordination of efforts of the whole world community is required. Any failure in its operation inevitably leads to economic losses of functionally interdependent national

economies. According to F. Myuller “the issue of reliable energy resources supply is becoming more significant under consideration of the world community; a lot, if not most, of modern countries, relate the prospects of their physical survival to this problem” (Myuller, 2003, p. 6).

At the same time, the scholars such as V. Guseynov and A. Goncharenko point out that “constantly increasing the importance of energy resources in the world politics causes a new aggravation of hidden and open confrontation between leading countries for gaining control over them” (Guseynov, 2008, p. 55). In the opinion of V. Ogneva and A. Sidorov (2015, p. 85), a new type of relations is both the growing vulnerability of participants in the international system from each other's actions (so-called “negative interdependence”) and stronger dependence of achieving goals by one side from considering the interests of other (so-called “positive interdependence”). These statements indicate the contradictory nature of energy markets, as the latter can be both a tool of cooperation and a tool of competition that quite often turns into energy confrontation.

It should be noted that electricity market substantially differs from other markets because of its complicated technologically unified electric power system (EPS) that has the following inherent features (Belyaev and Podkovalnikov, 2004, pp. 16-20):

1. Continuity of electric power production and consumption. This means the necessity to maintain a constant balance of EPS capacity due to the impossibility to store (accumulate) electric power on a large scale;

2. Parallel (simultaneous) operation of the whole EPS and the use of special energy transportation (electric power transmission lines), that provide for the participation in electricity markets only for the current power stations and consumers directly connected to EPS;

3. Long terms of shortage elimination on the electricity market. This feature requires taking special measures (by the government) to prevent deficiency, in particular maintaining centralized system of long-term planning of EPS development.

Considering peculiarities of EPS, the author suggests to treat the energy market as a system of relations, territorially and functionally restricted by electric power system, that appear in case of buying and selling of electric power and/or additional services, as well as transmission, distribution and supply of electric power to consumers on the principles of continuity, safety, affordability and reconciliation of economic interests of its participants.

According to the territories covered by EPS there are so-called local (LEM) (limited to some territory (settlement, district) or a segment of consumers within some certain country), national (NEM) (a set of LEMs within a country) and regional energy markets (energy space of two or more countries with common geographical area and interests in energy sector for implementing transborder

agreements). Thus, an important task is to ensure the economic security of every single member of a certain electricity market by reconciling economic interests in the context of sustainable development.

The author considers it reasonable to analyze the problems of economic security of energy markets using scientific approaches to the comprehension of security. Against this background, according to the classical theory of political realism, economic security of NEM is to be considered within the context of a struggle for providing a reliable energy sources supply. Because energy resources are strategic and assure economic security of every country, the latter have to struggle for them.

In the opinion of A. M. Schlesinger “ever since the industrial Revolution, energy and the need to secure its supply have been fundamental to any position of power in the world” (Schlesinger, 2005, p. 13). Thus, according to the representatives of political realism, security is treated as an access to energy sources, that is necessary for developing a national authority, or in other words, it is the centre of geopolitical confrontation.

Unlike the theory of realism, representatives of liberal approach point out the prospects of developing international relations. The latter ones mean peace and cooperation in energy sector. It can be achieved by establishing certain rules, generally recognized order based on universal values and interests.

Liberals point out that for separate countries it is impossible to gain energy independence, and emphasize the need to conclude multilateral agreements and endorse initiatives, which in their opinion is the only way to ensure security.

Hence, whereas according to classical scientific approaches to the comprehension of security essence, it is possible to use force to gain and maintain access to energy resources following the principles of theory of political realism, it also remains possible to cooperate – thereby using the main component of political liberalism, which gives the global economic security its purpose.

As of the 20th century changes in security threats led to a criticism of traditional approaches, particularly in the context of post-modernism. Universities in Wales, Copenhagen and Paris became the cornerstones of critical (non-traditional) security studies, each of which pushed for its own approach to conceptualize security.

The Wales approach, hence, developed the so-called an “emancipatory theory”. Its advocates a universal security system that is focused on an individual but neither a state nor nations. As K. Booth (2007) noted, it is not always a state protects freedom and life of its citizens. Simultaneously, attention is given to not just physical survival of people but their deliverance from everything that prevents from shaping destiny, including environmental problems.

Among the achievements of the Copenhagen University, the securitization theory introduced by B. Buzan (1998) is the most significant. According to latter, being approved by the society, an agent (a spokesman of a state who has enough authority in the society) transforms a certain factor into a threat, legitimizing the breaking of rules.

The insecuritisation theory, introduced by theorists of the Paris University, contains the ideas of blurring boundaries between internal and external security considering the latter as a complex of traditional threats to a state.

The systematization of “economic security” definitions that are present in modern economics (see Annex 1), enables to distil a range of approaches to it, namely: protective, condition-oriented, resource and potential, competitive, process-based, harmonized.

When examining these scientific approaches, it should be emphasized that the definition of an object of economic security still remains ambiguous. This term is treated in the context of either a certain enterprise or national economy (of a state) in general. However, taking into account a subjective-functional structure of the energy market, which has been analyzed before (Bihun, Shmatenko, 2017), the level of its economic security depends on not only functioning of business unities (energy generating, supplier and distributor) but also activities of such members as investors, consumers and regulatory bodies. Due to market integration processes, the latter ones act according to domestic legislation and also consider requirements of international energy laws.

Therefore, a lack of scientific studies on economic security of the energy market in the context of integration reflects the urgent need for theoretical and methodological works in this area.

Considering the structure of the energy market, the author notes that using any of presented theoretical approaches does not enable to show the whole specificity of the market, which is being investigated, except technological peculiarities of functioning, as there are also:

- an institutional structure of the market including a system of interrelated elements – institutions which are regulated by the rules of market functioning. These rules are taken from national and international acts, provisions and laws;
- dialectical interdependence between the members of the energy market. Being on opposing sides in economic relations, energy producers and consumers nevertheless share common interests about the market. If a producer cannot satisfy its consumers' needs, it cannot satisfy its own ones. Interdependence between these groups objectively determines their cooperation;
- the transformation of the electricity market model which means its organizational restructuring due to the integration into REM;
- ecocentric behavior of market members that means recognition of the primary importance of preserving nature for current and future generations. The value of nature requires collective

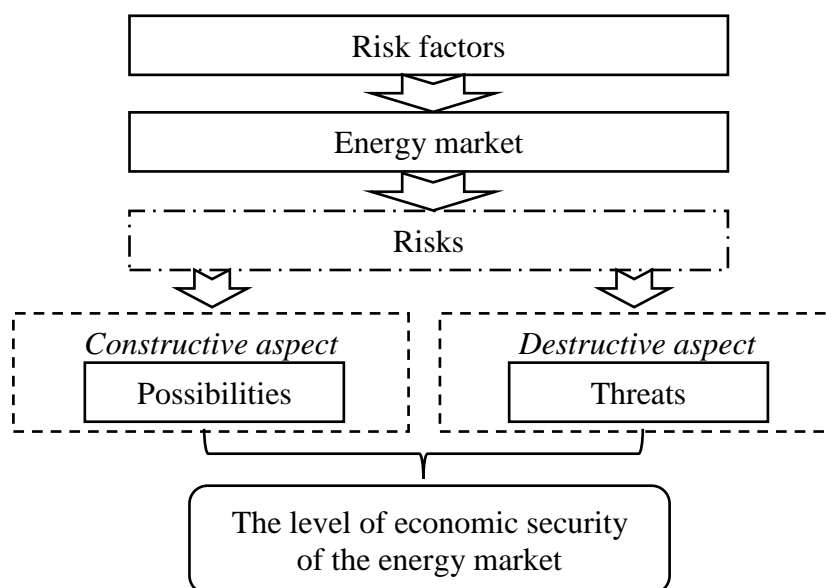
actions to ensuring sustainable development of society. Within the framework of energy markets, it means measures on improving energy efficiency, as well as implementing low-carbon technologies etc.

Hence, based on the above-mentioned market features, the author suggests to apply the institutional-transformational approach in order to define the term “economic security of energy market”. Thus, the author treats economic security of energy market as a set of conditions of energy market functioning, in particular caused by transformational processes, which protect all stakeholders from real and potential threats, as well as provide for the realization of their dialectically related economic interests based on sustainable development principles.

According to this definition, economic security of energy markets depends considerably on comprehending the basic principles of accompanying scientific theories such as theory of risk, theory of conflict and theory of social and economic catastrophes.

Undoubtedly, the development of conceptual principles of economic security is inevitably related to the category of risk. If we adhere to the position that risk, on the one hand, is a cause of threat (destructive aspect) and possibility raise the level of economic security (constructive aspect) on the other (see Figure 1), then the risk of economic security of energy market will be considered as deliberate actions of regulatory bodies in energy sector, focused on positive results of energy market functioning with alternative choices, that provides for possible adverse consequences.

Figure 1. Influence of risks on the level of economic security of the energy market



Source: Developed by the author based on Romanov, Butuhanov (2001), Rudashevskiy (1990), Yaresko (2014)

The International Index of Energy Security Risk, introduced by the US Chamber of Commerce in 2016 (Global Energy Institute, 2016), enables to compare energy security risks of 25 most energy-consuming countries of the world (including Ukraine). According to the methodology of this index, the higher the scores, the more risks are on the market of a country.

In general, countries have demonstrated a tendency of keeping their positions in this rating or have taken active measures on their improvement. Ukraine, in this context, kept within 1995-2014 the poorest 25th position, making it being perceived as a country with the lowest level of energy security among the biggest countries that consume energy resources. In 2014 the level of energy security risks of Ukraine (1944) was higher than the one of the leading country Norway (733), exceeding it by 265.2%.

Thus, the identification, analysis and evaluation of risks are getting more significant in the process of ensuring economic security of energy markets.

However, in accordance with the theory of conflicts, recurrent decline in economic security of energy markets is also a result of dynamic economic processes, namely the emergence of different conflict situations.

As the key world hydrocarbon resources are the assets of national state-owned companies, and processing facilities, distribution of hydrocarbon – of transnational corporations, then the actions of REM members are often motivated not by market interests but by own ones. A renown American scientist A. N. Chomsky (2007) believes that emergence of new consumers and producers of energy resources can lead to a conflict over the access to limited natural resources. Therefore, an important task for the entities of energy markets in the context of integration is to solve conflict situation by harmonizing interests.

2. Energy Trilemma and global trends in the development of the energy sector

However, the representatives of the theory of socio-economic catastrophes point out that even slight changes in the environment can radically alter the development of such an economic agent. That is why it is an important task for energy markets to prevent a potential bifurcation (especially an ecological one) and to devise mechanisms of avoiding irreversible changes. For instance, climate changes were the cause for the UN to call for sustainable development and to encourage building of a decarbonized economy thereby transforming the current development model, the latter being known for high energy and resource consumption, into a model of economic growth with low-level carbon emission.

According to statistics of the “Global Energy Statistical Yearbook” (Enerdata, 2017), in the period between 2000 and 2016 the total global share of renewable energy sources increased on average by 1.6%/ p.a. At the same time, EU member countries reached 4.6% p.a. thereby becoming leaders. Within the same time period in Ukraine, this index amounted to -0.1% p.a.

Only within 2016 the energy intensity of global economy came down by 2.04%. This indicates that there is a general improvement of energy efficiency and structural changes in most countries.

Tendencies in energy sector are also reflected in the annual rating of energy markets sustainability of the countries “Energy Trilemma Index” (World Energy Council, 2017) which is based on three aspects – energy security, social equality in getting the access to energy resources and reduction of the injurious effect of the energy sector on the environment.

Based on the analysis of 125 countries, eight states such as Denmark, Sweden, Switzerland, Great Britain, France, Spain, Italy and Slovakia, became the leaders in 2017, receiving the highest “AAA” rank. It should be mentioned that in 2014 only two countries were absolute leaders – Switzerland and Sweden. Ukraine was placed 48th in the overall rating of the countries (ABD), having climbed 17 positions in comparison with the results of 2015 (see Table 1).

Table 1. Ranking of Ukraine according to the Energy Trilemma Index

Indicator	2015	2016	2017	Score
Energy security	28	28	11	A
Energy equity (accessibility and affordability)	60	61	63	B
Environmental sustainability	111	108	102	D
Energy Trilemma Index	65	63	48	ABD

Source: World Energy Council (2017)

In 2017 there was the considerable improvement of energy security of Ukraine (an improvement of 17 positions in comparison with 2016) which enabled to reach the 11th position in the world rating. Thus, together with a good indicator of availability of energy supply Ukraine got A and B ranks respectively. However, there still is the lowest indicator of environmental sustainability (102 position out of 125) as a result of carbon dioxide emission while producing electricity. It leads to unbalanced resilience profile of domestic energy sector (ABD). Therefore, there is a need to improve energy efficiency policy and to apply the potential of the renewable energy sector of the country.

The authors of the rating point out that developed countries have more opportunities to ensure a safe, affordable and emission-free energy sector and to balance the energy trilemma. The reason is a shift to renewable energy sources including hydro- and nuclear energy industries.

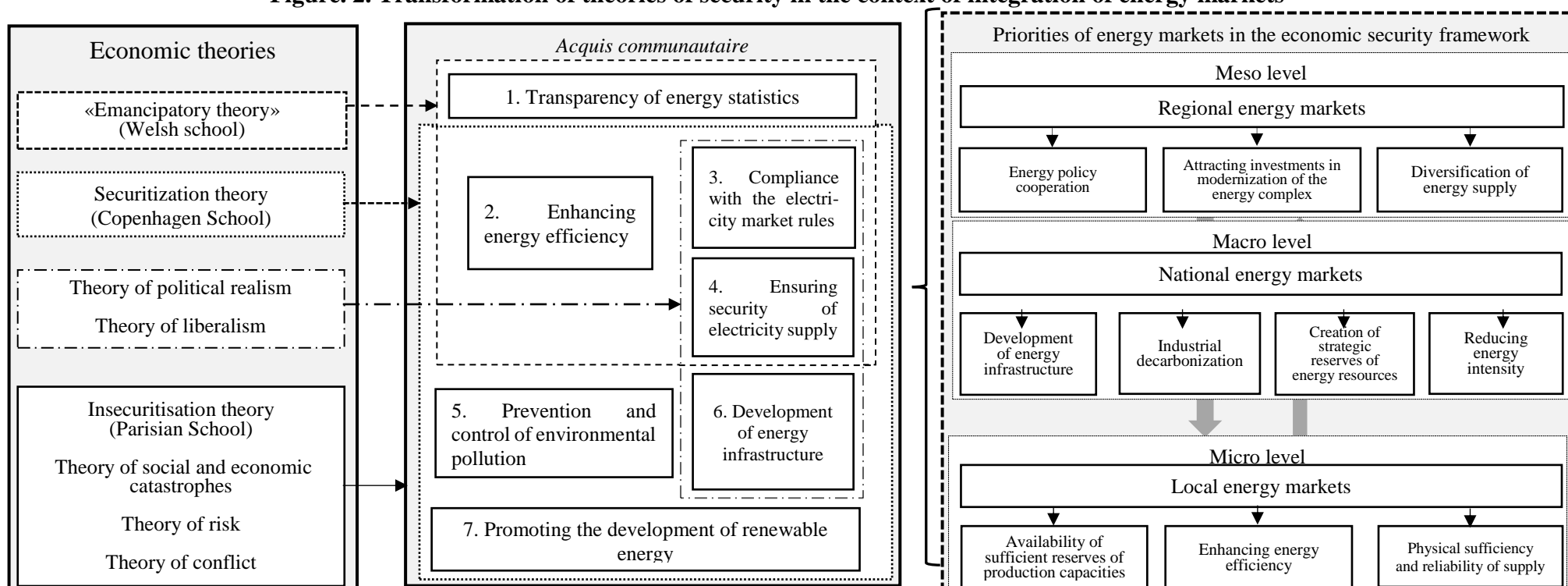
As O. Malikova (2012) states, for a fast formation of the decarbonized economy, it needs objective technological preconditions that are deeply interwoven with a decoupling effect (a gap between the speed of economic growth and the increase of impact on the environment) and a change of configuration and conditions of the market competition. Thus, the development vector of world NEM involves a considerable decrease of impact on the environment, in particular the possibility of changeover to an almost complete satisfaction of energy needs by using alternative energy sources.

3. Economic security in the context of energy markets integration

The controversial genesis of the studies on providing economic security has gradually led to a need for special legislation that would contain a complex of necessary imperatives, prohibitions and restrictions. At the same time, it is important to consider the industry specialization of the market. Normative regulation of any interaction between counterparties in the energy sector is complex and needs to consider three different, economic, social and political factors. In this case, it should be mentioned that there are two interconnected and at the same time mutually exclusive goals: (i) to achieve the economic indicators in the context of constant competition and (ii) the necessity to provide environmental protection.

For instance, the signatories of the Energy Community (2015) made commitments to adopt the key energy legislation of the EU, the so-called “*acquis communautaire*”. The latter involves the creation of a common legal framework on energy markets of the Community member states. This regulatory and legal framework of the EU contains subordinate acts that have been included in The Third Energy Package. It is based on a doctrine of sustainable development and is a set of ideas, concepts and regulations of different sciences, in particular theory of security and its accompanying theories (see Figure 2).

Figure. 2. Transformation of theories of security in the context of integration of energy markets



1. Directive 2008/92/EC of 22 October 2008 concerning a community procedure to improve the transparency of gas and electricity prices charged to industrial end-users; Regulation (EC) 1099/2008 of 22 October 2008 on energy statistics; Regulation (EU) 543/2013 of 14 June 2013 on submission and publication of data in electricity markets.
2. Directive 2012/27/EU of 25 October 2012 on energy efficiency.
3. Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal market in electricity; Regulation (EC) 714/2009 of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity; Regulation (EU) 838/2010 of 23 September 2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and a common regulatory approach to transmission charging.
4. Directive 2005/89/EC of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment.
5. Directive 2011/92/EC of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment ; Directive 2001/80/EC of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants; Directive 2010/75/EC of 24 November 2010 on industrial emissions (integrated pollution prevention and control); Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage; Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.
6. Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure.
7. Directive 2009/28/EC of 23 April 2009 on the promotion of the use of energy from renewable sources.

Source: Developed by the author based on Energy Community (2015)

As shown in Figure 2, the main energy legislation of the EU is based on the developments of fundamental theories, the analysis of which directly or indirectly places greater focus on ensuring security. That demonstrates their urgent need to be applied.

According to the Treaty of the Energy Community, which includes both the rules of fair competition and environmental protection, there is a need to have a coordinated vector of energy markets on different levels: local, national and regional. In Figure 2 there is a list of priorities in reflecting the peculiarities of the economic security hierarchy of energy markets. The structure of the latter has the following levels: micro level (LEM), macro level (NEM) and meso level (REM).

Dependence between the levels of economic security of energy markets is mutual: each local or national energy market is directly or indirectly affected by regional energy market and *vice versa*. The choice of certain mechanisms and tools of establishing priorities at each level is made according to the interests of interacting entities of NEM, as well as principles of ecological and economic concepts of sustainable development.

Conclusions

This paper aims at finding a scientific and practical solution to the development of conceptual provisions defining priorities of energy markets on different hierarchical levels in the framework of economic security based on the sustainable development concept. It allows the author to formulate the following theses:

1. Classical scientific approaches to the comprehension of security and the formation of systems of its ensuring at national and international levels are political realism and liberalism that were developed in the framework of traditional military and political approach focused on the interests of a state.

Fundamental changes in security conceptualization are presented in critical studies. The interdisciplinary approach is used to contrast the traditional one with three European schools. Except military security, it involves also environmental, economic, political and public security.

The need to analyze the economic security is also determined by the necessity to solve a range of problems that accompany the processes of growing diversity and complication of entrepreneurship activities. Among them, the necessity to understand the principles of the theory of risks, the theory of conflicts as well as the theory of socio-economic catastrophes plays a key role.

2. The conceptual framework of security theory is improved. Unlike the existing frameworks, it is supplemented with a term “economic security of energy market”. Based on institutional and transformational approach, it is treated as the conditions of energy market functioning, in particular,

caused by transformation processes, which ensures the protection of all stakeholders from real and potential threats. It also includes satisfaction of their dialectically related economic interests based on sustainable development principles. At the same time, its peculiarity is the formalization of a dynamic structure of conditions, which determine the system's movement. That enables to affect the processes in the system, which was analyzed.

3. Conceptual principles of economic security of energy markets are presented in the paper. Unlike the existing principles, these take into account peculiarities of integration processes, a set of legislative imperatives, restrictions and stakeholders' interests. It enables to consider both economic and social-political factors of market environment when establishing market priorities of every hierarchical level.

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Annex 1. Theoretical approaches to defining the term “economic security”

Approach	Author	An option of “economic security” definition	An object of economic security
Protective	Kovalev D. (1998)	A protection of enterprise activities against the negative influence of external environment and the ability to eliminate various threats or adapt to the present conditions, which do not have the negative impact on its activity.	Enterprise
	Ortynskiy V. (2009)	A protection of enterprise potential (manufacturing, managerial and engineering, financial and economic) against negative impact of external and internal factors, direct or indirect economic threats.	Enterprise
Condition-oriented	Zhyvko Z. (2012)	A condition, when an enterprise is provided with economic development and continuity of activities, is able to react in proper time, adequately and without losses to the changes of internal and external situations and negative influence of destabilizing factors.	Enterprise
	Abalkin L. (1994)	A set of conditions and factors which provide independence of national economy, its continuity and stability, an ability to get renewed and improved.	National economy
Resource and potential	Zhalilo Ya. (2004)	An ability of a national economy to reproduce itself on a large scale in order to satisfy needs of its population and state, resist destabilizing factors, which cause a threat to the development of a country.	National economy
	Arefieva O. (2001)	An efficient use of resources and present market opportunities that enables an enterprise to avoid internal and external threats ensures its lasting development on the market according to the mission.	Enterprise
Competitive	Kashin A. (2008)	Competitive advantages when material, financial, staff, technical and technological potential and organization structure of an enterprise fit its strategic goals and tasks.	Enterprise
	Vasylytsiv T. (2008)	An operation when an enterprise and its products are competitive on the market and at the same time it is provided with the most efficient use of resources, intellectual potential and human resources; possibility to resist negative influence of external and internal environment of its functioning.	Enterprise
Process-based	Cherniak H. (2017)	A continuous hierarchical process of deliberate organizational and managerial activities of an enterprise that involves identifying, preventing, resisting internal and external threats in order to provide effective functioning of an enterprise.	Enterprise
	Polovnev K. (2002)	A continuous process of supply of manufacturing enterprise that is in some external environment, with continuity of its functioning, financial balance and regular income and also possibility to achieve goals and tasks, its further development and improvement at the different stages of life cycle of an enterprise and within the changes of competitive market strategies.	Enterprise
Harmonized	Zaitseva I. (2011)	A level of harmonization in time and space between economic interests of enterprise's management and the interests of other business entities in the context of the situational approach to managing an enterprise.	Enterprise
	Kozachenko A. (2003)	A harmonization in time and space between economic interests of an enterprise and the interests of other entities of the external environment that operate outside the enterprise.	Enterprise

The new economic governance framework of the European Union

Ioana - Sorina MIHUȚ *

Abstract

There is a general agreement that the European Union is facing nowadays one of the most important challenges in the history of the community, taking into consideration the wide range of economic, social and political risks that constitute top priorities of the European authorities. One key concept in this approach is the efficiency of the economic governance process. The main purpose of this article is to evaluate the ability of the European Union to elaborate sound policies in the current economic framework that are focusing on supporting the common interests of all the Member States, with particular focus on the economic governance process. Furthermore, the article targets at identifying whether or not the new architecture of the EU economic governance developed as a result of the 2008 financial crisis constitute a triggering factor for social cohesion and political harmonization across the European community.

Keywords: Economic governance, macroeconomic policies, economic governance, government quality, institutions

JEL classification: H11, O38, O43

Introduction

Nowadays, worldwide economies experience massive transformations which impact the economic, social, and most importantly, the political framework. The dynamics generated by the globalization process determines the states to respond quickly to a large spectrum of challenges, and the promptitude of these responses constitutes, in the majority of the cases, the differentiating factor concerning the economic performance, and decisively, their degree of flexibility and adjustment.

The primary goal of the strategies elaborated by each and every country is ensuring a sustainable level of economic growth and development. The factors that are responsible for one economy to register high economic growth rates and another one to stagnate have represented the main concern of economists, researchers, analysts or policy makers all over the world. The dichotomy

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associated to these factors consisted, until not long ago, mostly of economic factors, which were easy to quantify, and also generated precise results regarding those given situations.

The European Union aims, more than any other structure, at establishing a harmonization among its Member States which, in the end, would ensure the economic convergence and, therefore, an economic growth. A sustainable economic growth embodies a strong correlation between the economic, social and political component.

One particular aspect presented by this structure refers to the fact that its entire activity is coordinated by a group of institutions, with well-established attributes, which along with the national institutions allow it to operate at its optimal level. Recent transformations which occurred at political level, have moved the centre of interest from the subject of the economic-financial crisis to the one regarding the risks generated by the instabilities from the political sector, both at the level of the European Union Member States and at the level of the partners from the economic, financial, trading or military sector of the European Union. The main risk regarding the stability of the European Union is considered nowadays to be the political risk, followed by the economic one.

A stable political framework associated to a good economic governance process, constitute primary instruments when it comes to fostering economic growth. The interconnectivity between the political stability/instability and the economic growth process was a subject of interest across the literature in the field. Alesina *et al.* (1996) used a data series of 113 countries and a time frame of 32 years in order to highlight the fact that the increase of the GDP/capita variable is reduced in the countries and intervals where governments face an accentuated political instability. Furthermore, Jong-A-Pin (2006), concludes that the political instability and a poor economic governance are consider to be the main factors for obtaining reduced economic growth rates. In the category of political factors affecting the process of economic growth are also included aspects regarding the budgetary deficits/surpluses. It is a well-known fact that high rates of budget deficits determine low rates of economic growth. The budget deficits constitute a strong indicator in quantifying the low capacity of the governments to elaborate measures to stabilize the economy and to reduce the aversion to risk of the foreign investors. Fischer (1993) using the panel methodology stated that the process of economic growth is negatively associated with high inflation and budget deficit rates and instability of the exchange rates. This hypothesis is also confirmed by the study published by Soukiazis and Castro (2005).

In the case of the European Union, the management of these risk categories lays in the hand of the existing institutions that are responsible for elaborating decisions which would oversee the interests of all the Member States. A decisive component in this discussion is the economic governance. This process has been a quasi-neglected aspect until two-three decades ago, when the

crucial role it has in the analysis and modelling of the economic growth and convergence processes was acknowledged. Furthermore, the European Union recognized the importance of this process by elaborating, subsequent to the recent economic-financial crisis, a new model of governance which aims at streamlining the monitoring and coordination instruments and techniques by the European Union of the activities performed at the level of the Member States.

One important debate in this direction refers to the assumption according to which globalization and regionalization reduce the power of national institutions concerning the economic governance process, or that the state sovereignty is affected by the emergence of supra-national institutions.

Held (1995) stated that increasing the economic and cultural interconnections between different economies through the continuous flow of peoples, goods, services, ideas, capitals and technologies reduces the power and effectiveness of governments at the nation state level. Furthermore, the power of the state is diminished by the increasing number of transnational process. In this sense, many of the areas that were in the responsibility of the state, namely, defence, economic management or communication must be coordinated at international level. Also, the emerge of different political unions, international organizations such as the World Bank, World Trade Organization or the International Monetary Fund and multilateral treaties (NATO) provided the basis for the development of a supranational state with dominant legislative power.

Globalization and regional integration, both redefined the role of the states, but they didn't reduced it. Therefore, the state remains the key player within the borders of every national state as well as in the international context.

The main purpose of this article is to highlight the implications of the economic governance upon the performances in the social, political and economic framework of the European Union Member States. The content of this article is expanded in the following sections: section 1 presents a short literature review regarding the concept of economic governance, section 2 analyses the taxonomy of the economic governance, as well as the taxonomy of the involved institutions, section 3 highlights the impact of the economic governance upon the different components of the economic, politic and social environment, section 4 performs a short analysis of the current stage of economic governance across EU Members States using the Fiscal Rule Index and the final part of this article details the conclusions as well as the policy implications that emerge from this research.

1. The concept of economic governance

The acknowledgement of the crucial role given to the economic governance in stimulating the economic growth and convergence process was under certain circumstances limited. The current

increased interest for this category of indicators is given by the current economic and political context and can also be attributed to the economic circumstances experienced over the last years. Santiso (2001, pp.154-180) considers that at the level of the current emerging economies, ensuring an efficient economic governance represents, both an objective and a fundamental condition, for assuring the economic development. Nonetheless, the association of these two elements proves to be a real challenge for the institutions operating at the level of these countries.

Although the role of the economic governance process is essential in ensuring the economic stability and in stimulating economic growth and convergence, the development of an accurate definition regarding this concept seems to be a difficult task to fulfil, considering the wide range of dimensions which this concept incorporates. These include the decision-making process of the institutions, their mechanisms of implementation and coordination of the decisions, as well as the ethical regulations which characterize the governance process. (Delors, J. 2013, pp.169-178).

The World Bank, defines the economic governance process consisting of: *“the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies”* (World Bank, 2018). Moreover, the World Bank Governance and Anti-Corruption Strategy (2016) confer to the governance the following interpretation: *“the way in which public officials and institutions acquire and exercise their authority in outlining public, policies and providing goods and services”*.

Williamson (2005, pp.1) considers the process of economic governance as being *“a study of proper organization and profitable arrangements”*. From this point of view, governance is analysed only from the perspective of an efficient management, without taking into account the fact that the governance process can also determine negative evolutions at the level of a society. Williamson focuses only on the economic governance which is performed in compliance with certain well-established rules, which take into consideration a series of regulations and measures which are elaborated by focusing on the principals of a harmonized functioning of the market.

Despite the fact that significant progresses have been made in establishing a comprehensive definition of the economic governance process in the last three decades, we must take into account the fact that many times confusion is made between the concepts of governance and govern. For instance, in the American Heritage, Random House and Merriam Webster dictionaries, the concepts of governance and govern are presented as synonyms and they are defines as: *“the exercise of authority and control”*, *“a method or system of government and management”* or *“the act, process or power of governing”*. In our opinion, in this case, the concept of govern represents only a component

of the economic governance process which requires a series of other social institutions in order to develop and enhance the economic performance of a country.

Also, it is important to make a clear distinction between the terms “*government*” and “*governance*”. According to the definition given by the United Nations (2000, p. 2) “*government refers to the national political and administrative machineries designed to make policy and to implement decisions*”. On the other hand, “*governance can be defined as the exercise of political, economic and administrative authority in the management of a country’s affairs at all levels*”.

According to Merrien (1998) governance should be characterized by “*contracting, rather than supervision; decentralization, rather than centralization; management based on market principles, rather than management by administrative departments; cooperation between the State and private sectors, rather than being guided by the State*”.

Therefore, the economic governance process is a complex and multi-level mechanisms that implies a strong cooperation between governments, citizens and international organizations in order to stimulate a sustainable economic development of the countries, including more varied dimensions than the simple term of government. It implies not only the set of rules and measures that shape the individual as well as the collective behaviour, but also the structure of the governmental institutions.

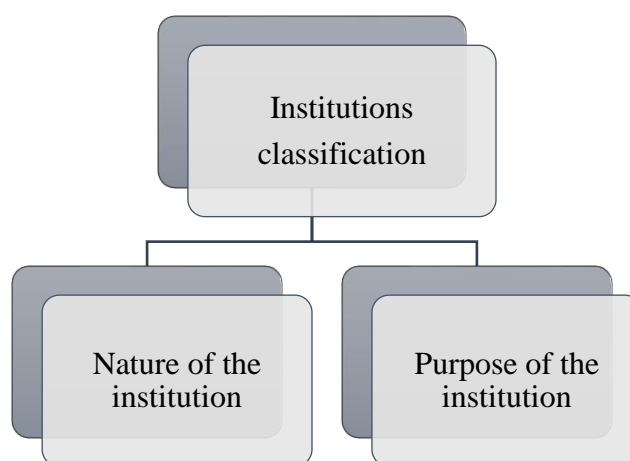
2. Taxonomy of the economic governance and of the involved institutions

We must consider the fact that the process of economic governance integrates in its structure a series of constraints, both of a formal and informal nature. North (1990) considered that, on the one hand, there are traditions, customs, and on the other hand, there are rules and regulations which control the entire activity performed at a political and economic level. In 1990, North considered that the institutions represent “*the rules of the game*” (North, 1990, p.3) at the level of a society which outline the behaviour of the individuals, the way in which they relate to one another and develop their activities. With reference to the emerging economies, the economic governance process implies a clear dichotomy regarding the institutions. On the one hand, we have the traditions, category which is responsible for the emerging of the institutions that have an informal role. This category is perceived most of the time as being an obstacle in the path of economic development, considering the fact that the functioning rules of this category are not influenced or dictated by the existing market requirements. Therefore, the institutions classified as informal do not represent a triggering factor for the economic growth because, on the one hand, they do not internalise in any way the information existing on the market at a certain moment in time, and, on the other hand, they do not take into account the evolutions or changes which take place at macro or microeconomic level. On the other

hand, the state is considered to be a fundamental component of the second category of institutions, namely the institutions with a formal role. If informal institutions do not represent in any way a triggering factor for the economic growth, often leading to regress through a series of limitations, the state represents a crucial factor when it comes to the issue of economic performance. The state has also a determinant role in the development of the industrialization process and its attributes exceeds the ones of only a goods and services provider.

Dixit (2008) suggests the following approach regarding the institutions involved in the economic governance coordination.

Figure 1. Classification of the institutions involved in the economic governance process



Source: Author interpretation according to Dixit, A., (2008, pp.3)

According to their nature, the institutions can be classified as (Dixit, 2008, p.3):

- *Formal institutions* – the state which is responsible for the enforcement of laws, legislature, judiciary, police or other agencies;
- *Private institutions* - which operate under the patronage of state law, for instance forums for arbitration;
- *Profit institutions* - which provide information;
- Other social bodies and ethnic groups.

If we consider the purpose of the institutions, they can be divided into the following categories:

a) Institutions responsible with the protection of property rights; b) Institutions responsible with the enforcement of the contracts among individuals; c) Institutions responsible for providing the physical and regulatory infrastructure to facilitate economic activity and the functioning of the other two mentioned categories of institutions; d) Institutions responsible for social cohesion.

Therefore, the intrinsic, but also the instrumental value of the institutions constitutes an important pillar in explaining the different economic growth rates of different economies, the degree of involvement in elaborating, implementing and assessing policies as the central point of the economic governance concept.

3. Economic governance as a determinant factor for social cohesion, political harmonization and economic performance

Currently, the European Union constitutes an integrated area which includes over 500 million individuals, different cultures and traditions. This high degree of diversity which characterizes the economies of the Member States corroborated with the economic and politic environment constitutes a real challenge concerning the process of economic governance, whether we talk about regional or national economic governance. The fundamental objective of the economic governance process at the level of the European Union focuses on three fundamental pillars, more specifically: the enforcement of social cohesion, the growth of social mobility and the enhancement of economic performance. In order for all of these objectives to be accomplished, interconnected actions between the state and various civil stakeholders must be implemented. Otherwise, the objectives can be supported by means of public or private actions. This multidimensional orientation of the economic governance process aims not only at successfully achieving an objective, but also at obtaining as many advantages as possible for the individuals, as the main component of the society, but also for the society as a whole. Table no. 1 makes a brief classification of the economic governance process from the perspective of the considered objectives.

Table 1. The economic governance approach from the perspective of set objectives

Objective set by means of regional, national or local economic governance		
Social cohesion	Social mobility	Economic performance
<ul style="list-style-type: none"> • Arrangements focusing on a certain area • Arrangements targeting a common activity 	<ul style="list-style-type: none"> • Arrangements supporting individuals according to their personal needs • Arrangements supporting disadvantaged groups 	<ul style="list-style-type: none"> • Arrangements addressing certain areas or groups • Arrangements addressing the entire community

Source: European Commission, 2014

Despite the fact that there is a high degree of heterogeneity existing at the level of the European Union, this characteristic is generally perceived as a stimulating factor of the economic

development. From the perspective of the economic governance process, this issue can be extremely complex if we are to take into account issues such as poverty, discrimination or even racism.

In order for the economic governance in area of social cohesion to be as beneficial as possible, the members of the European Commission developed a general framework in order to counteract all the possible challenges that may arise.

The following solutions were taken into account (European Commission, 2014): a) The existence of a high degree of interconnectivity among supranational, national and local authorities; b) The existence of a flexible legislation which would allow the funding of policies that are specific to economic governance, with open and participative structures; c) Focusing on strategies that have a long-term horizon and imply an interconnected action; d) Developing collaborative policies through democracy; e) An efficient cooperation system among public and private bodies; f) Acknowledging the challenges and opportunities generated by the diversity within the European Union; g) Implementing certain control mechanisms which would support the achievement of positive results; h) Developing a fiscal and regulatory framework which would meet the individual needs existing at the level of an economy.

The management of these multiple levels of diversity which characterize the Member States of the European Union require the development of certain urgent measures that should focus on ensuring a continuous and harmonious integration and rather on the similarities than on the differences among groups, individuals or societies. In the majority of the cases, the failure of the economic governance policies regarding the social cohesion and economic performance reside in the fact that there is a deep lack of conformity between local and regional policies. If at a local level, the diversity and its effects on the economic and social plan are perceived as being positive aspects of the growth and competitiveness, the national authorities consider this element as being a threat against integrity and, therefore, the policies promoted by them are restrictive. In this context, we must take into account the fact that a high degree of diversity related to individuals, education level and knowledge represents a stimulating factor of competitiveness and, therefore, of economic growth.

4. The current stage of economic governance in the European Union

Starting the development of the Economic and Monetary Union by the Treaty of Maastricht, the need to ensure sustainable economic convergence across the Member States became one of the main aims of the community. As stipulated by the Treaty, the Union set the following objectives to be achieved (Official Journal of the European Communities, (1992), Article B, p.4):

To promote economic and social progress which is balanced and sustainable, in particular through the creation of an area without internal frontiers, through the strengthening of economic and social cohesion and through the establishment of an Economic and Monetary Union, ultimately including a single currency in accordance with the provisions of this Treaty.

Besides developing the social dimension of the Community as well as establishing the Economic and Monetary Union, the Treaty of Maastricht focused on improving the effectiveness of the institutions as well as strengthened the democratic legitimacy of the institutions.

Improving economic governance remains a key objective on the European Union agenda. The weakness exposed by the economic crisis that started in the United States of America in 2007, triggered the attention on what we generally referred to during this article, as the economic governance process. The EU response consisted in a set of norms and regulations targeted to strengthen the general framework of economic governance and furthermore stimulate sustainable economic growth. The main directions lead to the development of the following programs: the "*Six Pack*" and "*Two Pack*" aimed at reconfiguring the Stability Growth Pact and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union. On 29th of September 2010 the European Commission imposed the so-called "*Six Pack*", that entered into force on the 13th of December 2011. This new set of measures consisted in five regulations and one directive and added a new instrument for improving the macroeconomic surveillance across the Member States, namely a macroeconomic imbalance procedure. The areas targeted by the "*Six Pack*" included preventive and corrective actions, establishing a budgetary framework, imposing sanctions in the case where the corrective actions are not implemented properly, the surveillance of the macroeconomic imbalances and also sanctions for excessive macroeconomic imbalances. At the end of May 2011, the European Commission launched a new package of measures called the "*Two Pack*" that focused on the problem of increasing transparency in what concerns the national budgetary policies. The issue of transparency constitutes a problematic indicator for the majority of the Member States of the EU. The main novelty introduced by the "*Two Pack*" consisted in the requirement addressed to the Member States of the Euro area to present a short draft regarding their budgetary programs for the next year.

There are four main pillars of the European Union economic governance, as detailed by Alexandre de Streel (2013) and namely: 1) the fiscal surveillance; 2) macroeconomic surveillance; 3) socio-economic coordination; 4) financial solidarity. The fiscal surveillance pillar is aimed to control and correct the fiscal imbalances of the Members States. This pillar oversees the budgetary discipline of the Member States, targeting two main indicators: a budget deficit lower than 3% of the GDP and a public debt lower than 60% of the GDP. The second pillar focuses on the macroeconomic

surveillance that introduced one new corrective mechanism and namely the Excessive Imbalance Procedure. The socio-economic coordination constitutes the essence of the third pillar of economic governance. The coordination of the economic and social policies of the Member States leads to boosting the economy by reducing the unemployment growth rate, creating new job opportunities and improving social cohesion. The fourth pillar concerns the financial solidarity across countries that target those members dealing with severe difficulties that could have spillover effects across other economies.

The fiscal policy developed by any state must be an efficient one taking into consideration the fact that it is one of the most important control instruments of the economic activity. Despite all that there are a series of limits that affect its efficiency including: a) social barriers regarding taxes and decreasing budgetary expenditures; b) the lack of complete information available for the government; c) the difficulty in establishing a consensus between the budgetary structure and the size of the budgetary deficit; d) the inadvertence between the political cycle and the fiscal policy.

As a response to the subject of efficiency in monitoring budgetary imbalances and fiscal rules, as main determinants of the economic governance process, the Directorate General for Economic and Financial Affairs (DG ECFIN) of the European Commission elaborated a complex index to evaluate the ability of the national institutions of the Member States to submit to the imposed fiscal rules. The index considers five main criteria: 1) the statutory base of the rule; 2) monitoring bodies – the room for revising objectives; 3) the mechanisms of monitoring compliance and enforcement of the rule; 4) corrective mechanisms; 5) media visibility of the rule.

The structure of the Fiscal Rules index criteria is detailed in table no. 2

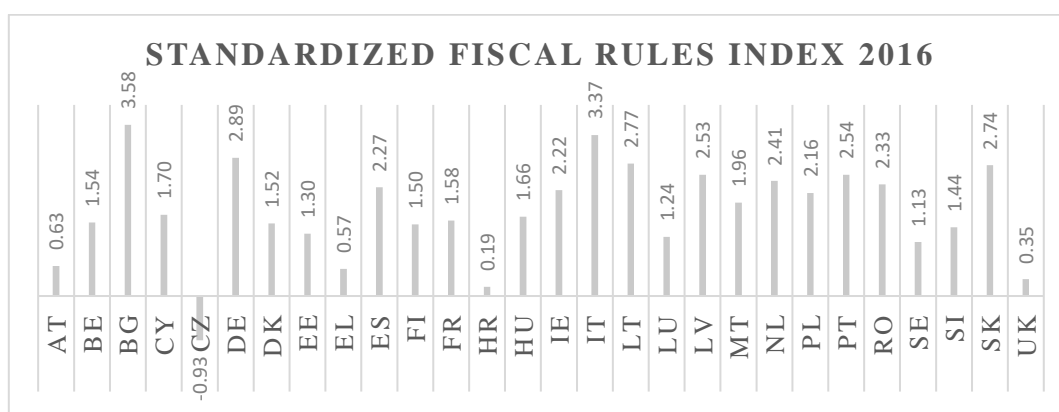
Table 2. The structure of the Fiscal Rules Index as detailed by the Directorate General for Economic and Financial Affairs (DG ECFIN) of the European Commission

Fiscal Rules Index Structure	
Criterion 1	4. constitutional base 3. the rule is based on a legal act (e.g. Public finance Act, Fiscal Responsibility Law) 2. the rule is based on a coalition agreement or an agreement reached by different general government tiers (and not enshrined in a legal act) 1. political commitment by a given authority (central/local government, minister of finance)
Criterion 2	3. there is no margin for adjusting objectives (they are encapsulated in the document underpinning the rule) 2. there is some but constrained margin in setting or adjusting objectives 1. there is complete freedom in setting objectives (the statutory base of the rule merely contains broad principles or the obligation for the government or the relevant authority to set targets)
Criterion 3	The score of this criterion index is constructed as a simple average of the two elements below: <u>Nature of the body in charge of monitoring respect of the rule</u> 3. monitoring by an independent authority (Fiscal Council, Court of Auditors or any other Court) or the national Parliament 2. monitoring by the ministry of finance or any other government body 1. no regular public monitoring of the rule (there is no report systematically assessing compliance)

	The score of this sub-criterion is augmented by 1 if there is real time monitoring of compliance with the rule, i.e. if alert mechanisms of risk of non-respect exist. <u>Nature of the body in charge of enforcement of the rule</u> 3. enforcement by an independent authority (Fiscal Council or any Court) or the national Parliament 2. enforcement by the ministry of finance or any other government body 1. no specific body in charge of enforcement
Criterion 4	4. there are automatic correction and sanction mechanisms in case of non-compliance 3. there is an automatic correction mechanism in case of non-compliance and the possibility of imposing sanctions 2. the authority responsible is obliged to take corrective measures in case of non-compliance or is obliged to present corrective proposals to Parliament or the relevant authority 1. there is no ex-ante defined actions in case of non-compliance
Criterion 5	3. observance of the rule is closely monitored by the media; non-compliance is likely to trigger public debate 2. high media interest in rule compliance, but non-compliance is unlikely to invoke public debate 1. no or modest interest of the media

Source: European Commission, Directorate General for Economic and Financial Affairs (DG ECFIN), available at: http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/documents/fiscal_rules_database_en.xls.

Figure 2. Standardized Fiscal Rules Index 2016 in the EU Member States

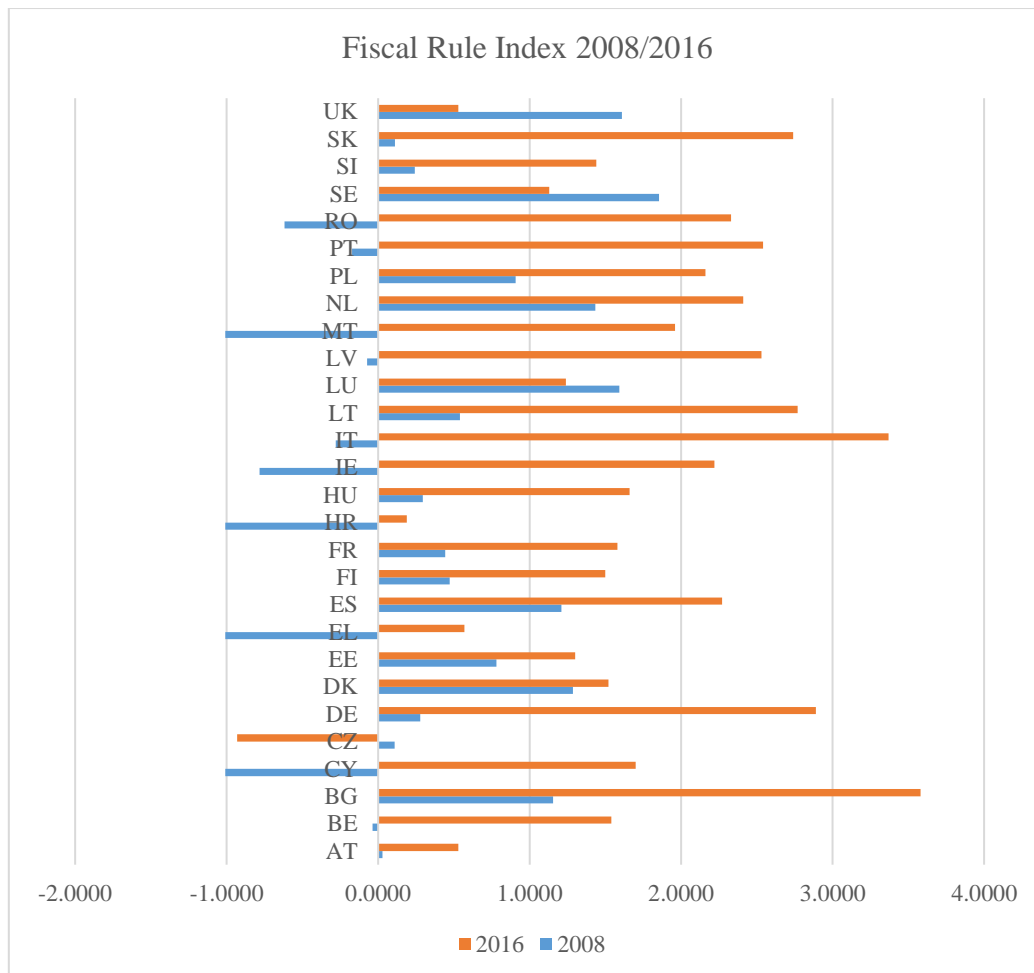


Source: European Commission, https://ec.europa.eu/info/publications/fiscal-rules-database_en, accessed at. 25.04.2018

The Fiscal Rules Index is calculated by ECOFIN in order to measure the effectiveness of the fiscal rules by aggregating the scores given to each rule. This index evaluates the strength of the particular types of criteria that are evaluated. The scores associated to each criteria taken into account are standardised to range between 0 and 1 in the first stage, afterwards a random weight technique is used to obtain the final values. Starting 2015 the methodology for calculating this index was improved. A higher value of the index corresponding to a certain country means a better quality of the fiscal rules. By analysing the fiscal rule index for the EU-28 in 2016, we may conclude the fact that there is a high quality of fiscal rules in countries such as Romania, Bulgaria, Italy, Slovakia, and Denmark. On the opposite pole there are countries like Croatia, UK, Austria, and the Czech Republic being the only country that registered negative values. Also, in 2016, Belgium, Italy and Finland despite that they didn't achieved sufficient debt reduction they were not put under the corrective arm

of the Stability and Growth Pact. At the same time there was a delay for Spain and Portugal concerning the corrective measures.

Figure 3. Standardized Fiscal Rules Index 2008/2016 in EU – 28



Source: European Commission, https://ec.europa.eu/info/publications/fiscal-rules-database_en, accessed at. 25.04.2018

At the end of 2009, 18 Member States of the European Union were facing severe fiscal problems according to the reports published by the European Commission. After that, the Member States of the European Union concentrate their efforts in improving their fiscal rules, therefore Figure 3 details the performances registered by each country. At the end of 2009, 18 Member States of the European Union were facing severe fiscal problems according to the reports published by the European Commission. From the analysis of the data we may conclude the most impressive progress in respect to the fiscal rules were obtained in countries like Romania (from -0,61 in 2008 to 2,33 in 2016), Bulgaria (from 1,15 in 2008 to 3,55 in 2016), Ireland (- 0,78 in 2008 to 2,22 in 2016) and also Poland (from -0,17 in 2008 to 2,54 in 2016). There were also countries that did not manage to improve their

fiscal rules, on contrary registering declining trends (the case of Czech Republic (from 0, 10 in 2008 to -0, 93 in 2016)).

Conclusions and policy implications

Even if this concept of economic governance is quite recent, the majority of the theoretical and empirical studies approached this issue in the light of the coordination mechanism which exists between government, market and civil society. These three elements are considered to be the fundamental pillars of an effective system of economic governance, their association allowing the stipulation of adequate policies, followed by their correct implementation. With reference to the efficient economic governance, elements such as the transparency of the information, the ability of the government to participate in the decision making process, the lack of corruption are perceived as primary conditions that enable this system to work at its best. It is extremely important to highlight the fact that in order to assure good and efficient economic governance, both nationally as internationally, the states should encourage the cooperation between the State and its citizens and acknowledge the fact that only a democratic system would allow achieving all these goals.

The investigation on the reform of economic governance until now has mainly concerned the examination of the rules and parameters of the Maastricht Treaty taken into account by the Member States in order to face the 2008 financial crisis, highlighting the gaps and weaknesses of the previous system of European economic governance.

The joint efforts of the institutions along with the Member States have led to a transformation of the previous system, developing more effective coordination and control measures, for the purpose of anticipating future financial crisis. New challenges are faced by the European Union as a whole that after remodelling the structure of its system is now facing further issues, such as environmental policies, the continuous differentiation between Euro zone countries and countries that are on the path of adopting Euro or benefit from the opt-out clause. The European Union has to continually redefine the role of its institutions, knowing how to respond to the actions generated by its citizens.

Each of these new challenges and risks are becoming an impasse for the future projects of the European integration. As was emphasized in the text, a decisive response is needed from a European Union capable of acting in the interests of the Europe as a whole and not of a Union whose interest coincides with the sum of the individual interests of its members.

The recent economic and financial crisis represented an important moment for bringing into discussion the political trajectory of the European Union, but also the preservation of this structure's fundamental pillars integrity. Moreover, the author underlines the fact that one of the conditions

which should be imposed for preserving the economic integrity at the level of the Member States is the acceptance by the countries of giving up the right of sovereignty upon the economic stability policies. Weak economic governance and political instability remain fundamental obstacles to achieve the objectives for sustainable development.

The European Union institutions elaborated a series of measures and policies in order to better respond to the challenges addressed by the governance frameworks of the States. The recommendations made by these institutions lead to the improvement in the transparency, responsiveness and effectiveness of the national states to deal with all the problems that may appear, but progresses should still be made. By analysing the Fiscal Rule Index published by the European Commission we concluded that the majority of the Member States managed to improve the quality of this indicator after the recent financial crisis, major progresses being registered in countries like Romania, Bulgaria and Ireland for the year 2016 compared to 2008. This indicator gives an image of the effectiveness of the fiscal rules, but we should also take into consideration the fact that the interpretation of this indicator should be made with extremely prudence.

The new model of economic governance focuses upon a monitoring and early reporting mechanism of any macroeconomic imbalances, as well as upon an intensification of the monitoring activity in the budgetary sector. This new model of governance is an imperious requirement especially for developing countries. All these coordinates aim, on the one hand, at avoiding the magnitude of the effects generated during the recent economic crisis, and on the other hand, at adjusting the community institutional framework to the high degree of heterogeneity of the economies which form the European Union and obtain in the end a sustainable economic development.

However, we have to keep in mind that the processes of growth and development cannot take place if we limit ourselves to considering only the economic aspects, since the real, creative and long-term growth and development will only be achieved with the participation of all the social partners, who can act only if they are protected and supported by a strong and effective governance framework.

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Organizational learning: cognitive and behavioural changes and implications in higher education institutions

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Abstract

Many facets of the concept of “organizational learning” and many ideas about it have been debated in the literature. One of the issues raised is whether organizational learning necessarily needs to encompass changes at both cognitive and behavioural levels in an organization or if one of these two types of changes is enough. The issue is even more complicated because changes in behaviour could be also related to adaptation and not learning. There is also the question if learning has really occurred if there is no change in behaviour, but only in cognition. Also, are organizational learning and changes in cognition or behaviour always beneficial for an organization? Therefore, the paper explores and expresses our position in the matter of the cognitive and behavioural dilemma regarding organizational learning. We are approaching these issues, as well as presenting some implications in the case of higher education institutions.

Keywords: organizational learning, cognitive/ behavioural changes, higher education institutions

JEL classification: D83

Introduction

Information has been of high significance since very distant times. Some very interesting insights that support this idea are: “[t]he Cro-Magnons...got to know the habits of the animals they hunted and knew where to lie in wait; and different bands shared information, so hunting parties could be forewarned of migrations days in advance.” (Tudge, 1998, p. 25 in Oxley *et al.*, 2008, p. 26). Thus, human evolution over time and the need to reach certain common goals have led to the emergence of organizations, which are generally defined as “a deliberate arrangement of people to accomplish some specific purpose” (Robbins and Coulter, 2009, p. 30).

We appreciate that the occurrence of organizations, the evolution of the concept of “organization” and the increasingly alert rhythm of changes in society and, implicitly, in the markets, have led to appreciate knowledge as constituting a competitive advantage for an organization.

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Organizational knowledge can be obtained through organizational learning, hence the increased significance of learning. Also, the association between learning and performance is a subject that has been widely treated in the literature. Crossan *et al.*'s (1995) research is a very relevant example of a thorough analysis on the relationship between learning and performance.

Organizational learning is a deeply complex concept. According to Shrivastava (1983), research on organizational learning has its bases on research on individual learning. The literature on organizational learning that is based on individual learning (and also on psychology) is, according to Chiva-Gómez (2003, after Easterby-Smith *et al.*, 1998; Easterby-Smith and Araujo, 1999) one of the two categories of literature, called the cognitive perspective (Chiva-Gómez, 2003 mentions the following researchers oriented towards the cognitive perspective: Argyris and Schön, 1978; Cyert and March, 1963; Huber, 1991; Levitt and March, 1988; Simon, 1991). The second perspective that Chiva-Gómez (2003) mentions is the social perspective (according to Chiva-Gómez, 2003, researchers oriented towards this perspective are: Blackler, 1993; Brown and Duguid, 1991; Cook and Yanow, 1996; Gherardi *et al.*, 1998; Lave and Wenger, 1991; Weick and Westley, 1996). The social perspective “is based on sociology and has a more relational orientation” (Chiva-Gómez, 2003, p. 102). Unlike the cognitive perspective, the social one wants to explain “what kind of social context is the most suitable for organizational learning and focuses on the group, community and organization rather than on the mind of the individual” (Chiva-Gómez, 2003, p. 102, after Gherardi *et al.*, 1998).

Both the cognitive perspective and the social perspective are useful when undertaking research in the field of organizational learning, since each of the two perspectives helps us understand different facets of the concept of “organizational learning”. A holistic approach on organizational learning ought to consider both the social and the cognitive perspectives on organizational learning research.

Referring now to the concept of “organizational learning”, first and foremost we need to mention that organizational learning is a multi-level concept, occurring at the following levels: individual, group, organizational and inter-organizational (Škerlavaj *et al.*, 2010, after Sanchez, 2001; Holmquist, 2004; Ibarra *et al.*, 2005; Boh *et al.*, 2007). Also, in order to better understand the notion of “organizational learning”, we ought to mention that, in literature, there are certain views regarding the constructs to which organizational learning is related or of which it is composed of. Two models that are of reference regarding the processes associated with organizational learning are those from Huber (1991) and Crossan *et al.* (1999). Thus, Huber (1991) has associated four constructs with organizational learning: knowledge acquisition; information distribution; information interpretation; organizational memory. Crossan *et al.* (1999) have adopted a perspective on organizational learning through four processes (intuiting, interpreting, integrating and institutionalizing), by linking the individual, group and organization levels. Without further analyzing these perspectives on

organizational learning, since this would exceed the scope of this paper, it is useful to have an overview of the processes related to it, for a better understanding of organizational learning as a process.

Being a broad concept, organizational learning has been defined in several ways, from different points of view. Further, we are making reference to part of the diverse ways in which the concept of “organizational learning” has been defined, focusing on those definitions that are related to our core issue – the cognitive and/or behavioural changes that may be needed in order to be able to talk about the occurrence of organizational learning. For a definition of the concept of “organizational learning” to be selected, it had to contain ideas that relate to: cognition; behaviour; cognitive and/or behavioural changes, this being our criterion of selecting papers which contain definitions for organizational learning.

One way of defining organizational learning relates to knowledge or insights development: “At its most basic definition, organizational learning is the development of new knowledge or insights that have the potential to influence behaviour” (Slater and Narver, 1995, in Bontis *et al.*, 2002, p. 439). Considering that this definition makes reference to knowledge or insights that can influence behaviours, we appreciate this definition as being essentially given from a cognitive perspective (from this point on, when we refer to the cognitive perspective/approach, we refer to organizational learning as changes in cognition and not in a broad sense to one of the two types of literature on organizational learning). However, behaviours are brought into discussion, which means, from our point of view, that an implicit reference to the behavioural perspective is being made. The perspective highlighted within this definition of organizational learning is one with which we agree. Our arguments are as follows: interpreting this definition, we can see that a possible meaning is that organizational learning does not necessarily imply changes in behaviour; also, the potential to influence or modify behaviours would be enough in order to talk about organizational learning. Certain behaviours need certain contexts to manifest. Therefore, as long as new knowledge or new insights that are gained through organizational learning have the potential to influence the mode of behaviour within an organization, we can talk about the occurrence of organizational learning. The actual manifestation of new behaviours is a matter of appropriate context.

Considering now the behavioural approach on organizational learning, here are two definitions that fit into this approach: “Organizational learning is defined as increasing an organization capacity to take effective action” (Kim, 1993, in Bontis *et al.*, 2002, p. 439) and “Organizations are seen as learning by encoding inferences from history into routines that guide behaviour” (Levitt and March, 1988, in Bontis *et al.*, 2002, p. 439).

To delineate the cognitive approach (or perspective) from the behavioural one, we are considering the two following definitions: “Learning as manifesting action and behavioural change, linked to a stimulus and a response” – the behavioural approach; “Learning as a complex process involving skills like mental mapping, use of intuition and imagination, and problem solving” – the cognitive approach (Yeo, 2002, p. 117, after Glynn *et al.*, 1991).

Organizational learning has also been defined considering both types of changes – in cognition and behaviour. Therefore, another definition given for the concept of “organizational learning”, which is one of the most complex definitions and possibly the most comprehensive definition given to this concept, is the following: “Learning is a process of change in cognition and behavior [sic!], and it does not necessarily follow that those changes will directly enhance performance.” (Crossan *et al.*, 1995, p. 353). This definition refers to both types of changes – organizational learning as implying both cognitive and behavioural changes. We share the idea that learning does not always lead to improvements in performance, as will be later discussed in another section of the paper. The perspective adopted in this paper is that learning can refer to changes at both cognitive and behavioural levels; however, our point of view is that changes are not necessarily needed at both cognitive and behavioural levels to consider that learning has occurred, as we are further going to see.

Škerlavaj *et al.* (2010, p. 190, after Argyris and Schön, 1978; Fiol and Lyles, 1985; Huber, 1991; Day, 1992; Crossan *et al.*, 1995) consider that “Organizational learning is a process concerned with transforming information into knowledge and knowledge into action” and that this “is reflected in accompanying behavioral [sic!] and cognitive changes” (Škerlavaj *et al.*, 2010, p. 190, after Kim, 1993; Crossan *et al.*, 1995). This is a definition that also involves both the cognitive and the behavioural approaches.

In this section of the paper we concentrated on the delimitation of organizational learning as a process, focusing on approaches from literature that contain references to: cognition, behaviour and/or changes in at least one of these two levels (cognition, behaviour). The definitions included in this section cover a whole range of possibilities, either referring to changes at cognitive level, behavioural level or both levels.

1. The cognition – behaviour dilemma

There is no doubt that organizational learning is a complex concept. It is, at the same time, a concept that has many facets and that has been widely debated in the literature. As we are further going to discuss, organizational learning implies changes at cognitive and/or behavioural level.

The dilemma that we are going to explore in this paper refers to whether both cognitive and behavioural changes are needed in order to talk about the occurrence of organizational learning or whether changes at only one of the two levels – either cognitive or behavioural – is enough in order to talk about the occurrence of organizational learning.

This issue is even more complicated, because changes in behaviour could also be related to adaptation and not learning. While Crossan *et al.* (1995) state that adaptation can have its roots in either cognition or behaviour, Bapuji and Crossan (2004, p. 399), referring to Fiol and Lyles's (1985) work, appreciate that the latter authors have suggested that <<learning is primarily 'cognitive' while adaptation is primarily 'behavioural'>> (the definitions from Fiol and Lyles, 1985, are included in another section of the paper).

Thus, our main objective, in this paper, consists in exploring and positioning ourselves in the matter of the cognitive - behavioural dilemma regarding organizational learning. In addition, we aim to analyze whether organizational learning and changes in cognition and/or behaviour, are always beneficial for an organization or not. Since higher education institutions have an important role in society, it is useful to present some implications in their case. Thus, we are including in the paper - in a concluding manner - some implications that cognitive and behavioural changes may have on education and research activities within higher education institutions.

2. Cognitive and behavioural changes. Perspectives from the literature and personal considerations

Organizational learning is a complex concept, that has been viewed and analyzed from different points of view in literature. This section of the paper contains different perspectives from the literature regarding cognitive and behavioural changes implied by organizational learning and also our personal considerations regarding the ideas/definitions found in the literature.

Fiol and Lyles (1985, p. 803) state that “Organizational learning means the process of improving actions through better knowledge and understanding.” In our opinion, the mentioned definition would make reference to organizational learning from a cognitive perspective, given the fact that the researchers equate organizational learning to better knowledge and better understanding. However, the authors consider organizational learning to be a process through which actions are improved. Thus, if we were to look at this definition from a wider point of view, we may consider that it also includes a behavioural perspective.

However, a significant aspect that needs to be mentioned is that Fiol and Lyles (1985) make a distinction between learning and adaptation. The researchers refer to learning as “The development

of insights, knowledge, and associations between past actions, the effectiveness of those actions, and future actions”, while adaptation is seen as “The ability to make incremental adjustments as a result of environmental changes, goal structure changes, or other changes” (Fiol and Lyles, 1985, p. 811).

Our point of view regarding adaptation is very well reflected in the above mentioned definition. Thus, we link adaptation with adjustments that are incremental in nature and that are a result of changes in environment and so on. We also consider adaptation to be different from learning. Our argument is as follows: organizational learning is mainly proactive (organizations seek to improve themselves and the processes within them in order to have competitive advantages or better organizational performance; organizational learning is not proactive if organizations do not learn consciously/intentionally), while adaptation is mainly reactive (organizations adjust to changes in the business environment; adaptation can be proactive in some cases – for example, when organizations change their goal structure, since this is a case when changes in behaviour are driven by internal changes and not changes in the business environment).

A different point of view is that of Shrivastava (1983). The researcher has included adaptation within the frame of organizational learning, taking into consideration four perspectives on the phenomenon of organizational learning: adaptation; assumption sharing; development of knowledge of action-outcome relationships; institutionalized experience. Referring to organizational learning as adaptation, Shrivastava (1983) mentions that Cyert and March (1963) appreciate that organizations manifest, over time, adaptive behaviour and also that they call this behaviour “organizational learning”.

Thus, in literature, either while seeing adaptation as something different from learning, or by considering adaptation as being directly related to organizational learning, we can see that adaptation has been linked with changes in behaviour. From our point of view, changes in behaviour that are an outcome of organizational learning have a permanent nature, while changes in behaviour that are a consequence of adaptation are directly related to a certain context, they disappear when the context disappears and they have a mainly reactive nature (when a certain situation imposes a particular behaviour needed for the survival of an organization, the organization will change the behaviours within it, but that organization can return to the old behaviours within it when that context is no longer present). Given these arguments, we consider that adaptation is different from organizational learning.

Considering the two types of changes that we are interested in – cognitive and behavioural – in the following we are referring to perspectives found in literature.

Returning to the main issue of this paper – the cognitive and/or behavioural changes implied by organizational learning, another useful idea from Fiol and Lyles (1985, p. 806) is the following: “it is essential to note the difference between cognition and behavior [sic!], for not only do they

represent two different phenomena, but also one is not necessarily an accurate reflection of the other.” Fiol and Lyles (1985) refer to the idea that it is possible to have changes at behavioural level, but without an association between these changes and developments in cognition, and, also, that acquiring knowledge without related changes at the behavioural level is possible. Another idea that Fiol and Lyles (1985) make reference to is the levels of learning: lower-level learning and higher-level learning. Lower-level learning involves, according to Fiol and Lyles (1985, p. 807), “association building”, while higher-level learning occurs through things such as insights or development of skills. The researchers consider that higher-level learning is, compared to lower-level learning, “a more cognitive process” (Fiol and Lyles, 1985, p. 808). The researchers specify that both levels of learning fit into the idea of cognition development. However, Fiol and Lyles (1985, p. 808) mention that what is desired through lower-level learning is “a particular behavioral [sic!] outcome or level of performance”.

Referring to the cognitive and the behavioural views on learning, Crossan *et al.* (1995) mention that the researchers who have a cognitive view on learning presume that “an adjustment or change in the way organizations or individuals process information, develop shared meaning, and interpret events” (Crossan *et al.*, 1995, p. 348) means the occurrence of learning, while the researchers who have a behavioural view link the occurrence of learning with changes in actions or behaviours.

Crossan *et al.* (1995) conclude that the researchers who are focused on the cognitive perspective on learning appreciate that learning takes place if there are changes in the processes of thought. This is something that Crossan *et al.* (1995) mention is unobservable. From this perspective, adjustments in behaviours, which are, according to Crossan *et al.* (1995), observable, are not a required condition to say that learning has occurred.

Crossan *et al.* (1995) also mention that the researchers who are focused on the behavioural perspective appreciate that the occurrence of learning is linked to changes in behaviour - changes that are noticeable -, even in the cases where those changes do not follow certain changes in thinking that would be the explanation for the new behaviours.

Our consideration is that, in order to talk about learning, we do not necessarily need to have changes at both the cognitive and the behavioural levels, but, if we have changes only at the behavioural level, we need to make sure that those changes are indeed a learning outcome and not a consequence of other phenomena in the organization or of other external causes. These ideas are explored in this section of the paper.

Huber (1991, p. 89) states that “An entity learns if, through its processing of information, the range of its potential behaviors [sic!] is changed.” Although Huber’s (1991) perspective is (mainly)

behavioural, one of the ideas that Huber (1991) puts forward, which is somehow apart, is that learning does not necessarily need to “result in observable changes in behavior [sic!]” (Huber, 1991, p. 89).

We appreciate that learning can translate in changes at either of the two levels - cognitive or behavioural, thus we are adopting a point of view that combines the two levels of learning. Therefore, we partially agree with the idea advanced by Huber (1991). We believe that the perspective is a plausible one, if we consider that learning can involve developing the capability to also act, when and if necessary, in ways which are different than those previously known. We also appreciate that this idea does not necessarily imply the existence of situations/contexts in which the potential behaviours could actually manifest, but only the existence of modifications in potential behaviours that are going to manifest when needed. However, our point of view adheres to the perspective according to which we can talk about learning also in the case of changes at only the cognitive level, even without having implications on behaviours, and regardless of whether they are potential or are actually manifested.

Referring to behavioural changes, Argyris and Schön (1996) consider that, although changes in behaviour are not a sufficient condition for organizational learning - because they can occur as a consequence of forgetting or through other ways that can generate behavioural changes -, they are a necessary condition. This perspective is partially different from the one that we have adhered to. Our consideration is that changes at the behavioural level can be either related or unrelated to learning so, from this point of view, the perspective adopted in our paper is similar to Argyris and Schön's (1996). However, the perspective adopted in our paper is as following: changes occurring at behavioural level are a sufficient condition (to say the organizational learning has occurred) as long as they have not occurred as a consequence of other determinant factors (for example, forgetting or adaptation). To further outline our perspective, we need to mention that we appreciate that learning has occurred in the case of changes at cognitive level, even if they are not accompanied by changes at behavioural level. Thus, we do not consider that behavioural changes are absolutely necessary to say that learning has occurred.

Our latest expressed idea is reflected in the following statement: “Change resulting from learning need not be visibly behavioral [sic!]. Learning may result in new and significant insights and awareness that dictate no behavioral [sic!] change.” (Friedlander, 1983, p. 194 in Huber, 1991, p. 89). We can consider that this idea falls mainly into the cognitive perspective of learning. From the above idea resulted a consideration from Huber (1991), that has been previously mentioned, regarding the change in the range of potential behaviours, through information processing (with the mention that Huber, 1991, highlights that his perspective is more behavioural).

To further outline our perspective, we are including, in the following, another point of view from the literature. Chen (2005) considers that organizational learning has two dimensions: a

cognitive dimension, meaning new knowledge acquired, and a behavioural dimension, meaning adjustments to change. Regarding this perspective, our opinion is that the behavioural dimension should not include adjustments to change (which would mean adaptation; and we consider adaptation to be different from learning), but the changes in behaviour that result from a process of learning. Changes in behaviour that appear through organizational learning are those that can lead, for example, to more effective and efficient achievement of tasks. Although Chen (2005) refers to dimensions of organizational learning, we need to note that his perspective has some similarities with the ones previously discussed, given that the two dimensions that the researcher mentions are cognitive and, namely, behavioural.

To conclude, the perspective that we are adopting and that we see as the most plausible one is that learning can imply changes at either cognitive or behavioural level and that, in the cases where changes have appeared at only one of the two levels (cognition, behaviour), this is enough in order to talk about learning (with the mention that in the case of behavioural changes we need to make sure that they are related to learning and not to forgetting or other factors).

3. Organizational learning and organizational performance. Managing the relationship between organizational learning and organizational performance

Until this point, we analyzed the concept of “organizational learning” from the perspective of cognitive and behavioural changes. In this section of the paper we are going to link the organizational learning process to organizational performance. We need to ask ourselves: is learning always beneficial for an organization? Will organizational learning always lead to better organizational performance? In what follows, we are going to address these issues.

Every organization ought to be interested in its organizational performance. Increasing organizational performance may be a finality of the organizational learning process, hence the importance of organizational learning. According to Fiol and Lyles (1985, p. 803) highlight that “In all instances the assumption that learning will improve future performance exists.” Also, Crossan *et al.* (1995, p. 353) highlight that a general assumption is that “learning is good and can be influenced to enhance performance”. However, learning is not always beneficial and does not always equate to better performance. These ideas are going to be explored and discussed in this section of the paper.

As Huber (1991) states, entities can learn correctly but learn something that is incorrect or they can learn incorrectly. Learning may lead to knowledge that is not veridical (see Huber, 1991). Huber (1991, p. 89) also mentions that “learning does not always increase the learner’s effectiveness, or even potential effectiveness.”

It can thus be seen that organizational learning is not always beneficial for an organization. If learning is not beneficial for an organization it implicitly can not lead to better organizational performance; on the contrary, it may lead to poorer performance.

Even more, if we want to address the relationship between organizational learning and organizational performance, Crossan *et al.* (1995) mention that, on a short term basis, learning may have a negative impact on performance, because individuals and organizations make use of ways of operating that are unfamiliar or new, while abandoning the familiar ways of doing things. This can lead to declines in performance on short terms. If organizations have a perception according to which there is a strong link between performance and learning, they may “prematurely abandon projects that are not performing” (Crossan *et al.*, 1995, p. 353, after Inkpen and Crossan, 1995).

It can thus be seen that organizations need to have a long term thinking if they are interested in improving their organizational performance through organizational learning.

Crossan *et al.* (1995) highlight that the relationship between learning and performance, although a complex one, can be managed if the probability to obtain improvements in performance is to be increased.

In a theoretical paper, Guță (2013) makes an assumption, according to which the concept of “management of the relationship between the process of organizational learning and organizational performance” would be a mediator in the relationship between the organizational learning process and organizational performance.

We are proposing an operationalization of the construct “management of the relationship between the process of organizational learning and performance”, considering that the idea of a concept referring to the management of the relationship between the organizational learning process and organizational performance could be useful, especially for organizations that would be interested in making attempts to manage the relationship between the organizational learning process and organizational performance. Also, taking into consideration that learning is not necessarily beneficial for an organization, orienting what an organization learns can be very helpful.

Operationalization of a concept is useful if we intend to measure a concept. The items that we are going to propose can be used in a questionnaire. Thus, in a different study (since the following ideas mentioned in this paragraph would exceed the scope of the present paper), by including a measurement scale for the concept of “management of the relationship between the process of organizational learning and performance”, alongside scales for measuring the organizational learning process and, respectively, organizational performance, the three concepts can be measured and then the relationship between them can be analyzed – for example correlations or testing the mediation

effect of the management of the relationship between the organizational learning process and organizational performance.

We have identified in literature very few ideas about the possibility of managing the relationship between learning and performance. Although the relationship between learning and performance is complex, Crossan *et al.* (1995) appreciate that this relationship can be subject to a process of management in order to increase the probability of obtaining improvements in performance, as mentioned earlier. An example in this regard, provided by Crossan *et al.* (1995), is recognizing or being aware of the fact that performance can undergo a deterioration process before it improves. From the previous idea, we have generated two items. The other two items have also been developed based on theoretical approaches on organizational learning.

In order to build the operationalization of the concept of “management of the relationship between the process of organizational learning and performance” we have focused on two “pillars”: awareness (propositions no. 1 and no. 3 from the following table) and orientation (propositions no. 2 and no. 4 from the following table).

We are particularizing the management of the relationship between the organizational learning process and organizational performance through the above two mentioned pillars: awareness, and, respectively, learning orientation.

Awareness refers to the idea of realizing that, in the event of changes at the cognitive or the behavioural level, performance may initially suffer a deterioration, before it improves. Awareness also refers to realizing that organizational learning is not always beneficial for an organization. The other part of the operationalization, namely orientation, implies capitalizing on change, following the awareness, and, respectively, orienting what an organization learns, in the idea that learning is going to be beneficial for the organization.

Table 1. Operationalization of the construct of “management of the relationship between the organizational learning process and organizational performance”

No. crt.	Proposition	Theoretical support
1.	Being aware that, in the occurrence of changes at cognitive or behavioural level, performance may initially deteriorate, before it improves.	Based on Crossan <i>et al.</i> (1995): Although the relationship between learning and performance is a complex one, Crossan <i>et al.</i> (1995) appreciate that it can be managed so that the probability of performance improvement to be higher. Such an example, offered by Crossan <i>et al.</i> (1995), is the recognition or the awareness of the fact that performance may go through a process of deterioration before it improves.

2.	The changes at cognitive or at behavioural level, that may initially lead to a deterioration in performance before a potential improvement, are capitalized.	This is an item that has been developed based on the idea of Crossan <i>et al.</i> (1995), but by going further than the initial idea exposed by the researchers.
3.	Being aware of the fact that organizational learning is not always beneficial for the organization.	Learning may influence an organization's performance either in a positive or a negative way (Crossan <i>et al.</i> , 1995; Hawkins, 2005, after Crossan <i>et al.</i> , 1995).
4.	Trying to orientate what the organization learns, so that learning will be beneficial.	We took the idea from the previous item one step further.

Source: Author's own research.

Concluding, according to literature, organizational learning is not always beneficial, not does it always lead to improvements in organizational performance.

However, through awareness and learning orientation – which are the two aspected that we have considered for defining the concept of “management of the relationship between the organizational learning process and organizational performance”, organizational learning can be better tied to orgnanizational performance, hoping for better organizational performance.

4. The case of higher education institutions: Implications of the cognitive and behavioural changes

Higher education institutions have a major role in the development of a society. In this context, it becomes relevant that higher education institutions need to perform well. Although the occurence of organizational learning does not always lead to better performance, it is a process through which performance can be improved (as a finality of the process).

Also, nowadays, organizations need to increase their pace of learning in order to thrive on the market. Higher education institutions, as a particular type of organizations, do not make an exception to this rule. Organizational learning is currently majorly important for organizations, including higher education institutions.

In a globalized world, we may think that the educational process becomes more and more standardized. As mentioned in the literature, “The new global educational orthodoxy together with competition-based education policies has led to over-standardization of teaching and learning” (Sahlberg, 2004, p. 79, after Hargreaves, 2003). However - and focusing strictly on higher education institutions -, we believe that, in order to have better competitive advantages, higher education institutions should differentiate themselves (e.g offer customized products to their clients – the

students –, in addition to a wide range of standardized products). In order for differentiation to be achieved, our opinion is that organizational learning is needed. Considering the challenging world in which higher education institutions operate, organizational learning emerges as an opportunity, and, even more, a necessity.

In this section of the paper we are presenting some implications in higher education institutions, from our point of view. For this, we are taking into consideration two types of changes - cognitive and behavioural. For highlighting the implications of these two types of changes, we are separately considering the two main types of activities in a higher education institution: research and education. The potential implications that we are taking into consideration reflect cases when the cognitive and/or behavioural changes would be auspicious.

Table 2. Implications in higher education institutions

	Cognitive changes	Behavioural changes
Research	New insights on different topics of research.	More innovative research.
	A better understanding in the matter of the research process.	A more efficient way of approaching the process of research, based on a better understanding and better policies or strategies.
	New ways of approaching research at organizational level (reformulation of policies, strategies).	
Education	A better understanding, at organizational level, regarding what the process of education means, in terms of the skills and knowledge that students need to acquire.	New/innovative ways of approaching the educational process: more appropriate ways of conducting courses, seminars and so on.
	A better understanding in the matter of students' selection and development.	A more effective way of selecting students; better ways to develop their abilities, knowledge and/or talent.
Better organizational performance – through awareness (that organizational learning is not always positive) and orientation (of organizational learning). This is an outcome at the institutional level.		

Source: Author's own research.

In higher education institutions, the educational and research activities need to be interconnected. Through organizational learning, universities may understand and perform better the processes that are related to research and, respectively, education, and thus may integrate better the education and research activities, which may lead in the end to better performance at institutional level.

Conclusions

Learning can have both a cognitive side, reflected in changes at the cognitive level, and a behavioural side, reflected in changes at the behavioural level. We have considered that learning has occurred in the case of changes at either of the two levels. More precisely, the perspective that we have adopted in this paper is that if there are changes in at least one of the two levels – cognitive and behavioural – this is enough in order to say that a process of learning has occurred. However, if changes are present at the behavioural level without being accompanied by changes at the cognitive level, we need to make sure that they are linked to learning and not to adaptation or to other triggering factors.

Regarding the effects of learning and of changes at cognitive and/or behavioural level, we need to take account of the fact that learning and, implicitly, changes at the cognitive and/or behavioural level are not always beneficial or positive.

Furthermore, learning does not always lead to improvements in performance. However, the relationship between the organizational learning process and organizational performance can be managed. We have proposed an operationalization of the construct of the “management of the relationship between the process of organizational learning and performance”. The proposed items in the operationalization may be used in empirical research. For example, if an organization is interested in making improvements in the matter of managing the relationship between the organizational learning process and organizational performance, the concerned organization can focus on awareness and orientation regarding the process of organizational learning.

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International terrorism and the basic ways to deal with it at the present stage

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Abstract

International terrorism is one of the global problems of today. In recent years it has increased and spread in Eastern and Western Europe. This study focused on the emergence and spread of international terrorism, as well as finding ways to deal with it at the present stage. The article provides statistics over the past decade about the spread of terrorism in the world, in particular in the European Union (EU) and Eastern Europe. The paper's main aim is to identify ways to combat international terrorism, in order to propose specific forms and methods of combating this phenomenon in the EU as well as in Eastern Europe.

Keywords: international terrorism, crime, anti-terrorism centers, international organizations, the terrorist threat

Introduction

Terror is a physical violence, including the annihilation of political opponents. Terrorism can be regarded as a constant companion of humanity, and is one of the most dangerous and unpredictable phenomena of modern times. So far, it has acquired different shapes and menacing proportions. One or another terrorist act may cause a massive loss of life, exerting a strong psychological pressure on the big numbers of people. Moreover, these attacks also cause the destruction of material and spiritual values, which are often beyond repair, they sow hatred among nations, promote wars, distrust and hatred between social and ethnic groups, which sometimes cannot be overcome within the life-span of one generation.

The history of global terrorism consists of five main stages. The peculiarities of each of them should be determined, highlighting the features specific to each stage of the development of global terrorism.

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The first stage represents the period of early terrorism. It falls on the period of the rise of terrorism before 1840s, when the foundation for modern terrorism was laid and the first organizations appeared.

The second stage – from the second half of the 19th century to the first two decades of the 20th century – is an era of classic terrorism. It was the time when the main forms and methods of terrorist activities were developed, and the classic patterns of terrorists' strategy and tactics were formed.

The third stage is considered as a transitional one. It lasted from the beginning of 1920s to the end of 1950s, and had two stages. At the first stage, it was possible to trace how terrorism transformed from individual and collective into a permanent factor of political life in many countries. At the second stage, terrorism was temporarily localized in the outlying areas of the world, and the transition to collective forms of terrorist activity was observed. Moreover, during this period, the new counter-terrorism forms and methods appeared.

The fourth stage, titled urban guerrilla, took place in 1960s-1980s. During this period, large organized terrorist groups appeared, while the sophistication of tactics and brutality intensified. The methods of influence on society and states were also distinctive, as well as the cooperation and internationalization of links of terrorists and their illegal organizations. As a result, at this stage, terrorism has become a global factor of international politics.

The fifth stage represents the era of modern terrorism, which is characterized by its large scale and the extreme social danger of terrorist attacks. Thus, gradually, terrorism has become one of the global problems of modern times, while its solution has become a political, economic and geostrategic battle for world domination (Held *et al.*, 2000).

The recent developments throughout the world clearly show that terrorism becomes one of the most important problems of the modern political reality. It determines the nature, content and dynamics of the development of political processes, the participants of which are all of the leading global actors.

Terrorism and other manifestations of extremism, which are formed on different ideological and political platforms, are a daily reality for the EU and Eastern Europe today. It is almost impossible to find a state, government and population, which can consider itself immune to terrorist acts. This means that today, terrorism became a threat to all humanity. Furthermore, murders, hostage-taking, bombings, arson attacks and any other of its manifestations may happen everywhere.

Due to this negative tendency, there is no doubt that the study of the causes of international terrorism, as well as the determination of the ways and methods of its manifestations are an acute and topical issue for Europe and for the whole world.

In our view, international terrorism is a reaction of certain social, confessional and ethnic groups to the globalization processes. Thus, as a result of the contact of civilizations and modernization of traditional societies, for some reasons, these groups feel the infringement of their rights. Having no opportunity to legally struggle for their interests, they resort to terrorism as a strategy of struggle of the weak against the strong. It should be noted that violence is not so important for terrorism as a feeling of horror and helplessness that appears in society after another terrorist attack. And in this context, terrorism may be considered a blackmail aimed at the governments of democratic countries (Ivakin, 2017).

Further, the media, which became widely spread as a result of the information revolution, gave terrorists a great way to influence the societies of the developed countries. After all, exactly the coverage of a terrorist attack in the media really influences the society, as an unknown terrorist act becomes meaningless.

It should be noted that with the development of high technologies, the emergence of new energy sources and means of communication, humanity gradually becomes more vulnerable even to the targeted terrorist attacks. Thus, the destruction or damage of any key facility causes the disastrous consequences for large regions or throughout the planet. This situation makes even the mere threat of a terrorist act more significant. Therefore, it is possible to say today that terrorists are focused on the intimidation of society in order to satisfy their destructive instincts rather than on the elimination of specific facilities (Naumec, 2000).

It seems that the next stage in the development of terrorism will be the provocation of wars, large-scale infringement of the sovereignty of states and the takeover of entire continents. After all, due to the absence of a universally recognized and comprehensive definition of terrorism, the formation of legal principles of cooperation of the states aimed at the struggle against it is focused on those fields, where its manifestations are the most dangerous to the interests of the international community.

1. Analysis of the main causes of international terrorism

There is a quite wide range of grounds for criminological classification of the causes and conditions for the rise of crime, which define the factors characterizing terrorism. They often include legal, social and economic, organizational and management, educational, ideological, psychological, socio-political and other causes and processes.

In our opinion, the key causes of terrorism include poverty, unemployment, illiteracy, lack of affordable housing, inadequate education and training, lack of positive prospects in life, estrangement

and marginalization of population, intensification of social inequalities, upbringing problems, negative consequences of migration, as well as the abundance of information in the media, which causes the rise in violence, inequality and intolerance. This means that terrorism has breeding grounds in those countries where people are poor and where people are pushed to find an enemy.

Modern terrorism is represented in form of massive provocations and is characterized by the transformation of terrorism to an instrument for reorganization of the world. It should be noted that this instrument is used to solve the tasks, which deprive the other countries of the possibility to objectively analyze the situation, as well as the state sovereignty when taking certain important decisions for the country.

So far, it is possible to single out several key prerequisites for the rapid spread of international terrorism. Thus, terrorism is caused by the peculiarities of the information society formation, the impact of the development of technological environment, the 'future shock' along with traditional society blurring, and the real problems of historical development of society, which are characterized by own particularities in political, cultural and social fields (Trunova, 2015).

Any terrorist act requires a national or, better, a global audience. This requirement determines the first prerequisite for terrorism spreading, or the emergence of information society. The modern form of terrorism emerged in Europe in the 19th century, where the society is known for reading newspapers regularly. With the increasing role of the media and their influence on the moods of society, the wave of terrorism begins to grow. Newspapers and magazines are complemented by radio and television, and then, the Internet takes effect, thereby causing the extension of the potential impact of terrorism on society, which, in turn, affects the growth of its capabilities.

However, it should be noted that we should not forget about the importance of technological and political aspects of the impact of some states on terror. The countries with totalitarian regimes, which have the technological aspects of information society at their disposal (for example, Nazi Germany or North Korea), yet blocking the free access to information exchange with the help of police methods, are less vulnerable to terrorism.

The second prerequisite for the expansion of the territory of negative influence of international terrorism is the nature of technology and the laws of development of technological environment of human existence, because in the process of scientific and technological progress, the technology-related environment is characterized by a more complex and vulnerable structure. A natural result of this is the appearance of the possibility of targeted destruction of social, technological and natural environment through technology development. For example, some advanced technology achievements lead to a significant increase in efficiency of arms, when certain devices may be used to launch nuclear missiles from any place to any other place in the world. Moreover, the cost of these

weapons may be affordable for not only the governments, but also any group of people (Shegaev, 2013).

Further, the formation of advanced and liberal-oriented society forms an important prerequisite for international terrorism rise. In this society, it is possible to observe blurring and gradual rejection by refined humanists and hedonists of the ideals inherent in traditional society. It is complemented by a phenomenon that was defined by Alvin Toffler as 'future shock.' He used this term to denote the stress and disorientation experienced by people who face a significant amount of changes in a too short period of time (Toffler, 1997).

With the help of the achievements of the scientific and technological revolution, many developed countries are so ahead in technological and financial terms that it is practically impossible to overtake them. Thus, the gap between the North and the South increases, while three-quarters of humanity continue falling into a kind of Malthusian trap, when people doomed to hunger and malnutrition and affected by the lack of natural resources have to resort to migration processes, internal disturbances and armed conflicts. It happens along with the increasing sense of injustice under the conditions of concealment of the real problems and when the authorities demonstrate no wish to build a constructive dialogue. This situation results in the appearance of the desire to destroy the world by any available means, giving rise to extremism and international terrorism.

It should be noted that liberal values and international treaties provide certain guarantees of human life and the responsibility of the authorities to their citizens. However, terrorist attacks prove that the authorities are not able to guarantee the life, health or peace of its citizens, whether it is the most developed country or a backward and poverty-stricken one. As the result of this situation, the authorities become responsible for it and therefore, they should be replaced. Herein lies the essence of the mechanism of political blackmail, which is often used by terrorists. It should be noted that today, none of the political, economic, military or scientific elites is able to comprehensively, adequately and effectively respond to security threats and risks (Green, 2009).

Another prerequisite that causes international terrorism is the real problems, which arise in the process of historical development and have political, cultural and socioeconomic basis. In our view, this aspect is the central one among the causes of terrorism. Thus, in a country that is more or less successful, it is possible to observe some isolated acts committed by mentally unstable marginals (for example, neo-Nazis in Germany), but the phenomenon of terrorism will be bland. The phenomenon of terrorism refers rather to the crisis stages of the modernization transition. While separatism and national liberation movements become the most frequent reason for it (Eastern Ukraine, Northern Cyprus), or the religious, ethnic and ideological conflicts (the Basques in France and Spain, Albanians, divided between Serbia, Albania and Macedonia).

Thus, in 2014, Ukraine became one of the European countries, which have joined the list of the countries with a high level of terrorist threat.

It was caused by the two most resonant terrorist acts: the arson committed by Ukrainian nationalists in Odessa House of Trade Unions on May 2, which caused the deaths of the opponents of Kyiv regime, and the aircraft with 298 passengers on board that was shot down over the territory of the so-called Donetsk People's Republic on July 17. Despite the fact that there are enough evidences concerning the arson of House of Trade Unions, in particular the organizers and direct participants of this terrorist act, its unbiased investigation never happened. On the contrary, those, who became victims of Ukrainian ultranationalists, appeared to be the accused. Nevertheless, despite the absence of any evidences of the involvement of Donetsk fighters in the tragedy with the Malaysian Boeing, exactly they were declared guilty of this action. It all indicates the bias and opportunism of the international structures in their assessment of certain terrorist acts, which certainly does not favour the effectiveness of implementation of the counter-terrorism policy.

In addition, today, it is possible to observe a clear link between terrorism and drug trafficking. Transnational criminal groups do not stop their attempts to directly influence the important economic sectors worldwide, creating huge shadow capitals and making attempts to interfere in the activity of state power structures, thus making it possible to guarantee decision-making, which is favorable for them. It should be noted that since the beginning of the 21st century, it is possible to observe the tendency of fusion of individual ethnic criminal groups with ethnic terrorist and extremist organizations. The result of this phenomenon is the distribution of drugs, facilitation of their transportation and sale. It causes the increase in terrorist acts funding along with additional damage to a target state.

Thus, terrorism has become a companion of globalization, while aiming all efforts at its undermining. The feeling of danger and risk gradually becomes universal and constant, especially in European countries, which have experienced terrorist attacks lately (Madrid and London in 2004, Toulouse in 2012, Paris in November 2015, Brussels in March 2016).

Terror becomes one of the most important instruments of anti-globalization process, as it struggles against uniformity. It seems that earlier, one or another act of terrorism was essentially an act of persecution, perhaps an ideological one, and had relatively narrow goals. But today, terror assumes such fundamental task as a struggle against variety.

It is also necessary to note that culturally and stage-homogeneous societies, like Switzerland or the Netherlands, are more protected against international terrorism. Its manifestation is often connected with the boundaries of cultures and epochs of historical development. One of the striking examples is the situation in Israel and the Palestinian Authority, when the Islamic world faces an

outpost of European civilization advanced deeply into Asia, and when the deeply traditional Palestinian society is in contact with a modernized society of Israel (Butrin, 2016).

Thus, summing up the causes of development and spread of international terrorism, it should be noted that terrorism and terrorists need a constant support or sympathy from some parts of society. And the attitude to terrorism directly depends on the consolidation of society around the political goals of terrorists, on the level of liberal and humanistic values accepted in a particular society, as well as on the degree of citizens' sense of justice.

Every politician, researcher and citizen must understand that a real problem – social, cultural or political – always stands behind terrorism. And there is always a segment of society, the most sensitive to this problem, which, perhaps, does not sympathize with the methods of terrorists, but still accepts their declared goals and ideas, thus contributing to the formation of potential cadres for terrorist threats on the domestic scene. Based on this, it is possible to make the conclusion that it will be appropriate to promptly and comprehensively solve acute problems, as it makes it possible to prevent the split in society in time and does not provide terrorist movements with the necessary support base, leading eventually to terrorist activities decline.

1.1. Analysis of the statistics of the modern manifestation of terrorism in Europe and the world

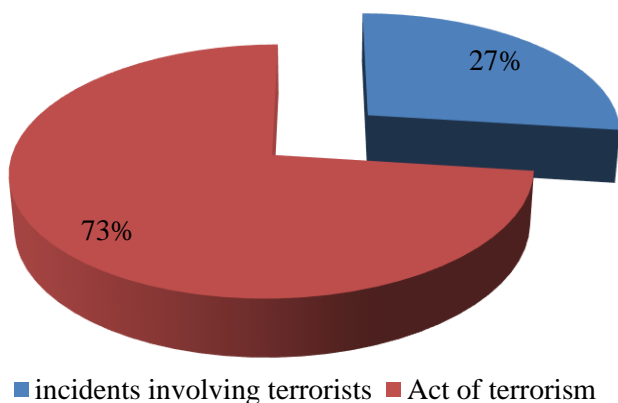
Global Terrorism Index shows that in 2015-2016, it was possible to observe two different tendencies in the development of international terrorism in the world. On the one hand, there was a drastic reduction in the number of victims of terrorist attacks – down to 25,637 persons (22%). On the other hand, there was an increase in the number of countries, where the deaths caused by manifestations of terrorist activity happened during this period. Thus, there were 65 countries in 2015, and 77 in 2016. It should be noted that it is the highest figure over the past 17 years (Centre for Humanitarian Technologies, 2018).

The situation in the European Union may seem better. Europol data show that the number of terrorist attacks dropped by 62% from 2014 to 2016. Thus, in the last two years, the attacks were documented in eight EU states, while more than half of them were committed in the UK. According to the same data, it is possible to note that 142 people were killed and 379 were injured as the result of terrorist activities in 2016. It is also possible to observe the increase in the number of arrests of persons suspected of terrorist activities – 1,002 persons.

However, in 2017, the terrorism-related situation in the EU states remained quite uneasy. The most problematic sites were still in the UK cities. The following picture demonstrates that there were

1,787 incidents involving terrorists, including 1,310 terrorist acts and 477 incidents involving terrorists (see Figure 1).

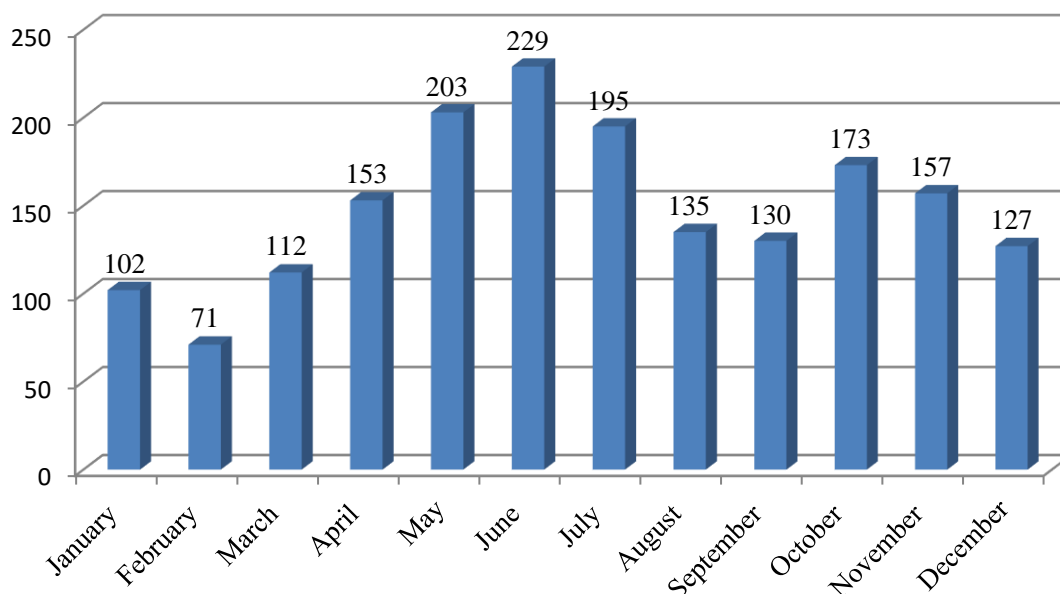
Figure 1. Incidents involving terrorists



Source: Centre for Humanitarian Technologies (2018)

The following data demonstrate the number of incidents involving terrorists by months in 2017 (see Figure 2).

Figure 2. The number of incidents involving terrorists by months in 2017



Centre for Humanitarian Technologies (2018)

Thus, according to the graph, the biggest number of terrorist incidents occurred in June (229 incidents) and in May (203 incidents).

The most resonant terrorist attacks in Europe and worldwide, which happened in 2017, are as follows:

- on the night of January 1, the attack on the nightclub Reina took place in the Turkish city of Istanbul. A terrorist armed with a gun killed a police officer, who was guarding the club, and then rushed into the premises, where there were more than 700 people, and opened fire on them. According to the Ministry of the Interior of Turkey, 39 persons were killed, 69 persons were injured;

- on February 3, a terrorist from Egypt attacked a serviceman in Paris near the Louvre using a machete. The attacker was detained, and there were no victims;

- on March 22, a terrorist attack happened on the Westminster Bridge in London. A Briton Khalid Masood drove his car into pedestrians on the pavement and knocked nearly 50 persons down, 4 persons died. After that, he stabbed a police officer, who was guarding the British Parliament. Thus, as the result of the attack, 5 persons died and 49 persons were injured. The terrorist was killed by police;

- on April 7, after the negative decision of Swedish authorities on refugee status, a citizen of Uzbekistan Rakhmat Akilov hijacked a lorry and drove it into the crowd on the main street of Stockholm. As a result, 14 persons were injured and 5 persons died;

- on April 9, there were two explosions in the churches of Egypt with a difference of several hours. The explosion in the main church of the Egyptian city of Tanta occurred in the morning, 28 persons died and nearly 80 persons were injured. The attack was committed by a suicide bomber who entered the church during the service. Later, the second suicide bomber blew himself up at the entrance to the church in the city of Alexandria, where the Pope of the Coptic Orthodox Church Tawadros II stayed at that time. 17 persons were killed as the result of the attack, including four police officers, who stopped the bomber and did not let him enter the church, thus avoiding a greater number of victims;

- on April 20, a French national Karim Cheurfi killed a police officer on the Champs Elysees in Paris using an assault rifle and injured two police officers and a German tourist. He was shot dead by police;

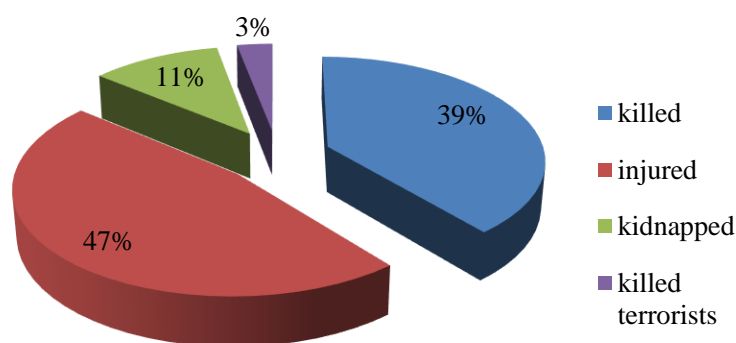
- on May 22, a suicide bomber Salman Ramadan Abedi carried out the suicide bomb attack at Manchester Arena in Manchester. Nearly 500 people were injured and 23 were killed;

- on June 3, a van was driven into pedestrians on the pavement in London. Three persons ran out of the van and attacked the visitors to restaurants and cafes with knives. As a result, 8 persons were killed and 48 persons were injured;

- on August 17, Younes Abouyaaqoub drove into pedestrians in the center of Barcelona. 16 persons were killed and 151 persons were injured. The terrorist escaped from the crime scene, but was shot dead by police during a search operation (The Telegraph 2017).

The following picture makes it possible to analyze the number of victims of terrorist acts in 2017 (see Figure 3).

Figure 3. The number of victims of terrorist acts in 2017



Source: The Telegraph (2017)

According to the diagram, 13,759 persons were killed, 16,683 persons suffered from injuries of differing levels of severity, 4,034 persons were kidnapped as a result of certain terrorist incidents, and only 1,044 persons, which is 3% of the victims of terrorist acts, are the killed terrorists.

The indicated terrorist attacks committed in 2017 indicate that they are not just some kinds of excesses of peaceful life, but rather an undeclared war, when the enemy is very dangerous, insidious and secretive. The situation is also complicated by the fact that terrorists can adapt to the existing counter-terrorism capabilities of the EU countries, resorting to new tactics of preparation and conduct of terrorist acts.

There are several explanations for this. First, the present-day terrorists are generally not the formal members of some radical organizations. They are just united by a common idea, which is presented as a victory of the true Islam. It should be noted that the Islamic State does not always take responsibility for one or another act of terrorism, as it finds out about what happened from the media, and therefore it needs time to study the details and possible risks. Nevertheless, in fact, all terrorist acts, which are committed by Islamists today directly or indirectly, are usually associated with the Islamic State, as it once happened with Al-Qaeda (Modzhoryan, 2008).

As a result, even the law enforcement agencies of some countries that opposed the far-left (the Red Army Faction in Germany, the Red Brigades in Italy, the Action Directe in France), or the

separatist organizations (the Basque Homeland and Liberty in Spain, the Provisional Irish Republican Army in the UK) are not able to effectively use their accumulated experience due to the absence of a unified terrorist organization among the Islamists. Without it, it is difficult to obtain the necessary information about its activities, to define the leaders and to arrest its members.

This method was very successful with terrorist organizations, as after the mass arrests of the leaders, common members were not able to independently continue their struggle. This in turn led to the dissolution and termination of its existence.

Second, a model terrorist attack in Europe today mainly uses an individual or a small group of executors, or suicide bombers. Both immigrants and their descendants in the second or third generation, who were subject to radicalization in mosques, Islamic centers, or via the Internet, may be involved in these attacks. These terrorists focus on common people, as it is much easier to commit an act of terrorism against them than to attack some strategic infrastructure facilities. In addition, the attacks on common people cause a strong response in the media. It should be noted that almost no one knows about the plans of these executors, who act alone. And therefore, it is almost impossible to search and detect them.

Third, the majority of terrorist attacks were committed in Europe without the use of firearms in order not to be noticed by the law-enforcement agencies or criminal organizations. Instead, terrorists preferred to use transport or homemade explosive devices (The Independent, 2016).

In connection with all these problems, it could be assumed that the law-enforcement authorities of the countries of Western and Eastern Europe faced the challenge of revealing Islamists, preventing terrorist attacks and countering the radicalization of society, which is a rather complicated process. It should be noted that the problem is that the EU countries in most cases only respond to the committed terrorist acts with the purpose of preventing them in the future.

Thus, it is possible to make the conclusion that the ill-thought-out migration policy, the difficulties in overcoming social polarization, and the weakness of law-enforcement agencies towards the known Islamists, as well as the lack of coordination between the EU member states lead to the rise of Islamist terrorism in Europe. Therefore, it seems that today, the European Union should analyze the existing counter-terrorism architecture and identify errors, which hamper the comprehensive protection of their citizens from this threat. Particular attention, in our view, should be paid to the international and inter-agency cooperation, to the exchange of live data between different agencies and states, to the effective border control and to the suppression of radicalization of society, especially among young people.

However, even with successful solutions to the problems in these areas, only the manifestations of terrorism will be suppressed, while the prime cause, which consists in the present-day injustice of

the world order, will not be revealed. As for the EU countries, it seems that they are not ready to deal with this issue today, preferring to strongly defend their borders. This strategy is, in fact, losing and wrong.

Terrorist attacks in Paris, Istanbul, Tunisia and the United Kingdom, as well as the other terrorist acts of the recent years show that the target object is still the prerogative of terrorists, while for the rest, this choice is always sudden. That is why it is difficult to reveal terrorism, while today, the civilization itself contributes to the quality and quantity of violent means, which can be used by radical organizations or individual terrorists.

1.2. International counter-terrorism system

Social development causes the transformation of terrorist attacks and the constant emergence of new factors. However, meanwhile, the international community establishes new organizations aimed at the struggle against international terrorism.

Thus, the international counter-terrorism system has been already established, and it provides for the bilateral cooperation at the global and regional level.

First of all, the matter is in the United Nations (UN), which deals with the release of important counter-terrorism documents and the establishment of anti-terrorist centers.

As of today, the United Nations is considered a single universal mechanism to support international peace and global security through the collective regulation of international relations and sustainable development and stability.

There are basic documents aimed at the struggle against international terrorism, including the following:

- Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents, dated December 14, 1973;
- International Convention against the Taking of Hostages, dated December 17, 1979;
- International Convention against the Recruitment, Use, Financing and Training of Mercenaries, dated December 4, 1989;
- Convention on the Safety of United Nations and Associated Personnel, dated December 9, 1994;
- International Convention for the Suppression of Terrorist Bombings, dated December 15, 1997 (Zonov, 2011).

In addition, today, the other actions aimed at the struggle against international terrorism are taken by the international community. First of all, the matter is in 12 international treaties aimed at

the struggle against terrorism. Moreover, the range of resolutions adopted by the UN Security Council are binding on all UN member states. In addition, the UN Security Council Counter-Terrorism Committee was established, which also aims to struggle against international terrorism.

It should be noted that there are several concepts of the struggle against international terrorism:

- the violent confrontation in the context of the struggle for existence, as the result of which the death of social groups or systems, which are adapted to the existing life conditions the least, is observed, while the most adapted ones survive (a kind of evolutionary processes);
- the struggle as a destruction of an enemy in the process of military or anti-terrorist operations;
- the preventive measures aimed at making the full-fledged terrorist activities impossible through the information war.

It is possible to assume that there is another method – the so-called humane war on terrorism, when the neutralization of terrorism is achieved by the prevention of terrorist factors, with the help of agreements and implementation of mutual concessions.

Important is the fact that the first two mentioned strategies have lost their positions in the practice of struggle against international terrorism, because they were not sufficiently effective and humane. It seems that the promising counter-terrorism strategies may include only the ones with no signs of physical abuse, the ones with the focus on a reasonable compromise that would take into account the interests of all parties. Compliance with these arrangements will make it possible for the society to find the best algorithm of social management, and therefore, there will be no breeding ground for terrorism.

It should be noted that the struggle against terrorism should be considered as a controlled and conscious process, which results in the thought-out and developed action strategies. After all, counter-terrorism strategy positioning intensifies the importance of planning of special events aimed at combating and preventing terrorism. This means that analytics is important in the process of development of specific strategies. There should be no just simple selection of components out of the existing arsenal of available tools (Yakovenko, 2013).

However, despite the efforts of international organizations, as well as the international community as a whole, international terrorism continues to increase its scale, spreading across the planet. It becomes apparent that today, none of the states is able to guarantee the prevention of terrorist attack threats and safe life to its citizens. In addition, politicians and experts discuss more and more frequently the possible terms for terrorists to obtain access to dual-use technologies.

Thus, it should be remembered that terrorism is only a method or tactics, but not a political program or ideology. It is definitely possible and necessary to destroy terrorists. It is necessary to take measures to prevent terrorist attacks. However, it should be remembered that the efforts of one great

power or even a group of highly developed countries are insufficient to struggle against international terrorism. International terrorism as a global problem of the modern world may be overcome only by collective and well-coordinated efforts of the majority of states and nations worldwide (Bekyashev and Avyasov, 2015).

Furthermore, it is necessary to pay attention to the fact that the existing counter-terrorism strategies focus on terrorism as an accomplished fact, while insufficient attention is paid to the technologies of prior neutralization of social conflicts, which are the deep social causes of terrorism. Definitely promising are the social and information counter-terrorism technologies. Their essence is reduced to elemental – it is easier to remove the preconditions of terrorist activities through the conformal reform and timely correction of social control algorithm than to neutralize the social conflict that may cost the authorities stability, while people may lose peace and security.

2. Counter-terrorism forms and methods

Any terrorist organization, despite its ideology or abilities, has its weak spots. Among them are the common ones, which may be found in all similar organizations. That is why the attention aimed at the search and identification of these weak spots will act as an effective method of struggle against international terrorism:

1. The activity of terrorists. The point is that terrorists are rarely able to act independently. This means that they are constantly in contact with fellow-fighters and like-minded persons. Therefore, the monitoring of these contacts with the help of special equipment makes it possible to define their action schemes, to find out the plans of terrorists, to detect and neutralize them.

It is important to monitor all movements and actions of the members of terrorist groups. Close attention to the collection and analysis of the information on terrorists makes it possible to achieve a significant effect in the struggle against them. For example, German authorities managed to neutralize the Baader-Meinhof Group (Red Army Faction) with the help of a computer database developed to collect and analyze the facts that are relevant to the terrorists.

2. The ability to arrest or kill the leaders of terrorist groups. It is well known that the leaders of terrorist groups have a significant influence on the activities of their organizations. It is possible to reduce their role in case when the terrorists are guided by other goals, for example, some worldview, or when they are backed by one or another special service of the other state. But more frequently, the activities of terrorist organizations directly rely on the actions of their leaders.

Any act of terrorism requires planning and careful preparation. Therefore, the capture and annihilation of a leader favours the destruction of terrorists' plans. Many terrorist attacks were

prevented with the help of this tactics. For example, the arrest of the leader of the Kurdistan Workers' Party, Abdullah Öcalan, which led to the complete elimination of this structure. This means that by eliminating the leader of a terrorist structure, it is possible to reduce its controllability and effectiveness or even to completely destroy it (Sychev, 2004).

3. The power struggle within terrorist groups. It is often possible to observe the manifestation of competition between these groups fighting for fame, influence or money. For example, in Iraq, terrorist group mainly fight against each other rather than against the authorities. This hostility is usually characterized by permanence. Thus, competition may cause weakening and destruction of many groups. For example, the reduction of the activity of Colombian FARC and the Philippines' New People's Army.

All this indicates that planning an anti-terrorist operation, it is necessary to focus on the identification of these conflicts, which can be used for the operation's success.

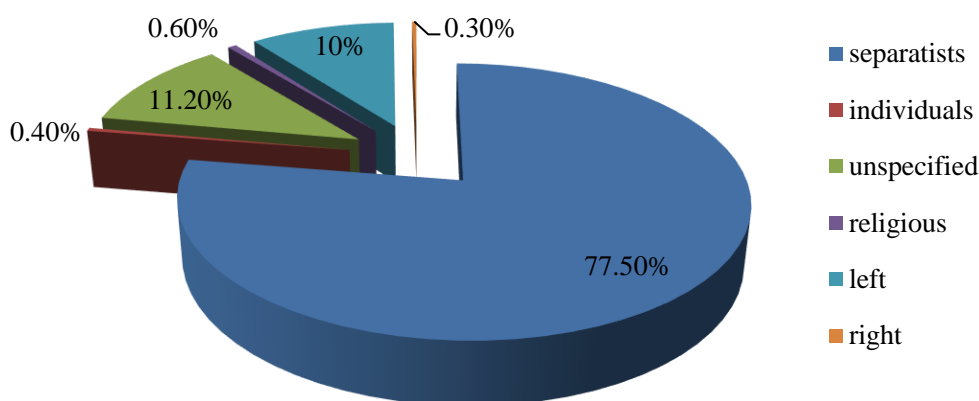
4. Terrorist organizations consist of people, which can be annihilated or returned to normal activities by means of persuasion and demonstrations of goodwill. An important method of combating and preventing terrorism are the government measures aimed at winning the minds of the members of terrorist groups, convincing them that it is senseless to continue the struggle. Among these measures, it is possible to single out the eradication of corruption in government agencies, the improvement of the life of population living in areas, where terrorists find support, the undermining of the financial base and food economy of terrorists, the inclination of their leaders to renounce the armed struggle, the provision of amnesties to the members of terrorist groups.

5. All states, even those that compete in the international arena, should combine their efforts in the struggle against terrorism. Committing their attacks around the world, terrorists make different countries their enemies. And the understanding of the importance of joint struggle against them becomes a stronger motivation for consolidation than the existing controversy between the countries.

6. Some states support terrorists. In this regard, it is important to keep them away from this support by military force. In addition, to suppress this support, the international community should impose economic and political sanctions (Kuznecov and Marshakova, 2016).

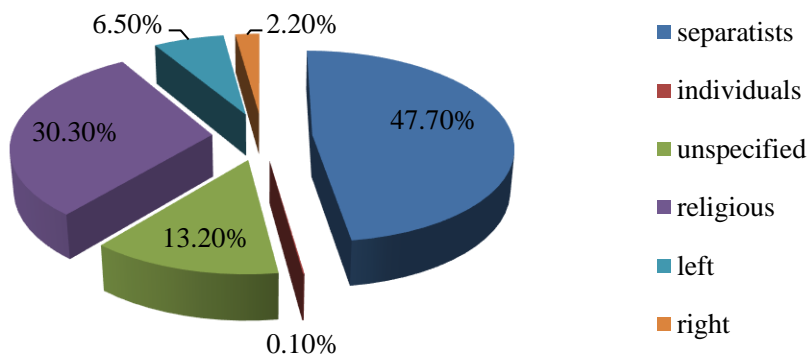
Based on the Europol's reports on terrorism for 2014-2017, it is possible to analyze the effectiveness of the methods used to struggle against terrorism and terrorists. For this purpose, it is possible to compare the number of terrorist acts in Europe and the number of people arrested for terrorist crimes during this period (see Figure 4 and Figure 5).

Figure 4. The number of terrorist acts in Europe



Source: Centre for Humanitarian Technologies (2018)

Figure 5. The number of people arrested for terrorist crimes



Source: Centre for Humanitarian Technologies (2018)

Thus, it is obvious that the biggest number of terrorist attacks was committed by separatists, but their activity reduces gradually. They are followed by left radicals, while the number of terrorist acts committed by them has also decreased in the recent years. Against this background, it is possible to see that the number of unspecified terrorist acts, the so-called unmotivated violence, has increased. As for religious terrorists, right-wing radicals and individual attackers, they have committed relatively fewer terrorist attacks. It can also be noted that leftists and separatists often carry out symbolic terrorist acts, which do not cause human losses.

Analyzing the data on the number of people arrested for terrorist crimes, we see a slightly different situation. Right-wing radicals and individual attackers are also relatively not numerous, but the number of arrested religious terrorists is considerable. Moreover, it is higher than the number of terrorist acts they have committed. This may show that religious terrorists are ill-prepared, and they are often arrested at the stage of crime planning, for example, when trying to assemble an explosive device or buy weapons.

Based on the indicated methods of struggle against terrorist organizations, it is possible to formulate the basic principles of counter-terrorist activities. Thus, an important principle is the destruction of a network of terrorist cells. Terrorists always have a strict hierarchy of leaders. Therefore, the annihilation or arrest of the leaders would be a destructive power for them. However, it is important to understand that the annihilation of one leader can influence only a single cell, but does not destroy the entire network of terrorist organizations.

In addition, the leaders of these structures often use propaganda method, but do not take part in the implementation or organization of a terrorist act. It is also important that the network structures will be the most stable and can be restored even after powerful campaigns against them. Nevertheless, it is always possible to find a weak spot, such as, focusing on professionals in different fields, which can be experts in explosives, weapon masters, without which it is impossible to conduct serious attacks. IT professionals or people involved in informational and psychological war may also be among these experts.

Political transformation will also be an important principle. Thus, global practice has the examples, when it was possible to stop the activities of terrorists by directing their efforts in the field of political struggle. For example, the Palestine Liberation Organization headed by Yasser Arafat, which initiated peace talks with Israel in 1990s. As a result, the members of the organization joined the structure of the Palestinian Authority. All this indicates that the success of terrorists directly depends on certain political conditions. When these conditions disappear, the terrorist organizations are losing their power, and often begin to struggle against each other (Dershovic, 2015).

Another principle consists in depriving terrorists of their basis in form of public support. The long-term existence of a terrorist group is possible only with the support of the population or its part. This makes it possible to recruit new fighters, receive the necessary resources and hide successfully. However, this assistance may be lost. For this purpose, it is important to work with local residents at the state level. For example, to create new jobs, to eliminate discrimination of national or religious minorities, and so on.

An important principle of the struggle against terrorism is, in our opinion, in the conduct of military operations and repressions. Many cases of annihilation of terrorists are related to the assistance from troops, although it is mainly the concern of special services. However, experience has proven that these operations inevitably cause civilian casualties, deprive the authorities of the support of local population, and cause economic collapse in this territory, therefore creating favorable conditions for the further actions of terrorists. Yet during the large-scale military operations, army units should be used in order to change the situation fundamentally.

It should be noted that modern information technologies may be the most advanced principle of the struggle today. Terrorists actively use information technologies to coordinate their actions and spread propaganda. Cellular communications, e-mail and other software for Internet communication caused the appearance of cyberterrorism. In this regard, it is important to monitor and suppress the use of information technologies by terrorists (Netan'yahu, 2002).

While terrorism was, as a rule, the domain of illegal structures before, which were trying to declare about their desire to participate in political processes in one or another state, by the middle of the second decade of the 21st century, terrorism has gained such a powerful potential that it considered it possible to emerge from the underground, figuratively speaking, and to challenge the world community and its leading countries, to declare about its claims to the reorganization of the world.

Not only the countries with unstable domestic political situation are subject to this threat, but also the leading countries of the world community with a well-functioning internal security system: Russia, the USA, France, the UK, China and others.

Moreover, the incidents, which happened in 2017, indicate that terrorism gradually becomes a daily reality. This in turn makes the collective public consciousness to perceive this phenomenon as quite ordinary one.

All of the above-mentioned tendencies, as well as the dynamics of terrorist acts show that terrorism in 2014 - 2017 acquired a qualitatively new essence and now differs from its earlier analogues fundamentally. The main conclusion to be made in the process of analysis of the present-day tendencies in terrorism is that international terrorism has transformed into a global problem of the modern global political processes, and in many respects defines the prospects of the further evolution of human civilization (Butrin, 2016).

Conclusions

In order to prevent terrorism at the present stage it is necessary to develop and introduce the most important courses of the struggle. In our opinion, it is possible the struggle against international terrorism, however, it is important to observe the following aspects for this purpose.

It is necessary to finally overcome the legacy of the Cold War between the US and Western Europe on the one part and Russia, China and Iran on the other part. This will make it possible to ease international tension and to create a high degree of mutual trust and genuine interest in the security level improvement to struggle against terrorists.

It is important to direct all of the remaining regional and internal conflicts across the world to the negotiation stage, and, if necessary, to carry out peace operations under the auspices of the United Nations (Syria, Somalia, etc.).

The refusal of the “double standards” policy is also a serious issue. It often happens that in one country, an organization is treated as a terrorist one, while the other country provides its members with the freedom of movement, the access to housing and employment. To avoid this situation, it is necessary to make a single list of terrorist organizations, which will be adopted by the UN Security Council in accordance with the international law. It seems obvious that terrorists should not have shelter countries, which they can use as the territories uncontrolled by the world community to carry out their illegal activities.

It is also important to continue improving the international legal framework under the auspices of the UN, defining the measures of prosecution and bringing terrorists, pirates, agents and their sponsors in any country of the world to criminal liability.

In order to overcome any possible terrorist attacks, it is also necessary to solve social and economic problems in Africa, Asia, Latin America, and the Middle East. By reducing unemployment, illiteracy, poverty, hunger and diseases, which are a breeding ground for the development of international terrorism, it is possible to achieve a significant weakening of the “recruiting” base for the leaders of terrorist groups.

A strong measure of struggle against international terrorism will be its organization on a global scale. Thus, in our opinion, it is necessary to provide funding of the preventive and active measures in this field, including at the expense of means saved on the reductions of armed forces and weapons and military equipment of the leading world powers.

Finally, it is possible to achieve the effectiveness of the struggle against international terrorism by making this struggle more systematic. For this purpose, it is necessary to skillfully combine political, economic, social, legal, educational and organizational measures, which will include operational investigations, special, military and other activities.

Thus, the current conditions of the global problem of international terrorism should not be regarded only as an independent phenomenon. The situation is that terrorism becomes an important part of the broader military and political global system, which is associated with the fundamental issues of war and peace. Their solution influences the further existence of civilization on the planet. Therefore, in order to prevent the growth of extremism in the society and the emergence of new terrorist attacks, it is important to implement the targeted programs aimed at the solution of the most critical social and economic issues in problem regions, to toughen anti-terrorist legislation, to carry

out special counter-terrorist operations, and to seek the organization of close international cooperation in this area on multilateral and bilateral grounds.

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The anatomy of Russia's grip on Armenia: bound to persist?

Aram TERZYAN*

Abstract

The 2018 “Velvet revolution” in Armenia has engendered a bunch of unanswered questions regarding both its domestic as well as foreign policy implications. Given the newly-elected prime minister’s critical stances on Armenia’s plight in the Russia-led unions, it is easy to resort to speculations about possible foreign policy changes. This study analyses the anatomy of Russia’s powerful grip on Armenia, with a focus on country’s huge economic dependence on Russia, the “frozen” Nagorno-Karabakh conflict, as well as Kremlin’s traditional special ties with Armenian incumbents. Even though a breakthrough on reducing the enormous asymmetry in Armenian-Russian relations is unlikely anytime soon, owing to its vast legitimacy the new Armenian government may well reinforce its agency. That said, in theory it has an opportunity to cut back the heavy reliance on Kremlin’s overwhelming political and economic support and somewhat rectify its compliant foreign policy behavior. Yet, further research is essential for in-depth analysis of ruling elite’s interactions with Kremlin.

Keywords: Armenian-Russian relations, Armenian “Velvet Revolution”, Nagorno-Karabakh conflict, authoritarianism promotion

Introduction

The 2018 “Velvet revolution” in Armenia has engendered a bunch of unanswered questions regarding both its domestic as well as foreign policy implications. Given the newly-elected prime minister Nikol Pashinyan’s critical stances on Armenia’s plight in Russia-led unions, it is easy to resort to speculations about possible foreign policy changes. Notably, in the fall of 2017 his “Yelk” parliamentary faction submitted a bill proposing Armenia’s withdrawal from the Russia-led Eurasian Economic Union (EAEU) – framed as a dormant union detrimental to country’s interests (Azatutyun, 2017).

Yet as a prime-minister Pashinyan denied the possibility of a secession from the EAEU and confirmed the indispensability of Armenian-Russian strategic partnership. Essentially, it is easy to

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fall prey to structural reductionism and contend that irrespective of ruling elites' nature, Armenia is immensely bound by constraints of vast political and economic dependence on Russia. Meanwhile, a more nuanced analysis of the anatomy of Russia's grip on Armenia helps evaluate the political feasibility of diminishing country's heavy dependence on Russia. There has been a tendency in the existing literature to regard Armenia's geographic location and material weakness as instrumental in inviting Russian coercive policies (Babayan, 2015; Ter-Matevosyan *et al.*, 2017). This makes Armenia's "Russia-first" foreign policy hardly surprising and, perhaps, not even worth studying since its actions all follow system-level theoretical expectations. Yet this study seeks to balance taken-for-granted assumptions of structural inevitability with agency-level factors in determining Armenia's foreign policy making.

Therefore, along with core structural constraints, most notably the "frozen" Nagorno-Karabakh conflict and Armenia's immense economic dependence on Russia, this study delves into individual-level factors, such as the former Armenian Presidents' preferences and choices behind the compliant behaviour towards Russia. This in turn, prompts a focus on Russia's authoritarianism promotion as a crucial tool for producing autocracies in CIS countries and absorbing them into its ranks (Ambrosio, 2016; Secrieru, 2006). Meanwhile, the frameworks 'authoritarian learning' and prospect theory seem amenable to accounting for Armenian Presidents' compliant behaviours vis-à-vis Russia. This specifically applies to the second President Robert Kocharyan as the core 'architect' of the path that led to Armenia's economic and political absorption by Russia.

The authoritarian learning literature is concerned with learning from both internal and external experience. In the analysis of the post-Soviet region, the literature has chiefly focused on the fostering and promotion by Russia of authoritarianism in other states (Ambrosio, 2009; Vanderhill, 2013). While authoritarian learning literature has not touched on individual learning, prospect theory puts attention on how decisionmakers formulate choices by using past reference points (Hall, 2017, p. 163). Each individual weighs up gains and losses of a possible decision. Presumably, individuals with pronounced power motivation are likely to make decisions, including foreign policy ones, that would be conducive to maintaining their power (Aberg and Terzyan, 2018, p. 155). Thus, I assume that along with above-mentioned constraints, the lessons Kocharyan learned from the steady survival of Kremlin-sponsored regimes, have influenced the strategic choice of the Russia-led path.

The paper is structured as follows. First, I briefly discuss Putin-led Russia's reinforced foreign policy towards the CIS countries that led to Armenia's economic absorption. This section focuses on Russia's economic and energy grip on Armenia. Subsequently, I delve into the "frozen" Nagorno Karabakh conflict, that has been critical to Armenia's compliance with Kremlin-led rules. In the next sections I discuss the intentional dimension of Armenian policy makers' choice of the Russia-led

trajectory within the frameworks of authoritarian learning and authoritarianism promotion. The conclusion briefly discusses the main findings.

1. The path to tightening Russia's economic grip on Armenia

The shift in the Russian leadership's foreign policy thinking from 'liberal ideas' to geopolitical and particularly pragmatic geoeconomic realism in the early stage of Putin's presidency (Thorun, 2009, p. 28) significantly determined policy priorities towards the newly independent CIS states. The ambition to restore Russia's 'greatness' and in particular to consolidate control in its traditional 'sphere of influence' prompted Putin to renew and promote the so-called 'CIS project'. It came down to tightening the Russian grip in its backyard, aimed at shielding it from 'unwanted intrusions' and suppressing the CIS states' pro-Western foreign policy pursuits (Skak, 2011).

To this purpose, the Russian leadership emphasized the necessity of expanding Russian capital, strengthening ties with political leaders, as well as retaining and reinforcing its military presence in CIS countries. Putin threw his weight behind the takeover and monopolization of strategic economic and energy infrastructures in the CIS countries as a powerful tool for influencing their behaviour and punishing 'disobedient' political leaders (Secrieru, 2006). Essentially, by offering huge militarisation-oriented support to power-hungry leaders, Kremlin sought to resonate with their pursuit of building up security forces and pro-regime groups against unwanted political and social attacks. In effect, the promotion of authoritarianism in CIS countries, with the goal of producing autocracies and absorbing them into its ranks, has been placed at the heart of Russia's renewed post-Soviet policy. Even though it is hard to assess the extent to which the rise of authoritarianism in Armenia and Kyrgyzstan has been correlated with the Russian mechanisms of its diffusion (Brownlee, 2017, p. 1335), the fact that both countries eventually signed up to the Russia-led trajectories suggests that Putin's 'packages' considerably appealed to Armenian and Kyrgyz leaderships.

The renewed 'CIS project' worked out particularly well in Armenia where, unlike neighbouring Georgia, it produced significant outputs over a relatively short period of time. More precisely, Armenian and Russian Presidents came up with the so called 'mutually beneficial' 'assets-for-debt' swap that would gradually but immensely step up Russian influence in the Armenian economy since the fall of 2001 (Eurasianet, 2002). The recipe is simple: in exchange for a write-off of its around \$100 million debt incurred since 1991, Armenia agreed to transfer strategic state-owned assets to Russia, including six hydroelectric power plants (Eurasianet, 2003). Moreover, in 2003, Armenia ratified an agreement that allowed Russian RAO Unified Energy Systems (UES) to take over the financial control of the Medzamor nuclear power plant, accounting for about 40 percent of Armenian

electricity production (Azatutyun, 2003). Overall, Russia took over around 90 percent of Armenia's power generating capacities. Besides, within the 'assets-for-debt' swap arrangements, Kocharyan's government handed over Armenia's largest cement factory to the Russian ITERA gas exporter in payment for its \$10 million debt for past gas deliveries (Eurasianet, 2003).

It is noteworthy that both Georgia and Ukraine similarly had huge debts to Russia, yet Armenia was the only one to make substantial concessions for its write-off. Indeed, the tightening economic grip on Armenia gave Russia political leverage to influence the country's behaviour. In October 2002, Armenia, along with Russia, Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, signed the founding documents of the Collective Security Treaty Organization (CSTO), thus confirming the strategic choice of the Russia-led trajectory. The Armenian-Russian military cooperation significantly intensified in the fall of 2003. On the eve of the Georgian 'Rose' revolution, Armenia signed a series of military agreements with Russia (Secieru, 2006).

Over time Russia has significantly tightened its economic grip on Armenia. As a single country, Russia is the main external trade partner of Armenia, being the destination for 20 per cent of Armenian exports and source of 70 per cent of remittances (Worldbank, 2015). Russia also maintains lead in the realm of foreign investments in Armenia. According to official information, there are about 1,400 enterprises with Russian capital, which is over one fourth of all economic entities with involvement of foreign capital (Sargsyan, 2017). Last but not least, Russia is home to more than 2.5 million Armenian migrants, who would be subject to harsh mistreatment in case of Armenia's 'non-Russian' foreign policy options. This assumption is based on the Russian authorities' massive crackdown on the Georgian population in Russia, following Tbilisi's determination to sign up to the Association Agreement with the EU (Emerson and Kostanyan, 2013). It is perhaps for this reason that the President of the Union of Armenians in Russia Ara Abrahamyan has warmly welcome Armenia's decision to join the EAEU, focusing specifically on its positive implications or at worst – the possibility to avoid repercussions for Armenian community in Russia (Panorama, 2013).

It is worth noting that, prior to Armenia's move towards the EAEU, Russia played its energy card by increasing gas prices for Armenia by 50 percent in April 2013, thus alarming possible economic repercussions of Armenia's European aspirations. Ironically, gas price was reduced as Armenia decided to sign up to the EAEU. Armenia's energy minister, Armen Movisisyan stated outright that the Eurasian choice shields Armenia from gas price hikes (Asbarez, 2013). Remarkably, there has been a tendency in President Sargsyan's discourse to emphasize the hypothetical economic and political hardships that Armenia would suffer in case of deviating from strategic partnership with Russia. In legitimizing Armenia's decision to join the EAEU, Sargsyan used the strategy of a 'hypothetical future' (Terzyan, 2017, p. 191). More specifically, given Armenia's huge economic and

energy dependence on Russia, he particularly noted that the choice of the EAEU would shield Armenia from unwelcome surprises and economic repercussions: “our choice is not civilizational. It corresponds to the economic interests of our nation. We cannot sign the Free trade agreement [DCFTA] and increase gas price and electricity fee three times?.” (Quoted from Ter-Matevosyan *et al.*, 2017, p. 350).

It follows that Russia possesses a bunch of economic and political tools for further tightening its grip on Armenia and influencing its policy preferences.

Well acknowledging the-state-of-the-art, the newly-elected prime-minister Nikol Pashinyan would be wary of questioning outright “Russia-first” approach. Rather, Pashinyan has emphasized the necessity of forging closer economic and political ties.

As stated the Armenian prime-minster in the first meeting with the Russian President:

We have things to discuss, but there are also things that do not need any discussion. That is the strategic relationship of allies between Armenia and Russia ... I can assure you that in Armenia there is a consensus and nobody has ever doubted the importance of the strategic nature of Armenian-Russian relations (Reuters, 2018).

Nevertheless, as the last section of this article suggests, if the newly-formed ruling elite would have an opportunity to somewhat reinforce its agency if it reviewed the practice of heavy reliance on Russia’s political and economic support.

2. Nagorno Karabakh conflict: Armenia’s raw nerve or Russia’s powerful leverage?

Nagorno Karabakh can be fairly framed as Armenia’s ‘raw nerve’, say the central issue on its foreign and security policy agenda.

In essence, Armenia’s strive for building resilience against its fiercest foe – energy rich Azerbaijan, as well as the latter’s strategic ally Turkey has been the core rationale behind Armenian-Russian increasingly intensifying military and political partnership. In 1997, Armenia and Russia signed a Treaty of Friendship, Cooperation and Security with ‘substantial military cooperative contents’(Nygren, 2007, p.114) Moreover, in 2000, Armenia allowed Russian troops to stay in Armenia until 2025, while Armenia’s membership in the Collective Security Treaty Organization and Eurasian Economic Union has confirmed country’s strategic choice of the Russia-led political and economic paths.

Meanwhile, Russia has essentially treated the “frozen” Nagorno-Karabkh conflict as a powerful tool for tightening its grip on Armenia. The formula is simple – Russia would help Armenia enhance

its military and security capabilities in exchange for its loyalty and compliance with Kremlin-led rules.

Interestingly, well acknowledging mounting challenges stemming from the “frozen” conflict, the first Armenian president Levon Ter-Petrosyan consistently cautioned against its repercussions for Armenia's independent and democratic development.

Ter-Petrosyan's discourse suggests that he viewed the Nagorno-Karabakh conflict self-destructive and that they would push Armenia into the Russian arms (Ter-Petrosyan, 2006, p.634). In the early stages of his political career, Ter-Petrosyan had espoused an overly critical stance on Russia. He regarded the reliance on Russia as delusional and self-destructive, while the Russian imperial policy was conceived as the most acute obstruction to Armenia's independent and democratic development (Ter Petrosyan, 2006, p. 34). Even though the anti-Russian rhetoric steadily crumbled in the wake of the Nagorno-Karabakh conflict escalation, Ter-Petrosyan did not tend to treat Russia as an indispensable ally and prioritized a non-Russian foreign policy agenda. There was marked pessimism about the feasibility of a symmetric Armenian-Russian partnership. Rather consistent with its imperial traditions, Russia would pursue to absorb Armenia into its ranks. No wonder Ter-Petrosyan invariably stressed that as long as Russia was chiefly preoccupied with domestic issues, Armenia would have to exploit the opportunity to increase its manoeuvring space, especially by achieving speedy conflict resolution. In doing so, Armenia would make the most out of regional cooperation and thus build resilience against a possible ‘return’ of Russian imperial ambitions that would leave Armenia isolated, with little to no room for manoeuvre (p. 634).

However, Ter-Petrosyan's efforts to redefine the images of Azerbaijan and Turkey in Armenian political thinking did not resonate with the Armenian political elite and post-war Armenian society. His pronounced emphasis on the inevitability of concessions in the Nagorno Karabakh conflict gained him notoriety. The leadership of Karabakh and that of the Armenian armed forces, as well as the diaspora, media, opposition, and intellectuals subjected him to heavy criticism on the ground of his pro-Turkish and pro-Azerbaijani sentiments (News.bbc, 1998a). Ter-Petrosyan was eventually forced to resign in 1998 and was succeeded by Robert Kocharyan, one of the prominent leaders of the Karabakh war, which showcases Ter-Petrosyan's fragile agency and the failure of his pragmatic foreign policy agenda (Aberg and Terzyan, 2018, p. 157).

It is worth noting that, from the outset, Kocharyan adopted a pro-Western (European) policy, putting a strong emphasis on Armenia's integration into European organizations. Moreover, he favoured a broader foreign policy agenda that included both political and military rapprochement with the West. In April 1999, Kocharyan attended the celebration of NATO's fiftieth anniversary in

Washington, which Armenian Communist Party leader S. Badalyan labelled as a betrayal of Russia (Terzyan, 2016, p. 150).

Kocharyan hailed the European path as Armenia's "civilizational choice," which would provide the best opportunity for the country's development. He welcomed Armenia's membership in the Council of Europe, a crucial milestone in Armenia's full scale 'homecoming' to Europe (Kocharyan 2011, p. 253). Moreover, in Kocharyan's words, as a typical European country, Armenia would draw on successful European experience of peace and prosperity and thus pursue peaceful resolution to the Nagorno-Karabakh conflict (p. 255).

In effect, in the early stages of his presidency, Kocharyan was largely perceived as a pro-European politician who strived for European integration to increase its manoeuvring space in relation to Russia. This was accurately captured in the notion of 'complementary foreign policy' put forward by Kocharyan, with the view of conducting a well-diversified foreign policy (Terzyan, 2016, p. 149). Overall, the banner of complementarity alluded to the willingness of achieving a breakthrough on the path to European integration, without 'disregarding' the long-standing partnership with Russia.

Nevertheless, as mentioned above, over time and particularly in the wake of Russia's Putin-led engagement with its 'near neighbourhood', Armenia plunged into the orbit of Russian influence

The biggest question is to what extent the Nagorno-Karabakh conflict has been critical to Kocharyan's choice of the Russia-led path.

Notably, from the outset of his presidency, Kocharyan securitized the Nagorno-Karabakh conflict and clearly distanced himself from his predecessor on this issue. In contrast to the first President who was invariably emphasizing the necessity of speedy conflict resolution, Kocharyan adopted a much harder position. He blamed Ter-Petrosyan for unacceptable concessions that would potentially be detrimental to Karabakh's security (Astourian, 2000 p. 32). He went as far as to question the ethnic compatibility of Armenians and Azerbaijanis: "The Armenian pogroms in Sumgait and Baku, and the attempts at mass military deportation of Armenians from Karabakh in 1991-92 indicate the impossibility for Armenians to live in Azerbaijan in general. We are talking about some sort of ethnic incompatibility" (Azatutyun, 2003). Such a belief about the ethnic antagonism of conflicting societies may shed light on his hard-line stances on Nagorno-Karabakh conflict resolution.

Moreover, being the man who led the war effort against Azerbaijan in the disputed territory of Nagorno-Karabakh and becoming its first President, Kocharyan would unlikely take steps that would undermine his reputation as 'a symbol' of Karabakh war victory. And as a politician who gained public and political support due to his staunch opposition to Ter-Petrosyan's discourse on concessions, Kocharyan was faced with path dependence. Essentially, his powerful backers – the Armenian army, the nationalist party Dashnaksutyun, as well as the voters who were particularly

sensitive to Karabakh conflict would preclude him from stepping down Ter-Petrosyan's path. Overall, his discourse suggests that Nagorno Karabakh was the issue of utmost importance on the Armenian foreign and security policy agenda, meanwhile the room for concessions to 'aggressor' Azerbaijan was rather limited. Kocharyan ruled out the possibility of any concession regarding the 'independent' status of the disputed territory (Aberg and Terzyan, 2018, pp. 162-163). The securitization of NK conflict may explain why he smoothly shifted from a pro-Western foreign policy agenda to the Russia-led path. Russia's 'warm welcome' into the Armenian economy was synchronized with increasingly intensifying and deepening bilateral political and military partnership. Thus, the critical importance initially assigned to Armenia's rapprochement with Europe in Kocharyan's discourse, would be eclipsed by the growing emphasis on Armenian-Russian strategic relationship and security alliance. Russia was largely framed as the most pivotal security partner (Kocharyan, 2011, p. 272).

Arguably, by establishing a strategic partnership with Russia, Kocharyan believed that it would lead Moscow to adopt a more benevolent stance on the Armenian-Azerbaijani conflict. The Russian foreign policy discourse of that time suggests Kremlin's resolution to considerably develop partnership with Azerbaijan into a strategic alliance (Mirzoyan, 2010, p. 45). Russia's strengthening of its military and political partnership with Azerbaijan would provoke fears across the Armenian leadership. The nightmare scenario of Russia-Azerbaijan strategic rapprochement would devastatingly militate against Armenia's policy in the Nagorno-Karabakh conflict. In effect, Kocharyan was forced to make decisions in conditions of sheer structural and strategic uncertainty, given the insufficient knowledge of Russia's possible foreign policy outputs and their implications for Karabakh-sensitive Armenia. The fears provoked by Russia's choice of Azerbaijan as a strategic partner in the South Caucasus would reportedly prompt Kocharyan to convince Russia to opt for Armenia. Thus, he would drop the European foreign policy agenda and give in to the expansionist Russian policy 'package'.

Kocharyan's successor, Serzh Sargsyan to a great extent remained committed to the 'Russia-first' approach. Yet, consistent with his predecessor's discourse, Sargsyan placed a pronounced emphasis on the European foreign policy agenda, with the EU being framed as Armenia's civilizational choice (Sargsyan, 2011). Nevertheless, in 2013 Armenia made a U-turn by shifting from the Association Agreement with the EU to the Russian-led Eurasian Economic Union.

There has been a tendency in existing studies to treat the U-turn as 'no choice option' given Armenia's vast political and economic dependence on Russia, which came to the fore in the face of Russia's increasing assertiveness towards the EU and the Eastern Partnership (Popescu, 2013, Delcour and Wolczuk, 2015). A question arises of to what extent Armenia's sensitivity to Nagorno-Karabakh conflict has determined its absorption by the Russia-led union.

Remarkably, Sargsyan, along with other high-ranking officials, has justified Armenia's membership in the EAEU chiefly in terms of its security concerns, with a pronounced focus on the Nagorno-Karabakh conflict. The discourse held by the Armenian policy-makers leads to the conclusion that there was lack of choice for conflict-bound Armenia in avoiding the U-turn (Terzyan, 2016b, pp. 173-174).

A former member of Parliament of the party "Rule of law", H. Margaryan has stated in the interview that since security is the top priority for Armenia, it is impossible to downplay the importance of the Armenia-Russia security partnership in the face of increasingly belligerent tone emanating from Armenia's neighbours (Margaryan, 2015).

Ironically, shortly before Armenia's U-turn, Russia set out to intensify military cooperation with Armenia's fiercest foe, Azerbaijan, in the form of supplying Russian military hardware worth \$4 billion (Eurasianet, 2013). The nightmare scenario of the Azerbaijan-Russia boosting military cooperation produced worries through Armenia and significantly influenced its choice of the EAEU.

Overall, there has been a broad consensus among the representatives of Armenian political elite* that the acute threats posed to Armenia by Azerbaijan and Turkey prompt to put heavy reliance on Russia. Thus, despite some resentment that Russian policy may generate, Armenia has to abstain from 'provoking' Russia'. Otherwise, the latter would 'hit where it hurts', most notably by arming Azerbaijan (A1plus, 2014). It follows that Armenia has no choice but to abide by the rules determined by Kremlin.

Interestingly, in the wake of the heavy fighting eruption between the Azerbaijani and Armenian armed forces in April 2016, President Sargsyan expressed his discontent with Russian military hardware supply to Azerbaijan and implicitly questioned the depth of the Armenian-Russian alliance. He particularly noted that: "Russia never played for Armenia the role that Turkey plays for Azerbaijan" (Mediamax, 2016).

Remarkably, in a joint press conference with German Chancellor Angela Merkel in Berlin on April 6, 2016, Sargsyan exposed the severe pain caused by Russia, and Armenia's vulnerability to Moscow's coercion:

Russia is our strategic partner indeed and we are in the same security structure – Collective Security Treaty Organization, and it is naturally painful for us when Russia sells arms to Azerbaijan. But, as you understand, our abilities to influence the process are limited (Sargsyan, 2016a).

*Note: Several officials provided valuable insights, but asked not to be cited in an attributable way.

Nevertheless, Sargsyan's critical position on Russia proved to have stemmed from temporary discontent, rather than from an in-depth review. He even subsequently expressed his vast support for the most disputable and ambivalent aspects of Russian foreign policy, ranging from issues such as the Ukrainian crisis to that in Syria, etc.:

We highly value Russia's role in the world and particularly in our region where numerous processes, which have their impact on stability and security, are going on. Armenia has been watching closely the intensive foreign policy contacts of the President of Russia... I am confident that Armenia only benefits from a greater involvement of Russia in our region (Sargsyan, 2016b).

Overall, the 'frozen' Nagorno-Karabakh conflict, along with ensuing troubled relations with Azerbaijan and Turkey have been critical to Armenia's treatment of Russia as an irreplaceable security ally. Meanwhile, Russia is equipped with a bunch of tools to further this sentiment in Armenian political thinking and public consciousness.

3. Kremlin's special ties with Armenian incumbents: A glance at individual-level factors

The argument that, in Armenia's hyper-presidential system, Presidents' personality and beliefs influenced Armenia's foreign policy outputs goes to the heart of the actor and action dispensability framework. Two crucial conditions, which, if satisfied, can prompt to posit that an individual has been important to an outcome. The first condition is that of 'action dispensability'. If the actions of an individual are removed from the events to be explained, do the events still occur? Therefore, the actions of an individual are indispensable to the outcome as long as their removal would lead to considerable changes in the outcome. The second condition is that of 'actor dispensability'. Would any individual, confronting the same set of circumstances, have taken broadly the same actions? Again, this is a function of two factors. First, the degree to which the individual holds strong and distinctive beliefs and predispositions concerning the matter at hand. Second, the clarity of the situational imperatives is key (Dyson, 2009, pp. 15-16.).

Regarding the 'actor dispensability' particularly in Kocharyan-led Armenian politics, it is worth noting that the post-Soviet transition led to the accumulation of presidential power at the expense of the parliament and the judiciary, neither of which had sufficient power to balance the presidential one or even properly perform their constitutional functions (Payasilyan, 2011, p. 110). The presidential power got immensely solidified after the assassinations of Prime Minister Vazgen Sargsyan and Head of Parliament Karen Demirchyan in 1999, especially as both limited Kocharyan's power and tended to explicitly disagree with him on many principal issues (Papazian, 2006, p. 235). The head of the Yerkrpah union, Vazgen Sargsyan, was strongly supported by the Armenian military forces and

widely viewed as Armenia's most influential politician of the time (Aberg and Terzyan, 2018, p. 160). His assassination provided a fertile ground for immense consolidation of Kocharyan's power. Freedom House reports further notes a range of abuses of Kocharyan's presidential power in the form of massive crackdown on the opposition and media, and the tendency to suppress dissent and pluralism (Freedom House, 2005).

Hence, the absence of checks and balances and lack of a viable opposition rendered Kocharyan the core policymaker or, say, the 'indispensable actor'. The consolidation of his power significantly impacted Armenia's foreign policy outputs as Armenia shifted from pro-Western agenda to the Russia-led trajectory. The critical unanswered question is why Russia's 'renewed' expansionist policy appealed to Kocharyan and prompted a foreign policy change. Particularly in contrast to Georgia, which was almost equally dependent on Russia, Armenia jumped further into Russian arms. The search for the answer to this complex question leads us to investigate the indispensable actor's personality – his dispositions and beliefs.

Media reports and accounts from Armenian politicians suggest that Kocharyan has been characterized by a marked penchant for concentrating power in his hands and making decisions single-handedly. He has been broadly regarded as a tough and unyielding politician in pursuit of his political goals (News.Bbc, 1998b). In terms of political psychology, the above-mentioned could be interpreted as power motivation and a marked need for power. Received wisdom posits that individuals with high need for power tend to require greater personal control and involvement in policy and are more likely to insist that policy outputs match their personal preferences rather than represent consensual group decisions (Dyson, 2009, p. 30). Overall, they are reluctant to delegate power and are inherently drawn to an authoritarian governance. The evidence, ranging from international reports about the plight of democracy in Armenia to a number of Armenian politicians' observations, support this argument about Kocharyan (Payaslyan, 2011, pp. 205-206, Kostanyan, 2011). In effect, Putin's pursuit of promoting authoritarianism in CIS countries significantly fit Kocharyan's ambitions.

The "success stories" of Russian-supported incumbents in Central Asian countries and Belarus and, by contrast, the mounting challenges facing the political elites in other CIS Western-oriented democratizing countries, such as Georgia, Moldova and Ukraine, have reportedly contributed to Kocharyan's choice of the Russian path. The concept of authoritarian learning seems amenable to account for Kocharyan's actions, significantly arising out of his power motivations. As indicated above, the authoritarian learning literature analyses learning from international examples with a focus on adaptability, lesson-drawing, emulation and persuasion (Hall, 2017, p. 162).

Kocharyan drew a range of lessons from the Rose Revolution in Georgia in 2003 and the Orange Revolution in Ukraine in 2004. First, the perception that the Russian-supported regimes, such as Belarus and Kazakhstan, have been shielded from Colour revolutions was reinforced. During the Georgian political crisis in November 2003, Armenia gave in to Kremlin's urges for intensifying military cooperation and signed a series of military agreements with Russia (Secieru, 2006). In further letting Russia tighten its grip on Armenia, Kocharyan reportedly believed that the label of 'Russia's true ally in the South Caucasus' would create a bulwark of stability and predictability for his regime's survival.

The second lesson for Kocharyan was that in order to avoid the destinies of former Georgian and Ukrainian presidents, opposition movements and media freedom needed to be limited. By using his hyper-presidential power, Kocharyan controlled institutions and the political system, coerced the opposition, built-up security forces and pro-regime groups. Besides, he launched a crackdown on independent media, and irreversibly shut down the popular A1+ television channel. Overall, the country smoothly plunged into authoritarianism, with all its attributes, such as rigged elections, feeble opposition, fragile civil society and censored media (Aberg and Terzyan, 2018, pp. 161-162). Not surprisingly, the Freedom House Reports noted downward trends in Armenia, featuring mounting political repression and the authorities' increasingly unresponsive and undemocratic governance (Freedom House, 2005).

Therefore, I assume that Kremlin's package considerably appealed to Kocharyan due to its emphasis on ensuring the steady survival of the Russian-sponsored regimes, in the face of 'colour' revolutions and abrupt power transitions in CIS countries. Thus, along with above-mentioned economic and political leverages, Russia significantly tightened its grip on Armenia by establishing special ties with its power-hungry incumbents. The latter would 'warmly welcome' Kremlin's expansionist agendas in exchange for its authoritarian support in retaining their power.

Even though Kocharyan's successor had way less agency and room for manouvere, Armenia's abrupt U-turn reportedly owed to his own power motivation – the determination to stay in office.

The very fact that Sargsyan frequently exemplified the Ukrainian scenario (Sargsyan, 2014) as a convenient excuse for the U-turn indicates his unwillingness to end up as his former Ukrainian counterpart, Yanukovich, did. Similarly, the representatives of the Armenian political elite often cited the Ukrainian scenario as a justification for the U-turn and implicitly noted that Armenia would rather abstain from provoking Russia (Terzyan, 2017, p. 198). Arguably, the perception of the 'Ukrainian scenario' from the Armenian leadership's perspective is chiefly related to the 'Euromaidan', with a highly unwanted outcome for incumbents. Notably, the opposition Heritage Party's former Vice-Chairman, Armen Martirosyan, noted that the Armenian incumbent's strive for staying in office had

been instrumental in opting for the EAEU, given the Russian guarantees that he would be safe within the Russian-led union (Martirosyan, 2014). Similarly, the party leader, Raffi Hovhannisyán regarded Armenia's U-turn as a deplorable stride towards perpetuating the illegitimate power of President Sargsyan and his regime, in the name of serving national interests (Hovhannisyán, 2014).

Even though it is hard to clearly measure the role of the agent's power motivation and its impact on the foreign policy output, it would be misleading to dismiss the agency-level variables. It would be highly likely for Kocharyán or Sargsyan-style agent, with immense power in its hands, in the absence of checks and balances, to act out of self-interest in determining foreign policy outputs.

Yet, the Armenian "Velvet revolution" engenders a glimmer of hope that owing to his vast popularity and legitimacy, the newly-elected prime minister Pashinyán will not necessarily carry on with the malpractices of his predecessors. Rather, he has an opportunity to cut back the heavy reliance on Kremlin's overwhelming support and thus reduce ruling elite's susceptibility to Russian coercive policies.

Further research could focus on Pashinyán-led elite's behavior *vis-à-vis* Russia and the extent to which it would be capable to redefine its submissive policy and depart from acute malpractices of the former governments.

Conclusion

The anatomy of Putin-led Russia's powerful grip on Armenia comes down to the following core elements: Armenia's growing economic and energy dependence on Russia; the "frozen" Nagorno-Karabakh conflict, as well as Kremlin's special ties with Armenian incumbents and their authoritarian support.

Along with the structural constraints, the individual-level factors - related to Armenian Presidents' perceptions and preferences have considerably influenced the Russia-led foreign policy choices. Arguably, second President's penchant for monopolizing power and avoiding "colour revolutions" played a part in leading him down the path to Russian-supported regimes.

Overall, Russia's pursuit of authoritarianism promotion in CIS countries with the view to their political and economic absorption has yielded remarkable results in Armenia. Yet, in theory the "Armenian Velvet revolution" implies that owing to its vast popularity and legitimacy, new Armenian government has an opportunity to cut back the heavy reliance on Kremlin's overwhelming political and economic support. Essentially, this would reduce the ruling elite's susceptibility to Russian coercive policies.

Therefore, despite a series of structural constraints on the path to diminishing country's huge dependence on Russia, the agency-level factors should not be neglected.

Further research could focus on Pashinyan-led elite's interactions with Kremlin and the extent to which it would be capable to redefine its actorness.

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