Volume XVII, Issue 2/2020

Economics and Management

SOUTH-WEST UNIVERSITY "NEOFIT RILSKY"
Faculty of Economics
Blagoevgrad

"ECONOMICS AND MANAGEMENT"
is a scientific journal of the Faculty of Economics at Sowth-West University "Neofit Rilski". It publishes articles on current issues in economics and management at the global, regional and local level.

Founders:
Prof. Raya Madgerova, PhD, Prof. Nadezhda Nikolova, PhD and Prof. Chavdar Nikolov, PhD

♦♦♦ 2005 г. ♦♦♦

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ECONOMICS & MANAGEMENT

JOURNAL FOR ECONOMICS AND MANAGEMENT SCIENCE OF FACULTY OF ECONOMICS – SOUTH-WEST UNIVERSITY "NEOFIT RILSKI"– BLAGOEVGRAD

VOL. XVII, № 2, 2020

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Each of the articles published in the "Economics & Management" Magazine, edition of the Faculty of Economics at the SWU "Neofit Rilski", after preliminary selection by the Editorial board, is a subject of preliminary review by two tenured reviewers, specialists in the respective scientific domain.

Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 1-25

THE DETERMINANTS OF DOMESTIC INVESTMENT IN NIGERIA: A NEW EVIDENCE FROM NON-LINEAR AUTOREGRESSIVE DISTRIBUTED LAG (NARDL) MODEL

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Received: 13.08.2020 Accepted: 30.09.2020

Abstract

This study employs an extended Nonlinear ARDL cointegration approach to examine the determinants of domestic investment in Nigeria over the 1980-2018 period. The result from bound testing reveal the presence of cointegrating relationship between domestic investment and the included variables. The empirical evidence demonstrates that domestic investment in Nigeria is determined by inflation, real interest and exchange rate, government spending, electric power consumption, savings, per capita income, credit to private sector and the interaction between government spending and oil price in the short-run; and inflation, interest and exchange rate, government spending, internal conflict, savings, and interaction between oil price and government spending in the long-run. The results also suggest that the impact of increase in interest, inflation and exchange rate is statistically different from their decrease. In essence, this study recommends the increase in government capital expenditure, savings, diversification of the economy, reduction of lending interest rate, maintenance of investment-friendly inflation rate, and conflicts control.

Keywords: *Investment, Interest rate, inflation, exchange rate, government, internal conflict, Nigeria, NARDL*
JEL Codes: *E22, E21, E62, H54, O16*

1. Introduction

Both in developed and developing economies, it has been argued that investment plays a very significant role in the functioning of an economy and the expansion of productive capacity in the economy (Ghassemi, 1996). In that, it drives growth and triggers development (Ojong, Ogar, & Arikpo, 2018), raise the level of employment/provide more jobs, promote production techniques, and enhance income level and standard of living (Meyer & Sanusi, 2019; Ali & Shaheen, 2016; Ojong, Ogar, & Arikpo, 2018). Investment is also one of the most important weapons for poverty alleviation. That is, as investment increases, resulting to higher growth and lower unemployment, lots of opportunities is

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opened to the poor to improve their income and livelihoods (Agbarakwe, 2019). In other words, low level of investment or capital formation is the principal factor behind suboptimal growth rates (Trade and Industrial Policy Secretariat [TIPS], 2000), unemployment, low income levels, income inequality, and poverty.

Notwithstanding the relevance of investment, an important aspect of investment is its instability – it is the most volatile component of aggregate effective demand (Anushree, 2019), and tends to vary by a greater extent than other components of aggregate demand (Hassett, 2020). Perhaps, this is because the fundamentals that drive investment - interest rate, cost of capital, expected return - also fluctuates. However, a small variation in investment tend to create a much larger fluctuations in aggregate demand, output level, employment and other macroeconomic variables, which often have major implications for government economic policies (Ghassemi, 1996). Apparently, this understanding was arguably responsible for the rise in research on the major factors which drives the level of investment in countries, even as policy actions by governments intended to raise the level of domestic investment often fails (Ojong, Ogar, & Arikpo, 2018; Agbarakwe, 2019).

There exists voluminous literature on investment that attempts to quantify and prioritise the key determinants of investment behaviour. Though the determinants of investment will depend on country specificities, yet, there is an almost universal consensus on some of the important factors that determine investment (TIPS, 2000). While it is argued that the expected profit (expected return on an investment) is the most important consideration in terms of all the variables which affect investment decision (Van der Walt & De Wet, 1995), and the cost of capital is its obvious complement. However, macroeconomic factors such as real interest rate, inflation rate and real exchange rate are arguably the most important, of all the variables that influence investment decisions or firms' investment behaviours. Indeed, this is not unconnected to the fact that macroeconomic factors alongside their fluctuations have important influence on firm investment behaviour. In that, instabilities can negatively impact the investment decision by increasing uncertainty. For instance, while highly volatile interest rate increases the value of waiting, and potentially results in investment being deferred; and highly volatile inflation rate creates uncertainty that acts as an expectation variable to discourage investment. On the other hand, fluctuations in the real exchange rate can influence investment decisions by affecting the profitability of export-oriented firms and the cost of capital sourced from abroad by domestic firms (TIPS, 2000).

Nevertheless, aside from macroeconomic factors, there also exist several factors that create instability, and therefore may negatively impact on investment behaviour. These includes: changes in regulatory, fiscal, monetary or other policy regimes; wars; infrastructural demand; financial factors; variations in global supplies of basic industrial

products; disparities in conditions of international trade and competition; and technological changes; (Bernake, 1983). Similarly, external conflict risk; government leadership; corruption; racial and ethnic tensions; rule of law; threats of civil war; efficiency of the legal system (with particular importance on the status of property rights); political terrorism; quality of bureaucracy (including its degree of independence from political pressure); risk of repudiation of contracts; political rights and civil liberties; risk of expropriation by government (Poirson, 1998); the rate of change in governments – whereby frequent changes create uncertainty with government policies (TIPS, 2000); and threats of secession, among others are also important determinants of investment.

In Nigeria, while several efforts have been made to enhance the level of investment in the country through policy actions, legislations, etc., however, the current reality indicates the otherwise. For instance, the Structural Adjustment Programme (SAP) of 1986 and it privatisation exercise; industrial policy of 1989; promulgation and subsequent adoption of the Export Processing Zone Decree of 1991; the creation of the Nigerian Investment Promotion Commission (NIPC) through decree 16 of 1995; provision of tax relief and other incentives to investors; signing of bilateral investment treaties and double taxation agreements (Ojong, Ogar, & Arikpo, 2018); repeal of laws that are inimical to foreign investment, promulgation of investment laws, and various over sea trips for image laundry by presidents (Iya & Aminu, 2015) among others were all geared towards promoting an enabling investment climate, thus raising the level of investment in the country, and thus the level of output, employment, income and standard of living, among others. Regrettably, these policies have achieved the opposite, as the level of domestic investment in the country has continued to decline, coupled with the prevalence of the menace of wide spread of poverty, poor growth rates, low living standard, and high level of unemployment among other macroeconomic anomalies in the country.

While the failure of policy makers to identify the key factors which determines the level of investment has been signalled as the major reason for the inconsistency and failures of policies in raising the level of domestic investment in Nigeria, thus attracting the inward flow of Foreign Direct Investment into the country (Agbarakwe, 2019; Ojong, Ogar, & Arikpo, 2018). However, it is apparent, as depicted in *figure 1*, that domestic investment (gross domestic fixed capital formation) in Nigeria has been erratic over time. Unequivocally, between 1981 to 2018, domestic investment has been on the decrease, falling from as high as 89.3 percent of the GDP in 1981 down to 16.92 percent in 2018, notwithstanding the implementation of policies such as the Structural Adjustment Programme (SAP), Nigerian Investment Promotion Commission (NIPC), etc., and the introduction of incentives to investors. In fact, efforts to raise the level of domestic investment in the country from 46.40 percent in 1985 to 54.95 percent in 1986 was dashed

after domestic investment fell to 43.96 percent in 1988, and even further to 14.21 percent in the year 2012 (Central Bank of Nigeria [CBN], 2018).

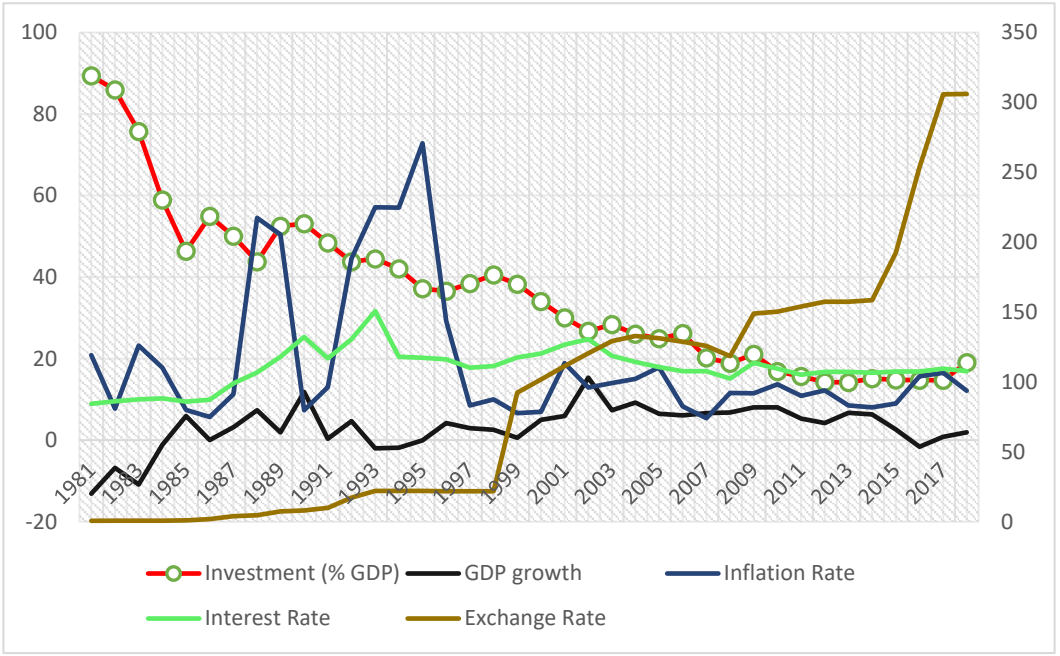


Figure 1: Plot of gross fixed capital formation (Domestic investment), Inflation, Interest and Exchange rate in Nigeria

Nevertheless, though the volatility and decline in domestic investment is accompanied by large variations in the lending interest rate, inflation rate and GDP growth rate, as well as the depreciation of the Naira, however, their movement cannot not be used to totally explain the level of domestic investment in the country, even as they have strong potentials to dictate the level of domestic investment. Apparently, this is not unconnected to the fact that the country's economic environment has also been bedevilled by several changes in fiscal and monetary policy, political instabilities (coups), civil wars and ethno-religious crises, insecurity, macroeconomic instabilities, and corruption, among others, which also have potentials in influencing changes in the level of domestic investment in the country. Thus, in order to arrive at a plausible conclusion, it is imperative to evaluate the major factors responsible for changes in the Nigerian domestic investment empirically.

On this note, the main objective of this study is to empirically evaluate the major determinants of domestic investment in Nigeria. The remainder of this paper is organised as follows: the second section is the review of previous studies on the determinants of investment, while section three describes the theoretical framework and the model. Section

four provides the data, econometric techniques and discussion of results. Conclusion and recommendations are provided in section five.

2. Review of Previous Studies on the Determinants of Investment

Over time, scholars have attempted to examine the nature of investment both from within and outside Nigeria. However, on the determinants of investment, majority of the studies has been largely based on the determinants of foreign direct investment or the determinants of aggregate investment – domestic and foreign (Belloumi & Alshehry, 2018; Ekpo, 1997; Obida & Abu, 2010; Agosin & Mayer, 2000). Nevertheless, studies on the determinants of domestic investment are also available, albeit sparse.

For instance, Mekonnen (2010) explored the determinants of domestic private investment in Ethiopia during the 1950-2003 period. Employing a multivariate single equation ECM estimation methodology, the estimation result reveals that private investment in Ethiopia is been influenced positively by domestic market, return to capital, trade openness and liberalisation measures, infrastructural facilities and FDI, while government activities, macroeconomic uncertainty and political instability affect domestic investment negatively. Ali and Shaheen (2016) employed the Error Correction Model (ECM) to investigate the economic factors that affect private investment in Pakistan during the period from 1980 to 2011. The empirical results suggest that savings, credit and gross domestic product are the positive determinants of domestic private investment in Pakistan, while inflation and external debt stock are the negative determinants of domestic private investment negatively. Muhdin (2016) used the Ordinary Least Square (OLS) technique to explore the determinants of domestic private investment. The results from the empirical analysis indicates that, while the level of national income, public investment and exchange rate influence the level of domestic private investment positively, interest rate, inflation rate and money supply impact the level of domestic private investment negatively.

Hecht, Razin, and Shinar (2004) employed Ordinary Least Square (OLS) and Two-Stage Least Square (TSLS) estimation techniques to evaluate the determinants of domestic investment in Israel and developing countries. The empirical results indicate that foreign direct investment, loan inflow (external debt), portfolio investment inflows, output growth and government expenditure influences domestic investment positively in the short-run, in Israel and the selected developing countries. Similarly, the authors also discovered that, while foreign direct investment and portfolio investment inflows have a significant long-run positive effect on domestic investment, loan inflows show a significant negative impact on domestic investment in the long-run in Israel and the selected developing countries.

In Nigeria, researchers have also made effort to identify the determinants of investment in the country. For example, Ojong, Ogar and Arikpo (2018) examined the determinants of domestic investment in Nigeria over the 1983 to 2015 period. Using ARDL model, the authors discovered that past values of domestic investment, government expenditure, and inflation rate are the positive determinants of domestic investment, while exchange rate determines domestic investment negatively in Nigeria. Agbarakwe (2019) employed the Autoregressive Distributed Lag (ARDL) model to examine the macroeconomic determinants of investment in Nigeria during the 1980 to 2018 period. The empirical results suggest that inflation, exchange rate and interest rate (both in current and past values) impact domestic investment negatively, while government spending have a positive impact on domestic investment.

Bakare (2011) employed the Error correction model (ECM) to examine the determinants of domestic private investment in Nigeria over the 1978 to 2008 period. Empirical results indicate that, while savings rate influences domestic private investment positively, public investment, exchange rate, corruption, and electricity, and political instability indicates negative impact on domestic private investment in Nigeria. Agu (2015) also used the Error Correction Model (ECM) procedure to examine the determinants of private investment in Nigeria over the 1970 to 2012 period. The submitted that domestic private investment rate is determined positively by real interest rate and political stability, while domestic public investment (public spending) determines domestic private investment negatively. Ayeni (2014) employed Autoregressive Distributed Lagged (ARDL) technique to investigate the determinants of private investment in Nigeria during the 1979 to 2012 period. The empirical results suggest that, real GDP growth rate is the only significant determinant of domestic private investment in Nigeria.

Ajayi and Kolapo (2018) examined the sensitivity of domestic private investment to macroeconomic indicators in Nigeria over the 1986 to 2015 period, using the Ordinary Least Square (OLS) and Engle Granger causality techniques. The empirical results suggest that, while GDP and exchange rate influence domestic private investment positively, changes in the money supply impact domestic private investment negatively. Agbarha and Monye (2017) employed the Error Correction Mechanism (ECM) to examined the determinants of domestic private investment in Nigeria during the 1980-2015 period. The results from the empirical analysis indicates that, interest rate is a significant negative determinant of private investment, while the previous level of private investment, aggregate demand, savings, and electricity generation determines private investment positively. Osmond (2015) evaluated the determinants of domestic private investment in Nigeria from 1970 to 2012, using the Error Correction Model (ECM). The empirical results show that disposable income and real interest rate determines the level of domestic investment

positively, while lending interest rate is responsible for the decline in the level of investment in Nigeria.

Kazeem (2013) examined the role of governance on private investment in Nigeria from 1970 to 2010. Using the Autoregressive Distributed Lag (ARDL) bound testing approach, the empirical results suggest that the degree of openness of the Nigerian economy (proxy by the difference between export and import, deflated by the nation output size), previous inflation rates and governance are important determinants of domestic private investment in Nigeria. Chete and Akpokodje (1998) employed the Ordinary Least Square (OLS) technique to examine the macroeconomic determinants of domestic private investment in Nigeria. Results from the empirical analysis indicates that private investment in Nigeria is influenced by public investment, inflation rate, real exchange rate, domestic credit to the private sector, and foreign capital inflow.

Duruechi and Ojiegbe (2015) employed Error correction techniques (ECM), Johansen cointegration, and Granger causality estimation techniques to evaluate the determinants of investments in Nigerian Economy during the 1990 to 2013 period. The empirical results indicate the presence of cointegrating relationship between investment and its determinants (inflation rate, government expenditure, exchange rate and interest rate), and a unidirectional causality running from government expenditure to investment. The authors also discovered that exchange rate is a significant determinants of domestic investment, while government expenditure determines investment in the long-run. Agwu (2015) employed the Autoregressive Distributed lag model (ARDL) technique to assess the determinants of investment in Nigeria. The results of the empirical analysis suggest that past income level, capital investment, government size and interest rate are the significant and positive determinants of investment in the long-run in Nigeria.

Clearly, a survey of literatures indicates that, while there is a dearth of study on the determinants of domestic investment in Nigeria, the few studies are also poised with certain drawbacks. A major drawback in the scanty research on the determinants of domestic investment in Nigeria is the use of linear time series models to examine the determinants of domestic investments. Moreover, while macroeconomic factors such as interest rate, exchange rate and inflation, among others have been considered to influence domestic investment linearly, however, in reality, these variables have asymmetric characteristics (Falk, 1986). In essence, this study contributes to literature and fill this gap by using the novel Nonlinear Autoregressive Distributive Lag (N-ARDL) advanced by Shin, Yu, and Greenwood-Nimmo (2014), to examine the asymmetric effect of interest rate, inflation rate, and exchange rate, in addition to the interactive and direct effect of other potential determinants on domestic investment in Nigeria.

3. Theoretical Framework and the Model

The framework for the analysis for this study is based on the flexible accelerator model (Anushree, 2019; Chand, 2019). The flexible accelerator model was developed to remove the major weaknesses of the simple acceleration – the principle that the capital stock is optimally adjusted without any time lag – by considering the time lags in the adjustment process between the level of output and the level of capital stock (Chand, 2019). However, due to the exclusion of potential determinants of investment such as wage rates, interest rates, taxes, and other macroeconomic and investment climate indicators; and the tendency of generating a spurious result and making empirical characterisation of the time structure of investment implausible due to the unrestricted lag structure of the model (Jorgenson & Siebert, 1968; Song, Liu, & Ping, 2001), researchers have adopted the use of a simplified version of the flexible accelerator model after disregarding the lags and the inclusion of relevant variables.

Thus, in line with the objective of this study, a simplified version of the accelerator investment model improved with the inclusion of variables such as real interest rate (INT), Inflation rate (P), exchange rate (EXC), Government expenditure (G), electricity power consumption (ELE), internal conflict ($INTC$), domestic savings (DS), per capita income (pcY), and credit to private sector (CPS), which tends to influence the variation in domestic investment will be employed. As such, a functional form of the model is formulated as:

$$INV_t = f(INT_t, P_t, EXC_t, G_t, ELE_t, INTC_t, DS_t, pcY_t, CPS_t, \varepsilon_t) \quad (1)$$

However, given that the Nigerian economy and budget is hinged on oil and gas export, as it accounts from more than 80 percent of the central government's revenue source (Central Bank of Nigeria [CBN], 2018), it is logical to also examine the interactive effect of government expenditure (G) and oil price ($OILP$) on domestic investment. Taking this into account, the new domestic investment model is:

$$INV_t = f(INT_t, P_t, EXC_t, G_t, ELE_t, INTC_t, DS_t, pcY_t, CPS_t, G \times OILP_t, \varepsilon_t) \quad (2)$$

If re-written in an explicit form, the model above is specified as:

$$INV_t = a_1 + \sum_{i=1}^{n} b_i Q_t + \varepsilon_t \quad (3)$$

Where: a is the intercept (or constant term); b denotes the slope coefficient; Q is the vector of the independent variables (potential determinants of domestic investment); ε is the random error term having zero mean and constant variance; t is number of times series observation; and $i = 0,1,2, \ldots n$.

4. Data, Econometric Techniques and Discussion of Results

4.1 Data Issues

The data used in this study are interpolated quarterly time series data sets covering the past four decades (1980-2018), with a total of 156 observations. The technique of data interpolation has been extensively explained in the literature (see Abu, Kadandani, Obi, & Modibbo, 2019; Sakanko, Obilikwu, & David, 2019). The data set were collected from secondary sources, such as the Central Bank of Nigeria (CBN), the World Development Indicators (WDI), and Organisation of Petroleum Exporting Countries (OPEC). Specifically, data on domestic investment, real interest rate, government expenditure, inflation, exchange rate, per capita income, domestic savings and electricity power consumption were collected from WDI, while the data on credit to private sector was sourced from the CBN bulletin. Furthermore, data on internal conflict was collected from Political Risk Service's International Country Risk Guide (ICRG), and data on Nigerian oil (Bonny light crude) price was collected from OPEC.

The variables are measured/defined as thus. Domestic investment (INV) is the aggregate gross fixed capital formation (as used in Ajayi & Kolapo, 2018; Atoyebi, et al., 2012; Agu, 2015; Mekonnen, 2010). Real interest rate (INT) is the lending interest rate adjusted for inflation (as in Alfa & Garba, 2012; Obafemi, Oburota, & Amoke, 2016). Inflation (P) is measured by the consumer price index. Exchange rate (EXC) is the nominal exchange of Naira currency to the U.S. dollar. Government expenditure (G) is the aggregate total government expenditure. Electricity (ELE) is the annual electric power consumption (kWh per capita), as used in previous studies (Agu, 2015; Bakare, 2011). Internal conflict ($INTC$) is measured by the rescaled ICRG internal conflicts index, which takes a value of 0 to 12, with higher values indicating that internal conflicts is higher and vice versa (as used in Abu, et al., 2019). Domestic savings (DS) is gross domestic savings as a percentage of the GDP (as in Agu, 2015). Per capita income (pcY) is measured by the annual percentage growth rate of GDP per capita based on constant local currency (as used in Ayeni, 2014). Credit to private sector (CPS) is the domestic credit to private sector as a percentage of the GDP. And oil price is measured by the Nigerian Bonny light oil spot price. Four variables – INT, P, DS, CPS and pcY are in rates (%), while the natural logarithm of INT and G were used in this study.

4.2 Econometrics Techniques

In the literature of domestic investment, researchers have adopted several estimation techniques to examine the determinants of domestic investment. However, for the purpose of this study, the Autoregressive Distributed Lag (ARDL) bound testing approach (Pesaran & Shin, An autoregressive distributed lag modeling approach to cointegration analysis: The Ragnar Frisch Centennial Symposium, 1999; Pesaran, Shin, & Smith, 2001) was employed. The choice of this model is not unconnected to the numerous advantages which it has over other cointegration methods such as the residual-based technique (Engle & Granger, 1987) and Maximum Likelihood test (Johansen, 1988, 1991; Johansen & Juselius, 1990), which are well documented (see Abu, Kadandani, Obi, & Modibbo, 2019; Abu, 2017, 2019; Sakanko & David, 2018; Sakanko et al., 2019; David et al, 2019).

Based on the model specified in *equation (3)* above, a multivariate ARDL(p,q) model can be expressed as:

$$\Delta lnINV_t = \alpha_1 + \sum_{j=1}^{p} \delta_j \Delta lnINV_{t-j} + \sum_{i=1}^{K} \sum_{j=0}^{q} \beta_{ij} \Delta Q_{i,t-j} + \lambda_1 lnINV_{t-1} + \lambda_2 Q_{t-1} + \varepsilon_{1t} \quad (4)$$

Where: $\sum_{i=1}^{K} Q_i$ is the vector of *k* explanatory variables (determinants of investment), $i = 1, 2, \dots, k$; α is the constant term; δ and β are the short-run coefficients; λ_1 and λ_2 are the long-run coefficient; Δ is the differentiation identity.

However, while the standard ARDL (here after Linear ARDL) model specified above enables evaluation of the long-run relations between time series variables, it only presumes linear or symmetric relations between them. Hence, the linear ARDL model and other techniques that presume symmetric dynamics are not able to capture the potential nonlinearity or asymmetry that lie within the relationship between domestic investment and variables such as interest rate, inflation rate and exchange rate which are volatile in nature. In light of this, this study adopts the Nonlinear ARDL (hereafter, NARDL) approach, which is developed by Shin et al. (2014), as an asymmetric extension to the linear ARDL model. The NARDL model is designed to capture both short run and long run asymmetries in a variable of interest, while reserving all merits of the linear ARDL approach (Cheah, Yiew, & Ng, 2017).

In the N-ARDL model, asymmetric/non-linear explanatory variables are split into their positive and negative partial sum series. While the positive partial sum series captures the increase of the explanatory variable, the negative partial sum series reflects the decrease of the explanatory variable (Pal & Mitra, 2016). In order to develop a NARDL model, the independent variables INT_t, P_t, and EXc_t, which are assumed to have nonlinear relationship with the dependent variable INV_t are split into two parts: INT_t^+, P_t^+ and EXC_t^+;

and INT_t^-, P_t^- and EXC_t^- as partial sums corresponding to the positive and negative changes of INT_t, P_t, and EXC_t, which are generated by computing:

$$INT_t^+ = \sum_{i=1}^{t} \Delta INT_i^+ = \sum_{i=1}^{t} \max(\Delta INT_t, 0) \tag{5a}$$

$$INT_t^- = \sum_{i=1}^{t} \Delta INT_i^- = \sum_{i=1}^{t} \min(\Delta INT_t, 0) \tag{5b}$$

$$P_t^+ = \sum_{i=1}^{t} \Delta P_i^+ = \sum_{i=1}^{t} \max(\Delta P_t, 0) \tag{5c}$$

$$P_t^- = \sum_{i=1}^{t} \Delta P_i^- = \sum_{i=1}^{t} \min(\Delta P_t, 0) \tag{5d}$$

$$EXC_t^+ = \sum_{i=1}^{t} \Delta EXC_i^+ = \sum_{i=1}^{t} \max(\Delta EXC_t, 0) \tag{5e}$$

$$EXC_t^- = \sum_{i=1}^{t} \Delta EXC_i^- = \sum_{i=1}^{t} \min(\Delta EXC_t, 0) \tag{5f}$$

Following the splitting of interest rate, inflation rate and exchange rate changes, an extended N-ARDL model, which is a modification of *equation (4)*, with the inclusion of both the decomposed partial sums of the asymmetric variables (INT_t, P_t, and EXC_t) and other symmetric variables (G_t, ELE_t, $INTC_t$, DS_t, pcY_t, CPS, and $G_t \times OILP_t$) is given as:

$$\Delta lnINV_t = \alpha_0 + \sum_{i=1}^{p} \delta_i \Delta lnINV_{t-i} + \sum_{i=0}^{q} (\gamma_{1i} \Delta v_{t-i}^+ + \gamma_{2i} \Delta v_{t-i}^- + \gamma_{3i} \Delta h_{t-i}) + \sigma_1 lnINV_t + \sigma_2 v_{t-1}^+ + \sigma_3 v_{t-1}^- + \sigma_4 h_{t-1} + \varepsilon_t \tag{6}$$

Where: v^+ and v^- are the vector of the partial sums of the asymmetric variables (INV_t, P_t, EXC_t) corresponding to the positive and negative changes in interest rate (INV), inflation rate (P_t), and exchange rate (EXC_t); h is the vector of regressors entering the model symmetrically (G_t, ELE_t, $INTC_t$, DS_t, pcY_t, CPS, and $G \times OILP_t$); δ_i and γ_i are the short-run coefficient of the lagged dependent variables, decomposed asymmetric variables, and symmetric variables; and $\sigma_1 - \sigma_4$ are the long-run coefficient of the dependent variable, decomposed asymmetric variables and symmetric variables.

As in the linear ARDL model, the null hypothesis of no (asymmetry) cointegration is being tested against the alternative hypothesis of cointegration using Wald F-statistics. The computed F-statistic from Wald statistics is then compared with the critical values provided by Pesaran et al. (2001) and/or Narayan (2005). If the computed F-statistic is greater than the upper bound I(1), we reject the null hypothesis of no cointegration and

conclude that there is cointegration between the series. On the other hand, if the computed F-statistic is lesser than the lower bound [I(0)], then we accept the null hypothesis and conclude that there is no cointegration among the series. Furthermore, if the calculated statistic is between I(0) and I(1), the inference would be inconclusive (Meo, et al., 2018; Sakanko & David, 2018; Abu, et al., 2019).

Presence of nonlinear effect of interest rate, inflation rate and exchange rate on domestic investment can be analysed by comparing coefficients σ_2 with σ_3; and δ_{1i} with δ_{2i}. If the difference in the value of coefficients σ_2 and $\sigma_3$is significant, then the asymmetric relationship is confirmed in the long-run relationship. Similarly, if the coefficients δ_{1i} and δ_{2i} differ significantly, asymmetric influence can be confirmed in the short-run part of the model (Pal & Mitra, 2016).

4.3 Discussion of Results

One of the most appealing advantages which Pesaran, et al, (2001) ARDL approach has over other cointegration methods such as the residual-based technique (Engle & Granger, 1987) and Maximum Likelihood test (Johansen, 1988, 1991; Johansen & Juselius, 1990), is that it can be applied for the series, which are purely stationary at I (0) or purely I(1) or the mixture of I(0) and I(1). Though it has been argued that there may be no need for a unit root or stationarity test when employing an ARDL estimation technique (see Akinlo, 2006; Duasa, 2007, cited in Abu, Kadandani, Obi, & Modibbo, 2019). However, in other to avoid the inclusion of I(2) series, which tend to generate spurious regression result (Sakanko & David, 2018; Sakanko, Obilikwu & David, 2019, Abu, 2017, 2019; Sakanko, Abu & David, 2019; David, 2018), we employed the Augmented Dickey–Fuller (ADF) and Phillips–Perron (PP) techniques to check the stationarity properties of the series entering the model. These tests compare the null hypothesis of a series "has a unit root" against the alternative hypothesis that the series "does not have a unit root".

Table 1: Results of Unit Root Test

Series	ADF		P-P		Decision
	Levels	First Diff.	Levels	First Diff.	
$lnINV$	-2.314320	-3.589538*	5.093330	-3.636063*	$I(1)$
INT	-4.604763*	-4.259804*	-3.091107*	-5.798973	$I(0)$
P	-2.650129***	-3.844900*	-1.666398***	-4.753068*	$I(0)$
EXC	-2.505137	-3.357420*	3.442253	-3.440811*	$I(1)$
lnG	-1.935933	-4.032449*	-1.301953	-5.050804*	$I(1)$
ELE	-2.423928	-2.795568*	0.810050	-4.648342*	$I(1)$
$INTC$	-2.382753	-3.438907*	-2.085091	-4.061718*	$I(1)$

DS	-5.108886*	-3.498124*	-2.676857*	-4.077104*	$I(0)$
pcY	-3.262149*	-3.601675*	-2.473674*	-5.604336	$I(0)$
CPS	-3.709895**	-4.169014*	-3.341686***	-4.350034*	$I(0)$
$OILP$	-3.162498***	-4.084077*	-0.272771	-3.914115*	$I(1)$

Note: ** and *** denotes a rejection of the null hypothesis of no unit root at 1% and 10% levels, respectively*

Clearly, from the stationarity result presented in Table 1 (above), ADF and P-P test indicates that the series in the model are mixture of I(0) and I(1), which thus validates the use of the ARDL bounds testing method to cointegration (Pesaran & Shin, 1999; Pesaran, Shin, & Smith, 2001) in the estimation of the relationship between the variables.

Having confirmed the validity of the series for ARDL bound testing approach, two ARDL (linear and nonlinear) models were estimated for the purpose of comparison. From the ARDL bound testing result presented in Table 2, the Wald f-statistics for both the linear and nonlinear ARDL models (4.47 and 5.19) exceeds the 90% 95% and 99% upper critical bounds. This result thus confirms the presence of linear (symmetric) and nonlinear (asymmetric) cointegrating relationship between the variables.

Table 2: Results of Bound Test

Model		***k*–1**		**F-Statistics**	**Decision**
Linear ARDL		10		4.464677	Cointegration
Asymmetric ARDL				5.186353	Cointegration
Critical values					
1%		5%		10%	
$I(0)$	$I(1)$	$I(0)$	$I(1)$	$I(0)$	$I(1)$
2.41	3.61	1.98	3.04	1.76	2.77

Note: *F-statistic values are calculated by the bound testing approach described by Pesaran et al. (2001).*

Given the confirmation of a long-run relationship between the variables, the linear and nonlinear ARDL model was estimated taking into consideration the optimal lag-length (2,0,1,2,2,1,1,2,2,0,2) and (2,2,2,1,2,2,2,2,2,0,2,2,2,1) respectively, suggested by the Akaike Information Criterion (AIC). Moreover, prior to further inference, the adequacy of the dynamic specifications of the model was evaluated based on diagnostic test, including the Jarque–Bera normality test, Durbin–Watson and Breusch–Godfrey autocorrelation diagnostics, Breusch–Pagan–Godfrey tests for heteroscedasticity, Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMQ) plots for testing parameter and variance stability, and Ramsey RESET for model stability. The results of diagnostic tests are reported in Table 6, and figures 2a, 2b, 3a and 3b. The results of the tests suggest that both the linear and nonlinear ARDL model

does not have the problem of serial correlation, heteroscedasticity and functional form, and the residuals of the models are normally distributed. However, while the CUSUM plots confirms the stability of the models and estimated parameters, the CUSUMQ plots of both model suggests otherwise. Regardless, the long-run and short-run results of the linear and nonlinear ARDL model are jointly presented in **Table 3** and **Table 4** respectively.

Table 3: Nonlinear and Linear ARDL model Diagnostic tests

LM Test Statistics	***Nonlinear ARDL Results***	***Linear ARDL***
Autocorrelation: CHSQ(2)	3.641504 [0.1619]	1.108932 [0.5744]
Heteroscedasticity: CHSQ(25)	39.08625 [0.3762]	32.80246 [0.1361]
Normality: Jaque-Bera	38.73280 [0.0000]	77.15915 [0.0000]
Functional Form: Ramsey RESET F-stat	0.447133 [0.5052]	0.581963 [0.4471]

Source: Author computation using E-views 10

From the long run result presented in **Table 4**, the nonlinear ARDL (NARDL) model show that interest rate, inflation rate, exchange rate, government spending, internal conflict, and domestic savings are the significant determinants of domestic investment in Nigeria in the long run. The model suggests that, a percent increase in interest rate reduces investment by 0.0032. Likewise, while a percent increase in inflation rate increase domestic investment by 0.0128, a percent decrease in inflation rate reduces investment by 0.0172. While positive and negative partial sum of exchange rate are both positively related to domestic investment, appreciation (decrease) in the exchange rate increases domestic investment by 0.0615, depreciation (increase) in the exchange rate increases domestic investment by only 0.0075. Similarly, a unit increase in government expenditure, internal conflict index (increase in internal conflicts), and a percent increase in domestic savings increase domestic investment by 0.929, and reduces domestic investment by 0.1056 and 0.0337 respectively.

Alternatively, in agreement with the nonlinear ARDL model, the linear ARDL model also reveal that interest rate and the interaction between government spending and oil price are the significant negative determinants of domestic investment, while exchange rate and government expenditure determines domestic investment positively in Nigeria. The result suggests that a percent increase in real interest rate reduces domestic investment by 0.002 percent. Similarly, a unit increase government spending as a result of increase in oil (bonny light) price will also reduce domestic investment in Nigeria by 0.357 percent. In contrast, a unit increase in government expenditure and naira to dollar exchange rate (depreciation)

raises the level of domestic investment in the country by 1.195 percent and 0.0042 percent respectively.

In the short run estimates reported in **Table 5**, the nonlinear ARDL model reveal that the past quarter level of domestic investment, interest rate, inflation rate, exchange rate, government expenditure, electric power consumption, domestic savings, per capita income, credit to private section and the interaction between government spending and oil price are the significant determinants of domestic investment in Nigeria in the short run. Result from the nonlinear ARDL model imply that a unit change in past quarter level of domestic investment raises domestic investment in current quarter by 0.405. Similarly, domestic investment is reduced by 0.405 for a percent increase in real interest rate in the current quarter, and 0.003 for a percent decrease in the real interest rate in the past quarter, in contrast to a 0.008 increase when real interest rate is increased by a percent in the past quarter. Likewise, domestic investment is reduced by 0.002 for a percent increase in inflation rate, and 0.006 for a percent decrease in inflation rate. However, in the past quarter, a percent decrease in inflation raises domestic investment by 0.003.

Furthermore, domestic investment is reduced by 0.005 for a unit depreciation in the naira exchange rate in the current quarter, and 0.045 for a unit appreciation in exchange rate in the past quarter. Similarly, investment in Nigeria is raised by 0.087 for a unit appreciation in the exchange rate in the current quarter, and 0.002 for a unit depreciation in the naira-dollar exchange rate. In addition, a unit increase in government expenditure in the current raises domestic investment by 0.547, and a unit increase in government expenditure in the past quarter reduces domestic investment by 0.196. While a kWh increase in the past quarter raised domestic investment by 0.0001, a kWh increase in electric power consumption in the current quarter reduces domestic investment by 0.0039. Similarly, while a percent increase in domestic savings, per capita income and credit to private sector in the current quarter raises domestic investment by 0.082, 0.0054, and 0.028 respectively, a percent increase in domestic savings, per capita income, and the interaction (product) of government spending and oil prices (increase in government spending as a result of increase in the global oil prices) reduces the level of domestic investment by 0.0039, 0.0022 and 0.133 respectively.

In similitude to the long run estimates, save the slight magnitude (size) of the impact of the variables on domestic investment, the result of the short-run linear ARDL model presented in **Table 5** is also similar (in sign) with the short-run estimates of the nonlinear ARDL model. In that, the Linear ARDL model shows that the past quarter of investment and exchange rate, government expenditure, internal conflict, domestic savings, per capita income, and past quarter interaction between government spending and changes in oil price are also the significant positive determinants of domestic investment, while inflation rate,

current exchange rate, past quarter government expenditure, current electric power consumption, past quarter per domestic savings and per capita income, and interaction between government spending and oil price determines domestic investment in Nigeria negatively.

The coefficient of the error correction term lagged by one period $[\varepsilon_{t-1}]$ in both models are statistically significant, correctly signed, less than 1, and also similar. This indicates at about 4% of the deviations from the equilibrium will be corrected within one quarter.

Table 4: Estimation Result of Linear and Nonlinear ARDL models (Long-run coefficients) Dependent variable: INV

Regressor	Asymmetric ARDL		Linear ARDL	
	$Coefficient$	$t-stat$	$Coefficient$	$t-stat$
$Constant$	1.281924	0.163010	7.747209*	5.108442
INT	–	–	-0.020430*	-2.465573
INT^+	-0.003188*	-2.435014	–	–
INT^-	0.012765	-0.265448	–	–
P	–	–	0.003497	0.806540
P^+	0.012765**	2.063962	–	–
P^-	-0.017221***	-1.489988	–	–
EXC	–	–	0.004198**	2.078775
EXC^+	0.007466*	2.563382	–	–
EXC^-	0.061450**	2.129514	–	–
lnG	0.929126*	2.281518	1.194495*	4.739758
ELE	0.006422	1.208892	-0.001408	-0.344775
$INTC$	-0.105564***	-1.803834	-0.035812	-0.581703
DS	-0.033668**	-2.095097	-0.005173	-0.620851
pcY	-0.002070	-0.097466	0.024412	1.238656
CPS	0.040091	1.223030	-0.011736	-0.756881
$lnG \times OILP$	0.305848	1.259275	-0.357392***	-1.628037

Note: *, ** & *** indicates 1%, 5% & 10% significance level; ln denotes logarithm; Δ is the first difference operator

In whole, the nonlinear ARDL model suggest that the movement in interest rate and exchange rate are asymmetrically related with the level of domestic investment. This suggests that, increase in interest rate and depreciation in exchange rate decreases the level of domestic investment, while the decrease in interest rate and appreciation in the exchange rate raises the level of domestic investment in Nigeria. Inflation rate on the other hand reduces domestic investment both with decrease of increase in inflation, though the impact

is not the same. However, this suggests that increase in real (lending) interest rate makes borrowing expensive; exchange rate depreciation makes import of machineries, raw materials, etc. expensive, thus discouraging domestic investors; and changes in inflation rate increases uncertainty.

On the other hand, the negative impact of electric power consumption on domestic investment both in the short run linear and nonlinear ARDL model suggest that, increase in electric power consumption reduces domestic investment in Nigeria. Perhaps this is due to the epileptic power supply in the country which is responsible for increase in production cost. The positive effect of government spending, domestic savings, per capita income, and credit to private sector on domestic investment in the short run suggests that the increase in government spending, domestic savings, per capita income and credit to private sector raises the level of domestic investment in Nigeria. Expectedly, this is consistent with the findings of previous studies (Mekonnen, 2010; Ali & Shaheen, 2016; Muhdin, 2016; Hecht, et al., 2004; Ojong, et al., 2018; Agbarakwe, 2019; Bakare, 2011; Agu, 2015; Ajayi & Kolapo, 2018; Agbarha & Monye, 2017; Agwu, 2015).

Moreover, as predicted, the interaction between government spending and oil prices is also statistically significant in explaining the determinant of domestic investment in Nigeria. Though government expenditure determines the level of domestic investment in Nigeria positively, however, due to the dependence of the Nigerian government revenue of oil gas export which is highly volatile, the interaction between government spending and oil price is negatively related to domestic investment. Two reasons can be suggested why the interaction between domestic investment and oil price is negative. First, during periods of oil boom (rising oil price), revenue from oil is mostly mismanaged by the political office holders, with meagre going into meaningful or beneficial projects which could make investment thrive. Secondly, public expenditure on capital projects such as roads, bridges, rail ways, port, electricity, etc. which tend to reduce the cost of production, thus enhancing the level of domestic investment and attracting more investment into the country has been historically less than 30 percent of the total expenditure.

While an asymmetric relationship can be observed from the size and sign of the coefficients of asymmetric variables (INT_t, P_t and EXC_t) presented in **Table 4**; however, the Wald test was employed to determine the presence of asymmetric relationships or otherwise between interact rate, inflation rate, exchange rate, and domestic investment in Nigeria. As reported in **Table 6**, the asymmetric result from Wald test suggest the presence of asymmetric relationship between the nonlinear/asymmetric variables (interest, inflation and exchange rate) and domestic investment. In other words, this implies that the partial sum of the variables (corresponding to increase and decrease in interest rate, exchange rate, and inflation rate) are statistically different. Hence, the effect of the increase in interest rate

and inflation, and depreciation of exchange rate on domestic investment is statistically different from the negative impact of interest rate, exchange rate (appreciation), and inflation on domestic investment.

Table 5: Estimation Result of Linear and Nonlinear ARDL models (Short-run coefficients)
Dependent variable: ΔINV

Regressor	Asymmetric ARDL		Linear ARDL	
	$Coefficient$	$t-stat$	$Coefficient$	$t-stat$
$\Delta INV(-1)$	0.405325*	6.590089	0.508255*	8.471822
ΔINT^{+}	-0.015263*	-7.674088	–	–
$\Delta INT^{+}(-1)$	0.008406*	4.149825	–	–
ΔINT^{-}	0.001207	0.871554	–	–
$\Delta INT^{-}(-1)$	-0.003157**	-2.332425	–	–
ΔP	–	–	-0.000868**	-2.334636
ΔP^{+}	-0.001584*	-2.869926	–	–
ΔP^{-}	-0.005622*	-4.756540	–	–
$\Delta P^{-}(-1)$	0.002658**	2.176788	–	–
ΔEXC	–	–	-0.002613*	-5.074489
$\Delta EXC(-1)$	–	–	0.000848***	1.584371
ΔEXC^{+}	-0.004651*	-9.679626	–	–
$\Delta EXC^{+}(-1)$	0.001992*	3.386567	–	–
ΔEXC^{-}	0.087346*	10.32113	–	–
$\Delta EXC^{-}(-1)$	-0.044521*	-4.538640	–	–
ΔlnG	0.547322*	12.33935	0.380112*	7.030262
$\Delta lnG(-1)$	-0.196002*	-5.603025	-0.200183*	-3.600244
ΔELE	-0.003939*	-7.633436	-0.002093*	-4.487883
$\Delta ELE(-1)$	0.001047***	1.774703	–	–
$\Delta INTC$	–	–	0.018379*	2.989008
ΔDS	0.008183*	9.134707	0.009180*	9.824690
$\Delta DS(-1)$	-0.003989*	-3.875762	-0.005706*	-5.168452
ΔpcY	0.005378*	3.531988	0.004558*	2.736942
$\Delta pcY(-1)$	-0.002175***	-1.607163	-0.004161*	-2.564582
ΔCPS	0.027700*	6.664713	–	–
$\Delta CPS(-1)$	-0.013904	-0.013904	–	–
$\Delta(lnG \times OILP)$	-0.132622*	-6.343889	-0.192530*	-6.252822
$\Delta(lnG \times OILP)(-1)$	–	–	0.074062**	2.305823
ε_{t-1}	-0.041544*	-9.297979	-0.043384*	-7.667562
Adj. R^2	0.935025		0.862732	

F-stat	39.67117*	32.12591*
D-W Stat	1.926265	1.904302

Note: *, ** & *** indicates 1%, 5% & 10% significance level; *ln* denotes logarithm; Δ is the first difference operator

Table 6: Testing the presence of (Long-run) asymmetries

Series	F-statistic [Prob.]	Asymmetric relationship
$Interest\ rate\ (INT_t)$	9.472835 [0.0027]	Long-run asymmetric relationship exist
$Inflation\ rate\ (P_t)$	5.173747 [0.0250]	Long-run asymmetric relationship exist
$Exchange\ rate\ (EXC_t)$	3.846061 [0.0526]	Long-run asymmetric relationship exist

Figure 3a: Linear ARDL CUSUM

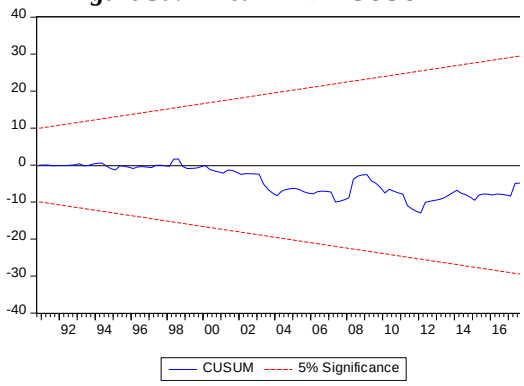
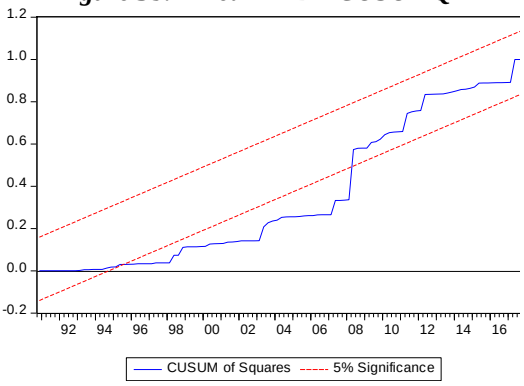


Figure 3b: Linear ARDL CUSUMQ



5. Conclusion and Recommendations

This study explored the determinants of domestic investment in Nigeria using quarterly time series data over the 1980 to 2018 period. In other to capture the impact of volatile interest rate, exchange rate and inflation rate, which has historically been identified as major determinants of investment, both within and outside Nigeria, the novel Nonlinear ARDL cointegration approach proposed by Shin, et al. (2014), which allows an examination of the potential asymmetric impact both in long- and in short-run time sphere, was adopted, in addition to the general (linear) ARDL bound testing approach of Pesaran, et al. (2001), for comparison. Among other things, the result from both the linear and nonlinear ARDL bound testing indicate the presence of cointegrating (long-run) relationship between domestic investment and asymmetric variables (interest rate, exchange rate and inflation rate), symmetric variables (government expenditure, electric power consumption, internal conflict, domestic saving, per capita income, and credit to private sector) and interaction variable (moderation between government spending and oil

price). Furthermore, the empirical evidence suggests that, in the shot-run, interest rate, exchange rate and inflation rate are asymmetrically related to domestic investment in Nigeria. That is, while increase in interest rate and depreciation in exchange rate reduces investment, decrease in their value increases investment. Though inflation rate is negatively related with domestic investment both with increase and decrease in inflation, however, the magnitude is more severe with fall in the general price level. In addition, while government expenditure, domestic savings, per capita income, and credit to private sector raises domestic investment, however, electric power consumption and the interaction between government spending and oil price (increase in government spending with increase in global oil price) reduces domestic investment in the short-run.

In the long-run, while increases in interest rate, decrease in inflation rate, internal conflict, domestic savings and the interaction between government spending and oil price (increase in government spending with rise in the price of Nigerian bonny light crude oil) impact domestic investment negatively, however, increase in inflation rate, exchange rate (appreciation and depreciation), and government spending raises the level of domestic investment in the long-run. Based on these findings, this study recommends the increase in government capital expenditure, savings, credit to private sector, diversification of the economy away from oil and gas export, reduction of the lending interest rate, maintaining of investment friendly inflation rate, and the control/reduction of internal conflicts.

For instance, due to the high impact of government spending, it is recommended that the central and regional governments increase their spending expenditure, specifically capital expenditure which has been historically lower at less than 30 percent of aggregate expenditure, in comparison with recurrent expenditures. However, given the negative impact of the interaction between government spending and oil price (bonny light crude), it advisable for the government to diversify the Nigerian economy away from the volatile oil and gas export, in addition to the cut in the cost of governance. It is also advisable to eliminate corruption in Nigeria, reason being that increase in oil price, which translates to increase in oil revenue is often beneficial to political elites and officials, because it avail them more money to loot, at the expense of the larger public.

In addition, given the positive impact of the appreciation of the naira; the negative impact of inflation; the positive impact of lower interest rate; the negative impact of electricity and internal conflict; and the positive effect of domestic savings, per capita income and credit to private sector, relevant policy actions should be instituted in other to increase credits to private sector, reduce the inflation rate, and obtain an investment-friendly lending interest rate and savings-friendly deposit interest rate. Furthermore, internal crises in part of the country should be holistically tackled as they scare investors

away, coupled with the increase in export so as to cause the naira to appreciate, and the enhancement of power distribution, generation and stability.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 26-39

EFFECT OF PLAYER AND TEAM CHARACTERISTICS' EFFECTS ON PLAYERS' SALARIES: A STUDY OF STATISTICAL METHODS

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Received: 15.05.2020 Accepted: 30.06.2020

Abstract

This study investigated factors that influence the remuneration of professional baseball players in Asian (Japan, Korea, and Taiwan) and US professional baseball leagues. The empirical results obtained by investigating 5289 baseball players as the study sample revealed that the support vector machine model was the most accurate in the Japanese and Korean leagues for predicting players' annual total remuneration, whereas the SVM model and the logit model were the most accurate in the Chinese (Taiwan) and US leagues, respectively.

Keywords: *baseball; salaries; players; logistic model; Support vector machines; Rough set theory*

JEL Codes: *C202, J01*

1. Introduction

Human capital and hedonic wage function theories are the major theories adopted to determine factors influencing remuneration. Human capital theory explains the influence of employees' individual characteristics, such as education (Renkas, 2013), age (Renkas, 2013), tenure (Barth, 1997), and training (Sun, 2012), on remuneration, and hedonic wage function theory explains the influence of work characteristics, such as industry (Sun, 2012), gender (Sun, 2012; Chzhen and Mumford, 2011; Ahmed and Mcgillivray, 2015), marital status (Chzhen and Mumford, 2011), party membership (Sun, 2012), number of family members (Sun, 2012), and number of young children in the household (Popli, 2012), on remuneration and reflects employee preferences for wages and work characteristics.

Remuneration structures in professional sports leagues vary by country because of the differences in their operational environments, such as the number of teams and fans. Athletes are paid a fixed remuneration along with bonuses and other incentives. Some players sign multiyear contracts (i.e., long-term contracts not signed on a yearly basis but

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renewed upon expiry). Discussions of differences in baseball player remuneration in the literature have mainly focused on human capital, reporting seniority and experience (Stone and Pantuosco, 2008; Holmes,2011; Haupert and Murray, 2012; Hake and Turner, 2011; Hill and Jolly, 2017), contract length (Pedace and Hall, 2012), population of the team's metropolitan statistical area (Holmes, 2011), nationality (Pedace and Hall, 2012), team performance (Wang and Cheng and Jane), total team revenue (Holmes, 2011), player performance (Haupert and Murray, 2012), and player age (Hake and Turner, 2011) as factors influencing athlete remuneration. However, these studies only applied human capital theory or other theory and did not conduct diagnostic tests, including those for determining the accuracy of the applied model.

Research has demonstrated that logistic regression, support vector machine (SVM), and rough set theory (RST) models are applicable to multifarious practical problems pertaining to economic and financial result prediction; however, this research has not applied them to athletes' remuneration. In this study, we adopted the "total sum" (i.e., fixed remuneration and bonus) to measure remuneration; developed logistic regression, support vector machine (SVM), and rough set theory (RST) models; and evaluated the accuracy of the developed models in predicting remuneration in professional baseball leagues in Asia (Japan, Korea, and Taiwan) and the United States

2. Literature Review

2.1. Player remuneration

In sporting competitions, coaches and trainers are crucial for individual and team performances (Wester and Weiss, 1991). They influence player styles and techniques and are involved in player role distribution, practice scheduling, on-site strategy, player dispatching, and other related decisions. Therefore, coach characteristics affect player performance and thus player remuneration (Kahn, 1993b). Idson and Kahane (2000) argued that the seniority of professional sports team coaches is positively related to player remuneration. Professional sports coaches are extensively involved in decision making, such as team composition and analyzing opponent strategy. Their experience confers them with strong leadership skills, which enhance team performance and positively contribute to player performance, thus leading to higher player remuneration. For success in team sports, athletes not only rely on individual prowess but also on team strategy. Idson and Kahane (2000, 2004) have asserted that team performance influences managerial assessment (e.g., remuneration and incentives) of players.

Krautmann (2017) reported that risk-averse owners pay a premium in salary bids for free agents in MLB because free agents' contract terms are negatively related to the degree of variability in their performance; this suggests a heretofore unrecognized factor affecting the market for talent in professional sports. Liu and Zong and Wang and Zhang (2017) reported factors that determine salary among professional baseball players in the Asian (Japan, Korea and Taiwan) and US. Empirical results show that US baseball players are the highest paid and those in Taiwan receive the lowest salary, with a large difference of 75 times. Experience, age, education and other variables, as well as population of teams' home cities are influential. Whether or not a player transfers to other teams, their health conditions (measured as BMI) and other variables significantly affect salary, and there is no significant variance arising from different management environments in different countries. Although team age and player salary are correlated significantly in the three countries, the correlation is positive in the US and negative in Asian (Japan, Korea and Taiwan). However, their health conditions (measured as BMI), training, education and population of teams' home cities have insignificantly correlation with the total salary from multi-year contracts.

2.2 Predicting economic and financial results by using the logistic model, support vector machines, or rough set theory

The logistic model, SVMs, or RST can be used to predict financial results such as firm performance (Zhang and Yang and Li, 2015), corporate failures (Kim and Mun and Bae, 2018), fraudulent financial statements (Yeh and Chi and Lin, 2016). For example, Zhang and Yang and Li (2015) employed an SVM to predict the profitability of the construction companies listed on the A-share market in China. Additionally, Kim and Mun and Bae (2018) used an SVM to predict corporate bankruptcy in Korea and demonstrated that the proposed method offers greater accuracy for corporate bankruptcy prediction than do existing methods. By contrast, Yeh and Chi and Lin (2016) integrated the RST and SVM approaches and employed both financial and nonfinancial ratios for detecting fraudulent financial statements.

Analogous economic results may be predicted using the logistic model, SVMs, or RST, such as stock market or price index (Cheng and Yang, 2018), financial asset returns (Taylor and Yu, 2016), futures index (Das and Padhy, 2017), economic resource price or consumption (Kaytez and Taplamacioglu and Cam, 2015; Yu and Zhang and Wang, 2017; Wu and Shen, 2018). For example, Cheng and Yang (2018) developed a novel fuzzy time-series model based on rough set rule induction for forecasting stock indexes, with TAIEX, Nikkei, and Hang Seng Index stock prices forming the experimental dataset. By contrast,

Taylor and Yu (2016) provided an empirical illustration by using daily stock index data and presented a new autoregressive logistic model for forecasting the probability of a time series of financial asset returns. Das and Padhy (2017) combined an unsupervised extreme learning machine with SVM-based clustering and support vector regression (called USELM- SVR) to forecast an energy commodity futures index on the Indian multi-commodity exchange. Furthermore, Kaytez and Taplamacioglu and Cam (2015) employed SVMs and LSSVMs as new techniques for energy consumption forecasting. Yu and Zhang and Wang (2017) demonstrated that an SVM performs effectively in forecasting, implying that it is a favorable candidate for crude oil price forecasting. Wu and Shen (2018) used an LSSVM model based on gray relational analysis to predict energy demand.

3. Methodology

3.1 Data sources and sampling

Comprehensive data are unavailable for professional athletics; therefore, we ensured data reliability by obtaining data directly from the investigated professional baseball leagues[1]. In addition, data were obtained from websites[2] and sports media[3]. Baseball players who have played at least one game in the top division in professional baseball leagues in Japan, Korea, Taiwan, and the United States between 2009 and 2017 were included in the study. Per-season contracts were investigated. Data on 5289 players were obtained.

Remuneration is generally of two types: direct (basic remuneration, stipends, incentives, and living expenses) and indirect (health insurance, vacation benefits, welfare, and services). Professional baseball players define their remuneration structure as consisting of remuneration and bonuses. However, many professional baseball leagues do

[1] http://mlb.mlb.com(MLB, American Professional Baseball League)
http://www.npb.or.jp(Nippon Professional Baseball League)
http://www.koreabaseball.com(Korea Professional Baseball League)
http://www.cpbl.com.tw(Chinese Professional Baseball League)

[2] http://home.a07.itscom.net/kazoo/pro/pro.htm (Salaries of Japanese Baseball Players)
http://content.usatoday.com/sports/baseball/salaries/default.aspx(Salaries of American baseball Players)
http://mlbcontracts.blogspot.com(contracts of American baseball Players)
http://twbsball.dils.tku.edu.tw/wiki/index.php?title=%E9%A6%96%E9%A0%81(Wikiped ia: Baseball)

[3] Data on the remuneration of professional baseball players are not public in Taiwan and Korea. The figures used in this study were extrapolated from media reports (e.g., the Baseball Match Handbook published by the Chinese and Korean professional baseball leagues).

not reveal the additional incentives offered. In this study, total annual remuneration[1]is defined as the remuneration (in US dollars) received by the sampled athletes during the 2009–2017 seasons. Accordingly, two levels of remuneration, 1 and 0, are defined as the output labels, representing annual remuneration higher and lower than the average remuneration of players in the same league at year t, respectively. In addition, the remuneration equations for professional baseball players are measured using player team transfer[2], players' degree of obesity[3], the length of training[4],the population of the city in which the team is located[5][6] (Liu and Zong and Wang and Zhang ,2017).

3.2 Model

The paper adopts logistic regression model, support vector machines (SVM) and rough sets theory (RST) to estimate parameters.

(1) Logistic regression model

$$\lambda = \ln \frac{p}{1-p} = \beta_0 + \beta_1 x_1 + \cdots \ldots \beta_i x_i \quad \ldots\ldots (1)$$

According to the definition of logistic function

$$p = \exp(\alpha + \beta x) / [1 + \exp(\alpha + \beta x)] \quad \ldots\ldots (2)$$

$$1-P = 1/[1+\exp(\alpha + \beta x)] \quad \ldots\ldots (3)$$

α, β_1 ……β_m are return parameters in the model

When the dependent variable is 0, 1 variable, the results are in two situations of occurrence (the dependent variable is 1) or non-occurrence (the dependent variable is 0). The model expressions are as follows:

$$P(Y=1) = \frac{\exp(\lambda)}{1+\exp(\lambda)} \quad \ldots\ldots (4)$$

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[1] Calculated as the sum of all payments guaranteed in the contract.

[2] It is a dummy variable which is equal to one if the player i at time t belonged to a new team after the previous season otherwise, is equal to zero

[3] body-mass index is the health of player i at time t measured in weight divided by height (in meters)

[4] It is the player's lagged degree of on-the-job training measured as the number of games through division 2 or minor league

[5] It is the population of the city in which the team is located at time t measured as the natural logarithm of the population of the team's home city.

[6] Statistics released by the government in a city of each team and estimated based on information obtained from Wikipedia (English version).

$$P(Y=0) = \frac{\exp(\lambda)}{1+\exp(\lambda)} \quad \ldots\ldots (5)$$

Equation (4) and (5) show that P(Y=1) =1- P(Y=0)

(2) Support vector machines (SVM)

Support vector machines are a set of related supervised learning methods used for classification and regression. Viewing input data as two sets of vectors (two classes classification) in an high dimensional transformed space, an SVM seeks to construct a separating hyper-plane in that space, one which maximizes the margin between the two data sets. To calculate the margin, two parallel hyper-planes are constructed, one on each side of the separating hyper-plane, which are "pushed up against" the two data sets. Intuitively, a good separation is achieved by the hyper plane that has the largest distance to the neighboring data points of both classes, since in general the larger the margin the better the generalization error of the classifier. That is, based on the structured risk minimization principle, SVMs seek to minimize an upper bound of the generalization error instead of the empirical error as in neural networks.

$$y=\text{sign}\,(w^T\emptyset(X) + b),\ y\in\{-1.1\} \quad \ldots\ldots (6)$$

where y is output (1 for type A , -1 for type B) ; $\emptyset(X)$ is a nonlinear mapping form the input space to the high dimensional transformed space. SVMs exploit the idea of mapping input data into a high dimensional reproducing kernel Hilbert space (RKHS) where classification could be easily performed. Coefficients W and b are estimated by the following optimization problem

$$\min_{w,b} R(w,\xi) = \frac{1}{2}\|w\|^2 + C\sum_{i=1}^{m} \xi_i \quad \ldots\ldots (7)$$

with $y_i\,(w^T\emptyset(X) + b) \geq 1+\xi_i$, i=1……m $\xi_i \geq 0$

c is a prescribed parameter to evaluates the trade-off between the empirical risk and the smoothness of the model.

(3) Rough set (Yeh et al.,2010)

Rough sets theory (RST) is a machine-learning method has proved to be a powerful tool for uncertainty and has been applied to data reduction, rule extraction, data mining and granularity computation. Here, we illustrate only the relevant basic ideas of RST that are relevant to the present work. By an information system we understand the 4-tuple S=(U,A,V, f), where U is a finite set of objects, called the universe, A is a finite set of attributes , $V= \bigcup_{a\in A} V_a$ is a domain of attribute a , and $f : U \times A \rightarrow V$ is called an information function such that $f(x,a) \in v_a$, for $\forall a \in A$, $\forall x \in U$. In the classification problems, an information system is also seen as a decision table assuming that $A = C \cup D$ and $C \cap D = \emptyset$, where C a set of condition attributes and D is a set of decision attributes

Let S= (U, A, V,f) be an information system, every P ⊆A generates an in-discernibility relation IND (P) on U, which is defined as follows:

IND (P) = {(x, y) ∈ U × U :$f(y,a)$, ∀a ∈ P }……(8)

U/IND (P) = {C_1, C_2 … … … C_K } is a partition of U by P, every C_i is an equivalence class. For ∀x ∈ U the equivalence class of x in relation to U/IND (P) is defined as follows:

$[x]_{U/IND(P)}$= {y ∈ U : $f(y,a) = f(x,a), \forall a \in P$}…… (9)

Let P ⊆A and X ⊆U. The P-lower approximation of x (denoted by $P_*(x)$) and the P-upper approximation of x (denoted by $P^*(x)$) are defined as follows:

$P_*(x)$= { y ∈ U : $[y]_{U/IND(P)\subseteq X}$}

$P^*(x)$= { y ∈ U : $[Y]_{U/IND(P)\cap X} \neq \emptyset$}…… (10)

where $P^*(x)$ is the set of all objects form U which can certainly be classified as elements of x employing the set of attributes P. $P^*(x)$ is the set of objects of U which can be classified as elements of x using the set of attributes P. Let P, Q⊆ A, the positive region of classification U/IND (Q) with respect to the set of attributes P, or in

Short, P-positive region of Q is defined as POS (Q) =$U_{X\in U/IND(Q)}$ p(X) .

$POS_p(Q)$ contains objects in U that can be classified to one class of the classification$U/IND(Q)$ by attributes P. The dependency of Q on P is defined as

$\gamma_p(Q)$= card ($POS_p(Q)$)/ card(U)……..(11)

An attribute a is said to be dispensable in P with respect to

Q, if $\gamma_p(Q)=\lambda_{P-\{a\}}(Q)$； otherwise a is an indispensable

attribute in P with respect to Q. ⊂

Let S= (U, A, V,f) be a decision table, the set of attributes

P(P ⊆C) is a reduce of attributes C, which satisfies the following

Conditions:

$\gamma_p(D) = \gamma_c(D), \gamma_p(D) \neq \gamma_{P'}(D)\ \ \forall P' \subset P$. ……..(12)

A reduce of condition attributes C is a subset that can discern decision classes with the same Accuracy as C, and none of the attributes in the reduced can be eliminated without decreasing its distrainable capability

A reduction of condition attributes C is a subset that can discern decision classes with the same accuracy as C, and none of the attributes in the reduced attributes can be eliminated without reducing its distrainable capability (Pawlak,2002).

3.3. Confusion matrix and type I, II errors of predicting models

True positive (TP) and true negative (TN) are correct classifications. A false negative (FN) occurs when the outcome is incorrectly predicted as negative when it is actually positive. a FN, also called a Type I error, occurs when a null hypothesis is rejected when it is actually true. A false positive (FP) occurs when the outcome is incorrectly predicted as positive when it is actually negative. A FP, also called a Type II error, occurs when a null hypothesis is accepted when it should have been rejected.

3.4. Robustness Test

In order to avoid possible bias from extreme values, the study also adopt those samples only include the sample data of from the 5th percentile to the 95th percentile as measures for the robustness test (Huang & Liu, 2011)

4. Results

4.1. Descriptive Statistics

The summary statistics of the player' salary among nations (for convenience of analysis, salaries' currency conversion is based on the exchange rate in 2009-2017 (Table1). The rate was obtained though www.oanda.com, those from the US receive the highest total salary, followed by Taiwan with the lowest. Based on country, overall salary level can be compared, such that US players receive 7.55 times that of Japanese professional baseball players, while the Japanese receive 1.76 times the salary of their Korean counterparts and the Korean receive 5.37 times the salary of their Taiwanese counterparts. The Americans earn 71.46 times of what Taiwanese professional baseball players receive. This large disparity in salary perhaps explains growing ambition among Asian players to find employment in the US. Comparing average salaries for 2009-2017, there is significant difference in the Asian and US Professional Baseball Leagues, reflecting perhaps that salary levels among professional baseball players have changed with the overall management environment.

It shows that the characteristics of baseball players or team from different countries vary. Of them, in terms of players' obesity (BMI)[1], baseball players in the US average as obese. The Japanese and Korean tend to be overweight. Taiwanese baseball players have standard BMI. Taiwanese baseball players have standard BMI. US players show lower training, reflecting the fact that American professional baseball players enjoy longer professional life. A possible reason maybe because US players have better physical conditions than their Asian counterparts. Another reason is that major league affords better

[1]BMI equal to or larger than 27 is considered obese, "overweight" is 24 - 27, and standard is 18.5 - 24.

training that helps maintain stamina muscle power and playing skills. Taiwan players have higher training. Reasons maybe that Taiwan baseball players suffer from sports injuries due to too-frequent dispatching, resulting in a shorter professional life.

Table 1. Descriptive statistics (average, annual salary, in US ten thousand dollars).

	U.S	JAPAN	Taiwan	Korea
TR_{it}	428.05	56.72	5.99	32.17
BMI_{it}	28.92	25.82	22.12	26.19
$TRAINING_{it-1}$	15.2	19.6	28.75	24.45

where TR_{it} is the sum of all payments guaranteed in the contract;. BMI_{it} is the health of player i at time t measured in weight divided by height (in meters); $TRAINING_{it-1}$ is the player's lagged degree of on-the-job training measured as the number of games through division 2 or minor league.

4.2. Empirical Test

Comparisons of predicted and actual classifications are shown in Tables 2–5. As indicated in Table 2 (Japanese professional baseball league), the SVM model had the highest value (the accuracy was 61.32%), and the RST model had the lowest value (the accuracy was 60.88%). As indicated in Table 3 (Korean professional baseball league), the SVM model had the highest value (the accuracy was 52.18%), and the RST model had the lowest value (the accuracy was 51.095). As indicated in Table 4 (Chinese professional baseball league, Taiwan), the SVM model had the highest value (the accuracy was 61.09%%), and the logit model had the lowest value (the accuracy was 53.68%).As indicated in Table 5 (Major League Baseball, United States), the logit model had the highest value (the accuracy was 59.78%), and the RST model had the lowest value (the accuracy was 49.78%). Furthermore, the empirical results show that these models exhibited higher accuracy (>50%). The significance of the difference provides strong evidence of the most accurate trend predictions regarding athlete remuneration in professional baseball leagues.

Table 2 The accuracy of every prediction model: Japan (N=1189)

	Logit	SVM	RST
Overall Correct Rate	62.28%	61.32%	60.88%
Overall Incorrect Rate	37.72%	38.68%	39.12%

Table 3 The accuracy of every prediction model: Korea (N=833)

	Logit	SVM	RST
Overall Correct Rate	52.22%	52.18%	51.09%
Overall Incorrect Rate	47.78%	47.82%	48.91%

Table 4 The accuracy of every prediction model: Taiwan (N=435)

	Logit	SVM	RST
Overall Correct Rate	53.68%	61.09%	56.11%
Overall Incorrect Rate	46.32%	38.91%	43.89%

Table 5 The accuracy of every prediction model: American (N=2832)

	Logit	SVM	RST
Overall Correct Rate	59.78%	50.08%	49.78%
Overall Incorrect Rate	40.22%	49.92%	50.22%

4.3. Robustness Test

We repeat the same analyses to tackle a possible sample specific issue and get general robust results (i.e., the study adopt those samples only include the sample data of from the 5th percentile to the 95th percentile as measures for the robustness test). Comparisons of predicted and actual classifications are shown in Tables 6–9.

As indicated in Table 6 (Japanese professional baseball league), the logit model had the highest value (the accuracy was 62.90%), and the RST model had the lowest value (the accuracy was 61.48%). As indicated in Table 7 (Korean professional baseball league), the logit model had the highest value (the accuracy was 53.26%), and the RST model had the lowest value (the accuracy was 52.11%). As indicated in Table 8 (Chinese professional baseball league, Taiwan), the SVM model had the highest value (the accuracy was 62.61%), and the logit model had the lowest value (the accuracy was 55.02%). As indicated in Table 9 (Major League Baseball, United States), the logit model had the highest value (the accuracy was 60.85%), and the RST model had the lowest value (the accuracy was 50.67%). Overall, analysis of the prediction model through robustness testing indicated that the significant difference provides strong evidence of more accurate trend predictions for athlete remuneration in professional baseball leagues. Additionally, the sample revealed that the empirical results still show that these models exhibited higher accuracy (>50%)

Table 6 The accuracy of every prediction model: Japan (N=1070)

	Logit	SVM	RST

Overall Correct Rate	62.90%	61.93%	61.48%
Overall Incorrect Rate	37.10%	38.07%	38.52%

Table 7 The accuracy of every prediction model: Korea (N=749) ((Robustness test)

	Logit	SVM	RST
Overall Correct Rate	53.26%	53.22%	52.11%
Overall Incorrect Rate	46.74%	46.78%	47.89%

Table 8 The accuracy of every prediction model: Taiwan (N=392)

	Logit	SVM	RST
Overall Correct Rate	55.02%	62.61%	57.51%
Overall Incorrect Rate	44.98%	37.39%	42.49%

Table 9 The accuracy of every prediction model: American (N=2549)

	Logit	SVM	RST
Overall Correct Rate	60.85%	50.98%	50.67%
Overall Incorrect Rate	39.15%	49.02%	49.33%

5. Discussion

This study examined salary structures among professional baseball players in Asia (Korea, Japan and Taiwan) and the United States. The results indicate that the SVM model predicted annual player salary in the Japanese and Korean professional baseball leagues the most accurately; the SVM model predicted annual player salary in the Chinese professional baseball league (Taiwan) the most accurately; and the Logit model predicted annual player salary in Major League Baseball (American) the most accurately.

The remuneration contracts of baseball players differ from those in other industries. In the United States and Japan, baseball player remuneration contracts are primarily multiyear contracts. In Taiwan, multiyear contracts were not used until 2006. Multiyear and annual contracts have distinct advantages and drawbacks. Although multiyear contracts guarantee exclusive access to the player, they financially burden the team sponsors because of the guaranteed payment regardless of player performance. Moreover, the team must bear the negative impact (cost efficiency) of a player being injured or unavailable because of unexpected events during the contract validity period. Therefore, seeking the optimal remuneration contract that benefits both the team management and the player is critical. However, few studies have focused on these two types of contracts, and the underlying theory is weak.

In summary, this study has the following implications. Although the empirical results of this study can serve as a reference for future academic research and team administration, the characteristics of our data are relatively restrictive. For example, data on player remuneration in Asian baseball leagues are incomplete, thus necessitating corroboration through further research. Nevertheless, remuneration data in professional sports are more easily accessible than those in other industries, but some variables, such as bonuses and incentives, are not easily accessible. Including such data in our analysis may have yielded clearer results. In addition, we developed cross-national models for forecasting remuneration structures for professional baseball players, which exhibited accurate outcomes with high goodness-of-fit. These models and results can serve as a reference to regulators and policy makers; however, our models are subjective, and an optimal model should be determined in the future.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 40-60

USING CAPITAL BUDGETING TECHNIQUES IN RATIONALIZING CAPITAL EXPENDITURE DECISIONS IN JORDANIAN INDUSTRIAL PUBLIC SHAREHOLDING COMPANIES

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Received: 20.04.2020 Accepted: 8.07.2020

Abstract

This study aims to examine the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, and to identify the obstacles which might limit this effect. The members of study sample are accountants who work in industrial companies which use capital budgeting techniques. Therefore, the unit of analysis is individuals, and the study uses a questionnaire method.

The main result is that there is a statistically significant effect of using capital budgeting techniques on rationalizing capital expenditure decisions in industrial companies, especially when they apply those practices that consider the time value of money. Additionally, there are significant obstacles that limit the effect of using capital budgeting techniques on rationalize capital expenditure decisions, especially the subjective factor of decision-makers in accepting or rejecting investing projects, and incapability of predicting amounts and timing of projects' cash flows.

Keywords: *capital budgeting techniques, capital expenditure decisions, industrial companies, emerging market*
JEL Codes: *M10, M41, M42*

1. Introduction

Using capital budgeting techniques in industrial companies is crucial to plan, finance and evaluate their investment projects, such as purchasing fixed assets, producing new products, opening new branches or changing from manual to automated manufacturing systems. These projects require decisions to achieve maximum possible returns, which positively reflect on maximizing the wealth of owners (Nishat & Haq, 2009; Khamees et al., 2010; Almazan et al., 2017; Alnidawi & Jaffal, 2018; Brunner & Ostermaier, 2019).

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There are several capital budgeting techniques that can be used to evaluate investment projects (Sarwary, 2020). They are divided into two groups. The first group techniques recognize the time value of money, such as net present value (NPV), internal rate of return (IRR), and profitability index (PI). The second group techniques do not recognize the time value of money, such as undiscounted payback period (PP) and accounting rate of return (ARR) (Garrison et al., 2015: 586). Previous literature (such as, Duchac et al., 2012; Arora, 2012; Whitecotton et al., 2014; El-Daour & Abu Shaaban, 2014; Vecino et al., 2015; Batra & Verma, 2017) highlighted that financial managers and academics favor undiscounted over discounted models.

The process of preparing capital budgets is a real challenge for decision-makers in order to select the most successful investment project among proposed projects, so decision-makers should go through the stages of preparing capital budgets starting from the most important stage, which is to identify proposed investment projects. They then trade-off those projects by determining expected revenues and costs for each project. A company also determines expected cash inflows for each project during its estimated useful life. Then, a decision is made whether to accept or reject a project based on capital budgeting techniques. In the final stage, there is a need for feedback to evaluate the decision taken and compare actual results with expected results to make the appropriate correction for any problem that may occur during the productive life of a project (Dheeriya, 2008; Verma et al., 2009; Braun & Tietz, 2014; Souza & Lunkes, 2016).

Companies face the risk of poor using of capital budgeting techniques and lack of commitment to their implementation (Dedi & Orsag, 2007; Truong et al., 2008; Ahmed, 2013; Souza & Lunkes, 2016). This risk negatively reflects on the ability to make rational capital expenditure decisions through the optimal investment of scarce resources (Danielson & Scott, 2006; Warren & Jack, 2018), especially since the capital expenditures decision is one of the strategic decisions affecting the value of a company in the long term (Ahmed, 2013; Souza & Lunkes, 2016; Stamevski et al., 2018), so it is necessary to make this decision on the basis of a proper use of capital budgeting techniques (Maroyi & Poll, 2012; Mukherjee et al., 2016). However, there are differences among companies in terms of procedures followed in preparing capital budgets (Ekeha, 2011; Duchac et al., 2012; Batra & Verma, 2017; Mohan & Narwal, 2017; Su et al., 2018).

Companies' management should have the ability to choose the best alternative by using capital budgeting techniques. These techniques help with rationalizing capital expenditures decisions. This study intends to illustrate this effect in the context of Jordan.

The motivation of this study stems from the fact that it deals with a vital subject, although it is rarely highlighted locally - according to the limits of researchers' knowledge - which is to guide Jordanian companies to optimize using of capital budgeting techniques

because of their direct effect on companies' financial performance. The importance of this work also lies in its targeting of the industrial sector, which is considered a key pillar in the Jordanian economy and has a high level of solvency and professional experience.

2. Literature Review

Capital budgets play a vital role in different sectors and lead us to distinguish between successful and failed companies. Capital budgets are concerned with long-term investment decisions starting with evaluating capital expenditure projects and ending with choosing the best alternative (Whitecotton et al., 2014). Whitecotton et al. (2014) added that capital budget is a way to assist managers to make investment decisions. Besides, Duchac et al. (2012) discussed that the capital budget is a process that plays a promote role in planning, evaluating and controlling investments.

Capital budgets maximize the corporate value and the wealth of its shareholders. According to Garrison et al. (2015), managers should carefully select projects that generate the maximum return in the future by using capital budgets. This is because capital budgets help managers make their decisions by providing information about a project and benefits that can be obtained from that project (Kida et al., 2001; Mubashar & Tariq, 2019).

According to Andor et al. (2015), capital budgeting techniques used in companies are influenced by their size, multinational culture, goals, and the existence of code of ethics; moreover, Vecino et al. (2015) added the educational level of decision-makers; furthermore, Andrés et al. (2015) added type of company activity.

NPV technique aims to find the difference between the present value of the cash inflows and cash outflows from a specific investment by using a discount rate (required return rate on investment). IRR is the rate at which present value of cash inflows from an investment is equal to the cost of that investment, i.e. when net present value of a project is zero (Hanaeda & Serita, 2014). According to this technique, an investment is accepted if its IRR is greater or equal to the required return rate. PI technique is benefits to costs ratio, and benefits should be greater than costs in order to accept an investment (Truong et al., 2008). Besides, PP technique is based on the time required to recover the initial investment cost. ARR technique is an estimate of profitability of an investment during its useful life rather than relying on cash flows (Wnuk-Pel, 2014).

Preparing capital budgets should be important to rationalize capital expenditure decisions, as those decisions are difficult and they cannot be easily reversed. Capital expenditure decision is based on forecasting future events and cash flows. Capital budgets help managers to make that decision via providing useful information about future events and cash flows. This is consistent with the results of Ekeha (2011). Besides, capital budgeting decisions give indicators regarding firm's plans and goals (Mittendorf, 2006).

Finally, capital budgeting is a measurable method for businesses to determine their long-term economic and financial profitability of any investment (Brunner & Ostermaier, 2019). In this field, the study investigates capital budgeting techniques and capital expenditure decisions in Jordanian industrial public shareholding companies to identify the role of capital budgets in these companies. Thereby, the study investigates the following null hypotheses:

HO1: There is no statistically significant effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies.

HO2: There are no statistically significant differences among the responses of the study sample regarding the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies due to the following companies' characteristics: sector, age, and capital size.

HO3: There are no statistically significant obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies.

HO4: There are no statistically significant differences among the responses of the study sample regarding the obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies due to the following companies' characteristics: sector, age, and capital size.

3. Definitions

Capital budgets: are long-term plans to choose the best alternative among several investments.

Capital budgeting techniques: are methods used to evaluate long-term investment projects to make a more accurate capital expenditure decision.

Capital expenditure decisions: are decisions taken by a company to invest its funds for a long-term period in order to achieve future returns.

Rationalizing capital expenditure decisions: means making long-term capital expenditure decisions according to scientific bases in order to reduce risks and increase efficiency and effectiveness.

4. Methodology

The study aims to investigate capital budgeting techniques and capital expenditure decisions in Jordanian industrial public shareholding companies. The study uses

descriptive-analytical approach and it is based on a quantitative approach (quantitative data collection) via a questionnaire survey based on Graham and Harvey (2001), Imegi and Nwokoye (2015), and Andor et al. (2015) survey. The five points Likert scale is used. Data are analyzed using the statistical package for the social sciences (SPSS); proper statistical tools are used, including descriptive statistics and hypotheses testing (Sekaran, 2009).

The study population consists of all Jordanian industrial public shareholding companies listed on Amman Stock Exchange (ASE) in 2019. There are (58) companies. The study sample is (41) companies which use capital budgeting techniques. These companies are identified by the researchers through making phone calls with all population companies (financial managers and related accountants) and asking them whether capital budgeting techniques are actually used by their companies. Roughly, (71%) of Jordanian industrial public shareholding companies use capital budgeting techniques.

The study questionnaires are distributed to financial managers and related accountants within Jordanian industrial public shareholding companies which use capital budgeting techniques. Five questionnaires are distributed to each company in order to enhance the credibility of the companies' responses. Therefore, the unit of analysis is individuals, and the sample of the study consists of (41) companies with (5) individuals in each company, so the total of distributed questionnaires is (205). (101) questionnaires are collected (individuals' response rate = 49%), and these questionnaires are collected from (24) responding companies (companies' response rate = 59%).

5. Data Analysis and Findings

5.1. Descriptive Statistics

The study questionnaire includes two parts; the first part shows three general questions, namely: company sector, age, and capital size. The second part includes measurement items of study variables. The company sector is identified by determining the affiliation of each company with the sub-industrial sectors according to the ASE classification, which are chemical industries, food and beverage, mining and extraction industries, pharmaceutical and medical industries, textile, leather and clothing industries, and other industries. Age of each company is calculated from the date of its establishing to the year 2019, then the sample companies are divided as follows:

- Less than (10) years old.
- (10) to (15) years old.
- More than (15) years old.

Moreover, the size of companies' capital is divided into three levels as follows:

- Small companies: their capitals are less than (5) million Jordanian dinars.

- Medium-sized companies: their capitals range from (5) million to (14) million Jordanian dinars.
- Large companies: their capitals are more than (14) million Jordanian dinars.

Table (1) illustrates the percentage results of types of company activities, ages of companies, and sizes of companies' capitals.

Table 1. The percentage results of company sector, age, and capital size

Item	Frequency	Percentage %
Company sector		
Chemical	3	12.5
Food & beverage	6	25
Mining & extraction	6	25
Pharmaceutical & medical	3	12.5
Textile, leather & clothing	3	12.5
Other industries	3	12.5
Total	**24**	**100**
Company age		
Less than 10 years old	4	17
10 to 15 years old	4	17
More than 15 years old	16	66
Total	**24**	**100**
Company capital size		
Small	6	25
Medium-sized	9	37.5
Large	9	37.5
Total	**24**	**100**

It is clear from Table (1) that the largest percentages of the study sample companies work in food and beverage industries (25%) and mining and extraction industries (25%). The age of (66%) of companies is more than (15) years, so two-thirds of companies have a long experience in using capital budgeting techniques, which might contribute to making rational capital expenditure decisions. (75%) of companies are large and medium-sized companies based on the company's capital, so three-quarters of companies deal with a capital of (5) million Jordanian dinars or more, and the management of those funds needs to use deliberate capital budgeting techniques. Given the age and capital of those companies, it could be concluded that they deal well with the issue of capital budgets.

Table (2) shows statistical results of internal consistency test for the study tool (a questionnaire survey) through Cronbach's alpha.

Table 2. Internal consistency test

Item	Items	Cronbach's Alpha
The effect of using capital budgeting techniques on rationalizing capital expenditure decisions		
In terms of capital expenditure decision making process	14	87%
In terms of capital expenditure decision outcomes	16	86%
Obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions		
Internal obstacles related to companies	6	88%
External obstacles related to capital budgeting techniques	9	84%
Total	45	86%

From Table (2), the values of Cronbach's alpha are between (84%) and (88%) for items of measuring the study variables, and the total index of all (45) questionnaire items together is (86%). These results are statistically acceptable as the values are greater than (60%). When the value is closer to (100%), this indicates a higher degree of internal consistency of the study tool (Sekaran, 2009). It is worth noting that the study examines the normal distribution of the study data by the graph method, and the results show that the study sample data are normally distributed (i.e. representing the study population).

Regarding the extent of using companies of capital budgeting techniques, Table (3) shows the results of descriptive statistical tests, namely means and standard deviations for capital budgeting techniques which are used by the sample companies.

Table 3. Descriptive statistics for capital budgeting techniques

Item	Mean	Standard Deviation	Ranking
Capital budgeting techniques that consider money time value			
Net Present Value (NPV)	3.24	1.27	4
Profitability Index (PI)	3.30	1.25	3
Internal Rate of Return (IRR)	3.10	1.23	5
Capital budgeting techniques that do not consider money time value			

Payback period (PP)	3.56	1.22	1
Accounting Rate of Return (ARR)	3.54	1.09	2
Overall average	3.35	1.21	

Table (3) summarizes that capital budgeting techniques that do not take into account the time value of money are commonly used by Jordanian industrial public shareholding companies (PP and ARR means are 3.56 and 3.54, respectively; their standard deviations are 1.22 and 1.09, respectively), then capital budgeting techniques that consider the time value of money (PI, NPV and IRR means are 3.30, 3.24, and 3.10, respectively; their standard deviations are 1.25, 1.27, and 1.23, respectively). These results are relatively consistent with Khamees et al. (2010), Khakasa (2014), Hanaeda & Serita (2014) and Mansaray (2019), but differ with Imegi & Nwokoye (2015). The researchers explain these results that companies might use traditional methods that do not take into account the money time value when starting to analyze capital projects, then they use more sophisticated methods, which consider the money time value in their detailed analyses of those projects that are approved by traditional methods.

The following Table (4) presents the descriptive statistical tests, namely arithmetic averages and standard deviations for items which measure the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, in terms of capital-expenditure decision-making process.

Table 4. Descriptive statistics for the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, in terms of decision-making process

Item	Mean	Standard deviation	Ranking
The company use capital budgeting techniques when making capital expenditure decisions	3.10	1.14	13
Clear policies and procedures are established by the company to use capital budgeting techniques when making capital expenditure decisions	3.25	1.12	9
Management is aware of the importance of preparing the feasibility study to make a rational capital expenditure decision through using capital budgeting techniques	3.46	1.25	8
When capital budgeting techniques are used, capital expenditure decisions made by the company are integrated with its strategic goals	3.09	1.21	14
Using capital budgeting techniques contributes to a higher degree of integration among different capital expenditure	3.24	1.23	10

decisions			
Using capital budgeting techniques contributes to improving efficiency of the stages of capital expenditure decision-making process via reducing their costs	3.16	1.32	12
The company uses more than one capital budgeting technique when making capital expenditure decisions to ensure the integrity of the chosen alternative	3.23	1.22	11
Using capital budgeting techniques in rationalizing capital expenditure decisions provides sufficient capabilities and skills to optimally achieve goals of these decisions	3.73	1.19	2
Using capital budgeting techniques contributes to reducing risk when making capital expenditure decisions	3.72	1.05	3
If the company considers the money time value when using capital budgeting techniques, this contributes to improving capital expenditure decisions	3.80	1.26	1
Using capital budgeting techniques when making capital expenditure decisions helps to predicting cash inflows and outflows, so improving returns on investments	3.61	1.22	6
Using capital budgeting techniques helps to predicting future outcomes of capital expenditure decisions	3.65	1.14	4
Using capital budgeting techniques in making capital expenditure decisions does not help to determine benefits of investment projects	3.47	1.20	7
The company does not evaluate any capital expenditure decision before making it via one or more of capital budgeting techniques	3.65	1.21	5
Overall average	3.44	1.20	

Table (4) shows that arithmetic averages for items which measure the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, in terms of capital-expenditure decision-making process are between (3.09) and (3.80) with standard deviations (1.21) and (1.26), respectively. The maximum mean relates to the item that "If the company considers the money time value when using capital budgeting techniques, this contributes to improving capital expenditure decisions". This result is consistent with Bennouna et al. (2010). The minimum mean is for the item that "When capital budgeting techniques are used, capital expenditure decisions made by the company are integrated with its strategic goals". Overall, the mean for all measurement items is (3.44), while their standard deviation is only (1.20). This low value for standard deviation indicates that answers of respondents are somewhat similar.

It is worth mentioning that the last two items are used as control questions to ensure the credibility of respondents in answering the questionnaire, as they are formulated in the negative form, so their points are reversed on Likert scale.

The following Table (5) presents the descriptive statistics for items which measure the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, in terms of capital-expenditure decision-making outcomes.

Table 5. Descriptive statistics for the effect of using capital budgeting techniques on rationalizing capital expenditure decisions, in terms of decision-making outcomes

Item	Mean	Standard deviation	Ranking
Capital expenditure decisions are more effective, if the company uses capital budgeting techniques regardless of their costs use	3.64	1.08	6
Capital budgeting techniques helps the company to improve efficiency of capital expenditure decision-making outcomes by minimizing their cost	3.66	1.12	3
Using capital budgeting techniques when making capital expenditure decisions allows to determine the increase in revenues from an investment project	3.67	1.11	2
By using capital budgeting techniques when making capital expenditure decisions, the company seeks to reduce costs of an investment project	3.36	1.35	8
Using capital budgeting techniques when making capital expenditure decisions reduces labor costs	3.28	1.27	9
The overall performance of the company is improved when capital expenditure decisions are made based on using capital budgeting techniques	3.65	1.28	5
Using capital budgeting techniques when making capital expenditure decisions contributes to maximizing the value of the company and shareholders' wealth	3.65	1.20	4
The company's goals are achieved when capital budgeting techniques are used in making capital expenditure decisions	3.68	1.17	1
Using capital budgeting techniques improves the quality of capital expenditure decisions	2.89	1.33	16
Investment projects are reassessed after implementation to ensure the soundness of capital expenditure decisions based on using capital budgeting	3.26	1.29	11

techniques			
Using capital budgeting techniques helps the company to validate forecasts of capital expenditure decisions	3.54	1.26	7
Using capital budgeting techniques when making capital spending decisions improves the company's keeping up with technological developments	3.26	1.23	10
The company sets clear instructions to innovate and develop products through using capital budgeting techniques when making capital expenditure decisions	3.00	1.24	14
Using capital budgeting techniques in making capital expenditure decisions contributes to product innovation and development. This leads to enter new markets	2.98	1.33	15
Using capital budgeting techniques when making capital expenditure decisions increases the company's efficiency of replacing new assets	3.06	1.26	12
Using capital budgeting techniques in making capital expenditure decisions contributes to develop the company's productive equipment	3.01	1.23	13
Overall average	3.35	1.23	

Arithmetic averages for items which measure the effect of using capital budgeting techniques on rationalizing capital expenditure decision outcomes range from (2.89) to (3.68) with standard deviations (1.33) and (1.17), respectively. The maximum mean is for the item that states: “The company's goals are achieved when capital budgeting techniques are used in making capital expenditure decisions”. This is consistent with the results of Ekeha (2011) and Alrawashdeh (2006). The minimum arithmetic average is for the item that “Using capital budgeting techniques improves the quality of capital expenditure decisions”. The arithmetic average of all items is (3.35), and the standard deviation is (1.23).

With regard to obstacles which limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies divided into internal constraints related to the company itself and external constraints related to capital budgeting techniques. The following Table (6) presents the descriptive statistical tests for items which measure these constraints.

Table 6. Obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions

Item	Mean	Standard deviation	Ranking
Internal Obstacles related to the company			
There is a lack of practical experience for decision-makers of using capital budgeting techniques in making capital expenditure decisions	3.56	1.31	6
Accepting or rejecting investment projects is based on personal opinion without taking into account the use of capital budgeting techniques	3.82	1.30	1
The lack of conviction of the capital budgeting techniques role in rationalizing capital expenditure decisions	3.79	1.27	2
There are no clear bases for using capital budgeting techniques in making capital expenditure decisions	3.72	1.23	4
Strategic goals are not supportive of using capital budgeting techniques in making capital expenditure decisions	3.68	1.22	5
The scarcity of financial and human resources are a constraint to the use of capital budgeting techniques in making capital expenditure decisions	3.74	1.21	3
Overall average	3.72	1.26	
External Obstacles related to capital budgeting techniques			
Inability to predict amounts and timing of cash inflows	3.93	1.14	1
Inability to predict amounts and timing of cash outflows	3.51	1.15	3
Ignoring subsequent cash flows of the project life	3.59	1.05	2
Inability to arrange the available investment projects and choose the best alternative	3.29	1.41	5
Difficulty in calculating the time value of money	3.38	1.15	4
Inability to determine the value of the discount rate used by the company	3.17	1.00	6
Uncertainty conditions related to results of an investment project	2.88	1.05	7
Failure to make a subsequent evaluation of investment projects under the risk	2.76	1.30	8
Inability to adjust the inflation effect on subsequent	2.73	1.50	9

years of an investment project		
Overall average	3.25	1.19

"Accepting or rejecting investment projects is based on personal opinion without taking into account the use of capital budgeting techniques" is the first internal constraint related to the company (mean = 3.82; standard deviation = 1.30). Then, "The lack of conviction of the capital budgeting techniques role in rationalizing capital expenditure decisions" (mean = 3.79; standard deviation = 1.27). On the other hand, "Inability to predict amounts and timing of cash inflows" is the first external obstacle related to capital budgeting techniques (mean = 3.93; standard deviation = 1.14), and the least important constraint is "Inability to adjust the inflation effect on subsequent years of an investment project" (mean = 2.73; standard deviation = 1.50). These results are relatively agreed with those of Bernado et al. (2001; 2004).

5.2. Hypothesis Testing

The main objective for this study is to investigate the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies. The study use appropriate statistical tests, namely one sample t-test and one-way ANOVA to test the study hypotheses.

HO1: There is no statistically significant effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies.

The following Table (7) summarizes the one-sample t-test results regarding to this hypothesis.

Table 7. One-sample t-test for the effect of using capital budgeting techniques on rationalizing capital expenditure decisions

Hypothesis	*T*	Df.	Sig.	Decision
HO1	5.937	100	0.000*	Rejected

*: significant level at $p < 0.01$

It can be seen from Table (7) that the model is fit at sig < 0.01 with a t-value of (5.937); therefore, HO1 hypothesis is rejected. This means that the use of capital budgeting techniques contributes to the rationalization of capital expenditure decisions in Jordanian industrial public shareholding companies. Hence, the capital budgeting techniques, both those that take into account the money time value and those that do not, provide useful

information to assess investment alternatives in order to choose the appropriate one that achieves company's objectives. Accordingly, information that is provided by capital budgeting techniques helps companies to predict amounts of cash flows and outcomes of capital expenditure decisions, as well as to reduce their risks and costs. This is supported by the descriptive statistical results for measurement items above.

HO2: There are no statistically significant differences among the responses of the study sample regarding the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies due to the following companies' characteristics: sector, age, and capital size.

Table (8) shows the results of one-way ANOVA test regarding to the previous hypothesis.

Table 8. One-way ANOVA for the differences among companies regarding the effect of using capital budgeting techniques on rationalizing capital expenditure decisions

Hypothesis	Source	Df.	*F*	Sig.	Decision
HO2 – Sector	Between	5	0.525	0.788	Accepted
	Within	95			
	Total	100			
HO2 – Age	Between	2	0.876	0.420	Accepted
	Within	98			
	Total	100			
HO2 - Capital size	Between	2	0.184	0.833	Accepted
	Within	98			
	Total	100			

*: significant level at $p < 0.01$

The above null hypothesis investigates whether all means are same between and within groups. The small F-value can be considered as evidence that means are same. Thereby, there are no statistically significant differences in average values among the responses of the study sample regarding the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies due to the following companies' characteristics: type of company activity, age of a company, and size of company's capital. These findings are relatively consistent with Wnuk-Pel (2014) and Alrawashdeh (2006), but differ with Andrés et al. (2015) and Chittenden and Derregia (2015). Andrés et al. and Chittenden and Derregia argued that

capital budgeting techniques used in companies are influenced by their sector, age, and capital size.

HO3: There are no statistically significant obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies.

Table (9) summarizes the one-sample t-test results regarding to the prior hypothesis.

Table 9. One-sample t-test for the obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions

Hypothesis	*T*	Df.	Sig.	Decision
HO3	7.440	100	0.000*	Rejected

*: significant level at $p < 0.01$

Table (9) illustrates that the model is fit at sig < 0.01 with a t-value of (7.440), so HO3 hypothesis is rejected. This means there are constraints that limit the contributions of using capital budgeting techniques in the rationalization of capital expenditure decisions in Jordanian industrial public shareholding companies. This result is consistent with Abu Huwaidi (2011) and Seiam (2003). As previously discussed in descriptive statistics, there are internal constraints related to the company itself, which are more important that the acceptance or rejection of investment projects is based on personal opinion and the lack of conviction of the capital budgeting techniques role. Moreover, there are external constraints related to capital budgeting techniques, which are more important that the inability to predict amounts and timing of cash flows and the ignorance subsequent cash flows of the project life.

HO4: There are no statistically significant differences among the responses of the study sample regarding the obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies due to the following companies' characteristics: sector, age, and capital size.

In order to examine the above hypothesis, one-way ANOVA test is used, and the following Table (10) shows the results of this test.

Table 10. One-way ANOVA for the differences among companies regarding the obstacles that limit the effect of using capital budgeting techniques on rationalizing capital expenditure decisions

Hypothesis	Source	Df.	*F*	Sig.	Decision
HO4 - Sector	Between	5	1.118	0.358	Accepted
	Within	95			
	Total	100			
HO4 - Age	Between	2	0.065	0.937	Accepted
	Within	98			
	Total	100			
HO4 – Capital size	Between	2	0.101	0.904	Accepted
	Within	98			
	Total	100			

*: significant level at $p < 0.01$

Table (10) shows small F-values. This means that all means are same between and within groups. Therefore, HO4 hypothesis is accepted. Thereby, there are no differences in average values among the responses of the study sample on identifying the constraints that limit the contributions of using capital budgeting techniques in the rationalization of capital expenditure decisions in Jordanian industrial public shareholding companies due to the following characteristics: type of company activity, age of the company, and the size of the company's capital.

6. Study Conclusions

The results of the study indicate that there is an average level of using capital budgeting techniques in evaluating capital projects in Jordanian industrial public shareholding companies. It is also found that companies use various capital budgeting techniques when evaluating capital projects, and the use rate is spread over all techniques. The payback period (PP) technique achieves the highest use rate, followed by the accounting rate of return (ARR) technique, and then the methods that take into consideration the time value of money, starting with the profitability index (PI) technique, then the net present value (NPV) technique and finally the internal rate of return (IRR) technique.

Additionally, the results show that there is an average level of the effect of using capital budgeting techniques on the process of making a capital-expenditure decision. However, there is a high level of this effect if companies take into account the time value

of money, because this contributes to improving their decisions. Using capital budgeting techniques provides sufficient capabilities and skills to optimally achieve goals of capital expenditures.

Furthermore, it is found that there is a relative weakness in some companies with regard to merging capital expenditure decisions with strategic goals when using capital budgeting techniques. This flaw might negatively affect efficiency related to stages of capital expenditure decision-making by increasing costs of those stages. In addition, some companies that do not use more than one technique might be prevented from ensuring the safety of their chosen alternative.

The results point out that there is generally an average level of the effect of using capital budgeting techniques on outcomes of capital expenditure decisions. Specifically, using capital budgeting techniques significantly achieves company's goals within its financial resources, determines the increase in revenues generated from its investment project, and improves efficiency related to reducing costs of capital expenditure decision-making outcomes, so maximizes the value of a company, which is reflected in maximizing the value of shareholders' wealth.

There is a relative weakness in some companies regarding the use of advanced capital budgeting techniques, which might negatively affect improving the quality of capital expenditure decisions and product innovation and development. This leads to difficulty entering new markets and reduces competitiveness of those companies. This could be attributed to the failure of some companies in setting clear instructions for innovating and developing their products through using different capital budgeting techniques, and to shortcomings in those companies with regard to upgrading their productive equipment.

There is a generally high level of internal obstacles in companies themselves. These constraints limit the impact of using capital budgeting techniques on rationalizing capital expenditure decisions. The most important constraint is that the acceptance or rejection of investment projects is based on personal opinion in some companies. Besides, some companies are not convinced of the role of capital budgeting techniques in rationalizing their decisions. The least obstacle among companies is the lack of experience of decision-makers in using capital budgeting techniques.

Regarding external obstacles, there is an average level of external constraints for capital budgeting techniques. The most important constraints are the inability to predict amounts and timing of cash inflows and outflows, and the ignorance of subsequent cash flows of the project life. While the external obstacles that have a relatively less impact are the inability to adjust inflation in subsequent years of the investment project, in addition to

the failure to make a subsequent evaluation of available investment projects in the light of risk.

The study concludes that there is a statistically significant effect at a level of 0.05 for the effect of using capital budgeting techniques on rationalizing capital expenditure decisions in Jordanian industrial public shareholding companies. The researchers explain this result through the fact that capital expenditure decisions could not be undone easily, as this reversing would incur a company large losses over a long period, especially if it begins implementation. This fact necessitates the use of capital budgeting techniques. However, there are no statistically significant differences for this effect among companies due to their sector, age, or size of capital.

The research demonstrates that there are statistically significant internal and external obstacles that negatively limit the impact of using capital budgeting techniques on rationalizing capital expenditure decisions. There are no statistically significant differences among respondents about identifying those obstacles owing to the type of company activity, its age, or its size.

7. Study Recommendations & Future Research

Based on the results concluded in this study, the researchers recommend the following suggestions: companies, especially Jordanian industrial public shareholding companies, should increase their use of capital budgeting techniques in order to rationalize their capital expenditure decisions.

Moreover, Jordanian industrial public shareholding companies should be urged to address the obstacles that limit the impact of using capital budgeting techniques on rationalizing their capital expenditure decisions, specifically the problem of personal opinions in accepting or rejecting investment projects, the problem of not convincing by managers for the role of capital budgeting techniques in rationalizing their decisions, the problem of inability to predict amounts and timing of cash inflows and outflows, and the problem of neglecting subsequent cash flows in the life of a project.

Additionally, companies should train managers responsible for making capital expenditure decisions in order to provide them with necessary knowledge and experience to allocate scarce financial resources to their optimal use.

This study also recommends companies to cooperate with academics to research the mechanisms of optimal using of capital budgeting techniques in order to make rational decisions, as well as to investigate how to counter obstacles that prevent that optimal using. Future research might be conducted on the remaining of Jordanian industrial public shareholding companies that do not use capital budgeting techniques to guide them about the importance of these techniques in rationalizing their investment decisions and

improving their financial performance. Furthermore, future research could also determine mechanisms of making each capital expenditure decision according to its type, and according to each capital budgeting technique to know the best technique or techniques for each decision.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 61-71

THEORIES OF CORPORATE GOVERNANCE AT STATE-OWNED ENTERPRISES

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Received: 9.07.2020 Accepted: 30.08.2020

Abstract

The aim of the article is to present the application of basic theories of corporate governance in state-owned enterprises. The modern theories of corporate governance were developed and applicable in the private sector only. State ownership fulfills more than one goal and makes it difficult to apply a specific theory of corporate governance.

The results of the article give grounds for applying a specific theory to an individual state-owned enterprise. For the correct application of a given theory, it is necessary to disclose information to determine the goals of the state enterprise and to specify the stakeholders. The mechanical application of theories of corporate theories from the private sector to state-owned enterprises reduces the significance of each theory and leads to incorrect conclusions.

Keywords: *agency theory, stewardship theory, stakeholder theory*
JEL Codes: *D86, G34, L33*

Introduction

The debate over corporate governance of state-owned enterprises offers a "puzzling irony" (Chen, 2016). The reason for such a reaction is the ignorance that the failure of state-owned enterprises is as common an event as the failure of the private sector (Toninelli, 2000). The main justification for ignorance of the issues of state-owned enterprises is the less attention they receive compared to private companies (Kowalski et al., 2013). The surveys for state ownership are disproportionate to the volume of surveys on private sector companies (Bruton et al., 2015). In practice, there is a constant demand for empirical research on the corporate governance of state-owned enterprises (Whincop, 2005). Differences in corporate governance research for private companies and state-owned enterprises have been likened to a "gap" (Grossi, Papenfuß & Tremblay, 2015).

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The dynamics in society determine the development of state ownership. With each change in society, the theories of corporate governance of state-owned enterprises are adapted and upgraded[1]. According to A. Hirschman, society goes through periods of public ownership to solve common problems and periods of achieving individual and private goals (Hirschman, 1982). According to the origin and evolution of a nation, the form of ownership changes, which is supported by scientific theories for each stage. Regardless of the stage of development in any society, state ownership raises reasonable questions about its justification, as well as about the benefits generated by it. For this reason, the assessment of state-owned enterprises must be both economic and social (Kim et al., 2019).

The theories and terminology of corporate governance of state-owned enterprises are in the field of political science and public administration rather than in economics and business administration. This may explain the difficulties in using terms and techniques applicable to the private sector in the analysis of state-owned enterprises. The modern practice of corporate governance of state-owned enterprises has points of contact with the private sector in the application of the universal principle for finding cases through standardized requirements for disclosure of information. The application of the "comply or explain" principle comes down to knowledge of global good practices and gives rise to attempts to introduce foreign practices into the national environment, as legislation and dependence on historical development and inertia remain secondary.

Corporate governance of state-owned enterprises is characterized by national differences. The features of individual countries differ significantly, as they are contextually rooted and historically determined (Backer, 2017). Case reporting and benchmarking of state ownership often do not lead to convergence of practices. The analysis of good practices should be conducted by rethinking the evolutionary models of state institutions and national economies (Berger & Dore, 1996).

Dynamics of state ownership

The dynamics of state ownership can be considered according to the views of various authors expressed over the years:

– One of the first opinions to justify the existence of state ownership is in four directions: promoting and accelerating economic development, ensuring national security and defense, organizing control over monopoly industries and the existence of political ideology (Friedmann & Garner, 1970).

[1] Corporate governance of state-owned enterprises has the function of increasing their efficiency in terms of value creation, while ensuring compliance with applicable law and regulations (Schneider, 2019).

– Later, state-owned enterprises are seen as a consequence of ideological reasons, the acquisition or consolidation of political or economic power, historical heritage and inertia, and as a pragmatic response to existing economic problems (Jones & Mason, 1982).

– The current view of the need for state-owned enterprises is associated with government intervention to address market failures that arise in the development of new strategic industries, limiting excessive monopoly profits from infrastructure services and the need to provide social security at low cost (Davids & Van Zanden, 2000).

Modern state ownership began to take shape in the 1930s due to following reasons:

– The effects of the Great Depression were caused by private sector errors, which necessitated government regulation, including through the acquisition or creation of state-owned enterprises for an infrastructure monopoly (Millward, 2006).

– After the end of the World War II, state ownership is a symbol of the modernization of the national economy and prosperity of society.

– In the 1970s, the oil crisis increased public attitudes towards the accountability of state-owned enterprises (European Commission, 2016).

– The global financial crisis of 2008 changed the perception of the effects of state ownership – state-owned enterprises are less in need of recovery.

– At the beginning of the 21st century, state ownership is at the heart of government programs for the competitiveness of national economies.

Modern views on property are focused mainly on the relation "ownership – responsibility", which is directly related to the rights of every member of society. This takes into account the change in the stereotype of shifting the financial burden on taxpayers.

Depending on the model of state ownership, three main ideal types describe the role of the state (Bellini, 2000):

– "Expert state", which has a monopoly on the legitimacy of identifying and achieving common interests. The status of “expert state” is based on both political and social factors. Characteristic of this type of state is the combination of open and effective achievement of common goals in line with business.

– "Referee state", which creates the framework in which the economy operates and exercises control over the relations between social actors. The "referee state" is based on economic structures and social networks.

– "Bargaining state", which is a political body aimed at preserving power structures and ensuring the survival of its controlling groups. In such situations, there are state subsidies to support and finance political activities.

State ownership has three organizational models depending on the phase of its historical development (Rajavuori, 2016):

– The state as an entrepreneur acts as a supplier of goods and services that cannot be generated by the private sector. For example, in a poorly developed financial system, the state assumes the function of owner for economic development and social policy[1].

– The state as a majority investor is the second phase. In this phase, the privatization of state-owned enterprises from the first phase is carried out.

– The state as a minority investor is the last phase. The state retains a minority share in sectors of strategic importance to the national economy. Holding structures and national development banks are used.

All these features create serious difficulties in using traditional theories of corporate governance, designed for private corporations, to study state-owned enterprises. In the following statement will highlight the main problems arising from attempts at such adaptation.

Application of the principal-agent theory to state-owned enterprises

Agency theory is deductive in its methodology, so it can be successfully applied when sufficient empirical material has been accumulated and theoretically summarized. The application of agency theory to state-owned enterprises is problematic due to conflicting interests in carrying out the owner and control functions by the state (Wicaksono, 2009).

The agency theory can be applied in state-owned enterprises when there is a clear definition of participants in corporate governance[2]:

– Principal. For state-owned enterprises, ownership rights are “poorly defined” (Ramamurti, 2000). There are limited ownership rights in state-owned enterprises (Sokol, 2010).

In theory, society is the ultimate principal of state-owned enterprises, and the state is the second principal, while in practice only the state performs the functions of principal[3]. Difficulties in determining the ultimate principal of state-owned enterprises prevent the development of appropriate mechanisms to align the agent's interest with that of the

[1] E. Reinert justifies the participation of the state in the first stages of industrial development with the need to put the nation in the "right business", to supply infrastructures, to create demand for modern technological products and to act as an "entrepreneur of last resort" (Reinert, 2000).

[2] The application of the principal-agent theory has a negative attitude towards state-owned enterprises due to the presentation of corporate governance as a top-down policy model (Waterman, Rouse & Wright, 2004).

[3] The agency problems of large state-owned enterprises and large private corporations with dispersed ownership are similar due to the many and overlapping layers of hierarchy (Chang, 2007).

principal[1]. The existence of multiple goals and their difficult definition at the level of society and the state make it difficult to account for and assess the degree of their implementation[2]. On the other hand, the presence of many interests leads to many principals[3]. The existing opinions in the literature that society is an investor and the state is an entrepreneur in the corporate governance of state-owned enterprises can be summarized[4]. Another problem is related to the encapsulation sometimes from the external environment in which state-owned enterprises operate, which acts as a disincentive to the development and implementation of new technologies and a reduction in investment for innovation (Brons & Tomasi, 2016).

– The existence of an agent (manager) has been accepted as a guarantee of success since the origin of state ownership – Herbert Morrison (1933) stated that managers of public corporations must be the "high custodians of the public interest" and governments must stay at "arm's length" from public corporations.

The agent in state-owned enterprises is neutralized from the external environment and very often cannot be replaced in case of negative results[5]. The lack of a market of control over the managers of state-owned enterprises further determines the agent's behavior towards free riding and moral hazard[6]. Such a situation without real control over management is the basis of another theory – "agents without principals" (Toninelli, 2000). To reduce agency conflict in state-owned enterprises, it is necessary to introduce a periodic reporting procedure (van Slyke, 2007).

[1] Remuneration in state-owned enterprises is "semi-elastic" in terms of profitability and is similar in formation to that of regulated industries. Incentives in Chinese state-owned enterprises can only be compared to those in Bulgaria (Mengistae & Xu, 2004).

[2] State-owned enterprises perform both economic and social functions. This dual nature leads to the need to disclose information through both public and private reporting styles (Royoa, Yetano & García-Lacalle, 2019).

[3] The multitude of principals leads to a situation in which the agent has an information advantage and is able to choose a specific principal as an ally. In addition, the agent has incentives to respond to different principals in different ways and means (Waterman & Meier, 1998).

[4] The use of accounting information (annual financial reports) for external users who do not have access to inside information derives from agency theory (Allini, Manes Rossi & Hussainey, 2016).

[5] The external environment is a mandatory element in agent theory: "The principal's gross (random) wealth is a linear function of the agent's total effort and the exogenous risk" (Cauley & Sander, 1992).

[6] Citizens, as the ultimate owner of state-owned enterprises, have no incentive to monitor agents and are defined as "free riders" (Thukral, 2015).

Another limitation for applying the principal-agent theory to state-owned enterprises is the difficulty of exercising control over management[1]. In most cases, control is neglected or overlaps with the ownership function. There is no “divorce of ownership and control” (Domberger & Piggott, 1994), which partly explains the poor performance of state-owned enterprises compared to the private sector.

"State-owned enterprise" does not automatically mean "state-managed enterprise", for example, there is a possibility for a private company to be managed as a state-owned enterprise, i.e. when the state appoints executive directors and managers (Toninelli, 2000). Thus, the only situation in which the application of the principal-agent theory to state-owned enterprises is justified is their listing on the stock exchange and the entry of new principal-investors[2].

Application of the stewardship theory to state-owned enterprises

The stewardship theory is built around the understanding that managers are good stewards who work for the interests of owners (Donaldson & Davis, 1991). These authors argue that executives are good owners of corporations and work hard to achieve a high level of corporate profits and shareholder returns (Donaldson and Davis, 1994).

With these statements, the stewardship theory opposes the thesis of lack of good faith of managers and denies the need to develop special mechanisms to control their decisions. Lex Donaldson and James Davis suggest: "There is a belief that companies would perform better if their boards of directors were to be made up of independent outsiders, that is non-executives” (Donaldson & Davis, 1994). Corporations would improve their efficiency if managers were given the widest possible powers, which is a process of empowering them by delegating powers.

The stewardship theory is based on mutual efforts to achieve common goals and requires cooperative behavior of all participants in corporate governance (Papenfuß et al., 2017). The guarantor for the application of this theory is the exchange of information for building trust through transparent communication and reporting between the participants about the set goals and the achieved results. The stewardship theory has the most positive results when co-decision procedures are adopted (van Slyke, 2007).

[1] Agency theory recommends a large number of independent external directors on the board and the separation of functions of CEO and chairman of the board in order to increase the independence of the board and effectively perform its supervisory role over managers (Donaldson & Davis, 1991).

[2] In the analysis of the corporate governance of state-owned enterprises, the annual reports are used as a source of information, i.e. based on accounting data, while for private companies – on financial data from the stock exchange (Bova & Yang, 2018).

In practical terms, the stewardship theory very rarely finds benchmarks. The presence of socially oriented, mission-led and morally responsible successful managers is a rare exception regardless of the applied corporate governance systems and enterprise ownership.

Application of the stakeholder theory to state-owned enterprises

Stakeholder theory is interconnected and to some extent builds on the stewardship theory. Unlike the stewardship theory, as well as the agency theory, the view of the enterprise is broader and includes external stakeholders.

Stakeholder theory reflects the understanding of the corporation as a public organization. Therefore, in a broader sense, it addresses the global problems of interaction between individual, company and society. This makes it very attractive for state-owned enterprises.

The uniqueness and difficulty of looking at state-owned enterprises is the presence of many key stakeholders (Wasowska & Postula, 2018). Their presence justifies the existence of many goals, some of which are contradictory[1]. Most often, analyzes of state-owned enterprises are made taking into account the formal relationships between stakeholders and especially when making decisions, while taking into account the objectives is neglected[2].

Adequate information on the purposes and results of the use of state ownership is necessary for the adequate application of the stakeholder theory in state-owned enterprises (Donaldson & Preston, 1995). In legitimizing stakeholders, it is of interest to integrate and satisfy diverse interests (Bryson, 2004). According to some authors, stakeholder theory requires employees to have a voice in the management of state-owned enterprises (Mengistae & Xu, 2004).

At the same time, with the stakeholder theory, the tasks and problems of corporate governance become more complex and increasing. Problems arise with the management of conflicts between stakeholders, which are much more and multi-layered than the principal-agent dichotomy. On the agenda is the issue of identifying stakeholders and their interests, developing strategies for participation or neutralization in the implementation of reforms and implementation of large-scale restructuring of state-owned enterprises, which affect

[1] Sometimes the goals of state-owned enterprises are numerous, not clearly defined or contradictory (Zamagni, 1987).

[2] Accountability must go beyond ordinary economic performance, as the long-term survival and success of a corporation requires the support of all its stakeholders (Mitchell, Agle & Wood, 1997).

many stakeholders. Thus, the stakeholder theory is quite difficult, underestimated, but also a promising apparatus for application in the analysis of corporate governance.

Conclusion

The goals of state-owned enterprises determine the applicability of a specific theory of corporate governance. Having more than one goal leads to a second principal and a wide range of stakeholders. The combination of ownership and control in the state raises legitimate questions about the level of corporate governance and the goals achieved. Setting profit as the sole goal puts the need for state property to the test.

Disclosure of information and accountability in state-owned enterprises aims not only to reduce information asymmetry, but also to determine the range of participants in corporate governance and to determine the unique purpose of state ownership. In this sense, the application of agency theory to state-owned enterprises should not be done mechanically by the private sector. The existence of several goals for state-owned enterprises, the fulfillment of more than one role by the state and the lack of a market for corporate control test the applicability of agency theory to state-owned enterprises. Therefore, it is recommended to apply the agency theory to state-owned enterprises that are engaged in commercial activities for financial purposes.

In the presence of disclosed information about the set goals and the achieved results of a state-owned enterprise, it is a basis for applying the stewardship theory. The interests of the principal and the agent coincide in the use of the company's resources. In such cases, there is no need to exercise control and managers are given more power.

Stakeholder theory focuses on the interests of the external environment. While for the private sector there are a limited number of cases for the public orientation of the company, it is widely used in state-owned enterprises. The real reflection of the stakeholder theory is the constitution of more than one principal – the state and society. It is recommended to apply the stakeholder theory in enterprises, where the stakeholders and the degree of satisfaction of their needs through state ownership can be unambiguously and convincingly identified.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 72-83

COMPETITIVENESS AND COMPETITIVE STRATEGIES IN WINE PRODUCTION

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Received: 7.10.2020 Accepted: 30.10.2020

Abstract

The topics of competitive advantages and competitive strategies of the enterprise in the wine production sector are becoming increasingly relevant today, given the fact that most enterprises operate in conditions of high competition and minimal resources. Competitive advantages and competitive strategies are one of the main processes that make the company commercial, successful and profitable. The main purpose of this study is to consider the importance of competitive advantages and competitive strategies for the winery. The main research methods used in the paper are content analysis, the method of comparison, intuitive and systematic approach, the method of analysis and synthesis.

Keywords: *competition, competitiveness, competitive factors, competitive advantage, competitive strategies, wine production, enterprise, product*
JEL Codes: *L26*

Introduction

In today's market conditions, it is very difficult to achieve stable business success if its effective development is not planned, if the information about the company's prospects and opportunities, the state of the target markets, the position of its competitors and its own competitiveness is not studied and analyzed (Filipova, 2004, p.81). Disclosure of the company's competitors is an important issue from the point of view of developing competitive strategies through which the business aims to maintain the conquered market positions, to reveal its competitive advantages and to increase its competitiveness (Kyurova, 2014, p.102). The authors and claims about competitive advantages and competitive strategies are extremely diverse. These topics are vitally relevant, because they are the basis of a progressive, successful and profitable wine production enterprise, in the conditions of constantly evolving technologies and innovations on the one hand, and constantly changing consumer requirements on the other hand. Sustainable business

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development is unthinkable without its adaptation to new market conditions. The companies operate in a highly competitive environment and it demands to synchronize the company's activities to market trends, which appear as an essential prerequisite for acquiring competitive advantages. The intensifying competition reflects on the achievements of increased innovation (Zlateva & Kalaidjieva, 2016, p.130). In the conditions of the free market and excessive competition, the survival of the wine production enterprise is unthinkable without a clear and well-developed competitive strategy, based at the same time on competitive advantages, which it has at its disposal. These are prerequisites that determine the relevance of the topics of competitive advantages and competitive strategies in the future.

In the wine sector, the study of competitive advantages and competitive strategies is important because:

- they are the basis of any progressive, successful and profitable wine production enterprise

- competitive advantages lead to the competitiveness of the wine production enterprise

- the competitive strategy is the way and one of the obligatory conditions for future success, which the wine-producing enterprise must follow in its competitive struggle with the competition in the industry

Based on the study of the literature on competitive advantages and competitive strategies, we can determine that in order to consider the competitive advantages and competitive strategies of the wine production enterprise, we must inevitably consider it first at the product level and then at the enterprise level. It is important to point out that the two levels are directly related, therefore both levels are vital for the competitive advantages and competitive strategies of the wine production enterprise.

Disscussion

At the product level, according to Ph. Kotler, for the successful development of a new product, the company must have an effective organization to manage the process of its creation and use the best analytical tools and concepts at each stage of this process (effective organization of work, marketing concepts and tools, dynamics of quality competition)(Kotler, 1996, p.388). When developing new products, it should be borne in mind that products and markets have a life cycle that requires a change in marketing strategies over time. Each new need follows a life cycle of search that goes through stages of emergence, accelerated growth, slow growth, maturity and decline. Every new technology that emerges to meet this need manifests a life cycle of demand-technology. ...

Companies need to anticipate new product qualities that the market needs. The winner is the one who first introduces new and valuable benefits for consumers. The search for these new qualities can be done on the basis of customer research, by intuition, through dialectical judgment or on the basis of a hierarchy of needs. Successful marketing is due to the creative application of the developing market potential (Kotler, 1996, p.563-464). Filipova points out that the competitiveness of a product depends on the degree to which it meets the needs of consumers and the efficiency of the processes that produce and maintain it (Filipova, 2005). In addition, Kyurova's view is that the competitiveness of the company's product should be seen as an expression of the positive relationship between the product's characteristics and the consumer's preferences, ie his satisfaction with these characteristics (Kyurova, 2018, p.101). Dimitar Donchev argues that the competitiveness of the product means the possibility for it to be realized in the presence of analogue products on the market. Production is considered competitive if it is able to provide the manufacturer with a profit at each stage of its life cycle. In this sense, the company's profit is a general measure of competitiveness, as the maximum rate of profit in the long run provides economic advantages of the company compared to competitors - manufacturers of analogue products (Donchev et al, 1998, p. 267). According to M. Ribov, The term Competitiveness of Production entered the literature as a consequence of the operation of the economic law of anarchy and competition in the capitalist mode of production. It is most often associated with the opposition of producers to each other in the constant struggle for markets for more favorable conditions of production. Therefore, the competitiveness of production is a private matter and is largely seen as a subordinate case of competition between producers, which in addition to the product and the conditions of its sale also includes the application of various methods and means to combat the rivals (Ribov, 1985, p.7). He further states that after the recession in the capitalist countries and the changes in the market that took place, the quality of production became the main driving force of competitiveness. … During this period, the quality of production is increasingly becoming a major tool in the competition, displacing in the background the widely used traditional means of competitiveness - price, payment terms, guarantees, etc. This trend determines the so-called. "Non-price competition", one of the main forms of which is "quality competition (Ribov, 1985, p.8). According to Ribov, products of competitive quality are characterized by a high technical level and perfection of production performance. This quality is assessed by comparison with similar products, recognized on the international market and having high competitiveness for the given period. As a result of this assessment, the output may be of high or low competitiveness (Ribov, 1985, p.11). M. Ribov accepts that quality indicators must meet a number of requirements (Ribov, 1985, p.13) - requirements for functionality, requirements for reliability, technological requirements, ergonomic requirements, aesthetic requirements, requirements for standardization and unification of products, requirements for patentability and patent purity, environmental requirements, requirements for economy, etc. He also points out

that the characteristics or properties of a product give it a certain advantage over the products offered by competing companies. In this connection, the term competitive advantage is used. The characteristics or properties that determine it relate not only to the product, but also to the company that offers it. Competitive advantage is established by comparing with the product of an individual competitor and in this sense it is relative. This means that it varies depending on whether the comparison is made with the leader, sub-leader or other a competitor in one market or another (Ribov, 1997, p.11). Ensuring the competitiveness of the product is a management tool. This is a set of planned and systematic activities necessary to maintain the competitiveness of the product so as to meet the identified or anticipated needs of the customer. Ensuring competitiveness requires constant assessment of the factors and conditions that affect the compliance of regulatory requirements with the intended use of the product, as well as verification and study of operations for its supply, production and provision to the customer (Ribov, 1997, p.122). Filipova and Yuleva consider competitiveness a fundamental complex indicator, a concentrated expression of economic health of each company, summarizing the efficiency of functioning of its economic, social, financial, institutional and other subsystems (Filipova & Yuleva, 2018, p.224). Manol Ribov agrees, that the competitiveness of the product is that part of the consumer value that is provided free of charge to the buyer (Ribov, 2005, p.59). It is important to know that competitiveness is highly dependent on people, on their knowledge, skills, work habits and behavior. … Companies manage to improve their technologies and products, to increase their profits mainly through people. Only human resources are those that combine the material, financial and information resources in the product. They are the ones who produce the product, who plan, organize and control the processes (Ribov, 1997, p.122). Regarding the competitive advantage of the product, D. Stoyanov writes that the characteristics or properties possessed by the product or the brand, which give them a certain superiority over the immediate, closest competitors (Stoyanov, 1995, p.5).

There are many definitions and statements about the competitiveness of the product and we cannot describe them all, so we will focus on some…, expressing the essence of the concept of "competitiveness of products / services", namely:

The competitiveness of the product expresses the comparative characteristic of consumer and value parameters of a given product in relation to the competing product.

The competitiveness of the product expresses the ability to produce quality goods and services that can be sold on the domestic and international market, and lead to an increase in the standard of living.

The competitiveness of the product expresses a set of product characteristics and services accompanying its sales and consumption, distinguishing it from analogue products in terms of satisfaction of consumer needs, level of costs for its production (acquisition)

and sale. The quality of the products and the price are the main components of its competitiveness.

The competitiveness of the product is a set of technical and economic characteristics of the specific product or a set of advantages that are inherent in the product in terms of free supply and direct competition with analogue products manufactured by other manufacturers. This is a relative category related to the specific market and time for sale and has an evaluative-subjective character.

The competitiveness of the product (the possibility of its sale on a given market) can be determined only by comparison with the goods of competitors. Each consumer buys the product that satisfies his personal needs, and the mass of consumers - that product that meets the public need more fully than the goods of competitors. As each buyer has his own criteria for assessing the degree of satisfaction of a given need, competitiveness acquires an individual nuance.

The competitiveness of a product is its ability to oppose to the market of other goods with the same purpose or to other goods with an analogous purpose.

The competitiveness of the product expresses the subjective consumer assessment of the higher level of the perceived value of the company's product compared to this level of competitors in the target market (Nenov & Minkov, 2015, p.145-146).

Based on the mentioned above, we can say that the competitiveness of the product of the wine production enterprise is formed by all those qualities that ensure its preference by consumers, against the background of satisfaction, conquering new markets, giving it a competitive advantage and increasing competitiveness of the enterprise that produces it.

Filipova points out that an expression of the competitiveness of the enterprise is its adaptability, expressing the adequacy of its responses to the impact of the environment and compliance with changes in environmental dynamics (Filipova, 2004, p.85). According to Mladen Velev, the competitiveness of the enterprise is its ability through continuous renewal and improvement to create sustainable competitive advantages, leading to high economic results in the long run (Velev, 2004, p.15). Savelyeva shares the opinion that the competitiveness of the enterprise is a multifaceted concept, characterizing its dynamic, manageable property, determined by the set of competitive advantages and weaknesses, including the formed factors of the external economic environment and expressed in the ability to withstand the competition on the internal and external markets of products, capital and labor in the considered period of time (Savelyeva, 2009, p.42). M. Ribov agrees that it is especially important to understand that the elements of the environment have a great influence on the competitiveness of the company. At the micro level, it covers suppliers, the public, competitors, intermediaries and consumers. It is characteristic that it directly affects the activity of the company. The other elements form the macroenvironment. They

affect the company directly and indirectly through the elements of the microenvironment. These include natural, geographical, economic, political, legal, technological, social and cultural factors (Ribov, 1997, p.20).

Based on the cited literature sources above, we can summarize that the competitiveness of the wine production enterprise (company) is its ability to conquer new markets, while unprecedentedly preserving the old, while increasing wealth, meeting needs and dominance of the product (service) on the market.

The factors that determine the strength of competition in industry markets are: number of companies; market size; market growth rate; production facilities; barriers to market entry and exit; size requirements for the necessary investments; economies of scale; price; level of standardization of goods; mobile technology modules; vertical integration; rapid renewal of the product range; differences between enterprises; acquisitions and mergers (Dimitrova, 2018). Operational productivity implies utilizing the capacity of all production resources of an enterprise in the best possible way. ... The adaptability of enterprises to the changing conditions of the market environment is achieved through the company's strategy. Thus, the adaptability of the enterprise is a manifestation of its competitiveness, and the company's strategy is established as the fulcrum of this competitiveness (Dimitrova, 2018).

Based on the mentioned above, we can say that the competitiveness of the wine production company leads to competitive advantages, and we can also assume that competitive advantages lead to its competitiveness. In this regard, we can assume that the factors for the formation of competitive advantages are precisely those that shape the competitiveness of the wine production enterprise.

These factors can be divided mainly into two types - external and internal factors.

External factors include:

- the level of competitiveness of the country;
- the level of competitiveness of the industry;
- the level of competitiveness of the region;
- state support for small and medium business in the country and the region;
- the legal regulation of the functioning of the economy of the country and the region;
- the openness of society and the market;
- the scientific level of the management of the economy of the country, the branch, the region, etc. and the implementation of the instruments of a competitive economy;
- the national system for standardization and certification;
- state support for human development;
- state support for science and innovation;

- the quality of the information provision of the management at all hierarchical levels;

- the level of integration within the country, as well as the framework of the world community;

- tax rates in the country and the regions;

- the availability of affordable and cheap natural resources;

- the system for training of the managerial staff;

- the climatic conditions and the geographical position of the country and the region;

- the level of competition in all areas of activity in the country.(Dimitrova, 2018, p.36-37)

Table 1. The internal factors can be represented by the following table:

Group of factors	**Factors in the group**
Structural factors	Production structure of the enterprise
	Organizational structure of the enterprise
	Degree of concentration and specialization of production
	Level of unification and standardization of the output and its constituent elements
	Reporting and regulation of production processes
	Staff
	Information and normative-methodical base of the management
	Strength of the competition at the input and output of the system
Resource factors	Access to quality and cheap raw materials and other resources
	Reporting and analysis of the use of all types of resources at all stages of the life cycle of large enterprises
	Functional and value analysis of the produced production and the elements of the production
	Optimization of resource efficiency
	Patented products
	Patented technologies
	Equipment
	Quality of production

Management factors	Managers
	Analysis of the implementation of the laws of the organization
	Functioning of the control system
	Functioning of the quality management system
	Conducting internal and external certification of products and systems
Market factors	Uniqueness of the company's products
	Uniqueness of the channels for realization of the company's products
	Uniqueness of the advertising of the company's products
	Efficiency of the system for stimulating sales and after-sales service
	Forecasting the pricing policy and the market infrastructure
Efficiency of functioning	Performance indicators
	Intensity of capital use
	Financial sustainability of the functioning of the enterprise
	Share of exports of science-intensive products

Source: Adapted from Dimitrova, 2018

The level of competitiveness at the micro level, ie of enterprises, is a consequence of the influence of various factors. Taking into account their interrelation and dependence, they can be divided into two main groups - factors for the competitiveness of the enterprise and factors for the competitiveness of the product (Dimitrova, 2018, p.41). Despite the presence of many competitive factors and their different significance for individual industries and activities, in summary there are five main factors determining the competitiveness of a production: price, quality, technology, innovation, time. ... The factors for product competitiveness are analyzed in several aspects: in terms of quality; of the marketing mix; of consumer value and price (Dimitrova, 2018, p.44-45). To summarize, it can be said that all these factors in their complex, interdependence and interaction form the competitive advantages (respectively competitive weaknesses) of the enterprise and its products and hence determine the level of its competitiveness. Their knowledge on the part of the enterprise and the disclosure of the degree of their influence is essential for the enterprise of adequate and active actions to increase its competitiveness (Dimitrova, 2018, p.49).

After a detailed analysis of the cited literature sources, we can assume that factors for the competitiveness of the wine production enterprise are all those external and internal influences on itself that have a direct or indirect impact on its competitiveness. We also assume that factors for the competitiveness of the product of the wine production enterprise are all those influences that together with the qualities and properties of the product affect the realization of the product itself and the satisfaction of consumer needs.

There is a close interrelationship and interdependence between competitive advantages and competitive strategies. The successful operation and development of the company in competitive markets requires it to have a competitive advantage over its competitors. Therefore, competitive advantages are the basis for the formation and implementation of the competitive strategy of the enterprise.(Dimitrova, 2018, p.37) In order to be competitive, modern enterprises must build their strategies on a completely new basis, based on new technologies, uniqueness of processes and products, meeting all customer requirements and high quality products.(Filipova, 2005, p.53) The development and implementation of competitive strategies should increase the level of competitiveness of the enterprise. In principle, different types of competitive strategies are considered and used in literature and practice:

- strategies for achieving competitive advantages;
- strategies for the company's behavior in the competition;
- strategies determined by the competitive status of the enterprise.

1. There are many areas of competitive strategies of the enterprise, based on achieving competitive advantages, which M. Porter combines into three types of competitive strategies: cost leadership strategy; differentiation strategy; focusing strategy. These typical competitive strategies are basic and have a universal application. Businesses need to apply only one of them to a specific strategic business unit.

1.1 Cost leadership strategy – it is based on achieving a level of costs lower than that of the main competitors, while maintaining the quality of production, not lower than the industry average. This allows either selling at prices lower than those of competitors, ... or selling at a price similar to that of competitors... .(Dimitrova, 2018, p.139)

1.2 Differentiation strategy - the company offers products with unique characteristics, with higher value and quality, with better marketing conditions compared to those of competitors. Successful differentiation allows the realization of higher profitability, at the expense of the fact that the market accepts a higher price for the presented product with non-standard properties and characteristics, for additional service, for better service, etc. In this strategy, the quality of the offered products is higher than the

average for the industry. The differentiation strategy is based on product, service, staff and image differentiation.(Dimitrova, 2018, p.141-142)

1.3 Focusing strategy - involves fixing on one market element or a specific group of consumers without striving to cover the entire market. The aim of the strategy is to meet the needs of the selected target market segment better than competitors. The focus strategy can be based either on differentiation or cost leadership, or on both, but only within the target segment. The strategy is also based on the barriers that separate the target segment from other segments of the industry market. It is such barriers, determined by the specific needs of the customers of the target segment (which the competitors making large deals on the industry market do not serve well enough), are the main reason for choosing the strategy of differentiation. The main idea of this strategy is to focus on a limited target segment and the ability to maximize the company's product to the needs of consumers in the target segment.(Dimitrova, 2018, p.144)

2. Competitive strategies based on market share. Ph. Kotler distinguishes four types of competitive strategies in this group.

2.1. The ‘market leader’ strategy - the most famous brands fall into the category of leaders. The leading company has a dominant position, which is recognized by its competitors. Often the leader is the "starting point" for competitors, which they imitate or avoid. The leader company can base its activity on several strategic alternatives: expansion of the primary demand, ... defense strategy, ... attacking strategy, ... demarketing strategy.(Dimitrova, 2018, p.145-147)

2.2. The ‘challenging’ strategy - an aggressive strategy aimed at taking the place of the market leader. The classic "challenge" strategy is to launch a price attack, ie. offering the same product, but at a significantly lower price. This strategy is all the more effective, the larger the market share of the leader is, because for them the reduction of the price means very big losses. The company that implements the challenge strategy suffers significantly less losses, especially if it is not large.(Dimitrova, 2018, p.147)

2.3. The ‘leader-following’ strategy - companies carefully maintain their market share, do not seek to attack the leader, try to keep their customers without giving up their share in emerging markets. An important feature of this strategy is that the company stays away from intense competition and concentrates its attention on the amount of profit.

2.4 The ‘specialist’ strategy - coincides with the strategy of concentration. The specialist is not interested in the market as a whole, but only in one or several segments. When choosing a niche, the problem arises for the criterion against which to specialize the company. Such a criterion could be related e.g. with technical characteristics of the product, its distinctive properties or with elements of marketing pressure.(Dimitrova, 2018, p.148-149)

Referring to the summarized cited literature sources, we can state that the competitive strategy of the wine production enterprise is the way in which the enterprise must go in the competitive struggle with the competition in the branch. This strategy must be carefully calculated, including all available information of the company at the time of its definition. It must predetermine (guarantee) the achievement of the company's goals, regardless of the constant internal and external influences of all objective and subjective factors. In addition, it must be adequate to meet all the challenges of competitors in the industry.

CONCLUSION

The attempt made in the paper to systematize and derive the vital importance of competitiveness, competitive advantages and competitive strategies for the wine production enterprise gives us grounds for formulating the following important conclusions:

First, in order to understand the mechanism for the formation of competitiveness, it is necessary to study the nature of competitive advantages.

Second, the competitiveness of the product of the wine-making enterprise is formed by all those qualities and characteristics that ensure its preference by consumers, against the background of satisfaction, conquering new markets, giving it a competitive advantage and increasing the competitiveness of the enterprise.

Third, there is a close interrelationship and interdependence between competitive advantages and competitive strategies. The successful operation and development of the company in competitive markets requires it to have a competitive advantage over its competitors. And they, in turn, are the basis for the formation and implementation of the competitive strategy of the enterprise.

Fourth, the competitive strategy of the wine production enterprise is the way the enterprise must go in the competitive struggle with the competition in the branch. It must predetermine (guarantee) the achievement of the company's goals, regardless of the constant internal and external influences of all objective and subjective factors. In addition, it must be adequate to meet all the challenges of competitors in the industry.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 84-95

TRANSPORT CRISIS MANAGEMENT AND MEDIA CONTACT

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Received: 11.11.2020 Accepted: 25.11.2020

Abstract

Transport crises can emerge from multiple and quite varied sources. Some could arise from natural phenomena, while others could result from lapses in the organization of the activity or the poor condition of the rolling stock, as well as criminal deeds, negligence or ill-intentioned human actions. The paper draws attention to the main stages of transport crisis management and provides guidelines and recommendations for said management. The paper also focuses on the key role and communicative skills of crisis managers for the effective management of crisis situations, especially getting them under control and maintaining the good image of transport enterprises.

Keywords: *identifying and controlling transport crises, media contact*
JEL Codes: *R40, R41, R42, R49*

1. Introduction

In regards to every organization, crises are periods of instability, conditions for the occurrence of serious changes. The results from that can be extreme, whether they are unfavorable or positive. In the case of permanently bad results, the focus is primarily on regulating the financial and legal mechanisms within the anti-crisis management. On the other hand, there is the changing role of consumers (Prahalad & Ramaswamy, 2009).

Crisis management is an element of the more comprehensive risk management system of companies which also includes capital investments and insurance. Although anyone could certainly recall a crisis situation, very few managers purposefully plan for a possible or potential crisis and even fewer have actually passed crisis management training. Given the fact that crisis management is a comparatively recent phenomenon, this is hardly surprising.

At present, due to the dynamic development of transport markets, the complex specificity of the transport activity and the numerous internal and external factors that affect the processes of carrying out transport services, managers should always keep in mind the

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multitude of potential negative situations and incidents that could occur during the organization and execution of the freight process.

On a global scale, there is a noticeable growth in the number of all sorts of threats and hazards that pose a risk to individuals and society as a whole; they can occur in the form of direct violence, terror, natural disasters, financial collapses, etc. A large number of disasters that cause considerable environmental damage results from the production activity of various enterprises (Andonov et al, 2009).

When a transport firm is affected by a major crisis, this could lead to a tremendous social and ecological catastrophe. A particularly indicative example in that regard is the Hitrino incident. On December 10, 2016, at 5:30 am, a freight train carrying propane-butane and propylene from Burgas to Ruse went off the rails upon entering the Hitrino train station, rupturing two cars and causing a fire in the process. The fire and the shock wave from the combustion destroyed the surrounding buildings (about 50 in number), causing them to collapse on some of the inhabitants, while others received varying degrees of burns. The village's inhabitants were forced to evacuate while 150 firefighters dealt with the flames. The injured were taken to hospitals in Shumen and Varna; most of them had sustained 90% burns on their bodies. In the case of Hitrino we are talking about propane-butane which is almost two times heavier than air, falls low to the ground and creates a highly explosive mixture when combined with atmospheric air. In an interview for the BNT's "More from the Day" news show, Mr. Andrei Ivanov, the former head of "Civil Defense", stated that what happened was a voluminous explosion where the chance of survival is zero. It was a very serious accident which became an economic, social and ecological catastrophe.

In the face of such incidents, transport managers should react in a timely and adequate manner, determine the source of the crisis and contain it, while simultaneously communicating duly and effectively with the emergency teams, society and especially the media covering the event. It is their responsibility to successfully bring the crisis to an end, minimize the amount of human casualties, material damage and especially the negative social and ecological effects, and maintain the enterprise's good image and name.

Any transport enterprise can be hit by a crisis, whether managers realize it or not. Every crisis represents a sudden or gradual change at the basis of which is an urgent problem whose solution requires immediate intervention. Any situation during production activities in the field of transport holds potential for the occurrence of crises and incidents which can cause sudden and serious unfavorable consequences for a company's personnel and reputation, as well as the environment.

Identifying Potential Crises

Generally, the factors that can provoke a crisis situation are multiple and extremely varied in nature. Since a crisis does not occur suddenly, the internal and external problems of organizations usually accumulate (Yarnikh, 2007).

The sources of potential transport crises can be quite varied. A crisis can occur as a result of the influence of multiple internal and external factors – social factors, political factors, drops in the quality of transport services; the poor financial state of transport enterprises and the unsatisfactory condition of the transport infrastructure; morally and physically obsolete rolling stock; lack of necessary safety and security in the freight process; prerequisites for the occurrence of accidents; little to no control over activities pertaining to the organization of the freight process; ill-intentioned human actions; disloyal employees; environmental pollution caused by harmful emissions; natural disasters and cataclysms, etc (fig.1).

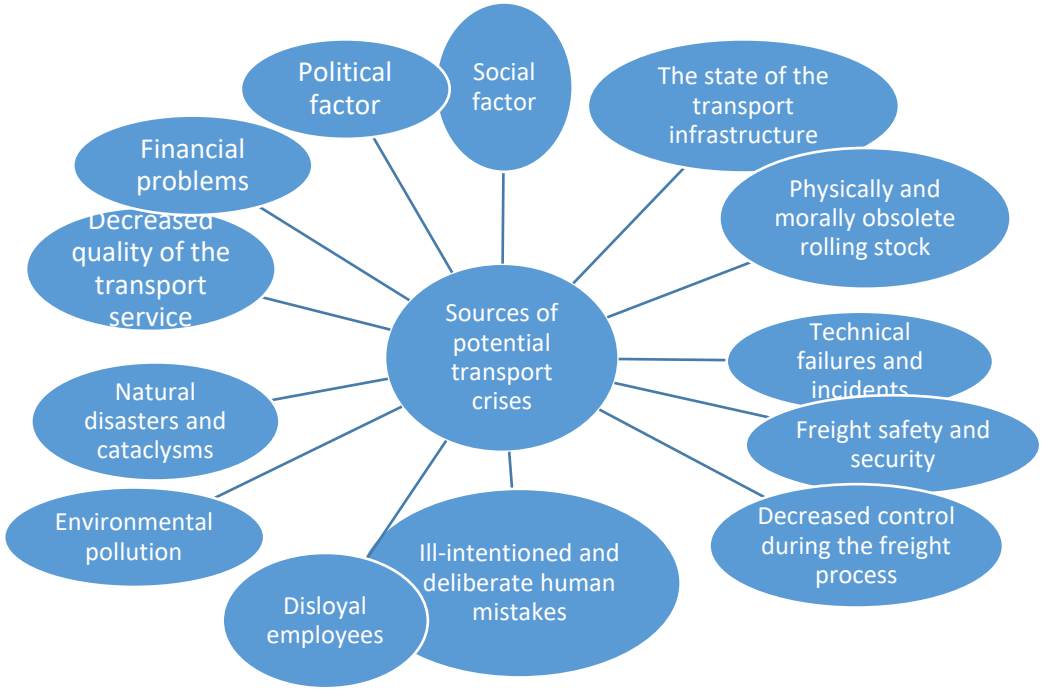


Figure 1. Sources of potential transport crises

Many crises originate from problems that seem minor at first glance. However, said problems can be neutralized before they become too dangerous or costly if the first warning

signs are taken into account. Potential probabilities for the occurrence of crises should be evaluated either through collecting information from a wider range of people or assessing various causes and situations that could lead to a crisis situation. For this purpose, information needs to be collected from the individual branches and subdivisions of transport enterprises, given their spatial distance.

When talking about a crisis forming within an organization, the options for finding a way out of it are usually limited. The first potential way is for managers to take advantage of the crisis and introduce new policies and structural changes, thus seeking and achieving progress in the organization's development. However, the so-called "trust" tax and dividend are particularly dangerous here (Covey & Whitman, 2010).

In most cases the early symptoms of a looming crisis could go unnoticed for a number of reasons due to underestimation of the problem, hubris or the impossibility for all individual branches and sub-divisions to be covered by the firm's activity.Some carriers ensure their ability to detect the symptoms of a looming crisis by giving power specifically to employees and a leader who are ready to handle the troubling signals or by forming the core of the crisis team in advance.Employees who work in the lower branches of an enterprise are the ones who are best suited to recognize the indicators of pending crises or risky situations.

Nowadays, the risk of its emergence is formidable, and dealing with this situation requires excellent preparation, experience, contacts, joint team activity and ability to adapt to changes and its management (Kotler & Caslione, 2009).

Some accidents that occur during the freight process could potentially be more dangerous and costly than others; therefore, the method for evaluating the probability for their occurrence and the consequences from them should be used in order to determine which ones can be effectively neutralized through management decisions and actions or through various types of insurance. From a management standpoint, some of the risks deserve more attention than other, more minor ones. To that end, crisis audits are implemented.

Crisis Audit

Crisis audits are necessary due to the fact that the sources of potential crises are large in number and are susceptible to the influence of multiple and various internal and external factors. The first step in a crisis audit involves the ability to outline the possible reasons for the occurrence of an eventual crisis. The next step involves systemic monitoring which is used to determine the elements which could cause trouble in the future:

Possible prerequisites for the occurrence of a crisis

Systematic monitoring of all accompanying activities that could lead to the occurrence of negative situations and incidents during the freight process

Crisis audits should focus on the problems pertaining to the scope of the crisis and the probability for its occurrence. A list of all risky branches should be made and all possible directions from which a crisis could arise should be assessed carefully. Team work is crucial in that regard because different people have very different ideas about crises. Surprising information can be obtained when communicating with many people – "a team for a given project", "the employees in the operational units", "corporate personnel" or "customers and suppliers" – but in order for the information to be reliable, people need to feel free, i.e. they need to be able to talk openly about the present and about looming problems. It is crucial that managers take into account warnings from employees and workers.

Generally speaking, all managers are selective in regards to the various critical situations which an enterprise could fall into and which should be the focus of attention. This is the correct approach because some risks concern their successful development more than others and also because some crises are more costly while others are more likely to occur. If they are not sensible in their approach to potential threats, managers could focus their attention to the emergence of more minor risks, thus ignoring risks that could have a fatal outcome. This is priority of calculation – a mathematical function called expected value. Expected values result from predictions about the probability for the actual occurrence of these events. Crisis audits should help detect several risks to the company or the respective branch and rate them according to importance. For this purpose, the following guidelines can be used:

- determining the probability for the occurrence of a given crisis as a percentage;
- evaluating the negative effects of the crisis;
- multiplying the monetary terms of the crisis by the probability for its occurrence.

Transport managers should make a list where eventual crises are ranked according to their expected value. Such a ranking list could provide them with clear insight into the risks which a transport enterprise can be faced with and how costly they will be.

Preventing the Occurrence of Eventual Crises

The next step in transport crisis management involves determining the probable crises that can be avoided. Crisis prevention can be just as simple and inherent to the activity as preemptive internal financial control and as complicated as the creation of new transport services.

Managers should create a systematic crisis prevention program on the basis of crisis audits. In order to do that, the list of potential hazards from the occurrence of a crisis should be examined and for each point the appropriate people should be summoned to discuss the following question:

WHAT CAN BE DONE TO AVOID OR NEUTRALIZE THE SOURCES OF FUTURE PROBLEMS?

The discussion process should aim to adopt the appropriate measures to protect transport enterprises from negative situations that could subsequently turn into serious and very costly problems for transport firms. After that, attention should be paid to the signs that could be preceding the occurrence of an eventual crisis.

The first step in preventing the occurrence of an eventual crisis involves planning the crisis itself, creating an organization and finding solutions before it occurs. Pre-crisis planning ensures the time that is necessary to go over all potential possibilities, consider the options, discuss the merits of the various approaches and even test people's readiness to take action. Each of these activities could very easily be resolved under normal circumstances rather than under pressure at the height of the crisis.

For this purpose, enterprises preemptively develop an effective plan for eventual crises by following these steps:

- forming a team – an indisputable fact and one of management's biggest achievements is the conclusion that the team principle can be exceptionally effective when dealing with complicated and unusual tasks. A well-prepared team contributes to the planning process with the experience and resourcefulness of many people. Team leaders should pick people with enough experience and qualifications pertaining to every single aspect of a potential crisis. By itself, this is a guarantee that nothing essential will be overlooked;
- taking the scope of the problem into account – once it has been formed, the team should determine the scope of the problem. This means specifying all possible difficulties

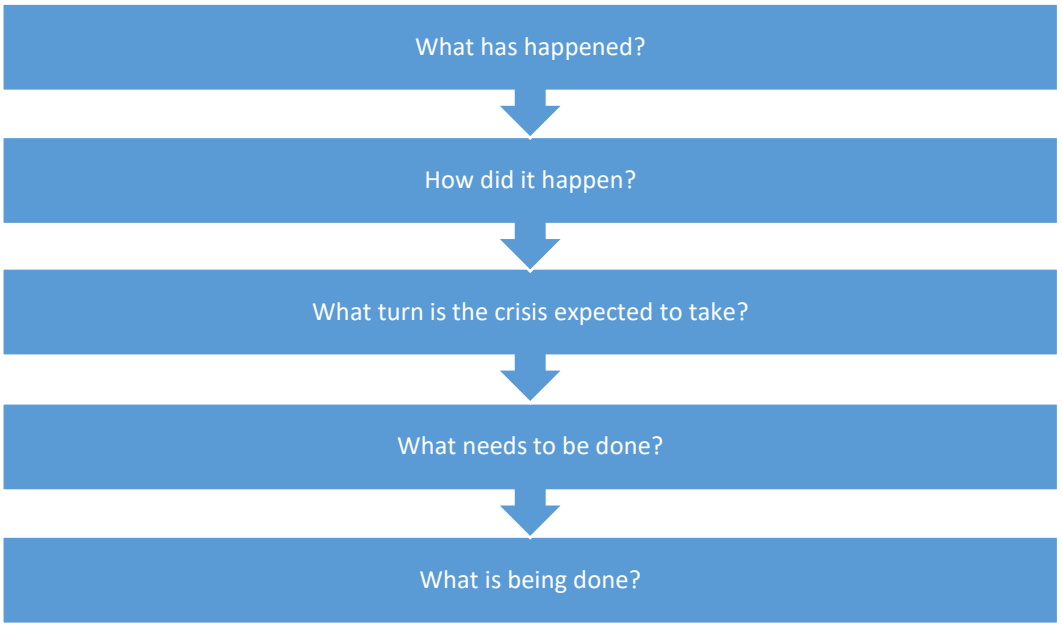
in case a crisis occurs. Additionally, one team member should be selected to rank all ideas suggested by the other members according to their importance;

- developing a plan for action – once the ideas have been grasped and brought down to the completion of a certain number of objectives, every single one of these objectives should subsequently be completed. The goal is to simultaneously develop and prepare a plan for a series of actions which will help neutralize a potential crisis or at the very least delay the possibility of its occurrence. This should be carried out by the team and coordinated with the other employees and managers.
- communication inside and outside of the enterprise is an essential part of planning a probable crisis. It should also include a plan for carrying out communications which would guarantee a successful approach towards people who are directly interested. A circle of people inside and outside the organization who need to be informed of the crisis should be determined and a list should be made of people and phone numbers that can be contacted in an emergency situation. Good internal communication keeps people in the company in good spirits and it acts as a strong preventive measure against any serious crisis. Similarly, good internal communication drowns out rumors and speculations and shows society that managers are aware of the problem and are working hard to resolve the crisis.

Crisis Containment

Any crisis that is left unchecked leads to a fatal outcome. Generally, a transport crisis, i.e. a major railway or airplane crash can lead to a multitude of negative economic, social and ecological consequences. Getting transport crises under control has a lot in common with the work of emergency medical teams – namely, stabilizing the situation by creating conditions for taking other, more decisive actions. When such a crisis occurs, the first thing that needs to be done is identify the problem and decide what needs to be done to stabilize the situation and prevent the crisis from expanding. The purpose of these actions is to provide the crisis team with enough time to implement the crisis plan. The crisis team needs to act quickly and decisively; the public's safety should be their top priority.

Comprehensive and thorough information needs to be collected and provided about the situation that has occurred and its development from the beginning of a crisis all the way to the official announcement of its end, and a wide circle of people needs to be notified. Society needs to be kept informed.



As a rule, all of these questions should be answered by managers and the individuals they have authorized. At any given moment from the beginning of a crisis all the way to its conclusion, they need to have the respective information at their disposal and be able to answer all the questions regarding its development.

Crisis containment requires a leader and mobilization of the entire crisis team, immediate and timely action and implementation of crisis plans.Crisis management teams need to be well-trained, comprised of reliable people who can think quickly and clearly and are able to work under pressure in difficult situations where, in most cases, there is insufficient information regarding details connected to the situation that has arisen.Because time is the factor that could deepen the problem further and make it difficult to resolve, crisis management teams need to be able to act swiftly. A crisis that goes on for too long could ruin a company's image in the public consciousness.

In addition to every plan of action during a crisis, crisis management teams also need to have a complete plan for announcing information. Obviously, in order for such a plan to be effective, it needs to include a preliminary reserve of answers for any questions that could arise. This is the only way to maintain the information vacuum and leave little room for rumors and speculations. Crisis management is inextricably linked to media contacts – together, they determine the degree of the exit from the situation that has arisen, as well as the mark it will leave on the enterprise's reputation and image. Unsuccessful media contacts could tarnish the transport company's reputation and make it subject to public attacks.

INFERENCES AND RECOMMENDATIONS

Most transport crises begin with minor problems which could grow if not paid attention to; if an enterprise's management fails to notice and neutralize them, they could turn into a real crisis. It should always be taken into consideration that things that seem insignificant at first glance could lead to the emergence of major crises in the transport business; therefore, managers should watch out for crisis precursors and deal with them quickly and decisively, thus avoiding bigger problems in the future. Sometimes, management decisions in transport whose consequences have not been specified well lead to serious consequences, even to social and ecological disasters. Ideally, crisis management starts before the crisis itself really is at hand. In a calm real situation, the first thing management needs to do is conduct a comprehensive review of organization risks, identifying the ones which could lead to serious problems.

Although it is unthinkable to list off all possible crises, taking some fundamental risk categories into account could help to identify the type of crisis that a transport organization will have to prepare for and avoid if possible. Since many risks are substantiated by people from the company itself, they need to learn from experience or during the activity process by keeping an eye out for negative phenomena or indications regarding the specificity of the transport activity. For instance, according to statistics, airplane flights are safer than all other modes of transportation, yet one plane crash represents a total collapse. Therefore, when major air companies analyze their vulnerability, they focus on the probability of a crash, as well as the ways they can prevent it and avoid the consequences from it; additionally, all air companies are prepared and take preventive measures in case a plane is hijacked.

Managers carry the main ideas, but the people who are capable of recognizing emerging crises and situations are the ones from a firm's lower levels. The employees from those levels meet on a regular basis to prepare plans and budgets, to assess the competitive environment and the firm's positions, and to point out possibilities for work improvement. Discovering risks should be their objective when thinking about potential risks; they think predominantly about crises they have experienced and ones which they have heard about on the news or from other people. Therefore, it is recommended that transport firms implement a system approach, which involves engaging all operational units, and it is the best way to determine eventual sources of potential crises. Although thinking beyond the boundaries of personal experience is quite difficult, more often than not it serves as the basis for real threats to originate from. The system approach to determining the risk of a crisis involves having discussions in all branches of the firm and on all levels. It is recommended that the identification of potential risks become part of the management

process itself when implementing the system approach for identifying potential crises; over time, this will help the participants develop the ability to detect risks which could grow into a real crisis. In practice, all employees from all levels and subdivisions of a transport enterprise need to be engaged in the identification of potential crises. At the same time, managers need to monitor the situation carefully inside and outside of the enterprise, as well as the attitudes of customers and suppliers, and listen to the advice of economic analysts. They need to initiate and simulate all possible ways of creating chaos and instability inside the firm, thus assessing the situation and taking preventive measures against potential hazards.

Situation games are a form of practical preparation for managers, experts and certain officials. As a rule, they precede teachings and are suitable for research, experiments or testing concepts, methods and new organization or management structures. They are a mandatory element of the evaluation of adopted plans and a convenient form for playing out the developed options for use of powers. They have great potential for solving fundamental discrepancies in the preparation of various categories of personnel engaged in management activities. They are used to recreate the dynamics of specific crisis situations, and the participants are practically performing their duties. The focus is on analyzing the information, assessing the mission and making decisions on the basis of evaluated risks. Deliberate contrasting of various points of view and approaches is sought over the course of their conduction because it is the only way to generate innovational decisions. The results are a subject of discussion over the course of the game and the analysis (Yonov & Dereliev, 2010).

When a transport crisis occurs, time becomes the greatest enemy. With each passing day the negative effects grow and the enterprise's image deteriorates.

In order for a crisis to be successfully contained, it is essential that the following four main rules be observed:

- aacting quickly and decisively – delays only create conditions and prerequisites for making the situation worse;

- putting people first – everything else like buildings, belongings, credit ratings and reputation can be restored; people's lives cannot;

- securing people from high management levels at the site of the crisis as quickly as possible – this will show society that a great deal of effort is going into containing the crisis;

- informing as many people as possible in order to suppress unnecessary rumors and speculations.

Once the crisis approaches its final stages, quick actions would have to be taken in order to resolve it completely and officially announce its end. The facts involving the origin of the crisis will be revealed in the process of its containment; for this purpose, all the

available information will need to be collected and processed. Crisis management teams should have a comprehensive vision on what has happened, as well as a clear idea of the reasons behind the negative situation, the origin of the crisis, its development and all the consequences from it. A complete and accurate spread of information among the media would provide intelligence to the main interested parties and suppress rumors and speculations. The process of resolving a crisis requires constant documentation and classification of the collected information. This will subsequently help make an authentic assessment of the crisis management team's actions and lessons will be learned from the accumulated experience. The documentation of the crisis will eventually prove to be valuable for eventual legal disputes in the post-crisis period.

For every organization, a crisis is a test of the endurance of its joints, its internal communications and, most importantly – its personnel (Yarnikh, 2007).

Crisis managers should head crisis teams from the beginning of a crisis all the way to its end. They need to have a good reputation in the eyes of society so they can be supported during a crisis, not attacked, cooperate with the media and demonstrate high level of professionalism in their presence. Media represent one of the connections enterprises have with society and people who have an interest in their activity. Therefore, during a crisis, reports should be presented clearly and accurately in order to be properly understood by society. Ignoring the media could lead to presentation of false and inaccurate information about events, damaging the transport enterprise's reputation in the process.

During economically turbulent times, every organization's management needs to guarantee its ability to endure and overcome unexpected blows, as well as taking advantage of unexpected opportunities. This means that the foundations require good management during turbulent conditions (Kotler & Caslione, 2009).

CONCLUSION

In most cases, managers' underestimation of problems, negligence and arrogant attitude, as well as other lapses in management are sides of human behavior which are unaffected by time and prevent people from recognizing a crisis in its infancy. In order to recognize a crisis which either has not occurred or is still in its infancy, crisis managers need a preemptively created organization mechanism which identifies signs of the occurrence of an eventual crisis and inform the people who have been empowered for this purpose. Quite often transport managers are reluctant to face unpleasant situations. Some of them believe in bad news, while others do not and prefer not to deal with it. Of course, not every problem is a precursor to a looming crisis, but managers would be wasting a lot of energy if they approach problems with complete indifference. They need to be able to

identify a crisis when it is right in front of their eyes and listen to their instincts which hint that something is not right. When they discover troubling facts, they need to start dealing with them immediately and study them carefully instead of ignoring them and underestimating their importance. Otherwise, if said troubling facts turn out to be true, that could lead to multiple financial losses, physical injuries and at the same time ruin the company's image.

Managers who deal with crisis situations successfully are decisive. They can react quickly, but their biggest skill is their ability to guarantee the decision-making process (Ribarska &Vasilev, 2009).

Crisis managers play a key role throughout all stages of a crisis all the way until the announcement of its end. Once the crisis has been resolved, its end should be announced, signaling that the situation has been restored to its normal state. During such negative situations people seek leaders who are sensible, confident, have good communication skills and utilize a publicly engaged approach which will help them overcome the situation and lead them out of the crisis. Therefore, it is crucial that managers maintain contact with the media at all times throughout the crisis containment process, providing them with the necessary information.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 96-104

IMPORTANCE OF BUSINESS INTELLIGENT INFORMATION SYSTEMS IN INCREASING THE COMPETITIVENESS OF BULGARIAN SMALL AND MEDIUM-SIZED ENTERPRISES

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Received: 28.08.2020 Accepted: 30.09.2020

Abstract

The successful management of modern companies increasingly depends on the implemented and functioning information and communication infrastructure through which to collect, process and analyse huge amounts of information effectively. At the same time, today's companies face persistent challenges in controlling the flow of business data and adopting decisions for its management and analysis in a highly competitive business environment. However, as a result of the growing mobility of enterprises and the automated activities performed on the Internet or the intranet/extranet, unfortunately the large generated information flows are in most cases not processed efficiently, so that their analysis can lead to a clear assessment of the state and priorities of an organization's development, as well as to data interpolation and extrapolation.

The purpose of this document is to analyze the significance of contemporary business intelligent systems in supporting decision-making processes and increasing the competitiveness and sustainable development of today's small and medium-sized enterprises in Bulgaria.

Keywords: *information and communication technologies (ICT), business intelligence systems (BIS), small and medium-sized enterprises (SMEs)*
JEL Codes: *C80, C88, L86, M10, M15*

1. Introduction to the problem

Modern companies are facing serious challenges developing their business in a dynamic and competitive environment. The managers of the companies have long been aware of the importance of the processes related to the processing of quantities of data generated daily by various systems and units of the business activity of the enterprise. They face the increasingly persistent challenge of controlling this information flow and achieving effective collection, processing and analysis of the huge amounts of business information accumulated over the years. It is exactly this key aspect that is decisive for the development

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of the structure of the organization, the effective planning of the business activity and as a result – the improvement of its competitiveness.

Well-established good practices among organizations worldwide show that the successful management of the business community increasingly depends on the adoption of effective strategies related to the improvement of the implemented and functioning information and communication infrastructure (ICT), as well as the integration of innovative, adaptive, flexible and adaptable platforms and solutions (Neykova & Miltchev, 2019). Unfortunately, in practice, as a result of the growing mobility of enterprises and the automated activities performed on the Internet or the intranet / extranet, large generated data flows are often not processed efficiently, so that their analysis can lead to a clear assessment of the situation and the priorities for the development of the organization, as well as to the planning and extrapolation of the data. In response to this in recent decades the industry of information and communication technologies (ICT) continuously generates applications and technological tools that can be used for data management, for studying models and trends in data and information, and for business intelligence (BI).

In this sense, the presented article is aimed at studying the capabilities of intelligent information systems for business analysis in order to monitor and control the large volumes of data generated in small and medium-sized enterprises in Bulgaria. These systems are evolving simultaneously with the rapid growth and complexity of data, and with the need for accurate information in a dynamic competitive business environment. As the main purpose of business intelligence systems (BIS) is to support decision-making processes, they are applicable in all small and medium-sized enterprises (SMEs) and will contribute to increasing their competitiveness. The implementation of such a system will lead to the transformation of business data into valuable information and knowledge which will help the management team of professionals to make timely, informed, well-founded management decisions and actions in the context of the rapidly changing business environment worldwide. In addition, business intelligence technologies will help to create a more complete picture of the organization's development at the particular time of analysis, as well as to integrate data generated from different sources, which will help support the process of rethinking and future planning of the vision and development of the business structure.

The idea of implementing BIS is provoked by the growing need of SMEs to rethink and revise the elements of BIS, as the selection and implementation of an appropriate model for improving the business analysis strategy can become a source of innovative growth and give a strong impetus to the development of organizations, providing them with priorities for positioning and expanding the market of manufactured goods and services, and higher competitiveness. Business intelligent information systems can be seen as a

natural improvement of an enterprise's ICT. They are perceived positively by the management units, as they open up opportunities for increasing the innovation capacity of the organization and improving its business activities.

2. The importance of Business Intelligent Systems (BIS) in increasing the competitiveness of SMEs

According to the statement of Bitterer and Sood (2011), intelligence is related to the comprehensive ability to use existing experience or knowledge to adapt to new situations or solve new problems. From this point of view, the importance of business intelligence systems (BIS) and their development is directly related to the new challenges that different SMEs face in the process of collecting, processing and storing huge amounts of data, whose tendency is to grow steadily. Large data can be defined as high-volume, high-speed and / or diverse format data that require cost-effective and innovative forms of processing and they allow better decision-making and process automation (Yordanova & Stefanova, 2019).

Numerous reports and academic studies have examined a trend showing BI solutions as an important element present in the list of priority technologies of different sized organizations. This is because company managers, as well as lower-level employees in organizations, need accurate information, analysis and visualization through various real-time business analysis software tools to properly assess the state and priorities for the development of the company and to make effective management decisions. As a result, the organizations today are forced to look for the right technological solutions and software tools to collect, transform and analyse large amounts of data in real time (Wen-Chen, 2014). In this sense, Business Intelligence systems today provide applications and technologies which help companies to acquire more extensive and thorough knowledge of their own business activities and the results they have achieved (Dell'Aquila et al., 2008). For example, Herrington et al. (2011) stated that BI helps in identifying the actual business intelligence needs of the organizations.

In other words, the main purpose of Business Intelligence technology systems is to provide various levels within organizations with timely, relevant and easy to visualize and use business information that can be effectively analysed in order to support and improve the managerial decision-making process across a wide range of business activities (Elbashir et al., 2008). In this way, Business Intelligence systems support the analytical decision-making process by performing multifunctional data analysis which presents a fuller picture of the business activities of different sized organizations, including SMEs.

In addition, the new intelligent analytical applications and visualization technologies are constantly developing and improving, allowing managers to perform real-time statistical analysis and forecasting of business processes and to meet today's business requirements (Ramakrishnan et al. 2012; Howson at al., 2019). They provide the management of the companies with an effective way of presenting a multidimensional description of data through tools for quick extraction, transformation, organization, analysis and summary of a large amount of business information. (Shariat & Hightower, 2007; Watson & Wixom, 2007; Yeoh & Koronios, 2010; UL-Ain et al., 2019). In this sense, BI platforms are becoming an increasingly strategic tool that boosts the competitive advantage of the organization (Watson & Wixom, 2007), where Business Intelligence capabilities are becoming important functions that support the organization both in the process of innovating and improving performance. This strategic tool must be coordinated and integrated with the business space and the decision-making environment used in the organization and it is exactly this proportion that is the key to the success of business intelligence (Clark at al., 2007).

The integration of BI solutions with other systems in the Bulgarian SMEs is a very necessary function whose capabilities can impact BI success in different decision-making environments. For this purpose, the process is implemented at the data, application, and user level (Isik et al., 2013). Because BI platforms are based on the processing of operational data which are collected and stored sequentially, many software companies offer BI systems that are an extension or integral part of embedded ERP systems, such as Microsoft's SQL Server, SAP's Business Objects BI Suite, and IBM's Cognos BI. The variety of BI software is great – some of the platforms have free versions (QlikSense, Microsoft Power BI), while others have high prices (Tableau, QlikView), but also offer additional free services for different types of mobile devices (laptops, tablets, smart phones). Some of the applications are more user-friendly, while others require IT professionals with coding skills and experience in business data analysis. In this regard, according to the International Data Corporation (IDC, 2019) forecasts, global revenue for big data and business analytics solutions is expected to reach $ 189.1 billion in 2019 with a double-digit annual growth in 2022.

2.1. Functions of BIS increasing the productivity and competitiveness of Bulgarian SMEs

It became clear that BIS plays an important role in the monitoring and control of business data. At the same time the implementation of an intelligent information system in order to improve the existing ICT in Bulgarian SMEs will contribute to the systematic extraction and creation of multidimensional analyses and associations of connections in

business information arrays, so that the data can be tracked, visualized and managed. For this purpose the functions of business intelligence systems are designed to ensure the generation of interactive dashboards on which the values of key indicators are constantly monitored and controlled. They provide important information about the organization in summary form, reflect the current situation of the organization and signal the presence of potential problems at a very early stage. The dashboards should be designed to be easy to understand, relevant, strategic, quantitative and up-to-date. They should include key graphical performance indicators to help visualize detailed information on the change in values, as well as to summarize them. Based on this, BIS allows fast retrieval of information and generation of personalized reports and real-time analytical processing.

The key functions of BIS, which are responsible for normalizing the data in a general framework and allowing the creation of associative links between the data, are the three steps of the ETL process - extract, transform and load. Based on the loaded data, virtual boards are generated with different types of text, graphic and tabular objects that support the visualization of information. The virtual dashboard is interactive and allows the extraction of very detailed information and the user can control both data interpolation and extrapolation. The possibilities for adding and combining different types of diagrams in one virtual board are practically unlimited and depend on the needs and the hierarchical position of the decision maker. Using the method of analytical processing of these data it is possible to analyze the organization's assets in real time during the survey period as the user is able to control the various visualization objects as well as to filter the data according to his/her interests. The priority functions of BIS, which will contribute to increasing the productivity and competitiveness of Bulgarian SMEs, can be summarized as follows:

- extraction and integration of a large amount of data and information;
- management of loaded data and information, including visualization and knowledge extraction;
- real-time analytical processing depending on the needs of the hierarchical position of the decision maker;
- associative analyses in order to interpolate and extrapolate data;
- generation of custom reports.

When choosing BIS, Bulgarian SMEs are advised to consider not only the functionality of the platform, but also its suitability for decision support and implementation of specific tasks related to the business activity. The implemented business intelligent solution can initially cover only part of the available data (for example, related to finance and personnel management), and subsequently expand its application to other functional areas. This will support the development of key areas in Bulgarian SMEs such as:

- general management - monitoring and analysing data and information for the purpose of brand management, market positioning, improvement of the business development strategy, risk management, etc;
- financial management - monitoring and analysing data and information in order to implement combinatorial strategies for sales, marketing and human resources to improve financial operations;
- marketing management - monitoring and analysing data and information in order to track marketing campaigns and the participation in them, timely evaluation and support of all activities directly related to the marketing activities of the company;
- sales management - monitoring and analysing data and information in order to provide a clear view of sales, their current status, future planning and financial return;
- human resources management - monitoring and analysing data and information for individual and group control of staff based on statistical samples, estimates and trends; workforce planning;
- production management - monitoring and analysing data and information in order to track efficiency and profitability.

Management of the process related to customer service - monitoring and analysing data and information in order to track trends related to the consumer use of a product or service, as well as its demand.

2.2. Challenges in the process of BIS implementation in Bulgarian SMEs

The analysis undoubtedly shows that the implementation of BIS in Bulgarian SMEs will contribute to the transformation of business data into valuable information and knowledge, which will lead to timely, informed, reasonable management decisions. In this regard, BIS are applicable in all Bulgarian small and medium-sized enterprises, but unfortunately a large number of SMEs face many problems and challenges that can affect the process of implementing BIS solutions in organizations and make it difficult for them to compete in the market. An example of this is the difficult choice between the great variety of new platforms and the high dynamics of their generation on the world market, which requires high professional competence and in-depth knowledge of the ICT specifics of the particular enterprise, as well as the willingness of the staff to cooperate in carrying out innovation activities. In addition, the process of BIS implementation is directly related to the existing and operating ICT system in the enterprise. Also SMEs may also face the issue of financial insufficiency for the implementation of BIS and their maintenance. At the same time, with the introduction of BIS, modern companies increasingly tend to look for qualified specialists who have the skills and knowledge to work with software platforms

and technologies for in-depth multi-dimensional analysis, but they are difficult to find on the market.

However, despite the problems and challenges discussed above, the author agrees with Jones and Van (2010), who emphasized that the benefits of BI for the business far outweigh the costs, stating that BI can be the differentiating factor in the market during periods of poor economy, can facilitate marketing communication plans, and aid in pre-selling an idea to the target customers. In this sense, the statement that "strategic leaders are known for thinking ahead, preparing for succession and implementing strategy" (Stamevska & Stamevski, 2020) suggests that Bulgarian SME managers need to rethink and adopt a comprehensive strategy for the application of intelligent technologies for business analysis. Such a strategy can be considered to be the key to improving the ICT of the enterprise. It can become a source of innovative growth and give a strong impetus to the development of organizations, giving them priorities for positioning and expanding the market of manufactured goods and services, as well as for achieving higher competitiveness.

3. Conclusion and Recommendations

Business intelligence analytics are a key aspect in developing the competitiveness of Bulgarian small and medium-sized enterprises and achieving sustainable development in the process of monitoring and controlling the processes involved in big data processing. The observations in the conducted survey allow the conclusion to be made that the introduction of a BI platform in Bulgarian SMEs will contribute to supporting associative data research and detailed visualization of dynamic processes in different sized organizations in order to rethink their vision and present its positions among business structures at the international level. Such an approach will lead to a direct interaction between the established information system that is currently operating and servicing the functional units of the organization in order to increase the efficiency of data and information processing, generating emergency analysis and reports across all units for timely decision-making, which, as a result, will lead to an increase in the quality of the products and services provided, a reduction in costs and an increase in the efficiency of the entire organization. In this sense, the managers of Bulgarian SMEs must rethink and adopt a comprehensive strategy for the implementation of BIS, which will affect the achievement of specific business benefits, the faster and more efficient functioning of the organization and its proper positioning on the market. Such an approach will contribute to increasing the sustainability and competitiveness of Bulgarian small and medium-sized enterprises on the economic market.

4. Future Studies

The performed analysis is a logical basis for future in-depth research on possible problems and challenges that affect the process of implementing BIS solutions in Bulgarian SMEs and may make their competitiveness on the market difficult.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 105-110

THE ROLE OF STRATEGIC MARKETING MANAGEMENT FOR COMPANY DEVELOPMENT

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Received: 22.08.2020, Accepted: 30.09.2020

Abstract

The effective development of each company is inextricably linked to the perception of the principles of strategic marketing management. Combining the characteristics of strategic management with strategic marketing, the process aims to take advantage of the business opportunities and stable market position for achieving the company's goals. The key role of the process also consists in the necessity of making effective decisions and take adequate actions as a result of corporate strategies' formulation and implementation.

Keywords: *strategic management marketing, strategic management, strategic marketing, strategic decisions*
JEL Codes: *M10, M30, M31*

Introduction

One of the key processes, ensuring the company's prosperity is strategic marketing management. However, in order to better understand its characteristics, it is necessary to clarify the nature of the two processes that make it up - strategic management and marketing management. To better understand its characteristics, however, the essence of the two constituent processes must be clarified first - strategic management and marketing management.

Specifics of strategic management and marketing management

Strategic management is an integral part of the daily life of senior executives - "a logical set of tools for analysis and selection, which is able to increase the likelihood of the company to choose the right strategy for its development, which in turn will allow to generate certain competitive advantages" (Todorov, 2018, p. 15). In this regard, it can be said that companies use this process as a basis for taking the direction of developing

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decisions and actions that they will take in search of strategic competitiveness and return on assets. (Hristova, 2016, p.322). It is clear that a major component of strategic management are strategic corporate decisions concerning the effective handle of the company with the impact of its environment. (Gunnigle & Moore, 1994). They, in turn, lay the foundations of strategies' formulation aimed the achievement of the business goals. The idea is to outline the main activities for strategic growth and stability through the analysis of the factor influence of the external business environment, determination of the company's position on the market and management of the internal company processes. At the same time, in order to establish itself permanently on the market, the company must use a set of effective management techniques and tools related to marketing activities. This determines the essence of the marketing management process, including the main functions - marketing planning, organization, implementation and control of marketing activities.

Soundaian (2019) defines it as "a way of identifying customer needs and buying or manufacturing and selling goods to satisfy their needs" (p.2). Significant role is played by high professionalism, work activity, social responsibility, skills for anticipating market relations, creation of effective relationships with customers, a rational system for controlling and regular assessment of customer satisfaction (Sinyaeva, 2011, p. 3). In this regard, Kotler (1996) considers that marketing management is a process of planning and implementing the concept, pricing, promotion and distribution of goods, services and ideas to create an exchange with target groups that satisfies the customer and the goals of the organization (p. 16).

Marketing management can be defined not only as a process, but also as a system for analyzing the opportunities and threats of the marketing environment; identifying the strengths and weaknesses in the company's marketing activities; market research, customers and competitors research; determining the company orientation; developing marketing strategies and finding ways to achieve the set goals. Its importance is determined by the opportunities provided to build a clear vision for the company development in long term; the implementation of forecasts for development; making managerial marketing decisions; creating a marketing plan; formation of the marketing mix; research, analysis, market evaluation, etc. (Madgerova, p.140).

Need for a new look at the strategic development of the company's marketing activities

Modern market and economic relations and technological revolution require a change in the concept of corporate marketing management. Today, the existence and success of an enterprise is associated with innovation (Kalaidjieva, 2014, p.110). Increasing attention is paid not only to the implementation and use of innovations, but also to social

responsibility, understanding and full satisfaction of new consumer tastes and requirements, creating value for the customer, building key competitive advantages, etc. This is what determines the growing role of strategic marketing management in the organization.

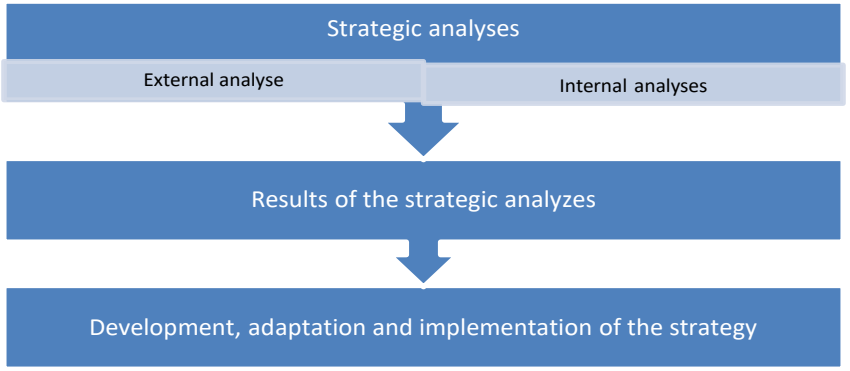
Figure №. 1 Transition from selling to strategic marketing

Source: Adapted by Soundaian, S. (2019). Strategic Marketing Management. MJP Publisher, p.4.

The main goal of strategic marketing management is through a systematic and continuous analysis of the external environment to adapt the company to its constant changes by creating the necessary conditions for development. The main goal of strategic marketing management is through a systematic and continuous analysis of the external environment, the company to adapt to its constant changes by creating the necessary conditions for development. At the same time, by researching and evaluating the internal company environment, the company can take stock of its potential, resources, market position, competencies, competitive advantages, opportunities and navigate on its current position in the business. The obtained data are used as a basis for making strategic decisions about the degree of compliance of the set general goals and the achieved results. They in turn are a starting point for the development of marketing strategies.

In support of this are the opinions of a number of authors, according to which, key components of the process of strategic marketing management are the strategic analysis, formulation and implementation of marketing strategy (Drummond, Ensor & Ashford, 2010, p. 14-15, Meek & Mee, 2003, p. 15).

Figure №. 2 Technology of the process of strategic marketing management



Source: Adapted by Aaker, D. & McLoughlin, D. (2009). Strategic Market Management: Global Perspectives. John Wiley & Sons, p. 11.

Mladenova (2006) also pays attention to the analytical and perspective phase of the strategic marketing planning including clarification of the current state of the organization and formulation of the marketing visions for the future development of the company - goals, strategies and action programs (p.32).

External strategic analysis is based on the use of indicators such as market segments, customer satisfaction, customer motivation, number and concentration of competitors, competitive goals and strategies, market scope, barriers to entry and exit, technological development in the industry, information security, etc. A set of indicators concerning profitability, market share, sales revenues, product range, strengths and weaknesses of companies, strategic problems, etc. is used for internal analysis.

These analyzes aim to clarify the opportunities, threats and strategic trends facing the company, allowing it to identify strategic alternatives and ultimately choose the optimal strategy to implement and adapt to its daily activities.

Current trends in strategic marketing management require a reorientation towards strategic thinking aimed at long-term decision making. An important issue here is one of the main components of the process - strategic marketing.

Unlike traditional marketing, strategic marketing focuses on the product, the relationship with the market, consumer tastes, seeking a balance between market conditions and company opportunities. By researching the threats of the external marketing environment and learning about its strengths and weaknesses, the company seeks to build such competitive advantages and take a position in the market that will ensure a stable level of profitability and growth. The long-term focus of the process draws attention to the creation of conditions for bringing the company to the requirements of the changing environment by attracting the necessary

resources; balancing between company and consumer interests; coordination, management and control of marketing systems; making decisions about the relationship between the company and stakeholders, etc. Based on the determination of success factors, the goal is to develop the company's mission, effective goal setting, formation of consumer demand, development of marketing strategies, plans and programs.

The differences between strategic marketing and operational marketing need to be considered in order to better understand its essence. They originate from the two main types of marketing activity in the organization - analytical orientation and operation.

Table 1. Comparison between strategic and operational marketing

Strategic marketing	Operational marketing
Analysis of consumer needs by defining the main market	Selection of targets for existing market segments
Market segmentation	Development of a marketing plan
Analysis of business opportunities	Defining the marketing mix
Competition analysis	Determining a marketing budget
Development of strategies	Implementation and control of marketing activities

Source: Adapted by Vasileva, Z., Filimonenko, I., Карпычева, О. & Говорина, О. (2008). Strategic marketing, Siberian Federal University Press. Krasnoyarsk, p.7.

It is obvious that strategic marketing seeks ways to permanently adapt and establish the market based on making adequate strategic decisions concerning the marketing activities of the company. It is necessary to mention that as a main tool of this process the adequate development and implementation of the marketing strategy is a key factor for success in the modern business environment and dynamic market relations.

Conclusion and Recommendations

From above presented it can be concluded that the strategic management of marketing activities in the company plays a key role in its development, so it is necessary to pay attention to the following aspects:

• Long-term orientation towards global goals for company development and reaching the desired strategic positions

• In-depth study of the external macro environment to identify opportunities and threats

• Analysis and evaluation of customers, competitors and other stakeholders

• Identifying the strengths of the company and creating a sustainable competitive advantages

• Use of innovative marketing approaches

• Efficiency of processes and systems by optimizing marketing planning, organization, implementation and control

• Presentation of strategic alternatives, ways and actions for achieving the set goals.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 111-116

DEFINITION AND CHARACTERISTICS OF MARKETING STRATEGY

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Received: 26.08.2020 Accepted: 30.09.2020

Abstract

In the current dynamic market relations, every company needs a plan for the formulation, selection and implementation of company goals that includes a wide range of methods and tools for market behavior. Therefore, the development of a reliable marketing strategy is a prerequisite for achieving high efficiency of marketing activities. Marketing strategies support the realization of corporate goals by revealing the long-term directions of the company's development by adaption to the external environment and optimization of the use of company resources. The idea is to identify and establish the competitive position and company advantages by optimal satisfaction of consumer needs.

The main purpose of the report is to clarify the main characteristics of marketing strategy and its role in strategic corporate development.

Keywords: *marketing strategy, marketing planning, strategy formulation, implementation and control, types of marketing strategies*

JEL Codes: *M10, M30, M31*

Introduction

Marketing strategy is a decisive factor in determining the ways to achieve marketing goals. As a main stage of the marketing planning process, it aims to build its own marketing concept to determine the strategic market position, directions for development and maintenance of company competitiveness. The implementation of the set concept is unthinkable without the effective marketing of the company's products and services. The development of a set of managerial decisions regarding the allocation of company resources aims to achieve a long-term competitive advantage in the target market (Doyle, 1990, p. 560, cited by Assenova, 2018, p.149). This in turn implies the use of a variety of tools to support the strategic marketing decision-making process.

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Nature and importance

The literature review shows similar opinions about the nature of marketing strategy. According to Sinyaeva (2003), it is a set of planning and management decisions for the organization of marketing activities and goals to achieve the corporate mission (p.26). Marketing strategy sets out the broad principles by which a business unit expects to achieve its marketing goals in the target market. It consists of basic solutions for total marketing costs, marketing mix and distribution (Kotler, 1988). It is often considered in terms of selection and analysis of target market, creation and maintaining of marketing mix that satisfies consumers in this market (Madgerova, 2012, p.173). It is no coincidence that the marketing strategy is defined as a powerful weapon with the help of which modern companies can resist the changing conditions (Pehlivanov, 2006, p.45). However, its main meaning is that it describes how the company can use its resources or strengths to take advantage of the established market opportunities and achieve individual and lasting competitive advantages (Zayler, 1993).

Based on the above, it can be summarized that the marketing strategy is a set of solutions, principles, methods and ways to achieve company goals in a certain period of time.

Although marketing strategies vary from company to company, they contain several key components. According to Aaker (2001), these are the product market of the company, investments, strategic assets, competencies, functional company areas (p.16). Since they are directly related to the achievement of corporate goals, in our opinion they include: defining marketing goals; environmental analysis; planning, organization and management of the marketing mix; providing a competitive advantage; defining the target market and satisfying consumer needs; allocation and use of resources to achieve marketing goals; determining marketing costs.

Formulation of marketing strategy

Developing a marketing strategy is not a unified process. It depends on the experience, the specifics of the activity, the company's capabilities, the views of the management team, etc. However, marketing strategies must be clearly and precisely formulated; feasible within the set deadlines and with the necessary resources; subordinate and inconsistent with the general company goals; measurable and consistent with market conditions.

After the literature review, it was found that there is no consensus on the technology of forming a marketing strategy. A number of authors consider the analysis of the environment as a first stage of the process in order to determine the current situation and forecast market trends (Drummond & Ensor, 2001, Antushevich & Karchevskaya, 2016, p. 81-82). According to Assenova (2018), in order to formulate the strategy, it is necessary to define clearly the goal, to specify the market / market segment, company's competitive advantages, main competitors, ways of strategy implementation and the desired results (p.150). Ferrell and Hartline (2007) include the definition of primary (and secondary) target market, product, pricing, distribution and integrated marketing communication strategy in the process (p.41). In this regard, Blagoev (1998) mentions that each company must develop at least as many marketing strategies as the elements of the marketing mix that will be used to achieve the goals (p.247).

In our opinion, the technology of the process includes three main stages - preliminary, actual and final.

Figure №. 1 Algorithm of marketing strategy development

Source: Developed by the author

Company success largely depends on the exact formulation of corporate goals and the ensuing sub-goals. The marketer is obliged to identify them, organize into a system and determine their relative importance (Mladenova, 2006, p.33). Realizing this need, the "Goal

tree" is used as a main method of goal setting. Hierarchical subordination of goals and levels of management support the strategic decision-making process by giving clarity on responsibilities, obligations, time period and degree of implementation.

Since the first stage is based on the analytical direction of marketing, the role of situational analysis is very important. It assesses the current market situation where the company is located and provides guidelines for development. It begins the marketing management process. The results and conclusions are used to develop goals, strategies and marketing plans (Madgerova et al., 2012, p.151). The preferred method is SWOT analysis. Based on overcoming the company's weaknesses and bringing out its strengths, ways for success and reduction of negative impact of the external environment are sought. The analysis of the company's development opportunities reveals underutilized marketing margins to achieve long-term stable growth and competitiveness.

In search of prospects for access, building positions in the desired market and creating a competitive advantage over the other competitors, the company must carefully choose its strategic business zone (SBZ). The importance of defining marketing goals is also important as they lay the foundation of marketing strategies formulation.

In essence, the second stage is the development of marketing strategy, programs and marketing plan. The aim is to orient the company's behavior towards full satisfaction of the constantly changing consumer needs, tastes and preferences. In the process of market segmentation and choice of target market the correct choice of segmentation variables, approaches and methods for segmentation comes to the fore. At the same time, the process of positioning is invariably associated with creation of lasting positive image of the product or service in the consumer’s mind that favors the occupation of the desired strategic position in the market.

In order to reveal the state of the marketing activities and their relevant environment, the marketing goal, strategy, tactics and budgets and the expected results in relation to the precisely defined target markets, a marketing plan is developed (Mladenova, 2006, p.40). At the same time, it is necessary to program the marketing actions by developing a schedule of marketing activities for the implementation of the plan.

The third stage is an assessment, selection of strategy and control of its implementation in the business. The idea is to establish the degree of compliance or deviation from the set goals and to overcome the problems with marketing. For this purpose, however, it is necessary to control the process and take corrective action if necessary. In this regard, Pride and Ferrell (2008) argue that proper implementation requires efficient organization structures and effective evaluation and control (p.53).

Marketing strategies can be formulated by senior managers, marketing department, marketing specialists inside and outside the company, with the joint participation of managers from different departments or several company divisions. This depends mainly on the

competencies, knowledge, management style, company culture and policy, financial security, etc.

Types of marketing strategies

Depending on the specifics of marketing decisions that are made in the company, marketing strategies are divided into four main types: corporate, business (business portfolio strategies), functional and operational strategies.

Corporate strategies are associated with the conquest and consolidation of the market position, company growth, profitability, the distribution of resources between the individual SBE, the strategic potential of the company and the acquisition of competitive advantage. Main types are the marketing strategies for growth and competitive strategies as important place occupied the matrices of I. Ansof, BCG, M. Porter, Ph. Kotler et al.

Determining the company portfolio of individual SBU concerns business strategies. In this case, it is interesting to consider the strategies of BCG and General Electric. Functional marketing strategies concern segmentation, target market selection and positioning. Operational strategies are the most detailed and include marketing strategies for the elements of the marketing mix - product, price, distribution and communication.

CONCLUSIONS

As a key element of strategic corporate planning, marketing strategies support the process of strategic management marketing. Their proper formulation and implementation contributes to the adoption of adequate and timely strategic decisions concerning the company's prosperity and development. Thus, this vital strategic activity is a key moment for achieving the goals of the enterprise through high efficiency of marketing activities.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 117-123

SOME ASPECTS OF STORYTELLING AS A PART OF CONTENT MARKETING

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Received: 22.09.2020, Accepted: 30.10.2020

Abstract

Storytelling is gaining in popularity in digital marketing. This study aims to present the benefits of this marketing tool and why it is increasingly preferred by companies in brand positioning. Increasing consumer engagement makes consumers feel more connected to the brand and predisposes to long-term and successful relationships between the company and the target audience. Adding value through the user experience and creating trust in the company are the basis of the company's efforts and creates conditions for full communication with the audience, which is essential for adapting the company to customer expectations.

Keywords: *digital marketing, content marketing, storytelling, online marketing strategy*
JEL Codes: *M30, M31, M37*

Introduction

In today's technological environment, it is a challenge for any business to be able to reach its target customers. Adapt to the current conditions, it is necessary for companies to rethink and redesign their strategies, according to the new habits of consumers and their ability to make increasingly informed decisions. Companies to help deliver value to the consumer and enhance the user experience, include storytelling as a critical tool in their digital strategies. Storytelling helps the company in its interaction with customers and strengthens the position of the brand by forming appropriate attitudes in the audience. Persuading consumers by presenting them with visual content, is increasingly present in the marketing strategies of companies. Inviting consumers to travel with the brand, offering them related content to their interests, creates an opportunity not only to communicate with their customers but also for them to be part of that communication (Romo, Garcia-Medina, Romero, 2017).

Storytelling is widespread in the digital world. That is information which is based on real stories or fictions that aim to transfer the consumer's consciousness from a state of need to a

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state of satisfaction. Stories drive action. People connect by interests, form communities, and stories play an essential part in inclusion and communication. In these cases, products and brands play a central role in their stories. (Woodside, Sood, Miller, 2008, p.97)

Stories are essential to creating customer engagement. For example, bloggers share their experiences, beliefs and attitudes, often using photos and videos. Marketers try to create social roles for brands in the webspace by attracting attention and creating interest in consumers, thus outlining the consumer journey. Brand ambassadors often play a key role in creating consumer attitudes. They tell and retell a story related to their experience with the product. The story of the brand becomes a story of pleasure by conveying feelings, moods and shared experiences. In this way, an internal mechanism is triggered in people who need help to find what makes them happy. That is where marketing places, which guides consumers in their choices and decisions.

Analysis and discussion

The term "content marketing" is proving to be one of the most sought about online business marketing. Content marketing seeks the emotional root of consumer need by offering a solution. Online content is everything. It must be valuable, related to the need and convincing for the brand itself. It attracts and retains customers, and all this happens through storytelling. The story of the brand makes it a virtual brand of happiness, and the story encourages the conscious desire of consumers for happiness. (Bagozzi, Nataraajan, 2000, p.10) The brand story should generate positive behaviour in the customer and create a perspective for the brand. No matter where the marketing efforts are directed - search engine optimization, potential customer generation or the use of social media, none of these tools will have an effect without convincing storytelling. (Pulizzi, 2012, p. 117)

Fig. 1 The place of storytelling in building a digital strategy

Source: Pulizzi, J. (2012), The Rise of Storytelling as the New Marketing, Springer Science+Business Media, p. 117, DOI 10.1007/s12109-012-9264-5

For a brand's story to work, it must go beyond the brand's products and services. Something needs to be created that they, the consumers, want to be a part of, and at the

same time, the company needs to show that it really understands who "they" are and what they need. (Shiao, 2019) Content is a big challenge. Many companies focus on the selection of staff to be engaged in publishing content, and a large part of their marketing budget is spent on creating and distributing content. The biggest challenge is creating engaging content. Storytelling involves both a critical mind and a creative mind. The critical mind analyzes, compares and selects, while the creative mind visualizes, anticipates and generates ideas. (Nossel, 2018, p.31)

People looking for clarity. Observing that many consumers are willing to share through blogs or other forms about their experiences, including buying and using brands, is an incentive to explore what they are willing to tell. Research shows that all companies use some form of content marketing and this is because it engages customers and brings results for the company. But what distinguishes good content from compelling content? The answer is that this is good storytelling, respectively this is content marketing. Offering free content relative to the interests of the consumer without being pressured to make a purchase is one of the solutions to successfully influence consumer attitudes. It should be very specific, aimed at a specific audience with a focus on usefulness and providing entertainment in order to truly engage readers and customers. (Pulizzi, 2012, p.120)

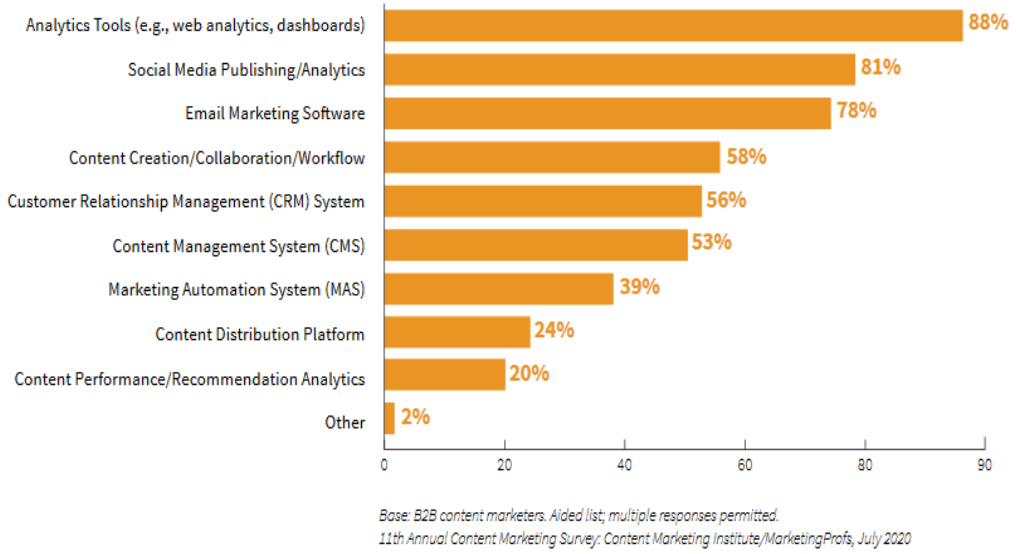
The search for new channels for content realization is an opportunity to reach another part of the target audience. Content publishers shape stories and personalize content to a specific audience. The biggest challenge of content marketing is to engage the minds of people who are away from home, away from the office. The content must be created and distributed by the various departments of the company related to the sales process. Big companies hire people with experience in storytelling. The role of copywriters includes journalists and editors, who, along with the analytical tools offered by the various platforms, according to the specific characteristics of buyer personas, create good practices that are an example of involving the audience in the "company" persuasion scenario.

Building a community by attracting external experts is a common practice. The big brands thus dominate the niche with content marketing, attracting external specialists as well. Nearly half of the brands outsource part of the process. The best content is achieved through the collaboration of external and internal specialists. We are witnessing very strong brands that win the hearts of their customers only by telling stories.

Creating a story is a complex process. Marketers largely resort to decision-making using the analytical tools that technologies provide. According to research conducted by the Content Marketing Institute and published in the company's 11th annual report, the best technologies that B2B organizations use to support content marketing are analysis tools (88%), publishing/analysis in social media (81%) and email marketing software (78%). These percentages are similar to the results of the same measurement from the previous

year, but with one notable exception: the use of content creation/collaboration/workflow technologies has increased from 48% to 58%. (Content Marketing Institute, MarketingProfs, N24, 2020) The ratio in the technologies used can be seen in fig. 2. A large number of respondents report that the size of their marketing team has remained the same, and a third of them announce that it has increased. It turns out that the pandemic has forced companies to focus more resources on advertising in the digital environment, a significant part of which is for content creation.

Fig. 2 Technologies B2B Organizations Use toAssist With Content Marketing



Source: Content Marketing Institute, MarketingProfs, N24 (2020) B2B Content Marketing. Benchmarks, Budgets, and Trends, 11th Annual Report

As mentioned, the best tools are search engine analytics tools, social media posts, email marketing software, customer relationship systems, and more. The ability to use paid ads reduces the value of the content offered. According to marketers, the best ways to distribute organic content are social media platforms (89%) and the company's corporate website or blog (87%). Survey participants say the struggle for consumer attention is intensifying as many companies promote low-value paid content.

According to the same report, the respondents achieved the set goals using content marketing for 2019 (Fig. 3).

Fig. 3 Goals B2B Marketers Have Achieved by Using Content MarketingSuccessfully in Last 12 Months

	All Respondents	As Reported One Year Ago*	As Reported Two Years Ago**
Create brand awareness	87%	86%	81%
Build credibility/trust	81%	75%	68%
Educate audience(s)	79%	79%	73%
Generate demand/leads	75%	70%	68%
Build loyalty with existing clients/customers	68%	63%	54%
Nurture subscribers/audiences/leads	60%	68%	58%
Drive attendance to one or more in-person or virtual events	56%	52%	49%
Generate sales/revenue	51%	53%	45%
Build a subscribed audience	47%	45%	43%
Support the launch of a new product	45%	45%	40%

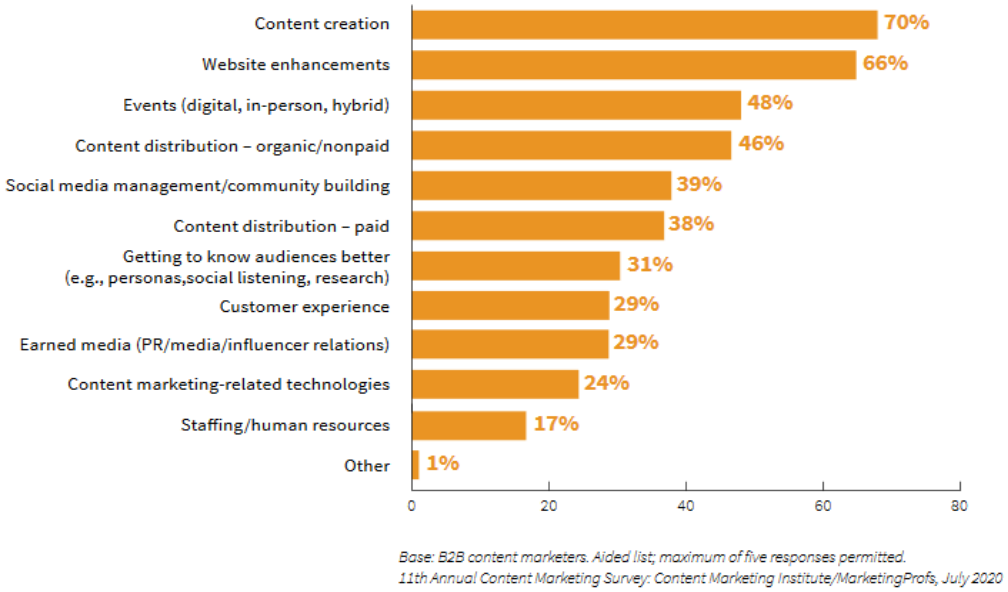
Source: Content Marketing Institute, MarketingProfs, N24 (2020) B2B Content Marketing. Benchmarks, Budgets, and Trends, 11th Annual Report

From the data we can judge that the marketing of the content and in particular the developer supports the brand recognition (87%) and builds trust (81%).

It is impressive that a serious increase is observed in building trust, reaching potential customers, building loyalty in real customers.

According to the CMI (Content Marketing Institute), forecasts for 2021 are that the pandemic will have a moderate long-term impact on the marketing success of companies. Asked what the company will invest in - 70% answered in creating content, 66% in improving the site. (Content Marketing Institute, MarketingProfs, N24, 2020) (Fig. 4)

Fig. 4 Top 5 Areas of Content Marketing B2B MarketersThink Their Organization Will Invest in During 2021



Source: Content Marketing Institute, MarketingProfs, N24 (2020) B2B Content Marketing. Benchmarks, Budgets, and Trends, 11th Annual Report

The study of CMI eloquently shows the guidelines of marketers in search of a profitable approach to the audience. Given the uncertainty resulting from the pandemic, experts advise that now is the time to revise the content marketing plan. To keep all strategies that work and to change those that do not benefit companies. Observations are that more and more companies are focusing on creating content by looking for creative stories, rather than just creating blogs, infographics and media assets. The review of the whole arsenal of used tools requires precision and constant calculation of which of them works and reaches the set goals. We need to look at creating content on a scale that includes understanding the technology, managing it, and how to structure the content to be as effective as possible and to benefit both parties in the sales process.

Conclusion

The titans in storytelling present us with a real, emotional and full of energy plot. Exactly how the stories told should affect consumers. The focus is on all emotions that awaken compassion, humanity, kindness. Playing with people's emotions makes them sympathizers, draws them into the story and engages their attention. The unique content is

created, it is the result of a lot of knowledge, effort and skills. Stories told in a casual and natural way bring the greatest success to companies. Content is the formula for building favourable relationships with audiences and creating loyal users. Content in the age of digital technology is everything!

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 124-145

INVESTIGATING THE MODERATING ROLE OF TEAMWORK CULTURE ON STRATEGIC INTELLIGENCE AND OPERATIONAL PERFORMANCE

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Received: 08.07.2020 Accepted: 30.08.2020

Abstract

This study aimed at identifying the effect of strategic intelligence on operational performance as well as detecting the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies. The study population was limited only to employees in the production lines, and the questionnaire was used as a data collection tool, taking a simple random sample composed of 266 individuals with analyzing 200 questionnaires. The results of this study emphasized that there is a statistically significant effect of the dimensions of strategic intelligence (foresight, future vision, and partnership) on operational performance, while there is no statistically significant effect of the dimensions of strategic intelligence (systemic thinking, motivation) on operational performance in Jordanian public shareholding industrial companies. The results of this study also showed that there is a statistically significant effect on the teamwork culture as a moderating variable in the relationship between strategic intelligence and operational performance.

Keywords: *Strategic Intelligence, Operational Processes, Teamwork Culture*.
JEL Codes: *M11*

1. Introduction

Organizations' strength has been measured by the level at which their leaders possess strategic intelligence, which is key to the organizations to succeed in the current century. According to researchers, strategic intelligence is a broad and diverse concept, without a firm and certain definition (Maccoby and Scudder, 2011; Coccia, 2010; Tessaleno, 2010). Its usage is important because we live in a rapidly changing world that needs to make events more smartly and creatively. Some decisions need to be made and problems require a solution continuously (Stamevska & Stamevski, 2020). Many new and intrinsic topics have

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emerged in the area of contemporary managerial thought that will address the challenges faced by organizations in the changing business environment. One of these modern topics is strategic intelligence (Zeidan, 2020), which is an urgent necessity for organizations operating in an environment characterized by large and rapid changes, and the intensity of untraditional competition in their markets. Organizations' existence depends on their ability to stand out from competitors by increasing their operational performance and enhancing capabilities and intrinsic efficiency; i.e. the ability to quickly follow to achieve precedence over competitors. Strategic intelligence has become a means of reaching high levels of performance to achieve customer satisfaction.

As the business environment of the organizations expands, the teamwork is used to carry out their operational activities (O'Neill and Salas, 2018). Many contemporary organizations continue to build and develop their strategic intelligence by seeking of help from specialists and experts in this field to provide the basic analyses that are the base for senior management decisions on key issues such as integration with other organizations or the development of new products (Xu, 2007). Both Tham and Kim (2002) have shown that strategic intelligence represents the organization's knowledge of its business environment in terms of activities, resources, customers, markets, products, services, and prices. This is to enable the organization to conceptualize its current processes, anticipate, and manage changes in preparation for the future, design appropriate strategies for creating value for customers, and improve profitability in existing and new markets. It is an administrative tool used to make decisions on important and cross-cutting issues (McDowell, 2008).

Strategic intelligence has gained the attention of many researchers and academics because of its role in keeping organizations against competitors under the threats they face, resulting from changes in the internal and external environment of the organization (Xu, 2007; Brouard, 2002; McDowell, 2008). Strategic intelligence is a preparation for the future and is used to find and analyze problems that the organization will face, and make appropriate, strategic decisions to address them, by generating reliable organizational knowledge for strategic decision-making, thereby creating a competitive advantage (Pellissier & Kruger, 2011). Gordon, 2007; Liebowitz, 2006; McDowell, 2008 emphasized the importance of strategic intelligence in strategic decision-making because it gives the organization a complete image of the business environment. On the other hand, the study of strategic intelligence was not limited to large organizations. Hawes (2010) has shown the role of strategic intelligence in the success of small and medium-sized businesses to meet competitive pressures.

Strategic intelligence thus provides a better opportunity for different kinds of organizations to analyze and infer what is going on in the internal and external environment

in which the organization operates. This helps to anticipate and manage future changes, develop appropriate strategies for adapting their operational processes to these changes, and fully be prepared for any sudden change that may occur (Brouard, 2002; McDawell, 2009; Xu, 2007).

Therefore, many researchers and academics have pointed out the importance of strategic intelligence in the organization's decision-making (Gordon, 2007; Liebowitz, 2006; McDowell, 2008; Xu, 2007). Strategic intelligence provides managers with a broader understanding of the operational environment, helping them to make decisions. Strategic intelligence is also used to estimate production costs (Witcher, 2019) and enables managers, and teamwork leaders to use appropriate communication methods to communicate their guidance to employees (Connors, 2019). Thus, managers must practise strategic intelligence at all levels of administration. It is an approach that addresses all issues that affect the organization in the medium and long term. Through strategic intelligence, opportunities to exploit them and threats to be addressed can be identified by creating the internal organization environment for dealing with current and future markets and sectors (Levine et al., 2017; Service, 2006).

Strategic intelligence plays a major role in each area of management, and organization decisions on plans in the future. It provides support for operational objectives by forecasting future challenges (Lehane, 2011). Tham & Kim (2002) defined strategic intelligence that what the organization needs to know about its business environment (activities, resources, customers, markets, products, prices) to conceptualize its current processes, anticipate, and manage changes in preparation for the future, design appropriate strategies for creating value for customers, and improve profitability in existing and new markets. Macadam & Bailie (2002) have emphasized the importance of aligning the business strategy with business performance, as most companies fail to turn strategy toward effective actions to increase the performance of their operational processes. Therefore, there must be consistency between the organization's strategy and its operational performance (Bourne, et al., 2000; Dale, 2007; Dixon et al., 1990; Franklin, 1996; MacAdam & Bailie, 2002).

In the light of the above, the study identified a strategic intelligence concept that is appropriate to the current study's aim and that is based on the intelligence that the organization's leaders enjoy and its elements are (foresight, systemic thinking, future vision, motivation (staff- motivation), and partnership) and it enables them to take advantage of the information available to make the right decisions, formulate plans, policies, and strategies to increase their operational performance in preparation for future changes.

Therefore, the study was to highlight the effect of strategic intelligence on operational performance in Jordanian public shareholding industrial companies as well as detecting the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance of these companies.

2. The Study Problem:

Strategic intelligence is one of the types of intelligence that successful leaders should have, to achieve the goals of the organization, and to discover ways to adapt to the surrounding environment, especially in the context of the accelerated trend toward using teamwork in implementing the processes of contemporary companies as a means of increasing the operational performance in Jordanian public shareholding industrial companies. They have a vital role in the Jordanian economy which requires a high level of operational performance. This has prompted the initiation of studying the strategic intelligence level in Jordanian public shareholding industrial companies and the development of a supportive culture for teamwork and the effect of this on improving the operational performance of these companies. Therefore, the study problem can be formulated through the following main question:

What is the role of strategic intelligence in operational performance in the context of the accelerated trend toward using teamwork in Jordanian public shareholding industrial companies?

The following sub-questions arise from the main question:

1) What is the effect of strategic intelligence on the operational performance of these companies?

2) Does teamwork culture play a role in improving the relationship between strategic intelligence and the operational performance of these companies?

3. The Importance of the Study:

This study is important as it is one of the few studies that dealt with strategic intelligence and operational performance in the Jordanian business environment. The importance of the current study is reflected in the following themes:

1) Examines the role of strategic intelligence in responding to changes in the current and future environment, planning, and forecasting results in a manner that reflects positively on operational performance.

2) The scarcity of studies that dealt with the subject matter of strategic intelligence in the Arab world in general and in Jordan in particular. Despite the importance of the subject matter, this study is unique in the Jordanian business environment in particular as it addresses a topic that researchers have not given sufficient attention to in the field of

managerial work as well as the importance resulting from the possibility of carrying out other similar studies in different business environments.

3) The importance of the study is reflected in the importance of its application in a developing country (Jordan) and the public sector of joint-stock companies listed in the Amman Financial Market, which is a vital source of the Jordanian national economy.

4) Alerting companies and their leaders to raise and pay attention to strategic intelligence levels, which contributes to the operational performance of these companies through the findings and recommendations of the study.

4. The Study Objectives:

The current study aims mainly to demonstrate the role of strategic intelligence in the operational performance of the public industrial companies listed in the Amman Financial Market by achieving the following objectives:

1) Identify the role of strategic intelligence in the operational performance of these companies.

2) Identify the modified role of the teamwork culture in the relationship between strategic intelligence and the operational performance of these companies.

3) Make recommendations to decision-makers that will contribute to the development of strategic intelligence and highlight the importance of the moderating role of the teamwork culture in increasing the level of the operational performance of these companies.

5. The Study Hypotheses:

The hypotheses of this study have been constructed after reviewing the literature and previous studies related to the subject matter of the study so that the study can achieve the required objectives and answer the questions that were developed while formulating the study problem as follows:

The First Main Hypothesis (Ho1): There is no statistically significant effect of the dimensions of strategic intelligence (foresight, systemic thinking, future vision, motivation, and partnership) on operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market. The following sub-hypotheses arise from the main hypothesis:

- Ho1-1: There is no statistically significant effect of foresight on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

- Ho1-2: There is no statistically significant effect of systemic thinking on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-3: There is no statistically significant effect of future vision on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-4: There is no statistically significant effect of motivation on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-5: There is no statistically significant effect of partnership on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

The Second Main Hypothesis (Ho2): There is no statistically significant effect of strategic intelligence on operational performance by the existence of the teamwork culture as a moderating variable in Jordanian public shareholding industrial companies.

6. Theoretical Framework:

6.1 Strategic Intelligence Dimensions

Many researchers have been interested in identifying the dimensions or elements of strategic intelligence, as Tregoe & Zimmerman (1980) referred to in their book entitled "Top Management Strategy". A set of (yes/no) questions was adopted and was addressed to the employees of top management of the company. Based on the answer, the availability of strategic intelligence is determined. Passas et al. (2006) have adopted a model composed of four dimensions: foresight, economic intelligence, knowledge management, and benchmarking. Georghiou (2006) has used a model to measure strategic intelligence, consisting of the following dimensions: evaluation, foresight, and technology assessment. Service (2006) has indicated that strategic intelligence is the ability to develop appropriate strategies to address future environmental impacts and that its elements are: talent, understanding, knowledge, flexibility, and broad imagination. Kuhlmann (2005) referred to four principles of effective strategic intelligence: the principle of participation, the principle of objectivity, the principle of mediation and organization, and finally, the principle of decision support.

Maccoby, who is considered one of the most prominent researchers in the field of strategic intelligence, has shown that strategic intelligence includes dimensions: foresight, systemic thinking, future vision, partnership, and staff- motivation (Maccoby, 2001; Maccoby, 2004; Maccoby & Scudder, 2011). This study was based on identifying the

dimensions of strategic intelligence on the dimensions in the Maccoby model with some change. Many studies used the strategic intelligence dimensions in the Maccoby model and these studies are (Pellissier & Kruger, 2011; Liang, 2004; Cui et al., 2011).

It should be noted that the interconnectedness and inseparability of the elements of strategic intelligence help leaders identify opportunities and threats facing the organization, prepare for the future, motivate the organization's staff, and thus achieve great positive results for the organization (Maccoby & Scudder, 2011). This study will be based on using strategic intelligence dimensions mentioned in the (Maccoby & Scudder, 2011) model and these dimensions will be addressed as follows:

Firstly, Foresight: It means that organizations should be efficient in anticipating the future. Organizations need to develop their capacity and ability to think in terms of future aspects, and to explore several ways in which organizations can look at the future (Wootton & Horne, 2010; Stamevska et al., 2019). Causal thinking based on current events or trends enables the organization to anticipate its future. (Willson,1992) pointed out that anticipating the future requires continuing to move toward the goal, estimating and preparing for all possibilities, clarifying the image of the desired future, and identifying the objective and the ultimate goal of the organization's activities. The leader who sets goals and objectives will be loyal to all categories of the organization's clients and thus achieve its goals, success, profit, and prosperity. In this context, Maccoby (2004) pointed out that foresight means a set of purposes that are broad, comprehensive, and thought-oriented to describe the discovery of the future and the desired situation in a harmonious and coordinated manner, very attractive and able to give an approach about the future. Leaders with foresight can then distinguish what can be avoided, and control it, and adopt the expectation in managing environmental changes in a calm and orderly manner, thereby enabling leaders to adopt appropriate scenarios that are consistent with future environmental changes.

Secondly, Systemic Thinking: Systemic thinking means synthesizing and merging elements rather than separating them into parts, then analyzing them, studying parts concerning the whole, knowing how they interact with each other, and then evaluating them in a way that serves the organization's operations. It can be said that it is the ability to synthesize and integrate a set of variables related to each other and then to analyze them clearly in a more well-defined manner (Maccoby, 2004). Systemic thinking seeks to provide the possibility of secure, judicious solutions that are both sustainable and parallel to the development of projects and business. It is also a well-integrated approach to thinking, learning and innovative analysis to address the potential consequences or unexpected consequences of adopting such solutions or methods. Ultimately, it relies on

the general principles and bases of all aspects of life, which are easily discovered once they are identified (Haines, 2007).

Thirdly, Future Vision: Future Vision means the ability to see developments before they occur and this is the strategic management core. The leader must be able to examine the situation, anticipate potential changes, take risks, and build confidence. Therefore, the vision assesses the intuition, which is not just a direct and sudden perception, but it is the result of the interaction between experiments and many experiences that the creative person lives with during the creative process. Vision is a description of a future image that the organization looks forward to, and surpasses its current situation in one or more aspects (Wheelen & Hunger, 2017). The vision as one of the dimensions of strategic intelligence is related to seeking help from foresight, and systemic thinking to design an optimal model or situation that the organization seeks to reach as it's the roadmap for employees (Maccoby, 2004).

Fourthly, Motivation: Motivation means the ability of managers to drive and motivate individuals to implement the insights and perceptions they have set, and guide them toward a specific goal to enhance the strategic objectives of the organization. Motivation reflects the ability of an intelligent leader to motivate employees (Stamevska & Stamevski, 2017) to implement the insights and perceptions they have set (Maccoby, 2004). It can be said that motivation as one of the dimensions of strategic intelligence is the extent of the leaders' ability to push individuals and empower them to believe in a general goal that brings them together based on the insights and perceptions that should be implemented. Maccoby (2010) has shown that employees' incentives represented in 4R's, which are Rewards, Responsibilities, Reasons, and Relationships.

Fifthly, Partnership: Partnership means the ability to establish strategic alliances and define their role in enhancing the organization's capabilities as one of the trends of contemporary organization, one of the mechanisms for adaptation to the competitive environment, and a framework for collaborative action among companies. Therefore, strategic leaders tend to form partnerships and alliances to achieve common goals. Joint teamwork, customer proximity, mutual trust among partners, and information exchange are key elements of a successful partnership. In this regard, Maccoby (2004) has indicated that intelligent leaders understand that they cannot achieve the vision set alone and that they will be stronger with the people or organizations that will help them succeed and achieve goals.

6.2 The Relationship between Strategic Intelligence and Operational Performance

Generally, the study of organizational performance has faced many challenges, including the concept variation and its measurement indicators, and the diversity of researchers' objectives when studying it. However, most researchers and academic scholars have agreed that performance represents the ultimate outcome that the organization seeks to achieve, and reflects its ability to use its material and human resources efficiently and effectively (Fan et al., 2017, Eccles, 1991, Daft, 2009, Miller & Leiblein, 1996; Wheelen & Hunger, 2017). In other words, performance is the result of the organization's processes by harmonizing the business environment and the resources of the organization (Johnson & Scholes, 1993).

This prompted several researchers and academics to study operational performance (Dilwarth, 1996; Noori & Radford, 1995; Hatten & Hatten, 1997, Evans, 1997, Slack et al. 2016, Krajewiski et al., 2018, Davies et al., 2003). Slack et al. (2016) has linked the organization's performance to the ability of its operations to meet operational objectives of quality, cost, reliability, flexibility, and speed as indicators of overall performance.

Since the practice of strategic intelligence makes the organization able to deal with current and future challenges with opportunities to enhance the organization's processes and success (Liebowitz, 2006; Maccoby & Scudder, 2011). Strategic intelligence provides appropriate means of support to achieve operational objectives (Lehane, 2011). Strategic intelligence also contributes to building and growing an organization and managing its operations efficiently and effectively (Reigle, 2008).

In addition, the practice of strategic intelligence promotes teamwork culture, sharing information, and enables employees to achieve the organization's goals by involving them in decision-making (Tham & Kim, 2002). Brouard (2002) has shown the role of strategic intelligence in developing the organization's capacity for collective learning, developing innovation in all of the organization's processes, and shifting employees' attention from a focus on unsystematic operational processes in business performance to a focus on more structured operational processes. Successful management of strategic intelligence seeks to make employees benefit from the use of information and knowledge about customers, products, markets, and all elements of the organization's internal and external environment, and to encourage employees to feel the change, and how this change will affect the organization's processes (Yuleva, 2019; Xu, 2007; Liang, 2004). Strategic decisions that are consistent with the change required in the internal environment in harmony with the external environment create a positive impact on the performance of the organization's operational processes. Turner & Grawfred (1994) pointed out that the organization's

outstanding performance required the organization to effectively manage its dominant processes, and the organization's ability to change its operations according to its constantly changing future needs in accordance with its strategies.

6.3 Teamwork Culture

Cabana and Kaptein (2019) confirmed that many scholars and researchers have shown teamwork culture is one of the main levels of analysis as teamwork culture refers to the cultural differences and similarities at the team level. The organization's culture is also multi-level as follows: individual, team, organizational, and national (Glick, 1985; Chao, 2000). Schein (2007) has confirmed that different cultures can be created within the organization because of differentiation, work division, and specialization that creates smaller units such as teams. These teams begin an independent process of forming the team's culture with their leaders. Cabana and Kaptein (2019); Castka et al. (2003) emphasized the importance of developing a teamwork culture for its positive links to the organizational unit operations' outputs (Liden et al., 2014). Teamwork culture is also essential for succeeding in applying total quality management (TQM) (Adebanjo and Kehoe, 2001), in which teamwork culture is a key component (Guimaraes, 1997). Teamwork culture is also linked to individual performance outcomes such as job satisfaction, organizational commitment, and labor turnover which will reflect on the operational performance of the organization (Jiang et al., 2019; Glisson and James, 2002). Team culture includes values, assumptions, and behaviors that individuals share as they work with each other daily within the same sub organizational unit (Cabana and Kaptein, 2019).

Therefore, the importance of teamwork culture is highlighted as the weak teamwork can damage the organization through the non-professional conduct of individuals, as well as generate frustration and depression in cooperative individuals (Rehder et al., 2020). Teamwork culture is also linked to innovation, occupational safety, lack of errors, and saving lives (O'Neill and Salas, 2018; Hughes et al., 2016; Hülsheger et al., 2009). Thus, to develop teamwork culture, the organization's management must provide means of professional safety, encourage teamwork through training (Rehder et al., 2020), remove communication barriers among members of teamwork (Connors, 2019), recognize achievement and rewards, and provide facilitation for teamwork to avoid poor operational performance in business (Adebanjo and Kehoe, 2001).

The practice of strategic intelligence also requires the promotion of a teamwork culture, sharing information, and empowering workers to contribute their perceptions about the future of the organization through their involvement in decision-making (Zeidan, 2020, Tham & Kim, 2002). Therefore, most organizations seek to establish teamwork culture

within their goals to achieve high performance that reflects positively on their operational performance, especially as modern industries are directed to using teamwork (O'Neill and Salas, 2018; Cross et al., 2016; Salas et al., 2015; Castka et al., 2003).

7. The Study Methodology:

In this study, the descriptive analytical approach was used. The previous literature relevant to the subject matter of the study and its variables has been used as a secondary source to develop and build the theoretical framework. The questionnaire was also used as a primary source for addressing the analytical aspects of the subject matter of the study. The study tool, a questionnaire was developed to collect data on study variables, which included some items that reflected the study objectives and questions, which participants answered. The quinary Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree) was used.

Appropriate statistical methods for data analysis have been used for such studies, especially descriptive statistics measures such as mean and standard deviations. Analytical statistics measures have also been used like multiple regression to find out the effect of each dimension of strategic intelligence on operational performance and also to find out the modified role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies.

7.1 The Study Population and Sample:

The study population is the employees in operating lines of Jordanian public shareholding industrial companies listed in the Amman Stock Exchange. A simple random sample was used. 266 questionnaires have been distributed to employees in these companies and 200 questionnaires have been recovered with a recovery rate of 75.1%. Table (1) shows the demographic characteristics of the study sample by (gender, age, work at the factory, and educational level).

Table 1: Demographic Characteristics of the Study Sample

Variable	Category	Frequency	Percentage
Gender	Male	104	%52
	Female	96	%48
Age	Less than 30	104	%52
	30-39 years old	40	%20
	40-49 years old	40	%20
	50 years and over	16	%8
	Technical work	136	%68

Work at the Factory	Managerial work	64	%32
Educational Level	Diploma or less	24	%12
	Bachelor's degree	128	%64
	Postgraduate Studies	48	%24
Total		**200**	**%100**

7.2 The Study Tool:

A questionnaire was developed as a tool for the study and data collection. The tool was presented to a group of researchers for arbitration and its items were modified to suit their observations. The questionnaire included four main parts. The first part included demographic characteristics. The second part included paragraphs and questions of the independent variable (strategic intelligence) with its dimensions (foresight, systemic thinking, future vision, motivation, and partnership) and the paragraphs of this variable were adopted based on several previous studies (Maccoby & Scudder, 2011; Pellissier & Kruger, 2011; Liang, 2004; Cui et al., 2011). The third part of the questionnaire included the modified variable (teamwork culture) questions and these paragraphs of the study were adopted from Castka et al. (2003) study. The fourth part included paragraphs and questions of the dependent variable (operational performance) with its dimensions (quality, cost, reliability, flexibility, and speed) and the paragraphs of this dimension have been adopted in the questionnaire based on studies (Macadam & Bailie, 2002; Bourne, et al., 2000).

7.4 The Study Tool Reliability:

The Alpha Cronbach method was used to measure internal consistency and reliability among questionnaire items distributed to the study sample. All values were above the threshold (0.60) and these values are statistically acceptable according to Sekaran and Bougie (2016). Table (2) shows these values.

Table 2: Results of Alpha Cronbach Scale for Internal Consistency and Reliability

Variable	Alpha Cronbach Value	Number of Items
Foresight Dimension	0.709	6
Systemic Thinking Dimension	0.900	7
Future Vision Dimension	0.861	4
Motivation Dimension	0.821	5
Partnership Dimension	0.897	5

Operational Performance Dimension	0.612	5
Teamwork Culture Dimension	0.794	5

7.5 Statistical Analysis:

Multicollinearity Test and Normal Distribution

Verification of the assumptions and conditions of statistical testing is one of the most important steps before conducting any statistical test. Pre-testing is important in avoiding misleading or biased results. Therefore, before starting the study hypotheses testing, it is important to ensure that the pre-tests confirm that the study data is appropriate for statistical analysis and does not have statistical problems. Therefore, the two researchers have performed multicollinearity test and normal distribution test, which are one of the conditions for multiple linear regression tests.

The multicollinearity test is a test that must be done before testing the hypotheses to ensure that there is no overlap between the independent variables. The variance inflation factor values must be less than 10. The results from Table (3) indicate that the obtained variance inflation factor (VIF) values range from (1.014-1.135), which are less than 10. Therefore, these variables do not have the problem of multicollinearity.

Table 3: The Variance Inflation Factor Values and Tolerance

Variable	Variance Inflation Factor (VIF)	Tolerance
Strategic Intelligence Variables		
Foresight Dimension	1.014	0.986
Systemic Thinking Dimension	1.130	0.885
Future Vision Dimension	1.135	0.881
Motivation Dimension	1.778	0.563
Partnership Dimension	2.202	0.454

To verify that the data follows the normal distribution, the Skewness Coefficient was calculated. If the coefficient of skewness value was less than (1) and (1-), this means that the data follow the normal distribution. All values were less than (1). As shown in Table (4), the data follow the normal distribution.

Table 4: The Values of Skewness Coefficient

Variable	Skewness Coefficient
Foresight Dimension	-0.245
Systemic Thinking Dimension	-0.556
Future Vision Dimension	-0.922
Motivation Dimension	-0.311
Partnership Dimension	-0.045
Operational Performance Dimension	0.201
Teamwork Culture Dimension	-0.957

Descriptive Statistical Analysis:

Table (5) shows descriptive statistics of the variables and dimensions of the study. The higher dimension in terms of mean was operational performance dimension and also teamwork culture dimension with arithmetic mean (4.04) and a standard deviation (0.590) for operational performance and (0.734) for teamwork culture and a high level of importance. However, the lower dimension in terms of mean was the foresight dimension of (3.29) with a standard deviation of (0.547) and a medium level of importance.

Table 5: The Arithmetic Mean, Standard Deviations, and Levels of Importance for the Study Variables

N	Variable	Arithmetic Mean	Standard Deviation	Level of Importance
1	Foresight Dimension	3.29	0.547	Medium
2	Systemic Thinking Dimension	3.49	0.831	Medium
3	Future Vision Dimension	3.30	0.740	Medium
4	Motivation Dimension	3.34	0.681	Medium
5	Partnership Dimension	3.13	0.817	Medium
6	Operational Performance Dimension	4.04	0.590	High
7	Teamwork Culture Dimension	4.04	0.734	High

Testing of the Study Hypotheses:

To test the study hypotheses, simple and multiple linear regression tests were used. The hierarchical multiple linear regression analysis was used to detect the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies.

First: Testing of the First Main Hypothesis

Ho1: There is no statistically significant effect of the dimensions of strategic intelligence (foresight, systemic thinking, future vision, motivation, and partnership) on operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

Table 6: Results of the Analysis of the Multiple Linear Regression Test of the Strategic Intelligence Dimensions on Operational Performance

Coefficient of Correlation (R) 0.363		**Coefficient of Determination (R^2)**	**F**	**Sig**
		0.132	**5.891**	**0.000**
Strategic Intelligence Dimensions	**Beta (B)**	**Standard Error**	**T**	**Sig**
Foresight Dimension	0.277	0.107	2.586	0.010
Systemic Thinking Dimension	-0.006	0.063	-0.094	0.925
Future Vision Dimension	0.281	0.102	2.756	0.006
Motivation Dimension	-0.121	0.131	-0.921	0.358
Partnership Dimension	0.252	0.120	2.105	0.037

The multiple linear regression results of the first main hypothesis in Table (6) indicate that the correlation value between the independent variables and the dependent variable has been (0.363) and this value indicates the existence of a relationship of medium strength. The value of the coefficient of determination has been (0.132), which means that (13.2%) of the change in the dependent variable is caused by independent variables and that the remaining value is attributable to other factors that this study doesn't address. Concerning the statistical significance of the model, the calculated value of **F** is (5.891) and this value is greater than the tabular value at the level of significance (0.000), which is less than the significance level at (0.05), so the regression model is statistically significant.

Concerning the effect of the strategic intelligence dimensions, the beta value of the foresight dimension is (0.277) and the calculated **T** value is (2.586), which is greater than

the tabular value (1.96) at the level of significance (0.000), which is less than the level of statistical significance at (0.05). Thus, there is a statistically significant effect of foresight on the operational performance in Jordanian industrial companies. The beta value of the systemic thinking dimension is (-0.006), and the calculated **T** value is (-0.094), which is less than the tabular value (1.96) and the significance level (0.925), which is greater than the statistical significance level at (0.05), which means that there is no statistically significant effect of systemic thinking on operational performance. Also, there is no statistically significant effect of motivation on the operational performance in Jordanian industrial companies as the beta value is (-0.121) and **T** value is (-0.921), which is less than the tabular value (1.96) and the statistical significance level (0.358), which is greater than the statistical significance level at (0.05). The results of the analysis of the multiple linear regression indicated that the dimensions of future vision and partnership have a statistical effect on the operational performance as the beta value for future vision is (0.281) and for partnership is (0.252). The calculated **T** values of these two dimensions are greater than (1.96) and the statistical significance level is less than (0.05). Thus, there is a statistically significant effect of the dimensions of future vision and partnership on the operational performance in Jordanian industrial companies.

Second: Testing of the Second Main Hypothesis

Ho2: There is no statistically significant effect of strategic intelligence on operational performance by the existence of the teamwork culture as a moderating variable in Jordanian public shareholding industrial companies.

Table 7: The Hierarchical Regression Testing to Test the Moderating Role of Teamwork Culture between Strategic Intelligence and Operational Performance

Independent Variables	The First Step			The Second Step		
	B	t	Sig.	B	t	Sig.
Strategic Intelligence	0.431	5.451	0.000	0.515	6.256	0.000
Teamwork Culture	0.272	3.449	0.001	0.263	3.396	0.001
Strategic Intelligence × Teamwork Culture			-	0.135	3.014	0.003
R	0.657			0.676		
R2	0.432			0.449		
Δ R2			-	0.025		

F	74.818		54.952	
Sig F		0.000		0.000

The hierarchal multiple linear regression test results in Table (7) indicate the second study hypothesis testing. The study variables entered into two models. In the first model, strategic intelligence and teamwork culture entered as independent variables and the operational performance as a dependent variable. Then, the interaction between strategic intelligence and teamwork culture entered into the dependent variable, operational performance to detect the moderating role of the teamwork culture and how the teamwork culture contributes as a moderating variable in the relationship between strategic intelligence and operational performance.

In the first model, the calculated **F** value is (74.818), which is statistically significant at (0.05). Thus, the first model is statistically significant. The correlation value has been (0.657), which indicates the existence of a relationship of medium strength among the study variables. The value of the coefficient of determination has been (0.432), which means that (43.2%) of the change in the dependent variable is caused by the two independent variables. The beta value of strategic intelligence is (0.431), and the beta value of teamwork culture is (0.515) and the calculated **T** values for the two values are greater than the tabular value (1.96), and the statistical significance level is less than the level (0.05). Therefore, strategic intelligence and teamwork culture have a statistically significant effect on the operational performance.

While the second model, which detects the statistical significance of the moderating role, the calculated **F** value is (54.952), which is statistically significant at (0.05). Therefore, the second model is statistically significant. The correlation value has been (0.676) and the value of the coefficient of determination has been (0.457), which means that (45.7%) of the variance in operational performance is caused by the interaction between the two variables, strategic intelligence, and teamwork culture. The difference between the two coefficients of determination in the two models is (0.025), which indicates that teamwork culture contributes as a moderating variable in the relationship between strategic intelligence and operational performance in Jordanian industrial companies. This is confirmed by the beta value of the interaction between strategic intelligence and teamwork culture, which is (0.135). This value is statistically significant at (0.05). Therefore, teamwork culture plays a modified role in the relationship between strategic intelligence and operational performance in Jordanian industrial companies.

8. Conclusion

The current study was accompanied by many determinants as it was conducted in one geographical environment, namely, the Jordanian business environment (Jordanian public shareholding industrial companies), one of the Middle East countries, which requires taking it into account in studying its results. Therefore, the study suggests conducting similar studies in other geographical environments to confirm and compare the results with the results of this study.

The results of this study emphasized that there is a statistically significant effect of the dimensions of strategic intelligence (foresight, future vision, and partnership) on operational performance, while there is no statistically significant effect of the dimensions of strategic intelligence (systemic thinking, and motivation) on operational performance in Jordanian public shareholding industrial companies. The results of this study also showed that there is a statistically significant effect on the teamwork culture as a modified variable in the relationship between strategic intelligence and operational performance in Jordanian industrial companies. In light of these findings, the study recommends that all the practices of the dimensions of strategic intelligence among managers and employees in Jordanian public shareholding industrial companies must be deepened through holding training courses, seminars, and workshops. This contributes to a deeper strategic vision and creates motivation for the company to think more comprehensively that will lead to the company's success in achieving its future directions. In addition, it helps develop information systems to anticipate the future clearly and to reduce the risk of decision-making when guiding those in charge of operational processes in those companies. Moreover, companies should encourage teamwork culture to improve the positive effect of strategic intelligence on operational performance. The study also highlighted the importance of changing the evaluation systems and incentives in those companies from individual to the group, so that work systems are developed that support teamwork and account for its results, thereby enhancing the teamwork spirit of the staff and increasing the performance of the company's operational processes.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 146-162

EURASIAN ECONOMIC UNION: PRECONDITIONS AND FIRST STEPS OF FIVE COUNTRIES TOWARDS INTEGRATION

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Received: 15.07.2020 Accepted: 30.08.2020

Abstract

The article analyzes the preconditions that paved the way to creation of the EAEU and the indicators characterizing the current situation and the degree of integration, which made it possible to identify the features of this regional economic integration and identify problems. As a result of the analysis, it was concluded that at the time of the union of the five countries (Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan) not all necessary preconditions for successful functioning of economic integration were present. The assumption that the EAEU is a political and economic union with a predominance of the political component was confirmed by the analysis of the indicators of integration and economic benefits of each country in the framework of this integration. Most EAEU countries have not received any benefits from participating in this integration. The analysis of changes in the trade within the EAEU countries from 2013 to 2018 allows us to conclude that the EAEU's members are more interested in trade with third countries than with their partners within this integration union. Certain recommendations aimed at the further development of this integration are given. The authors point out the importance of marketing of the territories within the geographic boundaries of the EAEU in order to create conditions for a rational division of labor and mutually profitable trade relations.

Keywords: *economic integration, integration processes, preconditions for integration, GDP, economic development, domestic trade, export, import, marketing of territories.*

JEL Codes: *F4, F15, F5, Z32*

1. Introduction

The period of active global integration processes historically matched, in time, with the collapse of the USSR which led to the dismantling of the Council for Mutual Economic Assistance (CMEA), the economic organization on international economic and political integration of all socialist countries existing from 1949 to 1991. In these difficult for Russia

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and the rest of the post-Soviet countries conditions, the CIS has emerged as rather a political union than economic one, whereas EAEU (Eurasian Economic Union) emerges as an economic integration, as its formal goal defines it.

The EAEU, occupying 15% of the world's landmass, represents the largest economic integration across the world. The population of the Union is more than 182 million and is distributed as follows: Russia - 80.4%, Kazakhstan - 9.6%, Belarus - 5.2%, Kyrgyzstan - 3.2%, Armenia - 1.6%. The EAEU is a leader in the extraction of oil and natural gas, as well as in the aggregate production of potash fertilizers and the cultivation of sunflower and sugar beets. This integration occupies the 3rd place in the world in the total amount of generated energy (5.4%) and the 4th in total coal production (4.8%). The EAEU is the 5th largest producer of steel in the world, and the 3rd largest cast iron producer.

As we can see, the economic potential of the EAEU is quite good. If the economic component is brought to the forefront, then the union of the five countries may become one of the most durable and promising integrations. To accomplish this promise, it is necessary to solve a number of very complex issues related to the relative equalization of the economic development of the countries included in this integration, as well as compliance with a number of fundamental principles of the functioning of international economic unions. The purposes of the EAEU are the creation of conditions for the stable development of the economies of each member state in the interests of living standards improvement of its population, the desire to create a single market for goods, services, capital and labor within this Union, including the creation of comprehensive modernization, cooperation, and increased competitiveness of national economies in the global economy.

The EAEU's goal statement defines its economic integration. However, there is no consensus on this issue: some argue that the EAEU is an economic union of five countries of the post-Soviet space, while others tend to see it as a political union dominated by Russian interests. When the EAEU was initiated, there were many supporters of the opinion that "for Russia, this integration is a strategic lever for maintaining geopolitical influence in the CIS".

Local experts such as Attokurova N.S. and Makeeva M.T. point out that "for the former Soviet Union republics, the integration process itself is quite painful, because the economic power and superiority of one state, the Russian Federation, is undeniable." However, they believe that "integration allows us [Kyrgyzstan] to combine efforts to strengthen joint positions in the global market" (Attokurova&Makeeva, 2016). According to the Kyrgyz scientist, Pirimbaev (2015) "The EAEU for Kyrgyzstan is a platform where it can carry out equal economic relations with all its members and demonstrate their voice in the international arena, relying on the capabilities and potential of the entire union".

Practices in other parts of the world demonstrate that "for economically more developed countries, the integration provides a stable, sustainable sources of raw materials and markets for finished products, whereas, for developing countries, such integration allows to combine efforts to strengthen joint positions in the global market". (Attokurova&Makeeva, 2016). Kazakh scientist described the Eurasian integration of the

three countries (Russia, Kazakhstan and Belarus) more as a political union than an economic one. He expressed the opinion that "Kazakhstan and Russia should agree on the ideological principles, political ideals and economic values of the initiated union. Otherwise, the foundation of the initiated union will not be strong, and its life will not be long" (Mominkulov Zh. B., 2014). If the EAEU is truly an economic integration, then the participating countries should receive economic benefits within the framework of such unification, only then this integration will have a good development prospects. If it is a political union, then the prospects of the EAEU are in doubt. In this regard, the question of whether the EAEU is an economic or still a political union remains as a fundamental matter.

2. Methods and approaches

The methodological basis of the study was a theoretical analysis of literary sources, a cause and effect analysis of the prerequisites for the formation of regional economic integration, as well as a statistical analysis of the main indicators characterizing the state of the EAEU. These methods allowed to identify the features of the regional economic integration of the five countries and to identify some problems of this integration. The research objective was facilitated by the use of the expert assessment method. The formation of the expert group was carried out using the "snowball" method, the essence of which is that each specialist involved as an expert recommended several scientists and specialists who can be an expert on the issue under research. As a result, an expert group of 15 people was formed, the scientists who published at least two scientific articles related to the problems of the formation and development of economic integrations. The collection and analysis of expert opinions was carried out using a questionnaire survey without expert contact among themselves, which eliminated the influence of the authoritative opinions of individual experts and ensured the independence of the assessment.

3. The level of research's elaboration on the issue of international economic integration

Scientific studies of regional economic integration issues have a deep roots dating back to the first half of the last century. The basis of the theory of economic integration is the work of Jacob Viner (1950), in which the effects resulting from the creation of economic integrations are formulated.

As of today, the schools of theory of economic integration have already been formed. A significant role in the development of this theory was played by the market (liberal) school (V. Repke, J. Rueff, R. Aron, etc.) and the market-institutional (neoliberal) school (M. Alle, B. Balassa, J. Weiner). Market school representatives focused on the importance of the role of freedom and mutual benefit in trade within the framework of economic integration. They believed that in the economic integration it is necessary to use market instruments and government regulation should not be allowed. "The term 'European

economic integration, to be reasonable, can only mean a state of affairs which will permit trading relations among different national economies to be as free and mutually advantageous as those which exist within a national economy" (Wilhelm, 1959, p.234).

However, experience shows that economic integration is a managed process, since it has not only positive, but also negative consequences for the participating countries. In particular, it leads to increased competition, non-optimal distribution of production, and uneven development of regions. Therefore, along with a market-based integration management mechanism, it is necessary to have the focused efforts of national governments and supranational integration institutions of economic unions (Misko , 2015, p.8).

The forms (stages) of economic integration were formulated by Bela Balassa. The degree of economic integration can be categorized into seven stages: preferential trading area, free-trade area, customs union, single market, economic union, economic and monetary union, complete economic integration (Balassa , 2013, p.67). Russian scientist Maksimova M., made a significant contribution to the development of the theory of economic integration. She believes that international economic integration, on the one hand, is an objective process, on the other hand, it is a regulated process and can only happen between countries with one socio-economic system (Maksimova, 1971, p.53). The scientific interest of domestic scientists in the problems of economic integration has intensified since 2015 when Kyrgyzstan became a full member of the EAEU. The range of problems investigated in the works of Pirimbaev J. Zh., Dzhailov D.S., Makeeva M.T. and other scientists are diverse. At the same time, each of them, while analyzing one or another issue related to the EAEU, focused on what place is given to Kyrgyzstan in this integration process.

4. **Analysis of preconditions to EAEU**

The EAEU is a regional international economic integration that has gone through two stages of the integration process (free trade zone and customs union). The Eurasian Economic Union is a subject of international law and has its own system of management institutions.

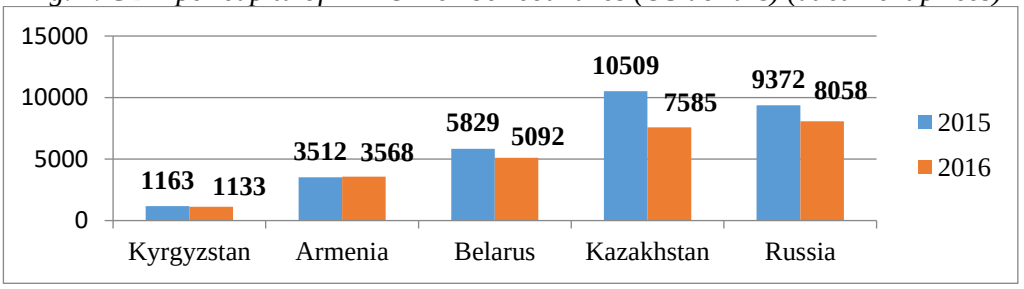
The integration processes within the EAEU were complex and contradictory due to differences in the interests of the participating countries, including the uneven level of economic growth and development. A distinctive feature of these processes is that they have pretty much a nature of formality. The formation of this integration was based, in our opinion, not only on economic motives, but on political motives as well. At the same time, the economic integration of the five countries (EAEU) was shaped in a timely manner, precisely when it was necessary to take urgent measures in response to increased competition on the global market. In other words, it emerged as a regional opposition to the challenges of politicized international economic relations.

In order to assess the first steps towards the integration of the EAEU countries, it is necessary to analyze the preconditions that contribute to union's strength and determine the prospects for the development of economic integration process. Scientists in the field of international economic integration point out the importance of certain prerequisites which consists of; approximately the same level of economic development and the maturity of a market economy, the presence of a common border and historically established economic relations, the presence of complementary economic structures of countries that aim to create an integration and others (Misko, 2015. p.23).

The most important precondition for achieving the effective functioning of economic integration is the compatibility of economic mechanisms and approximately the same level of economic growth and development. Although there are well known examples such as NAFTA where Mexico's economic growth and development lags far behind of those of integration partners. In the European Union, countries also differ in these indicators, which is reflected in their participation in the formation and use of the budget. For example, in 2007 Germany, UK and France were – in that order – the biggest net contributors, whereas Greece, Poland and Spain were the biggest net recipients"(Björn Paape&Iwona Kiereta, 2009, pp. 2-8). However EU has quite developed form of integration where «non-budgetary advantages (peace-keeping, political stability, etc.) of EU membership» has been given an important meaning to (Ibid).

Precisely this precondition was absent when the union of five countries was created. Thus, when Kyrgyzstan joined this union, the levels of economic development of each member country varied greatly (Fig. 1).

Fig. 1. GDP per capita of EAEU member countries (US dollars) (at current prices)



Source: (http://www.stat.kg/ru/news/vvp-i-vvp-na-dushu-naseleniya-po-stranam-eaes/): Stat.kg

As it is shown in figure 1, Kyrgyzstan has the lowest GDP per capita in 2015, which is 9 times lower than the highest integration indicator (Kazakhstan). The above shown figure clearly demonstrates the incompatibility of the economic mechanisms of Kyrgyzstan and Armenia with the economies of other EAEU countries. We also see that there was no economic development in all EAEU countries (with the exception of Armenia) in 2016 and GDP per capita indicator has decreased in comparison to 2015. At the same time, we see

that the most significant decrease in this indicator is in Kazakhstan, which means a decrease in the level of well-being of the its population.

A comparative analysis of the indicator of economic growth, of the total volume of GDP showed a significant decrease in this indicator in the participating countries in 2016 (Table 1).

Table 1. Change in the volume of GDP of the EAEU countries (billion US dollars) (in current prices)

Country	**GDP by year**			**2016 in % relation to 2014**
	2014	2015	2016	
Kyrgyzstan	7,4	6,6	6,6	89,2
Armenia	11,6	10,5	10,8	93,1
Belarus	78,5	55,3	48,1	61,3
Kazakhstan	221	184	135	61,1
Russia	2085	1372	1284	61,6

Source: (http://www.stat.kg/ru/news/vvp-i-vvp-na-dushu-naseleniya-po-stranam-eaes/): Stat.kg

Data analysis of table. 1 allowed us to conclude that the EAEU has not yet met the expectations of any of the participating countries for a number of subjective and objective reasons. In all participating countries, in the analyzed period, GDP has decreased. Moreover, the largest decline of GDP is observed in countries that were at the forefront of the economic integration process. Russia has its indicator decreased by 38.6%, Kazakhstan and Belarus by 38.9% and 38.7% respectively. The National Statistics Committee of the Kyrgyz Republic explains this situation by the depreciation of the national currency against the US dollar. Indeed, in the analyzed period, there was a significant increase in the average nominal exchange rate of the US dollar to the Russian ruble and the Kazakhstan tenge. It is advisable to pay attention to the fact that "devaluation of tenge can serve as evidence of the negative impact of the monetary policy of the Russian Federation on the tenge exchange rate. Since one of the main reasons for the collapse of the tenge is precisely the fact that Kazakhstan has "more active engagement" into the world economic space through the Russian market with all the ensuing circumstances"(Mominkulov Zh.B, 2014).

As a negative consequence of Kazakhstan's membership in the EAEU, we can consider the deterioration of its foreign trade balance. The results of a study conducted using the econometric method showed that "during Kazakhstan's membership in the Customs Union, import increased, but we cannot speak of increased export "(Aktaş, 2014).

As for the Belarusian ruble, it strengthened against the US dollar from 2014 to 2016. (table. 2).

Table 2. Nominal exchange rate of the US dollar to the Belarusian ruble (2014-2016)

Month	**USD average nominal rate to Belarusian ruble**	
	2014	**2016**
January	35,1878	38,3763
February	36,2614	35,6564
March	36,8180	34,1153
April	35,8584	33,5505
May	34,6812	33,7600
June	33,9017	32,7705
July	33,7537	32,2274
August	34,7608	33,1681
September	36,0123	33,1511
October	38,2056	32,7553
November	42,6817	33,2277
December	49,7610	31,6488
USD average annual rate	37,3236	33,7006

https://ratestats.com/belarusian-ruble/2014/: Ratestats

The data of table 2 shows that in 2014, 1 US dollar costs, on average, 37.3236 Belarusian rubles, and the value of US dollars decreased to 33.7006 Belarusian rubles in 2016. Consequently, 38.7% decrease in the republic's GDP (in US dollars) in 2016 compared to 2014 is not explained by the depreciation of the national currency against the US dollar. Then, what economic success has Belarus achieved as a country that stood at the origins of the formation of the EAEU?

We see that although the EAEU was created as an economic union, the participating countries did not receive the expected economic benefits at the beginning. It should be underlined that Kyrgyzstan, the last country joining this integration, did not achieve any tangible economic successes during its stay in the EAEU. It is appropriate to cite the statement of the Russian scientist Bondarev I. I., who said that "at this stage of economic development, there is no reason to talk about the great benefits of joining the EAEU for Kyrgyzstan and Armenia. It is possible that in the future, with the deepening of integration, the situation will change, but so far the integration has not affected the change in the foreign trade flows of these countries"(Bondarev, 2016, pp. 53-57).

The next important prerequisite or precondition is geographical proximity, the presence, in most cases, of a common border and historically established economic ties. This precondition is not fully present, since not all EAEU countries have common geographical boundaries. Armenia has no common borders with any of the EAEU countries. It borders with Georgia, Turkey, Iran and Azerbaijan. Although Armenia is located in western Asia, it is geographically close to Europe and, in this regard, considers its cooperation with the EU as great deal of importance.

The most important positive prerequisite is that all EAEU countries have a deep common history, 70 years of existence within the framework of one country (USSR) cannot

be erased overnight. This is an indisputable fact. The countries of this integration have close cultural and domestic ties. It is necessary to emphasize the importance of some family ties between citizens of these countries as well. For example, in Kyrgyzstan one can barely find a family that does not have relatives or friends with the citizens of Kazakhstan and/or Russia.

In addition, there is a commonality of economic problems faced by countries in the field of development, financing, regulation of the economy, and political cooperation. During the transition from a command economy to a mixed economic system, reforms were carried out in all EAEU countries aimed at introducing market mechanisms into the economy.

An important precondition for creating economic integration is the demonstration effect. If the countries that have created integration associations experience positive economic shifts, then this has a positive psychological impact on other countries.

As for EAEU, the accession of Armenia to this union expanding its geographical borders, increased confidence in integration. A positive demonstration effect from Armenia's accession to the EAEU was obtained thanks to the statement of the chairman of the International Public Organization for Humanitarian Development, Ghukasyan A., who was widely publicized on the Internet: "If Armenia had not joined the EAEU, it would have lost one billion dollars. Thanks to Eurasian integration, the republic is not only overcoming the economic crisis, but is increasing the level of economic development, mainly due to export growth"(Koenkozov, 2018).

The negative demonstration effect was facilitated by the World Bank's conclusion that "Russia received more benefits from the Customs Union than Belarus and Kazakhstan, because higher Russian import tariffs were accepted as common one for the two other republics." (Mominkulov Zh.B , 2014) This negatively affected the social situation in Kazakhstan. There was a wave of distrust towards EAEU among Kazakh citizens. The discontent began to alarm the citizens of Kyrgyzstan on the eve of its accession to integration. The movement of people between Kyrgyzstan and Kazakhstan is quite solid. Therefore, information about the dissatisfaction of many citizens of Kazakhstan with being within the EAEU has transmitted to Kyrgyzstan, as they say, "by word of mouth". Meanwhile, according to official studies, 80% of the Kazakh population supported the EAEU in 2015. However, in 2016, the approval rate from Kazakh population of the EAEU was 74%, having decreased by 6% over the year, which is close to the 2013 indicator (73%) (Vinokurov, Korshunov, Pereboev, & Tsukarev, 2017). Hence the negative public opinion may cause much larger consequence leading to secession like in the case of UK. It can be a case where countries may have many problems, such as «chronic deficits of foreign trade and financial balance sheet, high growth of external debt, high unemployment, low purchasing power of the population, high level of businessmen, political and economic instability, crime, corruption, Bar Nations abuse, and a devaluation of the currency." (Abuselidze & Katamadze, 2018, pp 44-53). In our opinion, this should be regarded as an alarming signal in public opinion. Therefore, urgent measures should be

taken to make adjustments to the policy and the course of development of the EAEU. Only then the demonstration effect will be positive, and the borders of the EAEU will expand.

It is necessary to pay attention to the fact that the strength of economic integration is ensured with equal rights and opportunities of the participating countries, or when the interests of each member country are equally taken into account. In the EAEU, the most of decisions are made by taking into account, primarily, the interests of Russia. When three countries were members of the integration, decisions were made by a majority of votes based on the following quotas: 57% for Russia, and 21.5% for Kazakhstan and Belarus respectively. Here, we can observe a negative demonstration effect, since the growing concern of other ex-soviet countries alarmed that if they are to join the EAEU, they would not be able to protect their interests and defend their independence as sovereign state. As the local scientist Pirimbaev Zh. (2015), points out: “The main reason for the resistance to the membership in the EAEU was the opinion about the fear of losing the sovereignty of the republic, hence, its independence”.

As for other parts of the world, a similar picture was observed in NAFTA, where the interests of the United States have similarly dominated over interests of the other two countries, particularly over Mexico. This integration has not gone further than the free trade zone, and its geographical borders have not expanded since its creation in 1994. Meanwhile, the presence of a leading country is one of the prerequisites for international economic integration. In the union of five countries, such a country is Russia, which has almost a century of leadership experience. In the period of the USSR, Russia was the undisputed leader, uniting not only the socialist republics, but also the CMEA countries. At the same time, it used to take the interests of all republics and socialist countries into account. The principles of economic cooperation between the republics of the USSR have largely become a model of economic relations within the CMEA. There was equal representation, equal rights and obligations of each country included in the CMEA regardless of the economic potential of the country and its population. However, unfortunately, this condition is not being observed within the EAEU. The EAEU member countries are not in the same position, which leads to the formation of “cracks” in the union, which Russia, as the leader of the group, is trying to “stick together”.

It should, particularly, be reminded of the "domino effect." After Russia, Belarus and Kazakhstan formed the EAEU, Kyrgyzstan began to experience difficulties associated with reorienting the economic ties of the countries included in this integration union. Kyrgyzstan faced the necessity of joining this union, since the period of free re-export of Chinese and Turkish goods to Kazakhstan and Russia has ended. Since 2010, Kyrgyzstan’s neighbors began to take tough measures aimed at ending the inflow of goods from Kyrgyzstan. Customs control was strengthened, wire fences were extended on mountain parts of the common borders with Kazakhstan, etc. Such actions of Kazakhstan contributed to the deterioration of the welfare of Kyrgyz population, as the reduction in re-export to Kazakhstan and Russia negatively affected the employment of its population. Today, Kyrgyzstan, as a full member of the EAEU experiences the deteriorating of trade in large

domestic markets like Dordoi, Madina, and Kara-Suy, which have lost wholesale buyers from Kazakhstan and Russia. Meanwhile, "large wholesale markets" such as “Dordoi", "Kara-Su", and "Madina", including the service spots such as transport, logistics terminals, public caterings, exchange points, security agencies, manual loaders and others, traditionally provided the significant employment to the local population. For example, only in the Dordoi market the number of employees reaches some 55 thousand people” (Attokurova, 2016).

Thus, the analysis allowed us to conclude that during the formation of the union of the five countries (EAEU) not all necessary preconditions for its further development were present. This result coincided with the opinion of the majority of experts included in the expert group that was established in order to identify the opinions of domestic scientists and specialists regarding the conditions in which the EAEU was created, and the benefits (disadvantages) of participation in this economic integration. Out of 15 experts, 13.3% (2 people) believed that there were no preconditions for the creation of EAEU; 66.7% (10 people) held the opinion that the preconditions were present, but partially; whereas 20% (3 people) answered affirmatively to the question: Were there all the necessary preconditions for the creation of economic integration of the five countries (EAEU)?

Despite the absence of important prerequisites, the EAEU is functioning and its borders, though very slow, are expanding. In 2015, Kyrgyzstan became a full member of this union. Here, it should be noted that theoretically the customs union, as a stage of the integration process, should contribute to the structural adjustment of the economy and support the development of national industries, which, ultimately, should contribute to the creation of jobs. However, this has not happened in Kyrgyzstan yet. It is likely that for this reason Tajikistan is in no hurry to make a decision on joining the EAEU. It the consequence of the demonstration effect.

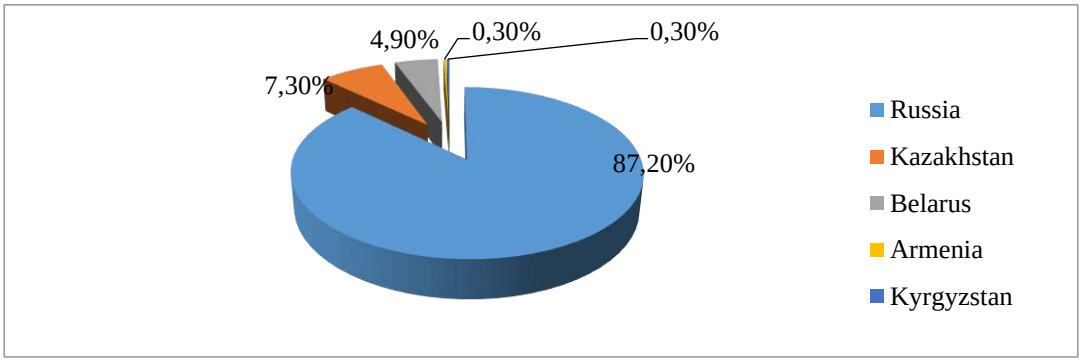
For fairness sake, it should be underlined that since the beginning of 2017, a turn towards positive changes has been noticed in the economic indicators of the EAEU. In addition, little time has passed since the succession of our country into this union. Perhaps, more positive changes are awaiting us in the future. However, for this purpose, it is necessary to form complementary economic structures within the framework of the EAEU, albeit difficult but quite feasible task.

5. Analysis of the first steps of the union of the five countries

Countries get united into economic integration, as noted above, in order to increase competitiveness and increase the level of economic growth that can be achieved by improving production conditions and increasing of its volume.

The volume of industrial production in the EAEU decreased by 3.4% in 2015 compared with 2014 and reached 907.1 billion US dollars. Moreover, the largest share of the production was in Russia (Fig. 2).

Fig. 2. The share of countries in the total industrial production of the EAEU in 2015



http://eurasianmovement.ru/archives/25674: eurasianmovement

Figure 2 shows that 87.2% of industrial production is produced by Russia, while the rest of the EAEU countries make just 12.8% of the total industrial production. Armenia and Kyrgyzstan make only 0.3% each in the total industrial production.

One of the important indicators of the integration of the countries of the economic union is the dynamics of internal trade in economic integration. To assess the integration of countries, in our opinion, it is necessary to compare the growth rates of mutual trade of the countries of integration with the growth rates of trade with countries outside of integration union over a number of years. In this regard, we analyzed the changes in the trade within the EAEU between the member countries for the period from 2013 to 2018.

From 2013 to 2017, the mutual trade of the EAEU countries decreased from year to year. Moreover, the largest decline was observed in 2015, when the volume of mutual trade in value terms decreased by 25.5% compared to the previous year. In 2016, the decline slowed to 6.7%.

The results of empirical studies conducted by a group of Russian scientists showed that "Over the 2012-2016 period, the physical volumes of Russian oil and raw-material exports to Ukraine, Belarus, and Kazakhstan decreased significantly. During the same period, the quantity of oil products in physical units exported by Russia to the developed countries remained approximately the same, whereas those supplied to other countries increased significantly. Consequently, the reduction in trade between Russia and the EAEU members was the largest and amounted to 34.1%." (Borisov,

Popova & Rasoulinezhad, 2014, pp.296-325). In 2017, the situation improved and there was a positive dynamics in internal trade between the EAEU countries (Table 3).

Table 3. EAEU Turnover Indicators for 2016 and January-September 2017

Trade indicators	**2016 г.**		**January-September 2017 г.**	
	USD in millions	**in % to 2015**	**USD in millions**	**in % to January-September 2015**
The volume of export operations in the mutual trade of the EAEU	42,960,3	94,2	38,871,7	126,9
Foreign trade with countries outside the EAEU, Turnover	509,372,7	87,9	450,762,7	124,7
Export	308,264,8	82,5	274,308,5	125,6
Import	201,107,9	97,9	176,454,2	123,3
Balance	107,156,9		97,854,3	

http://www.eurasiancommission.org/ru/act/integr_i_makroec/dep_stat/tradestat/analytics/Documents/report/Report_2015-2016.pdf: Eurasian Economic Commission

The data of table 3 demonstrate the improvement of the indicator of the EAEU development intensity as an economic integration in 2017. For 10 months of 2017, the volume of mutual exports within the EAEU increased by 26.9% compared to the same period in 2016. The growth rate of exports of goods to third countries is lower than to the country member of EAEU (+ 25.6%). We see a positive trade balance of integration.

Another important indicator of integration is the presence of the domestic export's share in total amount of exports within this union. In January-September 2017, third countries accounted for 87.6% of the total EAEU export volume. As you can see, the integration level of the union is still low, although there are insignificant positive changes. The situation in 2018 showed that "the growth in mutual trade decreased to 11.9%, while trade with third countries remained high (21.4% compared to January-September 2017) " (Eurasian Economic Commission, 2018). Hence, it is obvious that the EAEU members are more interested in trading with countries outside of its economic integration union. It is obvious that trade complementarity plays an important role. From this point of view, it is more profitable for the EAEU's main player, Russia, to trade with China, rather than with integration countries, from 2014 to 2016, trade with China was extremely complementary, because Russia exports to China mainly included raw materials (their share reached 87% in Russian exports to the country) in exchange for industrial imports, whose share in Russian imports from China exceeded 90% (Borisov, Popova & Rasoulinezhad, 2014, pp.296-325)

If we talk about the relative importance of UK trade with European and other countries in Asia, such as Japan, then according to experts, in 1988-1997, the additional information is supplied by a comparison of the scales of each trade box and provides a rough indication of the relative importance of UK trade with each region. UK-Asian and UK-Japanese trade, for example, are only a quarter and one tenth of UK-European trade respectively. (Azhar& Elliott, 2004, pp. 651-666). Consequently, the EAEU countries have not received significant economic benefits from the moment the union was established up till this day. According to neo-Keynesians, "in order to use the benefits of international economic integration and to preserve its national sovereignty in maximum way, it is necessary to coordinate the internal and foreign policies of integrating countries" (Misko, 2015, p.25). In reality, there is a divergence of economic interests in the EAEU, which leads to inconsistency of both internal and foreign policies among its members. Precisely this factor was indicated as the main condition, by 8 (53.3%) out of the 15 experts surveyed, that impedes the development of integration processes within the EAEU. At the same time, 73.4% (11 people) of the total number of experts see the EAEU as an economic and political union with a predominance of political component; 13.3% (2 people) believe that this is an economic and political union with a larger share of the economic component; another13.3% (2 people) characterize this integration as a purely economic union. It should be pointed out that the insufficient volume of mutual foreign direct investment (FDI) inside the EAEU leads to the fact that some members of economic integration, particularly Kazakhstan, Kyrgyzstan and Belarus, are trying to cooperate with Chinese investors. Which, in its turn, contradicts with the interests of, not only the leading country of this union the Russian Federation, but it equally contradicts with the EAEU interests as whole.

6. Conclusions and recommendations

Analyzing the preconditions for regional economic integration and assessing the degree of EAEU's integration we may conclude that the union of the five countries is an integration association that has a number of features where the most noticeable or meaningful one is the dominant position of political motives. Although, officially the goal of creating this integration is proclaimed to be an economic union based on economic interests.

A comparative analysis of the main indicators of economic growth and economic development of the EAEU countries has demonstrated that there is too much of difference in the level of socio-economic development among its members. To compare, the reason for clash of interests among EU members, considered as the most successful regional economic union known today, was over the expansion of its borders by adding new members due to the relatively underdeveloped countries of Eastern Europe.

Particular attention should be paid to the fact that the export structure of the main EAEU members, Russia and Kazakhstan, is very similar. These two countries depend on raw materials exports, which means that they are absolute competitors in the world market, which greatly complicates the formation of a complementary economic structure of this

economic union. Here we should pay attention to the following statement about the EAEU by the scientist of the Republic of Kazakhstan, Mamynkulov Zh. B.: "this union is seen by us as temporary and transitory, since Russia and Kazakhstan, in practice, are competitors than partners in exporting structure (Mominkulov Zh.B , 2014). Therefore, the clash of economic interests within integration requires a search for compromising solutions.

Bilateral trade within the EAEU prevails of multilateral one. Union's members trade mainly with Russia, with the exception of Kazakhstan and Kyrgyzstan. To strengthen this economic integration it is necessary to have an active mutual trade between all participants of this integration project. The geographical remoteness of Belarus from Kazakhstan and Kyrgyzstan, and the isolation Armenia, where goods flows can pass only through the territory of Georgia creates difficulties in intensifying internal trade. Finding ways to solve the problem of internal transportation of goods, as well as a rational division of labor within integration will, to a certain extent, solve this issue. It is necessary to intensify trade in services, for example tourism, using various tools to influence and stimulate touristic flows. It should be emphasized that 182 million people is a capacity for huge tourism market, which is quite enough for all member countries, given that the in-union tourism is developed with care of tourism production opportunities. In our opinion, it is necessary to use the active marketing of territories for these purposes, and to create territorial brands and a positive touristic image of a certain direction. For example, Issyk - Kul province in Kyrgyzstan can offer recreational, beach, health-improving, rural and other types of tourism to tourists from partner countries. Naryn province can be specialized in offering rural, mountain-adventure and jailoo[1] tourism. Jalal - Abad province has good opportunities for the development of cultural, educational, medical, and ecological tourism. There are opportunities for the development of rural tourism in almost all areas of the Kyrgyz Republic. At the same time, there is a needed to pay a closer attention to sustainable tourism development in all regions of the country.

The negative impact on the stability of EAEU as a regional economic integration comes from inconsistency of trade policies with third countries and internal trade conflicts.

It should be noted that in order to ensure the positive dynamics in the development of the EAEU, the leaders of all member countries should demonstrate their political will and a clear understanding of the fact that it is very difficult to survive alone in the face of global competition and the crisis caused by the coronavirus pandemic. From this point of view, each of the five countries should direct their efforts to increasing the viability of the EAEU. To be able to accomplish this task the following actions should be taken into consideration:

[1] Jailoo is the mountain pasture areas in Kyrgyzstan located on high altitude used traditionally for pasturing of cattle, horses, and sheep. It is famous, for tourists, for clean air, natural diary drinks, horse riding and general outdoor recreation

- consolidation of efforts to create a positive image of the EAEU both inside and outside of the union, and jointly confront against the opponents of integration in the information war;

- strive to find common ground and form common economic interests in inter-member contradictions;

- Russia should abandon, as the leader of this economic integration, its coercive manner when common decisions are made, and make decisions by mutual agreement taking into account the interests of each member of the EAEU regardless of its size and economic power;

- identify ways of effective division of labor within integration, contributing to the creation of complementary, rather than competing economies;

- create a favorable conditions for enhancing trade in services (tourism, educational, medical, etc.) between the countries of the union, which is especially important in crisis conditions prevailing in all countries due to the coronavirus pandemic;

- it is necessary to study the potential production capabilities of the domestic regions within each EAEU country thoroughly using the territory marketing tool in order to actively involve remote areas into integration processes and solve the problem of disproportional development.

To conclude, we analyzed the first steps of the EAEU after expanding its borders in 2015. Studying and analyzing the experience of the past allows us to understand the present and see, to a certain extent, the future. Considering the preconditions for the formation of a union of five countries, and the first years after Kyrgyzstan became part of this integration, it should be emphasized that the most important is the preservation and expansion of its geographical borders for the EAEU. Especially, in the tough competitive conditions expected after the end of the COVID-19 pandemic, characterized by new risks and unforeseen problems. Possible ways of developing the EAEU, their effectiveness, the influence of geopolitical factors, and many other issues that require special scientific research.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 163-170

REIMBURCEMENT POLICIES AND HEALTH TECHNOLOGY ASSESMENT OF MEDICAL DEVICES IN EUROPEAN COUNTRIES

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Received: 24.09.2020 Accepted: 30.10.2020

Abstract

The aim of the paper is to provide an overview of the key criteria for accepting a certain medical device for reimbursement in United Kingdom. The reason for focus on UK is based on the long-term experience of the author. The activities performed by National Institute for Health and Clinical Excellence in England-technology appraisals are essential for health technology evaluation. The use of new and existing medical devices and procedures should meet the highest standards. The research goals are to present facts and data valuable for health technology assessment of medical devices in Bulgaria. The expected results are to provide such a quality research to help further improvement of reimbursement policy of medical devices in Bulgaria. Health technology assessment (HTA) has been defined as 'a multidisciplinary field of policy analysis studying the medical, economic, social and ethical implications of the development, diffusion and use of health technologies.

Keywords: *Health Technology Assessment, Medical devices, reimbursement policies, quality of life, UK, QALY, HRQoL*
JEL Codes: *H51, I 18*

1. HTA has a long history in the UK, with prominent early studies being those on major programmes funded by the Department of Health such as the heart transplant and the major shift is research that is oriented towards efficacy and safety.

NICE is by far the most influential institute which produces four types of guidance: technology appraisals, clinical guidelines, public health guidance and reports on interventional procedures. In producing its guidance, NICE considers both clinical and cost-effectiveness.

2. Reimbursement policies of medical devices and Health technology assessment in United Kingdom - QALI.

NICE has issued methods guidelines for technology appraisals which form the template for manufacturer submissions and the review by the independent assessment

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groups. The guidelines embody the concept of the 'reference case', whereby preferred methods are outlined but manufacturers can also submit alternative analyses, if they think these are superior. The objective is to achieve some degree of standardization of submissions. NICE has been quite clear that the measure of health benefit to use in technology appraisals is the quality-adjusted life-year-QALI.

(Drummond, 2009, The NHS and HTA).

The quality-adjusted life-year (QALY) is a measure of the value of health outcomes. Since health is a function of length of life and quality of life, the QALY was developed as an attempt to combine the value of these attributes into a single index number. A quality-adjusted life year is a measure of quantity and quality of life lived used to assess the value for money of a medical intervention. It is based on the number of years that would be added to a patient's life by a particular medical intervention.

To determine QALYs, one multiplies the utility value associated with a given state of health by the years lived in that state. A year of life lived in perfect health is worth 1 QALY (1 year of life × 1 Utility value).

The QALY is primarily used in cost-effectiveness analyses to guide decisions regarding the distribution of limited health care resources among competing health programs or interventions for a population of interest, but has also been used to aid decisions regarding clinical management, medical devices and individual patient care. The QALY establishes and defines the cost of a new treatment or a health care intervention. By this means the QALY can be applied to provide a value for these treatments and interventions that can be used for comparison between new and established treatments.

As medical devices and public health advances have led to cures and better treatments of existing diseases and delayed mortality, it was logical that those who measure health outcomes would begin to assess the population's health not only on the basis of saving lives, but also in terms of improving the quality of lives. The concept of health-related quality of life (HRQOL) and its determinants have evolved since the 1980s to encompass those aspects of overall quality of life that can be clearly shown to affect health—either physical or mental.

Focusing on HRQOL as an outcome can bridge boundaries between disciplines and between social, mental, and medical services. Several recent federal policy changes underscore the need for measuring HRQOL to supplement public health's traditional measures of morbidity and mortality. Healthy People 2000, 2010, and 2020 identified quality of life improvement as a central public health goal.

Health-related quality of life is "An individual's or group's perceived physical and mental health over time" and as such should be monitored from public institututions.

Economic evaluations of health interventions pose a particular challenge for reporting. There is also a need to consolidate and update existing guidelines and promote their use in a user friendly manner. The Consolidated Health Economic Evaluation Reporting Standards (CHEERS) statement is an attempt to consolidate and update previous health economic evaluation guidelines efforts into one current, useful reporting guidance. The primary audiences for the CHEERS statement are researchers reporting economic evaluations and the editors and peer reviewers assessing them for publication.

Health economic evaluations are conducted to inform resource allocation decisions. Economic evaluation has been defined as ‘‘the comparative analysis of alternative courses of action in terms of both their costs and their consequences.’’ [1] All economic evaluations assess costs, but approaches to measuring and valuing the consequences of health interventions may differ.

Specific forms of analysis reflect different approaches to evaluating the consequences of health interventions. Health consequences may be estimated from a single analytical (experimental or non-experimental) study, a synthesis of studies, mathematical modelling, or a combination of modelling and study information.

Cost consequences analysis examines costs and consequences without attempting to isolate a single consequence or aggregate consequences into a single measure

Cost minimisation analysis (CMA)—The consequences of compared interventions are required to be equivalent, and only relative costs are compared Cost effectiveness analysis (CEA) measures consequences in natural units, such as life years gained, disability days avoided, or cases detected. In a variant of CEA, often called cost utility analysis, consequences are measured in terms of preference-based measures of health, such as quality adjusted life years or disability adjusted life years.

Cost benefit analysis—Consequences are valued in monetary units. Readers should be aware that an economic evaluation might be referred to as a ‘‘cost effectiveness analysis’’ or ‘‘cost benefit analysis’’ even if it does not strictly adhere to the definitions above. Multiple forms may also exist within a single evaluation. Different forms of analysis provide unique advantages or disadvantages for decision making. The Consolidated Health Economic Evaluation Reporting Standards (CHEERS) statement can be used with any form of economic evaluation.

The aim of the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) statement is to provide recommendations, in the form of a checklist, to optimise reporting of health economic evaluations.

An ICER – another strong and important tool is used for medical devices HTA - calculated by dividing the difference in total costs (incremental cost) by the difference in the chosen measure of health outcome or effect (incremental effect) to provide a ratio of 'extra cost per extra unit of health effect' – for the more expensive therapy vs the alternative.

A cost-effectiveness ratio is the net cost divided by changes in health outcomes. Examples include cost per case of disease prevented or cost per death averted. However, if the net costs are negative (which means a more effective intervention is less costly), the results are reported as net cost savings.

IMPORTANT

What is the ICER threshold?

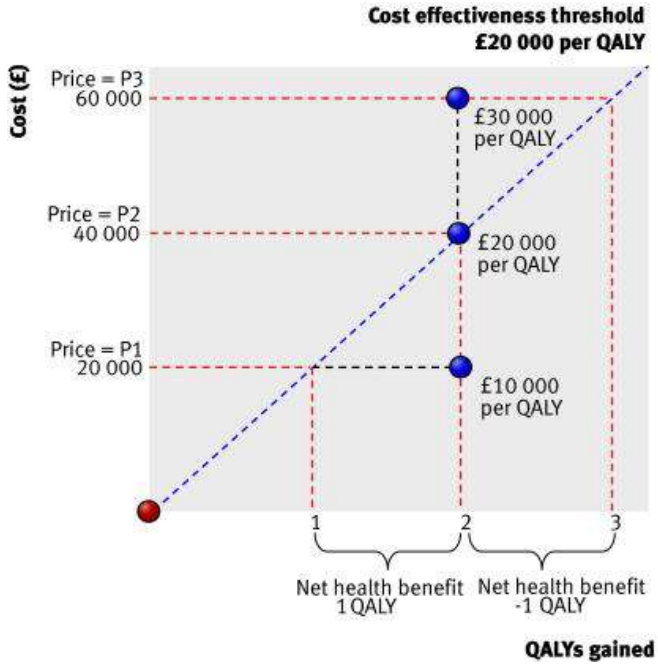
conditions and treatments. • ICER will use a broader range of cost-effectiveness thresholds between $50,000 and $150,000 per QALY to guide considerations of long-term value for money.

Table no. 1

Medical device	Price in lv.	Price in lv.	ICER
Heart	100 000	200 000	50 000

Source (author calculation)

$$\text{ICER} = \frac{\text{C b} - \text{C a}}{\text{E b} - \text{E a}} = \frac{200\,000 - 100\,000}{12 - 10} = \frac{100\,000}{2} = 50\,000 \text{ QALI}$$



3. HTA of medical devices in European countries

Health Technology Assessment (HTA) as a decision support tool and the suitability of this methodology for medical devices (MDs) in light of the discussion of the introduction of new regulatory provisions for their market authorization. Europe is one of the biggest markets for MDs, which encompass a broad and heterogeneous range of technologies. According to the European Union, a medical device is defined as "any instrument, apparatus, appliance, software, material or other article, whether used alone or in combination, including the software intended by its manufacturer to be used specifically for diagnostic and/or therapeutic purposes and necessary for its proper application, intended

by the manufacturer to be used for human beings for the purpose of diagnosis, prevention, monitoring, treatment or alleviation of disease". So incorporating the HTA perspective is crucial.

All institutions state a clear preference for direct evidence based on randomized controlled trials (RCTs), but also accept or suggest other designs under certain circumstances. In this respect, NICEstates that " the highest value has traditionally been placed on evidence from meta-analysis of RCTs or one or more well-designed and executed RCTs.

In Europe there is a growing recognition of the importance of methodological guidelines for HTA production, reflected also in collaborative initiatives toward methodological standardization (e.g., EUnetHTA).

However, the development and implementation of specific methodological tools for the assessment of MDs is still limited to the national level. Although some HTA institutions already consider different approaches for therapeutic and diagnostic technologies, other elements related to the use of MDs, such as device-operator interaction and the level of device activity require further methodological discussion. In conjunction with the efficient use of resources, the results raise the question if fully separate methodological guides are needed for the evaluation of MDs or if it is sufficient to include supplementary specifications in the general manuals of each institution. When researching specific methodological issues related to reimbursement policies and HTA, an overview of established practices is a prerequisite for facilitating knowledge transfer, analyzing best practice and formulating new methods. Variation in HTA practices may reflect historical development of processes, purpose of assessment, regulatory requirements or health system characteristics.

The study and analysis of the reimbursement policies of medical devices in other European countries make it possible to identify the possible development paths of the health insurance system in Bulgaria, as well as the optimal development path and the recipe for changing and solving the identified problems. An important component is the use of economic theory to make decisions about change and further development, using the methods of econometric analysis: regression and forecasts.

For this purpose materials from the health systems of Great Britain, Germany, France and others were studied, the existing Reimbursement lists were monitored with the prices of groups of medical devices from the same manufacturer and compared with the values of medical devices for this purpose in Bulgaria. Parallels are being made with activities in these European countries and prospects for improvement. The research deals with the management of health insurance funds in terms of proper allocation of resources between

different activities against the background of unworthy medical services and the increasing consumption of medical devices and diagnostic activities.

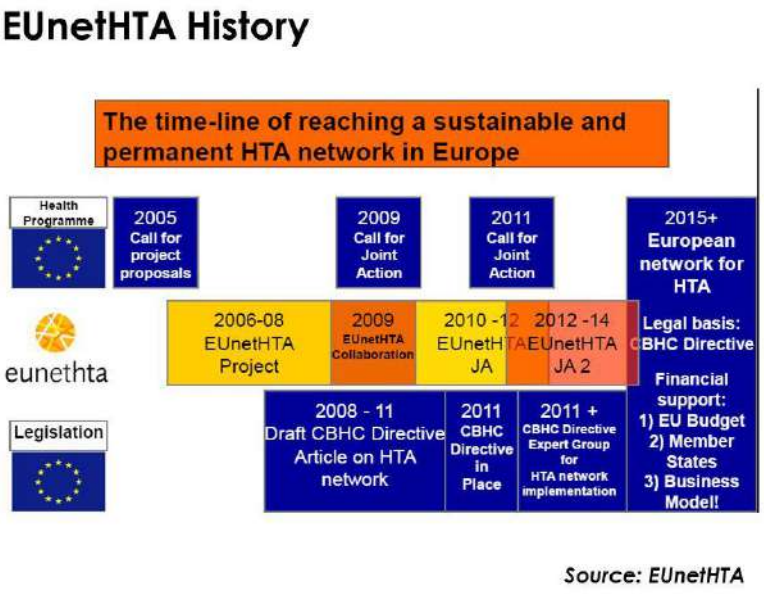
Taking into account the public fund resource over BGN 3 billion, the share of medical devices as a part of the general budget is low due to the partial reimbursement of important medical devices and due to the high single reimbursement value set for certain products, which requires an additional payment for some groups in 50:50 NHIF ratio: patient.

Figure 1

N	Country	Data	Kind of information and resource
1	FRANCE	List of medical devices - criteria, indications, prices	LISTE DES PRODUITS ET PRESTATIONS REMBOURSABLE
	POLAND	List of medical devices - Limits in medical devices financed by public funds, co-payment	Dziennik Ustaw
3	SPAIN	Legal framework, forms, instructions	www.aemps.gob.es/
4	GERMANY	DRG-Tariff	http://www.g-drg.de/
5	SLOVAKIA	List of medical devices	http://www.health.gov.sk/Clanok?zkszm-201710
			http://www.health.gov.sk/Clanok?zkzp-201710
6	SLOVENIA	List of medical devices	SEZNAM S ŠIFRANTOM, MEDICINSKIMI KRITERIJI, POOBLASTILI, POSTOPKI IN CENOVNIMI STANDARDI
7	LUXEMBOURG	List of medical devices	http://cns.public.lu/en/professionnels-sante/medicaments/dispositifs-medicaux.html
8	AUSTRIA	There is no centralized reimbursement	http://www.medizinprodukteregister.at/de/english-version#11a
9	CROATIA	List of medical devices	http://www.hzzo.hr/zdravstveni-sustav-rh/medicinski-proizvodi/
10	ESTONIA	List of medical devices	https://www.riigiteataja.ee/akt/129122016070
11	ROMANIA	List of medical devices	

The new approach contain a series of extremely important improvements to modernize the current system. Among them are stricter control for public spending towards high-risk devices via better monitoring pre-market mechanism with the involvement of a pool of experts at EU level. Very important is the reinforcement of public administration to the criteria for designation and processes for oversight of notified bodies and improved transparency through a comprehensive EU database on medical devices and a device traceability system based on unique device identification, introduction of an 'implant

card' for patients containing information about implanted medical devices, reinforcement of the rules on clinical evidence, including an EU-wide coordinated procedure for authorizing multi-centre clinical investigations. Another big step is strengthening of post-market surveillance requirements for manufacturers and improved coordination mechanisms between EU countries in the fields of vigilance and market surveillance to allow exchange of data.



Source: EUnetHTA

4. Conclusion

The work carried out aimed to identify and compare current methods, processes, and institutional practices for the evaluation of MDs in European countries to advance the debate on whether existing assessment tools have to be modified or adapted or if a wholly new approach is needed.

Despite growing consensus on the importance of the assessment of especially high-risk devices, existing initiatives for differentiated assessment practices, and relevant international activities, specific methodological tools for the assessment of MDs are rarely developed and implemented at the European level. Separate additional signposts incorporated in existing general methods guides may be sufficient for the evaluation of MDs.

The new approach contain a series of extremely important improvements to modernize the current system. Among them are stricter control for public spending towards high-risk devices via better monitoring pre-market mechanism with the involvement of a pool of experts at EU level. Very important is the reinforcement of public administration to the criteria for designation and processes for oversight of notified bodies and improved

transparency through a comprehensive EU database on medical devices and a device traceability system based on unique device identification, introduction of an 'implant card' for patients containing information about implanted medical devices, reinforcement of the rules on clinical evidence, including an EU-wide coordinated procedure for authorizing multi-centre clinical investigations. Another big step is strengthening of post-market surveillance requirements for manufacturers and improved coordination mechanisms between EU countries in the fields of vigilance and market surveillance to allow exchange of data.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 171-184

SOME CURRENT TRENDS IN THE INTERACTION OF RELIGION AND POLITICS

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Received: 14.08.2020 Accepted: 30.09.2020

Abstract

The article discusses the problems of the interaction between religion and politics in the present and in the conditions of the pandemic with the coronavirus COVIT 19. According to the author, its social consequences are comparable to the results of global crises that erupted centuries and decades ago on the spread of pathogenic microorganisms. Historically, the commonalities and differences between religion and politics as two forms of social unification are traced. There are many examples from modern times, the critical analysis of which gives the reader the opportunity to assess the extent to which the interaction between Religion and Politics today has to do with his own behavior and future destiny - closer and more distant.

Keywords: *religion, politics, institution, radical social change, social interaction, behavior, ideology, norms and expectations, secularization, "online" reality, etc.*
JEL Codes: *Z12.H12.Z18.N3.I10*

INTRODUCTION

The coronavirus appearance and spread in societies undoubtedly have caused a great "jolt" in the lives of modern people who have, more or less, already got accustomed to its current and so-called "global dimensions".

All around the world, COVID-19 has strongly affected the medicine and healthcare of the individual countries, their material production, agriculture, education, culture, especially communications and, above all, domestic and international transport links, tourism and the accompanying business activities, and trade in general. It also put to the test the normal functioning of national institutions for social survival, the welfare and policies, related to the dismissal of a huge number of people from work and last but not

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least – around the world the social environment management itself was unpleasantly surprised!

That same effect and the social consequences of it more or less seem comparable to the results of the world crises which erupted several times centuries and decades ago in a similar way , i.e. based on the spread of pathogenic microorganisms globally.

The numerous questions arising in connection to the mentioned can be united in one common question - Doesn't modern world face a large-scale challenge similar to the one the Bulgarian society (and not only it!) faced thirty and even more years ago?

Are we all, modern people, today at the threshold of another and totally new radical social change?

There is indeed a reason to raise this question, and others related to it as well. Thus, besides the significant changes that have occurred as a result of the pandemic in the socio-economic structure (sphere) of the countries around the world, we are witnessing profound changes in modern people's daily existence or way of living. We can already distinguish visible and significant transformations in the relations between individuals (individual members of social groups) at the different levels of social interaction - micro, meso and macro.

Do not also escape from the observer's view the vicissitudes, transformations or metamorphoses in the seemingly conservative spheres of public life, and more precisely in the institutions of both Religion and Politics. All of them are underlying the author's current interest in the issues under consideration. Her purpose is to present in the following lines opinions expressed on individual issues, as well as to try to systematise them and to offer her own position on some of them.

This paper should be viewed in the context of the interdisciplinary approach, a logical and meaningful consequence of the nature of the problems presented to the reader.

PREREQUISITES FOR ANALYSIS AND EVALUATION

Let us point out what content we give to the complex concept of "radical social change."

It is clarified in the literature that the main component of the concept of radical social change - its content - correlates with that of the concept of social change in sociology. In most general sense, therefore, its meaning and use encompass the relatively rapid (in historical sense) alteration or change of the social - «in particular the political and techno-economic system and organisation of society - of its institutions and values, and of actions of individuals and social groups ... changes in the interrelated statuses and roles of

individual members of Bulgarian society, which constitute a relatively stable system of social relations and interactions, norms and expectations, rights and obligations of individual citizens and groups" (Bratanov, P. 2018; 2015).[1]

The religious institution in its essence and according to the traditional understanding in Bulgarian sociologiological science of the content of the term "institution" (Mihailov, St., S. Koleva, 1996)[1], is considered in a functional-substantive and normative sense 'a spiritual-practical attitude of man to the world, which is related to supernatural personifications and ideas, and relevant practices and organisational forms“ (Bogomilova, N. 1996).

In particular, and again in the sense of the sociological interpretation, the church, which we herein consider a synonym of the religious institution, is defined as “an organisational manifestation of religion, within which the religious activity is carried out. It forms a system of authorities, values, beliefs, social norms and rituals, and a hierarchical structure, specifies the rights, obligations and manner of recruiting its members” (Bogomilova, N., cit. above).

Giddens emphasises the fact that until the beginning of the new millennium, at least sociological approaches to the study of religion were strongly influenced by the works of the three classical theorists - Marx, Durkheim and Weber (Giddens, A., 2003). Thus, the activity of a religious institution, for instance, according to Mendras (Mendras, A., 2002) should be analysed within and according to the rules of functional analysis. Then one of the main functions of religion, according to the French author, is to "unite society, to strengthen its internal unity" (Mendras, cit. above). At the same time, however - this author argues - we are also witnessing a dysfunctional role which religion can play as regards social integration (and cohesion). To clarify this fact, Mendras illustrates this with examples from Ireland and Lebanon.

In our opinion, quite naturally and logically with regard to these examples and in the same context we should include a number of contemporary events that immediately preceded the pandemic situation, which however takes place at the moment of its "subsiding" (or when it, the pandemic, gains strength for a re-appearance or for the so-

1 In the cited work "the institution (social)" is considered as an activity "... for the creation of material and spiritual goods for the servicing of people in meeting their needs, for the education and upbringing of adolescents, for the management of society, etc. It includes a certain number of people, which can vary widely, social things of one kind or another and a set of social prescriptions, norms and rules (written or non-written), which regulate the performance of the functions of the Institution .... its behaviour, the work of the people in it. These prescriptions, norms and rules unite the people working or participating in the Institution ... professional-labour, political, religious, sports or other community. ”(Mihailov, St., S. Koleva, Encyclopedic Dictionary of Sociology, Institute of Sociology, Sofia, 1996).

called "second wave" -?) and therefore, almost every day do not cease to attract the attention of the world community - the events in Syria, Morocco, Libya and others.

The functional approach to the analysis of the religious institution's specifics and activity in Durkheim's work focuses on religious life in small traditional societies, whereas this researcher "does not associate religion mainly with social inequalities, but with the general nature of institutions in society" (Giddens, cit. above).

This fact, obviously, distinguishes it from the analyses of M. Weber, which emphasise the connection of religion with social change. This idea is clearly developed in his famous book "The Protestant Ethic and the Spirit of Capitalism" (Weber, M. 1993), where the author traces how Protestantism and its extreme manifestation – Puritanism - are the basis of capitalist entrepreneurship and its rise, which modernises a number of countries in Western Europe and brings them to visible welfare and prosperity compared to countries of other, non-Christian religion.

From the perspctive of our interest in the peculiarities of the interaction between religion and politics, and in the context of the present analysis, we do not wish to disregard another view expressed by Abercrombie, Hill and Turner (N. Abercrombie, S. Hill and B.S. Turner, 94).

These authors refer to the potential opportunity which the functional approach offers in cases when it is applied to the consideration of religious views, beliefs and rituals as a specific social connection uniting the members of different social groups into a community. Their work indicates the probability of artificial or illegal expansion of the integrative features on the basis of which the given religious community is formed. The authors give as an example the fans of a football team, as well as the real representatives of nationalist groups in modern society. (1980)[1].

In fact, in our opinion, this case concerns a – let us call it "dark" - side of the religious tradition in general. J. Frazer was the first to focus the attention specifically on it in his famous book The Golden Bough (J.G. Frazer, 1923), where he describes numerous cases of extreme cruelty, torture and killings of unfortunate innocent human victims of various superstitions, taboos, magical and religious prohibitions (Frazer, J. 1980)[2]; Tokarev, SA, 1980).

The ideology of nationalism in its extreme manifestations, similar, for example, to those in Bosnia and Herzegovina in the 1990s, has led to almost half a million human casualties (!), i.e, when it, that same ideology, is not only deliberately distorted, but also dressed in religious garments, obviously, this precedent at the end of the last century, in

[1] See also Tokarev, S.A. Preface to the Russian language version of the book by J.G. Frazer, 1923, The Golden Bough. Moscow, 1980, Afterword in the Russian edition, pp. 794-804.

our opinion, is a frightening indication of what is always possible to happen. That is exactly why this tragedy should be perceived as an extremely serious warning to all of us, to the whole humanity at a time when, because of the pandemic, that same humanity is overwhelmed by discomposure, dismay, fear and anxiety, about both for the present and the future - closer or farther!

Our attention in the current analysis is drawn also by the understanding of J. Theodorson and A. Theodorson on the very essence of the religious institution. These researchers define it as "a system of social norms and roles organised to meet the need to clarify issues that affect the ultimate goal or purpose of life, as well as the meaning of its end, death, suffering, and accidental events. A religious institution includes those customs, rituals, prohibitions, standards of conduct, organisational forms, and roles that primarily encompass or justify the supernatural and the sacred, whether or not it affects formal religious organizations "(Theodorson, G.A. Theodorson, A. G., 1979).

There are many other authors – including those in the bosom of the religious institution itself, as well as even more thinkers, bookmen, and profound social scholars who, in their manuscripts, treatises, writings, works, and books, trace the essence of religion and its history and development over the centuries to the present day. The authors cited here, however, and according to the purpose of the present work, seem to offer us in sufficient detail the main that interests us at the moment and which we should take into account when considering the interaction between religion and politics nowadays.

So, since Religion is a system of authorities, values, beliefs, social norms and rituals and a hierarchical structure that specifies the rights and obligations of citizens, it really plays (a) certain role (s) in society based on the realisation of its own functions.

They aim at developing certain views, opinions and worldviews, as well as training, awareness, accumulation of knowledge, and the development of certain habits and standards of behavior. All this, undoubtly, has its vital meaning, and ultimate goal - to create and maintain stability, solidity and sustainability of the respective social community, social environment and surroundings.

In other words, the religious institution seeks to integrate (unite), to relate and communicate, to regulate, to cultivate strictness, obedience and compliance, and also to direct its members in their perception of the relevant normative models («standards ») of behavior in socium, which, at that it enriches with knowledge and erudition, as well as with life experiences.

We, therefore, should always remember that, when it comes to Religion, to a religious institution, respectively, at the centre of its focus and attention constantly, even eternally, stands the individual, as well as the whole religious community !

Undoubtedly, in the context of the further analysis and apart from the above-mentioned example of the former FR Yugoslavia, it will be interesting to see what of all that has been said so far about Religion is of particular relevance to Politics.

From the history we study nowadays, it is known that Politics, "as such", emerged relatively later in time after Religion. Until its appearance, i.e. in the prehistoric period, it was the religious cult and faith, considered in their various primary forms, that "governed", regulated and controlled the behaviour of the people of that time. It is the cult and the faith – in their capacity of unchanging guide, that are the reliable and safe reference points in the environment where the individuals are born, brought up, work - hunt, engage in agriculture, gathering, fishing ... It is that same environment which those "first people" seek to transform into their "second" specific reality - the artifacts from that time that have come down to us testify to the creation of own spiritual world by the tribal and communal people - a world where they, with their families, raise their children, exist and grow old and finally ... - leave, are gone ... Magical rituals and the following religious ideas and beliefs, according to the modern historical science, are the main adviser in the prehistoric era, which guides people, mentors them, but also helps them when needed. However, they demand trust, compliance and unconditional obedience from our "prehistoric" ancestors. The latter is aimed at observing traditions and customs, rituals and rites, norms and expectations related to the maintenance of superstition or - in other words - everything that has to do with the preservation of the dogma (faith), praise and divine predestination in the world of men, i.e. in the public (social) environment built by them.

Through the comparative-ethnographic method and on the basis of the evolutionary conception of the history of mankind and culture, Frazer developed also his famous theory of "magic and religion." We, however, and in connection with our aims in the present paper, we should distinguish in the work of this author another idea among his, which too is theoretically developed and known as "Frazer's theory of the origin of royal power."

In this theory, the prominent scientist assumes that in the human population "the first bearers of power - chiefs, leaders, kings – were the sorcerers, priests, magicians, and the basis of that power was the trust in their magical power." (Tokarev, SA ., cit. above).

The modern interpretation of power and Politics uses the legacy of Marxism and neo-Marxism and especially the ideas of M. Weber, but also what is laid down in the structural-functional theory of T. Parsons, in the so-called Theory of Elites and in organizational-managerial theories of power. The author, who specifically mentions this, further states the following: it (the power) is based on "... social relations of inequality, in which the ruler (an individual or a group of people) can impose their will on other participants in the social interaction, even despite their resistance, can change the behavior of the subordinate through specific means - authority (imposing of values and norms), law

(imposing of sanctions), violence (coercion). Power relations are essentially a form of social integration in which the will of one social subject is realised through the actions of others ... '. And further: "... power expresses a degree of social dependence. The monopoly of the ruler for influence over the right to choose the behavior of the subordinate rationalises the definition of power as "relations of domination and subordination" (Kolarova, R. cit. above).

For Weber specifically, power is at the heart of Politics, which is striving for it, or at least striving to participate in it. Weber's politics is inextricably linked with the so-called "Concept of democracy and leadership" or rather with the ideal of "leadership democracy" (Fuhrerdemokratie) or "charismatic domination" (Autaritat). According to him, the political charisma of the "gifted leader" ("**positively value**-laden charisma") introduces "dynamics into political life" (Weber, M., 1992). In this regard, for example, Dahrendorf specifically emphasises that the individual-aristocratic type of liberalism in Weber's "leadership democracy" is "a manifestation of some of the qualities of a political leader - passion - a sense of responsibility - a faithful view" (Darendorf, R., 1998, p. 7 - quoted in Bratanov, P. 2004, p. 127).

Indeed, Weber writes the following: "... the possessor of charisma has" forces and qualities inaccessible to everyone else" whereas "it does not matter how "objectively" correctly the relevant quality of the political leader is assessed. All that matters is only how it is practically evaluated by the objects of the charisma, by the adherents ... The bearer of charisma undertakes a task suitable for them and requires obedience and following by virtue of their mission ... Not every modern and not every democratic form of "creation" of a ruler is alien to charisma. In any case, the democratic system of so-called plebiscite domination ... has in its idea essential charismatic features, and all the arguments of its defenders emphasise precisely this peculiarity of it. The plebiscite is not a choice, but a one-off or ... renewed recognition of a candidate as a personally qualified charismatic ruler "(Weber, M., cit. above).

Weber's quoted text is not accidental at all. Based on his briefly presented idea, we could, in our opinion, make assumptions, opinions and possibly hypotheses about the real meaning and the actual historical role of the individual and the ruling person - the "charismatic person" - in the life of society in a given place and in certain time.

Modern Politics deals with the structure and governance of the state and the public environment by administering and controlling relations within it, as well as the dissemination and perception by individuals and social groups of various ideas, intentions and specific social actions that target the intergroup, incl. the class conflicts and which are related to the occupation of positions of power for the imposing of the private interest of the ruling class (or social stratum) as common to the whole society. Politics is also

inextricably linked "with the economic interests of the main owners of the production means grouped in certain classes" (Nikolov, S., R. Kolarova, 1996).

The conclusion that follows from what has been written is that both Religion and Politics "as such" have the same origins or nature – the socium or society in general. At that, both have potential that can be realised in its capacity of a characteristic means, way or tool for uniting, organising or uniting individuals and social groups in an indivisible whole or community. This is the reason to determine that both Religion and Politics should also be defined as two specific forms of social uniting, merging or cohesion ("integration"), sufficiently close in formal characteristics, but also different in content.

Apart from this fact, however, it is known that in the life of society these two forms of social grouping (uniting), however different in content and similar in form they may be - and possibly precisely because of that (!) - they sometimes act together. and synchronously in time in their capacity of accomplices and even very close aids. Thus, those same two forms of this specific social action – the connecting ("the integration") - have become the outer shell of religious conflicts and even of prolonged bloody wars over the centuries and to this day. For example, the Crusades and religious wars in Europe before the Enlightenment, and nowadays - the creation of ISIS, the clashes in Central and East Africa, in the western part of Middle East, in Afghanistan, as well as in the countries mentioned above.

The scientific explanation for such a "combination" is not an easy task - as evidenced by the classic work of M. Weber, to which we have paid special attention above. In all cases, when approaching it, as does the cited author, it is necessary to apply the specific-historical approach and analysis, which requires detailed clarification: first, the specific historical circumstances that characterise the connections and interrelations between Religion and Politics in the given moment and place, including internal and external inter-state relations, influences and interactions; second, the place and the role of Religion and Politics in the given social environment, i.e. an analysis of the relationship between secular and spiritual authorities at the moment of interest to us is necessary; third, the role of the dominant groups and of the individuals in the realisation of Religion and of Politics; fourth, the level of development or civilising of the individual participants, social groups and communities; fifth, the relationship of Religion and Politics with the role of morality, law and the prevailing doctrines at the particular time and place; sixth, the adherence to the existing traditions, rituals and customs in the life of the social groups and communities of interest to us; seventh, the peculiarities of everyday life, the daily routines, habits, norms and expectations of the individual participants, etc.

Another feature of the modern interaction between Religion and Politics is consequential from the fact that both set as their own desired goal and intentions the

implementation in the social environment of a certain behavioral model ("standard" of behaviour), which we have characterised above as "obedience and obedience" especially with regard to religion. In fact, this is a feature not only of Religion - any political leader, coalition or any other political governing group presupposes and imposes as a special requirement the unconditional obedience to their own decisions and will of the members of social groups and the community they instruct, guide and manage. In other words, this is another common characteristic of Religion and Politics, which finds its explanation and individual manifestations in the present precisely as a prerequisite and basis for the exercising of power.

The examples in this regard are innumerable and therefore we could limit our argument down to a single illustration in this sense - the strict legislatively-binding requirements, for example, of NOH (National Operational Headquarters) due to the declared "pandemic" state of emergency in our country on the eve of the greatest Christian holiday Easter, as well as in the days preceding the not less important Muslim holiday Ramadan Bayram. Let us add that Bulgarian citizens - regardless of their religion - demonstrated the appropriate discipline and listened not only to the instructions and threats constantly broadcast or disseminated through various communication channels, but most of all - "heard the voice of their own reason" and did what was required of them and what was imposed by the ruling coalition in the country, i.e. those same ones - the voters, the Bulgarian citizens or the electorate - have implemented the model of compliance and obedience required by all the governing persons to their own behaviour, habits and traditions (the "standard" of behaviour), i.e. they did not allow worshippers to congregate in churches and mosques and outside them during the performance of traditional religious rituals.

Yet, let us add that at about the same time, the world as a whole witnessed other specific patterns of individual and group religious behaviour, approved, recommended, and unwaveringly followed by other religious institutions and denominations as well. Thus, believers in many countries around the world celebrated religious holidays with their prayerful presence in only a limited number of temples and with observance of both the recommended distance and the ban for any physical contact, with mandatory decontamination, with the cancelling of customary rituals, with the strict regulation of social contacts in general, etc.

For instance, similar recommendations and actions, initially agreed with the Mayor of Moscow, were implemented by the church institution of the Russian Federation. In particular, Patriarch Kiril's address to the Russian Orthodox people not to go to church at Easter due to the risk of spreading the infection was accepted, understood and adequately implemented by the Russian Christians believers.

The Greek Orthodox Church, during the biggest Christian holiday, Easter, in turn closed church for visits of the laity and thus effectively supported the efforts of the Greek Conservative government to successfully deal with the further spread of the coronavirus.

Pope Francis also prevented a dangerous gathering of people in Rome, inside and outside the Catholic Cathedral of St. Peter, in turn, as an effective counterpoint to the growth of the coronavirus epidemic in Italy and in compliance with the requirements of the health authorities - he implemented an adequate rational model of religious behaviour on the occasion of Easter.

Society develops over time, and along does the relationship between Religion and Politics changes.

It is known from history that the process of the so-called secularisation dates back to the Enlightenment, when prominent thinkers, writers and the public political power and religion .... Since then until today and separately from the single events in regional and global plan, which we have already described, including the beginning and development of the coronavirus pandemic - we see that Religion is essentially moving away from Politics. The same process in a large number of modern countries is even resolved by law – i.e. the state is separated from Religion and is left to make its own institutional, organisational and managerial decisions. At least in our country, the Republic of Bulgaria, this is the case and in this way the religious institutions are legally separated from the political processes.

In reality, in practice, however, the mutual influence between Politics and Religion is still manifested in the various countries where there is legislation on the issue, similar to that in our country. For example, in the United States, the President places his hand on the bible when he takes the words of the obligatory oath upon taking office. In England, at the coronation of the new king (queen), the Archbishop of Canterbury says sacred words that affirm the monarch's relationship with God. Even in our country, the President, when celebrating, for example, the day of the Bulgarian army - St. George's Day – it is obligatory done in the presence of the highest officials of the Bulgarian Orthodox Church - and the Bulgarian Patriarch himself consecrates the military flags of the Bulgarian army. In fact, this is the continuation of a tradition that dates back to the distant Bulgarian Middle Ages.

During the April Uprising and the Liberation War, and later - during the numerous periods of social upheavals, troubles and misfortunes that befell our country, religion more or less did not remain a silent, indifferent and apathetic witness to what was happening. This fact was confirmed in the years after the radical social change in November 1989, when a sufficiently serious and prolonged attempt was made to introduce a schism in the Bulgarian Orthodox Church. It was an experience which - as is well known – the church did not allow to take place! Five or six years ago, however, and after the beginning of the

events in Kiev - similarly and under the active (political) dictate of Ukrainian nationalists, aimed at changing the consciousness, views and overall worldview of Orthodox Christianity in the country, the Ukrainian Orthodox Church proclaimed its sacred independence from the Russian Orthodox Church. These facts prove, in our opinion, that nothing guarantees against the possibility of modern interactions and contacts between Religion and Politics to be used at any time for one purpose or another (political) and intentions, possibly coloured even with self-interested, private interest(s) and leading to the overt and deliberate "politicisation" of Religion.

Thus, Religion is able to "justify" in the conditions of social change, especially in the eyes of believers, the actions of certain "politicians" by giving them a juridical, legal legitimacy (a seeming one!). Apparently, it makes their connection with the historical past (the Middle Ages), when the government of individual (European) countries was closely linked to the church institution, which embodies everything that is of interest to the power-desiring social social group (stratum) - law, political ideas and intentions, values (including ethical), norms (including moral) and expectations, cultural life and education, but also the system of control over their observance or violation, which is strictly sanctioned and respectively severely punished in individual cases, which are not small in number at all!

The question that still remains unanswered, in our opinion, is - in a global context – Should that same politics, the modern Politics, in turn follow more or less its own path of diverging from religious dogma?

The grounds for skepticism with regards to a positive answer are first, the facts in the present, some of which we have already noted - the policy of jihad and the emergence of the so-called Islamic State in the Middle East region, also the events in the Balkans a little more than two decades ago, and second, the presence nowadays in the political space of a number of European and sufficiently developed in all respects countries of religious, ie. so-called "clerical" parties - in Belgium, Italy, Germany ... Of course, the fact that they are religious does not mean that the ideas and programmes they offer are the same or identical. Politologists today define them as conservative or extremely conservative, as well as as social-reformist political parties. In any case, they function and will continue to develop in extremely complex and contradictory conditions and circumstances, both in individual countries and around the world.

Finally, let us focus attention to those same conditions or circumstances, which in the present and in the near future, will, most likely, remain an integral part of our own daily life and further existence.

CONCLUSIONS

First, an important circumstance for all of us, modern people, is the psychological crisis that the individual and members of social groups around the world have experienced (and continue to experience!) in the context of the pandemic. It inflicted a deep psychological trauma, accompanied by a sense of helplessness and hopelessness, of the inevitability of the impending disaster, as well as the inability to respond adequately to the impending danger and risk. All this - accompanied by a general concern for the future - closer or farther - and most of all with a fear of infection and possibly approaching – as if secretly - death ...

The effect of all this remains and at best, in our opinion, forces us to more or less ask ourselves questions such as, What is the meaning of our existence as people and individuals in general?; What is death?; Why does it exist at all?; What is most important in our own lives and in the lives of our close relatives?; What are the most significant values in it?, etc. And these are those vital questions, existential questions to which Religion gives its answer ...;

Second, the economic problems of the present - the drastic reduction of income, unresolved issues with work, family support, children, the constant rise of food prices, general insecurity, personal development of family members, medical problems and fear of the poor state of the health-care system, etc.

Third, the "online" reality after COVID-19 will continue to determine our individual behavior, our habits and way of life at different levels of social interaction - our personal and interpersonal contacts, interaction in and between groups, as well as between social communities and formations.

The final conclusion, which logically and meaningfully follows from all that has been said so far, is that modern society, considered individually as a group or as a global whole, faces a dilemma - whether to continue to exist, function and develop in the usual for our daily lives and in a way known to all of us way, or to change something, both in its surrounding material environment and within itself - including changes with regard to Religion and Politics.

In our opinion, digital reality and the so-called AI - artificial intelligence, which is already a reality, will continue to occupy an increasingly important place in our existence as individuals and as a biological population.

Together, they will unconditionally continue to exert an unavoidable impact on religious and political institutions, ie. and on Religion and Politics.

In turn, the same impact, will highly likely affect the specifics of their further functioning and development, their relations and mutual interrelations with the individual,

on the one hand, and with those of other major institutions of society, including those of the family, medicine, health care, material and spiritual production, education, culture and management of the social environment, on the other.

The answer to the other part of the final conclusion above seems to be more complicated - Will there be "any" change in each of us as individual members of society, also in our capacity of an integral part of it under the new conditions? And if so, what will be this change "in itself"?

We believe that there will definitely be a change and it depends on each one of us what it will be - whether it will lead us in the right, adequate direction to finally reach the dreamed promised land or vice versa.

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Economics and Management
ISSN: 2683-1325
Volume: XVII, Issue: 2, Year: 2020, pp. 185-192

ORIGIN AND CHARACTERISTICS OF EDUCATIONAL TOURISM

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Received: 28.09.2020 Accepted: 30.10.2020

Abstract

This report aims to present the origins and specifications of educational tourism. This report presents the relationship between tourism and education, focusing on the specifics of tourist educational products. Educational tourism is classified as a youth type of tourism that attracts a certain market niche. Therefore, educational tourism is defined as a niche type of tourism. In this type of tourism, the main motivation of tourists is the desire and need to learn and educate.

Keywords: *educational tourism, origin, educational tourism product, education*
JEL Codes: *I23, Z32, Z33*

1. Introduction

Educational tourism is a specifical niche type of tourism. This is the reason why it is not widespread and popular in the tourism market. There is a variety of different definition of educational products and products. This report presents the origin and specification of educational tourism. The market segment of educational tourism is significantly smaller compared to segments of mass tourism.

2. Origin of educational tourism

As the beginning of educational tourism date from the XVII and the XVIII century. Educational tourism is started like educational-entertainment tours in Europe known as "Grand tour of Europe". At this time of history, the travels of British aristocracy were very popular. Towner claims that tours have an enormous impact on art and culture of British as they were undertaken by the socio-cultural class in society (Towner, 1985).

There are many assumptions about the beginning and origin of the "Grand tour" in academic literature. Some of those assumptions are related to the development of the Roman Church in 1534. During the development of the Roman Empire, the construction of

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the transport route began. The intention of those routes was to connect separate places. These routes make travel shorter, easy, and even faster.

The evolution of travel is strongly influenced by different stages of human development.

Some assumptions are related to the recent stage of history. Later, between 1748 and 1789 is a calm and peaceful period. This period is favorable for faster development of travels in Europe. There is an increase in the number of British aristocrats who visited cities such as Paris, Rome, Venice, Florence, Naples.

Later, “The Grand Tour” is becoming one of the most demand forms of education. “The Grand Tour” became a part form formal education and a symbol of the evolution from childhood to adulthood. It became like a "normal" part of the aristocracy's schooling. The Grand Tour aims to inspire future leaders who have gained a variety of knowledge such as learning and practicing foreign languages, learning about customs, politics, and culture.

The purpose of the Grand Tour claims to expand knowledge and obtain more comprehensive knowledge, part of education, learning different languages and improving language skills.

Getting to know the different countries and their development in the field of art, culture, and architecture.

Progressively, “The Grand Tour” became very popular among British aristocracy. Later, tours became more accessible for other classes of British society. There was a significant increase in the number of people from different social classes who begin to travel. The number of tourist trips with educational purpose begins to grow.

In the 1840s, with the development of rail transport, there was a significant increase in middle-class travel. The duration of the trips varied from a few months to two or three years. During this period, the population's interest in travel began to grow.

The Grand Tour is an important part of the historical development of tourism. As it has already become clear, the Grand Tour is the beginning of a journey to educate British society, which has an impact on socio-cultural, political, and architectural understandings.

Some of the most popular destination as a part of “The Grand Tour" are major European cultural cities like Paris, Rome, Venice, Florence, and Naples. There were also trips to other countries such as Spain, Germany, Eastern Europe, and the Balkans.

As an important educational element of the British aristocracy was the acquaintance with Greek and Roman antiquity.

With the development of the idea and the goal of "The Grand Tour" the basis for the structure of the modern concept for tourism is placed.

In Europe, with the development of rail transport, travel is becoming more accepted, which is also becoming accessible to the middle class in society.

3. Definition of educational tourism

First, it is important to define the term 'education'. According to Smith (1982), education can be defined as "an organized, systematized process for promoting learning, providing the necessary conditions and activities through which the learning process itself can take place."

Some authors, such as Kidd (1973) and Smith (1982), believe that there is no definition of education and training, as it can be referred to three different directions. In the first place, it is a product of training, where the result is important. In second place is the learning process itself, which occurs during learning and gaining new knowledge. The third is the function itself or the actual actions that reinforce the knowledge gained.

According to the Organization for Economic Co-operation and Development (OECD), 2015 (economic and social development), there is a transfer from an industry-based system to a knowledge-based one. There is a growing emphasis on expanding the training and knowledge of staff after their initial education. By expanding learning beyond school and university, societies, and countries themselves will be able to adapt much more quickly and easily to the ongoing changes.

All this would help citizens to be more flexible and willing to accept the ongoing innovation processes, which would contribute to the flood of innovation, business development and economic growth.

The main characteristics of the development of education and lifelong learning are the achievement of a more inclusive and equitable society by making education far more accessible, especially for the less privileged members of society (DfES), 2018).

Educational tourism is most often associated with school trips and excursions.

According to the authors Ritchie, Carr, & Cooper (Ritchie, Carr, & Cooper, Managing Educational Tourism, 2003), educational tourism consists of two main elements. One of them is general travel for people, where there is some form of education and training, which is an important part of the tourist experience. The other element is related to the university and school tourism such as language schools, school trips, student exchange programs, in which tourist experiences are secondary to the educational aspect and intentions of the participants. In this case, education and training come first and are the main product of consumption, while tourist experiences are complementary.

Most authors looking at educational tourism focus on the second form, in which education comes first, and tourist experiences are the after-effects of individuals' travel and stay elsewhere than their permanent habitat.

Bodger (Bodger, 1998) links educational tourism (also known as education tourism) to any program in which participants travel in groups to a specific place, with the primary goal of gaining experience and participating in destination-specific training. Educational tourism is also related to other types of tourism such as ecological, cultural tourism, rural tourism, and student mobility between different educational institutions. In the management and development of

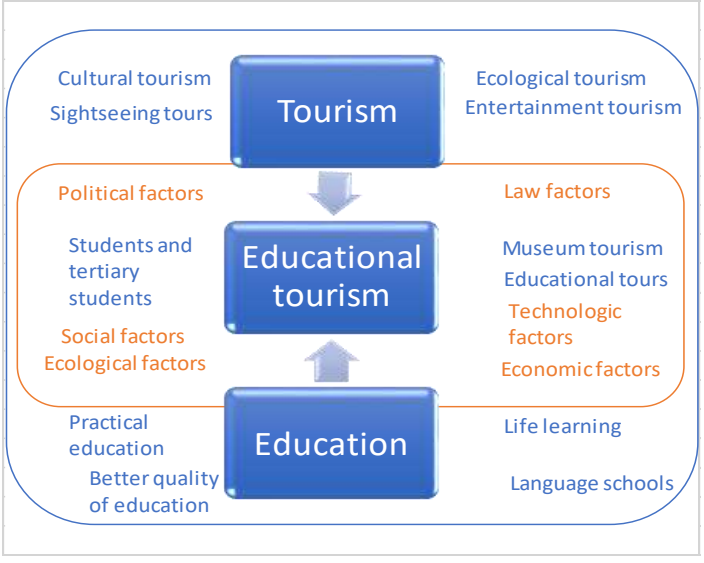
educational tourist destinations, it is necessary to consider the activities that travelling students exercise in the destination.

Ritchie (Carr, & Cooper, Managing Educational Tourism, 2003) defines educational tourism as "A tourism activity undertaken by individuals who travel on one or more nights with a primary or secondary purpose of education and learning. This definition gives a broader and more comprehensive picture of educational tourism, not only as tourism related to the travels of pupils and students but also individuals who wish to enrich their knowledge.

According to the World Tourism Organization (UNWTO, 2019), educational tourism is considered a form of tourism that encompasses different types of tourism, which are related to the motives of tourists to travel, participate and engage themselves in various training, self-improvement processes. , intellectual growth and the development of different and diverse skills. Educational tourism represents a wide range of products and services related to academic research, skills acquisition holidays, school trips, sports training, career development courses and language courses, among others.

The tourists who most often practice educational tourism are the individuals who are part of the educational sphere. These can be pupils, students, teachers, researchers, and academic staff.

Figure no. 1 Structure of educational tourism



Source Shwayat, M. A. (2017). International Student's Perception toward Educational Tourism at Yarmouk University. Journal of Tourism & Hospitality, 2-6.

As it is shown in figure no. 1 educational tourism is a combination of products of education and tourism sector. There are several groups of factors that impact educational

tourism. There are different factors like political, law, social, ecological, technological, and economic.

4. Products of educational tourism

The tourist product is consisting of tourist resources, services, and goods. It can have a variety of content, as it is to some extent determined by the needs of tourists and the desire of businesses to meet them. The tourist product is based on tourist resources. These resources are natural-climatic, socio-cultural, and historical, entertainment, cult, religious and others that help meet tourist needs.

The product of educational tourism is a combination of the tourist product and the product of education. This combination is well integrated and paired to meet the tourist and educational needs of consumers.

The combination of tourism and education products can take many forms. The specific about the tourist product that participates is static. Includes basic tourist services - transport, accommodation, and meals. While the product of education may be different. It can be student mobility, training, seminar, research trip, summer camps, courses lasting less than 12 months, one-year educational master's programs, educational tours and more. There is a certain variety of types of educational products that could together with tourism form the product of educational tourism.

Specification of educational tourism is that the subject and content of the trip have a greater value for the tourist. The product is less fixed, more variable and personalize than the product of mass tourism. Even small changes in the motive and needs of tourists would lead to endless diversification of the product of educational tourism and with these changes, it begins to become more personalized.

There is another species of educational product is its focus on certain market segments. The market segments that have an interest in the products of educational tourism are not as large as in other forms of tourism, in which the "non-formal" education that tourists receive is embedded. It is important to have an innovative and creative approach to the product of educational tourism, as most of the clients are not looking for typical mass trips, but authenticity and real experiences (Douglas, Douglas, & Derrett, 2001).

The term 'edutainment tour' is used for the tourist educational product, which means 'educational leisure trips/tours'. This term gives a clearer idea of what the product of educational tourism is. There is a growing trend in interest in the educational tourism product. The learning process during educational trips needs to be more enjoyable and less engaging. Entertainment must contain some educational value (NĚMEC, 2007).

Table no. 1 – Comparative analysis between educational tourism and international education

Specific	Educational tourism	International education	Comparative comment
Origin	Grand tour	Academic Pilgrims	Different terminology, but coincidence of time frame -formed in the middle of the XVII century.
Training process	Practical training	Practical training	The training process is the same.
Level of education	From primary education to lifelong education	Only higher education	Students who travel are one year or even less.
Type of travels	International and national travel; Day trips or excursions;	National trips from the hometown to the university centre; International travel relating to international educational programs;	Educational tourism is not so much related to the international exchange between schools. While higher education is directly related to this.
Educational result	Global learning; Specific academic and practical competencies;	Intercultural competence; Specific academic and practical competencies.	International education enables students to communicate in an intercultural environment. Educational tourism also provides this opportunity and contributes to the development of social and environmental awareness, which potentially leads to changes in behaviour and perception.
Economic impact	School trips have an impact on the local economy;	International education is a multibillion-dollar global industry	There is a lack of research on the impact of educational tourism on the economy.

Source McGladdery, C. A., & Lubbe, B. A. (2017): Rethinking educational tourism: proposing a new model and future direction. Tourism Review.

This table compares several key indicators, with the aim of highlighting the same and different characteristics of educational tourism and international education. After the

analysis, we can say that according to McGladdery, educational tourism is mainly related to primary school and excursions conducted during this period for educational purposes. He clearly points out that the two concepts have common ground, but they also have differences (McGladdery & Lubbe, 2017).

As it was mention above educational tourism have a variety of definition about its conception.

5. Conclusion

Tourism is one of the fastest-growing economic sectors in the world. The income from the tourism sector takes the largest share of GDP in some country. Tourism is considered an opportunity to support and accelerate economic growth and reap economic benefits for the entity that develops it.

The development of educational tourism has potential. It is necessary to combine the educational and tourist product of the destination in order to achieve good results. This requires cooperation between the education and tourism sectors.

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ISSN: 2683-1325