Sociálno-ekonomická revue

Fakulta sociálno-ekonomických vzťahov,
Trenčianska univerzita Alexandra Dubčeka v Trenčíne

Vedecký časopis – Scientific Journal

Social and Economic Revue

Faculty of Social and Economic Relations
Alexander Dubček University of Trenčín

ISSN – 1336-3727

Sociálno-ekonomická revue
Social and Economic Revue

Redakcia/Editorial office:
Študentská 2,
911 50 Trenčín
Tel.: 032/7 400 470, Fax: 032/7 400 403
URL: http://fsev.tnuni.sk/revue
E-mail: revue@tnuni.sk

Časopis Sociálno-ekonomická revue vychádza štvrťročne.
The Social and Economic Revue is published quarterly.

Vydavateľ/Publishing house:
Fakulta sociálno-ekonomických vzťahov, Trenčianska univerzita Alexandra Dubčeka v Trenčíne.
IČO 00 31 118 259

The Social and Economic Revue journal is indexed in international scientific databases: *Index Copernicus, Central and Eastern European online Library (CEEOL), EBSCO Publishing, Inc. - Business Source Complete, EconBiz.*

EV 3775/09

ISSN - 1336-3727 (tlačené vydanie/print edition)
ISSN - 2585-9358 (online)

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Ročník 17, marec 2019, číslo 1
Volume 17, March 2019, no. 1

Obsah Contents

FINANCIAL PLAN IN ENERGY SECTOR

Alena BAŠOVÁ

Abstract:

The key question is, what is financial planning. We can accept it as a process of evaluating the client's financial goals resulting from different stages of his life. The concept of financial planning appeared for the first time in the planning of the state where the state budget was drawn up. Business planning is in many indicators similar to state planning. The financial plan is the basis of the company's concept for its development. There are also negative views on the financial planning, which we can meet not only in literature, but also in the business life. If the company's financial plan is properly prepared, it will always report improvement in the economic indicators at the end of the planned period for which the company's financial plan was created. To achieve goal of paper, we have used methods of collecting information, especially from scientific foreign and domestic works. By using pairwise methods of induction and deduction, analyse and synthesis, we have formulated partial conclusions, to better illustrate the results obtained, we used graphical and mathematical methods, for more clear presentation of results in tables.

Key words

financial planning, investor, controlling function, complex processes, financial decisions

JEL Classification: L0, O12, P 3

Introduction

Foreign author Sinha M. describes financial planning as a process of evaluating the client's financial goals resulting from different stages of his life, taking into account the inventory of investments and other assets he currently has at his disposal (Mello, 2013).

The goal is to helps the client achieve these goals and estimate what the company will need in the future. The main objective of financial planning is to provide the investor with the necessary amount of money in the required time, allowing the investor to meet his requirements during the various stages and goals in his life. If it were to apply its definition with respect to the business sphere, the definition would be very similar. Similarly, as a person, an enterprise also has different phases of operation, from establishment to extinction, and at every stage of its lifetime, we need a variety of finances to run the business, and financial planning is intended to help ensure the smooth running of the business. So we can meet all its functions and goals at every moment of its existence. As another definition we state the British author R. P. Greenwood, according to which financial planning is associated with a controlling function. In an enterprise, its main role is to help manage the business (Greenwood, 2002).

Phases of financial planning

Furthermore, it emphasizes the importance of clarifying where the business benefits from planning. It is above all:

• choosing between many alternatives,

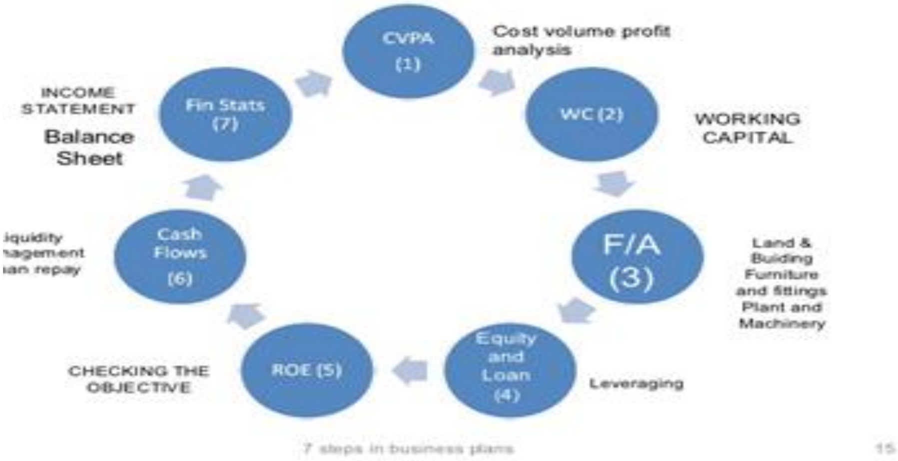
• planning of business activities over a specific time period,

• Verification the control of the business activities that have been carried out.

It is somewhat easier to define the financial planning of (Megginson, 1998). According to him, the main task of financial planning is to formulate the objectives of the enterprise. Based on the primary business goal, the acceptance of the ownership approach is formulated as maximizing the market value of the business for the owners. The following tasks are generally considered to be the most important financial objectives of an enterprise:

1. Liquidity.
2. Profitability.
3. Stability.

Figure 1. Steps of financial plan



Source: own processing by Musa (2011).

Financial planning involves complex processes, such as the creation of financial goals, a set of measures and activities to achieve them. It is a very important tool for financial management and it is also part of the business plan. The result of financial planning is the document - the financial plan. The financial plan shall describe all the activities, resources, facilities or material needs to meet these objectives as well as the relevant time frames. We should also point out that a financial plan as part of a business plan is very important, especially when establishing a business and the quality of a plan, directly depends on the amount of initial finance that an enterprise obtains from investors. The main elements of the financial plan are current consumption and future consumption of finance and existing and expected resources to cover consumption. The financial plan always forms for a certain period of time, according to which we distinguish the short, medium and long-term financial plan. The quality, complexity and reliability of the financial plan depend directly on the length of the period for which the financial plan is drawn up. We will detail the time dimension later.

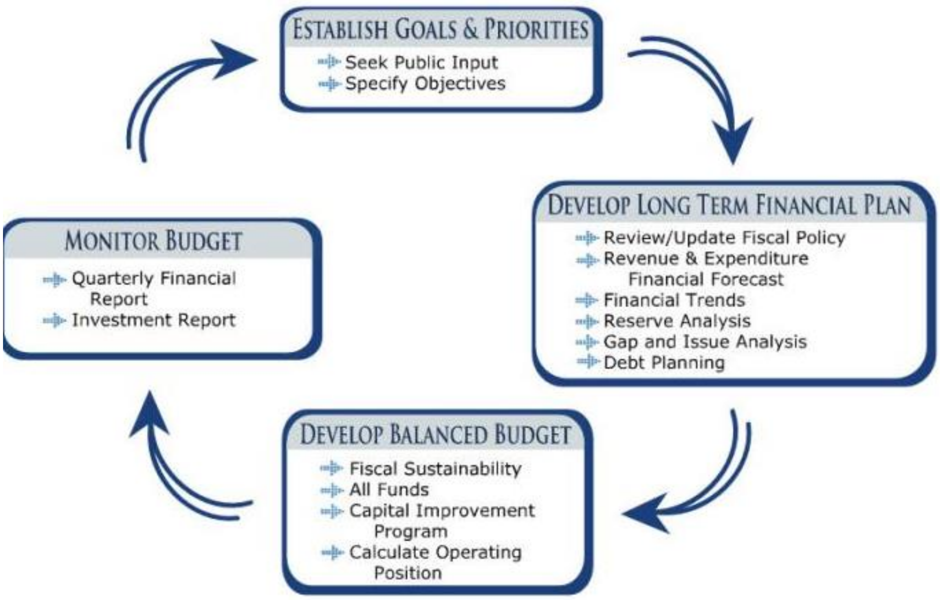
Figure 2. Financial plan

Source: own processing by Overton (2008).

As already mentioned in the previous definitions, the financial plan is part of the overall business plan, which includes other sub-schemes. Among them, mention should be made of R & D planning, investment planning, production planning, or sales planning. However, the financial plan has a special status among them, because it has a coordinating role. It captures the way in which planned activities are reflected in the change in cash flows as well as the capital of an enterprise. At the same time, feedback is strongly influenced by the fact that some of the financial targets are forced to look for solutions that are capable of meeting these objectives in the company's business activities. The financial plan makes it easier to achieve the internal unity and balance of the business plan. Financial planning in enterprises under market economy conditions has the following two features:

- Each enterprise plans only to meet its own goals. Therefore, the form and timing of the financial plan is neither determined nor influenced by external administrative interventions, and is therefore always an autonomous decision of each enterprise.
- The activity of the company significantly influences the state and the development of the market, which is always reflected in the financial plan of the company. He has to work either with financial reserves or use techniques that will enable the company to adapt flexibly to unexpected changes.

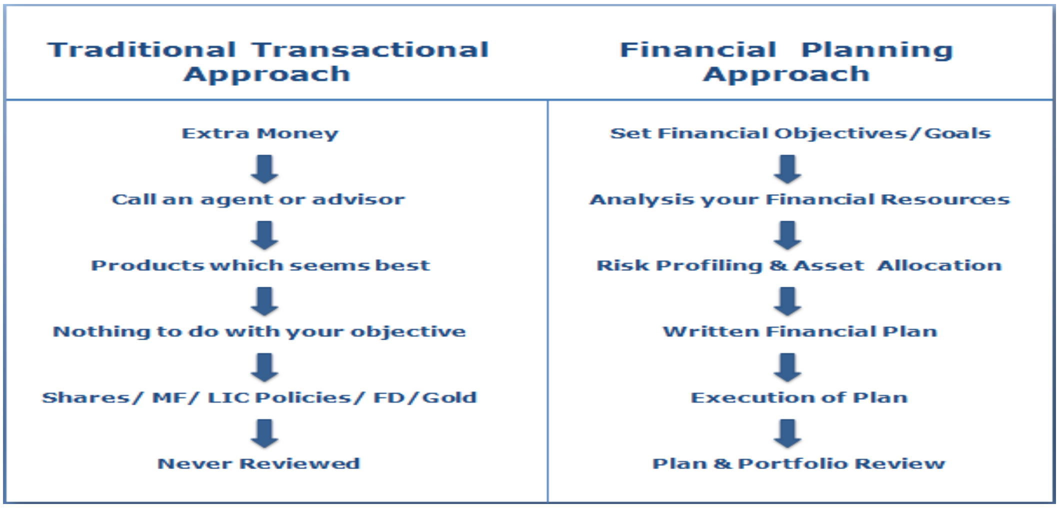
Figure 3. Steps of financial plan



Source: own processing by Kaye (1994).

The basis for financial planning is market research and the ability to move to this market. The financial plan allows us to verify the financial consequences of the decisions taken in all the sub-schemes, while also affecting the efficient use of factors of production. The active function of the financial plan in the business plan process is based on the interrelation of the material and value aspects of the transformation process. Value parameters such as profit, costs, revenues, and others are always matched by specific production, and vice versa, the level of value parameters is determined by the quantitative and qualitative structure of the production factors and the extent of their utilization (Alexy, Sivák, 2005).

Figure 4. Theoretical approach to financial planning



Source: Damodaran (2001).

The main task of the financial plan is (Warren, Shelton (2011):

- Identify the need for capital structure,
- determine the need for prompt cash,
- ensure optimal financing of investments,
- Ensure the payment capacity of the business.

Financial plans are part of all business subsystems and their development is based on two time planning concepts: periodic planning and project planning. Periodic planning is a continuous process of planning, control and evaluation activities.

Table 1: Comparing of prosseses of planning

OUR PROCESS		
STEP 1	INITIAL MEETING	Understanding your needs and goals is critical to developing the right plan
STEP 2	GATHER DATA	Using information from the past helps to create a more solid foundation for the future
STEP 3	ANALYZE & EVALUATE	Exploring your current situation, short- and long-term objectives and tolerance for risk creates the framework to develop your plan
STEP 4	EXPLORE ALTERNATIVE STRATEGIES	As fee-based advisors, we provide you with a variety of objective options to consider
STEP 5	IMPLEMENTATION	Once your plan is created, we guide you through the process toward making it a reality
STEP 6	MONITORING	Standing by your side, we'll help you stay on track whether you need to change direction or plot a new course

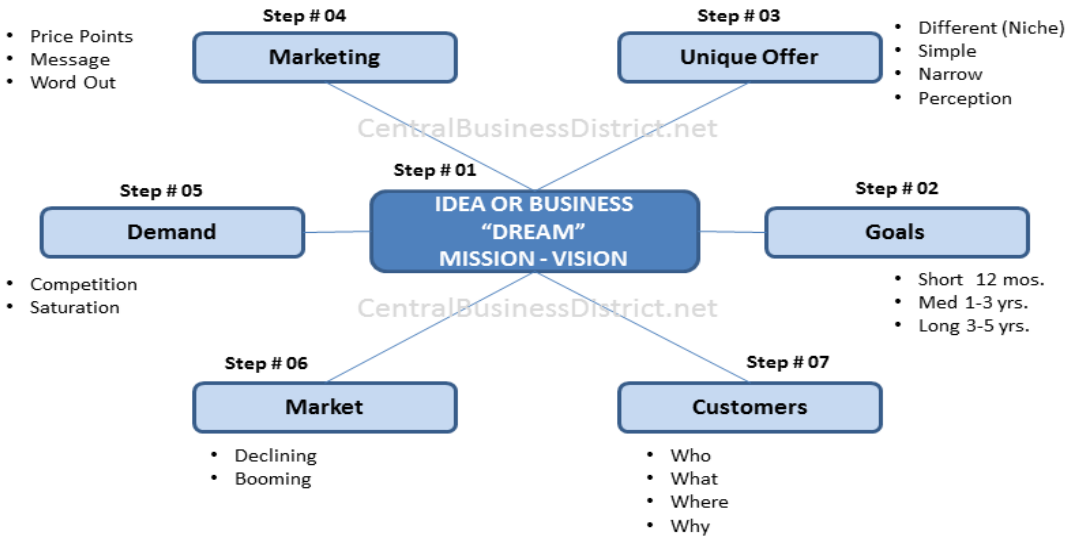
Source: own processing by Shim, Mcglade (2004).

Breakdown of Periodic Plans (Overton, 2008):

- long-term (strategic) FP - contains financial decisions on long-term assets and liabilities - decisions on the need for capital, methods of financing,
- medium-term FP - its role is to regulate economic development in order to achieve the strategic goals of the company
- short-term (annual) FP - contains fin. short-term assets and liabilities; are related to the realization of the production, business and other activities of the enterprise,
- project planning - long-term financial plans have a direct link to project finance plans. Project FPs are specific projects, each of which has its own time dimension (e.g., reconstruction or construction of a new plant); these projects are planned for their entire lifetime and are linked by periodic plans.

For the timing of financial plans, the purpose of their use, the methods and procedures for their compilation, the accuracy and the detail of the plan are decisive.

Figure 5. Idea of business plan



Source: own processing by Mello (2013).

Principles of making a financial plan when making a financial plan, the following guidelines must be followed (Mello, 2013):

- The principle of completeness - consists of including all factors of activity and their interrelations,
- • The principle of system ability - means the systematic monitoring of the main target and the secondary objectives of the enterprise, mainly profitability and liquidity,
- The transparency principle - means transparency for users, especially for checking performance, it should not be too detailed in terms of secondary information,
- The principle of periodicity and regularity - the compilation of plans in a regular period,
- The principle of elasticity - allows flexible responses to changes in the market and their impact on the objectives of the enterprise to take them into account in the financial plan, so that the plan does not lose the reality.

There must be a link between the financial plan and the sub-plans of the comprehensive business plan (horizontal links) and the coherence of the individual subsystems (vertical links) and the link with the information system (accounting, reporting and statistics). The financial plan should provide the necessary information to investors, shareholders and creditors

Based on market research, we can sales plan and plan of incomes. Depending on the uncertainty of the estimate, it is necessary to use interval estimates that determine the top - optimistic and lower - pessimistic version of the expected sales revenue. However, too optimistic estimates take on credibility, so it is better to think conservatively and realistically, where the logic, consistency, realism and continuity of the financial plan of the past period is important. Planning requires the knowledge of the interrelations of economic processes and the ability to model them to rapidly quantify the impacts of partial changes on all parts of the plan. The basis for the sales strategy is marketing and price forecasts. The result of management is an integral part in current double reporting. The balance sheet is reported on the liability side as an increase a gain or loss of equity. Balance allows us to determine the absolute amount of profit. The Profit and Loss Statement explains how it is generated, indicating in which earnings, after deducting costs, the profit has been generated.

The underlying task of the planned profit and loss statement is to collect data on planned earnings and costs by comparing the expected result of the business.

Conclusion:

Planning is one of the management functions. This management process in society must be structured and the plan must reflect the objectives of the business entity. A set of plans is formed in the company, and their scope and content are determined by the requirements of the owners, management and overall culture of the company. Properly defining objectives and linking them to the mission of an enterprise is also important in relation to control. Planning can be set up using several methods, techniques and models, distinguishing planning times from long-term and short-term financial plans. To make a good financial plan, we needed to know the results of financial analysis.

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THE INFLUENCE OF INSTITUTIONAL FACTORS ON ECONOMIC GROWTH

Martin HUDEC

Abstract

Economic growth and the associated standard of living are among the most significant, watched and discussed topics of the general public. For that reason, it is the subject of many economists, scientific literature, and economic models. Opinions about the causes of growth, but also stagnation, of the world's economies vary, whether within economic flows, theories or among economists themselves. Increasingly, it refers to the reduced ability of known theories to answer all the causes of economic differences between seemingly similar countries. One of the modern explanations of the differences between the world's economies is that of the so-called institutional factors of economic development - culture, religion, history, geography, or political regime. Therefore, this research paper analyses the relationship between economic growth and institutional factors of development. In the context of the influence of institutional factors on economic growth, democracy assumes that political competition allows voters to use the state as a source of redistribution. Thus, if the average voter is lower than the average, middle-income and low-income citizens can determine the election result and thus claim higher tax rates for the rich.

Key words

Cohesion, Convergence, Economic Growth

JEL Classification: A13, O4, O10

Introduction

One of the key economic policy objectives is to stimulate total output in the economy, i.e. the macroeconomic output (product), since the level of total income in the economy (and hence the standard of living of every citizen) also depends on the size of the product (Calvo, 2006). Likewise, despite questioning the use of standard macroeconomic aggregates to measure production by some economists, these indicators are still the best possible solution. Furthermore, the most commonly used standard macroeconomic aggregate to measure output (macroeconomic output) is gross domestic product (GDP). It is a monetary expression of the total value of goods and services newly created in a given period in a given territory; while it is used to determine the performance of the economy. It can be defined, respectively calculated in three ways: the production method (approach), the expenditure method and the income method. On a similar note, GDP is a key indicator of economic development. It represents the sum of the value added by processing in all sectors in activities considered in the system of national accounts (SNA) to be productive (i.e. including services of a market or non-market nature). To exclude the impact of price changes, it is expressed in constant prices. More profoundly, it is the most commonly used aggregate to measure production - all the final output (goods and services) produced in the country over the reference period, by the production factors. It doesn't matter if it's produced by are citizens or foreigners. If they are located within the country's boundaries, their production is included in GDP (Romer, 2018). Another standard but less widely used macroeconomic aggregate is the gross national product (GNP). It is the value of the final production produced over a certain period of time by domestic production factors anywhere in the world. Thus, unlike GDP (where the key factor is the location of factors of production), emphasis is placed on the ownership of the factors of production (Tucker, 2018). On the other hand, GDP (even though it is the most important macroeconomic aggregate) has justified doubts about its capability and relevancy. Among its shortcomings is the inability to record the gray economy, i.e. the economy, which includes activities that are carried out without proper permits, offending activities and avoidance of tax payments. Another lack of GDP is the inability to record the products and services that one provides to himself (the value of free time and this is a major gap in measuring wellbeing).

1. Interaction between Economic Growth and The Business Cycle

So far described the total size of production in the economy (the level of real GDP) represents more or less a static view of reality, since a more perceived indicator than the simple GDP is the dynamic aspect, i.e. the growth rate of output in the economy (growth rate of GDP). There are two basic approaches to economic reality and economic development, which are based on two key issues described by economic theory. First of all, it is the economic cycle that reflects the oscillations that occur in the economy (can be understood as the fluctuations of the short-term growth rates) and second of all, the economic growth, which shows the long-term trend of economic development. The economic cycle is therefore meant the oscillation of the real product around its potential level - it is a periodic occurrence of fluctuations in economic activity (Knoop, 2015). There are two basic circuits of theories dealing with this issue of the cycle (the business cycle, also known as the economic cycle or trade cycle). Business cycles are generally measured / estimated by considering the growth (development) rate of real GDP. Regardless of the regularly-applied term cycles, these changes in economic activity don't display uniform or predictable periodicity. Furthermore, the conventional boom-and-bust cycle alludes to changes in which the extension is swift and the contraction rigid.

The first circle are the traditional theories of the cycle which include the monetarist approach, the approach of the new classical macroeconomics, the approach of Keynesian directions, etc. The monetarist approach sees the source of the oscillation of the economy in the fluctuations of the money supply when the deviation of the actual inflation rate from its expected level increases, the growth rate of real wages, and consequently a decline in costs of businesses and production growth. The approach of a new classical macroeconomic theories is based on the assumption of rational expectations where economic cycles result in an unexpected economic policy. Keynesian directions operate with the accelerator and multiplier principle. According to the Keynesian approach, cyclical developments are the result of internal market instability - fluctuations in aggregate demand lead to fluctuations in gross domestic product, employment and other economic variables (Hori, 2017). The second circle of theories explains the long-term economic cycles. These theories of a real business cycle see the cause of cycles on the aggregate supply side. Furthermore, these theories reject the claim that there are deviations of the real product from its potential level, but claim that the potential product itself is fluctuating (Grinin, 2018). As the reasons for the fluctuations of potential product, theoreticians of the real economic cycle see, for example, oil shocks, crop failure, war, etc. For the economic growth of the country would be optimal to maintain a stable growth rate, maintaining a steady trend of economic development. Besides, balanced and stable economic development does not occur forever, since in market economies, are typical economic cycles.

1.1 Economic cycle and the Importance of Long-Run Growth

Macroeconomists give careful consideration to long-run growth than they completed two decades back. A large portion of this is the consequence of expanding consciousness of the significance of the subject: not exclusively is for quite some time run economic growth the eventually most vital part of how the economy performs, yet economic arrangements can have powerful effects on the rate of long-run growth. Macroeconomists will in general break the study of long-run growth into two sections. The initial segment is the assurance of an economy's steady-state capital-output ratio (and the speed with which it will unite to that steady-state capital-output ratio). The second part is the assurance of the rate of creation, innovation and advancement. An economy with a higher capital-output ratio will be a more extravagant economy (in the event that it approaches similar developments and advancements). However, an economy with higher rates of development and advancement, quicker aggregate factor profitability growth, will in general end up more extravagant quicker. One approach to build genuine GDP per laborer is to expand the capital stock per worker.

The capital stock per worker can be expanded from numerous points of view - greater venture, slower deterioration, or slower populace growth. As the capital stock per laborer rises, the estimation of the machines and workspace accessible to the normal worker rises. With more help from capital, the normal worker is progressively gainful (Shimer, 2010).

In any case, boosting profitability by raising capital per worker is liable to unavoidable losses: each progressive increment in capital per worker creates less of an expansion underway than did the one preceding. In the long run the lift to add up to profitability given by further increments in the capital stock does not add up to enough to compensate for the mileage on the additional capital utilized. The heft of increments in profitability and material ways of life through the span of decades or generations needs to originate from an unexpected source in comparison to just developing the measure of capital that the economy has.

2. The Relationship between Financial Development and Economic Growth

De Gregario and Guidotti in their research called *Financial Development and Economic Growth* found that financial advancement prompts an enhanced growth efficiency. Wachtel and Rousseau in *Financial Intermediation and Economic Growth* analyzed the causal connection among finance and growth in the United States, the United Kingdom and Canada and that their test for Granger-causality showed that financial advancement causes economic growth. However, Galetovic in *A Synthesis and Interpretation of the Evidence* reports no causal connection between financial improvement and economic growth. Additionally, according to Arestis and Demetriades in their research called *Finance and Growth: Institutional Consideration and Causality* found out that bank-based and capital-market-based financial frameworks and in addition the viability of government approaches in the two frameworks may have suggestions concerning the issue of whether financial developing winds up ready to advance economic growth. Bank-based financial frameworks are the nearby contribution of banks with modern firms. A nearby connection exists among banks and enterprises in bank-based financial framework. Organization depends on bank credits that is the normal for bank-based financial framework. Subsequently, bank assumes a vital job during the time spent economic advancement. The qualities of capital-based financial framework are exceedingly created capital markets and banks that have moderately low association in the designation of assets of financial resources. Bank-based financial framework empowers long haul finance which is devoted to long haul gainful venture that diminishes theoretical exercises. Consequently bank-based financial framework advances financial strength and help execute economic arrangements effectively. In bank-based financial framework, financial and mechanical capitals are related to the point that theoretical finance cannot impact genuine economic movement as it does in capital-market-based financial framework (Cline, 2010). Bank-based financial framework may help execute expansionary fiscal and mechanical approach, given the connection among financial and modern firms.

In developing economies, financial progression and financial restraint impact economic growth. Financial advancement is portrayed by market decided loan fees which are appealing for surplus units. Financial developing occurs and venture increments. The abrogation of coordinated credit programs enhances the nature of speculation. Higher market decided rate of profits can be earned through venture ventures. In this way, in a changed financial framework, financial improvement and economic growth is decidedly connected with the heading of causality running from financial advancement to economic growth. Actually, the normal for quelled financial framework is that the government keeps falsely genuine loan costs lower. The nature of venture lessens in light of restricted measure of loanable subsidizes rationed in agreement to government mandates (coordinated credit programs and concessionary loaning rates). Both the quality and amount of speculation lessen which thus influence economic growth. Regardless of, a positive connection between financial improvement and economic growth can be acquired. Notwithstanding, in a subdued financial framework financial extending may not be as powerful in advancing economic growth than in a changed framework (Emerson, 2018). Consequently, it appears that connection between financial advancement and economic growth must be more grounded under changed economies than under subdued economies. Causality connection between financial advancement and economic growth is inspected in this paper in vector autoregressive structure. Financial advancement is proxied as the ratio *M2* to genuine GDP that is meant by *M2Y* and economic growth is estimated as the normal rate of genuine per capita GDP that is signified by *Y*. The structure of cointegration testing methods created by Johansen in *Likelihood-based Inference in Cointegrated Vector Autoregressive Models* can be connected to assess long-run connections between economic factors. Accordingly, Johansen most extreme probability technique in a vector autoregressive system can give a premise to assessing the long-run connection between financial improvement and economic growth. We use Johansen cointegration strategy to test for the nearness of a cointegrating vector between financial advancement and economic growth. The strategy is based on the most extreme probability estimation of the error correction model (ECM):

$$\Delta x_t = \eta + \Gamma_1 \Delta x_{t-1} + \Gamma_2 \Delta x_{t-2} + \dots + \Gamma_{k+1} \Delta x_{t-(k+1)} + \pi x_{t-k} + \varepsilon_t \qquad (1)$$

where the matrix Γ catches the short-run parts of the connection between the components of x_t and the matrix π mirrors the long-run data. There can be at least one than cointegrating relations in a multivariate cointegration model contingent upon the quantity of straight blends of x_t. The position of π, meant by *r*, can decide the quantity of cointegration relations. The matrix π can be deteriorated in two frameworks, α and β where $\pi = \alpha\beta'$. The loads or the speed of alteration (the error correction coefficients) are contained in matrix α that compel the arrangement back towards their basic balance relations and the cointegrating vectors are contained in matrix β that condense the hidden long-run relations. Further, $x_t = \left[Y_t \quad M2Y_t\right]'$, η is a (2×1) vector of parameters, $\Gamma_1, \Gamma_2, \dots, \Gamma_{k+1}$ and π are (2×2) grids of parameters, and ε_t is a (2×1) vector of white noise errors. For this situation, condition (1) can be revamped in full as:

$$\begin{bmatrix} \Delta Y \\ \Delta M2Y \end{bmatrix} = \begin{bmatrix} \eta_1 \\ \eta_2 \end{bmatrix} \begin{bmatrix} \Gamma_{i,11} & \Gamma_{i,12} \\ \Gamma_{i,21} & \Gamma_{i,22} \end{bmatrix} \begin{bmatrix} \Delta Y_{t-i} \\ \Delta M2Y_{t-i} \end{bmatrix} + \begin{bmatrix} \alpha_1 \\ \alpha_2 \end{bmatrix} \begin{bmatrix} \beta_1 \\ \beta_2 \end{bmatrix}' \begin{bmatrix} Y_{t-k} \\ \Delta M2Y_{t-k} \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \end{bmatrix} \qquad (2)$$

Two probability ratio tests proposed by Johansen are utilized to decide the quantity of cointegrating vector in x_t. These are the maximal eigenvalue test and the follow test. The maximal eigenvalue test evaluates the invalid theory that there are actually *r* cointegrating vector against the elective speculation that there is *r+1*. The maximal eigenvalue test utilizes the *(r+1)* eigenvalue and is given by:

$$\tau_{\max} = -N \ln\left[1 - \Pi^2_{(k+1)}\right] \qquad (3)$$

The follow test assesses the null hypothesis that there are *r* or less cointegrating vectors against the alternative hypothesis that there are more than *r*. This test is defined by:

$$\tau_{trace} = -N \sum_{i=r+1}^{p} \ln\left(1 - \Pi_i^2\right) \qquad (4)$$

Of these two probability ratio tests, the follow test may need control with respect to the most extreme eigenvalue test. For these two tests, asymptotic basic qualities rectified for degrees of opportunity are given by Reimers in *Comparisons of Tests for Multivariate Cointegration*.

2. Different Views on Real Product Growth

Economic growth represents a situation where the potential product level is rising. However, growth in the overall potential product does not automatically mean improving living standards. Potential product is the theoretical overall product of the economy that the economy would achieve in full utilization of its production factors (labor, natural resources, capital). The economy reaches its potential GDP if it moves to the limit of its production potential. In this context, improving living standards depends on potential product growth per capita. Thus, the living standard of the population will only increase if the potential product grows faster than the population. Economic growth can also be defined as a process of increasing the production capacity of the economy. Theories of economic growth then examine what influences the capacity of the economy, i.e., by what basic sources and factors the product's growth is determined. Quantification of economic growth is based on the calculation of the abovementioned change in production (growth rate of output). Economic growth shows the growth of production over a longer period of time. The easiest way of calculating economic growth is thus the geometric mean of year-on-year growth rates over a given period and is basically the approximation of the potential product. Economists focused on economic growth claim that long-term growth per capita is often the only macroeconomic indicator that really matters. The differences in long-term growth rates of GDP thus have a much greater impact on the standard of living of the individual than on short-term economic fluctuations. It is true that short-term stability policy may eventually improve the economic situation in the order of several percent of GDP. However, a policy in the long run capable of increasing the rate of growth may mean a difference in the level of well-being achieved for the economy (Weil, 2012). According to the histogram of annual growth rates per capita in 122 economies of the world in 1965-1985, reported by Barro and Sala-i-Martin in their publication *Economic Growth*, growth in headline in the fastest growing economies grew at an average rate of 4.8% per annum, which corresponds to an overall increase of 161% over the twenty years under review. The output of the five countries with the worst economic performance declined at -1% per annum, real GDP per capita fell by 18% over the same period. The fastest growing economies thus ended in more than three times the GDP in just 20 years compared to economies with the worst economic performance. In general, one of the most important sources of real product growth is the growth of factors of production, labor, land and capital (extensive growth) and the growth of their overall productivity (intense growth). In practice, however, long-term growth sources vary according to theories and growth models.

The first growth theories originated in the 18th century. Classical economics Adam Smith and David Ricardo considered the main source of economic growth a workforce and its productivity. An important element was an international trade, which, according to the classical theory, through international specialization and division of labor, allows for long-term economic growth. Another classical economist, Thomas Malthus, argued that population growth in the absence of additional loose land would lead to a reduction in per capita product, under the law of declining yields. These first theories have in common that they completely neglect the fundamental influence of capital accumulation and technical progress. The first model of modern theory of growth is the Harrod's model. This is the most significant growth model of the period before the arrival of the neo-classical model Solow and Swan. Harrod's model was an attempt to dynamically conceive of Keynes' theory, linking the theory of short-term imbalances to the growth theory. Harrod's model puts a number of basic requirements on the economy: all savings in the economy are invested, the state has a decisive role in converting savings to investment, the marginal savings tendency, the labor growth rate and the capital intensity of production are constant, there is zero elasticity of substitution between production factors (Jones, 2013). The model expresses the so-called guaranteed growth rate. The guaranteed growth rate is a dynamic balance for continued long-term economic growth. The model also defines the natural growth rate. The natural growth rate is equal to the sum of the growth rate of the growth of the population looking for work and the rate of growth of the technical progress of the saving work. In this model, the economy achieves long-term equilibrium growth if the actual growth rate in each period is equal to the guaranteed growth rate and natural growth rate, so that the saving rate ensures sufficient capital for production and there is a balance between capital and the supply of efficient labor. Assuming that one unit of capital is needed per unit of production, the rate of savings will determine the actual growth rate. The economy will only achieve long-term sustainable growth if the savings rate is equal to the real growth rate of the product.

The problem is a factor of expectation. If real growth is expected to be greater than the guaranteed growth rate, investors will invest more than they would invest at a guaranteed growth rate. Through a multiplier, these investments will lead to further output growth. Investors do not realize that output growth was due to their expectations, and will expect further output growth in the future. According to Harrod, capitalism is internally unstable, the instability of which lies in forming investment expectations. The model therefore considers it necessary to maintain a certain level of investment to avoid imbalances in inflation or unemployment. The main problem and deficiency of Harrod's model, however, is that it does not define the mechanism by which this equilibrium would be established.

Neoclassical growth theories are based on the theory of factors production. Growth is, according to neoclassical economists, dependent on changes in capital, labor and land, multiplied by their marginal productivity. Neoclassical growth models are based on several conditions. They assume that land gain is equal to zero and no longer has an effect on the growth of retirement. Another assumption arises from the need to incorporate capital into an increase in capital gains, and this effect is therefore included in the change in the marginal efficiency of capital. According to neoclassical economists, each of the factors is infinitely divisible and can be used in any combination with another production factor to produce any amount of production. Any infinitely small change in factors will cause a change in overall production. The most famous neoclassical model is the Solow–Swan model, which significantly extends Harrod's model. Unlike Harrod, however, Solow–Swan consider capitalism to be a relatively stable system. Their model assumes that technical progress is expanding work so that technological innovations multiply the volume of physical work (so-called Harrod's neutral technical progress). It also assumes positive decreasing labor and capital returns, constant labor growth rate, technical progress, amortization of physical capital, constant saving, saving function, equality of savings and investment, a closed economy, full employment, flexible wages and prices, and a neoclassical production function (Grandville, 2016).

Solow–Swan model operates with the term *steady state*. A steady state represents a situation where each additional unit of capital per employee has no effect on output growth. This is due to the declining marginal product of capital. Under steady state, the growth of capital accumulation will only make sense if labor force growth, if investment serves as a substitute for impaired capital, or if technical progress improves labor. Under the steady state, the rise in the per capita income is due only to the growth of technical progress. Changes in capital accumulation therefore depend on the degree of savings and the size of the product per employee depends on the production function. It is reduced by the rate of labor force growth, the rate of increase in technical progress, and the rate of depreciation multiplied by the amount of accumulated capital per worker. When the economy is in a steady state, the change in capital will be zero. In a steady state, real investment equals maintenance investment. According to Solow–Swan model, every economy is moving towards steady state, while countries with a lower economic level grow relatively faster than countries with a higher standard of living, as poorer countries are more distant from a steady state.

With the expansion of empirical data on long-term growth, some weaknesses of Solow–Swan model began to be highlighted in the 1970s. Solow–Swan model predicts a much faster pace of economic convergence, more significant differences in the rate of return on capital between countries, and the smaller differences between countries in the share of retirement capital than is actually observed. Another weakness of the neoclassical model is that it basically does not explain growth. When the economy comes to a steady state, the growth of retirement per person is determined only by technical progress and it is exogenous. In order to solve the emerging problems of the neoclassical model, the so-called new theory of growth began to form. The new growth theory can be distinguished in two fundamental streams. The first trend is that the main driver of long-term growth is capital and not technological progress. Capital is widely understood in these theories, and in addition to physical capital, human capital is also included (capital is not a driving force of growth, but unlike Solow's model, it explains the efficiency of work as knowledge and more closely modeling its development over time) (Daly, 2012).

The new theory of growth seeks to endogenize technological progress. The endogenization of technological progress tries to explain better the sustainability of the world economic growth as well as the differences between countries. The so-called AK model of economic growth (a special case of a Cobb–Douglas function with constant returns to scale) are the easiest and most basic model of endogenous growth models. Unlike the Solow model, when the growth rate of savings led to an increase in economic growth only until a stable state is achieved, in the endogenous model the growth rate of savings leads to a steady increase in economic growth. AK models assume that the by-product of investment is knowledge creation. The business that invests, therefore, learns how to produce more efficiently. The impact of this by-product of the investment will be so high that returns on capital will be constant or even rising. Economics in a stable state may not only grow by increasing the rate of technological progress, as explained by Solow's model. Paul Romer's learning-by-doing model assumes positive externalities from the accumulation of capital. Part of the benefit of capital accumulation does not belong to the owners of the capital but to the rest of the company. In the case of capital formation such as an enterprise, new ideas arise, they enter a general inventory of knowledge and are consequently a product of investment in research and development and have a positive effect on the productivity of other enterprises. Private profits may be declining, but global output may have constant or even rising yields. The level of technology, i.e. total productivity, is given by the knowledge of the whole economy.

Another endogenous growth model can be considered two-sector Uzawa–Lucas model, which extends the AK model by a two-sector setup (physical and human capital are produced by different technologies). Investing in human capital is thus an alternative to technical progress. Another direction of the new growth theory includes R&D models that operate with microeconomic decisions in the area of R&D, precisely describe the innovation process (Weil, 2012). These models are further divided into two groups. The first group of models considers technical progress as the growth of the number of different products and intermediates. The second group deals with product quality.

3. Economic Development and Institutions

The political regime, its characteristics and its impact on economic growth are among the institutional factors of development. The influence of institutional factors, that is, factors influencing the institutional environment, social and legal norms and rules (rediscovering aspects of classical political economy) deals *institutional* (Clarence Ayres, Adolf Berle, John R. Commons, John Kenneth Galbraith, Wesley Mitchell, Thorstein Veblen) and *new institutional economics* (Daron Acemoglu, Masahiko Aoki, Armen Alchian, Yoram Barzel, Ronald Coase, Steven N. S. Cheung, Harold Demsetz, Avner Greif, Claude Ménard, Douglass North, Elinor Ostrom, Oliver Williamson). The main idea of (new)institutional economics assumes that economic growth and development depend decisively on current institutions. Institutional economics should address the question of why some countries are rich and other poor even though they have a similar approach to knowledge, a similar approach to capital markets, the same availability of land and natural resources, similar amenities to human capital. The answer of institutional economists lies in the qualitative differences of national institutions. Economic development and growth (according to institutional economists) are influenced both by formal rules (laws, etc.) and by informal rules (traditions, customs, etc.) (Kapp, 2014). According to Douglass C. North, institutions are *"commonly known rules to structure repetitive interaction situations which are complemented by an enforcement mechanism that ensures that non-compliance with the rule-component is sanctioned"*. Five different types of institutions can be distinguished (Table 1), i.e.

institutions that are not enforced by the state and violations of their rules are sanctioned within the company are then categorized as internal institutions. On the contrary, such institutions whose enforcement the state implements and where the state also sanctions their violation are called external institutions.

From the point of view of the influence of the political regime on the institutional environment of the state, the fifth type of institution will probably be the most important - external. The political regime will act most prominently on the institutional environment through the state. In the long run, however, the political regime can also be important for other types of institutions. Voigt also recalls existing relationships between internal and external institutions. In his opinion, the quality of external institutions is strengthened by internal institutions, but also that their action may be contradictory. What matters is how individual institutions work on economic variables. So how does it work on micro- and macro-economic situations? At the microeconomic level, institutions can act on voluntary exchanges of assets between private actors (types of commodities exchanged, payment methods, etc.), organizing repeated transactions by private individuals, collective bargaining and motivation for collective bargaining (Kasper, 2013). At the macroeconomic level, the institutional environment will act the lawful regulation of private property, contractual freedom, law and hence economic growth and development itself.

Table 1. Types of Institutions

Kind of rule	Kind of enforcement	Type of Institution
Convention	Self-enforcing	Type-1 internal
Ethical rule	Self-commitment of the actor	Type-2 internal
Customs	Via informal societal control	Type-3 internal
Private rule	Organized private enforcement	Type-4 internal
State law	Organized state enforcement	External

Source: Stefan Voigt, 2009

Moreover, efforts to measure and compare the quality of institutions are done by the Index of Economic Freedom. It was developed by renowned economists, The Heritage Foundation and The Wall Street Journal to measure the degree of economic freedom in the world's nations. Its study is based on the assumption that more free institutions, which are not weakened by state action, i.e. state-defined price or quantitative regulations, foreign trade restrictions, tax rates, currency stability, etc., lead to higher economic growth. Earlier studies that looked at the links between economic growth and economic freedom were based on the assumption that freedom must be great everywhere where there are extensive democratic rights. Democracy was therefore a substitute variable of economic freedoms. However, the Index of Economic Freedom first of all tries to quantify the freedom of institutions. It is composed of 21 indicators, which are divided into seven groups, each of which has a certain share in the total index.

The first group takes into account the state's share of total consumption expenditure and share of transfer payments and subsidies to gross domestic product. The second group measures the importance of the state-owned enterprises, the freedom of enterprises to determine their prices, the level of taxation and the existence of a general defense duty. The third group on monetary policy and price stability takes into account the rate of money supply growth, the range of annual inflation rates and the current inflation rate. The fourth group is based on the possibility or the impossibility for citizens to hold accounts in a non-national currency and the possibility or the impossibility to legally hold accounts in other countries and the magnitude of the difference between the official exchange rate and the black-market exchange rate. The fifth group takes into account the security of private property rights, equality of citizens before the law, and access to impartial justice. The sixth group measures the amount of taxes levied on foreign trade, along with the average level of taxation on international transactions and the degree of country integration in the world economy. The last group consists of four indicators that ask how many percent private bank deposits are held with private banks, how many percent of the total volume of loans is directed to private entities, how much interest is determined on the market, and to what extent is limited mobility of capital. In the first ten places within the scope of economic freedoms were in 2018 Hong Kong (90,2/100), Singapore (88,8/100), New Zealand (84,2/100), Switzerland (81,7/100) and Australia (80,9/100) (The Heritage Foundation, 2018).

3.1 Democracy, Political Stability and Economic Growth

Numerous examinations have been led on the connection among democracy and growth. The general comprehension of the connection between economic growth and democracy is that democracy cultivates economic growth with respect to non-democracies in a given nation. On the other hand, economic instability has a negative effect on economic growth. Democracy record accelerated growth as it is internally more stable, while higher incomes of the population have a positive effect on the functioning of democracy, but there is no such relationship in autocracy. Authoritarian regimes are generally less stable in the deteriorating performance of the economy, as they lack legitimacy. Authoritarian regimes can survive this period of sustained economic growth, but when the economy begins to stagnate for a long time, the government has a much better chance of remaining a democratic government because it is characterized by legitimacy. Expectations about the future of the political regime are also important. The risk that the country will cease to be democratic is severely damaging to economic growth. As a result, the democracies with a high degree of democratic capital (values, norms, cultural and sociological attitudes of the population) and a long-standing democratic tradition have a demonstrably positive impact on economic growth. Likewise, a stable democracy encourages economic development, which leads to the strengthening of democratic capital, thereby further enhancing stability and growth (Lewis, 2003). All things considered, this theory has gone under the examination of many market analysts, who call attention to that nations, for example, Hong Kong, Singapore and Taiwan, which accomplished super growth notwithstanding of the truth that the governments of these nations are authoritarian in their nature.

Nonetheless, the aftereffects of measurable examinations directed regarding this matter have been somewhat uncertain. Such uncertain outcomes come from utilizing decreased shape models that pool information from developing and developed nations. On a similar note, economic growth and democracy are two terms that have regularly been heard utilized in a similar setting by open observers, government officials, and well-known media. Subsequently we are regularly looked with the inquiry of whether the theory that democracy encourages economic growth is just the pie in the sky thinking of people who esteem both democracy and growth. The significance of looking at this inquiry in more noteworthy detail lies in the way that it is a key strategy question for some global guide establishments, for example, the IMF and World Bank. This issue is especially essential to many developing nations because of the way that one of the most vital preconditions towards getting help from these establishments is political progression (Dalziel, 2018). Consequently, are approaches of western nations that support the establishment of democracy to goad economic growth in nations like Somalia and Haiti of any practical use? In many developing nations political progression can prompt economic strategies that are hindering to economic growth. For instance, nations that have a more prominent dimension of political opportunity may not actualize strategies, for example, exchange progression that could beneficially affect growth. This can be outlined by looking at the circumstance that South Korea looked amid the late 1980's the point at which its government endeavored to move towards more prominent political opportunity as well as economic opportunity. In this manner with democratization going full bore, Korean premium gatherings, for example, the agriculturists, upset against free market arrangements, for example, import advancement, keeping the current government from executing free market strategies.

Moreover, the significance of the dimension of democracy can be delineated utilizing the accompanying model. Give us initial a chance to accept that the economy in a given country comprises of various lease looking for gatherings. In a popularity-based country the government is then controlled by one of these gatherings or an alliance of different gatherings. Such situations naturally advance lease looking for as the government tries to fulfill the decision gathering or alliance of gatherings with the expectations of picking up or remaining in power. It very well may be expressed just that the government is childish, as in it is concerned simply with the welfare of its own individuals. The gathering that the government speaks to is essential as the government should then pick between expending or putting resources into physical capital. Along these lines the government faces an exchange off between executing strategies that fabricate political capital through lease looking for exercises that support current consumption and development situated approaches. Along these lines developing nations with equitable routines are bound to advance consumption at the cost of savings. On the other hand, likelihood of losing power is often related specifically with the level of political (in)stability in the country. Such instability can have genuine outcomes on monetary growth as there is an immediate association between capital flight and political instability. At the point when a political routine is unstable, sparing rates decline as instability propels customers to build spending as their savings could end up useless. Savings likewise turned out to be repetitive when political instability prompts the removal of individuals, denying them of a source of living. Investors' interest for settled capital stocks will likewise diminish with expanding political instability. Notwithstanding when investors do invest, they will in general support businesses and investment openings that are fluid and theoretical (Hollyer, 2018). Therefore, investment in such nations tends towards low profitability businesses that are not capital escalated which would give the establishment to advancement. Therefore, two of the most fundamental factors that support financial growth, investment and savings, are influenced antagonistically by political changes.

Various studies have recorded a vigorous constructive outcome of economic freedom on economic growth. Economic freedom can be depicted basically as a measure that describes how much an economy is a market economy. As such, it is an estimation of the capacity to go into willful contracts with restricted government mediation as control, assessments, and principle of law which maintains contracts and secures private property. So how does economic freedom influence growth? Economic freedom builds growth through its impacts on the neoclassical growth factors, physical capital and human capital. The sort of organizations set up importantly affects the impetuses of economic performing artists to be progressively effective or wasteful. Along these lines, hypothetically, establishments that advance economic freedom additionally have the ability to advance motivating forces which in tum advances profitability. Subsequently, it tends to be asserted that economic freedom has the ability to advance effectiveness by urging rivalry because of less directions and government undertakings. It likewise empowers specialization and economies of scale, as economic freedom empowers ability to be designated to where it produces the most noteworthy esteem. Therefore, economic freedom may comprise a logical factor for growth in developing nations. Likewise, Institutions frame the incentive structure of a general public, and the political and economic institutions, in outcome, are the basic determinants of economic execution. Along these lines, the government adequacy marker signifies the nature of open administration arrangement, the quality of the organization, the fitness of government employees, the freedom of the common administration from political weights, and the believability of the government's promise to strategies. As such, government adequacy estimates the fitness of government institutions (Kawanaka, 2016). In this way, hypothetically, if government institutions were working productively by diminishing the costs of exchanges, there would be an expansion in the productivity of the neoclassical growth factors - stimulating economic growth.

In the current literature there are two comprehensively contradicting perspectives relating to this connection among growth and the degree of democracy, the equivalence viewpoint and the contention point of view. The similarity point of view is upheld by a school of financial specialists and political researchers that keeps up that democracy beneficially affects growth both straightforwardly and in a roundabout way. Then again, the contention point of view is shielded by a second school of thought that keeps up that democracy adverse effect on growth. Protectors of the struggle viewpoint point to nations, for example, Hong Kong, Singapore and Taiwan, which accomplished super growth in any case of the reality that the governments of these nations were authoritarian in nature. Then again, others point to the dismal execution of economies in authoritarian routines in numerous African nations - if dictators made countries rich, Africa would be an economic colossus. The contentions between these two perspectives track with the lines of which routine can keep up property rights, diminish current utilization, and actualize convenient and fitting economic approaches that both lead to and continue growth (Moore, 2018). Defenders of the likeness point of view contend that vote-based foundations make an arrangement of balanced governance that successfully control governmental power and limit the potential for the execution of disliked strategies. Furthermore, it has likewise been contended that democracies are better ready to ensure private property, which numerous financial specialists guarantee to be the establishment of material advance. Likewise, human capital is another channel through which democracy could impact growth as democracies give more noteworthy load towards the fundamental needs of the open (Casasnovas, 2007). Advancement requires expansive sums of investment that requires substitution far from current utilization.

Therefore, proponents of the struggle point of view are wont to contend that a majority rule government can't execute such arrangements because of a paranoid fear of being casted a ballot out of office. It has been stated that, such speculation programs infer cuts in current utilization that would be excruciating at low dimensions of living that exist in every single developing nation. No political gathering can would like to win a fair race on the stage of current penances for a splendid future. Authoritarian routines have progressively brought together power with which to organize economic growth than democracies, especially in developing nations. Nor is there a rule that asserts that non-just governments can't keep up private property. Then again, it has been contended that democracies in developing nations may really adverse effect private property rights. Democracy offers the individuals who are poor, mistreated or generally hopeless a result of the initial endowments a chance to review through the state. Supplied with political influence in the shape of universal suffrage, the individuals who endure as a result of private property will endeavor to utilize this influence to seize the wealth. The across the board use of democracy as an intermediary for assurances of property rights is in this way unmerited.

Conclusion

In conclusion, we have found out that political competition reduces the rate of physical accumulation of capital and labor, i.e. reduces investment and the supply of labor factor. On the other hand, it increases the rate of human capital and labor productivity. In fact, freer regimes with more political competition may not grow faster than non-free regimes. What is important, however, is the quality and structure of growth - democratic countries will rely on long-term and sustainable intensive growth, undemocratic to short-term and extensive. In the context of the influence of institutional factors on economic growth, democracy assumes that political competition allows voters to use the state as a source of redistribution. Thus, if the average voter is lower than the average, middle-income and low-income citizens can determine the election result and thus claim higher tax rates for the rich. Although this situation would lead to an increase in tax revenue in the short term, it would reduce incentives for capital accumulation, especially among the wealthy. However, political competition can also negatively affect fiscal and monetary policy, since it is the source of a mismatch between the political and economic cycles and leads to a weakening of investment activity. Political competition could have a similar effect on job offer. Moreover, non-democratic regimes simply have the advantage that their lack of social or political pressure makes it possible for people to work, even with a minimum wage. While political competition could discourage investment in physical capital, it could have a positive effect on the human capital. Based on the theory of the media voter, electoral rivalry will provide incentives to provide public goods, for example, in the area of education and health care, and thus increase the level of human capital. Politically more competitive regimes will also likely increase productivity and technological innovation. political competition stimulates innovation and the dissemination of best practices, as the best ideas come out of such a free society. more competitively-priced regimes have a greater chance of eliminating different regulations and customs protection, and these pro-market measures should encourage resource efficiency and the development of new processes.

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CHOOSING OPTIMAL BUSINESS VALUATION METHOD: LITHUANIAN CASE

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Abstract

Business appraiser face a problem in their practice when it comes to answering questions about what to do and what provisions should be followed and how to make decisions about the selection of valuation methods. The data presented in the literature, the valuation reports in practice, show that the value of a company or shareholding calculated by different methods may differ significantly in individual cases. Therefore, based on the available data and their analysis, it is necessary to justify which methods or combinations of methods, taking into account the factors influencing the business, will fully reflect the value of the business (shareholding) of the company. This article presents an analysis and systematization of literature on business valuation techniques and their application to business (stock) value calculations. The authors provide a model for the selection of valuation methods that can be used by professional appraisers and potential investors when making decisions related to the process of acquiring shareholdings in companies.

Key words

business valuation, methods, income approach, market approach, assets.

JEL Classification: D81, G32, M21

Introduction

Although the stock market in Lithuania is still very young, investments in companies that are not usually listed on the stock exchange are going on constantly. These investments in company equity are always associated with a wide range of risks and uncertainties. Insufficient analysis of the acquire and the uncontrolled acquisition of a

One of the most important reasons for investment decision is the selection of methods used to calculate the value of the investment object and the application of these methods and the interpretation of the results of the calculation. In order to make a profitable investment decision and generate sufficient return for the investor in the future, it is expedient to evaluate the assets, finances, competitive environment and other factors of the company in which the shareholding is acquired using a variety of methods and models. This can only mean that you need to know the potential market (investment) value of a business or a block of shares before buying a business or a shareholding, in other words, we need to be clear enough to know the price of the item being negotiated with the seller.

shareholding in the company can enable the investor to take the risk of acquiring a purchase that can only bring distance. Therefore, investing in a block of shares must take all possible steps to limit and mitigate the risk associated with the acquisition of the company's shareholding and to expect the buyer to actually acquire what he is going to pay for.

Regardless of all the uncertainties, it is very important to evaluate all possible circumstances related to the implementation of the transactions, given that the investment condition is reasonable and that the investor should not pay more for the assets than the assets are worth. This is inextricably linked to an impartial, competent, based on clear, verified assumptions, business or acquisition of a shareholding valuation. Therefore, the choice of valuation methods must not be an automatic and simple process. *The goal of the paper*. Identify the factors influencing the choice of valuation method, their significance and make a decision-making model. To accomplish this goal several objectives must be accomplished:

1. based on a literature review, create a questionnaire for experts to identify factors

and criteria that influence the selection of valuation methods;
2. to conduct a survey of Lithuanian business valuation experts - certified business appraisers;
3. to create a model for the selection of business valuation method.

Business valuation methods and peculiarities of their application

Business Valuation Methods, Calculation Methods, and Principles in Developed Countries were developed in the 1930s. These principles are based on classical economic theory and practice on marginal utility, production factors, and value concepts. (Adomavičiūtė, 2011, p. 5).

In the Asset and Business Valuation Methodology (2012), we see that two pages of information describing the methods and calculation techniques used to calculate the value of a business (shareholding). The following methods may be used to evaluate the business (shareholding) value (Methodology for Valuation of Property and Business, 2012, pp. 10-13):

Table 1. Explanation of valuation methods

Method	Description
The comparative method	The method, which is based on a comparison of similar assets.
Income Method	A method where an asset is valued not as a sum of assets but as a business object generating profit.
A combination of the comparative method and / or the income approach and / or the cost method - a combination of asset approach methods	The essence of the method is the determination of the value of a business by applying the methods of valuing the market value of the company's assets, after deducting liabilities

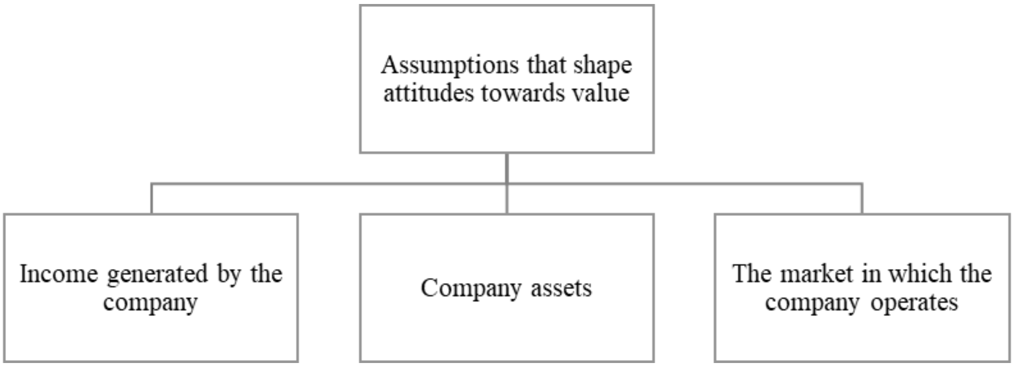
Source: Methodology for Valuation of Property and Business, 2012 (2009)

In Lithuania, the concept of "methods" is used for the calculation of value, which includes three groups of methods: income, comparative and asset approach methods. Each of the valuation methods includes a number of valuation techniques used to calculate the value of the company (shareholding). The application of all three valuation methods differs in that different information is used, which is collected during the study and the valuation itself. It could be argued that the value of the same company calculated using different methods and calculation techniques under the conditions of perfect competition should be the same. However, most markets are imperfect, and values calculated using different methods may not match. This fact confirms the importance of justifying the choice of methods and factors that influence the calculation of business value.

It is always advisable to apply all three valuation methods to calculate the value of the company, justifying which of the valuation methods objectively and correctly reflects the value of the company (Domnina and Savoskina, 2014, 18-23). The authors note that the main problem and difficulty in any valuation process is the selection of the appropriate valuation method. No valuer can be 100 percent sure that the market value of his selected valuation method is reliable, fair and maximally informative. These conclusions from the authors confirm that the selection of valuation method is one of the most important components of the valuation process.

In order to identify each of the valuation methods, we need to find out what each of the business valuation methods is based on, or what conditions or concepts shape one or another method to business. In the figure we distinguish three forming concepts or assumptions.

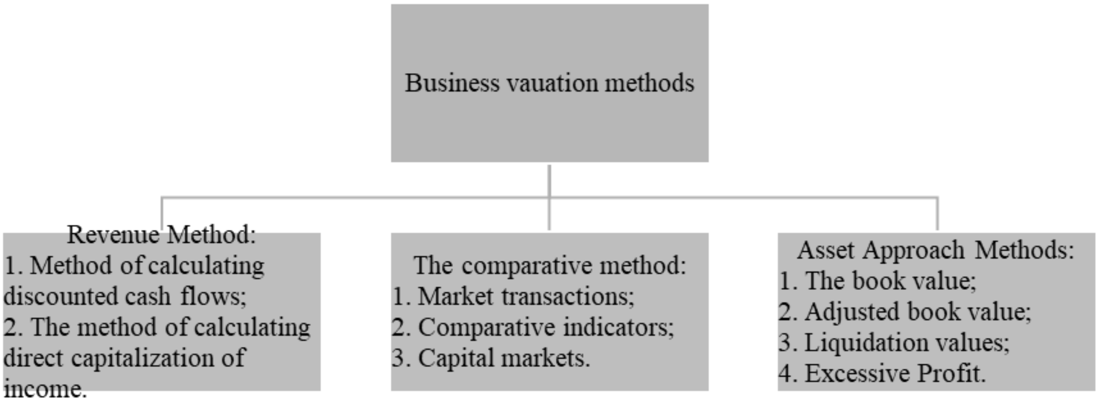
Fig. 4. Assumptions that shape attitudes towards value



Source: Domnina ir Savoskina, 2014.

It can be said that there are three main valuation methods that include a number of calculation techniques. Summarizing the literature on the classification of business valuation methods, we can provide a general, aggregating classification of business valuation methods:

Fig. 1. Valuation methods



Source: by Galasiuk, 2010; Damodaran, 2002; Norvaišienė, 2003.

On the basis of the literature analysis it can be concluded that the value of the business (shareholding) is calculated by three main methods. The chosen business valuation method allows to use different techniques of business value calculation.

Factors affecting selection of valuation method

It is important to clarify the subject of valuation when deciding which method to use in a particular situation and the purpose of this valuation. In other words, it is important to precisely define the problem of valuation. Three things are particularly important to consider in this context: the value that is expected of both the current value level, the valuation date, and the purpose of the valuation. The process of defining the valuation problem often determines the selection of the appropriate method (Parino, 2005).

Each of the valuation methods reflects the assumptions about the market, how it can or does not work. Using the discounted cash flow technique, it is assumed that market prices deviate from fair value but adjust over a long period. The comparative method assumes that markets are fairly fair and that companies in the sector or market in question are wrongly priced, the sector itself or the entire market is well priced (Damodaran, 2006).

It is also important to acknowledge that ultimately the quality of any value calculation depends on how well the valuer understands the company and its competitive position, its business strategy, and the company's future prospects. Basically, the approximate quality of business valuation depends on the information that is available and how well that information is used (Parino, 2005).

Choosing a business valuation method can be a less complex task than it might seem at first glance. Given the complexity of this process, it would be helpful to use the decision-making theory to determine whether and how decision-making on the choice of valuation method can be optimized. Professional literature offers different classifications of decision methods. If we use a classification in which we emphasize the relationship between empiricism and theory in the various decision-making methods, then we can divide the decision methods into three groups (Hamurova, Janošova, 2013):

- Empirical methods (empirical-intuitive, empirical-analytical, expert methods);
- Precise methods;
- Euristical methods;

Table 2. Methods of decision-making

Category	Strategy	Criteria
Empirical	Test and error	Based on extensive testing
	Experiments	Based on experimental results
	Experience	Based on existing knowledge
	Consultations	Based on professional advice
	Ratings	Based on approximate calculations
Heuristic	Principles	Based on scientific theories
	Ethical	Based on philosophical judgment and beliefs
	Representation	Based on general rules
	Availability	Based on limited or widespread information
	Confirmation	Based on assumptions and bias, and their justification
Accurate	Minimum prices	Based on money, time and energy reduction
	Maximum benefits	Based on increasing practicability, functionality, reliability, quality, and reliability
	Maximum profitability	Based on cost-profit relation

Source: Wang, 2007.

In practice, the selection of the valuation method is usually the result of different strategies based on experience, tests and mistakes, intuition, principles, ethics, consultation with impartial third parties and the result of many other strategies. Therefore, the decision-making process for selecting the valuation method cannot be assigned to only one group of decision-making processes. In the opinion of the author, the decision taken by the appraiser on the selection of valuation method is the result of decision-making strategies specific to the methods of empirical and heuristics solutions (Hamurova, Janošova, 2013).

In summary, neither the theory nor the practice has a clear and convincing answer - how the method should be selected and the results calculated by these methods are treated.

Research methodology

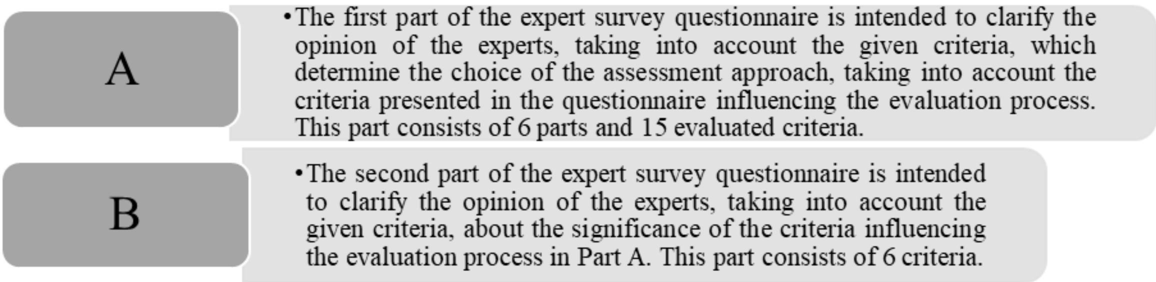
In business valuation practice, the decision to select a valuation method is often based on experience, tests and errors, intuition, ethics, consultation with impartial third parties, etc. In the opinion of the authors, the decision made by the appraiser on the selection of valuation method can be the result of various decision-making strategies.

Research object. Identifying the factors that influence the selection of business (shareholding) valuation methods and making a selection model. This research object has been chosen for two important reasons. First, the results of the different methods can vary significantly, and secondly, changing market conditions and circumstances create new requirements for valuers to ensure transparency in the valuation process, and therefore the reasonableness of the valuation method is an essential part of the valuation process.

Research methods. A qualitative research expert questionnaire (questionnaire) was chosen to fulfil the research objectives. It is a general science method that is widely used in various fields such as technology, law, military science, economics, and so on. The advantage of the expert method is that the experts logically analyse a problem by quantifying and formally processing the data. Depending on expert judgment, the degree of relevance of their opinions and the objectivity of the findings can be determined.

Questionnaire is divided into two main parts A and B. The definition and division of the parts of the questionnaire are presented in the figure.

Fig. 2. Parts of the questionnaire



Source: own processing

Analysis, mathematical statistics and systematization are used to process the data obtained with the help of the questionnaire. Based on the results obtained, answers are found to the research objectives.

The analysis of the data obtained during the research is important from the theoretical and adaptive point of view, because it allows to check theoretical statements, to emphasize regularities of social processes and phenomena, tendencies of change, as well as to prepare scientifically based recommendations. The survey data obtained after the survey were processed by quantitative analysis methods. Quantitative analysis was chosen considering that the essence of this analysis is an attempt to introduce concepts into numbers, classify them, measure and analyse them using statistical analysis procedures.

The survey samples. The website of the Audit, Accounting, Property Valuation and Insolvency Management Service under the Ministry of Finance of the Republic of Lithuania publishes 32 certified business appraisers, the business appraisers certified in the Republic of Lithuania are published on the website of the Audit, Accounting, Property Valuation and Insolvency Management Service under the Ministry of Finance of the Republic of Lithuania. (Web Link: http://www.avnt.lt/veiklos-sritys/vertinimas/Vertintojai-ir-vertinimo-imones/vertintojai-ir-j-asistentai-2/).

Expert surveys are usually not anonymous and the selection criteria are not random. Experts need not only expertise in the field of research, but also experience in the field of research that is defined by a number of experts. The classical theory states that the reliability of the aggregated decisions and the number of experts in the decision-making process are linked by a fast-flowing nonlinear link. It has been proven that the accuracy of small expert group decisions and assessments in aggregated expert evaluation modules with equal weights does not diminish the accuracy of large expert group decisions and evaluations (Libby, 1978, p. 121 – 129).

A questionnaire was sent to these qualified appraisers to determine the views of these experts on the questions formulated in the questionnaire.

Number of experts. As mentioned above, the website of the Audit, Accounting, Property Valuation and Insolvency Management Service under the Ministry of Finance of the Republic of Lithuania publishes 32 certified business appraisers. Taking into account the methodological assumptions, it is formulated in the classical test theory, which states that the reliability of aggregated decisions and the number of decision-makers (in this case, experts) are linked by a fast-flowing nonlinear link. It has been proven that the accuracy of small expert group decisions and assessments in aggregated expert evaluation modules with equal weights does not diminish the accuracy of large expert group decisions and evaluations (Libby, 1978, p. 121 – 129). Therefore, a questionnaire was submitted to all experts certified and having a business appraiser qualification in Lithuania in order to determine the attitude of these respondents to the questions formulated in the questionnaire.

Organization of research. The layout of the study is based on the consistency of the information gathering. The survey used the indirect survey method - this method is characterized by the lack of direct communication with the respondent, in which case the questionnaire will be presented on the principle of an electronic survey. When filling in the questionnaires, the questionnaires are sent to the respondents by e-mail, with a link to the online questionnaire. The choice of the method of such a survey is related to the fact that it does not require high costs, and that its help is quickly and conveniently reached the required number of respondents. It should also be noted that these respondents are, sufficiently, accurately identified.

Investigation Period. November 19 - 30, 2018.

Analysis of research results

Adoption of a decision on the comparative method. The comparative (market) method is considered by many authors analysing business valuation issues and business valuation practices to be the most accurate and objectively reflective market value. Therefore, the appraiser must formulate precise criteria to assess the reliability of the comparative method in the business / shareholding value calculation process.

In analysing the circumstances surrounding the decision on whether to apply the comparative / market approach, we must provide an analysis of the factors that allow a sound conclusion to be reached on such a decision. The table (see Table 3) provides a definition of the factors that make it possible to decide on the application / non-application of this method. The analysis of the shortcomings of the comparative method presented by different authors (Galasiuk, 2010; Damodaran, 2006; Korobkov, 2013; Šliogerienė, 2009; Parham, 2012; Galinienė, 2005), allows to combine the presented method deficiencies in several ways. questions. The answers to these formulated questions allow us to make a decision on the application of the comparative method. Table 3 outlines the questions for decision-making.

Table 3. Assessment of the application of the comparative method

Criteria	Factors	Yes	No
Is it possible to say that there are enough comparative objects on the market that can be reliably compared to the object being valued?	Is the valued company listed on the stock exchange?		
	Are there reliable information on the prices of the selected purchase-sale transactions for the selected benchmark objects?		
	Are comparative objects similar to economic, technical, material and other parameters?		
	Are there any reliable information about the parameters of the comparator objects, which would allow to compare objects when making the necessary corrections?		

Source: created by Galasiuk, 2010; Damodaran, 2006.

If the appraiser answers negatively to at least one of them by analysing and replying to the questions in the table, a decision may be made that the application of the comparative method and the results obtained may be unreliable and the method of calculating the market value is not applicable. It should be noted that the use of the comparative method in small and underdeveloped financial markets, to which Lithuania belongs, is practically impossible. The comparative method is usually to compare the results obtained with other methods and perform only an indicator function.

Assessment of suitability of income and asset methods. The first analysis of the results of the expert survey includes expert appraisals of decision-making related to the choice of the main valuation method, i.e. two - income and asset approach methods. In Part A of the Survey Questionnaire, the experts identified the choice of their priority valuation method in assessing the criteria indicated in the questionnaire. In this section, which consists of 15 criteria to be evaluated, each of the criteria was asked to indicate the method choice to the experts. The results of the questionnaire part A answers are presented in Table *4*.

Table 4. Results of the Expert valuation Method Selection research

Criteria	Priority of the method selection					Total of respondents
	Only income method is suitable	Both methods are suitable, but the income method is more appropriate	Both methods are equally suitable	Both methods are suitable, but asset-based method is more suitable	Only assets-based method is suitable	
Period of activity of the company being valued:						
Newly established company for up to 3 years	1	5	3	10	1	20
Operating for 3 to 5 years	0	6	8	6	0	20
Operating for 5 to 10 years	1	9	10	0	0	20
Operating for more than 10 years	1	13	6	0	0	20
Business continuity of the company being valued:						
Present uncertainty (bankruptcy)	0	0	0	11	9	20
No uncertainties	3	8	9	0	0	20
Basis for the value of the company being valued:						
Ability to generate revenues (cash flows)	4	12	3	1	0	20
Managed assets	0	2	5	10	3	20
Activity of the company being valued:						
Profitable	2	10	8	0	0	20
Unprofitable	0	0	9	10	1	20
Cash flow forecasts of the company being valued:						
There is reliable market data	3	13	3	1	0	20

Criteria	Priority of the method selection					Total of respondents
	Only income method is suitable	Both methods are suitable, but the income method is more appropriate	Both methods are equally suitable	Both methods are suitable, but asset-based method is more suitable	Only assets-based method is suitable	
No reliable market data	0	4	3	11	2	20
Other indicators of the company being valued:						
The company being valued has a large, unique asset or is an asset management company	0	2	2	11	5	20
It is not possible to reliably estimate the market value of the assets (including intangible) managed by the company being valued.	6	12	1	1	0	20
It is not possible to reliably identify financial indicators, income levels, profitability, liquidity and other indicators of the company being valued.	0	1	2	11	6	20
Total expert choices Σ:	**16**	**88**	**71**	**100**	**25**	
The share of choices in the total answers:	**5,33%**	**29,33%**	**23,67%**	**33,33%**	**8,33%**	

Source: own processing

By analysing the results of the Survey of Expert Opinion in Part A of the questionnaire, we can see several trends in the choice of methods:

- the opinions of the experts were very insignificant in the selection of value calculation methods according to the criteria provided in the questionnaire;
- The impact of the rated operating time criterion on the choice of valuation method indicates that asset-based approaches are a priority for new or up to 3-year-old business value calculations;
- the longer duration of the company, the priority of methods selection is transferred to the side of income methods.
- The business continuity criterion of the companies under valuation indicates that the value of the assets managed by the company should be chosen as a priority method for calculating the value of the company.
- The valuation criterion of the rated entity is understood as the allocation of companies to the generation of ongoing, growing cash flows and those that manage large or unique assets, including intangible and financial assets. In this case, the expert opinions were divided into two parts, where methods of income or assets-based methods were more appropriate;
- When analysing the performance criteria of the company being valuated, we see that

there is no clear choice and, according to the experts, this criteria is not very important in the choice of the priority method and both income and assets-based methods are suitable for the calculation of value;

- the cash flow projections criteria of the rated entity clearly identify the expert opinion that market data for the application of the income approach is a very important factor that ensures the reliability of the calculation results in formulating a conclusion on the value of the business (shareholding);
- The same selection of asset approach methods is done by "more appropriate" experts when "there is no way to reliably identify the financial indicators, income level, profitability, liquidity and other indicators of the rated entity" or the company is an asset management company;
- however, a more relevant important reason for the method of expert choice may be the burden of identifying the entity's assets and calculating the market value;
- From the analysis of method selection (see Table 4) we can see, except when the company is bankrupt, that the choice of using only one method of income or asset approach to calculate the value of a business (shareholding) was very limited 5.33% and 8.33%;
- It is very important to note that expert opinions are not categorical regarding the choice of one method or another, but identifying what is "more appropriate"“.

In the second part of the expert questionnaire, Part B, which was intended to clarify the opinion of the experts in the light of the criteria presented, the significance of the criteria in Part A of the questionnaire. This part consists of 8 main criteria from K1 to K8 (see Table 5). Assessments of the relevance of the selected criteria are presented in Table 5.

Table 5. Assessment of method selection criteria significance

Experts	**Criteria evaluation**							
	K1	K2	K3	K4	K5	K6	K7	K8
E1	4	3	2	2	4	3	1	3
E2	4	4	2	4	4	1	5	5
E3	3	5	3	5	4	3	4	5
E4	4	4	4	5	5	4	5	5
E5	5	4	4	4	5	5	5	5
E6	2	4	4	3	5	4	4	3
E7	4	5	4	3	5	2	4	5
E8	2	5	5	2	5	2	2	5
E9	5	5	5	5	5	5	5	5
E10	3	4	3	3	4	3	4	4
E11	3	4	4	3	5	4	5	4
E12	4	5	4	4	4	4	5	5
E13	3	5	4	4	4	4	5	4
E14	4	5	3	3	4	4	5	4
E15	4	5	4	3	5	4	4	4
E16	4	4	4	3	5	4	5	5
E17	4	5	3	3	5	4	4	4
E18	4	5	4	3	5	4	5	4
E19	4	5	4	3	5	4	4	4
E20	5	4	4	4	3	4	4	5

Experts	Criteria evaluation							
	K1	K2	K3	K4	K5	K6	K7	K8
Total points Σ	75	90	74	69	91	72	85	88
Criteria significance	0,82	0,99	0,81	0,76	1,00	0,79	0,93	0,97

Source: own processing

The criteria presented in the table above:

K1 - period of activity of the company being valued;

K2 - business continuity of the company being valued;

K3 - the company being valued has a large, unique asset or is an asset management company;

K4 - there is no possibility to reliably estimate the market value of the assets (including intangible) managed by the company being valued;

K5 - the basis of the value of the company being valued;

K6 - activity of the company being valued;

K7 - there is no possibility to reliably identify financial indicators, income level, profitability, liquidity and other indicators of the company being valued;

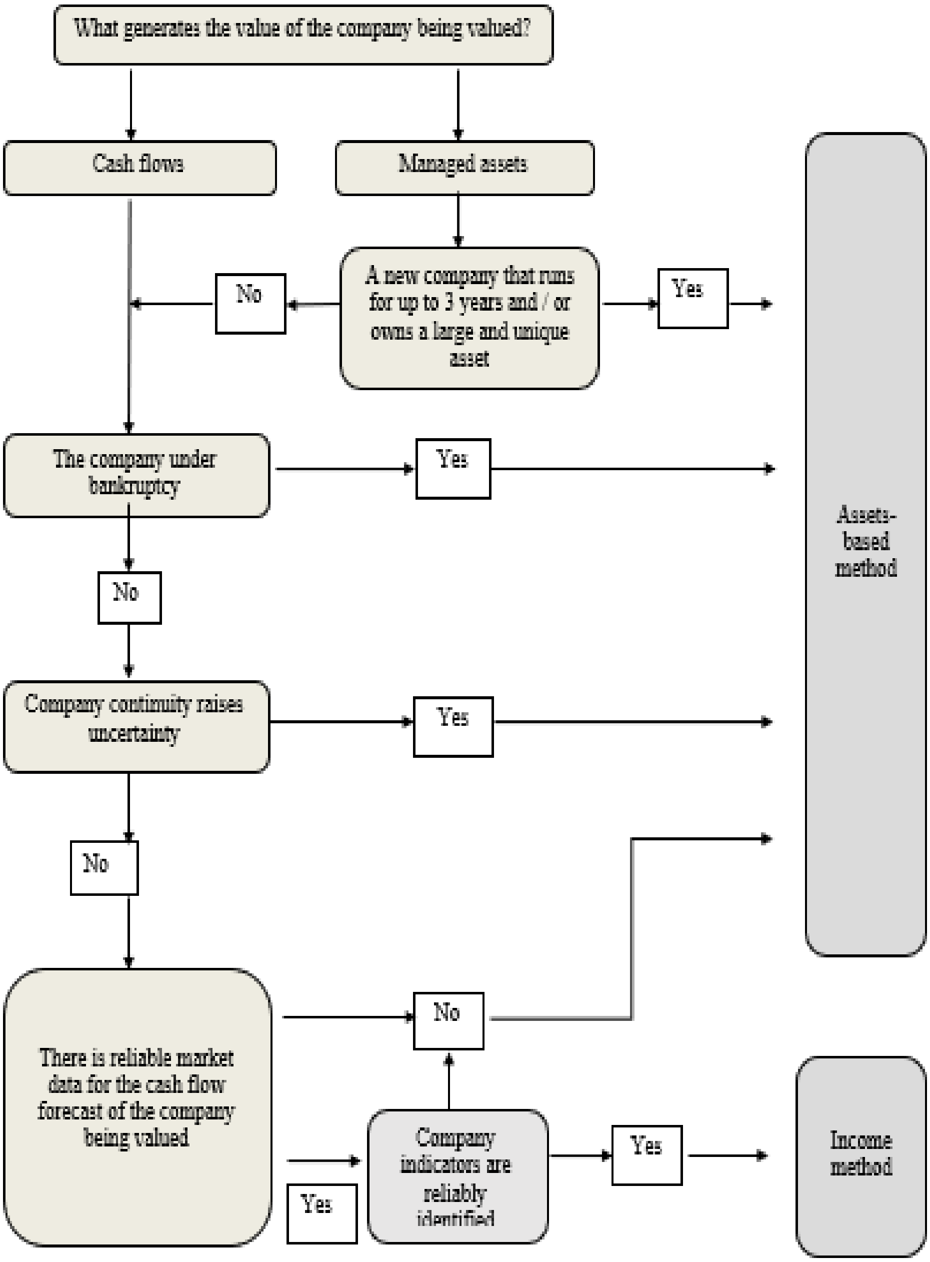
K8 - Estimated cash flow projections of the company.

By analysing the results of the Survey of Part B Expert Opinion Survey, several conclusions can be drawn regarding the relevance of the criteria for selecting assessment methods:

- Analysis of the results of the calculation shows that the opinions of the experts on the significance of the criteria to be evaluated were very insignificant;
- Experts identify the following criteria as the most significant criteria for influencing the choice of methods:
  - the basis of valuation of the company being valued or the source of value creation (cash flows from operating or managed assets);
  - the second most important criterion is to ensure the continuity of the business of the company under review, taking into account the company's ability to continue as a going concern or discontinuing the activity;
  - also, the relevance of the cash flow projections of the rated entity is an important criterion;
- The analysis of the significance of the method selection criteria confirms that all the criteria analysed are important not only in the choice of method, but also in the application of the methods in the business value calculations.

Summarizing the results of the method selection study, it is possible to form a recommendation scheme for the selection of valuation methods of the company. The criteria used to compile this scheme (see Table 4) are categorized according to the estimated significance of the criteria (see Table 5), starting with the most significant and ending with the least significant. The following is a scheme for selecting the valuation methods:

Fig. 3. Scheme for selecting business valuation method



Source: own processing

When submitting a Business Valuation Method Selection Scheme, you should consider some important comments:

- When the value of the company is created by managed assets, the choice of valuation method does not raise additional issues and is defined by the asset-based approach, including when the business value is calculated of the company operating in market for up to 3 years and have large and / or unique assets.
- In all other "Values of the Company's Operations Period" Criteria (see Table 14), when the Company does not have or does not have a significant asset, the change in the value calculation method returns to the analysis of the income method;
- For companies operating in the market for more than three years, the preferred method of valuation, according to experts, is the income methods;
- It should be noted that the criteria for the operating period, according to experts, are not very significant for the selection of the valuation method;
- The reliability of market data and the reliability of the company indicators are related. It can be stated that if there is no reliable market data and it is not possible to identify company indicators, comparing them with market data, the method selection priority is transferred to the asset method;
- Indicator K4 (see Table 15) does not make a decision - if there is no possibility to determine the value of the assets managed by the company, the statement that the assets create company value has no basis. Income method selection analysis is applied. The indicator is the last in terms of significant.

Conclusion

The valuation data presented in the literature, the valuation reports in practice, show that the value of a company or shareholding calculated by different methods may differ significantly in individual cases. Therefore, based on the available data and their analysis, it is necessary to justify the chosen methods or combinations of methods to reflect the value of the business (shareholding) in the most correct way and to make a reasonable final conclusion on the value. Factors influencing the process of deciding on a suitable business (shareholding) valuation method may, in different situations, be treated differently or weighted. Therefore, the standardization of the decision-making process by selecting valuation methods, taking into account the fact that the valuation process is related to the subjective approach of the appraiser, is a complex process. In addition, account must be taken of the fact that valuation is a very important and responsible component of the financial sector. Therefore, it should be noted that entities responsible for calculating the value of a business (shareholding) cannot use different valuation methods without complying with certain principles.

After the analysis of the scientific literature and articles, it can be reasonably concluded that there is no practicable single methodology for the selection of valuation methods. There is no clear and convincing answer either in theory or in business appraisers practice - what procedures, models should be used to choose the method and how the results of the chosen methods should be treated. Analysing possible solutions in the literature for the choice of valuation methods and techniques, the number of factors and issues analysed clearly confirms the assertion that this process is not simple and cannot be automated or embedded in unambiguous algorithms.

In order to accomplish the set tasks, an expert survey (questionnaire) was carried out, the result of which the research data allows to determine the priorities of the selection method, taking into account the evaluation criteria and the significance of the selected evaluation criteria. Depending on expert judgment, the degree of compliance of the expert opinions and the objectivity of the findings were determined.

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THE EUROPEAN UNION AND THE SOVEREIGNTY OF A MEMBER STATE

Andrea ZJAROVÁ

Abstract

Based on the level of integration achieved in Europe, the European Union has become a reflection of international relations and an ideal model of cooperation. Many integrative studies have been carried out. Discussions have also followed this international cooperation in the European Union as a view of progress. But this integration success, although it has lasted for at least 60 years, has grown especially in the last two decades. Relations between the Member States and the European Union have restricted. If we look closely at the constitutional changes that had to be made by the states before the accession of new member state into the European Union, the democratic deficit, the strict economic policy, or the subsidiarity, should it be asked next question: Has the European Union an influence on the sovereignty of its Member States?

Keywords

Sovereignty of State, European Union, The Treaty of Lisbon, Limitation of Sovereignty, Member State

JEL Classification: O15, D61, D60

Introduction

The current notion of state sovereignty is discussed. It is a very extensive concept that can be seen from several aspects. Member States are giving up some of their powers in favour of the European Union, the supranational organization, which after the Lisbon Treaty, is considered to be a separate subject of international law. This means that the European Union can participate in international law-making process and conclude international agreements, which are binding on the Member States.

The sovereignty of the state as the highest, absolute and exclusive power in a particular territory. It has been limited, and this limitation has brought a change to the state's sovereignty defined by Bodin. These are new processes that contribute to changing the view of this classic concept. In particular, it is the participation of states in supranational organization, to which states transfer their powers and perform them better at this supranational level. With regard to certain areas, such as international relations, these countries retain their exclusive competence in the area of international relations. A sovereign state cannot tolerate in its territory the restriction of sovereignty on the part of another state, except for where it has undertaken to undertake a certain international obligation under the treaty or a rule of international law.

International organizations are creating a complicated world of inter-state relations, but it is confirmed that states always have a major role in international relations, even though international organizations have limited them in part. State sovereignty forms the basis of the state mechanism since the establishment of the first states. The modern phenomenon of state integration at regional level, as well as the globalization of relations, has brought about a revision of the state's sovereignty, which is no longer understood as the absolute power of the state, but are states that voluntarily give up their sovereignty in favor of such integration.

Does the European Union influence the sovereignty of its Member States? To try to answer this question, it is necessary to describe briefly the historical development of European integration and to describe the areas where the European Union's sovereignty of the Member States is being influenced.

A brief history of European Union`s integration process

The impuls for the creation of the three European Communities and later for the creation of the European Union was a document called Schuman's Declaration, co-authored by Robert Schuman, post-war French Finance Minister and Jean Monnet, French economist. The Declaration was a proposal by the French Government to Germany, whose aim was to preserve peace in post-war Europe by eliminating the historical contradictions between France and Germany. The authors argued that united Europe cannot be created at the same time, but by steps. Schuman was in favor of the opinion that integration should be started in the coal and steel sector, and this cooperation should gradually lead to a federation. The Schuman Declaration was presented to the public on 9 May 1950.

On 18 April 1951, the High Authority of the European Coal and Steel Community was set up with the aim of unifying the coal industry. This treaty was signed for 50 years, and this community no longer exists.

On 25 March 1957, the Rome Treaties were signed, under which two other communities began to operate – Commission of the European Economic Community, which applied to the economy as a whole and Commission of the European Atomic Energy Community, whose objective was the peaceful development of nuclear energy and nuclear industry. The number of Members of the European Communities was increased and the integration of economic issues were transferred into other areas. The result of this process is the signature of the Single European Act in 1986, which mainly extended the powers of the Communities, set a new goal in the form of the creation of a common currency and closer cooperation in foreign policy. On 22 February 1992, the Treaty on European Union, also known as the Maastricht Treaty, was signed, adding to the European Communities other forms of cooperation and introducing a following three-pillar structure:

The first pillar consisted of three European Communities, the second pillar was created by a common foreign and security policy, and the third pillar involved cooperation in the area of justice and home affairs.

The Treaty of Amsterdam (1997) revised previous treaties and restricted the third pillar, the issue of which was moved to the first pillar. The police and judicial cooperation in the field of criminal matters therefore remained in the third pillar.

The Treaty of Nice (2001) made a change in the voting procedure. Where unanimity voting was used until then, qualified majority voting was introduced. It also aimed to prepare the Union for the accession of a new member states (Mazák, 2009, pp. 15-31).

Following the failure of The Treaty establishing a Constitution for Europe, a conference was convened in June 2007 to prepare a new reform treaty, entitled the Treaty of Lisbon. This was signed in Lisbon on 13 December 2007 and abandoned some concepts of the failed Constitutional Treaty. The Tretay of Lisbon is a reform treaty that revises existing treaties without replacing them with one constitutional text. In addition, it maintains the idea of a single entity - the European Union as a successor to the European Community, which is a separate legal entity (Mazák, 2011, pp. 17-23).

In the following chapters, the contribution deals with the current legal situation after the signature of The Treaty of Lisbon and its impact on the sovereignty of the Member States. Does the European Union affect the sovereignty of the Member States? In what areas is the sovereignty of the Membe State of the European Union being restricted?

Supranationality and sovereignty of the Member states.

Integration and supranationality are related terms, but they are not synonyms. Integration does not require Member States to renounce their sovereignty, but merely assumes that they will voluntarily join organizations. On the contrary, supranationality means giving up sovereignty and creating new organizations that stand above these states that have given up their sovereignty. The European Union talks about the integration process, which is supported by the primacy of Union law and the direct applicability of European law (Heredía, 2001, pp. 120-138).

The idea of supranationality is a new concept that was created during the first half of the 20th century. Supranationality is defined by three elements: Sovereignty as a political power that is unconditional and original, nationality and territoriality. Until recently, only international organizations whose international charter has the character of an international treaty have been used as a form of cooperation by states. Cooperation between states is ensured by the representative authorities of such an organization in which all Member States are represented, as well as executive authorities that ensure that decisions are taken. As such, the international organization does not have jurisdiction over Member States, which means that its activities result in non-binding acts or international treaties that are binding only on those States that have explicitly and voluntarily accepted them. This method is typical of the principle of sovereign equality. But such a form of cooperation cannot create a solid integration unit, which is the European Union. This has chosen an original way of transnationality as an organization. Thus, it is a supranational entity that has its own powers and which stands above the Member States and also has powers over these states (Týč, 2010, pp. 57-58).

Forms of realization of supranationality are the following:

1. The European Union is not only a simple summary of the Member States. It has its own interests and will, which is manifested through Union authorities that have an independent status. This will be done either on the basis of majority voting or on the basis of decisions taken by the European Commission or the Court of Justice of the European Union, independently of the will of the Member States.
2. The most important manifestation of supranationality is the power of the European Union institutions to create a law which constitutes a separate legal system and is binding on the Member States, their natural and legal persons, and the European Union institutions.
3. The European Union shall have financial autonomy.

The transfer of sovereign rights only occurs in certain specific areas. Member States retain most of their powers and their national identity is not jeopardized in this way. Decisions taken at supranational level must not be in conflict with the interests of the Member States. If they did not agree with the decisions taken but would be bound by them, this could result in their reaction in the form of non-legal behavior causing the European Union to break up and disrupt the integral unity of the organization (Týč, 2010, p. 18-19).

Principle of loyalty in the European Union

The principle of loyal cooperation between the Member States in relation to the European Union is reflected in Article 4 of the Treaty on European Union. It is formulated as a positive concept, when Member States implement all measures aimed at fulfilling primary and secondary law obligations as well as negative concept, which means that Member States will refrain from any measures that could jeopardize the achievement of the European Union's objectives. Basically, it is a strong argument, enshrined in the founding treaty, which promotes the principle of the primacy of European Union law (Týč, 2010, p. 29-30).

The division of competences

The division of competences is defined in the Treaty of Lisbon. Prior to the Treaty of Lisbon, the division of competenced was not explicitly mentioned in the Treaties. The Court of Justice created the terms “exclusive and divided jurisdiction”. Following the adoption of the Treaty of Lisbon, the following competences are distinguished:

a) exclusive competences[1], defined in Article 3 of the Treaty on the functioning of the European Union. Exclusive competences assume that action at Union level is more effective than non-harmonized action by Member States. Decision-making is given here only by the institutions of the European Union, which means that Member State cannot interfere in this process. Member States can only take decisions if they are expressly authorized to do so and only if a gap is to be filled (Právomoci, 2018, p. 1).

[1] The exclusive competences include the customs union, the establishment of competition rules for the functioning of the internal market, the monetary policy for Member States whose currency is the euro, the conservation of marine biological resources under the common fisheries policy, the common commercial policy and the power to conclude an international treaty.

b) shared copetence[2] has the European Union and Member States. It is a called also “shared powers” where the European Union has priority. This is reflected in Article 2 of the Treaty on the Functioning of the European Union. The member states can act only if the European Union has chosen not to (Mazák, 2011, p. 130-132).

c) Competence to support, coordinate or supplement actions of the member states[3] are defined in Article 2 of the Treaty on the Functioning of the European Union: "In certain areas and under the conditions laid down in the Treaties, the Union shall have the power to carry out activities to support, coordinate or supplement the activities of the Member States without replacing their competence in these areas."

d) Competence to provide arrangements within which EU member states must coordinate policy[4] are defined in Article 2 of the Treaty on the Functioning of the European Union. Even with these competences, it is the Union that coordinates them.

“In the judgment of the Constitutional Court of the Czech Republic no. Pl. ÚS 29/09, the Constitutional Court of the Czech Republic presented its view on the understanding of sovereignty against the background of integration. According to the Constitutional Court of the Czech Republic, the State Institute of State Sovereignty has undergone a certain transformation and gained new meanings and proportions. It is not just a simple attribute of the national state and an expression of power over the controlled territory. Today's concept of sovereignty is necessarily linked to the willingness and willingness of the state to participate in international cooperation and to use its powers in conjunction with other entities of the international community. Sovereignty is, in the words of the Constitutional Court, "a manifestation of the new order of the globalized world." In this globalized space, not only are economies and decision-making processes interconnected, responsibilities shifted and management centers are created, but new approaches to classical concepts are being created. One of them, the sovereignty of the state, is taking on a new dimension just in the context of European integration, where sharing common goals, but especially the sharing of powers, is the basis for the emergence of the concept of shared sovereignty.

The Constitutional Court does not regard the process of European integration as a process of gradual loss of the original powers of the Czech Republic. On the contrary, it seeks to strengthen the state in it and the concept of sovereignty understands the state's ability to determine its future, the ability to use, share and jointly exercise some of its powers, leading to a simpler and more effective achievement of the state's goals. The Constitutional Court states literally that "The European Union has progressed most in the concept of shared sovereignty and is already creating a sui generis entity that will hardly be placed in the classic state categories. It is therefore more a question of linguistic whether the process of integration is to be regarded as a loss of sovereignty or competence, or as a lending, respectively. forwarding part of the sovereign's competencies. It may seem paradoxical that the key manifestation of the sovereignty of the state is also the possibility to dispose of its sovereignty or its part, respectively. to delegate certain

[2] Shared competences include: internal market, social policy with regard to aspects defined in this Treaty, economic, social and territorial cohesion, agriculture and fisheries, with the exception of marine biological resources protection, environment, consumer protection, transport, trans-european networks, energy, freedom area security and justice issues and common security issues in public health matters with regard to the aspects defined in this Treaty. In the area of research, technological development and space, the Union has the competence to carry out activities, in particular to define and implement programs, but the exercise of that competence must not lead to Member States being prevented from exercising their powers. In the area of development cooperation and humanitarian aid, the Union has the competence to carry out activities and to pursue a common policy, but the exercise of that competence must not lead to Member States being prevented from exercising their powers.

[3] Competence to support, coordinate or supplement actions of the member states include the protection and improvement of human health, industry, culture, tourism, education, vocational training, sport civil protection and administrative cooperation.

[4] Competence to provide arrangements within which EU member states must coordinate policy include economic and employment policy and the European Union's competence to define a common foreign and security policy.

competences temporarily or permanently. "(US 29/09)

Thus, by joining the European Union, a Member State does not lose its sovereignty. In the context of European integration, it is necessary to accept a shift in understanding the notion of sovereignty of the state from a static to an open, dynamic concept that is an instrument for preserving the sovereignty of the state. The Member State remains a sovereign state. Elements that highlight state sovereignty even in situations where division and sharing of powers are permitted are:

a) States are the sources of the treaties - European integration is based on the Member States' agreement contained in the founding treaties. Within the hierarchy of sources of law, these are at the highest level, constituting some EU constitutional law, which is referred to as primary law. Although the Union is a separate entity with its own will, institutions and instruments of action, it does not have the possibility to change the founding treaties itself. Primary EU law is the result of an agreement between the Member States, making them referred to as "Treaty Masters". The procedure for adopting and amending primary law is governed by Art. 48 of the Treaty on European Union. There are three types of contract change procedures:

1. A ordinary legislative procedure is the procedure for acceptance of changes is a general form of revision of the Treaties, which should be used for all material changes of primary law. This procedure is coupled with the most complex negotiation that calls for a special convention and an intergovernmental conference. Changes to the Treaties can only come into effect once they have been ratified by all Member States.
2. A simplified procedure for the adoption of amendments relating to the Union's internal policy and action, but which must not lead to an extension of the Union's competence. The changes are decided by the European Council and enter into force only after approval by all Member States.
3. Simplified revision procedure for the adoption of amendments to Council decision-making procedures and Council and European Parliament adoption procedures. Each initiative is presented here to national parliaments, where each has the right to express their disagreement within a period of six months, thereby blocking further progress in amending the Treaty on the functioning of the European Union. This right of national parliaments is referred to as the red card right.

b) Member States can leave the European Union - This possibility is provided in Article 50 of the Treaty on European Union. The State wishing to leave from the Union must notify the European Council about this decision, which will adopt guidelines for the Union's action to conclude an agreement on the terms of use. This negotiation is carried out by the Union and the Council concludes the Union's withdrawal agreement with the consent of the European Parliament. Thus, the Union's institutions have the possibility to influence the process of state representation, but not the performance itself. This remains a unilateral, autonomous decision of the emerging State. If no withdrawal agreement is reached, membership will cease within two years of the State's announcement of its intention to leave the European Council. The State's withdrawal under Article 50 of the Treaty on European Union is the only way of ending the membership that governs European law. But European law does not allow the exclusion of the state. Accession and resignation are autonomous powers of the State, which remain a privilege which cannot be withdrawn by a decision of any institution or decision of other Member States.

c) The European Union has an obligation to respect the national identities of its Member States - Although the Union is a separate entity and its law is superior, its dominant position towards its Member States, its activities are limited. The limits of Union action are the values that make up the national identity of the Member States. These values must be respected by the Union. It follows from the principle of loyalty. "Constitutional Court of the Czech Republic in judgment no. Pl. ÚS 29/09 is based on the assumption that the transfer of powers to the Union is not definitive and that it intends to respect it and thus accept the effectiveness of Union law in the Czech Republic only until such performance is compatible with the values of the Czech constitutional system. Therefore, it respects Union law as an autonomous legal system, but recalls that it wants to act as the ultimate guardian of the inviolable values of Czech constitutionality, which cannot be affected by the operation of an autonomous supranational legal order (US 29/09).

Legal basis of Europan Union`s legal acts

The question of the division of competences is also related to the question of the legal basis of the acts, ie the way in which the powers are enshrined in the founding treaties. 'According to settled case-law, the choice of the legal basis of a Union act must be based on objective elements which can be examined in the context of judicial review, which include, in particular, the aim and content of the measure. Where a review of a measure demonstrates that it pursues a dual objective or contains two components, and if one of those objectives or one of these constituents can be identified as the principal objective or principal component, while the other objective or component is complementary, the act must be based on a single legal basis, one that requires a major or predominant goal or component. With regard to a measure which simultaneously pursues several objectives or has more than one component which is inextricably linked, without having one objective or one component complementary to the other, the Court has held that, if the various provisions of the Treaties are to apply, such a measure must be based, exceptionally, on the various relevant legal bases, that the application of a dual legal basis is ruled out if the proceedings covered by these two foundations are incompatible. '(US 29/09)

The European Union must act within the limits of its delegated powers and the objectives set out in the founding treaties. Thus, the founding treaties establish a competence, ie a framework in which they can issue acts and jurisdiction, that is to say, the types of acts that may be issued in such a field of competence. Thus, an act must be adopted in order to achieve the objective set out in Article 3 of the Treaty on European Union and the European Union must be expressly authorized to adopt such an act in another Treaty article. The European Union may also, in some rare cases, if it is not expressly empowered to adopt an act in the Treaty, to adopt such an act where this is necessary to achieve the objectives of the Union. If the Union is explicitly empowered to adopt an act, it is an explicit competence for the European Union to act in order to achieve the intended objective of achieving its competence. In this case, however, the question of jurisdiction may not be fulfilled, that is, Union law to adopt a legal act in the exercise of that competence. The Court has held that where a founding treaty does not explicitly provide for the possibility of adopting such an act in the exercise of a recognized competence, the Union may adopt such an act where this is important for the achievement of the specific objective arising from the founding treaty. Such exercise of powers is called "implicit powers" or "pouvoirs implicites" (Tokár, 2002, pp. 126-139).

Priority of European Union law over National Law of Member States

The principle of priority of European Union law means that European Union law has primacy over national law of Member State, which means that in the case of a conflict between European law and the law of a Member State, European law always has priority.

The legal consequence of this principle is the inapplicability of a national rule contrary to European law. This principle is not directly laid down in the founding Treaties, but derives from the case-law of the European Court of Justice (Horváth, 2004, pp. 251-253). 'That principle does not lead to the annulment or invalidity of the national rule, which is not applicable in a particular case. The application of a national rule contrary to Union law is still possible. Such legislation remains a valid part of national law and applies to those issues that are not covered by Union law (Sehnálek, 2009, p. 492) '. 'This principle was created by the judgment of the European Court of Justice in Costa v. Enel, in which the Court found that by creating a Community, its legal personality, its institutional basis and its competences, individual Member States transferred their sovereign rights to the Community, thereby limiting their sovereignty in some areas and thereby creating a legal order that is not binding only on Member States but also for their citizens (Horváth, 2004, p. 251-253) "

In applying the precedence principle, it is binding that all standards of European law prevail over all legal acts of a Member State, including constitutional rules, which is not absolute (Kalesná, 2011, p. 181).

“In the conditions of the Slovak Republic, the norms of European law prevail over all legal regulations except the Constitution of the Slovak Republic. This follows from Article 7 and Article 125 of the Constitution of Slovak Republic. The obligation to respect this principle of primacy of European law have national courts as well as to state and local authorities.

Citizenship of the European Union

By joining the European Union, the Member State, on the one hand, limits its sovereignty, but at the same time extends the citizenship. As the European Union is not a state in the true sense, it is not possible to compare the Institute of European Citizenship with the Institution of Nationality (Pavlíček, 1999, p. 161).

Citizenship of the European Union carries considerable integration potential and is based on the fact that European Union citizenship is a relationship between the Union and its citizens, resulting in the development of the idea that European integration is an integration of the population and the states. There can be talk of direct integration, that is, the creation of a direct relationship between the Union and its citizens, where the Member States are not intermediaries and the indirect stage of integration, which consists in the mutual cooperation of the Member States. Direct integration came much later than indirect and its beginnings translate into the conduct of direct elections to the European Parliament in 1979 and is embedded in the Union Citizenship Institute introduced by the Maastricht Treaty and is now regulated by Articles 18-25 of the Treaty on the Functioning of the European Union.

'A citizen of the European Union is any person who holds the nationality of a Member State. Union citizenship complements and does not replace citizenship "(Treaty on the Functioning of the European Union). It follows from that definition of citizenship in Article 20 of the Treaty on the Functioning of the European Union that, as far as this legal relationship is concerned, it is not a direct relationship between the Union and the citizen. This means that only Member States decide who will be and who will not be their citizens. It is the exclusive competence of the Member States which they must exercise in accordance with Union law. The citizenship of a Member State is therefore the basis for Union citizenship (Tokár, 2002, p. 129).

'In Rottmann, the European Court of Justice addressed the question of the loss of Union citizenship. The European Court of Justice has held that if a Member State's citizenship is lost, whereby a person loses Union citizenship, such a loss must not be contrary to Union law, even if the question of citizenship falls within the exclusive competence of a Member State (Judgment 135/08).

Union citizenship carries certain rights: in particular, the right to vote and stand as a candidate in municipal and European elections, freedom of movement and residence in the Member States, the right to protection by diplomatic agents in third countries, the right to appeal to the European Parliament with petitions, the right to assistance from the European Ombudsman, or the right to communicate with European institutions in the state language (Mazák, 2009, pp. 74-100).

The Union Citizenship Institute is linked to the democratic principles applied in the Union. Article 9 of the Treaty on European Union implies the principle of equality of citizens: "In all its activities, the Union respects the principle of equality of citizens, which receives the same attention from its institutions, offices and agencies (Treaty on European Union)."

The Constitutional Court of the Czech Republic deald with the concept of the citizenship of the European Union. In the Lisbon II decision, the complainants' objections that the introduction of the concept of citizenship pushes the European Union towards the federal state, which shows that the EU bears the mark of the state, that the establishment of citizenship is contrary to the principle of sovereignty of the Czech Republic, the Constitutional Court of the Czech Republic stated that the institute of European citizenship Union was introduced by the Maastricht Treaty in 1993 (Lisbon II Judgment). "

The procedural aspect of the transfer of sovereignty and the problem of democracy deficit?

Many authors certainly agree that the classical perception of the concept of sovereignty, as understood by philosophers in the past, no longer exists, because the state is deprived of part of its sovereignty after it has accepted international commitments. In his work, Belling denies the division of sovereignty and claims that the European Union does not have the characteristics of sovereignty, because the European Union is not about the transfer of sovereignty but the transfer of the power of sovereign rights. Belling in his work develops the theory that the transfer of apparent sovereignty to a higher or lower degree denies the uniformity of sovereignty.

Interpretations dealing with the transfer of sovereignty in different spheres are based on the confusion of sovereignty for political power. He further claims that the supranational system has no sovereignty because it has no original power. But it is possible to transfer sovereignty from the state to this supranational, respectively state level, but only if state give up part of their power in favor of such a supranational organization. This can happen if states either transfer their sovereignty to a supranational level in a formal way, or de facto resign from political power. But in this case, this transnational community will become a state. A prerequisite for this is not only the transfer of sovereignty but also the emergence of a new state nation (Belling, 2014, p. 1).

Another view is the idea that "EU sovereignty comes directly from the Member States." It is manifested through negotiation and substitution of core contracts and through continued participation in the decision-making process. It is a legitimacy mediated by other legitimate authorities. ”It speaks of flexible sovereignty through which the transfer of certain sovereign state competences to the Union can be described. This flexible sovereignty is a process that does not only concern a Member State but also a multinational organization (Azud, 2006, p. 34).

"As regards the transfer of sovereign rights, that is to say, the transfer of sovereignty, this follows from the conditions of the Slovak Republic under Article 7 of the Constitution of the Slovak Republic, which states that" the Slovak Republic may, by an international treaty ratified and proclaimed by law, transfer part of their rights to the European Communities and the European Union”. It follows from the aforementioned provision that the Slovak Republic does not lose these rights but performs them through the European Union (Skalická, 2012, p. 144-161).

"The question of the transfer of sovereignty is also a question of the democratic deficit of the European Union. Most of the legislation that is adopted in the Member States affects the EU more or less. This also applies to laws where national parliaments are bound by Union law when they are adopted. Failure to respect European law would result in a Member State being penalized by the Commission and the European Court of Justice. As far as Union law is concerned, this is not created by the democratic path typical of national legal systems. Draft legislative acts are drafted by the Commission, a non-elected executive. The acts are adopted by the Council, ie by the ministers of the Member States, again an unelected executive body. In most cases, the adoption of acts by the European Parliament is subject to the co-decision procedure. Although this is an elected body, its function cannot be compared to that of national parliaments. Thus, Union acts do not emerge in the democratic environment of a representative body. This is a problem called "democratic deficit". It is very difficult to involve national parliaments in the decision-making process in the EU. A positive change was brought about by the Treaty of Lisbon, which allows national parliaments to get subsidiarity, that is, to challenge the EU's competence to the detriment of the Member States (Týč, 2010, p. 79).

The problem of democratic deficit in the European Union contains two connected processes: It is a voluntary self-limitation of state sovereignty, which is a manifestation of state sovereignty. An example of such a voluntary self-limitation is, in particular, the adaptation of the law to the requirements of the European Union and the external constraint of sovereignty, which is the result of the restrictive influence of other sovereigns. It concerns, for example, the adoption of measures to protect the Union's internal market or to regulate the movement and residence of third-country nationals in the Union through a visa requirement (Koper, 2001, p. 225). "

Conclusion

The classical concept of sovereignty, as understood by philosophers in the past, no longer exists, because the state is deprived of part of its sovereignty after it has accepted international obligations. The European Union has an influence on the sovereignty of a Member State, which it restricts in many areas. These include, for example, the judiciary, the appointment of senior officials, the development of foreign policy relations, or the common currency or banking union.

There are only a few remaining areas in which sovereignty is not restricted. For example, the exclusive right of state over state territory and population, the right to grant amnesty, or the rights related to defense of the state, in particular the right to proclaim war and the right to make peace. Particularly after the adoption of the Treaty of Lisbon, integration and strengthening of the European Union is being strengthened and deepened. It is interesting to see how the European Union will develop in the future.

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CONCEPTUALISING THE ESSENCE OF A GREEN ORGANISATION

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Abstract

The international community, the European Union, encourage to address global ecology problems immediately, e.t. since 2010, the European Commission, by recognising the important role and contribution to improving the quality of environment, each year announces the green capital of Europe – this is the city in which the most favourable conditions for ecological lifestyle are established and which may become an example to other cities. The paper gives an analysis of the change in the concept of an organization, defines a paradigm of a green organization, and formulates the most important features of a green organization. Special attention is devoted to the assessment of specific components of a green organization. With an aim of making an analysis of the concept of a green organization, while refining the characteristic features of a green organization, the methods of comparative analysis and synthesis as well as abstrahation have been applied. New organisational features characterizing their adaptation to the changing environment are formed. Identification of these features, their exclusivity enables to conclude that a new type of the organisation has formed – the green organisation.

Key words

green organisation, sustainability, sustainable development.

JEL Classification: M14, M19, L22

Introduction

Owing to the human economic activity over the last two hundred years, the climate system has become much more complicated: forest areas are diminishing; massifs of arable lands and urbanised territories are expanding; gaseous composition are changing fast; the green-house effect is exacerbating, pollution of the soil and water is increasing , and the eco-system is changing (draughts, heat waves and cold spells have become more frequent; thickness of the snow coating, depth of the permafrost has changed) (Rimkus et al., 2006; Bukantis et al., 2016; Felton et al., 2016). An effect of the climate change will continue to intensify (Keršytė et al., 2015). The international community, the European Union, encourage to address global ecology problems immediately, e.t. since 2010, the European Commission, by recognising the important role and contribution to improving the quality of environment, each year announces the green capital of Europe – this is the city in which the most favourable conditions for ecological lifestyle are established and which may become an example to other cities.

The number of organisations applying the green business practice has increased in the whole world, since this lends a competitive advantage and benefit to society (Yeganeh and Glavas, 2008). Currently, to be green is the norm (Margaretha and Saragih, 2013), whereas the management science may boast of increase in the research on green marketing, green accounting, and green human resource management (Renwick et al., 2013). The term "green" has different meanings, however most often this is associated with that what is important to nature or natural environment (Opatha and Arulrajah, 2014). The term ecological or green spreads fast in all aspects of our life (Dutta, 2012). Environmental friendliness is a holistic process which goal is smarter energy consumption, low costs, low waste using sustainable resources or recycled materials for final results which are products, etc. (Jafri, 2012). To be ecological is necessary and important (Opatha and Arulrajah, 2014), as we have to avert or reduce the global warming, natural disasters, e.g. acid rain, tsunami, floods, hurricanes, draught, etc. due to harmful and unrestricted use of natural resources for production, as well as diseases that are caused by pollution. We have to ensure proper balance of relationships between plants, animals and people, and their environment, survival of people and business organisations. Having regard to that, modern organisations also have to develop responsibility, as corporate responsibility is not a mere means of creating a trademark (Sathyapriya et al., 2013; Delmas and Pekovic, 2013). By forming the green practice in their activity and developing the green responsibility, organisations "educate, enlighten" consumers by participating in environmental and other civil campaigns not polluting the environment and explaining consumers why this is beneficial for society, thus fostering ethical and environmentally friendly consumption (Juščius and Šneiderienė, 2013; Tariq et al. 2014).

The object of our research is a green organisation. *The aim of the research is as such:* after analysing the concept of the green organisation, to refine the features characteristic exclusively for the green organisation. *Methods of research:* comparative analysis of research literature, abstrahation, synthesis.

The Concept of the Organisation

The organisation, as a product of human activity, has been created in order to do something; it also has to have a goal, thus giving meaning to its existence (Butkus, 2002). In 1936, the classic of management Chester Barnard defined the organisation as a system of consciously coordinated activity or powers of two or more persons. The above mentioned boosted research in this field by noting that a common objective pursued collectively turns the human community into an organisation, and that this common goal may not coincide with the goals of people joining the organisation, but must be expressed by the needs of consumers of activity results of that organisation. People unite into an organisation driven by different goals which they expect to achieve easier by namely being a part of it (whereas its viability is guaranteed by the consumer of the product of joint activity). Therefore a special type of activity becomes necessary – management, sharing of the common work, product creation process among organisation members, and establishment of such conditions that would allow the organisation members to achieve their goals in the best way while doing such works that are assigned to them in the process of creating the organisation's product (Barnard, 1968). It may be stated that an organisation exists when people communicate mutually in order to perform essential functions instrumental in the achievement of its goals (Barnard, 1968; Daft, 2010; Hatch, 2018).

Against the background of constant change of social and economic processes, increasing complexity of technologies, a permanent change in the concept of organisation takes place objectively (see Table 1). This change is determined by a number of different factors (Zakarevičius, 2012). All researches unanimously state that in the near, or maybe in the more distant future, only the organisations that will be capable of solving two main economic tasks will be able function successfully and to compete: 1) to optimise production costs and 2) to guarantee the quality of production. These two tasks are dialectically related – this as if seemingly contradicts each other, yet, on the other hand – must be resolved in a comprehensive manner (Zakarevičius, 2012).

Table 1. Change in the concept of organisation

Type of organisation	Description
Mechanistic organisation	An organisation is treated as machines, engineering objects (Taylor; 1911; Fayol; 1916). Organisation members do not have goals associated with its activity; they fulfil requirements of their owners, whereas their actions in the organisation are strictly regulated. Employees are treated as components of the mechanism, whereas their totality – as a well-tuned machine.
Organisation as a social system	An organisation as a totality of people in which every person, group of people, are linked by close mutual relationships, whereas their whole activity is consciously coordinated (Barnard; 1938). The most important property of this system – the property of integrity.

Systemic organisation	It has clearly expressed one or several goals, and it functions solely for realising these goals (Parsons 1960; Blau, Scott; 1962; Etzioni 1964; Thompson, 1967; Lawrence, Lorsch, 1967 Miller, 1972). Features: system adaptivity to the external environment, integratedness of all system components, regulation of internal relationships (Zakarevičius, 2009).
Entrepreneurial organisation	This is a systemically organised, structured organisation managed in a professional manner in which economic, social, managerial mechanisms operate in such a way that make it possible to integrate innovative, creative, managerial ideas of employees, to mobilize them and other resources for the implementation of these ideas (Zakarevičius, 2009; 2012).
Learning organisation	An organisation creating knowledge. By relying on its internal resources, it constantly increases its potential, improves all performance parameters, develops possibilities for the achievement of these parameters. The organisation is capable of accumulating the necessary quantity of knowledge, generating new information and using this knowledge in an optimal way. Knowledge is acquired by learning (Kanišauskaitė, 2011; Peleckienė, 2014).
Socially responsible organisation	An organisation active participant of public processes, and follows the principles of responsible conduct in its activity. Social responsibility of organisations covers economic, legal, ethical and philanthropic expectations nurtured by society. In other words, social responsibility – is a commitment to act ethically while solving economic, legal, social and environmental issues of activity in relationships with the surrounding social environment (Siltaoja, 2009; Stukaitė, 2012).

Source: own processing

It is obvious that an organisation is a group of people who are linked together by cooperation ties, common interests, and goals. In this respect, each organisation is a social system. On the other hand, an organisation is an economic system, as a transformation process of raw materials, materials, and the product made by others takes place. Organisations exist, since they combine resources in order to achieve desired goals and results, manufacture goods and provide services effectively. They are open to novelties, use modern production and information technologies, adapt to the changing environment, create value to the owners, customers and employees, give rise and maintain permanent challenges of diversity, employee motivation and coordination (Daft, 2010).

It is noteworthy that it is customary to regard an organisation as a group of persons consisting of at least two people who act together in particular manner and seek the goal set. This is a social – economic system composed of the people communicating mutually, and which exchanges different information, human, material, etc. resources with the environment (Barnard, 1968; Butkus, 2002; Navickas and Navickienė, 2009; Daft, 2010; Lipinskienė, 2011; Hatch, 2018).

The Green Organisation

Over the years, against the growth of economic activity, people could have forgotten the fact that their farm is dependent on the planet's ecological systems (Mikalauskienė, 2014). With the strengthening of civilisation impacts, economic activity has gradually encompassed the whole plannet, and no free area not touched by man has remained in it (Melnikas, 2011; Boiral et al., 2012; Šimanskienė and Petrulis, 2014; Mikalauskienė, 2014). Changes in the natural environment during the last century progressed fast: due to the impact of global processes, unsustainable development of economy and ecological problems ignored for a long time, nature has suffered even greater devastation (Melnikas, 2011; Boiral et al., 2012; Šimanskienė and Petrulis, 2014). Polluted environment gave the society the first signals on the fact that irreversible processes associated with the economic development taking place in the world may determine lifestyle peculiarities not only for our generation, but also bring much more serious consequences for the future generations. (Melnikas, 2011; Boiral et al., 2012; Šimanskienė and Petrulis, 2014; Mikalauskienė, 2014). Each Earth dweller starts to feel painful consequences, and this stimulates the desire to act and to change (Chen, 2011; Tumulytė, 2012; Chang and Chen, 2013; Šimanskienė and Petrulis, 2014; Song and Yu, 2018). Modern societies have to solve a lot of essential issues on environmental protection, energy, raw materials, construction, consumption of material possessions, as well as the improvement of work conditions for employees, their wellness, operation quality of organisations and the assurance of competitiveness with other organisations (Kutkaitis and Župerkienė, 2011; Petkevičiūtė and Balčiūnaitienė, 2018).

As ecology is gaining increasing importance, a new approach – sustainable development associated with the substance of economic growth that is important in solving contradictions between production and consumption, as well as aspects of the survival of humanity itself is formed. It is based on the assumption that development has to satisfy current day needs and not to pose any danger to the well-being of future generations (Bagdonienė et al., 2009; Stasiukynas, 2013; Jolink and Niesten, 2013; Mikalauskienė, 2014; Pivorienė, 2014; Petkevičiūtė and Balčiūnaitienė, 2018).

All the prepared strategic documents (see Table 2) pertaining to more environmentally friendly *green* growth of economy, are treated as an inseparable part of the sustainable development process and combines three basic dimensions: economic, environmental and social (Stasiukynas, 2013; Mikalauskienė, 2014; Pivorienė, 2014; Jolink and Niesten, 2016; Petkevičiūtė and Balčiūnaitienė, 2018). Social and environmental dimensions cover the "human capital" (knowledge, skills, social cohesion, culture, values, health, education, etc.) and the "nature capital (natural resources, bio-geological processes, etc.), whereas the economic dimension covers "the capital created by man" (all economic types of activity, their participants, means) (Mikalauskienė, 2014; Pivorienė, 2014; Šimanskienė and Petrulis, 2014).

Table 2. Development of environmental awareness in strategic documents

Important events of development	Aspects
UNO Council session (1969)	A global crisis has been emphasized, as due to rapid growth of economy, natural resources have been declining.
The green movement, Europe and North America. "Greenpeace" and "Earth First!" organizations are set up (1971 – 1980)	Environmental, social, political, economic tasks are formulated.
United Nations conference, Stockholm (1972)	The view was expressed for the first time that ecological issues and their solution must be related with the development of economy and society. The provision that it was necessary to take care of the future generations, and to leave the Earth similarly fertile, not polluted, by reducing different threats was formulated, therefore economic development had to proceed by using natural resources in the most effective way and with regard to the environmental impact.
International discussion ("Limits to Growth"), Rome (1972)	An eco-development approach was developed which had a great effect on the conservation and preservation of natural resources.
World Conservation Strategy (1980)	It was declared that rational consumption of natural resources is an integral part of economic development and environmental protection.
Report of the United Nations	A new term of economic growth was defined – this is a fast,

World Commission on Environment and Development "Our common future" known as the Brundtland report (1987)	socially and environmentally sustainable (responsible) economic growth. The vision of further development as a sustainable development which allows satisfying current public needs without reducing opportunities for future generations to satisfy their own needs and covering economic, social and environmental dimensions was formulated.
United National Environment and Development Conference in Rio de Janeiro (1992)	The provisions of sustainable development as continuous progress of society in seeking to satisfy humanity's needs now and in the future by rationally using and replenishing natural resources, as well as preserving them for future generations, covering environmental. economic, social and cultural aspects were formulated.
UN world summit on sustainable development in Johannesburg (2002)	Poverty eradication; change of non-balanced consumption and production models; conservation and management of natural resources; development of sustainability in the globalised world; development of sustainability and health; development of sustainability and implementation measures.
UN Green economy strategy (2008)	Economy is treated as the green economy capable of ensuring human welfare and social equality by mitigating environmental threats.
Declaration on Green Growth by the Organisation for Economic Cooperation and Development (OECD) (2009)	The declaration consolidated the preparation of the "green growth strategy" covering economic, environmental, social, technological and development aspects.
EU growth strategy 2020 (2010)	Special attention is devoted to sustainable development by using natural resources in the most effective way and addressing the climate change.
OECD Green growth strategy (2011)	Measures how to ensure economic growth and development by reducing the pace of climate change, environmental degradation and ineffective use of natural resources.
Rio + 20, UN world conference on Sustainable Development in Rio de Janeiro (2012)	Improvement of life quality and ecology by eradicating HIV, malaria and other diseases, reducing infant mortality; improvement of social inequality; assurance of global primary education; sustainable development of environmental protection and ecology; green economy in the globalised world; strengthening of the institutional basis of sustainable development; implementation measures for sustainable development: dissemination and adaptability of the Human Development on the local level.
Green action plan for small and medium-sized enterprise, European Commission (2014)	Goals: 1) to seek that European SMEs would use resources in the most effective way, 2) to support the green entrepreneurship, 3) to use the opportunities offered by the greener value chains, and 4) to facilitate the advent of the green SMEs to the market. The plan of green actions is aimed to contribute to the European re-industrialisation by strengthening the competitiveness of SMEs and to support the creation of green enterprises in all European regions, by paying particular attention to the fact that at this stage, in the field of effective use of resources, great differences between the sectors and member states subsist.

Source: own processing

It is perceived that sustainable development is a crucial paradigm on which basis the practices of organisations and relationships with the surrounding environment are built (Bagdonienė et al., 2009; Atkočiūnienė and Radiunaitė, 2011; Reiser, 2011; Jurgelėnas, 2014). The *green organisation* is an essential condition of sustainable development and an integral part of the growth process of the green economy. Modern business which has historically paid attention only to the accumulation of profit, now has to take into regard sustainability of environment and broader social interests, as this is a basis of business success without which business would not be able to develop further (Šimanskienė and Petrulis, 2014).

The concept of the *green organisation* has not been finally formed yet, and is fragmented. It is noteworthy that *green organisations* cover actions of a sustainable organisation in seeking to create an organisation effectively consuming and less aggressive towards the environment by saving resources, reducing negative impact on the organisation's activity, enhancing competitiveness, etc. Although the *green organisation* is associated with long-term sustainable changes, mere sustainability is not a *green organisation* (Yeganeh and Glavas, 2008). In the *green organisation*, sustainability means *green and long-term activity* (Yeganeh and Glavas, 2008). An analysis of research and special literature revealed a lack of clarity and consensus on the use of different terms, such as sustainability, corporate social responsibility, ethics, and sustainable development (Yeganeh and Glavas, 2008; Potašinskaitė and Draugelytė, 2013). Examples of sustainable organisation and green organisation practices are provided in Table 3 (Yeganeh and Glavas, 2008).

Table 3. Examples of sustainable organisation and green organisation practices

Description of a sustainable organisation	**Description of a green organisation**
Suggestions on ecological initiatives are provided, analysis of ecological footprints, reports on sustainable development, proposals for changing a policy and (or) practices and recommendations for mitigating an impact on the environment are put forward.	A learning environment was formed in which organisation members together develop the green business practice, strengthen work relationships and cooperation, create a common vision and individual solutions based on the most progressive environmental technologies.

Source: Yeganeh and Glavas, 2008

A *green organisation* may be recognised upon assessing its daily practices: it uses "the green lens" in the value chain in cooperating and producing goods, providing services that are useful to the consumer and nature; takes decisions determining effective use of energy; produces a new, innovative product while satisfying the pro-poor needs and receiving profit; together with examples of the green practice and green initiatives, increase the engagement and involvement of employees into the organisation's activity; participates in the markets aspiring to resolve the most important world problems (water filtering, residents health insurance, etc.) (Yeganeh and Glavas, 2008).

Identification of components of internal and external environment of the *green organisation* enables to distinguish features of the green organisation more precisely. After analysing research works of different authors, key features of the green and traditional organisation are provided in Table 4.

Table 4. Characteristics of the green and traditional organisation

Green organisation	Traditional organisation
Internal environment components	
Aim	
Seek to manufacture/provide green products by applying innovative business solutions that are environmentally friendly; seek the satisfaction of consumers and society in the product and services, organisation. To realise the products, they apply the green marketing which focus is based on the production of green and environmentally friendly products and their supply to consumers in order to satisfy their needs and not forgetting the organisation's goal to receive profit.	Seek to manufacture/provide goods and services in demand by using limited resources in the most effective way.
Human resources	
Employees implement the policy which is aim is to achieve that the organisation's employees would become ecological and useful to society, nature and organisation by seeking to ensure environmentally friendly products through successful realisation of environmental programmes, objectives, and thus contribute to environmental sustainability.	Employees implement the organisation's goals.
Structure	
Flexible, horizontal structure facilitating the involvement and their participation of employees in making decisions; direct communication with employees.	Clear hierarchical structure, distance between the superior and the subordinate, units.
Technologies	
Advanced, environmentally friendly technologies are used in creating and developing innovative, better green products.	A traditional combination of equipment, tools or relevant knowledge necessary for work, information or transformation of materials into products is used.
External environmental components	
Suppliers	
When selecting suppliers, not only to the price and quality are taken into account, but also the impact of the purchased resource for production or consumption processes on the environment. Such selection measures as green purchases, green logistics, etc. are applied. Criteria of the green purchases enable to make sure that the products used are made or supplied without using harmful substances, child labour, etc. Criteria of the green logistics enable to make sure whether the organisation's solutions are sustainable, effective, and less aggressive towards environment.	When selecting suppliers, the price and quality criteria are applied.
Competitors	
Competition takes place for more effective means of energy consumption, use of renewable energy resources, and effective consumption of resources.	Competition for consumers, labour resources, price, quality, etc. takes place.
Consumers	
Green consumers are those who avoid the goods/services which may endanger consumers' health, cause damage to environment through production, consumption and disposal processes; which consume disproportionately much energy, cause unnecessary waste and difficulties in processing them, use materials received from endangered species. Green consumers buy only what is necessary. They are familiarized with the environmental programme implemented	Traditional consumers purchase goods/services not necessary when they need them.

by the organisation, waste processing and management, packaging in secondary packages, recycled raw materials used in production. Green organisation carry out environmental training of consumers, employees, community. They have regard to the consumers who respond to problems caused by unethical or illegal world trade with their purchase actions.	

Source: own processing

After outlining exclusive features of the *green organisation*, it is necessary to define the *green organisation*. Authors of different works (see Table 5) provide quite a similar concept of the green organisation.

Table 5. Concept of the green organisation

Authors	Basic concepts
Yeganeh and Glavas, 2008.	The *green organisation* means benefit to society and environment, also added value to the organisation. This is a "compromise" between the creation of a business value and the input to the public and environmental well-being. The environment covers not only nature, but also the level of poverty, health, peace, housing and all other factors that contribute to the well-being of society.
Reiser, 2011; Azevedo at al., 2012.	The *green organisation* may be understood as a conception of a responsible business creating permanent value to the organisation which is understood through the organisation's links with the accessibility and consumption of resources, as well as creation of public well-being.
Sathyapriya et al., 2013; Rani and Mishra, 2014; Tariq et al. 2014.	The *green organisation* is defined as an organisation that is environmentally friendly, well organised and socially responsible.
Duarte and Cruz-Machado, 2012.	Special attention of the *green organisation* is focused on the reduction of waste, effective use of resources, satisfaction of customers' needs.
Opatha and Arulrajah, 2014.	*Practices of the green organisation and its development* are crucial for the survival and development of humanity. The direction of activity and development targeted at sparing consumption of material products, alternatives, by improving consumption indicators, processing and recycling particular products are related with the pursued green economy and benefit to society.

Source: own processing

It may be claimed that the *green organisation* is based on the sustainable development concept taking into account economic, ecological and social aspects, seeking benefit for the organisation, environment and society. The *green organisation* – is the one creating constant and added value, seeking not only profit, but also contributing to the creation of public and environment well-being in the present and future time; focusing on the green and long-term practice, having regard to nature, poverty reduction, health accessibility, peace assurance and all other factors that contribute to the development of public and environmental well-being. The g*reen organisation* seeks to give a meaning and to implement the green policy in its daily activity. A sustainable organisation is most often associated with the implementation of sustainable development principles in the organisation by acknowledging that coherence of an organisation, as a business practice, is most often isolated from the core activity strategy of the organisation (Bagdonienė, et al., 2009; Navickas and Navickienė, 2009; Šimanskienė and Paužuolienė, 2011).

The *green organisation* is not a spontaneous phenomenon, and its creation and operation requires the establishment of appropriate conditions: it is necessary to determine the green initiative factors in the organisation, and a system fostering and supporting them, as well to develop and improve them constantly (Yeganeh and Glavas, 2008). The green organisation is an excellent medium to develop programmes as the staff, continuously encouraged by the management, may improve the existing technologies and create the new ones. Therefore, seeking to foster progress, the *green organisation* must be created first of all *(Green action plan for SME; Green Employment Initiative)*.

Organisations are committed to serve the society in which they carry out business in the best way (Jackson et al. 2011). The organisation's liability now rests not only with shareholders, but also other stakeholders – employees, consumers, business partners, local communities, non-governmental organisations, activist groups. Being a part of society, the organization will have to operate *on the basis of green management* (Jackson et al. 2014). The *green management* commits becoming a *green organisation* in each cell of the organisation, e.g. *greener business operations, green human resources management, green accounting and green financing, greener retail trade, green marketing,* etc. (Renwick et al. 2012). This is a way of organisation management when environmental issues have a direct impact on the organisation's results (Jackson et al. 2011, 2014). In order to make business flourish, the organisation must comply with the new standards and implement them (Atkočiūnienė and Radiunaitė, 2011). The organisation in which nature and people are properly appreciated creates an astounding competitive advantage. Organisations, seeking to acquire a competitive advantage, create their *green* image based on the concept of sustainable development, thus emphasizing the good and at the same time some bad properties of a product (service) (Griesienė and Sarvutytė-Gailiūnienė, 2014). The organisation has to produce such goods and provide such services which are in demand at a particular time. In other words, the better the organisation satisfies public needs, the firmer it becomes established in society and its activity becomes more profitable. To this effect, it is necessary to control and improve properties of a product, cut down production costs in order to get profit, also to reduce the risk of loss upon decline of market prices, to present exclusivity of a product, as business success most often depends on it (Juščius and Šneiderienė, 2013). Only such organisations that readjust their business models, products and processes, are able to respond to changes, adapt, will acquire a competitive advantage and be viable long-term (Baležentis, 2007; Atkočiūnienė and Radiunaitė, 2011; Hurn, 2012).

Conclusion

Complex economic, environmental and social processes give rise to the green changes in organisations. New organisational features characterizing their adaptation to the changing environment are formed. Identification of these features, their exclusivity enables to conclude that a new type of the organisation has formed – the green organisation.

The emergence of green organisations is a reflection of transformations taking place in society, ranging from individual persons preoccupied with the destiny of future generations to real actions of supranational, ethical politicians. Contrary to the previously existing initiatives that have often were limited to the presentation of reports, in the case of the green organisation all stakeholders develop, elaborate the green business practice conjointly.

The green organisation is a fundamental condition of sustainable development and an integral part of the green economy growth process. The green organisation is an excellent medium for developing green initiatives, implementing innovations, existing technologies, and creating the new ones, making new products that are in demand and distinguished for exclusive properties, by saving resources used for the production thereof. The green organisation – is a future organisation.

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THE COMPETENCIES REQUIRED BY PORT ECONOMISTS, STEVEDORES, TECHNOLOGISTS: A PILOT STUDY

Vilma LOCAITIENĖ, Saulius LILEIKIS

Abstract

Port companies require employees characterized by specific professional competencies and at the same time – by general, i.e. social and personal ones. The European higher education system in terms of the Bologna Process should provide opportunities for students to develop their professional competencies needed. The scientific content of a competency usually includes knowledge, abilities, skills and attitudes in relation to the documents of the Bologna Process and national legislation. The goal of the research is to characterize the need for the competencies required by port economists, technologists and stevedores by assessing both – the need for professional competencies required by port terminal employees, and the importance of personal and social competencies required by port terminal employees. This is a pilot study. It allows to prepare for the future complex diagnostic study of the competencies required by Klaipeda State Seaport employees.

Key words

Port, competencies, economists, technologists, stevedores

JEL Classification: O15, D61, D60

Introduction

Port companies require employees characterized by specific professional competencies and at the same time – by general, i.e. social and personal ones. The European higher vocational education system in terms of the Bologna Process should provide opportunities for students to develop their professional competencies needed. Students of modern port curriculum attend maritime academies in order to be future employees of port companies.

The scientific content of a competency usually includes knowledge, abilities, skills and attitudes in relation to the documents of the Bologna Process and national legislation. Specific investigations of the competencies, required by port personnel, have emerged over the past two decades (Murphy, Poist, 2006; Ahn, McLean, 2008; Thai, 2012, 2012a; Hooydonk, 2013; Thai, Yeo, Pak, 2016; Jugovic, Stumpf, Schiozzi, 2017 etc.).

Regular analysis of the competencies, required by port companies, can assist improving the academic content of relevant maritime study programs related to the seaport.

Goal and Methodology

The goal of the research is to characterize the need for the competencies required by port economists, technologists and stevedores in order to prepare for the complex diagnostic study of the competencies required by Klaipeda State Seaport employees.

The object of the research is competencies required by port economists, technologists and stevedores.

The objectives of the research are as follows:

1. To reveal the theoretical background of the study.
2. To assess the need for professional competencies required by port terminal employees.
3. To assess the importance of personal and social competencies required by port terminal employees.

Methods such as scientific literature analysis, questionnaire survey of port experts, statistical analysis, data interpretation, comparative analysis and synthesis were used.

The type of the research is a pilot study.

The methodological principle, on which the research is based, is a comprehensive development. It highlights the importance of the universal personal development in relation to the physiological, psychological and spiritual needs of the personality in terms of his/her vocational education from the point of view of the port work reality, i.e. economic, managerial and technological functions, psychological self-management, communication and cooperation, leadership and self-leadership.

Organization and validity of the research. The questionnaire was prepared according to the scientific literature, to the competencies developed in study programs such as Maritime transport logistics technology, Port and shipping management, Port and shipping finance at Lithuanian Maritime Academy, and to the port scientific, academic and practical experience of the coauthors of this article. The questionnaire consists of closed questions in two groups called Professional competencies of port terminal employees related to positions of economists, technologists and stevedores, and Personal qualities, abilities and social competencies necessary for the professional activities of port economists, technologists and stevedores.

The study data was developed using *Microsoft Office Excel*. The sample size is homogenous and statistically insignificant (30 port experts, who improve their competencies attending the port study programs at Lithuanian Maritime Academy, answered the questionnaire) but it is enough for the problematical pilot study. Ethical communication with the experts increased possibilities to get real and correct answers. The purpose of the research was explained to the experts. Confidentiality, anonymity and sharing the results, which are only applicable to the selected population, were guaranteed for them.

1. The theoretical background of the study

Before identifying the trends in competencies required by port economists, technologists and stevedores, it is appropriate to note some points. Scientists have noted that the content of EU directives on higher education and its implementation are too formal, standardized and too much based on control. Specialists, developed by controlling, are characterized by narrow thinking and limited competency. Rapid technological and social changes require rapid response. Professionals, who are able to think analytically and creatively, are able to react to the demand of skills rapidly. Globalization fosters resistance to the development of narrowly defined competencies. This requires more thinking about the preparation of an analyst and a creator. This is completely contrary to standardization (Duobliené, 2010).

Modern ports have become a part of an integrated logistics chain. Thus, port employees need competencies not only in the narrow context of cargo handling in terminals but also in a whole logistics chain, ensuring interaction between the port and other participants in the transport chain (Thai, 2012; Rodrigue, Comtois, Slack, 2016; Nicolae et al., 2017).

Different scientists determine the need and elements of competencies required by port employees. However, there is no unified competency analysis system. Of course, this is due to the fact, that there are no two same ports or terminals worldwide. Functional connections between port subjects and transport system participants are dependent on the internal and external factors for port activity.

Thai (2012, 2012a) and Thai, Yeo (2015) offered a competency system for marine transport logistics professionals. This system consists of three areas of their activities related to business, logistics and management. Core professional and specific professional competencies are distinguished in each area. According to this system, marine transport logistics professionals in the port should be characterized by 63 abilities, knowledges and skills, which include understanding of port, shipping, logistics, business planning, management and control (Thai, 2012, 2012a; Thai, Yeo, 2015). The proposed system was specified and the core professional competencies were supplemented by *Port Management* and *Port Business* ones. The core of specific professional competencies of a port specialist should consist of three groups of competencies, i.e. *Port Logistics, Port Engineering*, *Port Operations* (Thai, 2012, 2012a; Thai, Yeo, 2015; Thai, Yeo, Pak, 2016).

Ahn, McLean (2008) investigated the need for professional competencies required by employees in the port of Busan. They distinguished 6 groups of professional competencies (planning, service management, service organization, service marketing, use of information systems, ability to work in global market conditions) and 16 sub-competencies. The results of the study revealed the need to develop the ability to work with IT in global market conditions in order to maintain the competitiveness of port services (Ahn, McLean, 2008).

The professional competencies and their elements, necessary for the effective management of multimodal transport services, were analyzed by Ngamvichaikit (2017). It was stated, that the elements of competency of this field of logistics are related to the functions of service planning, observation, control and evaluation. They include managing relationships to customers and suppliers, and the use and development of IT by improving the quality of service. 10 professional competencies and their 27 elements, which are necessary for the employees of freight forwarding companies, were highlighted (Ngamvichaikit, 2017).

It is appropriate to notice, that along with the development of the economic productivity of port companies, it is very important to create a strong team with the required qualifications, based on professional skills in terms of personal abilities and knowledge, related to the necessary qualifications in the labor market (Nicolae et al., 2017).

According to the changes, the employees of the port terminal should be considered not only as "dockers" but also as logisticians, who should be comprehensive:

- To know management functions and have managerial skills by organizing the process of cargo handling;
- To have knowledge in the field of logistics, attitudes and the ability to apply them by making logistic decisions in the activities of the port terminal;
- To have special knowledge, attitudes and the ability to plan, carry out and control cargo handling operations.

The analysis of scientific literature has created the understanding, that the professional competencies of port employees should be investigated in accordance with three areas of activity by distinguishing between the *core* professional competencies related to the Port Business and Management, and *specific* professional competencies of the port specialist.

Three areas are as follows:

- Professional competencies of a port *economist* consist of the *specific* competency (Port Economics, Finance) and *core* competencies related to Port business and management;
- *Technologist's* professional competencies comprise the *specific* competency elements of Port technologies, and *core* competencies related to Port business and management;
- Professional competencies of a *stevedore* consist of the *specific* competency (Port Operation), and *core* competencies related to Port business and management.

2. The need for professional competencies required by port terminal employees

A survey of 30 respondents revealed, that the specific financial competencies of a port economist were assessed as more significant (4.05) than core professional abilities (3.29) (Table 1).

Table 1. Professional competencies of a port economist

Competency group (a)	Economist's competency elements (b)	Mean (a)	Mean (b)	Moda	Var	ST.Dev
Port finance	Port terminal income/cost sources	4.05	4.19	5	1.46	1.21
	Financial indicators of the port terminal activity		4.10	5	1.69	1.30
	Terminal employee wage structure		3.95	5	2.05	1.43
	Port terminal accounting		3.95	5	1.85	1.36
Port business, management	Port terminal operation	3.29	3.62	3	1.35	1.16
	Cargo handling resources		3.62	5	2.25	1.50
	Port terminal performance assessment methods		3.67	3	1.13	1.06

	Cargo features		3.24	5	2.49	1.58
	Dangerous cargo transportation requirements		3.10	4	2.29	1.51
	Cargo handling organization forms		3.10	2	1.69	1.30
	Ship types, structure		2.67	2	1.83	1.35

Respondents noted, that for an economist it is most important to know the income/cost sources of the port terminal (4.19). This response had the lowest variation between responses in the group (1.46). Assessing the core professional knowledge and abilities, the respondents distinguished the cargo handling resources and port terminal operation.

Respondents rated the professional competencies of a technologist (Table 2).

Table 2. Professional competencies of a technologist

Competency group (a)	Technologist's competency elements (b)	Mean (a)	Mean (b)	Moda	Var	ST.Dev
Port technologies	Cargo handling operations to/from ship	4.18	4.33	5	1.13	1.06
	Cargo handling technology to/from land vehicles		4.19	5	1.16	1.08
	Preparation of cargo for loading on board		4.10	5	1.19	1.09
	Port terminal material handling equipment and mechanisms		4.10	5	1.39	1.18
Port business, management	Cargo features	3.94	4.38	5	0.85	0.92
	Dangerous cargo transportation requirements		4.19	5	1.26	1.12
	Safety requirements for stevedoring companies		4.14	5	1.23	1.11
	Ship types, structure		4.10	5	1.29	1.14
	Port terminal operation		3.81	5	1.86	1.36
	Cargo handling resources		3.76	5	1.29	1.14
	Legal regulation of port activity		3.67	5	1.33	1.15
	Environmental requirements for stevedoring companies		3.48	5	2.06	1.44

Respondents distinguished the knowledge of cargo features (4.38) and cargo handling operations to/from ship (4.33). They marked the knowledge of environmental requirements for stevedoring companies as a less significant competency (3.48). It is appropriate to note, that the respondents assessed the core (3.94) and specific (4.18) professional competencies of a technologist. Thus, the knowledge and abilities required by the technologist activity should relate to the general activity of the port terminal.

Respondents rated the professional competencies of a stevedore (Table 3).

Table 3. Professional competencies of a stevedore

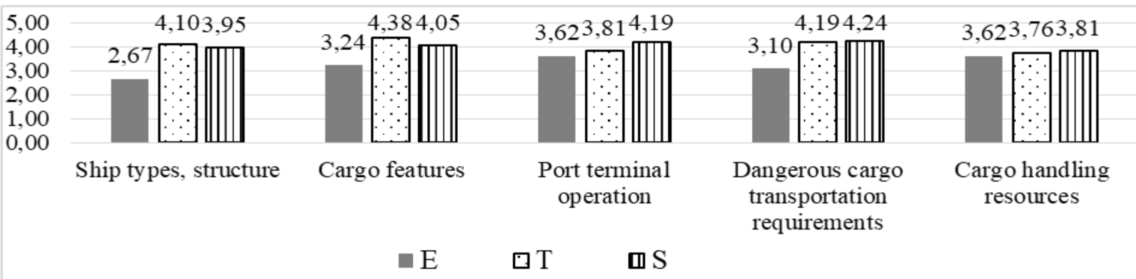
Competency group (a)	Stevedore's competency elements	Mean (a)	Mean (b)	Moda	Var	ST.Dev
Port operation	Preparation of cargo for loading on board	4.06	4.38	5	1.25	1.12
	Port terminal material handling equipment and mechanisms		4.29	5	1.21	1.10
	Dispatch/demurrage conditions		4.05	5	1.45	1.20
	Cargo handling process documentation		3.52	4	1.86	1.36
Port business, management	Dangerous cargo transportation requirements	3.88	4.24	5	1.29	1.14
	Port terminal operation		4.19	5	1.46	1.21
	Safety requirements for stevedoring companies		4.14	5	1.83	1.35
	Cargo features		4.05	5	1.75	1.32
	Ships types, structures		3.95	5	1.35	1.16
	Cargo handling resources		3.81	5	1.56	1.25
	Environmental requirements for stevedoring companies		3.71	5	2.01	1.42
	Port terminal income/cost sources		2.90	3	1.89	1.37

The skills of cargo preparation for loading on board (4.38; var. 1.25) and knowledge of the port terminal material handling equipment and mechanisms (4.29; var. 1.21) were distinguished. The knowledge of the environmental requirements for stevedoring companies (3.71; var. 2.01) and of the port terminal income/cost sources (2.90; var. 1.89) is rated as less important competency.

Specific professional competencies were assessed at 4.06 and core professional competencies at 3.88 by analyzing the data of professional competencies by groups. These results suggest, that the activity of a stevedore as well as a technologist require knowledge and abilities related to the comprehensive understanding of port terminal activities.

The core professional competencies of the employees were examined (Graph 1).

Graph 1. The core professional competencies of the employees

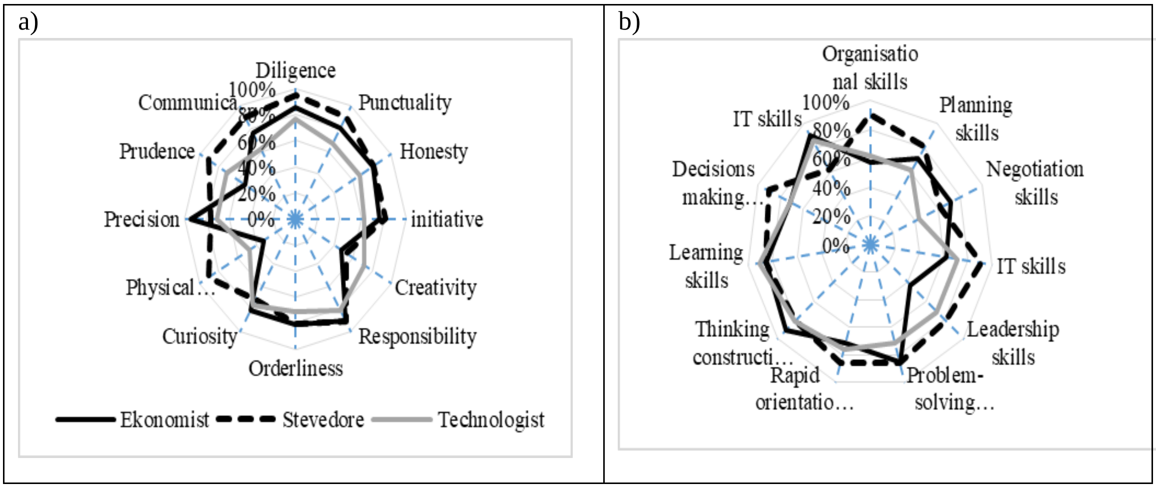


Comparison of the ratings of five general core competencies for different functions in the port in terms of a port economist (E), a technologist (T) and a stevedore (S), revealed a similar importance of the ability to perform the port terminal operation (mean: 3.62; 3.81; 4.19), and of knowledge of cargo handling resources (mean: 3.62; 3.76; 3.81). The general professional competencies required by a stevedore and a technologist are similar. A technologist should know the features of cargo and ship types better. Knowledge of ships, cargo features and requirements for the transport of dangerous goods is less important for a port economist because his/her competency core should be composed of specific competencies.

3. The importance of personal and social competencies required by port terminal employees

Questions of personal and social competencies were formulated after partial adaptation of the universal typology of managerial competencies (Martinkienė, 2012). Respondents have evaluated 12 personal characteristics and skills that are mainly required by port economists, stevedores and technologists (Fig. 1a).

Figure 1. a) Personal characteristics of the port staff; b) Personal skills of the port staff



They noted, that 7 qualities such as diligence, punctuality, honesty, responsibility, initiative, curiosity, orderliness are necessary for the mentioned groups of port employees regardless of their functions. A stevedore should be characterized by physical endurance, prudence and communicability. A technologist should be the most creative and may be less communicable. An economist should be the most precise and may be less precautious because he/she is not involved in creative decision-making.

Eleven personal skills were evaluated (Fig. 1b). According to the respondents, the ability to thinking constructively, to learning and rapid orienting is necessary for three mentioned groups.

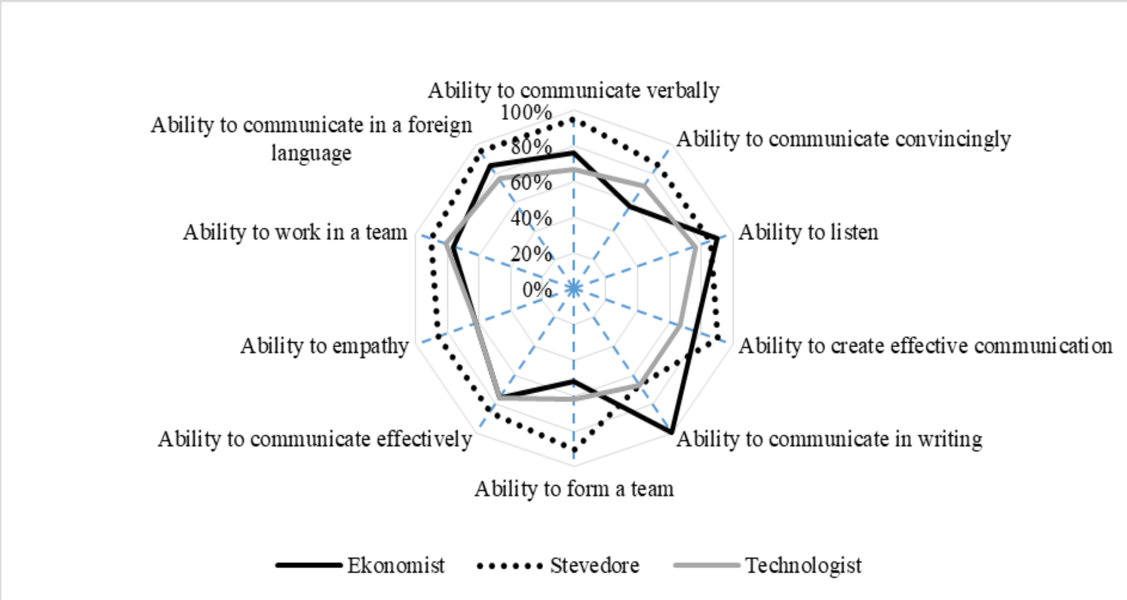
Significant differences characterize the personal skills of a stevedore – he/she should be able to make decisions independently (90%), to organize (90%) and plan (80%) and manage him-/herself in a stressful situation (90%) and lead (81%). However, the skills to apply IT (62%) and negotiate (62%) are less significant.

An economist should be able to manage problems (90%), apply IT (90%), negotiate better than others (71%) and think constructively (90%). However, his/her activity is less marked by the ability to lead (43%) and organize (62%).

The personal abilities of a technologist are similar to those of a stevedore; the ability to lead (71%) is more significant but the ability to negotiate (43%) is less necessary.

The social competencies of the port staff were examined (Fig. 2). It is appropriate to note the competencies required for a stevedore. Most of them ranged between 86% and 95%. Only the ability to communicate in writing (67%) is less significant. The social competencies of a technologist ranged between 67% and 80%. The competency to work in a team (81%) is marked as more significant.

Figure 2. Social competencies of the port staff



The respondents also rated the social competencies of an economist, who should be able to communicate in writing (100%) and verbally (76%), be able to listen (90%), but he/she may work without a team (52%).

Conclusion

Narrowly thinking specialists, characterized by limited competency, do not fit the needs of the modern port. Professional competencies of the terminal staff should include general knowledge of business, management and logistics, as well as specific knowledge of the port, shipping and port finance, and attitudes and abilities. Rapid technological and social change requires a specialist, who can react to the demand for skills rapidly, think analytically and be creative. This is determined by his/her personal characteristics, skills and social competencies.

The professional competencies of a port economist should consist elements of specific competencies of the port, shipping, finance and economy; general professional competencies should be related to terminal operations and sources of cargo handling activities. The professional competencies of a stevedore and a technologist should similarly include specific and general knowledge, skills and abilities. Their activity requires a comprehensive understanding of port operations, emphasizing the cargo handling technologies, equipment and cargo features, including dangerous cargo.

The main personal characteristics such as diligence, punctuality, honesty, responsibility, initiative, curiosity and orderliness are necessary for three groups of employees, regardless of their functions. The personal abilities of a technologist and a stevedore can be similar but a stevedore should be able to manage, organize and make decisions. A port economist should be precise, responsible and able to apply IT and think constructively by managing problems. The social competencies of a stevedore are most significant because his/her activity requires teamwork, directly related to customer service.

This pilot study can be regarded as a preparation for the further comprehensive study of the competencies required by Klaipeda State Seaport employees.

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BRAIN DRAIN IMPACT ON THE ECONOMY: BALTIC STATES CASE

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Abstract

Globalization processes in the world are increasingly facilitating for migration of people. Increasing openness of countries, improved transport systems, their convenience and accessibility make it easier, and easier for people to travel between countries. This encourages international migration. As most countries migrate most of their human resources, some countries face the problem of brain drain when leaving a country with highly skilled resources, transferring their competences to another country. Considering that people are one of the most important resources of the country, it is obvious that large emigration flows affect the social and economic situation of the country. The brain drain phenomenon is particularly painful for those countries that do not have significant economic advantages over other countries but have favourable conditions for people to leave - international agreements, visa-free regime, etc. In Europe, this is especially evident among former post-Soviet countries. Those who joined the European Union were faced with a massive flow of migration as they could not offer their citizens adequate financial wealth. This article aims to compare the Baltic States' situation with the brain drain. In this article, the authors seek to assess how brain drain affects the economies of countries and to make suggestions on how to deal with emerging problems.

Keywords

labour market, migration, brain drain, employment, Baltic States

JEL Classification: J20, J61, O15

Introduction

The notion of brain drains stems from the changes in demographic factors caused by the migration of human resources. Changing the global logistics situation makes it easier for people to change their place of residence. In this way, economically developed countries are gaining ground, while developing countries face a lack of human resources. In the course of an active international movement of human resources, a large number of countries are facing the problem of brain drain, when highly skilled workers leave the country.

International migration is a phenomenon describing the resettlement of people or working from one country to another. This phenomenon is determined by a number of objective factors - the growing openness of countries and the expanding international agreements. One of the best examples is the free movement of people adopted by EU countries. Emphasis must be placed on developing logistics systems and infrastructure, social guarantees (especially in EU countries). However, the difficult financial situation of the citizens and the lack of conditions to improve it at home country often play a decisive role in the intention to emigrate.

The extent of the brain drain is particularly determined by the expanding activities of global companies, leading to an increasing demand for educated people. They are trying to attract the most promising employees to their core brain centres to grow and compete. This is to create a multicultural team capable of dealing with the most challenging tasks. Internationalization of economic activity has become a part of the global economy. Internationalization of economic activity - it is a convergence and cooperation between national economies. It manifests itself in general production dependence, in the stages of international trade, production, capital movement and labour migration growth, and overall influence on the most important economic processes in various countries (Vilpišauskas, 2004). This makes a significant contribution to the brain drain in lower economic development countries as they are uncompetitive to create the right working conditions for their most promising citizens.

The object of the particular study is: Macroeconomic problems caused by brain drain.

The aim of the study is: Evaluate the impact of brain drain on the economies of Baltic States.

The objectives of the study are:

1) To analyse the main features of the phenomenon of brain drain;
2) To form research methodology for the research of brain drain;
3) Investigate the impact of brain drain on the economies of Baltic States.

The methods of the study are:

- Logic and comparative scientific literature analysis
- Synthesis and deduction
- Statistical analysis

The novelty of the study: The brain drain phenomenon is widely known in the world but there is still a lack of justification for the economic impact of this phenomenon. This is relevant for smaller countries that do not have the ability to financially maintain highly qualified professionals. The developed research methodology allows to evaluate the impact of brain drain on national economies, including indicators such as average life expectancy, average duration of education, GDP per capita, etc. This makes it possible to compare states and look for solutions to reduce the process of brain drain.

Theoretical background and methodology

The brain drain is a significant component of the labor market, promoting its changes. In the absence of talented employees, business subjects in developed countries are trying to attract them from abroad, but this is difficult to achieve without state aid. A positive migration policy, a stable tax environment, and a social package allow for a steady flow of talented employees.

Labour market surveys can be conducted at two levels - microeconomic and macroeconomic. This allows us to analyse the labour market situation in various sections and to ensure timely decision making. According to Wells, Gruneberg, Dainty (2005), the main macroeconomic labour market research objects are:

- Labour market and its dynamics;
- Research on equality and opportunities between low-skilled workers, especially in industry;
- Migration at both national and international level, especially in the context of the free labour market (e.g. European Union).

Thus, the investigation of labour market trends can provide information both on the national and on the international economic situation. In order to get even more accurate results, it is necessary to take into account microeconomic research factors, which in this case are:

- Employee satisfaction and approach to work;
- Relationship between skills and performance (productivity), distribution of earned profit due to productivity;
- Future skills requirements, including professional and managerial skills, and how these skills are recognized;
- Strengthening the concept of Human Resource Management in a modern context.

The research objects presented highlight that labour market research is important both at national and business level. With the labour market research tools needed to quickly respond to changes in the demand for labour, her conditions, and so effectively adjust the budget to promote the efficiency of the labour market. In a negative case, possible react to the deterioration of the labour market situation and prepare for the general economic downturn.

Technological progress is also important for labour market changes. In the less developed countries, dominates lower-skilled workers who accomplish the simplest operations. In this way, the country is not able to create high value-added products and keep the country's finest minds. Conclusively, this situation promotes the brain drain. The high economic development countries face the opposite situation of high-value-added products in the country and the critical need for high-quality human resources. Technological progress creates conditions for the economic development of business globalization (Maceika, 1998):

1. International Trade: goods, services, technologies and objects of intellectual property.
2. International Movement of Production Factors:

- labour migration (natural migration of unskilled, cheap paid labour, brain drain),
- for the exchange of information (scientific-technical information, know-how).

3. For International Financial Transactions:

- lending (private individuals and businesses, government, international organizations)
- transactions with securities (shares, bonds, etc.),
- financial instruments (forwards, futures, options, etc.).

4. For the development of global infrastructure (creation of companies serving various international business entities: international banks, crediting institutions, international consulting companies, etc.).

In terms of the phenomenon of the brain drain, it is generally accepted that migration flows move from poorer countries to richer ones. When people emigrate, they are looking for better living conditions, which are in developed and richer countries. Because migrants are often highly qualified, they choose countries with more attractive labour market conditions - easier to find work, more opportunities for improvement. The main result of this phenomenon is the search for better financial opportunities in countries with higher levels of development. As qualified human resources migrate in the brain drain process, it expects a higher wage in a foreign country to match its existing qualification.

The migration of highly skilled workers from developing countries to developed countries is driven by a variety of economic and social factors. Didžgalvytė and Pukelienė (2010) distinguish three main reasons:

- High level of income in developed countries;
- Lack of labour supply in developing countries;
- Working conditions in developing countries.

Differences in employment levels between countries are determined by objective economic factors. In general, it forms the directions of the brain drain. According to Martinka, Stoškus, Beržinskienė (2009), the employment rate of the country's population is determined by the size of effective general demand determined by the demand for consumption and investment. The general shortage or decline in demand creates conditions for a fall in economic activity. Later, it determines the rise in unemployment and the number of unemployed. On the other hand, the increase in aggregate demand gives the economy a boost by creating preconditions for employment growth and falling unemployment. This may be due to a decline in the production of goods and services during the downturn, coupled with a decline in labour demand. Meanwhile, as economic activity increases, reverse processes take place. The longer and more intensive the economic upturn, the less the unemployment rate. It seems that this is the unemployment caused by cyclical economic fluctuations. In general, employment rates are a very important aspect of macroeconomic research, allowing us to see both the current economic situation in the country and its future potential. This allows predicting and potential volumes of brain drain.

According to Edwards (2016), the working-age population in Italy is emigrating due to better living conditions. In developing countries exists a situation where people of working age are leaving their countries, especially young people who have not yet established themselves in the labour market. This is due to the low level of wages, lower economic and social development level of the country compared to other countries, inefficient tax policy (Kripaitis and Romikaitytė, 2005). Also, political inactivity often contributes to the deterioration of conditions - reacting too slowly, not attempt to make the situation easier for the most intelligent part of society. Developing countries are facing a problem - the development of critical thinking as opposed to the interests of individuals who may be hampered by an increase in people's awareness.

The outcome of the brain drain phenomenon is an inefficient investment in higher education. Developing countries allocate sufficient funds to the higher education system and emigrants who use state support later leave their home country. In this way, public investment in higher education in order to "grow" young scientists and skilled workers ineffective because they are being moved to another country. Investments in human capital are considered to be one of the most important investments, as it promotes domestic economic growth. Due to the high level of education, the quality of work is improving, productivity is increasing and thus increase the overall economic level of the country. High-skilled workers are also receiving higher salaries, making the state budget and social funds for pension funding more supplement. However, in confront of the brain drain, this is not being effectively exploited, as the number of productive part of society decreases and country confronted the problems of social programs, infrastructure development, and financing.

However, there is also exists in the opposite view of the possible positive effects of brain drain on foreign countries. According to this, migration can be useful and encouraging. Positive migration processes are visible through emigrants' feedback. Lowell and Findlay (2001) distinguish three of the most striking consequences of specialist migration feedback. When migrants come back from the foreign country, productivity increases in the labour market, as there are skills and work experience gained abroad. In addition, emigrants who remain abroad provide financial support through exchanges and that transferring their knowledge or technology to developing countries can increase their productivity and economic growth. Also, some emigrants go abroad only temporarily to accumulate capital, which then directs to their home country to invest in own house, business or other forms. However, in order to realize such a scenario, it is imperative that the developing country has a positive attitude towards emigrants, sincerely wishes to cooperate with them and recover them. If a state will act superficially, there is a risk not only of displacing a citizen of an emigrant country but also of ultimately repelling them, losing their competences.

In order to solve the problem of brain drain needed integrated solutions. They need to be coordinated between public authorities, municipal authorities to maximize the impact on returning citizens. One of these measures is the improvement of integrated labour policies. Working conditions are closely related to the government's policy in the country. The literature mentions a number of key decisions to be made by developing countries to avoid brain drain:

- Implement poverty reduction policies;
- Encourage employees to return to their homeland through various communication and financial programs;
- Improve the situation in the labour market - clarify labour relations, create a promotion mechanism;
- Investing in higher education - taking over the best foreign experience;
- To create conditions for the use of minds - to promote innovative business, self-expression of people in creating new business units.

Changes in the labour market nowadays are particularly visible in the migration of workers. Opinions on this issue are not unequivocal - they depend significantly on the country's economic situation. human resources travel to large countries without incentive, while small states with a weaker economic status are experiencing labour shortages. It is increasing, even more, when emigrated workers are not replaced by labour force from other countries. According to Lemos and Portes (2008), labour market migration has a small negative impact, as migration rates vary in the short and long term. In the course of migration, people who have previously emigrated, return to the country, adapt their experience and economic benefits. In the long run, wage levels are rising.

The efficiency of the labour market depends on the elasticity of social relations. According to Kramarz, Skans (2014), weak social relationships have an impact on the labour market, as it allows for the dissemination of information through business structures - labour agents, consultants, and others. This is particularly evident when there is a high level of immigration in the country - people who come to a new state and do not have any social links are looking for employment opportunities in the business enterprises. Job search networks are important not only for employees, but also for businesses, as this makes it easier for companies to deal with the issue, and networks quickly find workers with the requirable qualifications. Job Search Networks collect information on employee skills and transmit it accurately to companies that have a particular employee experience. Through these networks, it is easier to find work for those who have no work experience but have completed a certain type of studies. Technical knowledge graduates have the greatest amount of knowledge, while graduates with lower education have a lack of information, so training costs are needed to eliminate it.

When analysing brain drain in the Baltic States, demographic migration indicators, as well as socio-economic indicators, will be analysed separately. Depending on individual indicators, a comparison between Lithuania, Latvia, and Estonia will be carried out to assess the extent of migration and brain drain in countries. The analysis of these indicators also aims to identify the causes and consequences of brain drain in the Baltic States. In addition, the policies and measures taken by the countries to stop the brain drain will be discussed separately.

In general, the brain drain phenomenon is driven by labour market imbalances in countries with different economic capacities. The host country incurs particular costs in recruiting qualified staff, but it pays off when they enter the labour market. Meanwhile, states, struggling with the brain drain, must purposefully strive for employees to associate their future with their homeland.

Results and debate

Migration shows people, who have left the country and arrived. Migration includes both immigration and emigration processes, which are measured by the number of immigrants and emigrants in the country. The emigration process (leaving the country) directly reduces the population in the country. Immigration is the opposite of emigration when people come to live to the other countries. The scale of immigration and emigration in the Baltic States is presented in Tables 1 and 2.

Table 1. Amount of immigrants

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Estonia	3671	3884	2810	3709	2639	4098	3904	15413	14822	17616
Lithuania	9297	6487	5213	15685	19843	22011	24294	22130	20162	20368
Latvia	4678	3731	4011	10234	13303	8299	10365	9479	8345	9916

Source: Departments of Statistics in Estonia, Latvia and Lithuania

The data in the first table show that the highest number of immigrants is recorded in Lithuania and during the period of 2008 - 2017 there was a tendency to increase. In 2008, 9297 persons arrived in Lithuania and 20368 in 2017. Estonia is also lagging, and the growth trend of immigrants is similar to that in Lithuania. In 2008, 3671 persons arrived in Estonia, 0 in 2017 17616 persons. And the lowest number of immigrants in Latvia. In addition, Latvia does not have such rapid growth trends during the analysed period. In 2008, 4678 persons arrived in Latvia and 9916 in 2017.

Table 2. Amount of emigrants

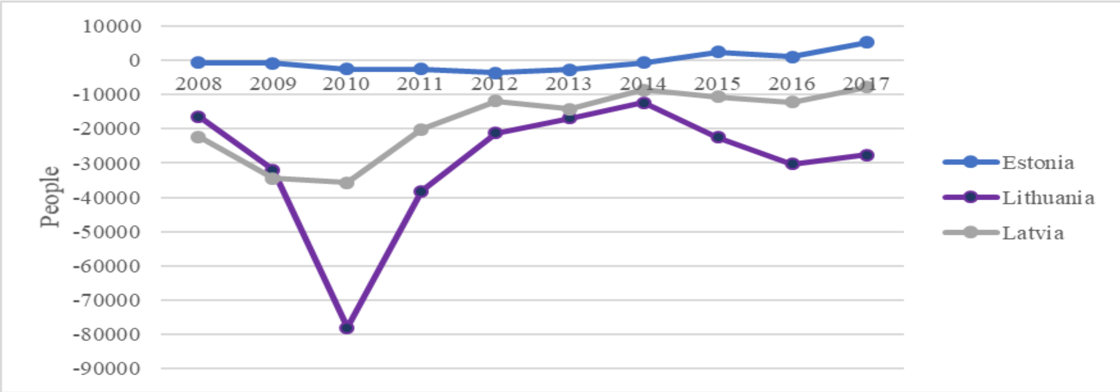
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Estonia	4406	4658	5294	6214	6321	6740	4637	13003	13792	12358
Lithuania	25750	38500	83157	53863	41100	38818	36621	44533	50333	47925
Latvia	27045	38208	39651	30311	25163	22561	19017	20119	20574	17724

Source: Departments of Statistics in Estonia, Latvia and Lithuania

In 2008 - 2017, the number of emigrants grew in Lithuania. It is distinguished by the largest number of emigrants from the Baltic States and in 2017 even 47925 persons emigrated from Lithuania. Although the growing number of emigrants has been recorded in Estonia in the last 10 years, in 2017, the number of emigrants in Estonia is at least 12358 in the Baltic States. Latvia is distinguished by a decrease in the number of emigrants in the last 10 years, but in 2017, the number of expatriates is still quite high - 17724.

However, the change in the number of emigrants and immigrants separately in Lithuania, Latvia and Estonia do not show the actual migration situation in the countries. In order to assess migration trends in the country, it is important to assess the difference between the migratory balance - the immigrants and the emigrants. The balance of migration shows how different the number of immigrants and emigrants is, which is reflected in the overall migration situation prevailing in the country. The balance of migration in 2008 - 2017 is presented in Graph 1.

Graph 1. International migration



Source: Departments of Statistics in Estonia, Latvia and Lithuania

Figure 1 shows that during the period of 2008-2017 migration in Lithuania fluctuated the most. The biggest difference was recorded in 2010 when 77944 persons left Lithuania more than they arrived. Later on, the situation was getting worse, but in 2017 there is still a negative and the largest balance of migration in the Baltic States. This means that in 2017, 27557 more people left Lithuania than arrived. As work-age people are migrant mostly, Lithuania faces a sufficiently large brain drain. In Latvia, the balance of migration is much lower and reaches -7808 in 2017, which also means that fewer people arrive in the country than they leave. However, the indicator has been improving rapidly in recent years, which means that fewer and fewer people are leaving the country. The best migration situation is recorded in Estonia. Although the balance of migration in Estonia was negative until 2014, the value of this indicator is not high and has left 2548 more than arrived. However, already in 2015, the situation improved, and a positive indicator of the migration balance was recorded. This is also the case in 2017, which means that more people are drawn to Estonia than they leave. In this case, Estonia has no problem with the brain drain. This situation shows a phenomenon of brain inflows. This is a rare example of the post-Soviet states. This shows the improvement of social and economic conditions in the country - higher salaries, easier conditions of establishment in the labour market, improving and acceptable working environment for people, improving social situation. For all these reasons, people are beginning to choose Estonia as a migration-friendly country, where they decide to transfer their skills and working skills, which are helping the country's economy to grow even faster.

Brain drain trends can also be explored through social prism. In order to more accurately assess and compare the quality of life in the Baltic States, the Universal Human Development Index (HDI) proposed by United Nations experts is taken into account. This index is calculated using data from three indicators:

- Average life expectancy;
- The average duration of training;
- Gross national income per capita.

Since 1990 The United Nations collects countries data and presents annually an annual report on human development reflecting the HDI. According to the latest data in 2018, the Baltic countries are located at high enough positions - 30, 35 and 41/42, out of 189 countries. More detailed data on the HDI are presented in Table 3.

Table 3. Human Development index of Baltic States

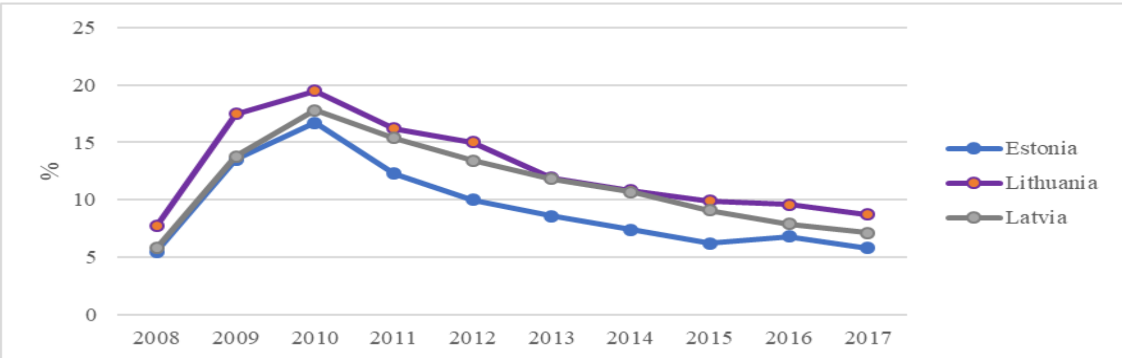
	Estonia	Lithuania	Latvia
Position	30	35	41/42
Human development index	0,871	0,858	0,847
Average life expectancy (years)	77,7	74,8	74,7
Average duration of training (years)	16,1	16,1	15,8
Gross national income per capita ($)	28 993	28 314	25 002

Source: United Nations Development Programme (2018)

According to the HDI, Estonia is ranked 30th and is the best in the Baltic States. HDI stands at 0.871, average life expectancy at 77.7 years, average 16.1 years of education, and $ 28.993 per capita gross national income. Lithuania is a little behind Estonia. HDI is 0.885, average life expectancy slightly shorter - 74.8. The average duration of education in Lithuania is equal to 16.1 years in Estonia. The gross national income per capita is $ 28,314 In this case, Latvia occupies the lowest of the Baltic States - 41/42 place (sharing with Portugal). Latvia's HDI is smaller than Estonia and Lithuania and is 0.847. The average life expectancy is slightly different from 74.7 years in Lithuania. The average length of training is less than 15.8 years. Gross National Income per capita in Latvia is $ 25.002.

The large scale of international migration and the predominant brain drain process also affect the country's economy. This is reflected in labour market indicators, economic activity in the country, prices and costs, and even government finances. When analysing the impact of labour migration and brain drain on the labour market, the rate of unemployment in the Baltic States is evaluated. It is shown in Graph 2.

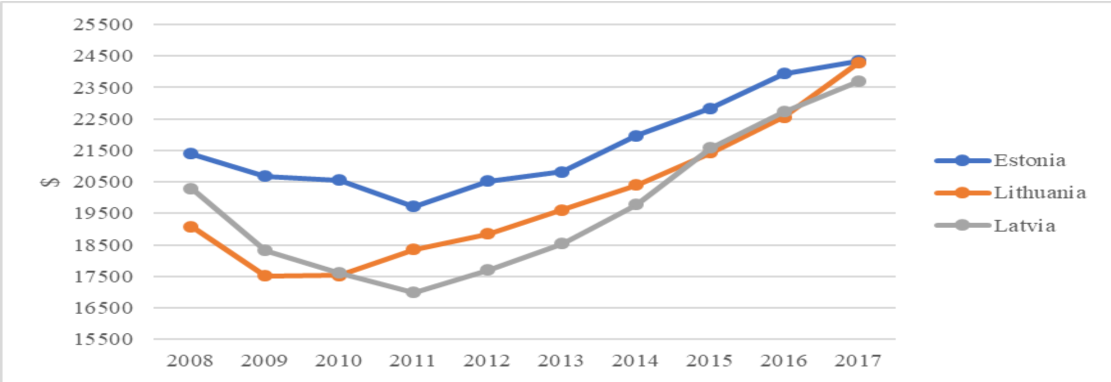
Graph 2 Unemployment level, in %,



Source: Eurostat

When assessing and comparing unemployment in the Baltic States, the unemployment rate in Lithuania, Latvia and Estonia is quite similar, and the fluctuation tendencies also are similar. The financial crisis that arose in 2008 has also affected the unemployment rate and its effects are visible until 2010, with rapidly rising unemployment rates in the countries. In Latvia, the highest unemployment rate is recorded as high as 19.4%, 17.81% in Lithuania and 16.71% in Estonia. Later, the unemployment rate in the countries began to decline, and such trends are also influenced by human resource migration and brain drain processes. Given the fact that the working-age population is the largest emigrant and the population is aging, it is artificially reducing unemployment in the country. As the working age population diminishes, while the retirement age increases, the unemployment rate in the country is lower and employment rates are higher. However, although the unemployment rate in the countries is falling due to high emigration of people of working age, the country faces with another problem - the lack of qualified human resources. This affects both price and cost level indicators, as well as the wages shown in Graph 3.

Graph 3. Annual average wages, in USD

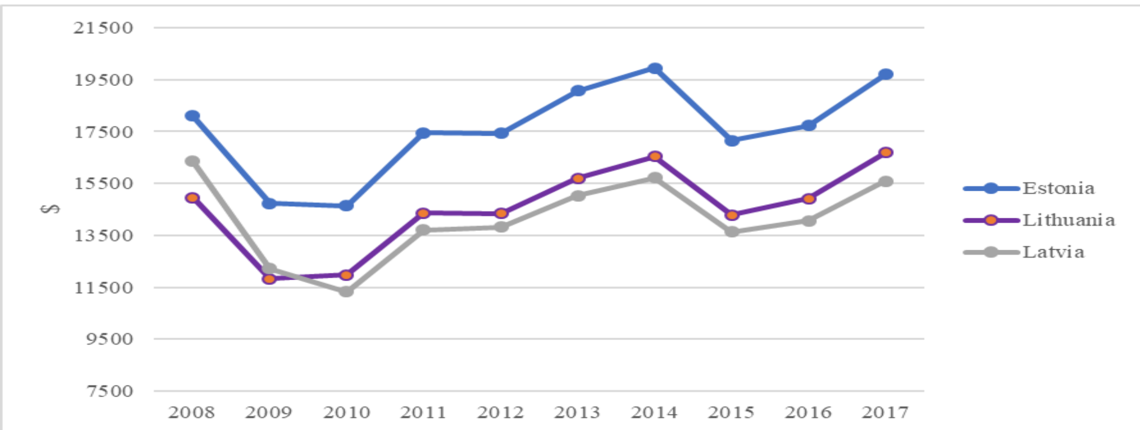


Source: OECD

In 2008 - 2017, the highest gross wages are recorded in Estonia and the lowest in Lithuania. In Latvia and Estonia, wages grew at a similar pace during the analysed period, but in Estonia the growth rate was slightly faster. Wage growth is driven by various factors, but one of them is labour migration and the brain drain process. As mentioned earlier, countries are facing the problem of a skilled workforce as a result of the rapid brain drain process. This means that the labour market is becoming more competitive, and the lack of skilled workers offers higher wages.

GDP is the most commonly used indicator for the country's economic growth. As countries vary in size, countries will be compared against GDP per capita in order to achieve more accurate comparisons. Data provided in Graph 4.

Graph 4. GDP per capita (EUR)



Source: The World Bank (2019).

According Figure 4, Estonia, according to the same level of GDP per capita, is ahead of Latvia and Lithuania. The overall rates of change in the period of 2008-2017 are similar. However, the previous assessment of wages shows that in Lithuania it is the lowest, despite the change in GDP per capita. And this is one of the most important reasons why residents decide to emigrate from Lithuania, thus looking for better conditions for living and getting the competitive salary for labour. Having assessed the various indicators of the Baltic States, can state that the best brain drain problem is being solved in Estonia, meanwhile Lithuania and Latvia must make a progress. In Lithuania, the emigration flows are very high, and the number of immigrants is much lower. This leads to changes in the labour market, changes in social and economic indicators and reduces the country's economic development tendencies. In Latvia, the situation is similar to that in Lithuania. According to social indicators, Latvia lags slightly behind Lithuania, but economic indicators in the country show a slightly better situation. In addition, Latvia's emigration flows are much lower than in Lithuania. In order to solve this problem, Latvia undertaked determinate efforts. According to Actina, Geipele, Zeltins (2015), citizens in Latvia are encouraged to return to their homeland in various ways: young people who have completed their studies abroad are offered the work in public service, summer camps, language schools, conferences and folklore festivals are organized around the world. Moreover, in 2013, the Saeima legitimized dual citizenship. Latvia has also agreed to accept 531 refugees under the EU Refugee Program. In Lithuania, youth entrepreneurship promotion programs are being created, support and subsidies are provided. In recent years, a minimum wage has been raised in Lithuania, and a law has been passed that the qualified labour force must receive a higher than the minimum wage. Various conferences, advertisements and other tools are also being used to attract Lithuanians to return to the country. However, in Latvia and Lithuania these actions are not yet valid, and the problem of brain drain is still relevant.

Estonia is a model country among the Baltic States, which has solved the problem of brain drain in recent years. In Estonia, more people come to the country than they emigrate. This situation exists because Estonia is applying strategies for attracting immigrants. The country has created favourable conditions for settled residents to establish themselves in the country and create a job. The improving social situation, rising wages have led to the arrival of not only large immigrant flows, but even helped to recover emigrant Estonians (50% of the people returning to Estonia are citizens of that country). This is a positive development, as it means that in a country with a

growing population, the collapse of pension, social security and education systems is no longer threaten, and the growing number of workers allows for a continuation of a balanced budget policy and moderately raising old age pensions and salaries for teachers, doctors and other public sector employees. Attracting a skilled workforce to the country helps Estonia to improve the situation in the country, improve social indicators and promote economic development.

Conclusions

The concept of brain drain describes the process of talented or educated working-age population leaving the country. The brain drain is happening due to people seeking better living conditions. Mostly migratory flows are due to higher income in developed countries, as well as low labour supply in developing countries and better job prospects. The consequences of this phenomenon are felt both socially and economically, as there are changes in the labour market, enhance a lack of skilled labour, as well as an aging population, inefficient use of funds invested in the education system and financial difficulties. Thus, in order to address this problem and reduce its consequences, it is first necessary to implement a poverty reduction policy, to encourage employees to return to their homeland, to improve the situation in the labour market; to create conditions for the use of the mind potential and other.

Comparison of the Baltic States showed that the problem of brain drain in Lithuania and Latvia is really topical and its consequences impede the development of social and economic development. Estonia is experiencing a stagnant brain drain problem, as a positive indicator of the migration balance. Taking into account the trends of the variables analysed and the consequences of brain drain, Latvia is trying to solve this problem by encouraging citizens to return to their homeland by offering a job in public service, young people who have completed their studies abroad, organizing camps, language schools, conferences, festivals, as well as receiving refugees. Similar measures are being implemented in Lithuania: young people's entrepreneurship is encouraged; support and subsidies are given to facilitate the return of young people to the Lithuanian labour market. In order to help establish themselves in the country, young families are granted housing support. Lithuania also raises wages, thus reducing the level of poverty in the country and improving living standards. However, the data show that such a policy is not effective so far because the problem is not solved. Estonian system of attracting immigrants has been very successful - creating favourable conditions for the settled population to establish themselves in the country and creating a job, improving the social situation, increasing wages led to the arrival of not only large flows of immigrants and thus solving the problem of brain drain. This encourages population growth in Estonia, the risk of a collapse in pension, social security and education systems disappears, and the growing number of workers allows the continuation of a balanced budget policy and moderately raising old age pensions and salaries for teachers, doctors and other public sector employees.

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Manuscripts **should not exceed** 22 standard A4 pages in length.

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- Title of the paper – centered, capital letters (11-point font size, Arial Bold);
- Author's name – centered, do not include professional, official or academic degrees (12-point font size, Arial (*Italics*);
- Abstract (8 – 10 lines) – English language (9-point font size, TNR *Italics*);
- Key words (at least 5 words) – written in Slovak (Czech) and English language (9-point font size, TNR *Italics*);

Body of main text: *Introduction* (establish the existing state of knowledge of your research topic, identify the specific focus of your work, include relevant citations from primary literature, justify how this topic requires additional study, state specific objectives/hypotheses, methods, describe the meaning of your research); *Goal and Methodology; Findings; Discussion*; *Body of main text* should be divided into chapters and subchapters. Chapter titles are to be numbered, 11-point font size bold, align left; *Conclusion*; *Notes.*

Manuscript formatting:

- aligned to block,
- 10-point font size, Times New Roman,
- single spaced,
- indent each new paragraph 3 pt,
- do not paginate.

Tables and graphs are to be in black and white colour, numbered in order of their being referenced in the text. Table titles (Table 1), graph titles (Graph 1) and/or figure titles (Fig.1) should be written in 10,5-point font size, Times New Roman ***Bold Italics.*** Indicate source in 8-point font size, Times New Roman. *Source: Cihelhová. (2009). Svetová ekonomika, s.23*., *By: www.slovakia.culturalprofiles.net/?id=-13602, (2012-15-03).* **Formulas** are to be numbered using a parenthesis.

References in the text (Harvard style – APA styles (American Psycho-logical Association 6th edition) should be set in parenthesis in this type of format: (a surname of an author(s) of a work, comma the year of edition and number of pages, for example: (Romer, 1985, pp. 998-1020; Snowdon (Ed.), 1998, p. 100; Snowdon et al., 1998, pp. 100-121; Romer, 1985, pp. 998-1020).

References should appear in the reference list at the end of the paper. List references in alphabetical order by surname and name of the author in line with the applicable Slovak style of reference/citation. References within the text (name, date and page number) may be given in parenthesis (Drucker, 2005, p. 87). Do not use footnotes.

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Introduction (Times new roman Body text 10)

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Goal and Methodology (Times new roman Body text 10)

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Findings (Times new roman Body text 10)

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Woolman, N. (2011). *Investment in creative industries is not high risk.* [acc.: 2012-15-11]. Available at: http://www.thestage.co.uk/news/not-high. (internetový zdroj)

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