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# **MEST Journal**

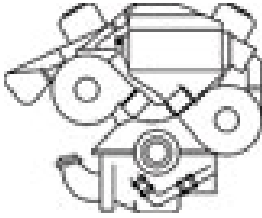
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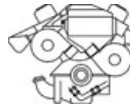
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## Editorial on MEST Journal 2017-1

Prof. Dr. [Zoran Čekerevac](#)<sup>1</sup>

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Belgrade  
January 15<sup>th</sup>, 2017

Welcome to the newest issue of the MEST Journal, an international peer-refereed academic journal, the official journal of the non-profit organization MESTE, and the Faculty of Business and Law of the "Union – Nikola Tesla" University in Belgrade, and the SZ & Associates - Toronto. This issue is published online and in print.

The MEST Journal is registered in DOI system by CrossRef with **DOI 10.12709/issn.2334-7058**. All articles published in this issue, as well as in the previous issues of the MEST Journal, have their own DOIs. The MEST Journal is registered in **doiSerbia** of the **National Library of Serbia, COBIB.SR, Matica Srpska Library, COBISS.SR, Google Scholar, CrossRef, OALIB, EleCas** base of **KoBSON**, the **Index Copernicus ICI Journals Master List 2014**, and in the **ResearchBib** (IF: 2016 Evaluation Pending).

We keep the practice that articles, that have undergone peer review, and will be published in the next issues, we make available to readers in the form of preview - early reading. The focal point of the journal remained at international level, with the view on matters from a global perspective. However, due to their importance, in this issue have been published some papers relating to some specific local events.

In this issue, eighteen of submitted papers were published, of which five were classified in the group of research scientific papers, eleven in the group of scientific review papers, and one article in each of the following categories: "book review" and "case study". The most of the articles is multidisciplinary. However, ten papers can be predominantly classified to the field of management, five to the group of economics and finance, and one article can be placed into each of groups: IT, sociology, and education.

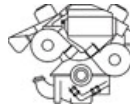
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- Management in economics
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- Marketing management of research
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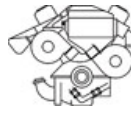
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- Application of IT in higher education
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- Data protection
- New services
- Information security
- Information system security
- Business information system
- Innovation and technology
- Industrial research
- Technology forecasting
- Instrumentation and analytical techniques
- Specials of direct relevance to industrial entrepreneurs
- Debates on key industrial issues
- All facets of industrial development

***These are basic, but not exclusive themed areas.***



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# BOOK REVIEW OF OFFER AND SODERBERG'S: *THE NOBEL FACTOR*

**Walter E. Block**

Harold E. Wirth Eminent Scholar Endowed Chair and Professor of Economics, Joseph A. Butt, S.J. College of Business, Loyola University New Orleans, LA, USA

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## **Abstract**

*This book tells everything that anyone could ever want to know about the Nobel Prize in Economics. It delves into the history and sociology of this award. It gives the background of the behind the scene political machinations undergirding it. It names names, and weighs in on the question of whether there is any underlying bias in making this honor. Its thesis is that this prize has influenced public policy pretty much throughout the world, and does a splendid job in marshaling evidence for this claim. It analyses the political background of most awardees. All of this is good and well. However, in the course of offering the reader this important information, this publication commits a series of errors, some of them quite substantial from an economic point of view; these are heavily criticized in the course of this review.*

**Keywords:** Nobel Prize, economics, prestige, culture, influence

## **1 INTRODUCTION**

This is an important book. It will prove fascinating for all economics junkies, plus those interested in any and all Nobel Prizes, whether or not in the dismal science. I learned a lot from this publication, and highly recommend it on that basis. Perhaps a more descriptive, and marketable title for it would have been "Everything you ever wanted to know about the Nobel Prize in Economics, and about those who have given, and been given this award." The authors call such people Nobel Prize Winners (NPW) and I shall follow their lead on this.

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This book explains the choices of the Nobel Prize committee; they are based, mainly, but not solely, on past citations to their publications, and, also, on who are the acknowledged leaders in this field. Very helpful was their application of the Bass Model of innovation (chapter 6). There, among many other insights, we can easily see which NPWs boosted the prize (had many cites beforehand), and those who were enhanced by it (relatively more cites afterward). I greatly enjoyed reading about how well non-winners (born too early) such as Adam Smith, Karl Marx, John Maynard Keynes and Alfred Marshall stacked up in this way against the actual NPWs: pretty darn well. Ditto for Nobelables (Cardinals who might reasonably become Pope are called Papabile) such as Joan Robinson, J.K. Galbraith, who, claim our authors, were cheated out of this well-

deserved award by right wing committee members, mainly, Assar Lindbeck.<sup>1</sup> However, there is no mention of the oft-made claim that Mises, too, was in effect cheated out of this prize. He was mentioned (p. 135) in this regard along with several other “refusees” (Nobelables who did not make it). The prize was awarded to Mises’ student Friedrich A. Hayek in 1974, one year after the former passed away. In the view of Offer and Soderberg, that prize was an anomaly, pretty much undeserved, at least on the basis of citations to his works.

In section II we discuss author’s citations, on the basis of which many NPWs are selected. The burden of section III is to criticize several errors committed by the authors. Bias in the selection process is the subject of section IV. Minor errors of Offer and Soderberg are discussed in section V. We conclude in section VI.

## 2 CITATIONS

Our authors focus on citations as an explanation of NPWing, and this is not unreasonable. However, they rely on JSTOR which almost totally excludes Austrian and libertarian economists, who publish in journals such as *The Quarterly Journal of Austrian Economics*, *the Review of Austrian Economics*, *the Journal of Libertarian Studies*, *the Cato Journal*, *Reason Papers*, *Libertarian Papers*, *the Independent Review*, *Dialogue*, *MEST Journal*, *The Journal of Private Enterprise*, *Review of Social and Economic Issues*, *Romanian Economic and Business Review*, *Acta Economica et Turistica*, *Humanomics*, *Journal of Economic and Social Thought*, *Journal of Economics and Political Economy*, *The Journal of Philosophical Economics*, etc., etc. Rather, they focus on journals in which the faculties of the Ivies, MIT, Stanford, Chicago, Berkeley, etc., publish in, which leads to an incestuous in-group bias toward periodicals such as the *American Economic Review*, *the Journal of Political Economy*, *Quarterly Journal of Economics*, *Econometrica*,

*Review of Economic Studies*, *Quarterly Journal of Economics*, *Journal of Economic Theory*, *Journal of Econometrics*, and other “top” journals.

I would like to offer an alternative hypothesis. NPW and Nobelables are chosen on the basis, in addition to cites in “leading” journals, of the discovery of “market failures.” Certainly, Akerlof and Stiglitz fall into this category. The *American Economic Review* is replete with articles of this sort.<sup>2</sup> But this applies as well to the economists our authors are pleased to call “right wing.” For example, Milton Friedman, who sees more market failures than you can shake a stick at.

This book could sorely use an index. Not so much for subjects, although for that too, as for names. The latter are effusively mentioned all throughout. In addition to all the NPWs, and the Nobelables, there are dozens of other authors who have weighed in on the Nobel Prizes. The book is exhaustive about this subject, one of its many strengths.

## 3 MAJOR ERRORS

Let us now consider some of its, unfortunately, numerous weaknesses. According to the authors, right-wing economists do not really care about unemployment (p. 150). For them, it is “voluntary,” akin to “agreeable idleness.” It is sort of like a vacation, which no one can oppose. In contrast, leftists are vitally concerned about this social problem. Their solution? Strengthening labor unions and aggregate demand. This is problematic. They offer no cites to these straw men of theirs. As for organized labor curing unemployment, this is erroneous. They *create* it, by boosting wages above productivity levels. The rust belt in the northeast of the U.S. offers ample testimony to this phenomenon. Aggregate demand? Why, then, is black teen unemployment quadruple that of adult white levels? Could this have something to do with the minimum wage law, beloved of one of these authors’ favorite

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<sup>1</sup> Our authors write (p. 136) of “... the discretion available to the (Nobel) committee, especially during the later Lindbeck chairmanship years, the period of right-wing ascendancy in the 1990s.” My own experience with the latter was when he addressed the Columbia University labor workshop while I was a graduate student there. Gary Becker, Jacob Mincer, Rueben

Gronau and several others jumped all over Lindbeck as a *left* winger. I suppose the political spectrum is different in Sweden than in the U.S.

<sup>2</sup> One of my favorites is Prendergast, 1993. She has not yet won the Nobel Prize in economics, but if my theory is correct, this contribution of hers bodes well for her chances. See Block, 2001 for a rejoinder.

institutions, labor unions? Nor do they mention the fact that before the advent of this pernicious legislation, there was no such bifurcation.

These authors write as journalists; they appear very well acquainted with this subject, but do not address it qua economists. They are listed as economic historians, and I can well believe their expertise in the latter capacity; but not the former. Which basic economic errors do they commit that lead me to this opinion? Let me mention some of the ways.

"The (physical) sciences abide by this method (falsifiability, testability, predictions) and economics, when it aspires to the same esteem, is presumed to do so as well" (p. 3). Not so, not so. There are numerous economic laws that give us important information about the real world, and yet do not pass muster on this criterion. For example, there is a tendency for profits to be equal in all industries, apart from risk. Whenever voluntary trade occurs, each party values the other's possession more than his own. Both gain in the ex-ante sense. These authors (p. 50) approvingly quote Feynman as follows: "... if it disagrees with experiment, it's wrong, that's all there is to it." They accurately characterize this as "logical positivism" (p. 50), but seem blissfully unaware that any criticism has ever been leveled at this doctrine. They go so far as to write (pp. 50-51): "... after three centuries, economics has yet to come up with a single non-obvious 'law,' or universal regularity." How about trying some of these on for size (Hoppe, 1995):

"Whenever two people A and B engage in a voluntary exchange, they must both expect to profit from it. And they must have reverse preference orders for the goods and services exchanged so that A values what he receives from B more highly than what he gives to him, and B must evaluate the same things the other way around.

"Or consider this: Whenever an exchange is not voluntary but coerced, one party profits at the expense of the other.

"Or the law of marginal utility: Whenever the supply of good increases by one additional unit,

provided each unit is regarded as of equal serviceability by a person, the value attached to this unit must decrease. For this additional unit can only be employed as a means for the attainment of a goal that is considered less valuable than the least valued goal satisfied by a unit of such good if the supply were one unit shorter.

"Or take the Ricardian law of association: Of two producers, if A is more productive in the production of two types of goods than is B, they can still engage in a mutually beneficial division of labor. This is because overall physical productivity is higher if A specializes in producing one good which he can produce most efficiently, rather than both A and B producing both goods separately and autonomously.

"Or as another example: Whenever minimum wage laws are enforced that require wages to be higher than existing market wages, involuntary unemployment will result.

"Or as a final example: Whenever the quantity of money is increased while the demand for money to be held as cash reserve on hand is unchanged, the purchasing power of money will fall."

Here is a further example of their economic illiteracy:

"When there is no slack,<sup>3</sup> nobody can gain without somebody else losing" (p. 3). But voluntary trade, see above, disproves this claim of the market as a zero-sum game.

"... everyone gets the value of what they can sell" (p. 3). No, no, no, whenever anyone sells anything, he gets *more* than the value he places on his property. Otherwise, why, ever, would he agree to vend?

These authors see "rent control" (p. 6) as a means leading to "good-quality affordable housing." And, yet, every introductory microeconomic textbook properly concludes, on the basis of elementary supply and demand, the very opposite. This conclusion attains one of the highest consensuses of all questions asked of economists in surveys (Block, & Walker, 1988). Even their favorite economist, Myrdal (1965), had this to say about

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<sup>3</sup> I assume this means we have attained full employment.

that pernicious legislation: "Rent control has in certain western countries constituted, maybe, the worst example of poor planning by governments lacking courage and vision." Not discouraged, our authors characterize this law as (p. 157): "... a social intervention intended to mitigate monopoly pricing." Here, they would appear to have taken a full leave of their senses? For the neo-classicals, "monopoly" is based on concentration ratios. But, surely, this industry is amongst the closest to "perfect competition" given its numerous sellers. For Austrian economist, this depicts restrictions on entry into the field, which can only be considered virtually non-existent, apart from government regulation.

#### 4 BIAS

Offer and Soderberg criticize the free market "bias" of the Nobel Committee. Yet, they themselves are not free of this unsavory characteristic. Exhibit A: they feature Gunnar and Alva Myrdal on their front cover. Would not a group picture have been more appropriate? Exhibit B: they see Milton Friedman, throughout their book, as an exemplar of free enterprise. Not at all. Rather, he was a social democrat,<sup>4</sup> albeit with some few free enterprise opinions.<sup>5</sup> Exhibit C: They regard Friedrich Hayek in much the same manner. Yet, the overwhelming evidence<sup>6</sup> fails to bear this out.<sup>7</sup> Their treatment of the latter economist is particularly galling. They note that "Hayek conceded some need for social insurance and other government interventions" (p. 8). Despite these facts that they themselves mention, they still consider him an advocate of free markets.

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<sup>4</sup> Our authors are intent on shoving this economist into a free enterprise box, even though he hardly fits there. For example, they claim (p. 157) he was the "most influential adversary" of "Social Democracy." But on the very same page they admit that "He proposed a negative income tax to bring incomes up to a social minimum... Although designed as an alternative to Social Democracy (perhaps as a way of making it unnecessary, or to make it easy to abolish) it overlapped with the Social Democratic aspiration to place a floor under incomes." What does this man have to do to convince Offer and Soderberg that he is to a great degree a social democratic. "Overlapping" with their policies is, it would appear, insufficient. He is a confessed Keynesian, see below, fn. 8. Must he swear allegiance, too, to Galbraith and Karl Marx?

They characterize the early members of the Mont Pelerin Society as "some of the leading anti-labour intellectuals in Europe and America..." I presume they mean by this that Hayek, Friedman, Stigler, Ohlin, Allais, etc., were not supporters of minimum wage laws and unions. But this is not at all "anti-labour." Rather, it is anti-unemployment and rust belts. Elsewhere (p. 142) this organization is described as "reactionary." Is this not the sort of bias against which we are continually warned?

The authors of this book mischaracterize Milton Friedman as an opponent of Keynesianism (p. 10). The truth of the matter is that he was a monetarist-Keynesian, albeit not a fiscalist one. States Skousen (2001): "This slide from Keynesian theory to particular policies was well illustrated in his seventh edition (1967), when Samuelson cited a statement by Milton Friedman, "We are all Keynesians now." ... Friedman (1968, p. 15) would later put it this way: "We all use the Keynesian language and apparatus, none of us any longer accepts the initial Keynesian conclusions."<sup>8</sup> But, surely, the "apparatus" is far more important than and "conclusions" drawn from it, since the latter is based on the former, not the other way around.

#### 5 MINOR ERRORS

In the view of Offer and Soderberg, "In 2008, the financial markets had to be rescued by governments from their follies" (p. 12). And again: "The economic crisis ... was caused by financial deregulation..." (p. 14). Unhappily, we are offered not a single shred of evidence for this highly contentious claim. They also opine again in the

<sup>5</sup> See on this Block, 1999, 2003, 2010, 2011, 2013; Block and Barnett, 2012-2013; McChesney, 1991; Rothbard, 2002; Friedman and Block, 2006; Friedman and Block, 2006; Kinsella, 2009; Lind, 2012; Machan, 2010; McChesney, 1991; North, 2012; Rothbard, 2002; Vance, 2005; Wapshott, 2012; Wenzel, 2012; Wilcke, 1999

<sup>6</sup> These authors are a bear for "evidence." This salutary characteristic often leaves them, as in these two cases.

<sup>7</sup> Block, 1996, 1999, 2006; Hoppe, misc dates; Knott, 2012; McMaken, 2010, 2013; North, 2014; Rothbard, 1980, 1981-1982, 1998 (ch. 28)

<sup>8</sup> See on this Block, 1999, fn. 16, Friedman, 1968, p. 15; Garrison, 2010; Samuelson, 1967, 210; 1970, 193, Skousen 2001.

absence of any empirical support (p. 15): "Social Democracy provides an alternative<sup>9</sup> that is pragmatically successful, analytically coherent, economically efficient, ethically attractive, and theoretically modest." If that is not bias, there is no such thing as that characteristic.

Here is yet another rookie error; we are told that "... the invisible hand, which implies that the pursuit of self-interest is socially beneficial. This doctrine ... has never been proven, except in an abstract and exotic form." But, this is a misspecification of one of the elementary building blocks of the dismal science. *Of course*, the pursuit of self-interest is not always socially beneficial. One need not extend one's thought further than murder, rape, theft, terrorism. These are all "self-interested." But the invisible hand applies to none of these outrages. Rather, it is predicated upon something these authors miss: it holds only under a regime of economic freedom, private property rights, and laissez-faire capitalism. It does not at all apply to "crony capitalism," where "rent-seeking"<sup>10</sup> is the order of the day.

Here is an unwarranted critique of the profession of economics (p. 118): "The results are striking. To begin with, there was no unanimity. If economics was a science, there was no agreement on its core policy implications. One would hardly expect such lack of agreement over core issues in the application of physics, chemistry or biology." Note, first, the subtle change from "core policy implications" to "core issues." I have no doubt that biologists would not reach anything like unanimity on a "core policy implication" related to their subject matter such as the pro-life pro-choice debate. Nor would physicists or chemists achieve unanimity of the wisdom of U.S. military ordinance policy. The point is, in the social sciences, all of them, not just economics, "core policy implications" have to do with *values*, which are no part of their "core issues." Economists

overwhelmingly agree, for example, on the economic effects of rent control, even Myrdal, as we have seen. But, as to whether the public policy of income redistribution should be followed, of course, there is wide disagreement since different economists have adopted different political philosophies, which are not at all at the core of positive economics.<sup>11</sup>

Here are some more elementary errors. These authors (p. 159) maintain that "Markets failed because transactions were costly." That is a new one entirely, and might yet earn for them a Nobel Prize. But they might as well have said that "Markets failed because land, labor or capital was costly." Offer and Soderberg (p. 160) misconstrue "... public choice doctrine, whose central premise was that majority rule undermined the efficiency of free markets." As every freshman economics student full well knows, in markets, free or not, there is no "majority rule." Rather, there is unanimity; both, or all, participants in purchases, sales, lending, borrowing, renting, agree to the deal, or it simply does not take place. Where, then, does "majority rule?" In *politics*, of course, not economics. Further, they aver (p. 9): "Mixed economies with high levels of government intervention have reliably sustained political and economic freedoms for many decades, while laissez-faire and totalitarian regimes have not." A few examples of each might have come in handy. And, it is more than passing curious that they should equate "laissez-faire and totalitarian regimes." Surely, they are polar opposites.

One last error/oversight of theirs. I regard Murray N. Rothbard as the second-best economist (to Mises) in all of the history of our profession. Any book about the top economists who have not won this prize that fails to even mention him cannot be all good. This publication fails that litmus test.<sup>12</sup>

<sup>9</sup> To the free enterprise system

<sup>10</sup> For a critique of this nomenclature, but not the idea behind it, see Block, 2000, 2002, 2015;

<sup>11</sup> For the distinction between normative and positive economics, another elementary aspect of this discipline that seems to have escaped our authors, see Block and

Cappelli, 2013. Another howler in this regard (p. 162) is this: "... market-clearing equilibrium economics ... justified the existing distribution of property and income." It did no such thing. The former is in the positive realm; the latter is normative.

<sup>12</sup> He is indeed mentioned (p. 116) but not in that context.

## 6 CONCLUSION

Let me end this review on a positive note. Their main thesis is that the awarding of this prize has had an important effect on public policy. Have they demonstrated this? Yes, I think they have. And,

this is important, since it is the duty of our profession to explain, understand and analyze economic activity. This is part and parcel of an accurate explanation, and we should all be grateful to these authors for pointing that out.

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# IMAGE AND NATION BRAND FORMATION AS TOURISM DEVELOPMENT FACTOR IN KAZAKHSTAN

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## Abstract

*The role of marketing in shaping the image and creating a national brand of the country as a factor in the development of tourism in Kazakhstan. This article discusses the marketing approach to image formation, creation and promotion of a brand of Kazakhstan as a national idea. The theoretical substantiation of necessity for using marketing tools is given as a form of the country's image for developing tourism and territory. The authors, recognizing the importance of a single national brand of the country, at the same time warned that the creation and promotion it must be seen as a long process, as opposed to those opinions. Interesting and worthy of attention, those who are directly responsible for the formation of the image, creating and promoting the country's brand, is the example of Germany in solving this problem, which is used in preparation for the World Cup in 2006. This approach is possible, according to the authors, in preparation for the Expo-2017 and Universiade-2017 and proposals are given to apply similar marketing tools to enhance the image of Kazakhstan.*

**Keywords:** marketing, image, branding, brand of the country, the German experience, brand positioning Kazakhstan EXPO-2017, the energy of the future, Tourism.

## 1 SYMBOLS AND BRANDS IN CONSCIOUSNESS AND BEHAVIOR OF THE MODERN CONSUMER

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The phenomenon of consumer consciousness has already been the focus of special humanitarian and applied research for a long time.



At that along with material well-being growth a symbolic aspect of consumerism is emphasized still oftener. R. Barthes, J. Baudrillard, F. Jameson, P. Bourdieu, M. Foucault and other competent authors analyzed a semiotic character of consumer relations from different methodological viewpoints. Baudrillard concept seems the most consistent among all concepts. Beginning from sketchy the system of objects, and concluding with the creation period of, for a critique of the political economy, of the sign, Baudrillard strictly adhered to the same theorem of consumerism: "Consumption, as much as this word actually means, is the activity of a systematic manipulation of signs" (Baudrillard, 2001, p. 92).

From this viewpoint, consumerism is reduced not to consumption of things or services proper, but only of content mediated by them (for example, social status). The goods become an element of some peculiar symbolic constructor.

The important psychological factor, defining the relation to the goods, is the brand. According to David Olgyvy, the brand is an intangible sum of properties of a product, service or firm. (Initially in America a brand – incandescent iron for marking cows within a herd and a brand itself on cattle croup or ear) (Posypanova, 2012).

Earlier it was considered, that the brand is a synonym of a famous trademark. In modern consumption, the brand can be the goods, service, company, possessing of psychological resources (value), but neither its trademark (brand name), nor the set of ideas about it (associations of a brand or a brand myth), nor the system of ideas, images about it (brand image). The brand meaning is given in the dictionary of economic terms: the world-famous trademark; the product protected legislatively; the company (its name) or the concept separated from a lot of the same kind by public consciousness.

The theme of our research relates to a collective, complex brand – a brand of places and of a country as a whole. About these brands, there are much fewer publications than about brands of products, services, and firms although the interrelation between the first and the second exists and it is rather a complex one.

## 2 FROM BRANDING OF THE GOODS AND SERVICES THROUGH PLACE BRANDING TOWARDS COUNTRY BRANDING

For successful participation of Kazakhstan in competition among countries, and also for its effective integration into world economic area, one needs research and development of its competitive advantages, including – of branding and image nature. The country image is formed not only by means of popularization and purposeful distribution of the positive information about products services and firms but also is based on all sides of social life and economy of separate territories and countries.

Place branding in many developed countries has become one of efficient tools of their territory (city, region, country) development. In the CIS countries, place branding principles started to be used rather recently where the concept proper has just begun to be included into a system of marketing of these countries, the Given method assumes planning and territory development as single integral investment or tourist object. Thus, place brand – set of well-established images, opinions, events, products and services, associated by target audiences with a definite territory, and in total – with a country. This image can be unified (if constituent brands of places, individual companies and organizations harmonize with each other) or fragmented (if a country is torn apart by contradictions – ethnic, political, cultural and language, etc.).

The integral country brand is made up of a great number of components: political or public figures of the given state, separate areas of its vital activity – power, economy, army, foreign and domestic policies, culture, outstanding figures etc. It is that that defines reputation the state gets or will get in the consciousness of world community because of interactions of either of its subjects (territories) with the rest of the world. Therefore, the country brand is a cumulative indicator of authority and success of its actions on international stage, opinion estimation of the foreign public about a country. Today it is already acknowledged, that programs of creation and promotion of a brand, formation of a country image in the modern world it is possible and it is

necessary to carry out with the use of marketing tools.

When comparing present time with the time of independence of Kazakhstan beginning, citizens of our republic see the enormous positive changes, a new image of the country constructed the worthy present and resolutely directed to uneasy globalized future. And do other world countries know this renewed rapidly developing Kazakhstan? Or do many of them still associate our republic with agrarian and raw material backwardness and mainly culture of nomadic shepherds? Even not all citizens of Kazakhstan notice and adequately estimate dramatic changes of successful entry of the country in global social and economic community, in the Eurasian and world culture. Our rich and glorious history, our present outstanding successes we report insufficiently about to world community, we work insufficiently on the creation of brands of Kazakhstan territories and the country as a whole.

One of the reasons of delay use of areas branding - unwillingness to apply marketing principles, as it demands transition from “object” method (remained after the planned economy) to marketing one – “territorial”. Certainly, and using “object” approach to development strategies were worked out considering attraction of investments and tourists. However, they have been aimed only at certain objects. At such approach, the investor or the tourist sees one or several objects, but by no means a territory (country, region) with all its advantages, amenities, possibilities, and potential.

Place marketing assumes its development as unified investment or tourist object, with all its potential for investment, business, and tourism. All attractive objects of investment and tourism, are promoted together (under an umbrella) with a territory itself, as its part. And the most important thing, they consider not only tangible assets (bowels, combines and sports complexes and other industrial and residential funds), but also intangible assets – personnel potential, advantageous geographical location, unique climatic features, mentality, rich historical heritage, varied and original cuisine, language, interesting traditions and customs and so on. Investors, tourists, and business see the whole territory as a single unique living organism where it is possible to invest in and to spend time with

interest. In the set of all these constituents, the territory takes definite outlines clear for the target audience, i.e. an image, and so country brand. Thus, a brand of places merges in an integral image – country brand. And the country brand can be used successfully in the development of the whole territory and its tourist places.

What to begin brand creation with? Many people reduce everything to draw a logo and to think up a slogan for a region. The falsity of such an approach was proved by well-known scientists Simon Anholt, Philip Kotler, Donald Haider, Irving Rein who have brought an essential contribution to the solution of a problem of the study of places branding. As far back as in 1993 since the publication of the book “Marketing Places: Attracting Investment, Industry, and Tourism to Cities, States, and Nations” (Kotler, Haider, & Rein, 2002) there has been a concept, that in the modern world citizens become consumers, and territories (cities, regions, and countries) – products (Ashworth & Kavaratzis, 2010). In 2002 S. Anholt, one of leading world experts in branding area has used “places branding” phrase as a term for the first time. According to Anholt's theory (hexagon), there are six elements of a modern place brand: tourism, export brands, policy, business and investments, culture, people (Anholt S. , 2008) (Anholt S. , 2007). Only based on an optimum combination of all hexagon corners, it is possible to become successful in the branding of country territory (Kudasheva, 2013). The “place brand” phrase that was perceived in Kazakhstan several years ago, as something new, fashionable and hard to understand, nowadays becomes widely used among representatives of the tourist industry and bodies of the state and regional authorities. In recent years, tourism branch problems are in the focus of attention of the Government of the RK. So, in the country “Development of tourist branch of the Republic of Kazakhstan for 2011-2014” target program has been approved and is being carried out.

They address to branding at times not because there is an urgent need for it, and according to “we want to have a brand too” principle. Hence, in our opinion, errors, disappointments and following negation of branding as a marketing tool. Here the relation to the idea of brand as a reflexion of ambitions and aspiration to bombast manifests itself. One should remember that branding is by no

means reduced to the formulating of brand idea. The idea is the second step, and the first one is the marketing analysis of preferences of citizens and foreign tourists and is also the competitive environment research. Creation of successful tourist brand is work for years ahead in an information, infrastructural and legislative area, and in personnel training sphere. A lot of people think, that it is necessary to select such a slogan (symbol, logo, event) which will speak for itself, the rest is allegedly details, unacceptable. Even local, world famous brands, such as Oxford, New York, Paris etc., have emerged not as a result of special brand campaigns and were naturally formed throughout centuries.

If to speak about Kazakhstan then quite often catchy slogans, as a rule, are not supported by any unique specific offer for the tourist; there is no popular, practically applicable territory image and understanding what exactly the tourist will get by visiting a positioned place and what one should expect from the given destination. Examples: "Burabay - the second Switzerland"; "Astana - the heart of Kazakhstan"; "Almaty - southern capital"; "Kazakhstan - the heart of Eurasia" etc. The geographical associating is good if a geographical object possesses exclusive tourist fame and clear advantages to the visitor, however, if it has no unique properties and characteristics known to the public at large it will be just one of many. Here it is possible to speak only about the addition to a ready territory image, but not about its creation and orientation to this uniqueness. To integrate a territory into the "talked-up" routes does not always help. Because at failure of such integration - attempt to create own twin brand, as a result can turn into endless chain of very look alike museums, mosques, landscapes and finally cities (for example, cities on the Silk Way), regardless on territory of what country they are situated either in Uzbekistan or in Kazakhstan. An example of such an approach for us if not to make corresponding marketing decisions, there even can be such an international project of Turkic languages countries on the creation of mutual "Modern Silk way" project where Kazakhstan will become a coordinator (Kuryatov, 2014).

Traditionally the state occupies itself with the problem of formation of a national image, nationwide brand in all countries of the world. Experts agree about opinion, that always the customer and

the initiator of the new national idea in Kazakhstan is ambitious and charismatic leader being in power since the first days of independence of Kazakhstan - the President of Republic - the Leader of the nation N.A. Nazarbaev. Many of known events of universal importance took place in Kazakhstan mostly thanks to the main newsmaker of the country Nazarbaev N.A., to his exclusive gift to put forward creative and ambitious ideas in creation and realization of event measures, in working out of strategic programs on the development of either aspect of the state. So, the President of Kazakhstan is sure, that in the economic aspect we may become the bridge connecting advanced economies of the European Union (on the one hand), and dynamical fast-growing economies of East, Southeast and South Asia (on the other hand). If to look at it more broadly, then he as the advocate Eurasianism, has made to all CIS countries the unique offer – to create a large economic area in the center of Eurasia as an area of mutual development embodied in the form of the Eurasian Economic Union (EAEU). Therefore, it is no coincidence that national brand promotion becomes an economic direction. As the beginning of the given campaign was the message of the President of the Republic of Kazakhstan of N. Nazarbayev to the people of Kazakhstan in 2006 called "Strategy of Kazakhstan entry among 50 most competitive countries of the world". The given message had program nature for the whole PR-strategy of Kazakhstan in an economic direction and in it key priorities of the positioning of Kazakhstan in the world market are sorted out (Nazarbayev, 2006) (Nazarbayev N. , 2012). They were continued and corroborated in the subsequent annual messages of the President of the country to the Kazakhstan people (and to the world as a whole), in particular in 2013 and 2014.

So in the state policy, the basic value has developed - to play the important role in social and political events of the Eurasian area. Kazakhstan, due to its geographical position – on Europe and Asia junction, is some kind of crossroad of the worlds, combining cultural values of these parts of the world within itself. In Kazakhstan two world religions – Islam and Christianity became closely intertwined, more than 100 nationalities live well. The strategic transport ways lay across the country territory connecting Asia with Europe,

Russia with the countries of the Central Asia. And accordingly, through Kazakhstan "path" of migration flows bearing a part of the culture of various people and settling in this country in some way or another (the Silk Way continues) was made. The Kazakh people themselves nowadays absorb the best values of the western culture. Especially it is pronouncedly remarked among inhabitants of cities and youth, its wishes to accept and live according to the values of the West – freedom and emancipation. Thereby the Kazakh people, its majority still remaining in eastern mentality without losing contact with origins, with collectivism and unity of the East (China, Korea, Malaysia, Japan), also want to live according to the best European values.

Country image, by definition of the World Tourism organization, is a set of emotional and rational ideas following from comparison of all country signs, one's own experience, and rumors influencing the creation of a certain image. All listed factors allow, at the mention of the name, at once to make the whole chain of associations in relation to the given country. How to ensure a positive country image? Opinions of politicians are not much different in this respect. The president of Kazakhstan N. Nazarbayev as, the leader of one of the independent countries appeared not so long ago on a world map, has defined following major factors of his republic appeal: political stability, friendly relations with neighbors, a high degree of market economy development together with efficient state regulation.

Thus, the positive authority of Kazakhstan and in particular its leader - the President of Kazakhstan N.A. Nazarbaev, on the one hand, deserves working out and the creation of brand corresponding to high country authority on a global scene and to a worthy standard of living of Kazakhstan citizens. On the other hand, there is an urgent need in it for the creation of an image of the appeal of the country and its people for visitors, tourists and all world community.

Adoption and carrying out of the long-term national "Brand of Kazakhstan" program will help not only to form recognizable positive image of the country in the world, but also will promote emergence of Kazakhstani national identity, mutual sense of goal and national pride that will help to unite Kazakhstan around the single

national idea - economic country development (entry of Kazakhstan in among 30 developed countries of the world). As we have already mentioned, this process is very long and it is not limited by some timeframe to achieve the aim. Therefore, image formation should be carried out by a sequence of continuous events directed on its improvement and positioning of the country in the world.

Preparation and carrying out of two important international events - the Winter University Games in Almaty and EXPO – 2017 "Energy of the future" exhibition may become the important events favoring creation and positioning of the brand of Kazakhstan. They will be a starting point which will allow Kazakhstan to promote its brand and to form image not only as the country being in the heart of Eurasia, and as an innovative and ambitious country constantly aspiring to adoption of new technologies, the country with strong scientific potential directed in the future (Nazarbaev university and colleges of world level in Astana and Almaty, Nazarbaev intellectual schools all over the country, etc.); the country where there are all conditions for those who is ready to invest capital which will be reliably protected and will work for the mutual benefit.

### **3 GERMANY EXPERIENCE TO CARRY OUT IMAGE CAMPAIGNS**

Creation of country brand - cause of all its inhabitants, beginning from the head of state and concluding with an average citizen. In our opinion, the experience of Germany can be as an example how to carry out image campaigns on the eve of forthcoming significant world events in Kazakhstan in 2017.

It is well known that in German culture soccer occupies a special niche and is a part of a daily life of people. Therefore, among a huge number of campaigns directed on the formation of Germany image, none of them can be compared with a campaign to strengthen the national brand that begun in 2004 within the frameworks of preparation for World Cup 2006.

Everything has begun with awareness by the higher political persons of Germany, that the country is getting the negative image owing to increase of unemployment rate and slow rates of economic growth. To change the situation which

threatened outflow of highly skilled specialists and decline of macroeconomic indicators, they required campaign that would show Germany as an innovative and ambitious country where there were all conditions for life and capital investments.

For the first time the central idea of future image campaign was voiced during an inaugural speech of the President of Federative Republic of Germany Horst Koehler who mentioned that Germany – Land of Ideas, encouraging experiments and inquisitiveness; courage, creativity and wish to create something new, without forgetting former achievements. Potentially considerable social and economic effects from planned image events have led to the consolidation of the state and society under the patronage of the President of Germany (n.d., 2016). Official campaign sponsors were the Government of Germany represented by the Ministry of Economy and Technologies, the Ministry of Foreign Affairs, the Ministry of Education and Research, and also the Federal Union of the German Industry (BDI). The initiative to change Germany image caused state-private partnership concerning PR measures. To coordinate and carry out measures the coalition of the largest companies in the country created “FC Deutschland” legal person composed of 23 companies including world famous - Deutsche Bank, Audi, T-Mobile, Lufthansa. The estimated image campaign budget was €20 million, of which 10 million was given by the federal government and 10 million - BDI (n.d., 2016). Campaign working out has begun in 2004, and in the middle of 2005 (on June, 14) Minister for Internal Affairs Otto Schily and BDI vice-president made a presentation of “Germany - Land of Ideas” campaign. The key idea of the given image campaign, according to developers' opinion - the given phrase combining positive features of Germany within the country and abroad: science and culture nation, the country of poets and thinkers, innovation products with “made in Germany” brand. The central idea embodies the quality Germany is valued for all over the world: inventiveness and creative passion, perfect quality.

To inform address groups of the central idea they began to carry out five developed projects mainly in 2004 because Germany got the right to hold the World Cup. They considered that sporting event of

such kind draws a huge public response, attracts media attention, promotes inflow of tourists and enables the country to show its achievements.

On the threshold of 2006 image campaign launch in a few large cities of the world - in the USA, in France, in the Great Britain, in Japan – they installed TV screens showing shots from “Germany - Land of ideas” film specially prepared for this instance. To provide media support of special five projects in August 2005 on <http://www.land-of-ideas.org/> campaign site they created “Media Service” which was a unique information resource for 15 thousand journalists who were going to visit Germany in 2006 to cover the World Cup. The given resource provided audio/video/text data on Germany and the image campaign; on the possibility to establish various contacts; data, where matches take place and any information about Germany, selected considering interests and country of person interested.

In 2005 there were large image events, mostly directed to work with mass media to inform address groups of the information on the campaign beginning which helped to understand their point more deeply. We believe they are very important for the understanding of their orientation and we give them in chronological order:

- June 14, 2005, “Germany - Land of Ideas” campaign and its six projects were presented.
- August 26, 2005, “Germany - Land of Ideas” campaign becomes the official partner of the 2006 FEI World Equestrian Games.
- September 13, 2005, the international presentation of the campaign and the second project “Welcome to Germany - Land of Ideas”.
- October 3, 2005, on Germany Unity Day (Tag der Deutschen Einheit) Brandenburg becomes a partner of the campaign and on the same day “Germany - Land of Ideas” campaign fan club was formed. The fan club aims to encourage a sense of belonging to people to Germany and the carried-out campaign and to favor meetings of people who are optimistic, love their country and aim for the future.
- October 27, 2005, organizers of the campaign declared there would be a tour from November 1<sup>st</sup> until December 31<sup>st</sup> through 12 cities where matches would take place. The

tour purpose - to give the chance to people to feel involved in the World Cup organization. During visiting of cities, they plan to hold sporting events and games, and also enroll new fan club members.

- December 5, 2005, the announcement of 365 participants of the third project "365 Landmarks in Land of Ideas".
- December 6, 2005, the international presentation of media service for journalists on a campaign site where till 2006 spring they planned to prepare collections of materials for journalists from 40 countries and to grant access to 1000 articles and photos too.
- December 22, 2005, presentation of prototypes of sculptures for "Walk of Ideas" project.
- December 29, 2005, opening of the World Cup year in Germany. On the square in front of the Brandenburg gates in Berlin representatives of each of the countries, taking part in the World Cup, are welcomed by the Minister for Internal Affairs of the Federative Republic of Germany and the mayor of Berlin.

The opening ceremony of the World Cup year "Welcome to Germany – Land of Ideas" was broadcast on 300 channels.

Events within image campaign frameworks that had taken place from June 2005 until January 2006 resulted in an unprecedented response of mass media. For the given period in print media, on TV and on the Internet there had emerged about 7143 messages about the campaign which reached about 471 million people. About 40 thousand people became the fan club members, about 55 thousand copies of the guide to the Land of Ideas. About thousand international journalists made use of materials of "MediaService" information resource on the campaign site

In 2006 they began to carry out five main projects on this basis:

1. project: "Welcome to Germany – Land of Ideas". Project realization has begun on October 3, 2005, on Germany Unity Day. 226 embassies and consulates received collections of materials about Germany and the image campaign to distribute among visitors; all visitors of the country were welcomed at the airports, cities, and stations.

There was "Germany – Land of Ideas" campaign presentation during all celebrations in honor of Germany Unity in embassies.

2. project: "365 Landmarks in the Land of Ideas". Project realization has begun in 2005. Every year in Germany there is national competition among companies, research, cultural and fine arts institutes. The jury consisting of 18 persons chooses 365 innovative ideas which will be presented every day from January 1<sup>st</sup> until December 31<sup>st</sup>. After all, ideas have been presented winners in 7 categories are chosen. (Competition of 365 winners began to be held annually since then, it attracts a lot of public attention as participants present their ideas in all corners of Germany). The monthly campaign newsletter regularly covers competition events. Following the results of the competition they publish a book containing data about all winners that allows potential investors to familiarize with their ideas.
3. project: "Walk of Ideas". The project was carried out from March till May 2005. During this time in different areas of Berlin they installed six huge sculptures, symbolizing wealth of ideas and inventive spirit of Germany. Sculptures reflect inventions and discoveries of the German people that continue to produce a considerable effect on science, culture, and technologies. Installation of each figure was accompanied by mass media attention mainly owing to the project sum (to create each sculpture they spent from 300 till 350K euros) and due to their installation in the most populous city places.

"Innovative football boots" was the first sculpture to be installed, reflecting the fact that the first football boots, allowing standing firmly on a wet and swampy football pitch brought to the victory of Germany in the World Cup in 1954, had been created by German Adi Dassler, who established Adidas company.

The second sculpture in the form of a huge pill is called "Milestones in medicine". It tells that the most popular analgesic pill in the world was invented in Germany by Bayer company; German researchers Felix Hoffmann, Robert Koch, Emil von Behring, Paul Ehrlich and Gerhard Domagk contributed a lot to medicine development; cardiac catheter and X-ray

apparatus were created in Germany. And nowadays German scientists develop about 300 new medicines, including anticancer vaccine, one for the treatment of heart beats, diabetes, and Alzheimer's disease.

The third sculpture – “Automobile” was installed near the Brandenburg gates. It reflects successes of Germany automobile production: the whole world uses motors named in honor of Germans Otto and Diesel; such German makes as Audi, BMW, Mercedes-Benz, Opel, Porsche, and Volkswagen enjoy wide popularity; thanks to Germany cars got airbags, ABS, ESP, four-wheel drive, etc.

The fourth sculpture – “Modern printing”, reflecting the fact that due to the printing press invention by Gutenberg mass distribution of the first best seller the Bible became possible that in turn accelerated processes of the Reformation and the Enlightenment. Germany gave to the world great writers and thinkers – Goethe, Schiller, Mann, Grimm Brothers, etc.

The fifth sculpture – “Musical masterpieces”, emphasizes the huge contribution of German composers to the creation of world famous music masterpieces – Mendelssohn's Wedding March, Beethoven's symphonies, Schumann's etudes, Bach's toccatas and Wagner's “Flight of Valkyrie”.

The last sculpture – “Relativity theory” tells about creation by German Albert Einstein of the relativity theory that led to the development of quantum mechanics and lasers Theodor Hansch who in 2005 received the Nobel Prize in Physics.

“Walk of Ideas” project was one of the most successful ones in the image campaign since creatively executed sculptures drew the huge attention of journalists, population and tourists.

4. project: “100 Masterminds of Tomorrow” became a logical conclusion of “Walk of Ideas”. Specially formed jury selected 100 persons who got considerable results in economics, science, art, etc. Within the frameworks of the given project, they organized an exhibition where there were full-length photos biography and ideas of the

selected 100 people. These people will have to form the future of Germany based on successes of past generations shown in the form of sculptures on “Walk of Ideas”.

5. project: investment image promotion. Germany Trade and Invest and “Germany – Land of Ideas” campaign developed “Invest into Germany – Land of Ideas” program which goal - to improve Germany image as an ideal place to do business, using the emotional address to potential investors. The single central idea for all five projects meant to convince investors that all put forward ideas is successfully implemented in Germany.
6. the project also includes 10 subprojects, beginning from the distribution of information booklets about Germany investment possibilities, conducting forums and concluding with one of the most unusual advertising campaigns with the participation of German model Claudia Schiffer. The ad campaign consisted of putting up 11 posters with the model in the financial centers of London, Tokyo, New York. The first posters were displayed in London from June 5 till July 2, 2006, in Tokyo posters were displayed from June 26 till July 9. The campaign ended in New York where from 1 till 30 July at the Big Central Stadium 80 posters were put up. Before posters were put up press conferences were held in German embassies in each of the cities. The ad campaign was a great success which was proved by placing of one of the posters with Claudia Schiffer in the Advertising Museum in Paris.

Advertising campaign singularity consisted in that that posters appealed not to reason of potential investors, and to their emotions and sexual instincts. Each poster slogan was deliberately ambiguous because of the model covered only with the flag of Germany. For each city, they selected different posters: more conservative ones for London and Tokyo, and with sexual context for New York.

Other slogans on this poster: “Follow your instincts. Invest in Germany”; “Invest in Germany, boys”; “Get your hands on a German supermodel”. Another slogan on a poster for Grand Central Station (New York): “Grand ideas in a central location”.

The six projects of the campaign considered above were carried out in logic sequence to achieve the largest effect. At first by means of "Media Service" project they created the basis for coverage of the campaign and all aspects of Germany life in the media. The fan club formation and 365 landmarks in the land of ideas competition allowed to involve the population in the campaign that in turn provided support to campaign events within the country. Creation of sculptures attracted many tourists and attention of the media on the eve of the World Cup carrying out. Since March 2006 the sculptures and the 100 masterminds of the country exhibition reflected a huge scientific heritage and potential of the country. After the demonstrated wealth of ideas, its logical conclusion was the advertising campaign calling on the eve of the World Cup to visit Germany and to make investments.

The image campaign results:

- the most popular in the history of Germany image campaign attracted the audience of over 3,5 billion people;
- as of July 14, 2006, in Germany there appeared about 14200 articles regarding the campaign;
- the campaign initially planned to be over at the end of 2006, was prolonged till 2010;
- 22 large German companies became partners of the campaign (on the site in "Partners" section one can see innovative achievements and workings out of each of them);
- journalists mentioned, that after the World Cup end there were two winners – Italy and Germany as Germany could improve its image both within the country and abroad;
- according to the research, after carrying out of the campaign the majority of Germans perceived their country as progressive, cosmopolitan, inventive and innovative.

From experience of carrying out of the campaign to strengthen the image of Germany it is possible to make following conclusions:

1. Carrying out of image improvement campaign is better to time to the large international event which will automatically draw mass media attention.
2. Only joint actions of a society and the state will be able to provide the campaign with resources and population support.

3. The constant presence of the higher officials of the state at the key events ensures the media attention and emphasizes true interest of the state in solving the problem.
4. Provision of mass media with any social, economic, cultural information ensures wider distribution of the central campaign idea.
5. At image improvement campaign its every detail should act to inform address groups about the key idea (projects showed innovation ability, scientific potential and uniqueness of Germany)
6. The campaign should not be sporadic – it is necessary to create information occasions all the time.
7. The unconventional approach to boring topics – the campaign guarantee of success (posters with model Claudia Schiffer).

Germany image strengthening campaign was integrated organization of a large number of events that touched on about 3,5 billion. people.

#### 4 POSSIBILITIES AND PROSPECTS OF KAZAKHSTAN NATIONAL BRANDING

The German image campaign experience described above may be used by Kazakhstan for working out of its own image campaign. Kazakhstan has time and possibility to do corresponding work before carrying out of 2017 University Games and EXPO 2017 which will ensure attention from mass media, the inflow of tourists from all over the world. The involving of the private sector in image campaign will favor civil society activation and will unite the country. Thus, Kazakhstan may use all those tools which allowed Germany to score success: to involve young scientists, to tell about conducted workings out dealing with exhibition topics, to regularly give information on current events to the media, to create special body which would be engaged in solution of image problems, to use famous people for an advertising campaign.

Concerning our country "Kazakhstan – heart of Eurasia" project, put forward as image generating idea, may provide ample opportunities for realization of dozens of new subprojects, covering all regions, cities and population strata. And these projects may be as innovative (containing the key idea of the EXPO–2017 "Energy of the future"), as

historical and cultural. 2017 Winter University Games with "Spread your wings" slogan will present to the world Kazakhstan as the country with athletic, creative young people directed to scientific knowledge. Along with today's innovations, it is appropriate to remind of those innovations that ancestors who lived in ancient Steppe of Kazakhstan gave to world civilization. On the one hand, one can remember the contribution to civilization development made by Kazakh ancestors (horse domestication, invention of boots, breeches, saddle, stirrups, horse harness, ancient monuments of writing, yurt, urban civilization on Syr-Darya banks, musical instruments of Desht-i-Kypchak steppe – kobyz and dombra, teacher of mankind Abu Nasr al-Farabi, the second Mecca of the Islamic world - Turkestan with Hodzha Ahmet Yassau mausoleum, Saks barrows and "Golden Warrior", Berelsky barrows, khan headquarters in Burabay, etc.) It will remind tourists, that, where present Astana is located once, there was an ancient steppe settlement "Bozok" (Blue Arrow) where headquarters of Kypchak khans was situated. Here it cries out for the analogy to the monuments of innovative football boots, printing, etc. of "Walk of Ideas" in the capital of Germany.

The exhibition will acquaint the world with multinational culture, ancient history, art, traditions and hospitality of Kazakhstani people, will increase recognizability and tourist appeal of Kazakhstan in the world community.

The result of carrying out of world exhibitions is an expansion of the international, economic, political, cultural and scientific contacts. Carrying out of "Expo 2017" - the big step toward the establishment of Kazakhstan as international exhibition and information and presentation platform. For EXPO 2017 not only in Astana but also in different regions of the country there will be prepared and constructed attractive tourists' objects.

For example, in Akmolinsk area, one will construct "Ethno-aul" cultural and tourist complex surrounded by an eco-settlement consisting of 100 dwellings. During construction, they will use only ecologically clean construction materials and "green" technologies – everything according to "Energy of the future" EXPO theme (n.d., 2013). It is interesting, that during the EXPO Kazakhstan it

is planned to promote one of the key ideas of the President of the country N. Nazarbayev about the transition to "green economy". He often says that transition process to the environment-friendly economy will be accompanied by serious changes in several branches, it will generate new industry and will create qualitative workplaces. And this is idea for an exhibition which will draw hundreds of thousands of tourists to visit it, specially constructed objects or those that are already in operation on industrial scale in different regions of the country (wind generators, large and small hydroelectric power plants in Almaty and East Kazakhstan oblasts, solar batteries in southern regions, etc.) The pride that such a grand event takes place on Kazakhstan soil, will produce patriotic sentiments upsurge of the country citizens.

To hold the Winter University Games in Almaty in 2017 is an ideal possibility in order to show to the world amenities of the Republic of Kazakhstan. Sunkar eyes have become the mascot of the University Games. "Free and strong indigenous inhabitant of Kazakh steppes, it always defeats its enemies, often surpassing it by their sizes", – it is like this that developers positioned their eyes. The falcon quite corresponds to the Kazakh people spirit. The mascot to disclose the key concept of "Spread your wings!" slogan, is shown in the form of stylized wings.

It is necessary to consider for the attraction of tourists that factor too that from the organization and carrying out level (brightness, spectacularity, and hospitality) of the University Games which will take place during the winter period, on the eve of EXPO-2017. Organizers of the winter games should make so that they ensure full house of tourists at the second visit of the country during the summer period.

Each city of Kazakhstan may contribute its mite to formation of image and national brand promotion, proceeding from its peculiarities and achievement of today (Baikonur – space harbor, Karaganda – industry center and scientific intelligentsia city, Aktau – city of oil industry workers and the center of ancient Mangyshlak, Shymkent, Taraz – cities on the ancient Silk way, Kurchatov – scientific center of nuclear test on the soil of Kazakhs, channel in Sary-Arka steppe "Irtys-Karaganda" and so on). In Astana, there is already a realized

project like "Walks of Ideas in Germany" in the form of an ethnic-memorial complex "Map of Kazakhstan - Atameken" or "Kazakhstan in miniature". Near it, there may be sculptural compositions and operating copies of objects devoted to innovative ideas, arisen on the Kazakh soil at the dawn of a human civilization (domesticated horses, bullock cart, yurt, breeches, saddle, stirrups etc.). Ethno-auls and agrotourism complexes may and should be created also around such cities as Kokshetau, Karaganda, and Pavlodar. They will become centers to demonstrate and hold various events according to national traditions within reach of Astana. It is necessary to note, what even without state support some entrepreneurs began to create agro - and ethno-tourism objects in the mentioned cities. For example, 5 km from Karaganda "Kamila" farm by itself and using its own means began to create an agritourism complex. Some scientists and students of the Karaganda Economical University of Kazpotrebsoyuz were taking an active part in designing of the given complex. The complex includes riding hall and stables, falcon, quail and pheasant farms, stocked pond and a pond for beach rest, a cafe building, a complex of guest cabins with all conveniences, racecourse, model farms for keeping of cows, sheep, goats, camels and other animals. They will serve for child-rearing of townspeople and will teach to look after "their own" animals (each child will have an interim certificate on the right of possession of a kid, a lamb, a chicken and so on). Near farms there will be beds for the cultivation of

vegetables, berries, fruit trees will be planted. They also become available to visitors where right from a bed, parents with children can see and learn how they grow, gather a bunch of radishes, of spring onions, dill, and other garden stuff, pick berries and fruit. Wind-generated installations will give the possibility to satisfy partly the complex need in the electric power.

By the time of carrying out of the EXPO-2017 at a racecourse championship of teams of the country regions and ones from abroad for such games as "Kokpar", "Alaman baiga", "Kyz kuu", and also for individual ones as "Zhamby atu (sadak tartu)", "Oramal ilu" trick riding, "Tal shabu", "Falconry", etc. May take place. Such an approach organized in each of the regions, along with well-planned marketing strategy will draw the attention of tourists and will give a charge for national spirit upsurge of the people of Kazakhstan. "Kamila" agro-tour complex project provides for the possibility to carry out, near "Ethno-aul" by the population request, national weddings, solemn events - "as beru" initiation, "Kyz uzatu" (decorated horse wagons - in summer, in winter – troika sleigh) etc. Unlike exhibition model complexes of temporary nature, the given complex is designed as actually functioning and where there is an actual life with all attributes during the whole year. Such complexes, with support from the state in the form of loans and preferences, become a considerable contribution to international image strengthening and to the Kazakhstan entry into 30 most developed countries.

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# THEORETICAL APPROACHES TO UNDERSTANDING THE NATURE OF THE CASH FLOWS OF COMPANIES

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## **Abstract**

*The article deals with theoretical approaches to understanding the nature of the cash flows of companies. The question of determining the economic nature of the cash flows is extremely important both in theoretical and practical aspects, as formed approaches to the interpretation of the essence of the cash flows in the future define the fundamentals of their planning and control. The article is presented in three parts. The first part deals with the static approach to understanding the nature of the cash flows of the company in which the cash flow is interpreted from the perspective of its impact on the balance of funds in the accounts of the company and is defined as the net movement of cash for the period. The basic categories that characterize the cash flow within the static approach are: "cash balance at any given time", "net movement of cash" and "net cash flow". The second part of the article deals with the nature of the cash flows on a dynamic level. At this level, the cash flow represents the movement of cash in two ways: in the form of a plan of future cash flows of the company in time or report about their movement in prior periods. Confidence approach to the determination of the cash flows is presented in the third part of the work. The author believes this approach is the most reasonable. Using it the author in the conclusions offers to determine the cash flow as the directed movement of cash that is expressed in its receipt, distribution, and disposal from operating, investing and financing activities. The result of the movement of cash is a balance of cash and cash equivalents, which serves as a static determinant of the cash flows.*

**Keywords:** cash flow, cash, net cash flow, the net movement of cash, revenues, spending of cash, operating, financing, investing activity.

## **1 INTRODUCTION**

The question of determining the economic nature of the cash flows is extremely important both in the

theoretical and practical aspects, as formed approaches to the interpretation of the essence of the cash flows in the future define the fundamentals of their planning and control.

In the foreign and domestic literature on corporate finance, theoretical and practical issues of economic nature of the cash flows of companies

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have been the subject of many research scientists and practitioners.

In the foreign and domestic literature on corporate finance, theoretical and practical issues of economic nature of the cash flows of companies have been the subject of many research scientists and practitioners.

They made a significant contribution to the development of theoretical and methodological foundations to determine the economic nature of the cash flows, of their planning and control. However, as it is evidenced by the financial theory and practice of today's there is no unified approach to determining the economic essence of the definition "the cash flow of the company" in Ukrainian and foreign science, as scientists and practitioners still continue to debate about understanding the economic nature of this category. In this regard, it is actual to develop the relevant paradigm of understanding the nature of the cash flows of the company that would include all their properties integrated.

Discovery of the economic nature of the cash flows of the company is proposed to start from the disclosure of the essence of the cash flow concept which originated in the 50-60s of the twentieth century. This concept involves forming an idea of the company as a totality of cash inflows and outflows alternating. The basis of the concept is a logical assumption that some cash flow may be associated with any financial transaction, that means a set of distributed in time payments (outflows) and receipts (inflows) arising from management decisions within the operating, investing and financing activity.

As note Fabotsi & Drake (2010) there is no specific definition of the cash flow. Probably the reason for so much confusion about the definition of the cash flow is because it refers both to the cash inflows and outflows and to the difference between them that is a net cash flow.

Purely on the semantic level, the cash flow is a quantified expression of money that the entity has at a particular time, for the investor the cash flow is an expected future profits on investments, from the position of managers the cash flow is a plan for the future movement of cash and so on. In each case, the dynamics of movement of the company's cash is a continuous process and creates the cash flow. However, this approach to understanding the

nature of the cash flows is too fragmented and does not display all aspects of this phenomenon.

The study of scientific and practical literature in corporate finance showed many meanings of the definition "the cash flow of the company." Multilevel understanding of the nature of the cash flows is due to the fact that since they form the basis of the cost of corporate economic relations, then they have the relationship with all economic processes of any enterprise. In addition, they affect significantly the final results of economic activities of companies, determine the level of their solvency and financial balance.

Based on the study of scientific and practical literature on corporate finance three approaches to understanding the nature of the cash flows of the company can be distinguished: static, dynamic and aggregated. Each of these approaches discloses the nature of the cash flows in terms of taking into account the specific characteristics possessed by the cash flows of the company.

## **2 STATIC APPROACH TO UNDERSTANDING THE ESSENCE OF THE CASH FLOWS OF THE COMPANY**

Representatives of static approach interpret the cash flow from the perspective of its impact on the balance of funds in the accounts of the company and define it as a net cash flow for the period. In particular, in English online investment encyclopedia "Investopedia" (2016) the cash flow of the company is identified with a net cash flow and is regarded as the net amount of money and cash equivalents entering the company and getting out of it. Accordingly, the positive cash flow shows that the liquid assets of the company are increasing, allowing to settle debts, reinvest in the business, return money to shareholders, pay expenses and provide protection against future financial problems. The negative cash flow shows that the liquid assets of the company are reduced. In this definition, the cash flow is completely identified with the net cash flow of the company but that is not correct because the definition of "the cash flow" has greater meaning.

Within static approach to understanding the nature of the cash flows, there are other views. Pokrovskiy (2012, p. 9) explains the cash flow as the result of economic activity reflected in the

receipt, distribution, and use of funds and depends on multivariate internal and external environment of the entity. But as we see from the given definition the cash flow in this interpretation may be associated with the profit of the company that is also a result of the economic activity of the company.

As Tennet (2014, pp. 11-12) notes profit and cash are two big differences, as income and expenses, on the basis of which income is recognized, are determined at the time of delivery of goods or services, while revenues or cash payments are determined at the time of their transfer. The time delay between the moment of recognition of events for the purposes of profit determination and availability of funds can be significant.

According to the English-language online encyclopedia "Investopedia" (2016), a net cash flow differs from the net profit which includes accounts receivable and other components on which payments were actually received. The cash flow is used for assessing the quality of revenue, shows how it is liquid and can show how much solvent it remains.

In the context of determining the difference between the cash flow and profit of the company the opinion of Brigham & Erhardt (2009, pp. 73-74) is also plausible. They note that the cash flow of the company is usually different from its profit which is reflected in the balance sheet because some types of income and expenses reported in the financial results do not result in actual cash payments in the reporting period. The research offers to calculate a net cash flow as net income "minus" non-cash income "plus" non-cash expenses. As the non-cash expenses (those that do not result in actual cash payments) the authors suggest amortization of tangible and intangible assets and deferred tax liabilities. At the same time, some components of the net profit can be displayed but not received in cash during the reporting period.

The definition of a net cash flow can be also met in some regulatory legal acts of Ukraine, including the Order of the State Committee of Ukraine on mineral resources "Approval of the Regulations on the procedure for the development and study of conditions on mineral raw materials for the calculation of reserves of solid minerals in the bowels" (2005). Here a net cash flow is a

difference (balance) between inflows and outflows of cash from operating and investing activities during the anticipated implementation of the project.

Order of the Ministry of Economy of Ukraine "On Approval of the recommendations on the development of a company business plan" (Nakaz № 290, 2006). The cash flow from current economic (investment, financial) activity is the amount of excess (deficiency) of funds obtained from the comparison of receipts and payments of cash from operating (investment, financial) activities.

Explanation of the cash flows as cash balance can be found also in the work of Tennet (2014, p. 11): "The amount of money needed for the company depends on the predictability both of revenues as a result of economic activities and payments (demand) to suppliers and employees".

The cash flow according to Tennet (2014) are those cash revenues which allow the company to meet the demand for them. The alternative to this is the presence of foreign investors who are willing to fund any shortage of money. But in order to attract foreign investment company must demonstrate the ability to achieve positive cash flow that will pay interest and ultimately return the invested funds.

Thus, under a static approach, the cash flow is a free cash balance at any given time which cannot be identified with the flow (circulation, movement) because the flow means motion. The volume of the cash flow can be characterized by such indicators as the volume of funds received and the amount of money spent. As you can see from the above definitions of basic categories that characterize the cash flow within the static approach are: "the cash balance at any given time", "the net movement of cash", "the net cash flow".

According to the Professor of Financial Management P. Fernandez in the general understanding, the cash flow is the difference between inflows and outflows of cash, that is when the money coming into the company is bigger than those getting out of it. Fernandez (2006) notices that the company works better and "generates wealth" for shareholders when the cash flows are increasing. He notes that as a rule for the characteristics of this process four definitions of

the cash flow are used: operating cash flow (OCF), "equity cash flow" (ECF), "free cash flow" (FCF) and capital cash flow (CCF). The methods of calculating the respective types of the cash flows are shown in Table 1.

Table 1. The methods of calculating operating (OCF) equity (CCF), free (FCF), and capital (CCF) cash flows.

No	Indicator	The methods of calculation	The components
1	Operating cash flow (OCF)	$OCF = EBIT + A - \Delta WCR - \Delta FA - \Delta DE$	EBIT – profits before interest and taxes; $\Delta DE$ – costs that are amortized.
2	Equity cash flow (ECF)	$ECF = CF_{in} - CF_{out}$ $ECF = PAT + A - \Delta WCR - D_{PP} + \Delta D - \Delta OA - \Delta FA - \Delta Fas$	$CF_{in}$ – inflows of funds; $CF_{out}$ – outflows of funds; PAT – net operating profit after tax; A – amortization;
3	Free cash flow (FCF)	<i>Provided that the company has no debt</i> $FCF = ECF$	$\Delta WCR$ – increasing working capital; $D_{PP}$ – repayment of principal debt; $\Delta D$ – growth of debt;
		<i>In the presence of debt</i> $FCF = PAT + A - \Delta WCR - \Delta OA - \Delta FA - \Delta Fas + I_{at}$ , $FCF = ECF + I(1-t) - \Delta D$	$\Delta OA$ – increase in other assets; $\Delta FA$ – gross investments in fixed assets; $\Delta Fas$ – book value of retired or acquired fixed assets; I – financial expenses;
4	Capital cash flow (CCF)	$CCF = ECF + CF_d = ECF + I - \Delta D$	$I_{at} - (\text{financial expenses after tax}) = D \times K_d \times (1-t)$ D – debt capital; $K_d$ – the cost of debt capital; $CF_d$ – the cash flow of creditors; t – effective income tax rate

Equity cash flow (ECF) is money balances of which are available on the company after tax, after covering the necessary capital investment and the required increase in working capital (Working capital requirements, WCR), payment of financial expenses and attracting new debt and loan capital. Equity cash flow (ECF) is money available on the company for its shareholders which can be used to pay dividends or repurchase shares. The equity cash flow for the period is the difference between inflows and outflows of cash during the period. When equity cash flow is forecast for the period it must be equivalent to the projected dividends plus treasury shares in this period (Fernandez, 2006).

Free cash flow (FCF) is the cash flow by operating activities after tax without including in the calculation the level of a debt burden that is

without deduction of financial expenses of the company. These are remains of cash available in the company after covering the necessary capital investment and working capital requirements (WCR), assuming there is no debt. It is quite often believed that free cash flow (FCF) represents cash generated by the company for providers of financial resources which are the shareholders and creditors, but it is not like that because the parameter that reflects the cash funds generated by the company to its shareholders and creditors is called capital cash flow (CCF).

Capital cash flow (DCF) is a cash flow that is available to creditors plus equity cash flow (ECF). Cash flow to creditors ( $CF_d$ ) consists of amounts of interest payments plus repayment of the principal sum of debt.

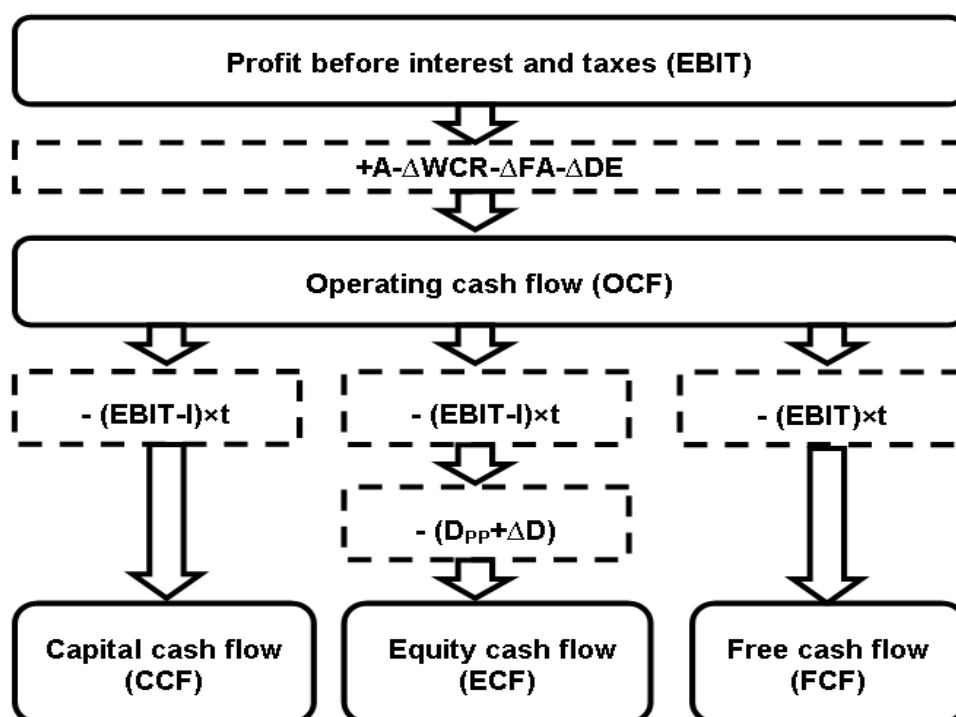


Fig.1. The relationship between different types of cash flows (Fernandez, 2006)

### 3 DEFINITION OF THE ESSENCE OF THE CASH FLOWS OF THE COMPANY ON THE DYNAMIC LEVEL

On the dynamic level, the cash flow represents the movement of cash in two ways: in the form of a plan of future movement of company's cash in time or report about their movements in prior periods. According to Kovalev (2008, p. 44), cash receipts, revenues, expenses, profits and other payments may occur as a part of the cash flow. In most cases, it is about the expected cash flows. For these flows formalized methods and criteria to make informed financial decisions have been developed. According to Prof. Xaxonova N. M. (2014) the cash flow is a targeted movement of cash and cash equivalents measured in terms of money per unit of time.

Within the dynamic approach, the category of the cash flow is often identified with the "payments flow" that is why it is necessary to determine the economic essence of this economic category. Differences between cash flows and payments are noted in the works of J. Brigham and M. Erhardt "Financial management", who divide all cash flows

according to their uniformity into constant regular cash flows called payments and the actual cash flows when it is about irregular payments or receipts.

According to Sirotkina & Kelchevskaya (2011, pp. 27-28), the definition "payments flow" can be interpreted in two ways. On the one hand, the flow is considered as the directed movement of material or financial resources and on the other hand as a series of payments over time that is a set of sums of money each of which refers to a certain period of time. The second definition appeared because the movement of economic resources of the company is characterized by the presence of not separate concurrent payments but some of their sequence in time. This sequence of payments which includes incoming and outgoing of cash is called the payments flow. In this case, as the authors claim, the payments flow is a financial planning tool. Elements of the flows are separate payments which may forecast both the incoming of cash and its outgoing.

It should be noted that in the scientific literature within the dynamic approach there is a number of other similar definitions of the category "the cash flow of the company" (Table 2).

Table 2. *Defining the essence of "the cash flows" within the dynamic approach*

№	Source	The essence of "the cash flows"
1	Act of CMU "General principles of property valuation and property rights" Number of IAS 7 "Statement of Cash Flows";	The cash flow is the amount of actual or projected revenue from the activity (use) of the assessment subject.
2	Act of CMU №4 "Report of Cash Flows"	The cash flow is a receipt and disposal of cash and cash equivalents.
3	Bazilinska O.Ya.	The cash flows are inflows and outflows of cash and its equivalents.
4	Blank I.O.	The cash flow of the company is a collection of receipts and payments of cash, distributed into separate intervals over the examined period of time, that are generated by its economic activity, the movement of which is related to the time, risk and liquidity factor.
5	Butynetz F.F.	The cash flows are receipts and payments of cash, which is one of the most important independent objects of financial analysis that is conducted to assess the financial stability and solvency
6	Kramarenko H.A.	The cash flow is a set of distributed in time receipts and disposals of funds generated by the economic activity of the company
7	Kalambet S.V. Yakymova A.M.	The cash flow is distributed in time inflow and outflow of the company, that is a movement for cash accounts of the company
8	Lihonenko L.O. Sytnyk H.V.	The cash flow is a system of distributed in time revenues and expenditures of cash generated by its economic activity and accompany the movement of value, having an external sign of functioning of the company
9	Lykasevych I.Ya.	The cash flow is distributed in time movement of the cash flows arising from an economic activity or of certain transactions of a subject. He notes that the term "the cash flow" is fundamental in financial management and is an important object of financial management.
10	Kramenko V.I.	The cash flow is the collection of income and outflow of funds for a certain period of time, formed in the course of economic activity
11	Kovalenko L.O. Remniova L.M.	The cash flow is a receipt and disposal of cash and cash equivalents as a result of the industrial and economic activity of the company.
12	Mnyh Ye. V.	The cash flow is a set of distributed in time receipts and disbursements of funds generated by its economic activities
13	Savytska H.V.	The cash flow is a continuous process of cash flow over time, which is vividly compared with a system of "financial circulation" which ensures the viability of the organization.
14	Starostenko H.H. Mirko N.V.	The cash flow is revenues and expenditures of funds in the implementation of the economic activities of the company
15	Vynohradova E.V., Lastovenko A.V., Belopolskaia T.V.	The cash flow is a receipt and expenditure of cash and cash equivalents, which lead to changes in the cost structure of property of the entity in composition and sources of the formation.

As it can be seen in Tab. 2 according to a dynamic approach to the essence of the cash flows some scientists define "the movement of cash" as determinants of the cash flow and the others define "revenue and expenditure of funds" and "the payments flow". The cash flow is not a constant at a certain date (as noted under a static approach to the cash flow) but rather a circulation of cash for a certain period. Circulation and movement reveal the essence of the category "the

cash flow", the circulation and movement are the main features of this category, the cash flows are inextricably linked with them. The process of the movement of cash occurs in time and space during maintenance of all types of economic activities.

Zhezhe Yu.V. proves the following distinctive features of static and dynamic approaches to the study of cash (Table 3).

*Table 3 Distinctive features of static and dynamic approaches to interpretation of the cash flows \**

No	The criterion of evaluation	The static approach	The dynamic approach
1	Object of study	The static value of the reserve funds of the entity	Movement, changing of cash of the entity for a certain period of time
2	Time of studies	The reporting date or a set of reporting dates	A certain period of time
3	Methodological basis of research	Description of indicators of cash balance readies for a reporting date	Description of the enterprise dynamics considering the totality of the factors influencing the movement and transformation of funds
4	Information base of research	Financial and statistical reports characterizing the performance of the company (balance sheet, income statement)	Specific reporting documents reflecting the movement of the cash flow (cash flow statement)
5	The result of the study	Assessment of the financial condition of the entity	Evaluation of the financial status and the reasons underlying this situation and leading to such a state of the entity.

*\* prepared by the author based on (Kovalev, 2008)*

#### 4 AGGREGATED APPROACH TO UNDERSTANDING THE ESSENCE OF THE CASH FLOWS OF THE COMPANY

The category "the cash flow of the company" is aggregated as it includes many types of the cash flows generated by the company and serving its economic activity. It should be noted that each company has its own "unique cash flow". It depends on the specifics of activity of each entity: from areas of operation, from the level of production, goods turnover, the number of employees, type of activity, tax policy, payment discipline and so on.

Within the aggregated approach Sorokina (2003, p. 45), generates the following definition: the cash flow is an aggregated category comprised of different types of flows serving the financial and economic activity of the company. This view is confirmed by Merna and Al-Thani in their work "Corporate risk management" (2008), who state that the cash flow can be determined by a company as a single flow as well as the aggregated number of flows for a fixed period of time.

According to Fabozzi & Drake (2010, pp. 275-276), "the cash flow is a flow of funds into the company during the time period". The main problem to determine the cash flows happens because the inflows and outflows of company's

money can be distinguished, while at any time there is a reserve of cash but these reserve funds change in connection with: the size of the company, business demand for money and the management of working capital by the company.

According to the author of the thesis aggregated is the definition of the cash flow proposed by Podderiogin (2001) according to which the cash flow is a set of distributed in time events related to separate and logically complete fact of the change of an ownership of financial resources through the implementation of commitments between economic agents. A similar determination can be met in the works of Vasylychenko & Pirog (2010, p. 45).

To further deepen the understanding of economic nature of “the cash flows” we give its basic characteristics which are distinguished by Professor I. O. Blank in his monograph which is devoted to research the cash flows of the company (Blank, 2002, p. 29). First of all, the cash flow is considered as the object of financial economic management of the company. This cash flow of the company is a process that: is directly related to the functioning of money and the monetary system of the country, with the formation, distribution and use of capital; reflects the shape and volume of the company functioning in the commodity and financial markets, use of various forms of credit; characterizes turnover and transformation of certain types of its assets; ensures the generation of economic benefit; is carried out taking into account the time factor, risk and liquidity.

## CONCLUSIONS

Thus, having analyzed the diverse approaches to understanding the nature of the cash flows of the company it can be concluded that to formulate the definition of the cash flow its economic nature should be taken into account under which we can primarily understand the movement of cash. Some scholars add to the category of cash also “the cash equivalents” which is due to the specifics of the transformation of surplus cash in short-term investments that can be quickly converted into cash.

In our opinion, the aggregated approach to understanding the nature of the cash flows is the most appropriate, as it includes both dynamic and static (at a certain date) nature of this category. We define the cash flow of the company as the intended movement of cash which is expressed in their receipt, distribution, and disposal from operating, investing and financing activities. The result of the movement of cash is an available balance of cash and cash equivalents which serve as a static determinant of the cash flows.

To form a complete picture of the nature of the cash flows of the company all the key determinants that determine their economic nature must be taken into account. According to the content, it is a process that reflects the movement of the cash flows of the company. The cash flows mediate economic relations between the entities and act as a mechanism that ensures the movement of value between them.

According to its form, it is the total amount of all receipts and disposals that ensure uninterrupted cycling of the capital of the company in the process of simple or extended reproduction. According to the methodology of formation, it is a system of financial transactions that generate inflows and outflows of cash and aimed at solving specific, clearly defined tasks within the operating, investing and financing activities.

In order to clear the determination of certain structural components of the cash flow and to form a clear interpretation of these categories the inflow of cash funds will be called a positive (input, positive) cash flow and the outflow of cash funds will be called a negative (output, negative) cash flow, and the difference between positive and negative cash flows for each activity (in terms of operating, investing and financing activities) or for economic activity as a whole will be called a net cash flow.

So the cash flow of the company is a specific financial category that expresses the movement of cash and cash equivalents during the determined time period and ensures the implementation of economic relations arising in the process of realization of its operating, investing and financing activities.

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# INNOVATIONS IN CRISIS MANAGEMENT

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## **Abstract**

*The article is devoted to the capabilities of innovative activities in crisis management and analyzes the terms of “crisis management”, “risk management”, “anticrisis administration”, “anticrisis management”. The differences and similarities between the above-mentioned terms were described based on the standards as well as several publications. The article shows that the use of innovation in crisis management is possible in two aspects: innovation as improvement activities relating to crisis management and innovations used to meet the challenges to emerge from the crisis. Basing on the analysis, the authors created a list of possible areas of innovation activities of enterprises, the crisis of which has arisen because of natural, social, or military man-made emergencies. They analyzed the war as the source of the crisis for companies and the source of the crisis of the state and showed that the state in which military operations are going on, needs to move from conventional management to crisis management.*

**Keywords:** *innovation, management, crisis, risk management, crisis management, administration.*

## **1 INTRODUCTION**

Most authors considering innovations in crisis management focus their attention on innovations that are used to emerge from the company crisis. Much less has been said about innovation in the activities of crisis management or crisis team. This is a consequence of the fact that, historically, crisis management was considered as management only in an emergency. It is called - an emergency crisis management. The purpose of this management is to bring the company out of

the crisis, or at least reduce the damage. A set of techniques that can be used by the crisis manager for this purpose quite varies, but it is difficult to offer any of novelty – innovation.

The situation changed after the crisis management tasks have expanded. The problems began to include: definition of probability (risk) of the crisis, identification, development of crisis measures. This situation prompted the development of preventive, prophylactic measures to prevent or mitigate the crisis itself or increase the stability of the enterprise to a particular crisis. In addition to the above activities, crisis management begins to include various methods of forecasting the onset of the crisis, and

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a large set of preventive measures aimed at reducing the action of the crisis for the company. In addition to crisis management the terms such as “risk management” and “anticrisis administration” are used.

The terms of “crisis management”, “risk management” and “anticrisis administration” will be described briefly in the further part of the article.

## 2 RISK MANAGEMENT

Risk management is the identification, assessment, and prioritization of risks (defined in ISO 31000 as the effect of uncertainty on objectives) followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events (Hubbard, 2009, p. 46) or to maximize the realization of opportunities. Risk management’s objective is to assure uncertainty does not deflect the endeavor from the business goals (Antunes & Gonzalez, 2015).

The definition of risk management in the literature varies. In the dictionary of business terms (Akademik, 2001) risk management is defined as the set of rules and procedures aimed at monitoring possible adverse events, with a view of taking decisions to prevent a negative effect. This is a general definition. In this sense, risk management can be attributed to any kind of activity. This may be risk management in the state and private sector, risk management in the social sphere, and risk management in business, etc.

Most authors link risk management with business and economic security. According to the dictionary of crisis management (Yun, Tal', & Grigor'yev, 2003) and (Akademik, 2000), the risk management covers a risk assessment, management of risk, and financial relations arising in the business process.

Risk management holds a special place in some specific types of business, such as insurance.

In the insurance, risk management is seen as a deliberate action of the insurer, the surveyor or adjuster to limit or minimize the risk within the system of economic relations. The implementation of risk management in practice means the consistent use of the insurer of the structural elements of risk management: the

establishment (definition) of risk, risk assessment, risk control, risk financing. These structural elements of risk management as a whole or in a part are concentrated in the site plan that contains specific requirements that must be followed by every participant of insurance relations in any situation. With a specific situational plan, managers implementing risk solutions can act quickly in unforeseen circumstances. It reduces uncertainty in the actions of economic entities in the risk situation and shows the probability of negative event so the exposure to the risk may be estimated reliably. The discrepancy between the objective value of the existing risk and its subjective perception depends on the availability of information on the subject. From the standpoint of risk management, insurance is the process of formation and use of insurance fund of a certain group of individuals and / or legal persons having an insurable interest, due to risky circumstances of time and place (Efimov, 1996).

According to the National Standard of the Russian Federation “Risk management. Terms and definitions” (GOST R 51897-2011/Rukovodstvo ISO 73:2009, 2012), risk management is defined as a coordinated action for the organization of risk management. Russian standard GOST R 51897-2011 fully complies with the international ISO Guide 73 Document: 2009 (ISO Guide 73:2009, 2009). Other documents and standards use the terminology of the standard GOST R 51897-2011, for example, the standard ISO 31000-2010 Risk Management. Principles and guidelines (GOST R ISO 31000-2010, 2011).

Let us briefly consider some of the important aspects of ISO 31000-2010 standard. In accordance with this standard, any activities of the organization include the risk. The organization carries out risk management through risk identification, analysis, and its subsequent evaluation. Since all organizations manage risk to some extent, this standard establishes a set of principles that must be followed in order risk management to be effective. This standard recommends that organizations develop, implement and continuously improve infrastructure, the purpose of which is to integrate the risk management process in general management, strategy, and planning, management, reporting processes, policies, values, and culture.

Risk management can be applied to the entire organization at any time, in its many areas and at many levels, as well as to specific functions, projects, and activities.

The standard emphasizes that risk management enables an organization to:

- to increase the ability to achieve the objectives;
- maintain an active management;
- be aware of the need to identify the impact and risks across the organization;
- improve the identification of opportunities and threats;
- comply with the relevant statutory and regulatory requirements and international standards;
- improve binding management reporting;
- improve management;
- strengthen stakeholders' confidence;
- create a reliable basis for decision-making and planning;
- improve management;
- effectively allocate and use the resources to influence the risk;
- increase the functional efficiency and effectiveness;
- increase the level of security, health, and environmental protection;
- improve loss prevention and incident management;
- minimize losses;
- improve training within the organization;
- improve the sustainability of the organization.

The standard ISO 31000-2010 use the terms: "risk management" and "managing risk". "Risk management" refers to the architecture (principles, infrastructure, and processes) of effective risk management, and "managing risk" refers to the use of this architecture to particular risks (GOST R ISO 31000-2010, 2011).

Risk management can be regarded as an independent activity. If the firm has developed crisis management, risk management can then enter the crisis management structure of the company and is a part of the preventive crisis management.

### 3 ANTICRISIS ADMINISTRATION

There are several approaches to the concept of anticrisis administration. In the first case, anticrisis

administration stands synonymous with crisis management. In the second one anticrisis administration is a particular case of crisis management. This approach limits the anticrisis administration separate issues, primarily related to problems in management. According to the "Encyclopedia of the investor" (2013) anticrisis administration is a special case of crisis management. Anticrisis administration is a process of application forms, methods, and procedures aimed at the socio-economic recovery of financial and economic activity of an individual entrepreneur, enterprise, industry, the creation and development of conditions to emerge from the crisis. Anticrisis administration considers the crises caused by the poor administration - inadequate, or unprofessional, and crises that have arisen as a result of corruption, abuse, theft and fraud (Akademik, 2013).

Detailed analysis of the literature showed that most of the authors, describing the anticrisis administration, use the same goals and objectives that are used in crisis management. The most common tasks of anticrisis administration are:

- analysis of macro and micro environment and choice preferred of the company's mission;
- the study of the mechanism of the economic crisis and creation of a system scanning the external and the internal organization of media with the aim of early detection of signals concerning the threat of forthcoming crisis;
- strategic MCS (management control systems) and the development of strategies to prevent its bankruptcy;
- rapid assessment and analysis of the financial condition of the organization and the identification of possible insolvency (bankruptcy) - the operational MCS (management control systems);
- development of the preferred policy of behavior in the situation of upcoming crisis and its elimination from the company;
- a permanent record of business risks and development measures to reduce it.

The terms "anticrisis administration", "crisis management" and "anticrisis management" have become very popular in the business life of the post-Soviet countries. Some authors divide these concepts whereas some mix them. In some cases, the term of anticrisis administration is

understood as the management of the company in the context of a general crisis of the economy, some authors describe it as management of the organization on the eve of bankruptcy, and others associate it with the concept of anticrisis administration activities undertaken by managers within the framework of judicial bankruptcy proceedings. Some authors believe that the anticrisis measures should be taken when the financial position of companies operating in the market is becoming worse and the prospect of bankruptcy - real. Thus, anticrisis administration completely ignores diagnostics threat of bankruptcy in the early stages of its origin and focuses its attention only on the anticrisis issue (Akademik, 2013). This is an outdated approach. The modern approach is based not only on the fight against the crisis but, first, on the prevention of negative issues.

Korol V.S. defines crisis management as the company's ability to respond constructively to the changes that threaten its normal functioning (Korol', 2001).

According to E.M Korotkov, the anticrisis administration is the management, which places emphasis on the way of foreseeing the danger of the crisis, analyzing its symptoms and reducing the negative effects of the crisis and its use of factors for the subsequent development (Korotkov, 2010).

Utkin E.A notes that the main thing in the anticrisis administration is providing conditions when financial difficulties cannot be permanently stable. There should not be any question of bankruptcy because there should be established management mechanism to address emerging problems before, as long as they did not take irreversible" (Utkin, 1999).

Professor A.G. Hraznova believes that the anticrisis administration is such an enterprise management system that is comprehensive, systemic in nature and aimed at preventing or eliminating the adverse effects of business through the use of the full potential of modern management, development and implementation in an enterprise a special program of strategic character, allowing to remove temporary difficulties, to preserve and increase its market positions in all circumstances, by relying mainly on its own resources (Gryaznova, 1999).

Thus, the concept of "anticrisis administration" as well as the concept of "crisis management" and "anticrisis management" have no clear definition in the current literature. These concepts are so similar that they can be considered as synonyms. But we should not say this categorically. The development of economic science and, in particular, the science of economic security can in some way share these concepts.

Risk management of self-direction is increasingly becoming a structural element of the crisis management system of the company and is a preventive and prophylactic part of the modern crisis management.

#### 4 INNOVATIONS IN CRISIS MANAGEMENT

With the expansion of crisis management, there will be more opportunities to apply innovations to solve specific problems of crisis management. Thus, in the modern crisis management innovation is possible in two ways:

- the use of innovation to meet the challenges of crisis management, which are not related to changes in the production facility protection. These innovations relate to the introduction of innovative methods of forecasting crises, the use of innovative methods for the development of preventive measures, in particular, the use of simulation techniques, etc.;
- the introduction of innovation in an enterprise. These innovations are very diverse and are aimed at improving the sustainability of the enterprise for the crisis, or are used to cause that the company recovers from the crisis.

Innovations that are used to exit the company out of the crisis, can be directed to:

- changes in the organization structure;
- changes in the personnel of the organization;
- creation of a new product or service;
- the introduction of new technologies;
- development of a new market;
- obtainment of a new source of raw materials;
- changes in the enterprise market position;
- changes in the economic, social and environmental policies;
- changes in the control system.

These innovations are used by crisis managers in the process of withdrawal of the company from the

crisis. They are described in detail in the literature. They can be used for businesses, social groups, local government structures, government structures, the foreign policy decisions of the international level.

Innovation in crisis management has a slightly different purpose than innovation in the usual innovation management. The aim of innovation management is to ensure long-term operation of the companies on the basis of the effective organization of innovative processes and ensure the high competitiveness of innovative products (Tseli i zadachi innovatsionnogo menedzhmenta, n.d.). The main criterion for assessing the achievement of objectives of innovation activity is the profitability of the enterprise.

- innovations in crisis management primarily aim at causing that the company will recover from the crisis and establish a stable operation of the enterprise. The main criterion for the assessment of achievement of innovation in crisis management is the stability of the enterprise to the reasons that have caused the crisis of its activities. The objective of crisis management innovation can be considered achieved when the management of the firm may return to normal (non-crisis) mode. After the transition into noncrisis mode of operation, the company can continue to innovate itself and move to the innovative type of development or entities continue to use innovations that have been introduced by crisis managers. The activity of companies, which will use the innovation embedded in a crisis, looks unpromising at first glance. However, for many companies, it is a quite suitable choice of activities. This refers to the companies in which the crisis has come as a result of emergency situations of natural, technogenic social or military nature. Innovative activities of crisis management in these enterprises will be aimed at increasing the sustainability of enterprises in certain emergency situations. Innovation, in this case, may concern:
  - change of the location of the enterprise. The company may be moved to a different place which will be safer. Enterprises may be placed in many locations, regions or countries.
  - changes relating to the security of the process, equipment, buildings and structures.

Crisis management in an innovative activity is aimed at the introduction of new, safer technologies and equipment. At the same time, production of the enterprise cannot be changed. The improvement of buildings and facilities, including a system of interaction with the environment, will be important for some businesses, e.g. the introduction of new treatment systems or occurrence of waste disposal companies can be the most important task of innovation after the onset of the crisis, which has been linked to pollution of the environment.

- improvement of the management structure of the enterprise. Improvement of the competence of employees. Implementation of an enterprise risk management department or crisis management, which will operate on a permanent basis.
- assurance of the energy structure. The introduction of dual (redundant) power supply systems. Replacing traditional energy with new one, for instance, replacing oil products with natural gas. Implementation of know-how to provide an independent energy supply. For example, the introduction of solar or wind power generators.
- innovations in logistics. Ensuring uninterrupted delivery of products and raw materials.
- changes in the insurance activity of the enterprise. It is advisable to ensure the activity of the company against certain risks.
- access to new markets.
- the search for new suppliers of raw materials and components which enable changes in the amount of raw materials and products at the enterprise stock, etc.

The introduction of such innovations is primarily aimed at the renewal and stabilization of the enterprise and does not apply to its further development strategy. After the restoration of a stable operation, crisis management of the enterprise may be completed.

Some companies, especially these which are in a crisis due to economic reasons, may switch to an innovative type of development. An innovative type of development imposes a special mark on the management, its objectives, functions, forms and methods, sources of capital, structure, forming in its composition standalone core -

Innovation Management, that directs and governs the totality of the innovation and investment processes in the economic system, provides sophisticated integration of science, production, and market. An innovative way of development of the company requires the implementation of crisis management or risk management on an ongoing basis. The analysis of possible risks in innovation is one of the main tasks at the stage of development and adoption of the innovative project.

Most authors considering the crisis management write about saving the organization (in some cases at any cost). It should be added that some crises are so devastating that it is impossible to save the company. In such a case, other tasks may be assigned to a crisis manager: liquidation of the enterprise, the rebirth of the enterprise; the revival of the updated enterprise; carrying out bankruptcy procedures; creation of an enterprise which is not related to the previous one.

## 5 CRISIS MANAGEMENT AT THE STATE LEVEL

The bulk of publications and textbooks are devoted to crisis management activities of enterprises and their associations. However, crisis management can be successfully used in the management of a national scale. Its application for the removal of the country (e.g. Ukraine) of the crisis is more than justified.

One type of a large-scale state of crisis is a war. The war can be seen not only as a state of crisis but also as a special condition of the state. For example, one of the key theses of David Keen, in his work entitled "The Economic Functions of Violence in Civil Wars" is a definition that war is not just a rejection of the existing system, but rather the creation of an alternative way of making a profit, power, and protection of interests (Keen,

1998, pp. 71-72). In the study of long-term conflicts D. Keen concludes that in many cases, a specific mechanism was created when the warring parties tried to achieve short-term benefits but did not want to end the war and defeat the enemy. This mechanism is called the term "war economy" and it has been used to explain several different events – rebellions or collapses of state institutions. (Collier & Hoeffler, 2004), (Collier & Hoeffler, 2002).

The war is a crisis for most residents of the state due to the negative economic, humanitarian, social and political consequences of the armed conflict. The war in this sense is characterized as a very negative impact on all aspects of life and all reasonable efforts should be used to its completion. The aim of the international community (UN, NGOs, etc.) is to promote the rapid recovery of the country or countries after the war and to develop constitutional and democratic principles as the other states have an interest in it (Kazans'kiy & Zaplatins'kiy, 2012). Thus, the international community is engaged in crisis management. Opportunities and types of innovations in crisis management at the macro level differ from innovations at the enterprise level.

## 6 CONCLUSION

Innovative activities in crisis management may relate to various aspects of the company or the state structure. First, the types of innovations in crisis management depend on the reasons that caused the crisis. Secondly, innovations depend on its depth. What is more, they depend on the desires and goals of the owner (owners) of the enterprise or public policy (for government agencies). The issues of innovation in crisis management are not developed enough and require serious scientific research, which is particularly important in terms of increasing the number of risks and crises.

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# DETECTION AND ASSESSMENT OF SAFETY PROBLEMS WITHIN ROAD TRANSPORT DECISION-MAKING

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## **Abstract**

*The transportation system safety in many countries often constitutes the largest public-sector problem. This problem is characterized by the presence of a variety of potential negative events that could occur (including their causal factors), the complexity of their detection and stochastic nature of their consequences. The planning and management process concerning transport safety requires that engineers collect and maintain traffic safety data, identify hazardous locations, conduct engineering studies, and establish project priorities. In this regard, the article discusses most common technical and technological factors affecting transport safety and the role of road infrastructure in road accident occurrence. For the purpose of design and maintenance of a successful transport management an exemplary procedure for estimation of transport infrastructure improvement on traffic safety is considered. All above-mentioned could be done in a successful manner just by the usage of scientific approaches and methods. The present paper discusses the essence of some scientific methods, and possibilities to be adapted for the purpose of a successful decision-making in the area of transport safety.*

**Keywords:** traffic safety, hazardous locations, decision making, scientific approaches and methods

## **1 INTRODUCTION**

The transportation system safety in many countries often constitutes the largest public-sector problem. The planning and management process concerning transport safety requires that engineers collect and maintain traffic safety data,

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identify hazardous locations, conduct engineering studies, and establish project priorities. The article discusses most common technical and technological (engineering) factors affecting transport safety and the role of road infrastructure in road accident occurrence. For the purpose of design and maintenance of a successful transport management, all the main operations that should be performed are given and an exemplary procedure for estimation of transport infrastructure improvement on traffic safety is considered. The

article also discusses the essence of some scientific methods, and possibilities to be adapted for the purpose of a successful decision-making in the area of transport safety in Bulgaria.

## 2 FACTORS AFFECTING TRAFFIC SAFETY

The operating environment of potential conflicts between traffic participants could be the result of the influence of several factors. These factors include: state and/or local policy on road safety, the characteristics of traffic flows (traffic intensity, speed, density and composition (structure)), vehicle characteristics and human behavior weather conditions, organization and traffic management, etc. The interaction between these factors is derived from the 'Driver-Vehicle-Road' system in the context of the environment (working conditions). (Georgiev, 2007)

Statistically significant relationships can be established between accident frequency and traffic flow, for a variety of site categories. The main factors on the occurrence of human error resulting in an accidents involving a vehicle are: the alcohol intake (in one-third of the cases), the speed chosen by the drivers, the level of attention allocated to the driving task and the level of experience of the road users. Factors affecting traffic safety that are connected with the road conditions and other infrastructure are also known as engineering factors. They are technical and technological factors which can be divided into 6 main groups: connected with road segment or intersection (length of the road segment, traffic volume, etc.), connected with the alignment (vertical or horizontal), connected with road shoulder type and width, connected with infrastructure characteristics (side ditches, barriers, fences, etc.), devices for traffic control

(road signs, road markings) and technological factors such as guidance devices. Engineering factors are exactly the ones that are of main importance because they can be changed to a certain extent and therefore managed. (Sinha & Labi, 2007), (Nambuusi, Brijis, & Hermans, 2008), (Canale, Leonardi, & Pappalardo, 2003).

## 3 PROCEDURE FOR SAFETY IMPACT EVALUATION

For the evaluation of safety impacts of engineering factors on the accident occurrence in this part of the article the main operations in successful safety management cycle are discussed (fig. 1) (Safety Management Cycle, 2015) and a procedure for the estimation the impact of road intervention (fig. 2).

The main operations in Successful Safety Management are connected with continuous updating of the data about black spots, accident reduction factors, the condition of road infrastructure, policies for traffic regulation and continuous training of road users.



Figure 1 Main operations in successful management cycle

All approaches and accident prediction models can be assigned to '4. Monitoring of the accident

factors and tracking changes in the operational environment' and '5. Appropriate Actions'. The Decision-making procedure for traffic accident reduction is shown in fig. 2

Based on the theory (Sinha & Labi, 2007), a summary procedure for estimation the impact of road interventions is shown in fig. 2.

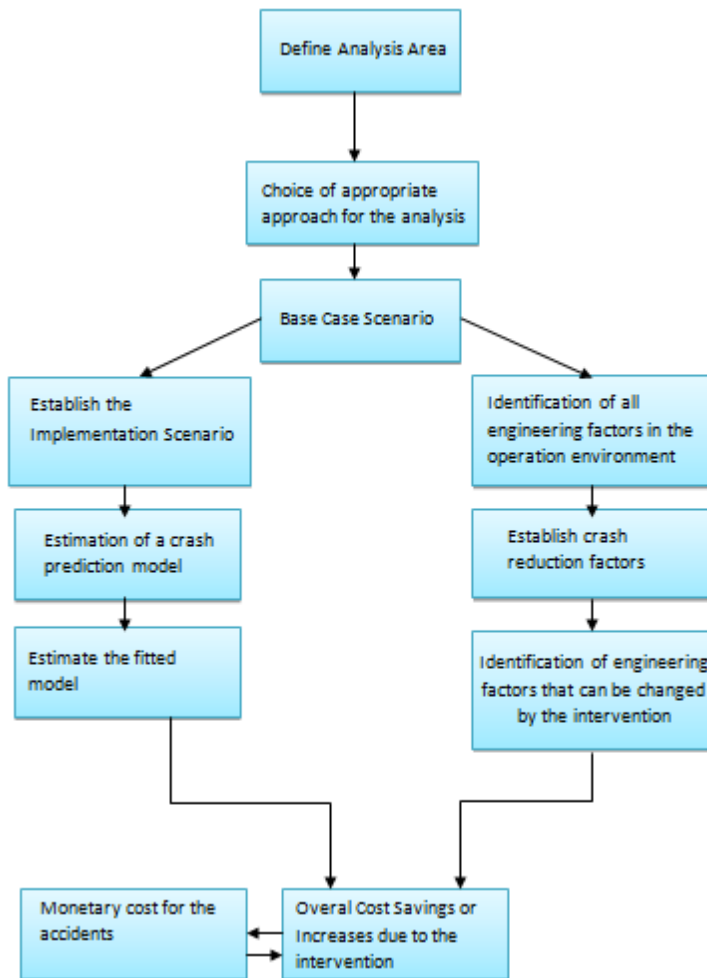


Figure 2 Decision-making procedure for estimation the impact of road interventions

Evaluation of the impact of different factors on safety levels (number of road crashes) is crucial for the comparison of 'with' and 'without improvement' road conditions or scenarios. The summary procedure is connected to the solution of three tasks:

- determining engineering factors and the extent to which they affect the road safety (individually or in combination),
- evaluation of each unit change of the engineering factors on crash reduction,

- from the first two points, evaluating the predicted accident number and possible change expected due to a certain intervention. How will this intervention affect the overall monetary cost of the accidents on a given intersection?

All tasks in the procedure are connected together for the purpose of safety improvement and can be explained as follows:

*Defining the Analysis Area* - which is the specific transportation facility that is going to be analyzed - road section or intersection, or sections or intersections of the same type?

*Choice of an appropriate approach for the analysis* - the choice of adequate approach is crucial for the research. Some approaches may be used often but this does not mean that they are the best for the field scenario. There is a large number of scientific papers and publications on methods and approaches for assessing road safety and influencing factors. What unites them all is the search for an appropriate solution for improving road safety depending on individual characteristics: areas designated as hazardous after conducted surveys (black spots or black sites), roads and areas associated with particular types of accidents at a number of individual sites throughout the area, etc.

*Establish the base case scenario* - the choice of scenario that is going to be evaluated.

*The left part of fig. 2:* Establishing the implementation scenario is a subtask, connected with certain differences and specific conditions connected with the area of evaluation. The next step is the choice of appropriate model and estimation of a crash prediction model based on the chosen approach. A few of the factors may be insignificant for the model and that is why estimation of the fitted model is important.

*The right part of fig. 2:* Identification of all engineering factors in the operation environment, establishing crash reduction factors and

identification of those which can be changed by a certain intervention, are crucial steps for the accident prediction models' implementation.

The final part of the procedure is to gather information about the monetary cost of the accidents used for the evaluation of monetary losses from the accidents and after that determining the overall cost savings or increases due to the partly intervention on the infrastructure.

#### 4 CONTEMPORARY STATE OF TRAFFIC SAFETY IN BULGARIA

The increasing number of vehicles shows that by 2030 it will exceed 1.2 billion cars (World Book Inc., 2001)

Compared to other European countries, by the index number of killed in road transport accidents per 1 million inhabitants, Bulgaria occupies the unsatisfactory position on traffic safety with about 1000 people killed in road accidents per year. In Bulgaria, more than two-thirds of injuries and 40% of deaths in road accidents were registered in urban areas (dokkpbdp, 2016). Statistics is kept mainly about traffic accidents connected with speeding, wrong overtaking and passing in the opposite traffic lane, withdrawing priority of vehicle or pedestrian, and alcohol intake.

Over the past three years, the greatest number of accidents have occurred on the first class roads. In 2015, accidents on the highways have increased compared to third class roads and municipal ones.

The main urban transport problems in Bulgaria can be reduced to *traffic congestion, environmental pollution, unreliable public transport and low level of road safety*. (Georgiev, 2007).

#### 5 SELECTING AND ADAPTING ACCIDENT PREDICTION MODELS FOR INTERSECTIONS IN SOFIA, BULGARIA

Making efforts of authorities to establish measures for accident reduction and evaluation of the key causal factors are of most importance for the creation of safer traffic conditions. For this purpose, the article aims at selecting and checking

the applicability of appropriate accident prediction models for the territory of Sofia, Bulgaria. A study of various scientific papers and research in the field of accident predicting models shows that the most often used form of model is (1), (Nambuusi, Brijis, & Hermans, 2008) and (Canale, Leonardi, & Pappalardo, 2003):

$$Y_i = e^{(b_0 + b_1 X_1 + \dots + b_n X_n)}, \quad (1)$$

where:

$Y_i$  – estimated number of accidents (dependent variable);

$X_1, X_2, \dots, X_n$  - independent variables of the model;

$b_0 \dots b_n$  - coefficients of the equation to be estimated by the model.

The evaluation procedure is used to derive the regression coefficients and it is directly dependent on the accepted type of distribution of  $Y_i$ : lognormal regression models and log-linear Poisson models. For the purpose of the article, lognormal regression model for accident prediction is selected, which accepts that the number of accidents is log-normally distributed and this guarantees that the results for the predicted number of accidents will be positive number.

After analysis of the most commonly used technical and technological (engineering) affecting safety factors, the following ones are used in the models: average daily traffic (vehicles/day) on the major road and on the minor road, lane number of the major road and of the minor road, lane width (meters) of the major road and of the minor road, existence of separate lanes for right turn of the major road and of the minor road. Initially, 14 causal factors (model variables) have been considered and analyzed by the usage of multi-factor analysis. Subsequently, some of them have been estimated as very poorly influencing factors and excluded from the model.

There were fitted two models regarding *four-leg signalized intersections* and *three-leg stop/signalized intersections*.

The first type of model is based on data about accidents number with fatalities, traffic and

infrastructure characteristics of 76 four-leg signalized intersections in Sofia. The second model is based on the same data for 60 three-leg stop/controlled intersections. Other types of intersections are not subject to the current article.

For the purpose of models fitting a specialized software was used - Statistica 7. Based on equation (1) the two models were verified and their applicability (adequacy) was proved:

**Model 1: Road accidents with fatalities on four-leg signalized intersections**

After the conducted research for this type of model the following form was obtained (2):

$$Y_1 = e^{(-0.102071 + 0.000036X_1 + 0.0000270X_2 - 0.023147X_3 - 0.019034X_4 - 0.102494X_5 + 0.204026X_6 + 0.059099X_7 + 0.020106X_8)} \quad (2)$$

where:

$Y_1$ - predicted number of road accidents with fatalities for four-leg signalized intersections;

$X_1, X_2, \dots, X_n$  - independent variables of the model;

$b_0, b_1, \dots, b_8$  - coefficients of the model to be estimated;

- by adding one more separate lane for a right turn movement of the minor road, accidents number can be reduced by more than 0.10;
- an extension of the lane with 25 cm of the minor road leads to accidents number reduction by more than 0.20;
- if the number of major road lanes increases by 1, the accidents number can be reduced by more than 0.25.

Table 1. Results for the Accident Prediction Model for Four-leg Signalized Intersections in Sofia, Bulgaria				
	Estimated	Standard error	t-value df = 72	p-level
$b_0$	-0.102071	0.46413	0.0000001	1E-09
$b_1$	0.000036	1E-09	0.0000001	1E-09
$b_2$	0.000027	0.01801	5E-08	1E-11
$b_3$	-0.023147	0.02207	5E-08	1E-08
$b_4$	-0.019034	0.09329	1E-11	5E-06
$b_5$	-0.102494	0.14565	5E-08	1E-09
$b_6$	0.204026	0.14565	7E-09	2E-10
$b_7$	0.059099	0.05446	6E-11	5E-08
$b_8$	0.020106	0.0591	7E-10	7E-09

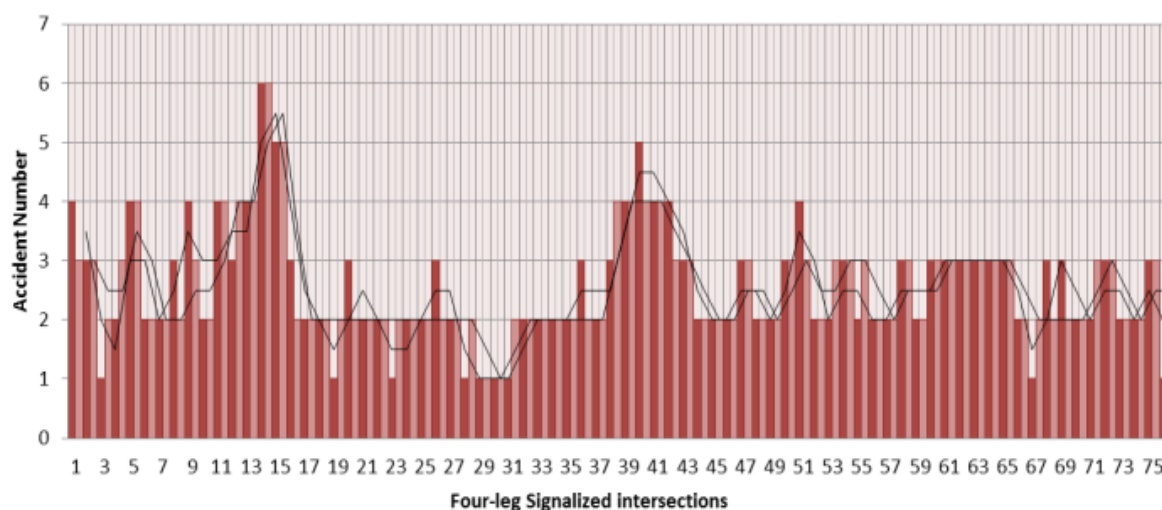


Figure 3 Accident prediction model for four-leg signalized intersection in Sofia

The computation results relating the model are shown in table 1 and figure 3. The comparison between actual statistical data and data derived from the model is shown in fig. 3.

In summary, when changing only one variable and under equal other conditions the following results are received:

A combination of all above-mentioned interventions (changes in the engineering factors) may lead to significant reduction of the number of accidents.

**Model 2: Road accidents with fatalities on three-leg stop/signalized intersections**

This model has the following form (3):

$$Y_2 = e^{(-0.314489+0.000056X_1-0.000002X_2+0.017336X_3-0.007231X_4+0.503134X_5-0.46575X_6+0.001272X_7+0.097021X_8)}$$

where:

$Y_2$  - predicted number of road accidents with fatalities for three-leg stop/signalized intersections;

$X_1, X_2, \dots, X_n$  - independent variables of the model;

$b_0, b_1, \dots, b_8$  - coefficients of the model to be estimated.

The results relating the model are shown in table 2 and figure 4. The comparison between actual statistical data and those derived from the model is shown in fig. 4.

Table 2. Results for the Accident Prediction Model for Three-leg Stop - Controlled Intersections in Sofia, Bulgaria

	Estimated	Standard error	t-value df = 51	p-level
$b_0$	-0.314489	0.5789	7E-09	8E-10
$b_1$	0.000056	1E-13	1E-13	1E-10
$b_2$	-0.000002	7.5E-07	2E-12	5E-12
$b_3$	0.017336	0.01441	1E-10	1E-10
$b_4$	-0.007231	0.03808	4E-11	0.000000001
$b_5$	0.503134	0.20534	4E-10	1E-12
$b_6$	-0.46575	0.24316	1E-09	0.000000001
$b_7$	0.001272	0.05049	1E-11	0.000000001
$b_8$	0.097021	0.09702	1E-09	1E-11

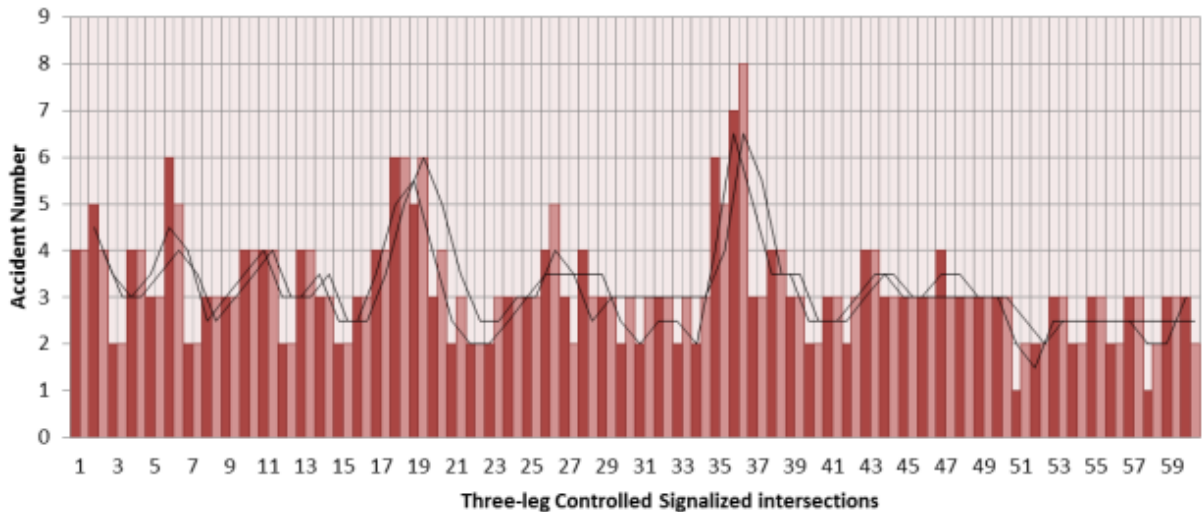


Figure 4 Accident prediction model for Three-leg Stop - controlled intersections in Sofia

For the results of this model, it can be said that an extension of the minor road by 25 cm gives an accidents number reduction by more than one-third.

Any increase (even great) of the average daily traffic of minor road does not lead to a crucial growth of the number of accidents with fatalities.

On the other hand, in the case of an increase of the average daily traffic of major road by 2000 vehicles/day leads to an increase in a number of accidents with fatalities by 2 or more accidents.

## 6 CONCLUSIONS

The proposed procedure and accident prediction models could be successfully used in decision making to improve traffic safety in cities where it is required to estimate the potential number of accidents that are expected to occur at a certain intersection.

By the definition of the main technical and technological factors affecting safety and collection of needed statistical information, traffic safety can be seriously improved which will result in a general reduction of road accidents number and their consequences (fatalities, injuries, material loss).

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# INDUSTRIAL INFLUENCE ON THE INTERNATIONAL FREIGHT TRAFFIC OF THE LAND TRANSPORTS IN THE REPUBLIC OF BULGARIA

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## **Abstract**

*The market demand and supply of transport services are in direct functional correlation with the industrial output and the consumption. The sectors “Mining and quarrying” and “Manufacturing” in the Republic of Bulgaria are generating the basic product flows thus determining the land transport market demand parameters in the country.*

*The paper is investigating and analyzing the current state and development tendencies of the industrial sector as well as the tendencies of basic indicators of the international exchange of the Republic of Bulgaria. The estimation results are systematically represented, the economic activities are determined and ranged according to their influence strength over the international land transport.*

**Keywords:** Freight transport, industry, international transport.

## **1 OBJECTIVES**

Purposes of the analysis:

- determining the modal shares of road and rail transport in international trade;
- determining the trends of the industrial development in the Republic of Bulgaria;
- determining the development trends of international land transport;
- identification of the freight structure represented by different goods in the international road and rail transport;
- identification of main directions and key partners in the international stock exchange based upon land transport;
- determining the influence rate of the industry over the international freight.

## **2 METHODOLOGY**

The objects of the survey are international railway and road transport, industry and international trade of Bulgaria. Using Eurostat statistical data (EC, 2016), the trade turnover of Bulgaria is

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analyzed in physical units (tons) based upon the following sections and combinations (Jelezov & Kirilova, 2015):

- export and import divided by partner countries;
- export and import by groups of cargo per SITC<sup>1</sup>;
- differentiated freight structure by commodities;
- export and import divided by modes of transport (only for non-EU member countries) per classification SNT/R<sup>2</sup> in physical units (tons).

The international trade is studied based upon physical units per classification SITC.

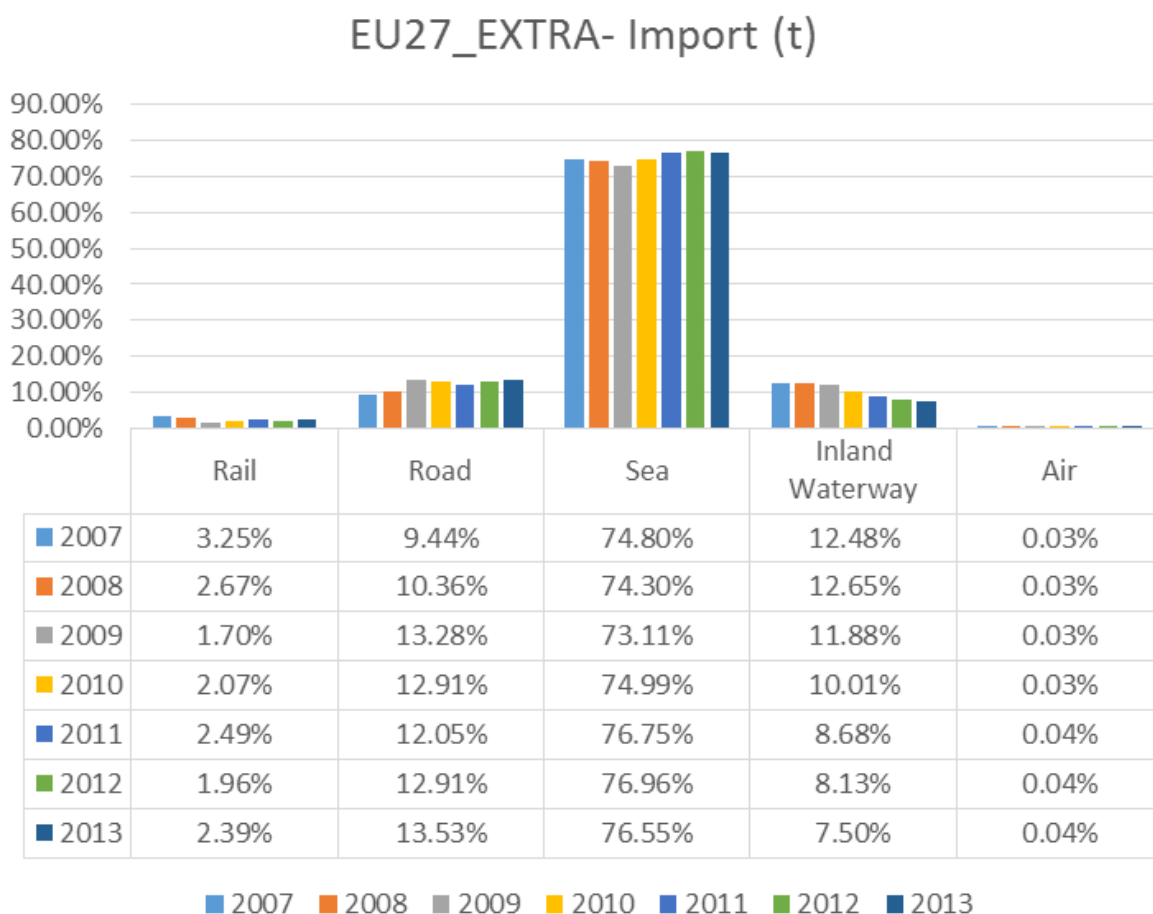
The reference period of the analysis is 2007 – 2013.

The trends of industrial development are studied based upon National Statistical Institute (NSI, 2016) data about the indices of production and per economic activities.

### 3 RESULTS AND DISCUSSIONS

#### 3.1 Modal split in the international trade

The modal split data about import and export by modes of transport are represented by figures 1, 2, 3 and 4.



*Fig. 1 Modal split in the import*

<sup>1</sup> Standard International Trade Classification.

<sup>2</sup> Standard Goods Classification for Transport Statistics/Revised (NST/R).

### EU27\_EXTRA- export (t)

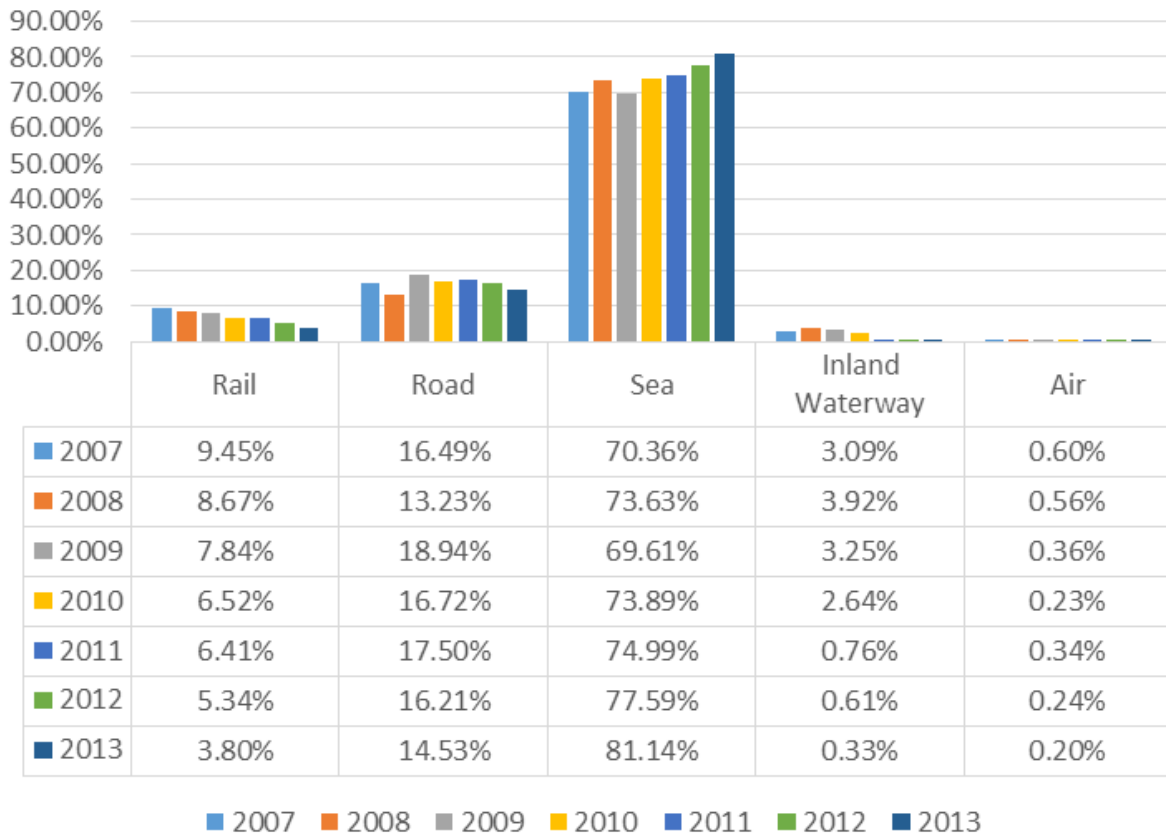


Fig. 2 Modal split in the export

### Modal split of imports by type of land transport

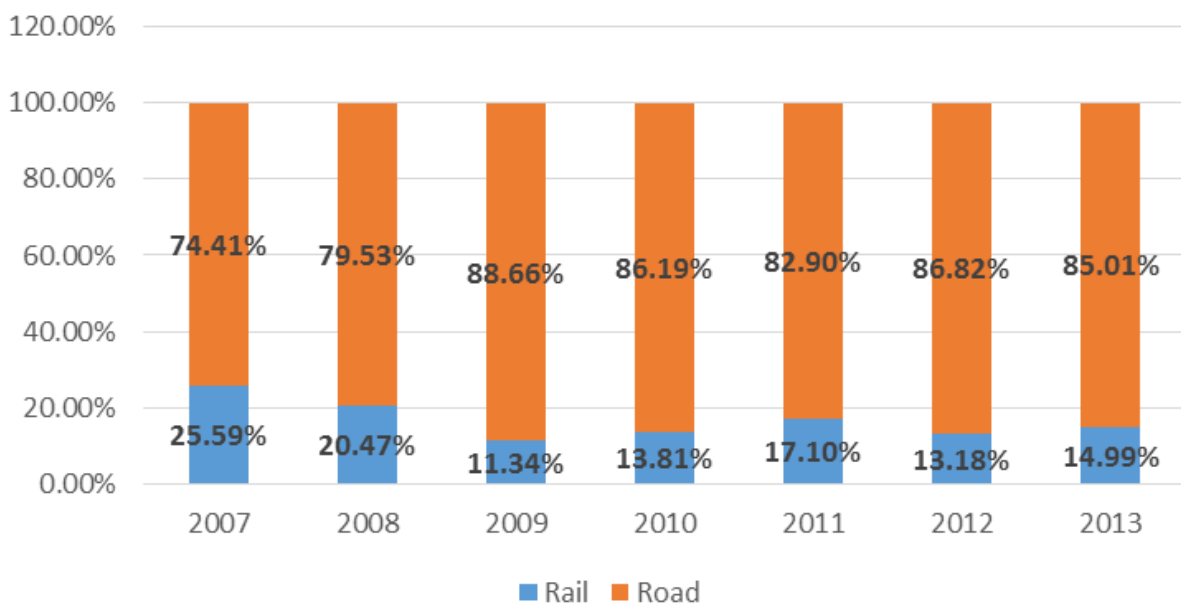
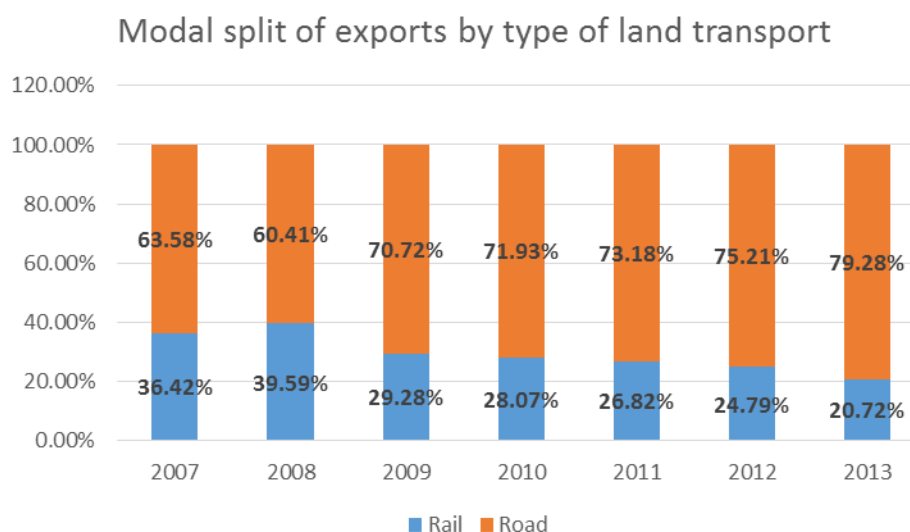


Fig. 3 Modal split of imports by type of land transport



*Fig. 4 Modal split of export by type of land transport*

**Conclusions:**

- Basic share in international trade with tendency towards increasing belongs to maritime transport both in import (75%-77%) as well as export (70%-81%);
- The overall share of land transport during the study period has increased from 12.69% to 15.92%;
- The share of railway transport in import during the study period has decreased from 3.25% to 2.39%;
- The share of railway transport in export during the study period has decreased from 9.45% to 3.80%;
- The share of road transport in import has increased from 9.44% to 13.53%;
- The share of road transport in export has decreased from 16.49% to 14.53%;
- The share of road transport in international freight with land transport has increased from 74.41% to 85.01% in import and from 63.58% to 79.28% in export.

- machinery, transport equipment, manufactured articles and miscellaneous articles;
- agricultural products and live animals;
- chemicals;
- metal products;
- foodstuffs and animal fodder.

These groups account for over 80% of the import with road transport.

- For export by road transport leading are the following commodity groups:
  - crude and manufactured minerals, building materials;
  - machinery, transport equipment, manufactured articles and miscellaneous articles;
  - chemicals;
  - ores and metal waste;
  - agricultural products and live animals.

These groups account for over 79% of the export with road transport.

- For import by railway transport leading are the following commodity groups:
  - petroleum products;
  - ores and metal waste;
  - metal products;
  - crude and manufactured minerals, building materials;
  - machinery, transport equipment, manufactured articles and miscellaneous articles.

**3.2 Main commodities per transport modes**

Table 5 indicates the shares of different commodity groups by directions and modes of transport.

**Conclusions:**

- For import by road transport leading are the following commodity groups:

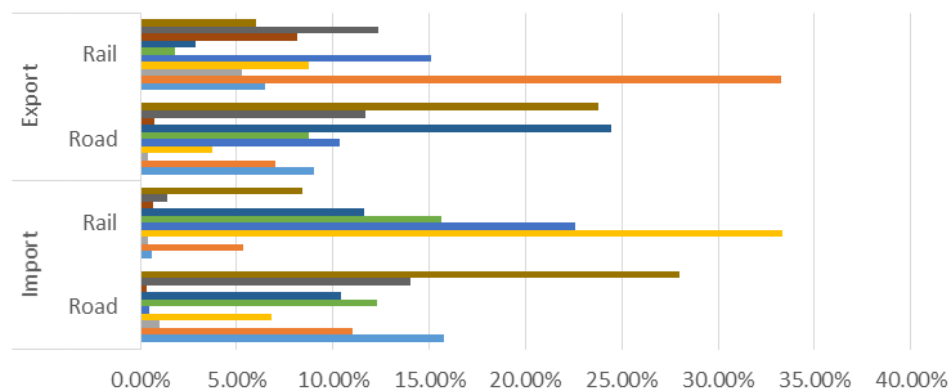
These groups account for over 91% of the import with railway transport.

– For export by railway transport leading are the following commodity groups:

- foodstuffs and animal fodder;
- ores and metal waste;

- chemicals;
- petroleum products;
- fertilizers;
- agricultural products and live animals.

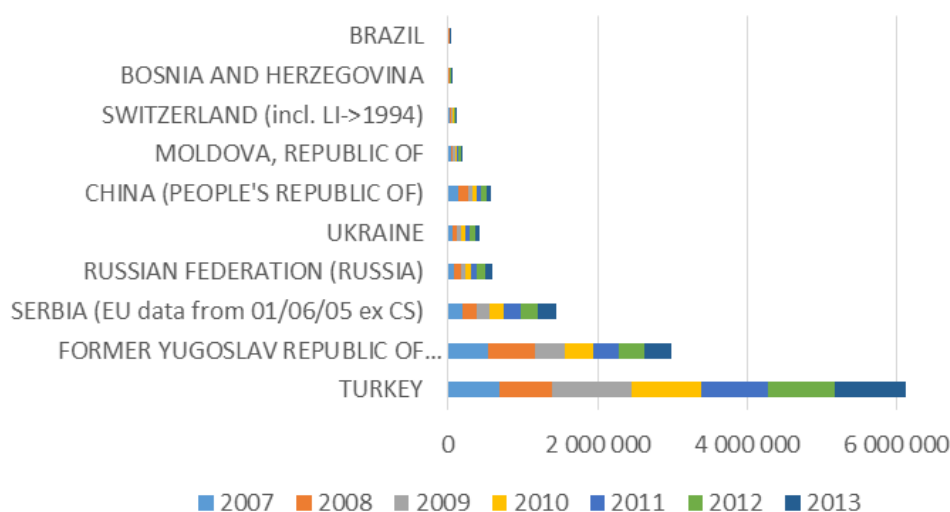
These groups account for over 77% of the export with railway transport.



	Import		Export	
	Road	Rail	Road	Rail
■ MACHINERY, TRANSPORT EQUIPMENT, MANUFACTURED ARTICLES AND MISCELLANEOUS ARTICLES	27.98%	8.41%	23.76%	5.99%
■ CHEMICALS	14.00%	1.39%	11.72%	12.34%
■ FERTILIZERS	0.30%	0.68%	0.70%	8.15%
■ CRUDE AND MANUFACTURED MINERALS, BUILDING MATERIALS	10.41%	11.64%	24.42%	2.86%
■ METAL PRODUCTS	12.32%	15.62%	8.78%	1.79%
■ ORES AND METAL WASTE	0.45%	22.56%	10.36%	15.07%
■ PETROLEUM PRODUCTS	6.78%	33.36%	3.77%	8.76%
■ SOLID MINERAL FUELS	1.03%	0.41%	0.43%	5.29%
■ FOODSTUFFS AND ANIMAL FODDER	11.01%	5.31%	7.03%	33.26%
■ AGRICULTURAL PRODUCTS AND LIVE ANIMALS	15.73%	0.61%	9.03%	6.49%

*Fig. 5 Main commodities by transport modes*

### Import by road



*Fig. 6 Key country-partners (road, import)*

### 3.3 Key country-partners per transport mode

Figures 6, 7, 8 and 9 represent data about the road and rail transport freight haulage by commodities and directions (import and export).

Conclusions:

- The basic partner countries for road transport haulage are Turkey, Former Yugoslav Republic of Macedonia, Serbia, Russian federation. These countries account for over

84% of the import and over 79% of the export by road transport;

- The basic partner countries for rail transport freight in import are Serbia, Kazakhstan, Russian federation и Ukraine. These countries together account for accumulation of over 77% of the import by rail transport;
- The basic partner countries for rail transport freight in export are Turkey, Former Yugoslav Republic of Macedonia, Serbia, Russian federation. These countries account for over 87% of the export by railway transport

Export by road

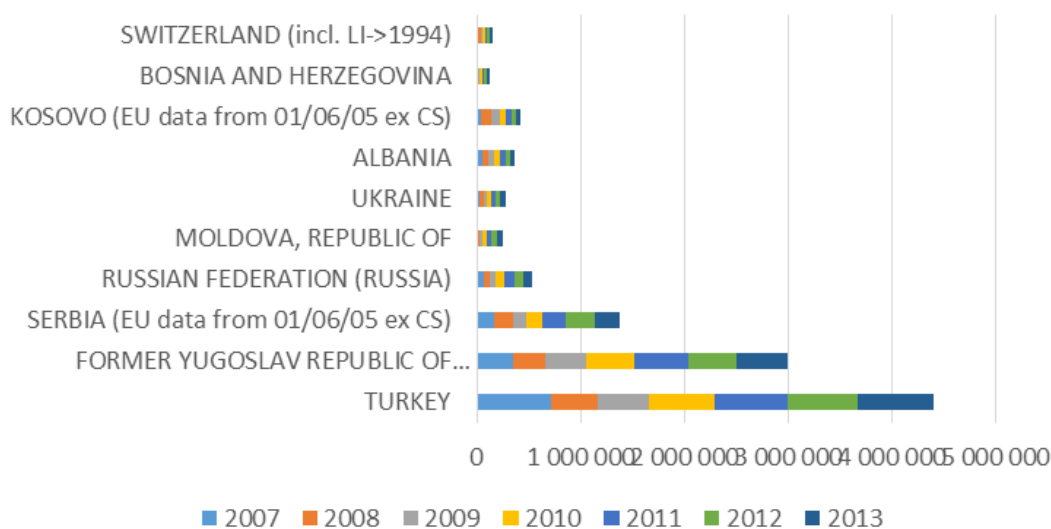


Fig. 7 Key country-partners (road, export)

Import by rail

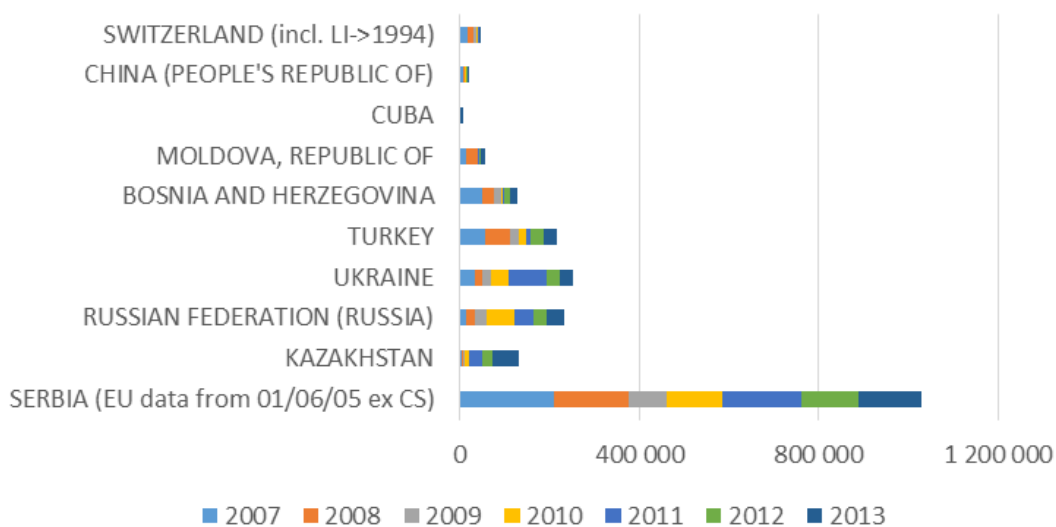


Fig. 8 Key country-partners (rail, import)

### Export by rail

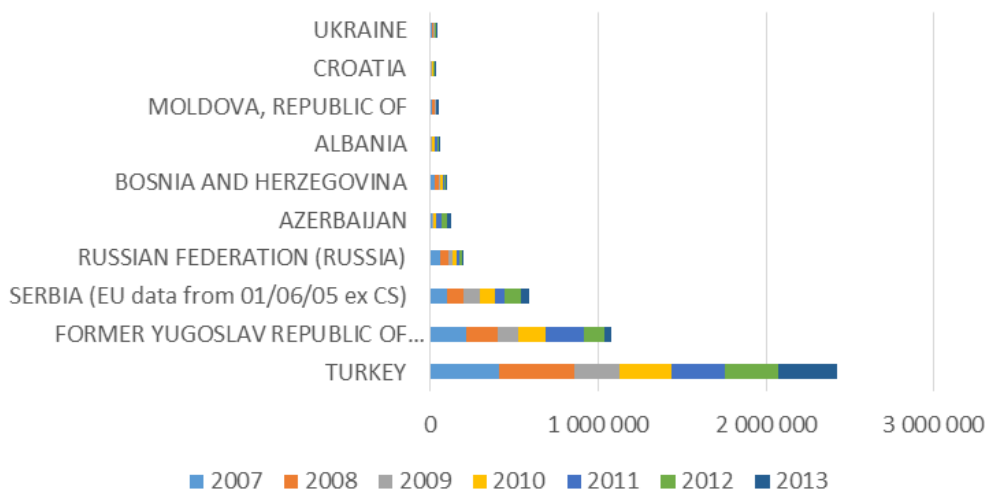


Fig. 9 Key country-partners (rail, export)

### 3.4 Impact of the industry on the international land transport

The industrial influence over the international freight carriages is estimated through determining correlation rates between the freight carriage

alteration indices and the industrial output alterations indices.

The freight carriage alteration indices are indicated on figure 10 (for export) and figure 11 (import).

### Export indices, 2007=100

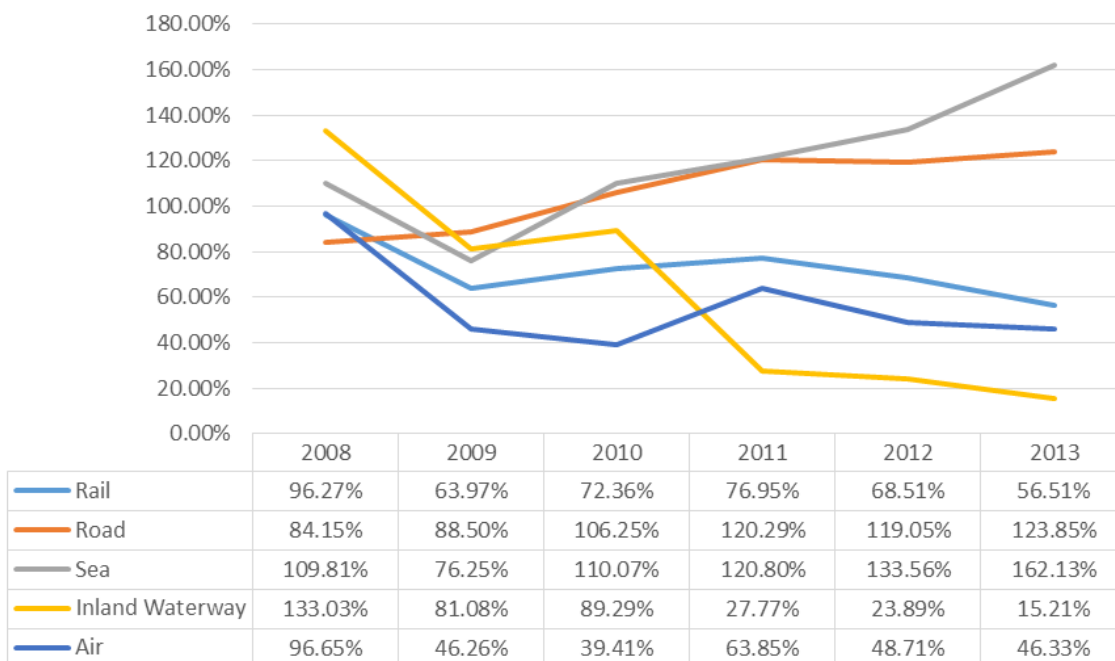


Fig. 10 Export indices, 2007=100%

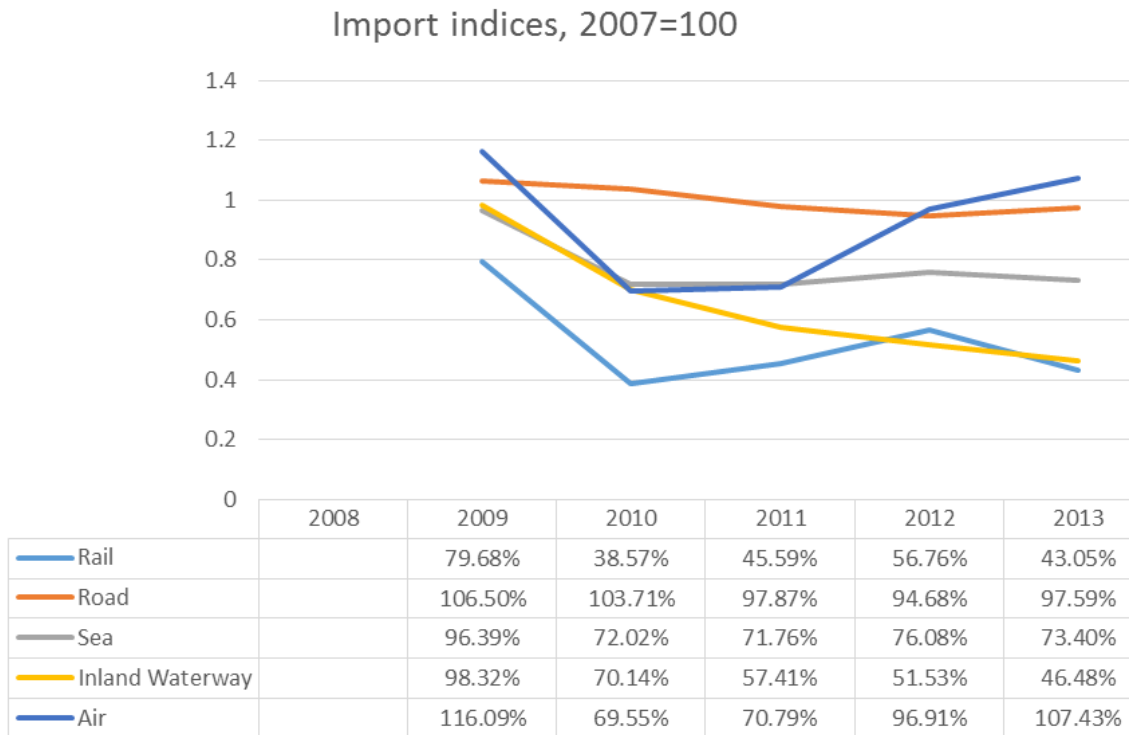


Fig. 11 Import indices, 2007=100

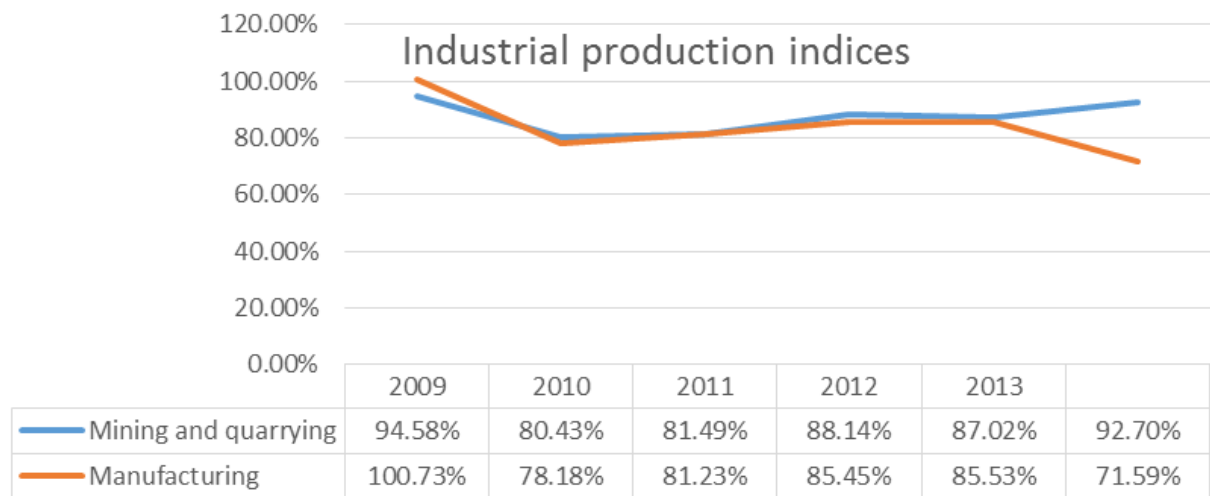


Fig. 12 Industrial production indices

The estimation of the strength of industrial influence over freight carriages the following scale is applied:

Correlation strength
0.3 < R < 0.5 – moderate
0.5 < R < 0.7 – considerable
0.7 < R < 0.9 – high
0.9 < R < 1,0 –very high

The estimation results are systematically represented; the economic activities are determined and ranked according to their influence strength over the international land transport. The results are represented in tables 1 to 5.

Table 1. Impact assessment for rail-very high

Correlation coefficients 0.9 < R < 1,0 –very high		
Rail-import	Manufacture of other non-metallic mineral products	0.90
Rail-export	Manufacture of fabricated metal products, except machinery and equipment	0.98
	Manufacture of furniture	0.96
	Repair and installation of machinery and equipment	0.92
	Intermediate goods	0.98
	Investment goods	0.93

Table 3. Impact assessment for rail- considerable

Correlation coefficients 0.5 < R < 0.7 – considerable		
Rail-import	Repair and installation of machinery and equipment	0.55
Rail-export	Manufacture of paper and paper products	0.54
	Printing and reproduction of recorded media	0.66
	Manufacture of other non-metallic mineral products	0.67
	Manufacture of electrical equipment	0.62
	Manufacture of motor vehicles, trailers, and semi-trailers	0.54
	Manufacture of other transport equipment	0.55

Table 2. Impact assessment for rail-high

Correlation coefficients 0.7 < R < 0.9 – high		
Rail-import	Manufacture of beverages	0.77
	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.74
	Manufacture of chemicals and chemical products	0.83
	Manufacture of fabricated metal products, except machinery and equipment	0.72
	Manufacture of other transport equipment	0.77
	Manufacture of furniture	0.74
	Intermediate goods	0.84
	Investment goods	0.73
	Consumer non-durables	0.82
	Other mining and quarrying	0.76
Rail-export	Manufacture of food products	0.70
	Manufacture of chemicals and chemical products	0.86
	Manufacture of rubber and plastic products	0.84
	Manufacture of basic metals	0.83
	Electricity, gas, steam and air conditioning supply	0.70
	Electricity, gas, steam and air conditioning supply	0.70
	Energy goods	0.73
	Consumer durables	0.80
Other mining and quarrying	0.72	

Table 4. Impact assessment for road - high

Correlation coefficients 0.7 < R < 0.9 – high		
Road-import	Manufacture of beverages	0.89
	Manufacture of other non-metallic mineral products	0.76
	Manufacture of other transport equipment	0.90
	Consumer non-durables	0.78
	Other mining and quarrying	0.80
Road-export	Manufacture of computer, electronic and optical products	0.83

Table 5. Impact assessment for road - very high

Correlation coefficients 0.5 < R < 0.7 – considerable		
Road-import	Manufacture of leather and related products	0.566
Road-export	Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.613
	Mining of coal and lignite	0.631

## 4 CONCLUSIONS

- The results indicate six economic activities with very high influence over the railway transport, while no economic activity has such influence over road transport;
- 19 economic activities belong to the high influential group over railway transport, and 6 for the road transport;
- The export by railway transport is influenced by a greater number of economic activities (20

- altogether), compared with the import (11 altogether).
- The economic activities influencing the import by road transport (6 altogether) are more than those influencing export (3 altogether);
  - The import by railway transport is most influenced by manufacturing of other non-metallic mineral products, while the export by railway transport is most strongly influenced by manufacturing of fabricated metal products, except machinery and equipment;
  - The import by road transport is most influenced by manufacturing of beverages, while the export by road transport is most strongly influenced by manufacturing of computer, electronic and optical products.

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# RISK MANAGEMENT ISSUES IN TRANSPORTATION AND LOGISTICS COMPANIES

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JEL Category: **M14, M31, L91**

## **Abstract**

*Transportation business as a specific kind of a service must take into account a lot of risks resulting from the variable nature of external as well as internal factors of changing business environment. Transportation business is one of the most problematic spheres in the Slovak business. It is important to work with risks and manage them not only during establishing the business but also during the whole run of business activities. Risk management in business is the assumption that business risks will be properly identified, assessed and managed and business opportunities will be fully exploited. The aim of this paper is to point out the possible forms of risk management use in the transportation business. The process of business risk management in transportation company is related to its transnational character or the nature of stakeholders. Standards and norms, used in this area, can be applied. Since the transport companies now operate in an environment with high degree of uncertainty and are exposed to various risks it is not possible to define some stable and exact process and exact solution that would guarantee risk elimination or successful crisis encompassment. Risk management as well as solving each crisis situation has individual and specific character. It is connected with various circumstances, performed in different conditions and accompanied by different events. Encompassment of each crisis situation requires great practical experience and professional knowledge in various fields. At present, risk elimination and solving crisis situations is understood as the top of managerial wisdom and the most demanding manager task.*

**Keywords:** Management, marketing, quality, transport, service, business risks, risk management

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## **1 INTRODUCTION**

Any business activity that is realized in a certain business environment is affected by many risks. These risks result from the variable nature of external as well as internal factors affecting the enterprise in this business environment. The

business in transportation as a specific kind of services must take into account this changing nature of the environment. Specifically, transportation business is one of the most problematic spheres in the Slovakian business. For example, although the business in road freight transport over 3.5 tons belongs to the frequent business sphere, authorization to perform the profession of the operator of road freight transport and the Community license for national / international transportation over 3.5 tons even before the establishment of the company is required. However, many entrepreneurs in developing their business plans do not count on the fact that obtaining permission and license can be a long and difficult process. In the worst case, the issue of permission can be rejected by the District Office, Department of road transport. Except for the problems during the establishment of the company when it is necessary to document financial and professional competence, vehicle ownership, technical base, etc., a variety of documentation and permissions are also needed for carrying out the operation of transport business. The carrier must know national laws and also the regulations of the European Union.

Most of the companies engaged in business activities in the transport sector can be ranked among small and medium-sized enterprises (SMEs). Based on data from Eurostat, out of the total number of new enterprises in Slovakia, only 74,9% were still active at the end of the first year of existence and only 44,4% were still in business after five years. This means that over 50% of new enterprises in Slovakia do not survive longer than five years. According to the Eurostat data, Slovakia belongs among the EU countries with an above average number of founded and wound-up enterprises. It is also a country with the lowest enterprise survival rate within two years from being founded (ENTIRE, 2013).

Just for this reason, it is important to work with risks and manage them not only during establishing the business but during the whole run of business activities. The aim of this paper is to point out the possible forms of use of risk management in the transport business.

## 2 BUSINESS ENVIRONMENT OF TRANSPORT COMPANIES AND ITS SPECIFICS

Globalization has increased the consumption of communication, travel and information services. The increasing specialization of enterprises has led to close cooperation with external service providers. The current phenomenon of the economy is the effort of enterprises to buy also such activities which until now were carried out on their own. Many enterprises have realized that it is preferable to specialize in a particular area and other activities to keep for external specialists which are much more effective in them. It is a logical consequence of the growing complexity of the market and competition. These activities include the transport, too (Bujanova & Luskova, 2011).

Transport significantly contributes to the creation of the present modern world. Life today would be unthinkable without it, so each country seeks to build its own perfect transport system. The goal of each transport service provider should be to optimize its services so that they are effective and quality and meet the customer needs as much as possible (Dvorak, Leitner, & Novak, 2012).

Transport companies are surrounded by an environment that certain way - positive or negative - affect them and affect their behavior. If the company wants to be successful, it must analyze all these influences, know the direction of their activities, exploit them and adapt its behavior as current as the expected development in which it exists. At the same time, it must be stressed that these effects operate in a variety of the firms and generally the firm cannot directly control them. What for one business may represent a threat to its existence; it may be for another important opportunity for further development

Business activities in transport enterprises must focus on addressing the following questions: what, whom, how many, how, when, where, for how much to carry?

In view of the perspective, the overall business objectives of each transport company will be in the near future aimed at:

- Orientation towards the market and customer.
- Increasing productivity through flexible adaptation to market requirements.

- Improving the quality of services through innovation of technical and technological base.
- A targeted approach to competition.
- Focus on the quality of human resources.

Individual transport companies will have also an opportunity to strengthen their competitiveness in connection with the ongoing integration processes in Europe. However, increasing the market share and achievement of faster growth compared to the competition means to strengthen the marketing approach and go to marketing management of the company. Business in the field of transport notes the transport market and transportation in their mutual relationships. It examines not only the current state of the transport market but also directions of future development of demand in this market and possibilities of its satisfying.

### 3 POSITION OF THE RISK MANAGEMENT IN RELATION TO THE MANAGEMENT OF TRANSPORT COMPANIES

From the general point of view management in transport means the complex of universally valid models, approaches, methods and techniques applied by adding the values of resources and achieving the goals of a business-oriented entity whose product is an intangible service.

Transportation service can be characterized as an activity of a transportation service provider for the moving of persons or goods from a point of departure to a destination. Provider of transportation service may be legal or natural person e.g. carrier, freight forwarder or another intermediary, providing transportation service to the customer.

Management and marketing activities in transportation services are affected especially by four basic features, which are also a source of risk:

- Intangibility - unlike the physical products services are not able to be seen, tasted or heard before the purchase.
- Indivisibility - the services are characterized that they are produced and consumed at the same time, in contrast to physical products which are first produced, then stored, and subsequently distributed and consumed later.
- Variability - it's a feature of service indicating its nature, quality, progress and dependency

on the person providing it, where and when is provided. E.g. no two rides one and the same trolleybuses on the same route are not identical.

- The inability of being stored - it is obvious that it is not possible to ride one day as a reserve and on the second day not to drive at all and rely on that we have something in stock. The inability of being stored is not a problem in the case of persistent demand and offer when the necessary staff is ensured in advance.

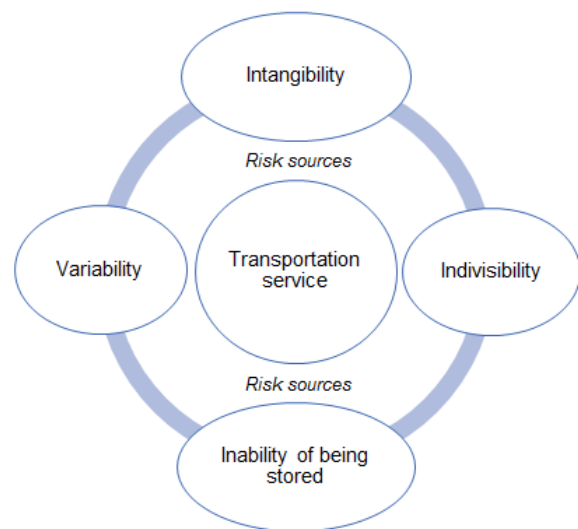


Fig. 1 Basic features of transportation services

In addition to these basic attributes transport services are also characterized by attributes such as complexity in understanding the product and assortment within the range of transportation services. The offer consists of a set of elementary services, where it is possible to distinguish between basic and supplementary services. Collectivity represents the fact that a part of the transportation services is provided by non-market or only by the partially-market way, what means that certain specific types of transportation services require various forms of state interventions.

Based on these facts, in the management of transport companies, it is necessary to apply the management procedures that take into account these specific features. One of the forms of management in the specific conditions of transport is marketing in transport. It represents tool aspect of specific techniques and procedures enabling application of management in real conditions of transport. This fact should be taken into account also in the application of management of business

risks and prevention of crisis situations in transport companies. Management and marketing in transport together represent, on the one hand, various forms of applications of general knowledge and, on the other hand, application of specific approaches in specific conditions of real practice.

Business risk brings to business in the transport element of uncertainty which may affect the development and business results. Business risk always has two sides - positive and negative. The positive side is associated with the hope of success and development of the company and the negative side is expressed through the failure of the set objectives, incurring losses and, in the worst case of dissolution of the company.

The following diagram illustrates the fact that the risk management must be considered in all aspects of management and marketing, but there are also such tasks that most managers shift to the shoulders of consultants and external collaborators (Buganova at al., 2012) (Hittmar & Striss, 2001).

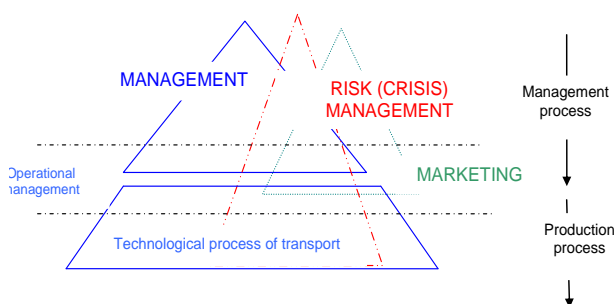


Fig. 2 Risk management in relation to the management of transport company

Risk management in business is the assumption that business risks will be properly identified, assessed and managed and business opportunities will be fully exploited.

Risk management can be described as a rational behavior in risk situation in order to protect and enhance the present and future assets of the company through the systematic integration of risk in key management decisions. Risk management cannot in small and medium-sized enterprises operate in isolation, detached from the company action. It must be integrated into the system and respected by all subsystems of the company. The introduction of risk management in small and medium-sized enterprises contributes to the maintenance or growth of the company's value for

its owners. It leads to higher quality of strategic management, increased stability, faster responses to changing market conditions and reducing the likelihood of mistakes, errors, and frauds (Belas, et al., 2014).

Risk management can be applied to the company as a whole or to certain areas of business activity, levels, or specific functions. The advantage for the company is, in particular, the move from a reactive to a proactive management which allows minimization of potential losses. One of the factors for successful risk management in the transport company is its integration into the strategic framework (Maris, 2013).

Strategic risk management framework ensures that risk information is reported to a sufficient extent and is used as a basis for decision making and responsibility acceptance at all important company levels.

Proposal of Strategic Framework of Risk Management consists of the following activities (Buganova at al., 2012):

Understanding of internal and external connections of enterprise – factors of internal and external business environment, relationships with stakeholders, company culture, etc. can have a significant impact on the proposal of the structure.

- Establishment of risk management policy, which has clearly defined objectives, intentions and direction of the company in the context of risk management.
- Assigning responsibilities and authorities, the organizational structure with a view to supporting the implementation of risk management, e.g. establishment of the risk management department, risk owners specification, etc.
- Integration of risk management into operational processes, integration of risk management into strategic planning, directions and implementation processes of a business and building a corporate culture. Development of a risk management plan.
- Allocation of resources needed for all stages of the risk management process (personnel, material, knowledge, experience, systems, technology, etc.).
- Establishing the mechanisms of internal communication presupposes the existence of

adequate internal information system which ensures that information from the application of risk management will be available in time and at the appropriate levels for all stakeholders.

- Establishing mechanisms for external communication, effective communication with external stakeholders in accordance with the intentions of the company. Confidence building and communication in crisis situations.

In addition to other international standards, the implementation of risk management in Slovakia is realized in accordance with the Australian Standard STN ISO 31000:2011 Risk Management – Principles and guidelines (STN ISO 31000:2011, 2011).

This standard can be used by any public, private or community enterprise, association, group or individual. It provides a common approach in support of standards dealing with specific risks or sectors but it does not replace those standards. Therefore, this International Standard is not specific to any industry or sector. It can be applied to any type of risk, whatever its nature, whether having positive or negative consequences.

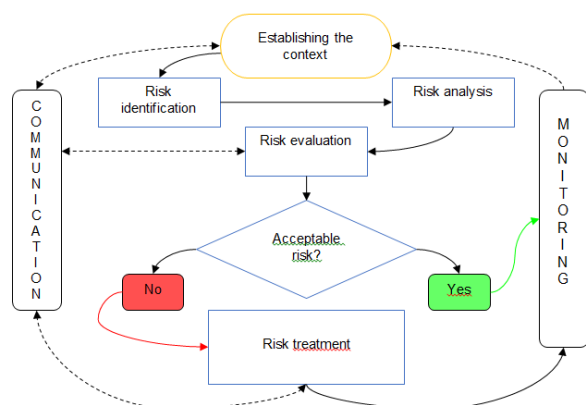


Fig.3: Risk management process

Source: Author based on (STN ISO 31000:2011, 2011)

The risk management process (Fig. 3) is formed by a set of the stages which are defined as follows (STN ISO 31000:2011, 2011) and (ISO 73:2009, 2009):

- Establishing the context – defines strategical and organizational relations to be taken into account when managing risk, sets the scope and risk criteria for the remaining process.
- Risk assessment:

- Risk identification – focused on identification of all risk sources which could have an impact upon assessed subject and provides inputs to risk analysis.

- Risk analysis – involves developing an understanding of risk. Identified risks are analyzed on the basis of consideration of the causes and sources of risk, determination of their positive and negative consequences, and the likelihood that those consequences can occur. The mutual conjunction of the criteria i.e. the likelihood and consequences represents the final point evaluation, respectively, the risk level. The individual criteria of certainly considered risk must be selected on the basis of the current and potential future situation of internal, external and financial continuity.

- Risk evaluation – involves comparing the likelihood of risk occurrence and its consequences with defined criteria. Based on this comparison considered risks are sorted according to management priorities followed by determining the boundary between acceptable and unacceptable risks.

- Risk treatment – involves elaboration of the proposal of measures only for unacceptable risks that require the development of a unique management plan together with the financing of the proposal. Acceptable risks are monitored because of the eventual future changes in the level of identified risks.

- Monitoring – this stage is focused on continuous monitoring and review of the risk management system, by reason of the constant changes in the internal, external and financial continuity. Subject to monitoring are acceptable and also the residual risks.

- Communication – involves mutual reviewing of individual processes and decisions in the system of risk management among stakeholders. Involvement of all stakeholders enables continuous improvement of processes and activities in the risk management system.

Since the transport companies now operate in an environment with high degree of uncertainty and are exposed to various risks it is not possible to define some stable and exact process and exact

solution that would guarantee risk elimination or successful crisis encompassment. Risk management as well as solving each crisis situation has individual and specific character, they are connected with various circumstances, performed in different conditions and accompanied by different events. Encompassment of each crisis situation requires great practical experience and professional knowledge in various fields. At present, risk elimination and solving crisis situations is understood as the top of managerial wisdom and the most demanding manager task (Bujanova & Luskova, 2011).

The process of the management of business risk for transport company is related to its transnational character or the nature of stakeholders. Standards and norms which are used in this area can be adapted based on these facts.

For transport companies, it is important to address the issues of risk management and management and marketing in transport. This is largely due to the fact that the State applies certain regulatory and other constraints in the transport sector which narrow the scope in implementing management and marketing activities. This is particularly the limitations in the provision of transport services, in pricing and in the field of social interests.

Passenger traffic is for its public action supported by the State and in these conditions is very difficult to obtain profit; moreover, it is very difficult to assert the abolition of some of its inefficient activities such as social tariffs, unprofitable lines, etc. Demand for transport services is usually derived from individual needs of passengers or the production needs of organizations. However, the offer has a standard structure in different modes of transport. Realization of transport service is often linked to the performance of the different modes of transport or is associated with other services and is not able of being stored. The necessity to cope with different kinds of variations (daily, monthly, seasonal etc. e.g. peak hours)

activates the need of maintaining excessive reserve capacity of vehicles and equipment.

Transport negatively affects the environment through the building of its infrastructure and operations. Public intervention into the process of providing transport services often overshadows the interest in the market orientation of the management of transport companies. Joining Slovakia, the European Union created scope for competition from the developed EU countries at the market of transport services. Transport companies who want in the new conditions not only to survive but also to benefit must be prepared in advance.

#### 4 CONCLUSIONS

For the transportation and logistics companies, it is necessary to build protection against business risks, fraud, and data misuse. Just these companies are faced with competition on an international scale and are forced to cooperate with various nationalities and cultures. It is essential, that the risks resulting from these facts have been systematically assessed and managed and the necessary control mechanisms for their monitoring have been built.

Risk management in transport companies should be implemented in line with the strategy of the company. The role of strategic management is to maintain or gain a strategic competitive advantage, define and at a certain time to achieve real long-term goals. The aim is to reduce the risk of potential errors and bring the organization into a situation in which it can foresee the changes, respond to them, induces changes and use them to its advantage. Effective management and marketing help to improve the quality of business. It may have a significant impact on reducing business risk and a more effective achievement of business objectives (mainly profit). These facts may lead to reducing the likelihood of company losses, bankruptcy and reducing unemployment. A well-functioning business is the basis of regional development and well- functioning society.

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# THE COMPLEX VIEW FOR STUDY DISCIPLINE CRISIS MANAGEMENT

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## **Abstract**

*Many Slovak and Czech Universities offer crisis management studies in some of the crisis management fields. Most of them reduce this study on the civil protection of inhabitants. Crisis management has its applications in natural environment, industry, business and public administration. And this is where the universities should play their role with their crisis management study complex offer. Outcomes, approaches and possible structure of this type of study will be discussed in this paper and should lead to the beginning of a discussion on this topic. Proposal for a complex study program "Crisis Management" is based on experience in teaching at the Faculty of Security Engineering, University of Žilina and the information on study programs at other faculties and universities in the Czech Republic, Slovakia, Serbia, Poland, Croatia and some other countries. It does not give the final solution, but it should generate discussion on the issue of crisis management education, the study specializations and structure of subjects.*

**Keywords:** Study program, crisis management, risk, crisis situations, crisis planning

## **1 INTRODUCTION**

Nowadays is possible characterize as the information age. At present, more and more information sources are available for modern society. Information provided to us, often purposely, is mostly of a negative character. Inhabitants and society acquire a feeling that they

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live in constant danger of their life and property. Paradoxically, this reality created a favorable situation for higher education institutions providing education in general and specific security. In the Czech Republic and the Slovak Republic several universities and faculties have reacted to this situation and now they offer interesting study programs oriented especially on the protection of inhabitants, rescue and security services, fire engineering, industrial safety and others. At present, none of these schools have any problems with applicants for study, but none of them provides education which would be focused on the complex study of crisis management. This reality was primarily influenced by education and profiling of teaching staff of the university at the time when the study programs were prepared. They were especially lecturers and professors of former military schools who were the most closely associated with these issues.

## 2 CRISIS MANAGEMENT AS STUDY DISCIPLINE

At our Faculty of Security Engineering, we have experienced from 1996. Based on the experience gained within teaching in the study program "Crisis Management", in solving research projects and finished last accreditation at the Faculty of Security Engineering, University of Žilina and information from other domestic and foreign universities, the approach to crisis management as study discipline can be formed from two views.

From a closer view, we can formulate study program "Crisis Management" as specialized preparation of specialists for single elements and institutions of the security system of the country or other legal entities, e.g. business sphere. Here could be included e. g. study programs Civil Protection, Protection of Inhabitants, Protection from Emergencies. This type of education is typical for the first degree of university study.

From a broader view, we can understand study program "Crisis Management" as the complex discipline acting in a wide range of activities and society life, which uses a number of common theoretical and practical tools, including scientific methods. In thus formulated study program we can develop risk analysis, prevention of emergencies, training of forces, resources and

means, response to emergencies and crisis events, recovery in study specializations (focuses, tendencies) aimed at:

- natural environment, including negative accompanying incidents (hydrological phenomena, meteorological phenomena, epiphytic and epizootic phenomena, etc.),
- industry, particularly in relation to major industrial and nuclear accidents,
- business and risks associated with the business,
- state, state administration, and public administration in preventing and responding to major emergencies, accidents, and crisis events. (Filip, 2016)

From the logical point of view, we can identify in crisis management sequence of typical interlocking activities, which should be reflected also in the structure of subjects of the crisis management study program. To this sequence, we can include especially these activities:

- identification of risks,
- analysis and assessment of risks and risk factors,
- preventive measures to reduce risks and critical values of risk factors, prevention of emergencies and crisis events,
- monitoring of risk factors,
- preparation of forces, sources, and capabilities to respond to emergencies and crisis events and dealing with their consequences,
- response to emergencies and crisis events,
- dealing with impacts of emergencies and crisis events on man and society,
- evaluation of the prepared measures effectiveness and efficiency,
- changes in the system and preparation of crisis management activities. (Horak 2004)

Proposal of study specializations (focuses, tendencies ...) of study program "Crisis Management" with a link to the typical crisis management activities is shown in Fig. 1. The proposal does not take into account the different levels of study degrees (bachelor, master, doctoral degree). Regarding the specific study program, a division of study for bachelor and master degree, we do not consider as a lucky solution.

### 3 AN EXAMPLE OF THE STRUCTURE OF THE CRISIS MANAGEMENT COURSE

Within the complex understanding of study program "Crisis Management" it is possible, regardless of the degree of study, to create several groups of subjects:

1. profile subjects ,
2. mathematical subjects (including informatics and physics)
3. managerial subjects,

4. humanities,
5. economic subjects,
6. technical subjects,
7. other subjects according to study specializations.

The structure of profile subjects should follow the typical crisis management activities shown in Fig.1 and create a theoretical and practical knowledge base to realize them. Proposal of the structure of profile subjects is shown in Fig. 2. Modifications of the subjects according to study specializations are necessary, or according to the graduates'

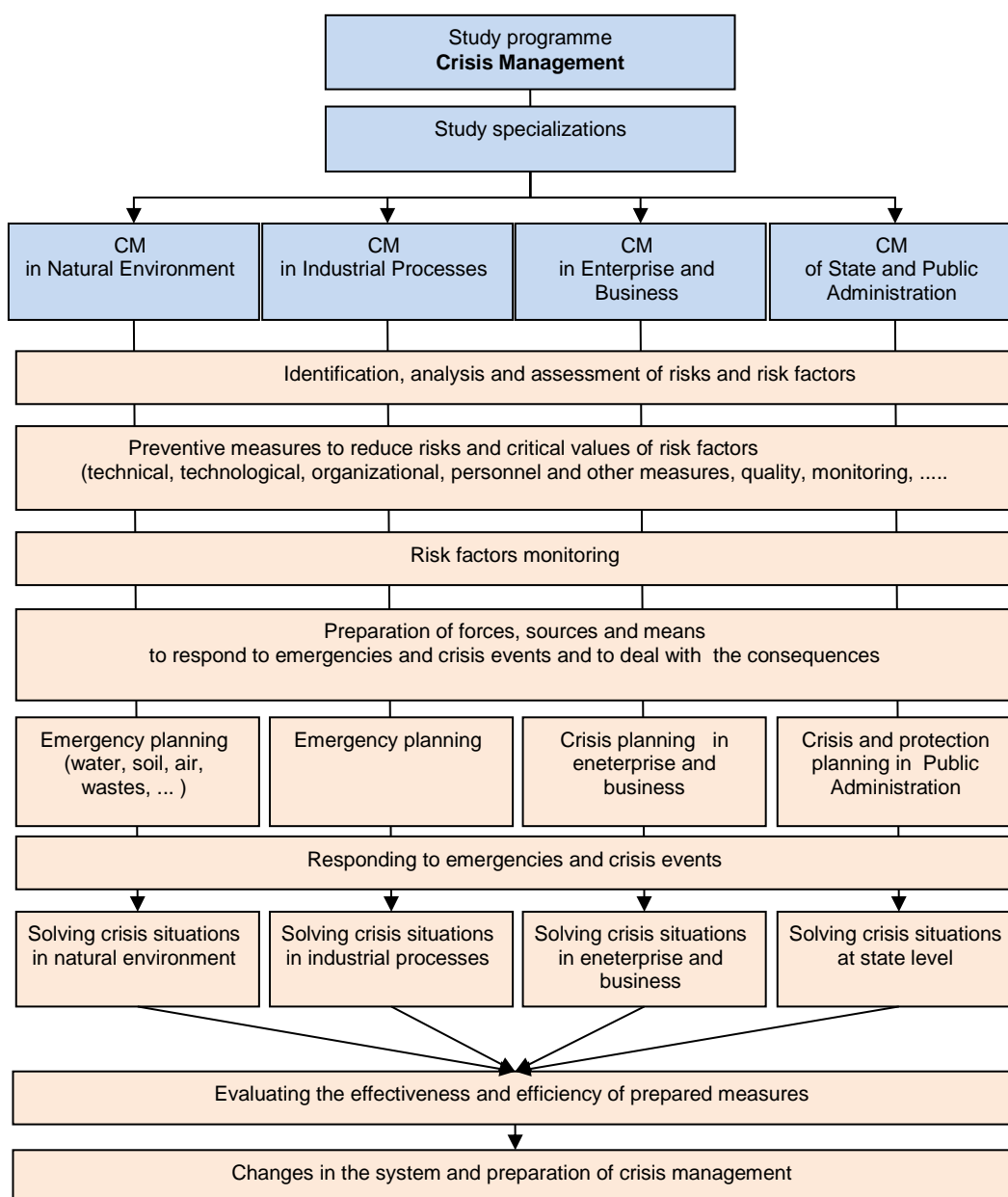


Fig. 1 Proposal of study specializations of study programme "Crisis Management "

assertion. A typical example is the risk analysis and the subject "Crisis Planning" where are different procedures in the processes of defense planning, civil emergency planning, and emergency planning. Concerning the cross-border effects of emergencies and crisis events, it is necessary to include in education also courses related to the international crisis management acting in terms of its institutions and relations with organizations of national crisis management. All mentioned subjects are necessary to be considered as compulsory.

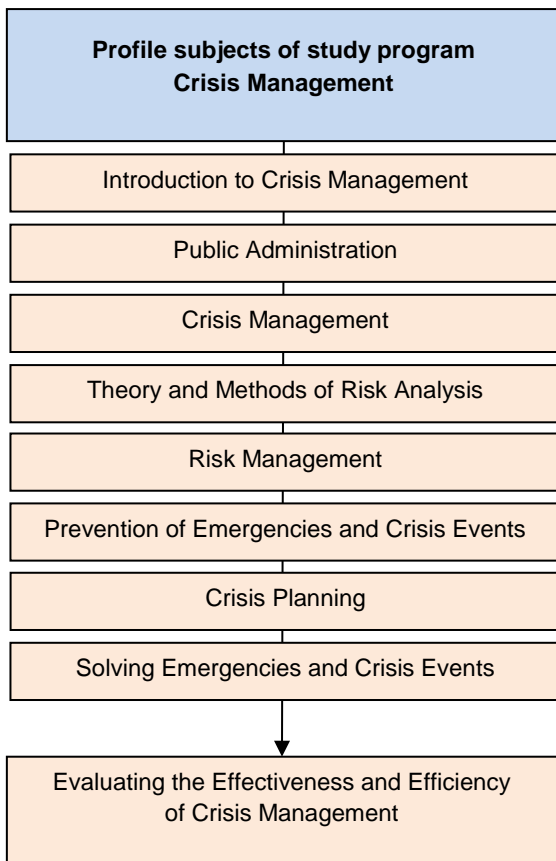


Fig. 2 Proposal of profile subjects of the study program "Crisis Management"

The structure of mathematical subjects results from interlocking of mathematical disciplines, physics, and informatics. Proposal of mathematical subjects' structure is shown in Fig. 3. Their teaching must be based on the application of mathematical, statistical and other methods in the various activities of crisis management. At present, it is very difficult to find teachers who would be able to teach thus framed subjects. Subject "Operational Analysis" is a typical engineering study degree subject and subject

"Simulation Technologies" is typical for doctoral degree study. All mentioned subjects are necessary to be considered compulsory with respect to their logical continuity.

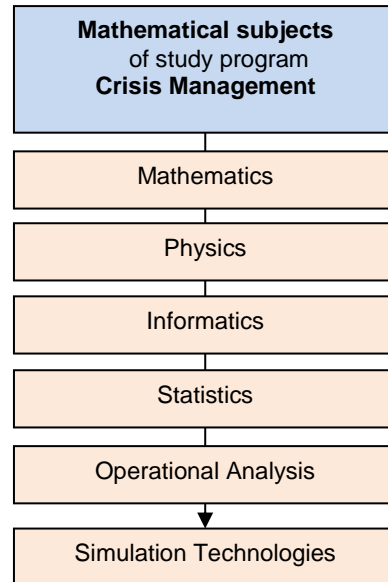


Fig. 3 Proposal of mathematical subjects of study programme „Crisis Management“

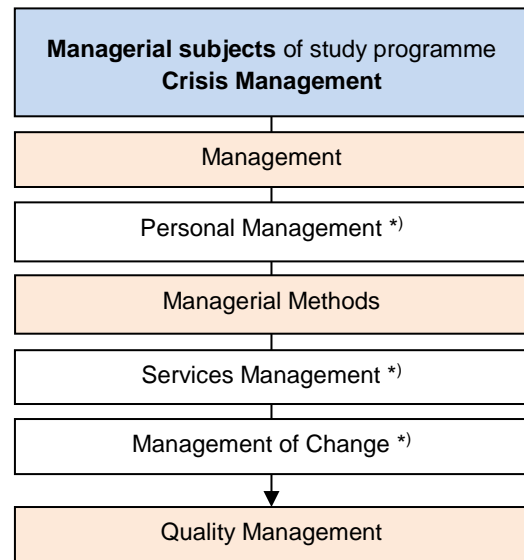


Fig. 4 Proposal of managerial subjects of study programme „Crisis Management“

Another important group consists of managerial subjects. Their structure also results from the logical follow-up, and it is possible to establish compulsory subjects and optional subjects in connection with study specialization (marked with \*). The proposal of the subjects' structure is shown in Fig. 4.

Humanities and technical subjects present the last two groups of subjects. Humanities have a specific position in the subjects' structure with regard to the difficult social and psychological environment that arises from the occurrence of emergency events and their impacts on affected population and crisis managers themselves. In regard to these circumstances, it is necessary to teach humanities in application to mentioned specific environment. Technical subjects have also specific position. In individual subjects, it is necessary to select and learn such topics that can contribute to prompt and proper crisis manager decision-making. They include e.g. topics in the field of resistance of ground and traffic buildings, transport processes, technology, communications, energy, food resources, population survival, disaster medicine, chemistry and others. (Ivancik 2011)

In addition to the mentioned subjects, it is possible to consider the education of other subjects according to study specialization. It concerns these subjects e.g.: Insurance, Forensic Engineering, Marketing, Security Services,

Meteorology, Hydrology, Emergency Survival and others. (Luskova 2006)

## 4 CONCLUSIONS

Proposals for a new structure of study program "Crisis Management" are based on experience in teaching at the Faculty of Security Engineering, University of Žilina and the information on study programs at other faculties and universities in the Czech Republic and Slovakia, Serbia, Poland, Croatia and other countries. Most of them focus on some aspects of the crisis management field, mostly on the civil protection. Proposal for a complex study program "Crisis Management" does not demand final solution, but it should generate discussion on the issue of crisis management education, the study specializations and structure of subjects. It may not be the only view of the preparation of crisis management experts. The structure of study program, according to the elements of the state security system or employment of graduates in various central bodies of state administration, is also offered. (Safarik, 2015) (Simak 2009)

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# POLISH INNOVATIONS IN MANAGEMENT OF IMMIGRATION POLICY

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## **Abstract**

*Research tasks were to analyze the needs of Polish migrant workers and the number of poles that can immigrate from Ukraine, Belarus, Russia, and Kazakhstan. The focus was on the analysis of innovations in immigration policy of Poland. We have performed a study of some scientific sources and practical life examples, and processing of statistical data. We found that Poland needs in the amount of 150000 migrant workers annually. And the Polish card and repatriation provide an influx of poles an average of 20000 people annually. It has two tools for innovations: A Law "About the Polish Card" and a Law "About Repatriation". Innovations of the Polish authorities in immigration policy will have the influx of immigrants to 33 thousand people annually. Unfortunately, it was not enough to compensate for the needs of the labor migrants. As it seems, these innovations attract economically inactive immigrants. It looks right to innovate in the management of immigration policy of Poland. This innovation is directed to the Immigration of the economically active people. It is recommended to change the Law "About the Polish Card" and the Law "About Repatriation" additionally. The main purpose of the recommendations is to reduce administrative barriers for economically active immigrants of Polish origin. A new tool is provided in the form a "Labor Migrant Card". Innovations described in the paper can be useful to the other countries of the European Union.*

**Keywords:** Labor migrants, migrant workers, workforce, immigration, labor market, innovation, management of immigration policy, Polish card, repatriation, Law "About the Polish card", Law "About repatriation"

## **1 INTRODUCTION**

Do you know why Poland and Europe need migrant workers?

All developed countries of Western Europe faced with a situation where the working age population

declined. None of them could do in this position your own workforce. All countries attracted labor migrants very active. The average annual growth rate of migrants was 500-600 thousand people in 2005 in Western Europe (Yandex.Direkt, Mezhdunarodnaya trudovaya migratsiya, 2015).

It had been demonstrated in (Deyneka & Bepal'ko, 2013, p. 342): migrant workers have a key role in the grass-roots sectors of the labor market, are not in demand from local workers. The

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importance of migrants is high in "top" segment of the labor market also. Industries which need qualified professionals were described in papers (Deyneka & Bespal'ko, 2013): managers, scientists, employees of high-tech industries, IT specialists, etc.

There are current demographic trends such, that, if Poland wants to maintain the current pace of development, the poles must attract by 2050 approximately 5 million immigrants (Legalizacja 1 mln ukraincow, 2016). It has about 150,000 labor migrants annually.

In the paper it has the answers to the questions:

1. is there in Poland the problem of attracting labor migrants?
2. what innovations do the Polish authorities to attract labor migrants-roles?
3. What's new can do the Polish authorities in this direction?

The results of the research are applied in the practice of Poland and other countries. They can be useful for countries seeking to raise the pace of development.

## 2 BACKGROUND OF THE STUDY

This will be discussed in the paper these tools to attract a workforce, as the "Polish card", "repatriation" and others.

### 2.1 Literature review

Earlier, European Union countries attracted labor migrants from the countries of North Africa and the Middle East very active. As You can see, lately it was the worsening of behavior problems of labor migrants from these regions (Avstriya: mul'tikul'turalizm mortv, 2016).

According to new publications, people changed the attitude to such migrants [ (Avstriya: mul'tikul'turalizm mortv, 2016), (Polska czeka na potomkow wygnancow, 2016), (Pol'sha otkazyvayetsya prinimat' migrantov po kvotam iz-za teraktov v Parizhe, 2015), (Pol'sha otkazalas' prinimat' migrantov posle teraktov v Bryussele, 2016)]. And the European Union has a problem: where it is possible to take labor migrants?

Let's go back to the beginning of the paper. Association of entrepreneurs and employers of Poland believes that the need to attract 5 million

migrant workers by 2050 (Legalizacja 1 mln ukraincow, 2016).

It has about 150,000 labor migrants annually. This number gives a positive answer to the first question: Yes, Poland has the problem of attracting of labor migrants.

Where to find such a number of skilled and socially adapted labor migrants?

Unlike other countries, Poland has unique resources in this area - the poles living in the East of Poland.

It has two tools to encourage poles to return to Poland:

- a Law "About the Polish card";
- and a Law "About repatriation".

The Polish card was introduced by the Law of 7 September 2007. This is a document confirming a membership to the Polish nation (Sejm, Ustawa o Karcie Polaka z dnia 7 wrzesnia 2007 r. tj. z dnia 30 lipca 2014 r., 2014). Polish consular offices received about 140 thousand requests for the issuance of the Polish card by 15 may 2014 (Pravitel'stvo Pol'shi khochet dat' bol'she prav vladel'tsam Karty polyaka, 2015). This is an average of 20 thousand people annually, who have received the Polish card.

The law "On repatriation" was approved on 9 November 2000 (Sejm, Ustawa o repatriacji z dnia 9 listopada 2000 r. tj. z dnia 4 wrzesnia 2014 r. (Dziennik Ustaw z 2014 r. poz. 1392), 2014). The Polish Supervisory bodies have monitored the implementation of this Law. It turned out that they had exercised their right of repatriation: in 2007 - only 243 people, and in 2012 - only 123, and in 2014 - the number of repatriates dramatically decreased to 64 people (Repatriatsiya v Pol'shu. Polucheniye grazhdanstva, 2015)

In General, about 5 thousand people repatriated to Poland from January 2001 to December 2014 (Szydlo, 2015). On average, 350 poles repatriated to Poland every year.

Thus, we see a serious problem. Poland needs to return the poles in the amount of 150 thousand people annually. And the Polish card and repatriation provide an influx of poles an average of 20 thousand people annually.

This is another difficulty for Poland. The Polish people go to Germany, Norway and other countries. For example, in 2013, 500 thousand poles left Poland to other countries of the European Union (Iz Pol'shi za god emigrirovalo rekordnoye kolichestvo polyakov, 2014).

In other words, these two tools for attracting of labor migrants (a Law "About the Polish card" and a Law "About repatriation") do not work extremely effectively. Therefore, Poland has the great problem of attracting labor migrants.

## 2.2 Methodology

While the exact methodologies used vary from field to field, the overall process is the same. We used well-documented and powerful methods of analysis. All our methods were economically justified.

Our key research technique was to analyze some scientific sources and practical life examples. In general, we learn approximately 70 scientific sources on an interesting topic. After that, we choose the hot ones for a detailed analysis.

We use the scientific method to search for relationships between the statistics. We welcome alternative and non-traditional positions of researchers.

## 3 THE RESULTS OF THE STUDY

In section 2.1 we got the answer to the question: is there in Poland the problem of attracting labor migrants?

It was shown that Poland has the great problem of attracting labor migrants.

Further, it will be considered the following questions:

- what innovations do the Polish authorities to attract labor migrants-poles?
- What's new can do the Polish authorities in this direction?

### 3.1 How many poles can immigrate to Poland?

For the beginning, let us estimate the ability to compensate for the shortage of human resources through the return of poles living in the East of Poland.

According to official statistics, 2,5 million poles living in the former Soviet Union (Polonia w liczbach, 2015), especially in such countries:

- Belarus – up to 900000 people;
- Ukraine – to 900000 people;
- Russia – up to 300000 people;
- Kazakhstan – up to 50000 people.

This figure (2.5 million) seems low. Association of entrepreneurs and employers of Poland believes that the need to attract 5 million migrant workers by 2050 (Legalizacja 1 mln ukraincow, 2016). And this opportunity looks impossible to compensate for labor shortages by bringing poles from the Eastern countries.

However, in the paper (Okulich-Kazarin, Administrirovaniye immigratsionnoy politiki RP: Skol'ko polyakov "poteryala" statistika?, 2015) it is shown that the official statistics do not provide real numbers. In this paper, it is argued that the real number of poles living to the East from Poland in 7-10 times more than stats.

Let us consider, for example, the real number of poles living in the Asian part of Russia, specifically in Siberia. This is quite important, because, according to the estimates of Polish historians, about 150 thousand Polish exiles passed through Siberia before 1914 (Polyaki v Sibiri, 2015). And, even 135 987 poles arrived in Siberia from November 1939 until very beginning of 1941 (Polyaki v Sibiri, 2015).

Further expulsion took place in may-June 1941. About 85 000 poles were deported to the Altai and Krasnoyarsk regions, Novosibirsk and other areas of Kazakhstan (Polska czeka na potomkow wygnancow, 2016).

According to official statistics, 36000 poles lived in Siberia at this time. It is evident the difference between official and real figures.

The paradox is that the number of poles living in Ukraine, Belarus, Russia, and Kazakhstan is 7-10 times more than statistically. We can expect 17-25 million poles and their descendants who live today in these countries. This amount is quite sufficient to compensate for the deficit of labor resources in Poland.

This shows that immigration of poles to Poland is a promising direction for the Polish Government.

### 3.2 What innovations do the Polish authorities to bring poles?

There are two widely discussed topics in Poland: a new Law "About the Polish card" and the new Law "About repatriation". First, we consider what changes the Polish authorities submit to the Law "About the Polish card". Second, we consider what changes the Polish authorities submit to the Law "About repatriation".

Firstly, the deputies of the Polish Sejm want to give more rights to the holders of Polish card. January 14, 2016, parliamentarians of the Polish Sejm supported the Law, which concerns amendments to the Law "About the Polish card". Work will continue with the parliamentary Committee on liaison with poles abroad (V seyme khotyat dat' bol'she prav vladel'tsam karty polyak, 2016):

- It provides that owners of the Polish card will receive assistance in settling their life in Poland. They will have almost the same rights as Polish citizens in emergency situations (as, for example, the conflict in the Donbas).
- It is suggested that the persons with the Polish card could receive a permit to stay in Poland for free. And after one year of residence – they can receive Polish citizenship automatically.
- It is also expected that the Polish government may pay for them Polish language courses and training partly.
- The deputies want to exempt Holders of the Polish card from consular fees for visas and other applications.
- One of the amendments provides a financial assistance for living in Poland cardholders in the amount of 5400 euros for each family member.

Secondly, the ruling party of Poland is preparing a new draft of Law "About repatriation". I want to clarify that the essence of this Law is "the moral obligation of the state" to facilitate the repatriation of the Polish people. I consider this Law from the point of view of human resources and immigration policy.

The project contains:

- it has provisions dealing with principles of professional activity of repatriates;
- it provides assistance by creating jobs, training

of repatriates and also refund part of the cost for training;

- it has also provided funds to cover expenses during the first three years after arrival in Poland.

The new draft of Law provides for two options of repatriation:

- The first option is valid today – it is an invitation to local government.
- The second option involves the assistance of the official Warsaw.

The project involved the expansion of the number of persons entitled to repatriation.

It is obvious that the Polish authorities are preparing innovations in the Legislation. These innovations are very important as the fulfillment of a moral obligation, on the one hand. On the other hand, these innovations in migration policy are useful for attracting labor migrants.

Thus, we have already found the answer to the second question: what innovations make the Polish authorities to attract labor migrants?

This follows from the analysis of the documents that the Polish authorities are preparing several innovations to the two Laws facilitating the immigration of poles from other countries. These amendments consist of administrative support and financial assistance. This is provided by the expansion of the number of persons who can live and work in Poland.

As it seems to me, these innovations attract economically inactive immigrants.

Previously the countries of the European Union had made that mistake. They attracted migrant workers from North Africa and the Middle East through large financial assistance. As You can see, lately it is the worsening of behavior problems of labor migrants from these regions [ (Avstriya: mul'tikul'turalizm mortv, 2016), (Khuligany sozhgli v Parizhe 804 avtomobilya za odnu noch', 2016)]. This situation could be repeated in Poland.

It looks right to innovate in the management of immigration policy. It is thought that it will be useful to introduce a new principle in immigration policy of Poland. This innovation is directed to the Immigration of the economically active people.

And now we go to a search of the answer to the third question: what's new can do the Polish

authorities in this direction? In other words, what recommendations can we give to Polish authorities for attracting more labor migrants- poles?

### 3.3 What's new can do the Polish authorities for bringing poles else

Let's return once more to the statistics.

1. Thanks to the amendments to the Law "About the Polish card", in the next few years, about 100 thousand people of Polish origin to enter Poland from Ukraine, Belarus, Russia and Kazakhstan (Jest projekt nowelizacji ustawy o Karcie Polaka, 2016).

If we divide 100,000 poles in 3-5 years, we will get an influx of immigrants 20-33 thousands of people annually.

2. Additionally, the new Law "About repatriation" can take 10000 people (Yandex.Direkt, Bedzie nowa ustawa o repatriacji, 2016).

If we divide 10000 poles in 3-5 years, we will get an influx of immigrants 2,0-3,3 thousands of people annually.

3. As a result, amendments to two laws provide for the return of only 22 to 33 thousand of poles. It has about 20% of the demand for migrant workers.

What can be done to increase the number of poles who return to Poland?

It can be recommended to the Polish authorities. All actions can be divided into three groups:

1. the removal of administrative barriers at the realization of the Law "About the Polish card";
2. the expansion of the scope of the Law "About repatriation";
3. a using of innovations in the form of a "Labour migrant card".

First. Administrative barriers at the Law "About the Polish card".

Unfortunately, the process of obtaining the "Polish card" has several administrative barriers:

- the "Polish card" is limiting opportunities for an immigration. It does not give the right to the visa-free crossing of the Polish border or a settlement in Poland (Ustawa o Karcie Polaka, 2007, article 7). Cross the border and stay in Poland for the holders of the "Polish card" is possible by obtaining a national visa type "D" (Ustawa o Karcie Polaka, 2007, article 7). It

takes time getting "D" visa.

- it is very important to have documents that one parent or grandfather/grandmother or great grandfather and great grandmother were of Polish nationality or had Polish citizenship (Ustawa o Karcie Polaka, 2007, p.1.3, article 2).
- the "Polish card" can be obtained by a person who can "prove their connection with the nation". This can be a basic knowledge of Polish language, knowledge and cultivation of Polish traditions (Ustawa o Karcie Polaka, 2007, p.1.1, article 2).
- is there a need to go to the Consul of the Republic of Poland to submit "a written Declaration of belonging to the Polish Nation" (Ustawa o Karcie Polaka, 2007, p.1.2, article 2). This rule has a serious limitation due to the large size of Russia and Kazakhstan.
- the majority of the capable poles living in Russia and Kazakhstan have spouses and children. The law "Polish card" has no rules governing relations between poles and spouses. And this fact also limits the possibility of immigration of poles.

Analysis of legal documents and private information helps to adjust the Law "About the Polish card". Such innovations are recommended:

- to soften the attitude of the poles living in the former Soviet Union - replace "proving" to softer terms and procedures;
- to allow the descendants of exiled poles to use supporting documents up to 10 generations;
- to revise the rules relating to the knowledge of the Polish language and traditions;
- to provide various possibilities to apply for the "Polish card" without a personal visit to the Consulate of the Republic of Poland;
- to introduce a legal provision for obtaining a "card of the spouse of the pole";
- to exclude the possibility of a refusal to issue the "Polish card" for subjective reasons.

Second. The expansion of the scope of the Law "About repatriation".

Unfortunately, the repatriation process has a number of administrative barriers also:

it is to have documents that one parent or grandfather/grandmother or great grandfather and great grandmother were of Polish nationality or

had Polish citizenship.

- it is the requirement for local authorities to give housing to immigrants. Local authorities unable to provide housing for this category of descendants of poles:
  - this is the high cost of translated and notarized documents.
  - the problem is that in the Law "About repatriation" is not specified the processing time.

Analysis of legal documents and private information helps to adjust the Law "About About repatriation" (Ustawa o repatriacji, 2000; (Okulich-Kazarin, The administration of migration policy of Poland: three important changes in the Law "About repatriation", 2015). Such innovations are recommended:

- to record p.1 of article 5.1 in the next edition "at least one parent and a grandparent, also great-grandmother or great-grandfather to 7 generations, were of Polish nationality or had Polish citizenship".
- to repeal p.2 and p.3 of article 5.
- to repeal article 11, article 12, article 12A.
- to record p.4 of article 5 in the next edition of "Decisions on the issues referred to in paragraph 1, taken by the Consul within 1 (one) week from the date of receipt of the documents. The Consul shall issue to the Person of Polish descent "Polish card" within 1 (one) month from the date of the decision on the matters referred to in paragraph 1".
- this is an opportunity for immigrants to buy their own housing themselves. This will stimulate the arrival of economically active poles.

Finally. Innovations in the form of a "Labour migrant card".

Analysis of legal documents and private information showed the main barrier to the return poles. This barrier is the lack of documentation about the Polish origin.

This barrier is contrary to "right of blood" was adopted in Poland. He also does not correspond to reality. Ethnic poles residing "in the Asian part of the former USSR", as a rule, do not have documents confirming Polish citizenship or Polish nationality.

Such innovation is recommended for ethnic poles who do not have documents confirming Polish citizenship or Polish nationality. It is useful to take the "Labour migrant card" for poles who do not have documents confirming Polish citizenship or Polish nationality.

The "Labour migrant card" can be issued to a person who is highly qualified, considers himself a pole and/or has a Polish surname. This "card" should give the right:

- for a visa "D" for pole and members of his family;
- the right to work without additional permission.

## 4 CONCLUSIONS

These were given answers to the questions in our study:

1. is there in Poland the problem of attracting labor migrants?
2. what innovations do the Polish authorities to attract labor migrants-poles?
3. what's new can do the Polish authorities in this direction?

In section 2.1 it is shown, that Poland has the great problem of attracting labor migrants. Poland needs to return the poles in the amount of 150 thousand people annually. And the Polish card and repatriation provide an influx of poles an average of 20 thousand people annually only.

In section 3.1. it is shown that this can be expected 17-25 million poles and their descendants who live in Ukraine, Belarus, Russia and Kazakhstan today. This amount is quite enough to compensate for the deficit of labor resources in Poland.

And the task of the authorities of Poland is to create conditions for the return of poles from these countries.

In section 3.2 it was performed the analysis of innovations in the management of the immigration policy of the Republic of Poland. The Polish authorities revise the Law "About the Polish card" and the Law "About repatriation".

These innovations aimed to encourage the arrival of poles from Ukraine, Belarus, Russia and Kazakhstan. They provide material assistance to the poles, with the documents belonging to the Polish nation.

It's proven statistically that the proposed

innovation is not sufficient to compensate for the deficiency of labor resources.

As it seems to me, these innovations attract economically inactive immigrants.

It looks right to innovate in the management of immigration policy of Poland. This innovation is directed to the Immigration of the economically active people.

In section 3.3 recommendations given to empower the return to Poland of a larger number of poles from Ukraine, Belarus, Russia and Kazakhstan. And these recommendations are useful to attract to Poland the economically active immigrants.

The main innovations are divided into three groups:

1. changes in the Law "About the Polish card".
2. changes in the Law "About repatriation".
3. the initiation of the adoption of the Law "About Labour migrant card".

The purpose of further research is the analysis of the conditions for the Law "About Labour migrant card".

Innovations that are described in sections 3.2 and 3.3 can be useful for other countries of the European Union.

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# DESIGN OF ADAPTIVE SYSTEM FOR DETECTION OF CYBER-ATTACKS

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## **Abstract**

*This paper is devoted to the improvement of the mathematical support for the intelligent detection models of cyber threats. The results of the research present the further development of detection models of cyber threats, as well as of common classes of cyber-attacks in mission critical information systems (MCIS). There was the model of detection of cyber-attacks to MCIS designed, which is based on the application of learning samples in the form of matrices of features for each of the modeled classes. The studies on minimization of the number of training samples, represented by a binary form of discerning features were carried out. There was the program "Cyber-attacks Analyzer" developed, which allows the automatic generation of dimensions of training matrix of cyber-attacks features, without requiring the participation of experts. It is shown that for the object detection within known classes of cyber-attacks the usage of representative sets of 3-4 features long in the training matrices increases the effectiveness of the algorithm, reaching up to 95%.*

**Keywords:** modeling, training matrices, adaptive system of detection of cyber threats, information systems, information security

## **1 INTRODUCTION**

Incomplete information about threats to information security and cyber security (CS) of mission critical information systems (MCIS) is twofold. Firstly, it is a partial lack of prior information, even at the level of the object structure to attack information, which has, as a rule, stochastic nature. Secondly, it is the limited ability of observation of the object of recognition and attack threats, which belong to a particular

class. In the extreme case, it is previously known only to the total set of IS threats and ways to implement them.

However, in practice, one of the main characteristics of today's threats is that they are not activated for a long time, sometimes for two or three years (Ranjan & Sahoo, 2014)(Lakhno, 2016). The targeted attacks, are particularly aimed to IS of enterprises, infrastructure, energy, transport, etc. IS are usually tailored to the environment in which they will be targeted. Active expansion of information-communication environment of the mission critical information systems (IC MCIS), especially in the segment of mobile, distributed and wireless technologies, is

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accompanied by the emergence of new threats to cyber security (CS). It is confirmed by the increasing number of incidents connected to information security, and also, detection of new vulnerabilities in the information systems (IS) and the automated control systems (ACS) (Ahmad, Dubrovskiy, & Flinn, 2005) (Chi, Park, Jung, & Lee, 2001).

The purpose of the study is to design a model for training the adaptive system of detection of cyber-attacks (ASDCA), which is being developed, based on the use of the apparatus of logical functions. The model allows taking into account the hard-to-explain features of threats, attacks, and anomalies in the IC MCIS, and it also reduces the time required for training ASDCA under conditions of the increase in the number of cyber threats.

## 2 THE MODEL OF LOGICAL PROCEDURES OF DETECTION OF ANOMALIES AND CYBER-ATTACKS

In a general case, the problem of detection of cyber-attacks to MCIS boils down to the following (Omar, Ngadi, & Jebur, 2013) (Tsai, Hsub, Linc, & Lin, 2009). A certain set of objects is explored; in our case, this is  $NPT$  – the number of possible targets from the side that attacks MCIS. The objects of this set are described by the features  $\{s_{ax1}, \dots, s_{axn}\}$ , represented, for example, in a binary form. It is known that the set of  $NPT$  is displayed in the form of the combination of disjoint subsets (classes) of cyber threats to MCIS –  $(CT_1, \dots, CT_l)$ . Let us assume that there is a finite set of objects  $\{ss_{a1}, \dots, ss_{an}\}$  from  $NPT$ , whereof we know which classes of anomalies, attacks or threats they belong in (these are precedents, i.e. the objects used for training, – OUT). It is required, based on a set of values of features, specified in the OUT, i.e. the description of a certain object  $ss_{an}$  from  $NPT$ , to identify this class and to adjust the performance of ASDCA for MCIS, accordingly. It is not known in advance, to which class the object can be attributed to (Zhan, Xu, & Xu, 2013) (Baddar, 2014).

A distinctive feature of the logical procedures examined in the work is the ability to obtain a

reliable result when there is no a priori information about the function of the distribution of existing values of features of a threat, cyber-attack or anomaly. Hereinafter we shall refer to such procedures as logical procedures. And there is no need to specify the so-called metrics in the space of object descriptions, characterizing each class. Therefore, for each feature of a cyber-attack, a binary function of the similarity between its values is defined, allowing distinguishing objects and their representations (sub-descriptions).

As the informative fragments, it is advisable to use only those fragments in the ASDCA that reflect typical patterns in the descriptions of the objects used for training (OUT). Therefore, the presence (absence) of such fragments in the categorized object allows determining its belonging to the class. When the logical procedures of detection of cyber-attacks (LPDCA) are applied, we also accept as informative those fragments that are found in the descriptions of the objects of the same class of cyber-attacks but missing from the descriptions of objects from other classes. The fragments used include also a meaningful description of the OUT in terms of designing ASDCA (Chertov, Fahmy, S, & Shroff, 2006) (Zhou, 2009).

The algorithms of the synthesis of workable implementations for LPDCA depend directly on the success of the research of metrical (quantitative) properties of many informative fragments, i.e. the features of a cyber-attack (cyber threat, anomaly, vulnerability). And it is necessary to transform the incoming uncategorized training matrix (OUT) into a categorized one and to design, in a training mode, a clear division of the features space of detection into the classes of detection  $CT_m^0 | m = \overline{1, M}$ , where  $M$  is the power of the alphabet of classes.

Technically, it appears difficult to implement the following tasks in ASDCA (Harel, 1987)(Gorodetski & Kotenko, 2002); (Lin & Tseng, 2004):

1. to calculate the asymptotic estimate of the number of blind coverings for integer matrix of the object's features;
2. to calculate the asymptotic estimate of accepted and maximum values of conjunctions of Boolean function that can be

applied to the synthesis of schematic-technical solutions of the ASDCA hardware for MCIS.

Let us consider the task of designing LPDCA based on the principle of "nonoccurrence" of sets of acceptable values of the features of cyber-attacks (cyber threats, anomalies, vulnerabilities).

Let us define:  $TN$  – a total number of cyber threats to MCIS;  $B_{s_a}$  – a set of numbers of cyber threats, implemented by an attacking side for achieving  $p_a$  – target of the cyber-attack;  $NP_{s_a}$  – an acceptable set of discrete features (of threat, anomaly, cyber-attack, etc.) in the  $\{s_{a_1}, \dots, s_{a_{jQ}}\}$  form.

The algorithm for calculating the value (ACV) of the significance of a feature for ASDCA can be presented as follows. Let us define the combination of subsets of  $NP_{s_a} = \{s_{a_{j_1}}, \dots, s_{a_{j_Q}}\}$ ,  $r_{p_a} \leq TN$  in the system of the features of OUT. We assume the subsets defined being the reference for ACV. Their total combination is  $\Omega TN$ .

Let us assign additional parameters:  $po_{ss_a}$  – the significance of the target of an attack (object)  $ss_{a_i}$ ,  $i = 1, 2, \dots, NPT$ ;  $po_{NP_{s_a}}$  – the significance of the object of the referent set  $NP_{s_a} \in \Omega TN$ .

Let us calculate for each class of cyber-attacks on MCCS  $CT \in \{CT_1, \dots, CT_l\}$ , the value of belonging  $E(ss_a, CT)$  of the object  $ss_a$  to the class  $CT$ , which has the form:

$$E(ss_a, CT) = \frac{1}{|LW_{CT}|} \cdot \sum_{ss_{a_i} \in CT} \sum_{NP_{s_a} \in \Omega TN} po_{ss_a} \cdot po_{NP_{s_a}} \cdot BN, \quad (1)$$

where  $|LW_{CT}| = |CT \cap \{ss_{a_1}, \dots, ss_{a_Q}\}|$ ,  $BN$  is the similarity of objects  $ss'_a$  and  $ss''_a$ .

Let us define as  $MC$  – combination of all elementary classifiers (EC), which were obtained by the totality of features from  $\{s_{ax1}, \dots, s_{axn}\}$ , i.e.

$$MC = (\sigma_{DOP}, NP_{s_a}), \quad \text{where}$$

$$NP_{s_a} \subseteq \{s_{ax1}, \dots, s_{axn}\},$$

$$\sigma_{DOP} = (\sigma_{DOP_1}, \dots, \sigma_{DOP_i}),$$

$$\sigma_{DOP_i} \in NP_{s_{a_j}}, \text{ for } i = 1, 2, \dots, r_{s_a}.$$

Let us suppose that a series  $Z$  of measurements of the values of the controlled features in MCIS was performed, and we received the matrix of features:

$$S = \begin{pmatrix} s_{ax_{11}} & s_{ax_{12}} & \dots & s_{ax_{1i}} & \dots & s_{ax_{1n}} \\ s_{ax_{21}} & s_{ax_{22}} & \dots & s_{ax_{2i}} & \dots & s_{ax_{2n}} \\ \dots & \dots & \dots & \dots & \dots & \dots \\ s_{ax_{i1}} & s_{ax_{i2}} & \dots & s_{ax_{ii}} & \dots & s_{ax_{in}} \\ \dots & \dots & \dots & \dots & \dots & \dots \\ s_{ax_{z1}} & s_{ax_{z2}} & \dots & s_{ax_{zi}} & \dots & s_{ax_{zn}} \end{pmatrix}, \quad (2)$$

For example, the matrix of features, available in the ASDCA repository, will look like this

$$S = \begin{pmatrix} 0 & 1 & \dots & 1 & \dots & 1 \\ 1 & 0 & \dots & - & \dots & 1 \\ \dots & \dots & \dots & \dots & \dots & \dots \\ - & 1 & \dots & 1 & \dots & 0 \\ \dots & \dots & \dots & \dots & \dots & \dots \\ 1 & 1 & \dots & - & \dots & 0 \end{pmatrix}. \quad (3)$$

Thus, a set of objects to be tested, belonging to a class, is specified by the binary features  $\{1001\dots-01\}$ . The dash points to the uncertainty of a feature in OUT.

Then the procedure of detection of the object  $ss_a = (ss_{a_1}, \dots, ss_{a_{TN}})$ , for example, cyber-attack in MCCS, is carried out on the basis of the results of calculation by elementary conjunctions –  $\mathfrak{R}$ . During the study, the results of which are described in the work (Khan, Awad, & Thuraisingham, 2007) (Al-Jarrah, 2014) (Abraham & Nair, 2014), it was justified that the most

economical was the variant to use the algorithm for calculating the conjunctions for coverage of the class of a corresponding object (cyber threat, vulnerability or attack).

Thus, obtaining LPDCA for the modeled class of objects (cyber threats, or cyber-attacks) is reduced to the following:

1. we set the distinctive function
2. we find disjunctive normal form (DNF) that implements this function
3. we find acceptable (maximal) conjunction  $\mathfrak{R}$  that defines the belonging of the object in the class under consideration.

Thus, the algorithm of training ASDCA is in an iterative procedure of finding DNF for the distinctive function of the object of detection by the feature matrix (2) and minimizing the number of features, the columns and rows of the OUT matrix to its limit value, which includes acceptable (maximal) conjunction that defines the belonging of the object in the studied class of anomalies, threats and cyber-attacks.

### 3 THE PROGRAM OF THE SEARCH OF THE MINIMALLY NEEDED

## NUMBERS OF FEATURES FOR DETECTION OF CYBER-ATTACKS

In the course of the research, a program was designed for evaluation of the complexity of the search algorithm of the minimally needed number of features for different classes of cyber-attacks "Cyber-attacks Analyzer", Fig. 1–3.

Form 1 sets analyzed classes of attacks, Fig. 1. Form 2 shows the calculation results for training matrices in the form of OUT, taking into account the information content of each of the 3 – 21 features. Form 3 visualizes the results of calculation in the form of histograms, as well as the evaluation of the complexity of the algorithm of forming OUT depending on the class of an attack, Fig. 3.

The modeling allowed drawing the conclusion that the objects belonging to different classes of cyber-attacks are often difficult to separate from each other. A rather large number of features (for certain classes of cyber- attacks, up to 50%) have the information weight almost equaling zero. In the case of using a set of features for the formation of the OUT, it is advisable to reject the requirement of its futility. This is done in order to increase the speed of the algorithm.

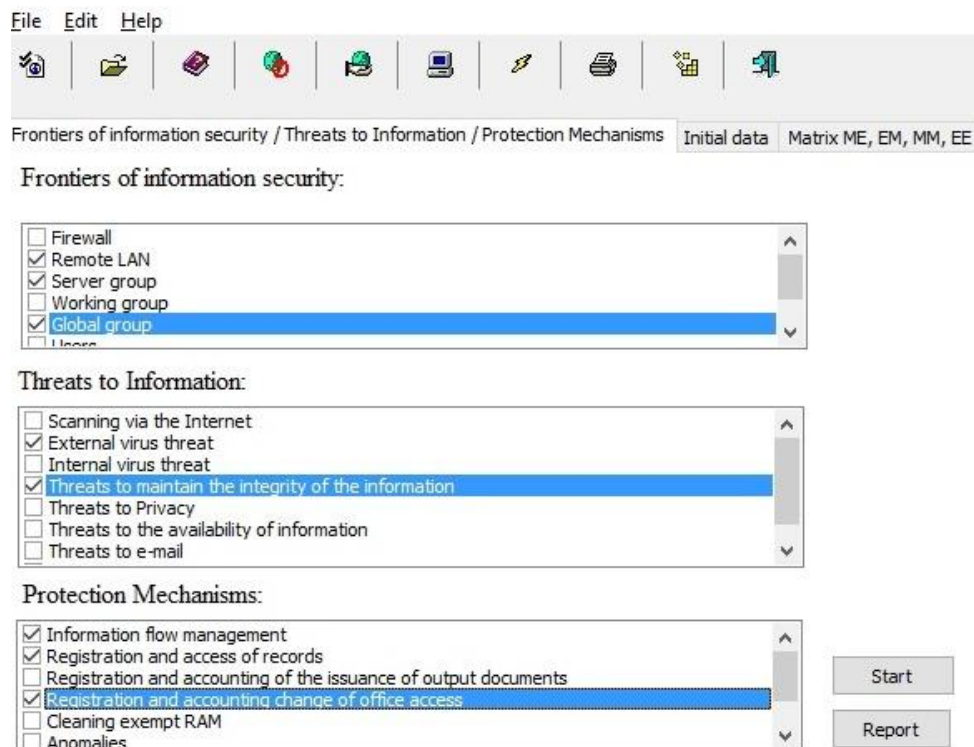


Fig. 1 The interface of the program Cyber-attacks Analyzer; Form 1

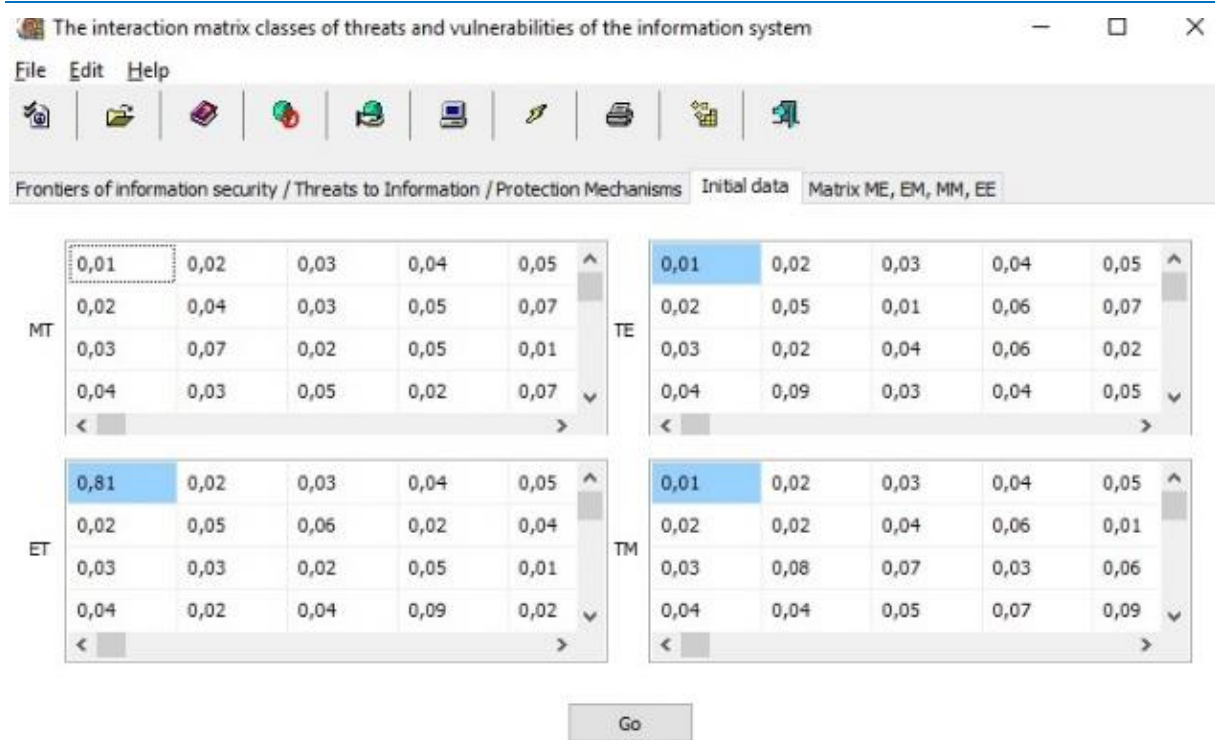


Fig. 2 The interface of the program Cyber-attacks Analyzer; Form 2

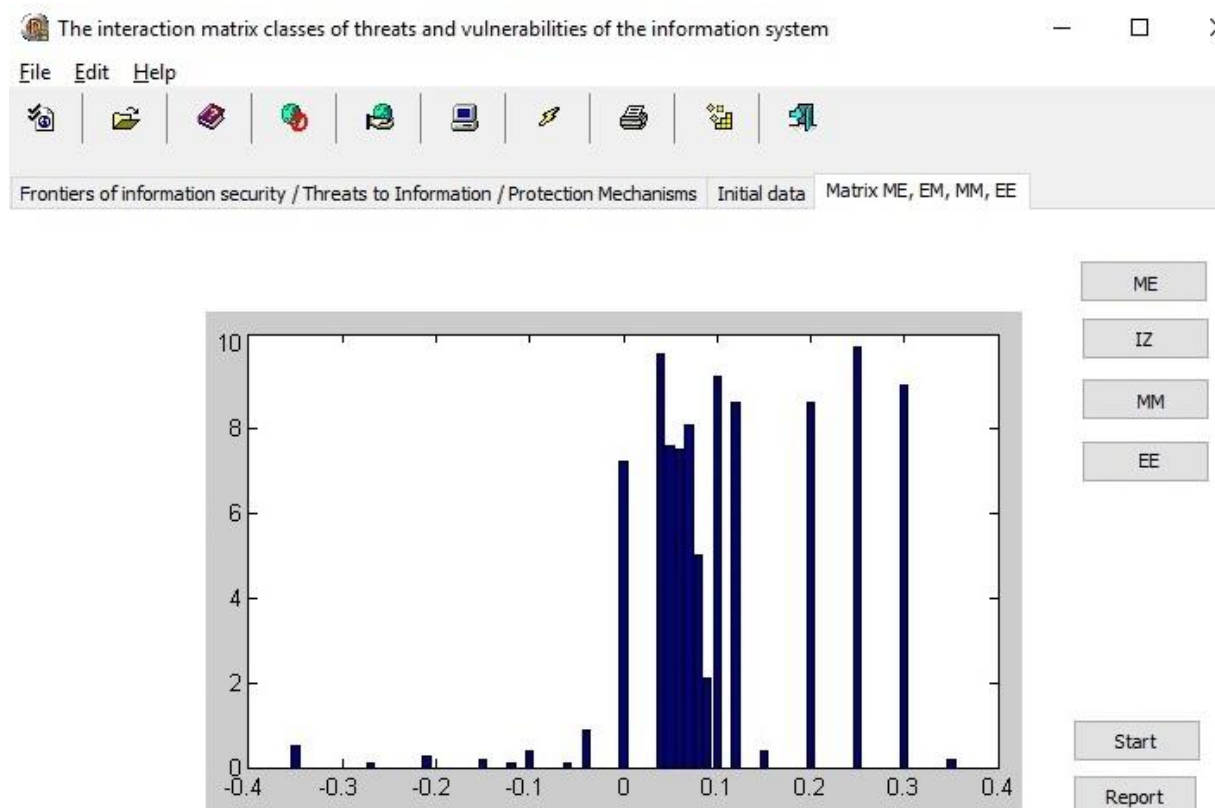


Fig. 3 The interface of the program Cyber-attacks Analyzer; Form 3

For example, in the case of an increase in the number of features from 3 to 6, the average number of checks per object ranged from 150 to 800, respectively. The use of representative sets

with the length of 3–4 features in the matrices of OUT made it possible to achieve maximum efficiency of the performance of the algorithm of detection for the majority of the known cyber

attacks. In the situation, where the features of the class of an object (e.g., cyber-attack) were positioned according to the decreasing information content (I), for every object, there was a combination of features with greater information content and then the information content of the group decreased smoothly. Thus, the less meaningful features (PS < 60 %) were not included in OUT.

The following feature of the matrix forming the OUT was identified: The information content of the control set formed by the two features, characteristic for different classes of attacks, such as Dos/DDoS, U2R, R2L, may describe the object of detection better than each of the features and the EC class separately. And the level of detection of cyber attacks, for which the training matrices of OUT were compiled, ranged from 25% to 30% for 2 features, 85–87% for 3–4 features, 92–98% for 5–9 features, Fig. 4.

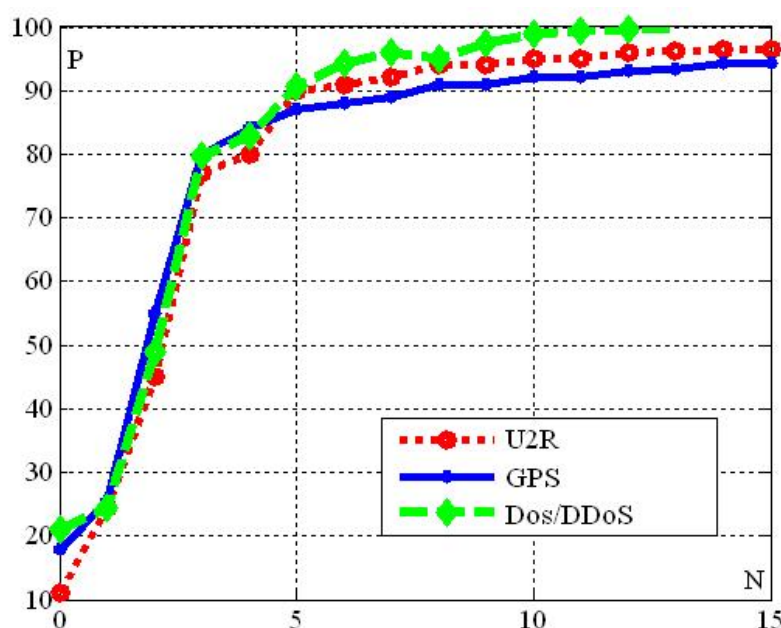


Fig. 4. Visualization of the accuracy of detection (P, %) for attacks of classes U2R, DOS/DDoS and attacks on satellite systems of GPS, depending on the number of features (N) in the OUT training matrix

Thus the OUT, described by a fragment of 2–3 features, belonging to different classes of objects, described the studied class better than each of the features separately.

It was experimentally found that, compared to the methods of consecutive exhaustive search of features and statistical algorithms of states, the proposed model allows:

- reduction the number of necessary rules of object detection within a class by 2.5–12 times (depending on the class of cyber-attacks);
- reduction of the time of detection of cyber-attacks by 7–9%.

In the test mode of ASDCA training, the rational number of steps of training OUT for the proposed model is amounted to the known classes of

objects and for the more sophisticated cyber-attacks.

## 4 CONCLUSIONS

As a result of the research:

- the model of detection of cyber attacks to mission critical information systems was designed, which is based on the application of training samples in the form of feature matrices for each of the modeled class;
- the studies were carried out on minimizing the number of training samples from the informative features for the ASDCA being developed. It was found that for detection in training matrices of OUT it was sufficient to use representative sets of 3–4 features long. The effectiveness of detection of anomalies and cyber-attacks reached 95%.

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# HARMONY OF PROFESSION AND CAREER

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## **Abstract**

*The world in which we live is constantly evolving and growing. Therefore, the essential thing for long term business success is learning and professional growth of employees. There are plenty of ways for career development of talented people. Each employee is personally responsible for identifying new opportunities and determines his own career path, but definitely, he should receive full support and assistance. The article deals with the aspects of a career building that play an important role in the career development of young professionals. But the result is worth it: the success in the profession is primarily the success of an individual; it is a professional and personal fulfillment. A person discovers and reveals their skills, personal and professional qualities. Moreover, professional activities allow a person to feel their importance to others, to society as a whole and get some compensation from it.*

**Keywords:** *career, management, professional development, staff, specialist, practical experience, skills, capacity, desired position*

## **1 INTRODUCTION**

Respect for the individual is especially appreciated. What does this mean in everyday life? We are convinced that employees play a vital role in achieving the goals of the company: promoting the development and growth of customers, investors, and the public. Expectations of business partners can justify truly outstanding professionals who have the opportunity to work on

interesting projects, receive a high-quality education, gain experience in Ukraine and abroad.

There should be a career scheme that provides the high level of personal and professional maturity and contribution of each employee in achieving mutual success and business development.

The world in which we live is constantly evolving and growing, so essential thing for long term business success is learning and professional growth of employees. There are plenty of ways for career development of talented people. Each employee is personally responsible for identifying

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new opportunities and determining their career path, but it definitely should receive full support and assistance.

Career is a successful promotion in public, service, research and other activities. It is an integral part of the way of life of the person who wants to succeed in life. Career development is all the same methods and actions that people can use to achieve any goals they have set. To organize your career correctly, to foresee all the traps in your way, you need to learn how to allocate your time and energy, how to be able to choose the needed goals and how to set your objectives.

From the organizational point of view, career is viewed as a set of interrelated decisions of an individual about the choice of any variant of the future activity, based on the opportunities that are open to them, overcoming differences between their actual and desired official position. As these decisions are made under conditions of lack of information, subjective evaluation of themselves and circumstances, lack of the time or emotional instability, they are not always consistent, rational, focused, and justified.

A career can be dynamic, associated with changing jobs and static, carried out in one place and at one position through professional growth. It can be vertical, which provides career development and horizontal, which takes place within one level of management but with the change of classes, sometimes professions. Combining these two approaches provides the stepped career. In other words, career success can be seen both in terms of promotion from one position to a higher one and in terms of the degree of mastery of a certain profession, skills, and knowledge that constitute it.

XXI century put the meaning of the word "career" to a new level. Building a career in the modern world is a prerequisite for self-realization in professional activities. It is difficult to imagine a successful and stable company that would not announce promotion opportunities. It is even harder to imagine a professional who would not have dreamed of a position of the head of department, company or holding. In the depths of these aspirations so often used word "careerist" was born. For many people it has a negative connotation, implying an unprincipled person,

indifferent to the interests of colleagues and companies. For professionals of staffing market, it is rather a positive characteristic.

## 2 PERSONAL DEVELOPMENT

In today's world, it is important to be not only a good specialist, it is important to be the best one. Therefore, it is advisable to consider the thesis of personal development that does not require evidence. In (50 istyn pro osobystyy rozvytok, 2011), there are shown 50 facts, but here will be presented only a few of them:

1. Acquired knowledge is no guarantee that you will grow and develop, the main thing is the ability to apply them.
2. A good idea without action is nothing.
3. Opportunities don't have to be searched for, they have to be created.
4. 10% of our lives are affected by uncontrollable circumstances, and the remaining 90% are affected by how we respond to these circumstances.
5. What we do not start today cannot be completed tomorrow, so you should never delay.
6. Waiting for ideal conditions to carry out your plans, you may be left with nothing.
7. As long as you keep doing what you're doing, you'll keep getting what you get.
8. Do not be afraid of changes. They most often occur at precisely the moment when they are needed.
9. Discipline is needed in order to choose the first out of two possibilities: what you want most of all and what you want right now.
10. The harder the way is; the more success awaits you at the end.

Of course, there are many aspects of promotion, and they play a pivotal role in the career development of young professionals. But the result is worth it: the success in the profession is primarily the success of you as a personality; it is your professional and personal fulfillment. Climbing the ladder of career ladder has never been an easy thing, especially in the present conditions of constant growth of companies. The labor market in Ukraine is gradually approaching the world standards, mastering new laws in the field of employment and personnel management.

Professional activity is one of the most important areas of personal fulfillment. This is where a person discovers and reveals their skills, personal and professional qualities. Moreover, professional activity allows a person to feel their importance to others, to society as a whole and get some compensation from it. Promotion plays a special role in the professional activity as a process of conscious implementation of "professional or official promotion" that helps a person to receive a certain status, which guarantees professional self-affirmation. On the one hand, promotion means that a person can realize themselves as a subject of society, on the other hand, it means that their activities are appreciated highly enough by others. So, promotion is a stimulus in the professional development of an employee and in the development of their own potential. Success in promotion largely depends on the efficiency of the first steps in education and professional activity. Considerable importance for future life and professional development is education and a choice of a profession. In the first stage of their personal development, young people often make mistakes. For example, studying a particular profession, some people believe that they will not

work in the specialty a single day because it is not prestigious, profitable or futile. In this case, time and money spent on education are lost, and the most important is the thing that there is no further vision of their place and role in the professional sphere. Therefore, regardless of where a young person studies we advise to realize that no knowledge can be unnecessary, and from the third year they have to assess their capabilities together with their knowledge and skills objectively. The professional should be able to make decisions, find their way in a new environment, be able to communicate with different people and adapt to the dynamic life.

### 3 ASSESSMENT OF SKILLS

Consequently, their skills can be assessed by treatment of important components of any activity: information and ability to find it, to analyze, to process and to transmit it (Fig. 1); relationships with people – to socialize, to find individual approach to everyone, to influence, to maintain links, to manage; technology – the degree of possession of professional skills, the ability to eliminate malfunctions, to design and so on.



Fig.1. The components of career success

Source: prepared by the author

After such self-examination, it is not difficult to determine what field will need people with their acquisition of knowledge and skills and take steps to the professional and career advancement.

There is a tip to those who are just looking for their first job: "in no way make yourself to work because of a 'prestigious position' and in the 'prestigious company'." The first step is to decide what one see

himself in 10-15 years, and only then take the first steps in this direction. One should remember the "golden rule": a person makes more than one mistake before reaching a certain result. But, it often happens that the first mistake becomes the last one. Do not accept mistakes as obstacles to professional growth, as any mistake is just a way to change behavior and try to act again but in a different way. For example, if an organization didn't give you a job, try to find a job in their competitors. Knowledge, hard work, communication, targeted actions and justified optimism - these are the building blocks that make up a professional career.

#### **4 CAREER MANAGEMENT**

There are several factors that influence the development of any type of career orientation. This is a psychological type of personality, cognitive interests, inclinations, professional orientation and professional motivation. Everyone has a set of personal characteristics, concept, motives, values that determine career choice. In a series of career-making solutions of a person, their professional "self-concept" is embodied. Unconscious realization of people's career orientations often happens.

It's hard not to agree that career orientation helps a person to realize themselves professionally. This is possible if the profession is chosen according to their interests and abilities. Otherwise, when the professional choice is determined by a random factor or the circumstances of the situation (proximity of the place of residence, the fashion for this profession, the ability to get a place with the help of an acquaintance, etc.), it is difficult for a person to realize their own professional potential. Professional self-determination and self-actualization of an individual is a long process of development of their relation to the future profession and to themselves as a professional. Success is determined by the activity of the subject of professional activity on the way to their personal development. They choose a profession themselves, they go through the period of professional training themselves and they build actively their own professional career and realize their own personal and intellectual potential (Reznik, 2004). Both development plans are being

implemented throughout the life and professional course of a person.

We tend to think that the career achievements of a person depend largely on the level of their personal professional development. There are important aspects such as:

1. the qualification that means the level of preparedness for any type of work;
2. the motivation that includes, both, guides to action and self-motivation, which is directly related to the core values of a person and is not always connected with the realities of the company;
3. the socialization that relates primarily to informal culture of the company (unwritten rules and rituals), which can be a barrier to personal development. There is a risk of negative evaluation by management or colleagues for taking initiative that might endanger the situation of the representatives of the company;
4. an implementation that is directly related to the socialization aspect.

Plans, providing changes, do not meet the proper support. Thus, the company limits the activities of its employees and creates problems for their promotion. A career plan can be defined as a plan of the individual work of the employee that provides personal goal achievement in their field.

There is such a thing as career management. According to E. Meyo, it is a process through which career of individual staff is planned to meet the commercial interests of the organization as well as the benefits and interests of each individual employee. In career management E. Meyo includes:

- a. the planning of individual career (professional counseling, workshops on career development planning, employee self-development plans, identifying career resource);
- b. processes of joint career planning (analysis of assessment and level of development, potential assessment centers, development centers, joint career planning);
- c. the organizational processes (succession planning, career continuity, advertising of ways of possible development, planning of needs in the workforce, special scheme for

rapid advancement of the prospective employees) (Koulopoulos, 2008).

Career management processes contribute to the competitiveness of employees and cause the need for joint training of management and employees to cope with the changes they entail. The success of these processes depends largely on the organizational culture: all the managers of the company share with the staff the principles and the value priorities (Kaunt, 2003).

One of the factors of the career development is labor motivation. It is studied by theories focused on the content and theories oriented on the process. The first group of theories examines basic human needs and motivations and motives of a higher order, the existence and development of which, according to A. Maslow, involves self-actualization of an individual. Procedural theories or the theories of achievement motivation study the process of selecting a way of behavior related to the expectations of an individual and subjective assessment of the effects of their actions on the working place. Mechanism of the influence of the specific needs and motives in the formation of a certain behavior is still insufficiently studied. However, it should be noted that the link between the needs, motives, emotions on the one hand and making the goal of self-regulation of labor behavior, on the other hand, is empirically established (Koulopoulos, 2008).

Career planning allows for:

1. Implementation of employee desires in terms of the development of their potential and professional growth.
2. The constant flow of qualified professionals who become a reserve.
3. The most efficient use of the staff now and in the future.
4. Employees' confidence in their own abilities.
5. Creation of a reserve for the promotion within the company.
6. A careful attitude of the company to its employees.

Successful career planning requires the participation of three interested sides:

- the company is responsible for creating the situation that promotes individual growth, learning and training of staff during the work and after work. This allows the employees to

acquire the necessary professional skills, get information about the possibilities of promotion in other areas and use these possibilities. Most newly hired employees have to start their career from the lowest positions;

- the leader serves as the catalyst that stimulates implementation of evidence-based planning for the future. In addition, the leader can show the employee the right direction with regards to the needs of the company. The leader also knows the capabilities of their employees and takes into account their aspirations. Finally, the leader is constantly in contact with the staff and informs them of the change in the company's needs and the impact of these changes on professional growth. The leader encourages his workers, evaluates their work properly and provides advice;
- employees play the most important role. They should assess their strengths and weaknesses, and be able to determine how and why they reached the present state. Finally, the employee must determine the next step in his career development, the ways to assess progress and plan the future options.

The following methods have been used in the career planning:

1. Methods of values specification. This method allows determining the most important life and labor interests. Factors such as prestige, the location of the company, diversity, the presence of stress, stimulation of intellectual activity, authorities are examined and classified in terms of their relevance to humans.
2. Methods of defining the level of work satisfaction. This technique is designed to receive information from the employee on several activities that give him pleasure. The employee also answers the questions the purpose of which is to find out why a particular activity gives him pleasure. It aims to determine the type of activity that every specific employee prefers.
3. Personal development and significance of work. This is a series of techniques that a person can use to assess the importance of special elements of work. This takes into account such factors as professional

development, the emergence of new problems, new opportunities, a sense of belonging to an important cause.

Managers must understand that some employees are absolutely satisfied with their current position and the type of their work. Such employees should never be focused on professional growth and promotion. Simultaneously, the manager must inform them of the additional opportunities that they can be provided.

Not all employees pass classic career stages: preliminary, development, promotion, preservation and maintenance of the achieved, completion and retirement. In career management, there is a concept called "career plateau." Plateau is a point in a career when the probability of further promotion is very small. This is the ending point of a rising career (Drozdov, 2015).

The main characteristics of four categories of employees in the "career plateau":

- "solid people" are high-level employees, whose "career plateau" which has an enviable height, but promotion, most likely, is not expected;
- "frozen" are workers with limited potential for promotion, working with efficiency, lower than expected;
- "stars" are high-level employees with opportunities for promotion, going one by one;
- "aliens" are employees with high potential for promotion, but without formed "plateau".

The key to choosing ways of promotion is to understand that not only factors, and not just a personality influence the promotion but the ways they interact. The leader manager should be able to identify the needs of the employee and the employee should have an idea of their existing and potential opportunities, the ability to express them in the future.

Consequently, career and promotion should be based on the total participation of both sides and their shared responsibility for "their" part of the process. Career determines not only the success or failure, as people consider it. It has an internal attitude and behavior, a gradual change of skills, abilities and professional opportunities associated with the activity.

In its essence career has a strategic character because it is directed to promoting an employee in the future. All people are interested in their career. Any life is in continuous changes, in human adaptation to developments, in improving ways of life, in an effort to achieve a higher status. But for some people this life is the burden of the struggle for physical survival and for others it is a natural process of living arrangement, others are seeking their way of life and realize it by trials and errors and usually with significant losses.

The question of the strategic plan is about how the first place can advance to the second one and the second place to the third one in order the third place would not have losses appears? E. Fromm (Fromm, 1992) gives the following answer - to expand the space of their destiny, to strengthen things that promote life. This can be a basis for understanding the nature of career strategies.

Prof. Romanov V.L. determines that the essence of a career strategy is to provide career so that a way of promotion could provide optimal use of the driving mechanisms and weakened the effect of any factor of deterrence and resistance. This definition of a career strategy implies that its main purpose is to ensure the stability of the career process, rather than setting a specific social or official status in the strategic period. The strategic plan of any person who begins to develop a career should take place in stages so that only close purposes can be determined relatively clearly. It is impossible to predict events that may be on a career path and affect its performance. (Vynohrads'kyy, Vynohrads'ka, & Shkanova, 2009)

Career strategy is the art to reduce or eliminate the effects of inhibiting factors to achieve incremental goals of the social or official status of a person in the strategic period. Its aim is to ensure the stability of the career process. In the implementation of individual promotion, the following principles are used: continuity, comprehension, speed, agility and efficiency.

Career tactics are the art of the possible implementation of a career strategy.

Career planning is one of the functions of the department of staff organization. The department determines employee's future development and the stages of achieving goals and promotion. When planning a career, the potential

opportunities and the abilities of the employee are compared to the requirements of the organization, its strategy of development.

People who are dealing with the employee's development plan are the following:

- the employee;
- personnel manager;
- line manager.

They provide measures for planning each individual employee's career.

The employee provides the following measures:

1. initial orientation;
2. the selection of a structural unit and a future position;
3. performing their work at their position;
4. assessment of the prospects for growth and planning it;
5. implementation of measures of growth.

The process of assessment and staff development includes:

1. The implementation of the necessary corporate policies and procedures (definition of objectives, assessment and so on).
2. Each worker:
  - is actively involved in planning and assessment of their activities;
  - is responsible for the results of their work;
  - seeks and captures the most effective ways of providing the greatest contribution to the joint success;
  - is responsible for planning their career;
  - is actively involved in the assessment to identify which aspects of their personality need development.

"The philosophy of development" is simple: everyone is a master of their career as they get greatest benefits from active management of their activities.

In the management of effectiveness not only quantitative indicators (business growth, financial

results) are important, but also the way how employees reach their goal. The task of the employee is that they should rely on global values and characteristics of the behavior of the company in their work. The company has to identify and use effectively staff skills for business development and people have to assess their strengths and weaknesses, identify career goals and improve their skills constantly. An employee initiates the process itself, defines development goals and plans necessary measures.

Monitoring results should be based on the following valuation:

- for each specific task or project;
- interim assessments in mid-year;
- the results of the year work.

At each stage of assessment, an employee meets the manager (the leader); they discuss results of work and future plans (including career prospects) together:

The changes expand the outlook of a person, open new perspectives before them, give opportunities to receive new knowledge. That's why workers should be given opportunities to participate in projects and short-term business trips abroad. As a result, the person receives the maximum benefit: acquires experience to work with other categories of customers, explores the new industry, seizes new way of life, immerses in another culture. Each employee can be sure that the company will find the best opportunity for their promotion.

Thus, career does not determine only successes or failures, it has an internal attitude and behavior, a gradual change of skills, abilities and professional opportunities associated with the activity.

So, professional skills, knowledge, experience, persistence and some element of luck are necessary for promotion.

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# SYSTEM OF RANKING OF POSITIONS OF THE PERSONNEL AS A FACTOR OF AN ENTERPRISE ACTIVITY EFFICIENCY INCREASE

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## **Abstract**

*Building any effective system of remuneration must begin with understanding what positions exist in the enterprise, how do they compare with each other, as one department can be compared with another division, i.e. construct a hierarchy of posts. This is achieved through evaluation and ranking of positions in the organization. The purpose of the evaluation system and ranking of posts is to establish a clear, understandable and manageable system of basic salaries. In the article, the system of ranking positions of the personnel is described. The algorithm for implementing a system of ranking at the company is suggested. Different types of ranks are described. Principles of grading and advantages of implementation of grading system on the enterprise are analyzed.*

**Keywords:** *system, positions ranking, algorithm, implementation, vertical rank, horizontal rank, principles of grading, labor market*

## **1 INTRODUCTION**

Building any effective system of remuneration must begin with understanding what positions exist in the enterprise, how do they compare with each other, as one department can be compared with another division, i.e. construct a hierarchy of posts. This is achieved through evaluation and

ranking of positions in the organization. The purpose of the evaluation system and ranking of posts is to establish a clear, understandable and manageable system of basic salaries. (Samoukina, 2003)

Rating and ranking of posts give the opportunity to make the wage system objective; transparent, clear; managed.

A full and reasoned analysis of positions from which to start building the system of evaluation and ranking also allows defining the requirements

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for core competencies and performance indicators. These levels will help in the analysis already established in the organization wages; in understanding the training and development of employees and motivating them to high labour productivity; optimization of company expenses for payment of labour; in developing the requirements for the vacant posts of the enterprise and, consequently, will increase the efficiency of enterprise management. The effectiveness of the system of ranking positions allows you to create an optimal system of material and moral motivation of personnel, efficient and productive labor to ensure the effectiveness of the company and increase of its competitiveness.

The job evaluation is now an integral part of the remuneration system. Its main advantage is the ability to translate this intangible indicator, as the value of the work of the employee in a cash equivalent. (Skovpen, 2008)

To evaluate positions, the grading is used. Grading - a grouping of posts on certain grounds (the definition of "weight", classification etc.) for the purpose of standardization of wages in the organization, because money is a way to determine the value of this position to the company. In fact, grading is a way of charging the building and system levels.

Grade (band or grade) is the minimum unit of distinction from the point of view of payment. This means that posts that fall in one grade, the difference in pay is insignificant, how small is the difference of their "weights" or grades. The range of pay for posts at the same grade can be called a tariff. It can be divided into pay grades - a minimum unit of discernment of payment for posts.

Grading solves the following tasks:

- ranking of works of importance to the organization;
- billing (definition of wages) on the basis of the importance of a specific job or position for the organization. It allows you to pay not only the market value of the employee but the importance of his work for the company. Billing is a career tool, and method of cost planning and personnel organization. Because the grades are combined they are similar in content and different hierarchical level of the post, it gives you the opportunity

to "bind" to different grades in different levels of additional financial and non-financial incentives: differences in the scope and content of the social packages, benefits for different categories of employees, etc.

- motivation. For this to be a career running motivation for job candidates - the motivation of attraction. For example, in the enterprise, which is engaged in programming and intellectual development, for managers will be a grade of IT staff as the main earning and profitable, and only then will host the grade servants (lawyers, managers, etc.) (Travin & Dyatlov, 2008)

Primarily, this system is convenient for large and medium-sized enterprises because, unlike the vertical arrangement of career, it allows you to build a career horizontally, within their own level.

## 2 THE ALGORITHM FOR RANKING POSTS AT THE COMPANY

The system of ranking positions began to be implemented in large enterprises in 2005-2006, when the grades were assigned empirically, practically in the absence of a technique of ranking.

An algorithm for its implementation is presented in figure 1. (Chemekov & Kuznetsova, 2002)

Currently, the job evaluation is considered as a process definition, assignment and change the grade of the post. The grade is treated as a digital value, which indicates the degree of importance of the position.

Consider the basic concepts of posts that are present in large holding structures.

Matrix post is a typical post formed within the same methodological line Manager to perform all or part of the uniform functions assigned to this position.

Unique position – a full-time position, which has no methodical leader. Private position – a full-time position, which is not unique.

The definition of the consolidated rank of a matrix, and a private office. Consolidated rank matrix post /private posts is a numerical indicator representing a combination of vertical and horizontal forks of ranks specified in the format  $X_1-Y$ , where X is the vertical grade, Y – grade horizontal.

The consolidated rank of private posts is determined on the basis of the composite rank of the matrix positions. The combined rank of the matrix positions is determined by calculation. The basis of determining the vertical rank is job assessment on three General parameters:

- the management level;
- communications;
- security clearance.

There are three types of ranks, they are presented in Table 1.

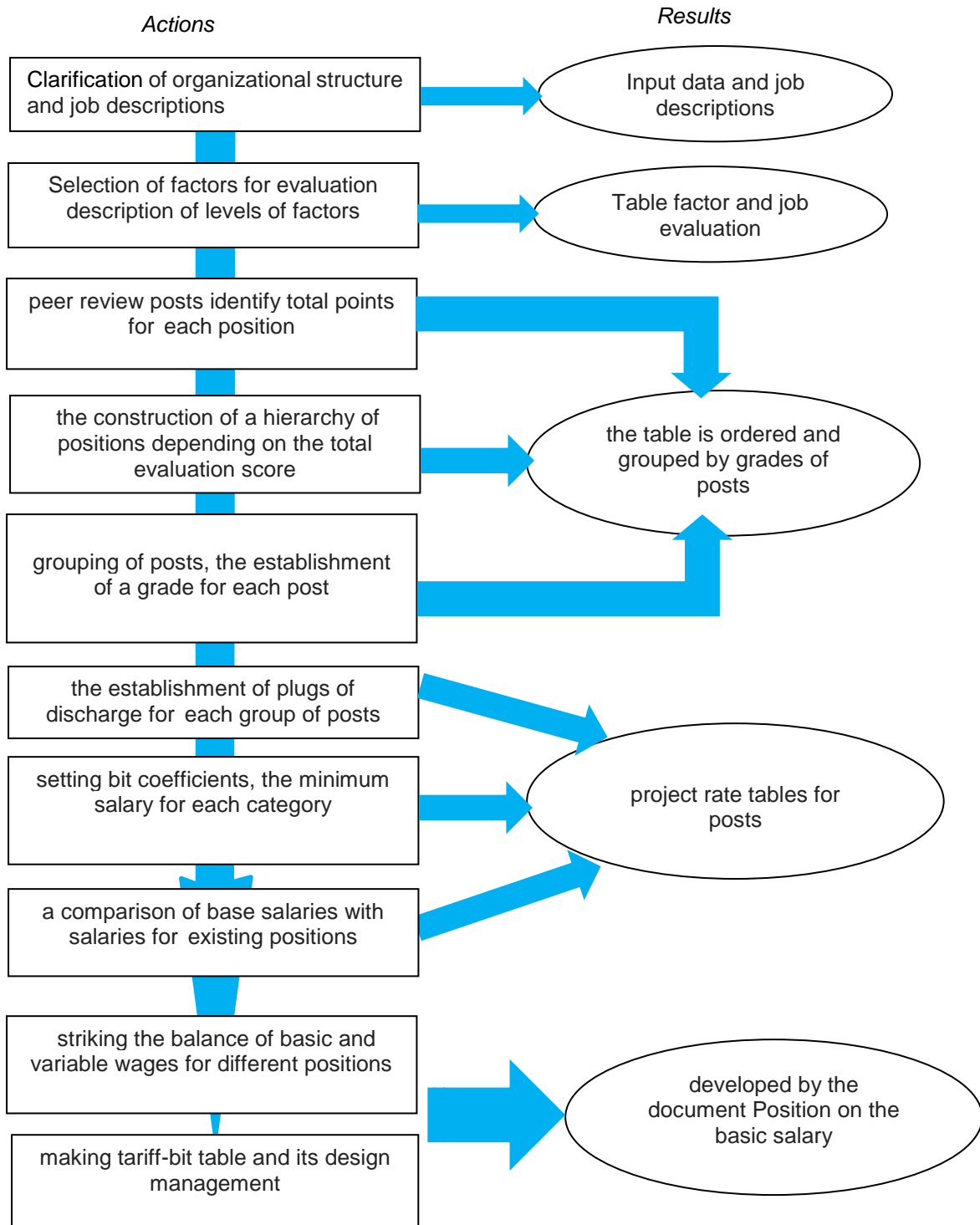


Fig. 1. The algorithm for implementing a system of ranking positions at the company.

Table 1 The types of ranks in the enterprise

The types of ranks	Definition
Vertical rank	A numeric indicator that represents important characteristics of the position: management level, level of tolerance, the nature of internal and external communication
Horizontal rank	A numeric indicator that identifies opportunities for professional growth, an employee in the position. When the appointment is assigned rank 0. To assign the next grade must receive training and successfully pass the test
Consolidated rank	A numerical indicator representing a combination of horizontal and vertical grades, specified in the format XY, where X is the vertical grade, Y - grade horizontal

Table 2 Levels of management and the respective weight

	Management level	weight
1	Administrative management (absent)	0
2	Administrative management of the department	3
3	Administrative management of the enterprise	7
4	Administrative management of few enterprises	8
5	Operational management of private posts within the enterprise	1
6	Operational management of private posts within few enterprises	2
7	Project management	1

Table 3 Weight of internal communications at the enterprise

The nature of internal communications within the main activity	weight
Communication implies the absence of the need for frequent (more than 50% of the time) contact with the staff from other units	0
Communication involves frequent (more than 50% of the time) contacts for standard algorithms	3
Communication implies the absence of the need for frequent (more than 50% of the time) of contacts in problem situations or in the absence of the standard algorithms	7

Table 4 Determination of the object of external communications

Object	1 - interested in contact	2 neutrals	3 - is not defined or is not interested	4 - set for confrontation
A. Providing the necessary information	0	1	x	x
B. The information exchange mutually beneficial cooperation	1	1	2	x
C. Providing targeted exposure within the framework of the standard algorithms	1	2	2	3
D. The provision of purposeful influence in problem situations	2	2	3	4

The management levels and their weight are shown in table 2. (DME, 2016)

The communications' nature allocates internal and external communications. Outcome indicator is a numeric value that is obtained by adding the totals by internal and external communications. Internal communications also assigned a weight, as shown in table 3. (DME, 2016)

The value of external communication is based on the combination of two parameters of the proposed installation of the object of external communications and the prevailing nature of the interaction with the object of external communications. This option is subject to assessment if the implementation of external communications represents more than 20% of the

time. In other cases, this parameter is equal to zero.

Determination of the object's external communications is shown in table 4. (DME, 2016)

The security clearance is the third parameter that affects the grade of the post. The value of this parameter is determined by selecting from table 5. (DME, 2016)

Table 5 The value of the security clearance parameter

Security clearance	First	Second	Third	Fourth
Weight	3	3	2	2

Received in three weights are added, forming a vertical grade of the post. When forming ranks must comply with the following requirement: vertical position matrix rank cannot be greater than or equal to the vertical rank of the position's immediate administrative supervisor.

After determining the vertical grade of each post is assigned a horizontal grade. The value of the horizontal rank matrix positions does not depend on the vertical position and rank is determined at the discretion of the head of this methodological matrix positions. The maximum horizontal grade is 3. Minimum horizontal rank of 1.

The consolidated rank of private posts is determined on the basis of a consolidated Matrix of rank positions and is set to posts. For private posts:

- not involving administrative leadership, consolidated the rank of private positions should be equal to half the rank of the matrix positions;
- involving the administrative implementation of the guide unit, the value of the vertical grade in the combined grade can be more or less

Table 6 Example of calculating rank

The management level	the nature of internal communications	the nature of external communications	Security clearance	Vertical rank	Horizontal rank	Consolidated rank
3	3	3	4	13	3	13.3

Vertical and consolidated rank is calculated automatically.

than 1, except for the private posts, correlated with the matrix.

The consolidated rank of private positions, which correspond to two or more of the matrix, is determined as follows: based on the consolidated ranks of each matrix position that is included in private, private are determined by the combined grades. Then select the maximum composite grade.

The number of horizontal grades of private positions is equal to the number of ranks matrix of the horizontal position. When assigning an employee to a position/transfer of an employee from a position horizontal grade is set different to 0.

For the number of posts is set imputed consolidated grade. For unique posts are special values of the composite rank.

The horizontal assignment of the grade is for appointment to a post at the desire of the employee to initiate the assignment of a second or third horizontal rank.

The process of assigning the composite grade assumes that the initiator of a process is:

- methodical Director for matrix positions;
- administrative lead for a unique position (because of unique posts there is no methodological guidance).

The rank calculation is made automatically, then there is a necessary clearance, is created and inserted into the system file with the calculation of the grade, then the document shall be approved by the leadership. Then there is the reflection of a consolidated grade card in the post and only after that HR-manager within three days changes the rank.

An example of the rank calculation is shown in Table 6.

The system of ranking positions of the staff found its use in the wage system.

When calculating the salary, use the following formula:

$$S' = S * H \quad (1)$$

$$H = h (r_0 + 1) * h (r_0 + 2) * \dots * h r_1.$$

$h = 1.04$  ( $2 < r < 20$ ) (for transfers increase with the grade to 01/02/13);

$h = 1.10$  ( $2 < r < 9$ );

$h = 1.15$  ( $10 < r < 14$ );

$h = 1.20$  ( $15 < r < 20$ ) (for transfers increase with grade, ranging from 01/02/13);

$S'$  - CH employee after the transfer;

$S$  - CH current employee prior to the transfer;

$r$  - grade vertical position;

$r_0$  - the vertical grade of the position from which the employee transferred on a current basis;

$r_1$  - the vertical grade of the position for which the employee is transferred on a current basis.

The formula for calculation of total salaries using time limits:

- individual form generation: using the same type of work, using several types of work;
- collective form generation: using the same type of work, using several types of work.

The use of collective forms is allowed only if the use of individual forms is impossible by the nature of the function performed by the wage.

Salary depends on the vertical rank: the higher the rank, the more salary. The horizontal grade is not taken into account.

### 3 THE ALGORITHM FOR GRADING IN THE COMPANY

Once all positions in the enterprise are described, they are grouped. In the future, assesses, and on the basis of assigned grades. The purpose of this procedure is the appointment of a fair and competitive remuneration. For this purpose, the results are not only internal evaluation but also labour-market data. For these purposes, it is proposed to use nationwide surveys. It is necessary to clear the entire staff into categories and assign each of them a position in the market in accordance with the data of external research, including salary survey.

Sources of information for analysis must be:

- job descriptions of employees;
- consultation with managers or educational leaders.

To optimize the system of ranking positions of the company, personnel must take the following steps:

1. Development of complete package of documents regulating the implementation of proposals for optimization of the system of ranking positions, including the basic concept.
2. The formation of the Expert group on preparation of offers on optimization of the system of ranking positions. Explanation and study of all of its members with the methods.
3. The ongoing job evaluation and their functionality. Involving representatives of these positions, conducting interviews with them, preparation of questionnaires, etc.
4. The requirements for various posts. Clarification of the factors.
5. Ranking of factors by levels.
6. The score of each level.
7. Evaluation weight factors.
8. The calculation of the number of points for each post.
9. The distribution of scores according to grades.
10. The establishment of salaries and calculation of tax "brackets".
11. Analysis of the results.

Best results can be obtained with the introduction in the enterprise is not only the practice of the use of grades but also supplement the system of key indicators of efficiency indicators of the rank of positions which will help optimally balance the ratio between constant and variable part of wages of the employee. The optimal ratio between fixed and variable part for most employees is 60% first and 40% second.

However, the optimization of grading system at the enterprise is not finished. After analyzing all of the options presented in the industry market compensation, management has a certain way to position the company, i.e. to decide whether the salary is average, below or above the average level. This takes into account strategic business objectives and financial resources.

With all these indicators is the development of the salary system. For each position, it is determined

by the "fork" – the minimum and maximum amount of salary depending on the value of work of the employee and other factors.

Principles of grading can be applied in the system of awarding and assigning the benefits and the development of other motivation tools.

The possible positioning of the enterprise in the labor market is presented in Table 7.

Table 7 Positioning of company on wages

Management		
Top management	middle management (heads of departments)	Junior management (supervisors, team leaders)
1st year - 15% higher than the average on the labor market; 2nd year - 20% higher than the average on the labor market; 3rd year - 25% higher than the average on the labor market	1st year - 10% higher than the average on the labor market; 2nd year - 15% higher than the average on the labor market;	1st year - 10% higher than the average on the labor market; 2nd year - 15% higher than the average on the labor market;
Staff		
The core staff	Administrative staff	Support staff
managers of main activity	Financiers, economists, accountants, secretaries, etc.	Janitors, cleaners, drivers, storekeepers, etc.
1st year - average labor market; 2nd year - 10% higher than the average on the labor market	1st year - average labor market; 2nd year - 10% higher than the average on the labor market	Depending on financial possibilities of the company Market values are not very important

The final decision about the positioning of enterprise on the labor market was adopted with the approved strategy of remuneration and the results of the internal analysis.

Further, it is advisable to develop a methodology of analysis posts. It is proposed to use a scoring method on key factors. The essence of this methodology is that experts (members of the Expert project group) are defined by a number of factors, all of which are qualities common to the work to be assessed. Each factor is assigned a "weight". Then each position is analyzed relative to the selected factors. The purpose of the analysis is to assess the work performed in specific positions, not specific employees.

Analysis rules post:

- the position must be analyzed in the form in which it is defined currently, and not as it was in the past or are planned in the future;
- work should be analyzed without regard to the level of its payment.

Using numerical methods of analysis are determined by the evaluation criteria, and each is assigned a "weight".

System levels will allow:

- to establish adequate remuneration and social packages for all the existing posts;
- to optimize the planning and control of personnel costs (recruitment, training etc.);
- to establish rules, standards and procedures for different level;
- to improve organizational culture based on the principles of industrial justice.

One of the problems identified in the analysis is the low number of criteria used when ranking posts at the company, which does not allow grades to fulfill their motivational functions. It is therefore proposed that the increase in the number of ranking criteria.

As key factors of job evaluation are proposed to use:

- the nature of the work;
- responsible for the financial result;
- independence in work;
- experience;
- the level of special knowledge (qualification);
- the level of contacts (communication with clients);
- the difficulty of work (mental effort);
- the cost of failure;
- conditions of work;
- physical effort;
- the degree of influence on achieving the company's goals;
- value for the profession, taking into account, including its scarcity in the market.

The important point here is that proposed as a criterion to introduce such parameter as the risk of decisions (price errors). It is necessary to estimate the position and the cost of losing this position to the company.

However, you must pay attention to the following. Criteria can be objective or subjective. For an example, management level - objective, nature of communication is subjective. To minimize the influence of subjective criteria, it is necessary to reduce the weight of such criteria. It is advisable to reduce the number of subjective criteria to a minimum. To this end, we propose the establishment of a panel. An important issue is the composition of this Expert group and its functioning.

Each criterion is assessed a certain number of points. The total amount received by all criteria scores determines the value of each particular position for the company. Depending on the number of points a specific position falls within a particular interval - refers to a specific grade.

*Grade A.* In this grade there are posts senior executives and professionals responsible for developing the company's strategy, corporate policies, new programs, business plans. Work in these positions involves solving complex problems, characterized by a high degree of independence and responsibility.

*Grade B.* In this grade there are the positions of managers and specialists of medium level. Work in these positions makes high demands on management skills, professional knowledge, and

personal qualities. It involves a high degree of communicativeness, responsibility, and creativity.

*Grade C.* In this grade there are the posts that make up the backbone of the company. Working in these positions are not initially imposes high requirements, but it is expected that in the normal course of business, employees must acquire special knowledge, abilities, and skills. This work is heavily regulated.

*Grade D.* In this grade there are support roles. Work in these positions is a simple, single-type operations and requires only basic skills.

In the optimization system of ranking positions can experience various difficulties.

Difficulties associated with the introduction of grades, can be classified on the same principle, and purpose that they can be used to solve it:

1. Personnel: the problem of the perception of the staff of the new system. This problem is directly related to managerial reasons, namely the poor organization of work on the project, lack of education among workers, reluctance to answer questions, policy management method.
2. Management:
  - difficulty in withdrawal from the assessment of individual employees in favor of the assessment office;
  - various errors based on incorrect subjective opinion, an unwillingness to look at things soberly, the desire to embellish;
  - the desire to save money and still get all three constraints at once: cheap, fast and qualitatively.
3. Financial:
  - lack of financing of the project;
  - the inability to bring the real situation with wages that will be generated and defined as a result of the project.

Through mismanagement work on the project becomes a reality a wide range of problems. At best, improper work on the project can get a costly package that doesn't work, at worst you lose one or more key employees and simply not to withstand the pressure of competitors. With proper management of the work of the problem, most likely, will also appear, but they will be associated with the formation of the so-called "surviving" of

the enterprise and its staff in the new regulations. The result is that the organization will receive significant additional growth potential.

Conduct grading with the help of consultants will help to avoid unforeseen problems and to construct logical and fair positions matrix. Also for the successful implementation of grades system are encouraged to inform the staff about the project. Awareness builds confidence and the lack of information rumors.

To maintain a remuneration system based on grades to date requires regular "upgrade" system. It is proposed to check the adequacy of the system once a year: on the one hand, it allows to release from the control of important changes both within the enterprise and in the labor market, on the other hand, this frequency does not allow to change it beyond recognition.

Adjustments can be both soft and hard. The soft adjustments system changes include changing the weights of compensable factors. For example, earlier it was important to focus on such factor as the "labor contents", but after the unification of certain activities, the emphasis may shift, for example, "work experience". Hard ways to adjust systems usually include changing the number or content of the factors, the scale of severity of individual factors. In this case, we have to reassess all positions and professions according to the new factors. It's already almost complete recycling system.

To adjust the model to yield the following events:

1. The new position, which must undergo the same assessment procedure as all positions and professions in the company and assigned to a particular grade.
2. The change in the market value of individual professionals – due to the opening of new competing companies in the region, or massive layoffs, an excess or a deficiency of graduates, etc. It is better to do it at the expense of introduction of allowances being transferred to employees on the contract or revise the accountant part.

The alteration of the contents or scope of work for the profession.

Tasks that can be solved by means of optimization of grading in the enterprise:

1. Personnel:

- The elimination of the state enterprise "lazy" employees who are accustomed not to earn money, and get.
- Understanding the business processes of an enterprise, and, consequently, improving employee engagement. Grading makes the atmosphere at the company is transparent and clear. This affects the involvement of employees in achieving common goals, and according to research, the profits of companies with a high level of employee engagement is 2.5 times higher than the competition.
- Increase the level of motivation as a consequence of the previous factor.
- Obtaining a convenient instrument for determining the base salary of the newly introduced positions.
- Comparison of the level of payments of the enterprise with the market average and bringing it to a competitive level.
- Determination of the mechanism and the size of bonuses or penalties.
- The employee gets a clear understanding of the possibilities of its development in the company, and, in most cases, ceases to feel undervalued.
- The grading system can become the locomotive of improving the professional level of the personnel.
- Increasing the attractiveness of HR-brand. Candidates when choosing an employer more and more interested in the existence of a grading on a par with having health insurance, career opportunities, etc.

2. Management:

- Optimization of the management structure. Grading helps to optimize the organizational structure.
- Elimination of duplicate functions.
- Integration of various units in holding structures.
- Improving the investment attractiveness and transparency.

3. Financial:

- Optimization of expenditure of the wage Fund by 20% on average. Through the creation of a compensation system based on the grading system, optimization of

- staff costs, resulting in savings of 10 to 50%.
- Tools to track personnel costs.
- Determining the value of each position to the company.
- to assess the prospects of their professional and career growth;
- get the opportunity to "horizontal" career development (promotion of the steps in one post due to the complexity of tasks, responsibility, and authority) - change of grade or undergrad and associated salary level;
- consistently acquire new professional knowledge and skills required to work effectively at a higher position.

#### 4 CONCLUSION

Optimization of the system of ranking positions of the staff will increase motivation, allow employees, increasing their skills, get a promotion and pay levels. When properly built the enterprise the system of grading will increase the weight of the knowledge of the employee, and his salary will increase accordingly. In this position, it can remain the same.

For the employee of the enterprise optimization of the grade system will allow:

- to understand the place that takes its position in an existing hierarchy of positions and to evaluate its role for the company;
- to get a fair remuneration - depending on complexity, responsibility, etc. the work to be performed;

In addition, the implementation of the proposed measures at the enterprise will allow achieving significant social outcomes:

- reduce employee turnover, because it assumes growth in the level of labor motivation of personnel;
- to raise qualification of the personnel of the enterprise;
- strengthen the corporate culture of the company and the commitment of employees to the enterprise.

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# METHODS, MODELS AND TECHNIQUES FOR DECISION MAKING IN PROJECTS WITH SPECIAL EMPHASIS ON THE BANKING SECTOR

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## **Abstract**

*The motivation for this paper is presented by the importance which is given to the project management process or the overall management of the projects as a manner of keeping the enterprise on the desired path to success on one hand, and the decision-making related to the development and implementation of projects on the other; and the lack of extensive and rich literature that pays enough attention to these two processes as a unity, which is necessary to perform the job successfully and according to the plans of the organization. The management of projects would not give the desired results if it is not guided by the decision-making process. This paper will cover all methodologies used for decision-making in the process of project management at a major bank in the Republic of Macedonia. The findings on the functioning of this process are obtained through analysis and research work of the department which is responsible for the management and implementation of all projects. The analysis is conducted prior to the commencement and during the project that the project team is working on, that is the migration to the new system R15.*

**Keywords:** Management, banking sector, decision-making process

## **1 INTRODUCTION**

This paper is based primarily on author's direct participation in the project, as part of the project team, interviews with the top management, the

project manager and team members, as well as through surveys mainly answered by members who have the biggest stake in the decision-making process during the entire project.

Mostly the research and questions are directed at what methods and techniques are used to arrive at a certain decision if there is any information that

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will ease the process, whether they referred back to a similar situation from the past and the like.

As quoted by the practice, all decisions (no matter whether if it is financial, or election of the members of the project team) will be adopted in accordance with certain procedures and laws which are in turn selected and defined by the organization in accordance with its needs and above all its objectives.

The organization itself has adopted its own rules under which prior to the start of a project predetermined procedures are used for determining the needs of the project, the team members, its activities and responsibilities, further dividing the team into smaller teams following areas of action, etc. These policies and procedures are changed depending on the nature of the project.

The selected and presented set of models and techniques are precisely the ones used by the bank exclusively for these types of projects. This does not mean that they could not be used for other projects, however in order to facilitate their work on the different types of projects they have created a different set of techniques which are used, and according to the needs of the project are modified and supplemented.

The choice for this project was reduced to a few models, models and techniques. Some of them are:

- SWOT analysis – through which we perceive the pros and cons of the project, what can be used as an opportunity, what deserves more attention, and towards what should the negative impact be redirected to;
- Charts – normally used to display a comparison which should help to secure the approval for the idea of starting a project. Charts are usually used to show the benefits (financial performance, the increasing-decreasing number of customers, etc.);
- Tree diagrams – this technique belongs to a package of assorted techniques because it allows you to see each component of a problem, every idea and opportunity or the ability to perceive the capabilities of a candidate, his thinking, decisions, etc.; and

- Surveys and interviews with the employees - though not typical and essential tool for decision making, it plays a major role in the execution of a project. Usually, this is a method that is used initially before the official launch of the project and at the end to examine how all stakeholders are satisfied with the new system and the new and improved functionalities.

Through these answers and analyses one can come to a crucial moment which also represents the importance of project management first, and then its weakness without the process of making realistic, timely and accurate decisions. How these decisions help transform a problem into a huge opportunity and thus result in amazing profit performance.

Out of this analysis a conclusion can be derived that also represents the result through which it can be seen how the decision – making process changes the direction of a project – from complete uncertainty, insecurity and possible loss to a project that abounds with information and security in the end, as well as achieving satisfactory profit levels.

## 2 PROJECTS AND PROJECT MANAGEMENT

Projects and project management have been thoroughly studied in the scope of organizations in the last few years. To understand these two terms, it is essential to differentiate between project and project management.

Project management is conceptualized as a procedure which applies tools and methods to direct the accomplishment of project goals (Lundin & Soederholm, 1995) (Munns & Bjeirmi, 1996). A project is defined as a temporary nature endeavor, which has a particular goal and is realized by utilizing resources in a certain direction (Lundin & Soederholm, 1995). The relationship between a certain project and the organization that undertakes it is described as a parent-child relationship where the parent organization is a key stakeholder for the project, but not the only strong and key stakeholder. Furthermore, (Mueller & Turner, 2007) explain another aspect of projects' nature, identifying projects as drivers that provide

important advantages for the purpose of the change in organizations. Each project is special and unique, although all projects share the same purpose, which is to create value to enable the

success and survival of organizations. Projects are among the major means used by organizations to achieve this aim, which will allow organizations to gain competitive advantage.

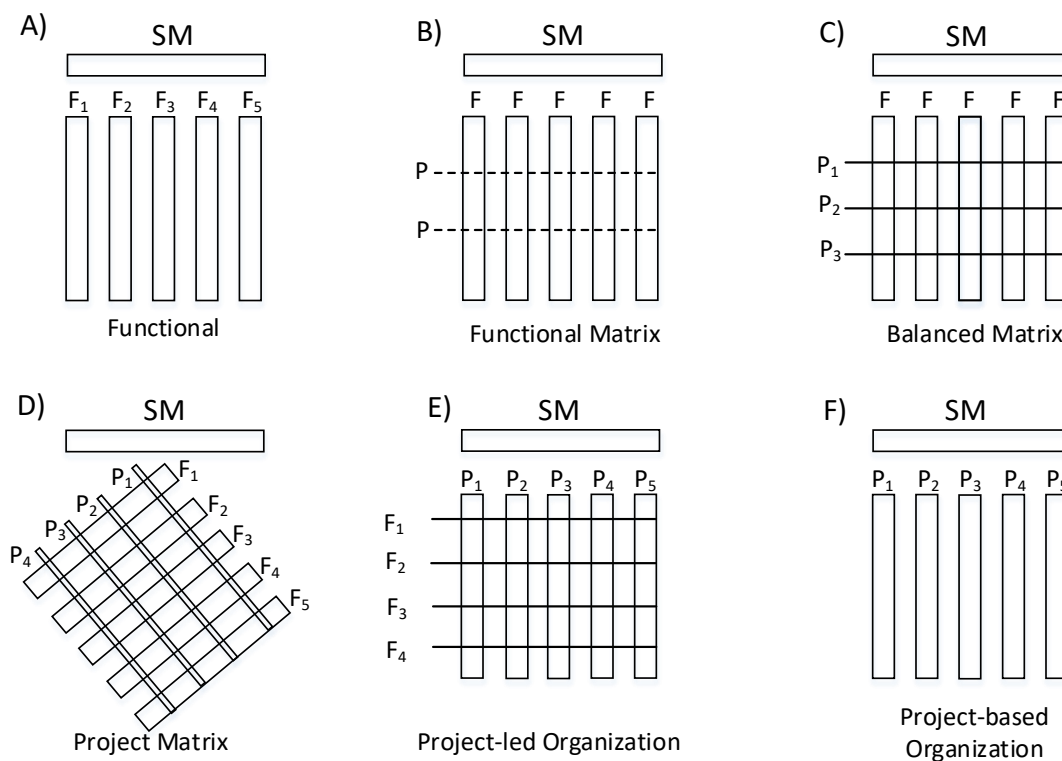


Fig. 1 Hobday's six type of organizations Source: (Hobday, 2000)

Projects can't be claimed successful unless they provide value and satisfy key stakeholders' interests adjusting to the surrounding environment. Moreover, consideration of strategic objectives should be taken into account in understanding the benefits derived from conducting projects. Managing projects should be done in a future perspective and in a way that ensures building a long-term competitive advantage in order to reach a strategic position. Therefore, in order to realize the strategic objectives a holistic view is needed to systematically "align, organize, and execute activities". As a consequence of the increasing importance of projects as means to deliver organizational strategy, many organizations started a process of projectification, developing a project-based structure. To understand the difference between projectized organizations and other forms of organizations, Hobday proposes a framework with the following six types:

From the figure, the F1, F2, F3, F4, and F5 represent the different functions an organization may have (sales, financial,...), while P1, P2, P3, P4, and P5 represent the projects that that organization may have. As shown in the figure, the types of organizations vary between two extremes: from non-projectized and only functional type (A) to totally projectized type (F). While type B have less project focus and coordination, type C represents a balance that the organization may have in considering functionality and projects. In type D, the project matrix, projects, and functions have equal importance, thus the project and functional managers have similar power. In type (E), projects have priority and privilege over functions with coordination shown in the links. Finally, type (F) represents the ultimate projectized organization, where projects are the heart of the organization and the business is built around them.

### 3 MAKING EFFECTIVE DECISIONS

Good decisions lead to great things and a perfect prove of that is Henry Ford's decision to double the wages of his autoworkers, paving the way for the growth of the middle class and changing the U.S. economy for the next century. And on the other hand bad decisions lead to disasters: Kodak's decision not to release the digital camera they invented in 1975, leaving the door open for competitors and leading to the company's bankruptcy. Actions like these force many decision makers to examine the decision-making effectiveness. As J. Davidson Frame points out in his book, *Framing Decisions* (Frame, 2012) - the attention of the decision maker and the project management team should focus on two things:

- First, it is important to recognize that decision making is a social activity. It is rooted in people and should not be approached as an objective process detached from human factors.
- Second, decision makers must recognize that decisions are the end product of wrestling with constraints: constraints of knowledge, time, resources, skills, political forces, legacy, laws of nature, human laws, ethics, personalities, and more. Effective decision making requires decision makers to surface these constraints and figure out how to craft workable decisions that accommodate them.

Every project starts with a decision. Leaders typically have a bias for action so they like making decisions and often do so with a strong sense of certainty that inspires those around them. Doubt, after all, is neither inspiring nor productive. And yet anyone with any experience knows that decisions are often ill-informed, biased, overoptimistic, and sometimes just plain wrong. The last seven years have revealed massive errors of judgment in strategic thinking, planning, execution, and communication. Poor decisions are made because decision making is difficult and judged by circumstances that keep changing.

Most of the business failures are derivated because the decision makers are ignoring data, people, and details that are available but somehow seemed unimportant at that time are overlooked. Once a decision is made, life isn't static. Change is continuous and new political sensitivities, innovative technologies, and emerging markets change the context in which

decisions stand or fall. When a team is in furious execution mode, horizon scanning is impossible, so the decision maker and the team need an early warning system that can alert when the great decision made yesterday is about to become irrelevant today. For the most part, that early warning system is the people.

Every decision is only ever a hypothesis: a belief that an action will have a predicted outcome. But perhaps the toughest part of decision making is remaining open to new information that may reinforce or challenge that prediction. Decision making never really stops. It demands that we continue to share information, review assumptions, and scan for blind spots. For agility, decision making can't be a special event. It has to become a state of mind.

While researching the literature about the connection that exists between the project management and the process of decision making in projects I found out that there is a big gap between them - it exists lots of literature that explain both processes but somehow it is not detailed enough so that it can't be really clear how these two processes work together as a one.

The best way to understand this relationship is a practical example of the decision-making process in a project for functional migration in one of the biggest banking institutions in the country.

The problem is studied through this example (project) because it is the most complex project in which this kind of institutions can get into. Making decisions in this kind of projects is not as easy as "weather to start the project today or tomorrow" but it is more of hard thinking, collaboration, teamwork, researching, and experience. Once the team is ready to begin the "battle" the first decision is:

"What kind of leadership style of decision-making it should be used".

When it comes to this decision the project team (not all of the members but the director and the manager of the department, the advisor for specific questions and the team leaders) gathers together for a meeting in which through active communication and conversation it is decided about the leadership style. This decision represents the base of the whole project as well as the base of the decision-making process. It is an important decision that requires time and

attention because the future of the project relies on it. This means that it should be chosen the right leadership style who is going to support the project manager and the decision maker – and by doing so it will support and lead the project as well as the decision-making process. Depending on the situation the style can be changed (sometimes it is needed an individual decision and sometimes the best decision is the one chosen by many people).

The basic decision is made with the help of the Vroom-Jago model in which by answering six questions the team comes to the final decision about which leadership style it is going to be used in the project. For every question, all members are supposed to give their explanation why they have

chosen the answer and why the chosen answer is better than the other one. Basically, the questions are YES/NO questions but yet can provide such a big value for the bank and for the project. In the picture, you can see how the process was conducted in the bank and how the final YES/NO question leads them to the best leadership style.

According to the given answers, the team has decided that in this case, the best decision-leadership style is the “Collaborative style” in which the team makes almost all of the decisions together as a team, as a unit. After this decision is made then all others are going to be based on the chosen style – meaning that the final decisions will always be a result of the hard work of a few people.

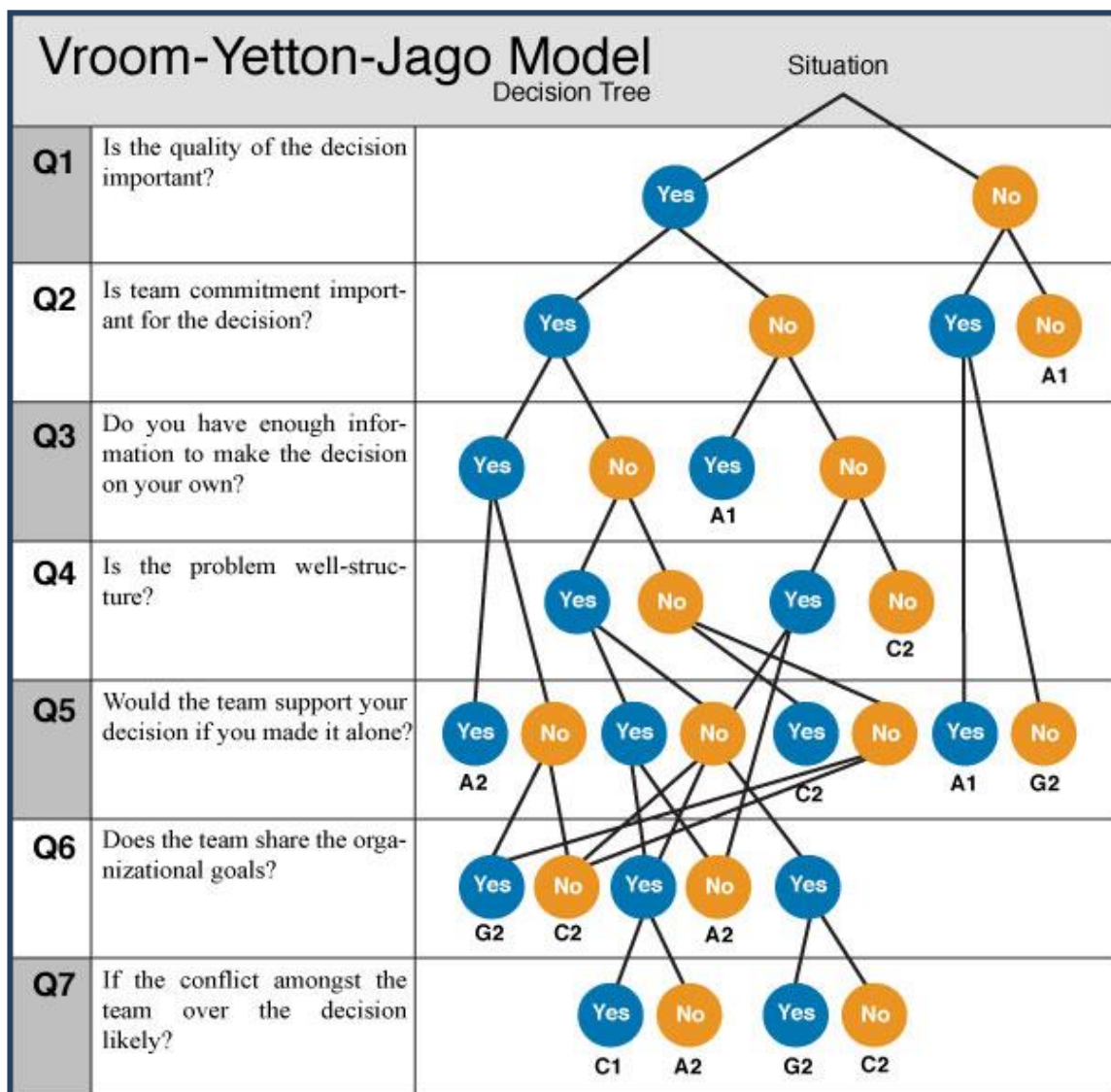


Fig. 2 Vroom-Jago Model (Elmansy, 2015)

Table 1. Comparison criteria for team members

Criteria	Person X			Person Y		
	Importance	Points	Importance x Points	Importance	Points	Importance x Points
English language	50	5	250	50	5	250
Java	5	0	0	5	5	25
C+	5	0	0	5	5	25
University educated - ebusiness	40	5	200	40	0	0
Previous experience	10	5	50	10	3	30
Knowledge about the bank	20	5	100	20	2	40
Knowledge about their system T24	30	5	150	30	3	90
	<b>Total</b>		<b>750</b>	<b>Total</b>		<b>460</b>

The next step in the project is deciding what kind of a people this project needs. Weather successful people with rich experience, college educated people, people who know how to manage risk and uncertainty and so on. This decision is important and the success of the project is closely related to it. Hard working and educated team players are the ones that can make this project moving towards its goals. In the literature making this decision looks very easy but what it comes to the reality seems a little different. According to the team leaders and the HR department of the bank, the best and the most organized method through

which it can be compared two or more candidates, their characters and capabilities are the Decision Matrix Analysis. Besides giving the option to compare and evaluate, the method can be used to eliminate the candidates who have shown lower results in the “needed characteristics and capabilities”. Basically, the method is based on the following: The director of the sector makes a list of needed characteristic that all candidates must possess and then it evaluates which ones are most important and which are not by giving them the appropriate rank (university educated – 15 points, experience – 10 points...).

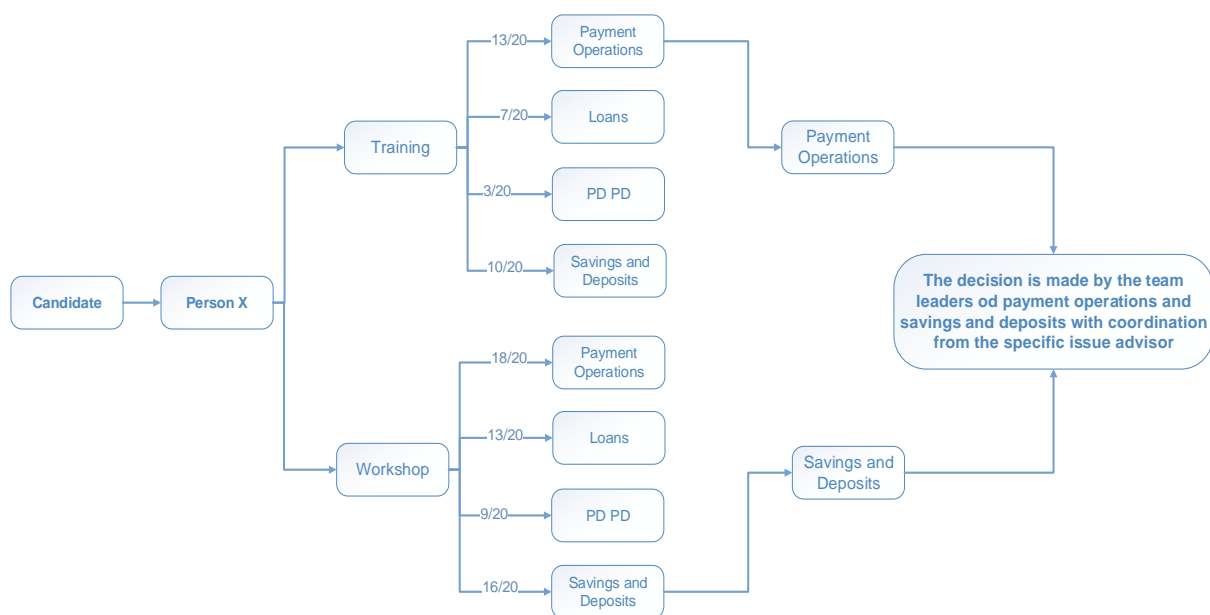


Fig. 3 Decision tree for particular candidate

After the list is completed all suitable candidates are called in for an interview. On this interview they are asked basic questions about their education, experience, capabilities and so on and every person who is attending the interview is supposed to give grades about everything in the list made by the director. If the education is ranked with 15 points and if the candidate is without university diploma then he would be graded with 1 or 2 then the rank should be multiplied by the given grade. All multiplied numbers should be summed up and the final number shows how suitable every candidate is.

If some of them have the same final number then they are compared and according to the grades in the most wanted characteristics, it is chosen the best one. This process, this decision tool it can be better understood by seeing the table 1 in which there are represented two candidates, the required criteria, its importance for the bank and the points. After the interviews are done it begins the second phase of the process of getting into the final decision – elimination. When compared both candidates it can be seen that the first one person X is the more appropriate than the second one person Y. And with that the decision is made - the main project team is formed. Once the selection process is finished, the team leaders are expected to make another final decision which must be made before the official start of the project. The next step is to functionally divide the selected candidates into smaller project teams (according to the different modules in the system of the bank – FT and TELLER transactions, Mortgages, Deposits and so on).

Team leaders have decided that the best way through which they can follow the work of the candidates and then divide them into different functional teams is with the method “Decision Tree”. By using this method they have an overview of how the candidates are performing the given tasks, how much time and help they need to do so and how they move forward in order to get to the final step where they would be assigned in particular module.

While performing these tasks from each functional area, team leaders give grades to the candidates and at the end they sum up them and the candidates are assigned in that functional team for which they received the greatest grades. After this decision is made, the decision-making process in the project is not completed. This process is

continuous and it happens as many times as required by the project goals and the project success.

The previously mentioned decisions can be grouped as decisions that need to be done before the actual beginning of the project before all the training are begun. Most of the times those decisions are the ones that are considered as routine decisions but this does not mean that they are not complex or that they cannot ruin the success of the project. Choosing the wrong decision leadership style or the wrong people can cause the project manager, the sponsor and all stakeholders a lot of money, time and lost job positions. These three decisions are the basis of the project if chosen right they can guarantee the success of the project, but if chosen the wrong ones they can also guarantee the unsuccessful beginning of such an important project.

In this paper, all other decisions are not mentioned because they depend on the flow of the project. The team may plan them but what will happen is just one big question. So that's why it is very important firstly to create a strong base and then to work on the other decisions. The Strong base means the even stronger end of the project.

## 4 CONCLUSIONS

The methods, models and the techniques used in decision making are a structured approaches which allows to be gained better understanding of the problem or the situation, the changing environment in which the decisions are made, all possible options from which the project manager can choose as well as advice which helps the most productive decision be chosen. On the one hand decision-making process is very complex, but on the other hand, it is a very strong tool through which it can be achieved everything. A careful consideration should be made when: choosing the methods and techniques or whether to base the decision on intuition or on real facts. Every organization should try to always make a decision based on facts but sometimes the situation and the project flow require for an instant decision which probably it is not going to be based on facts but on intuition.

Sometimes the problem is completely new and unknown for the organization and it is much more difficult to find the right solution which will guarantee success. These decisions lead to

success as well, but the organization needs to pay much more attention and time to control the factors arising from the particular problem.

In the real world, almost all organizations try to use all possibilities in order to create conditions which will revoke big success. This success is not going to be a result only of the properly selected methods, models and techniques but as well as of

the capabilities of the project managers to successfully predict if the chosen solutions are appropriate and what kind of success will generate their usage. One important thing to remember is that all decisions can be seen as roadmaps that are paving the way for the project team to the success. Firstly create a strong base and then move towards the obstacles in the project.

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# PERSPECTIVES FOR THE DEVELOPMENT OF HIGHER EDUCATION MARKET IN BULGARIA

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## **Abstract**

*The quality of education and higher education are of utmost importance for the competitiveness of the nation as well as of the state. The symbiosis between traditional forms of education at higher schools together with the innovative methods allows new and modern teaching approaches to be applied. The present report analysis the educational market in Bulgaria in terms of the demographic crisis in accordance with the European requirements for harmonization of the teaching methods among member states and development of the competitiveness of higher education. Development of education, based on modern teaching methods and lifelong learning programs, as well as consolidating the relation education – science – business, is the winning combination for a successful education.*

**Keywords:** *higher education, higher schools, quality, competitiveness.*

## **1 INTRODUCTION**

During the last years, Bulgarian higher schools face the challenge of providing educational services that guarantee quality and well professional realization after graduation. As a result of the elimination of barriers and submission of equal rights for education, many Bulgarians decide to study abroad. This problem raises the question how Bulgarian higher schools will cope with the new challenges.

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Redirecting the investments in market realization is the key factor for successful higher education. Science needs many resources in order to be developed, but the share of government costs for science in the state budget is decreasing each year. This raises the necessity of conducting national policy that guarantees appropriate conditions for funding and building up regional and European science infrastructures.

The development of science and science capacity are of great importance for the sustainable economic development. Knowledge, in its variable forms, is essential for the economic development of every country.

The main role of higher education is to upgrade the acquired knowledge and skills in order to ensure qualified human resources for the economy needs. It also helps the development of the post-graduation process of employees at the labor market.

Another important task of higher education is to support the development of science and integrate innovations in the teaching and research activities.

## 2 DEVELOPMENT OF THE EDUCATION MARKET AS A RESULT OF THE WORLD ECONOMIC CRISIS

Bulgarian higher schools need to overcome many negative effects of the world economic and financial crisis. As a result of these conditions in the period 2009 – 2013 for the Bulgarian economy is typical the following:

- Shrank of the industrial production;
- Many production factories were closed;
- The number of unemployed people raised;
- Many sectors of the economy needed lower prices of utilities and state funding to keep their professionals at work;
- The global financial crisis reflects negatively on the households' real incomes – the credit installments were increased, as well as the prices of products and services;
- The share of bad credits in Bulgaria reached 12.6%.
- The Bulgarian export decreased significantly, which results in a negative balance of payments and lower GDP. As a result, some of the companies shortened their personnel and others changed to part-time working process.
- As a consequence of the lower turnovers, many companies were forced to change their investment policy, which results in the decrease of the economic growth.
- The lower global liquidity leads to a discount of the direct foreign investments.

These conditions suppose application of activities that stimulate sustainable development through employment, social activities, efficient investment policy and funding through national and European resources. These are the key structural elements of the National Policy for Sustainable

Development, which the main objective is to enhance effectiveness in all sectors of the economy and ensure better living conditions for the society.

Many problems could be observed also in the educational system in Bulgaria as a result of the crisis:

- The population of the country drastically thinned down (e.g. from 8.8 million in 1990 to 7.35 million in present times);
- Aging population (Bulgaria takes the third place of middle-aged population in the EU);
- Lower birth rate and higher mortality rate;
- Reduced flows of students;
- Increasing number of the dropouts, especially from minority groups;
- Increasing number of dropout students;
- Limited opportunities for employment;
- Growing youth emigration and etc.

The public expenditures as a percentage of GDP (NSI, Public and private expenditures by level of education, 2016) in the country constitute 3.98%.

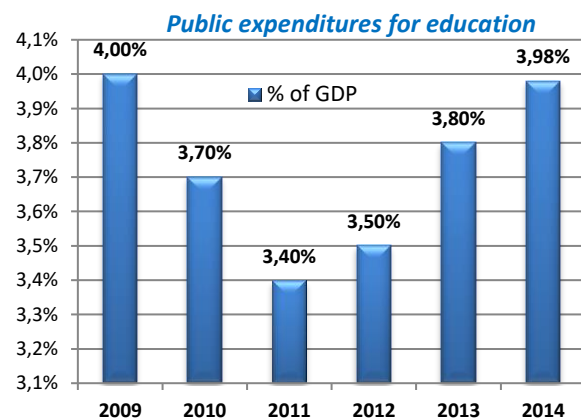


Fig.1 Public expenditures for education

Public expenditures for education are of utmost importance because they have a direct impact on the economic growth, influence labor productiveness and professional development of the workers.

For example, the top three member states, where the percentage of these expenditures of GDP is the highest, are Denmark (7.9% of GDP), Sweden (6.8% of GDP) and Cyprus (6.7% of GDP). In 2014 the total expenditures for education in EU 28 were approximately 680 billion Euros, which is 5.3% of GDP of the Union. (Eurostat, 2016)

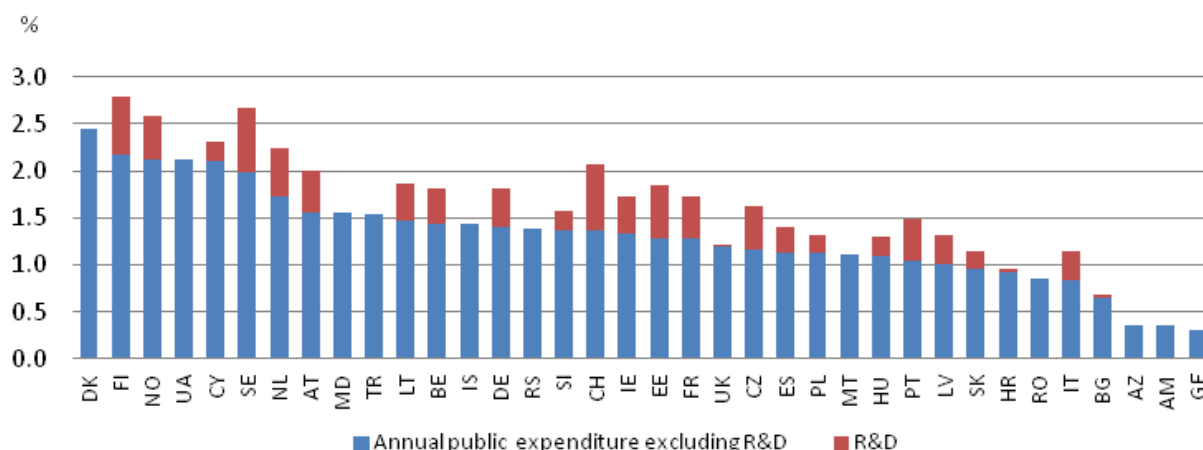


Fig.2 Annual public expenditure on tertiary education as a % of GDP, 2011  
Source: (European Commission/EACEA/Eurydice, 2015)

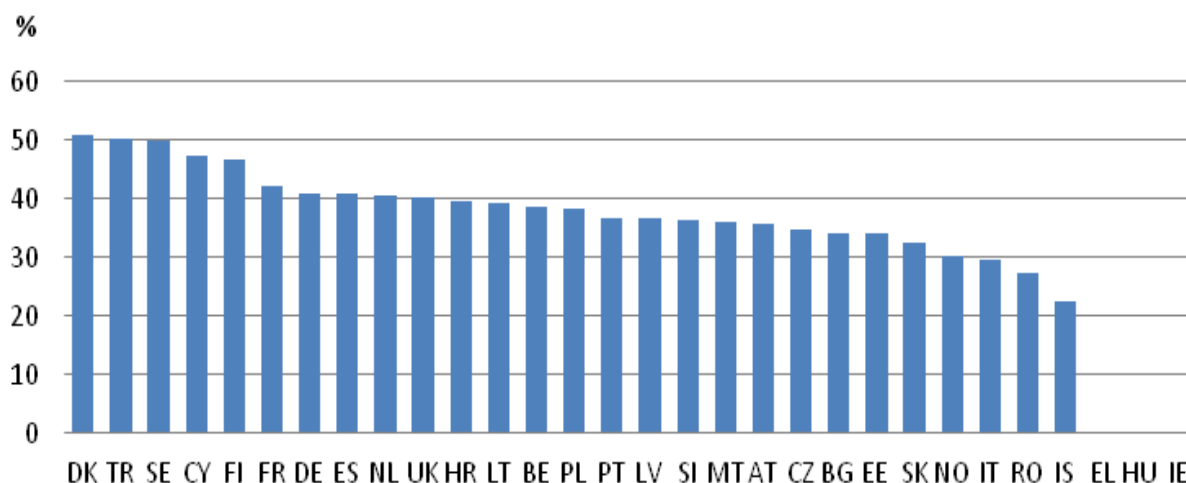


Fig.3 Annual public expenditure on tertiary educational institutions per full-time equivalent student in Euros PPS relative to the GDP per inhabitant in Euros PPS, 2011

The interesting fact is that the share of educational expenditures in the total government costs is the biggest in Estonia, which is famous for its successful educational system in the world. It spends 16.2% of its public expenditures for education. The policies of Lithuania - 15.5% and Latvia - 15% are similar. The lowest share of educational costs in the total public expenditures could be observed in Greece - 7.7%, and in Italy and Romania - 8.2%. In Bulgaria, this share is 9.81%. (NSI, Public and private expenditures by level of education, 2016)

On figures 2 and 3 the annual public expenditures for tertiary education as a % of GDP and annual public expenditures on tertiary educational institutions per full-time equivalent student in Euros PPS relative to GDP per inhabitant, are presented.

It is necessary the expenditures for education as a % of GDB to be increased in order a stable funding of education and science (The World Bank, 2012) to be reached.

The successful European practices for funding education and science suppose:

- Stimulating inner and outer integration of educational and scientific institutions;
- Encourage active participation in national and European funding programs;
- Support research projects and etc.

The current negative trends in the development of Bulgarian higher education are the most important challenges that have to be overcome. A serious problem concerning the discrepancy between graduates and workforce demand still exists in our country.

Table 1 Educational institutions by type of ownership

EDUCATIONAL INSTITUTIONS BY TYPE OF OWNERSHIP		(number)				
	2010/11	2011/12	2012/13	2013/14	2014/15	
<b>Higher</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>54</b>	
Separate colleges	9	8	8	8	8	
Colleges in the structure of the university and higher schools	22	21	20	19	19	
Universities and higher schools	44	45	45	45	46	
<b>Including state institutions</b>						
<b>Higher</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	
Separate colleges	1	1	1	1	1	
Colleges in the structure of the university and higher schools	22	21	20	19	19	
Universities and higher schools	36	36	36	36	36	
<b>Including private institutions</b>						
<b>Higher</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>17</b>	
Separate colleges	8	7	7	7	7	
Colleges in the structure of the university and higher schools	-	-	-	-	-	
Universities and higher schools	8	9	9	9	10	

Source: (NSI, Educational institutions by type and kind of ownership, 2016)

The main priority areas of the European policy in the frame of education are as follows:

- Acquiring the lifelong learning approach and ensure mobility of much more people;
- Enhancing the quality and effectiveness of education;
- Stimulating equality;
- Stimulating innovation in all degrees of education (MON, 2014)

The relationship between education and business is of great importance. It depends not only on the influence of the direct needs of the economy but has to be perceived as a system that brings benefits for both sides. Higher schools must be funded by companies from all the economic sectors in order to develop their research activities, where more students take participation. This leads to better training of qualified professionals.

The main objective of the state policy of Bulgaria is to stimulate the development of enterprises as a result of the quality of education and practically applied scientific studies. (Council for education and science „Bulgaria 2020“: National priorities in education and science, 2012) The relationship higher education-science-business, presented in

figure 3 is very significant for the development of the national economy.

### 3 PERSPECTIVES FOR THE DEVELOPMENT OF THE EDUCATIONAL MARKET IN BULGARIA

Nowadays, Bulgarian higher education faces challenges such as the foundation of European and world educational market, where higher education must be popularized.

There are 54 higher schools in Bulgaria (MIN, 2016), which have the following structure: 30 universities, 16 specialized higher schools, and 8 colleges. 36 of the universities and higher schools and one of the colleges are state-owned and the other 10 universities and higher schools and 7 colleges are private. Detailed information for the structure of higher schools in Bulgaria is presented in table 1.

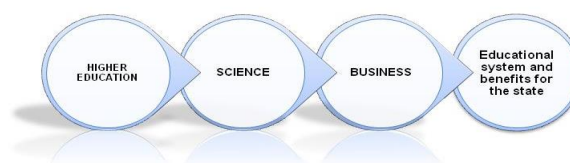


Fig.4 Relationship between education and benefits for the state

Companies from different sectors of the economy could be perceived as an appropriate funding resource for student education in terms of internships. The relationship between the education and the labor market is the main factor, which leads to better quality and development of competitiveness of the educational system.

The high quality of education, well-trained academic staff and the application of European Credit Transfer System are necessary preconditions for the participation of teachers and students in European exchange and mobility programs, as well as for the fulfillment of research projects.

The Lisbon Strategy intended to deal with lower productivity and unemployment as well as with social renewal. Continuing investments in knowledge and skills are key elements for ensuring competitiveness and guarantee for the better quality of the workforce.

Nowadays it is important for the development of state economies, their policies to stimulate scientific research and to ensure better conditions for technological and innovative development. (Gechev, 2015)

Every scientific policy must cover a wide spectrum of both research activities, managed by academic staff in relation to the teaching process, and research activities, conducted by scientific institutes.

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On the other side, the technological policy focuses on the building up and development of technological spaces.

The innovative policy is the tool by which many priority areas are developed as a result of the spreading of scientific achievements and results.

That is why the term “economy, based on knowledge” got very popular in the last years and revealed the important role of science and education in the everyday life.

## 4 CONCLUSION

Higher education has a significant contribution to the economic growth, capacity for innovations of the economy; an increase of the employment and decrease of unemployment; building up substantial cultural and economic relations among member states. Together with social benefits, higher education brings also many personal benefits for professionals, which result in higher incomes, better labor conditions; better health insurance and longer life expectancy.

The development of qualification of people must be a permanent process, followed by the adoption of new skills so as the workforce to be able to respond to the new labor market requirements.

The main objective of Bulgarian universities must be not only to provide knowledge to the society but also to carry out their functions efficiently.

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# THE EUROPEAN UNION: THE BUILDING OF A NATION

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JEL Category: Z12, Z13, Z18

## **Abstract**

*The European Union is an organization in a constant evolution with periods of stagnation. It has recently achieved high levels of integration that logically will be followed with a greater political integration. The Union will need a higher identification of the citizens in terms of participation in the democratic process and in terms of loyalty to the still to build the political structure. This research focuses on the actions undertaken in order to create a new level of identity, a European nation, by the actors involved in the European building process. It identifies the actions in two different kinds, the direct actions focus on this achievement and the indirect actions increasing the feeling of cultural communality in Europe. The direct actions follow the pattern already created by the European states creating their own nations, as establishing common symbols, convergence in the educational field, a common currency or a free movement area. The indirect actions normally do not have the involvement of the EU institutions, but also influence the process, as a sport, especially a football, Eurovision or the Council of Europe. The research proves an active policy integrating the Europeans but also points out problems and solutions for the success fulfillment of the process.*

**Keywords:** *The European Union, European Nation, European politics, European democracy, European integration.*

## **1 INTRODUCTION**

Europe is a complex idea based on different factors like geography, culture, politics, religion or economy. Geographically Europe is defined with its continental northern border of North Cape, Norway, the Cape Matapan in Greece, the Atlantic Ocean in the West and the Ural Mountains in the east. Geography is important because for joining the EU the candidates must be located

geographically in Europe, but Cyprus, a member of the organization, is clearly a country located in Asia, but its insularity and its Greek cultural heritage have influenced the inclusion of an exception to the rule above mentioned. Despite the fact that 20% of the territory of Kazakhstan is located westwards from the Urals, on the European soil, there is no debate about the Europeanism of the country. Turkey, with a small percentage of its territory in Europe, has generated an endless debate about if the country belongs to Europe or Asia because being a bridge between both areas (as commonly mentioned) will close its participation in the European integration.

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On the north, Iceland is generally accepted as Europe from the geographical point of view, but Greenland generates more controversy about its belonging to Europe or America. Geographically another conflictive area is the Caucasus region, where Georgia, Armenia, and Azerbaijan are not fully accepted neither as Europeans nor as Asians (Kaelble, 2003). Finally, Russia and its double soul, belongs somehow to its own particular geographical area, not Europe, not Asia, as most of its territory belongs to Asia but most of its population lives in the European territory of the federation.

Culturally the borders of Europe are more flexible. Obviously the spiritual soul of Europe springs in the Ancient Greece, as the philosophical ideas of Plato and Aristoteles have shaped the European culture and our way of thinking, Thucydides created history as we understand it, Phidias shaped our taste for art, or the influence of Euripides in our literature standards, among others outstanding artists. Freedom and individuality empower by the concept of citizenship in opposition to other social structures, as the oriental absolute power, influenced also the development of Europe (Chochia, 2012, 27).

Religion, Christianity, has helped to shape the European cultural values, as solidarity, but also with the religion wars to liberate Europe from Muslim rule in different territories as Spain, Sicily or the Balkans; the expansion of Europe eastwards to pagan lands to Christianise the population; the conflict between laicism and the Christian church, with the involvement of the Pope in earthly affairs rather than spiritual matters during centuries; several religion wars in Europe facing different Christian groups, and the culmination of the process with the incorporation to the European identity of the principles of the French Revolution, the separation of politics and religion, material matters under the rule of the state, spiritual affairs under the Church. The laicism is a European creation and part of the European identity (Bruter, 2005). Therefore, the Christian roots of Europe are obvious, but its laicism makes possible to other religions to cohabitate peacefully in Europe as long as their believers accept the separation between public and spiritual affairs, a concept sometimes not truly understood. Religion creates some suspicions

among many Europeans in the case of Turkey, a predominantly Muslim country, because of the importance of the religion in the organization of the society and its impact in the public life (Kohli, 2000, pp. 113-137). On the other hand, other European countries with fairly large Muslim populations", do not generate any conflict because of their religion.

In terms of politics, democracy is the dominant model of organization of the state in Europe with its roots in the Athens of Pericles. It is also a requirement to join the European Union. Hence border countries as Belarus are currently not fully accepted as Europeans because, among other reasons, its political system.

The market economy is an important factor of the European identity, and also another requisite to join the European Union.

The social structures of Europe are also an important part of its identity, as the concept of society is strongly linked with the idea of the nation, being most of the European countries national states, or at least with a predominant national group dominating the political structures of the society. The social cohesion in the European states come mostly from the identification of nation and state. On the other hand, most of the world is mostly organized on a different basis as often nations are kept in the cultural sphere without influencing the political life. Nevertheless, the European organization of nations has been imitated, especially in America, with the creation of nations by their respective political states.

The social system, respect to human rights or the role of women in the society, health care system, are other characteristics of the European civilization.

Hence, the concept of Europe is a complex system of a variety of factors that make Europe flexible in time and space, being its borders temporal. It generates tensions in the European Union because of internal reasons, the social cohesion or identity among Europeans, and externally, as the limits of the organization cannot be withdrawn clearly (Amin, 2004, pp. 1-14).

## 2 THE EUROPEAN UNION

The European conflicts during the XX century devastated Europe and were spread all over the world. Nationalism and aggressive behavior against other nations were the main causes of the conflict. Already Kant in his *Perpetual Peace* mentioned this source of conflicts, pointing out a solution based on a European federation. Aristide Briand, who served several terms as Prime Minister of France during the French Third Republic, presented a plan with the collaboration of Stresemann, German foreign minister of the Weimar Republic, to create a European organization overcoming the national boundaries of its members to avoid future conflicts (Kerikmae, 2009). The British promoted the creation of the League of Nations, as a forum where the world could solve the conflicts by peaceful means. The national sovereignty of the member states was fully respected in the organization. This approach is fully understandable through the prism of the British Empire, the biggest and more powerful of the world, with the English nation ruling over other hundreds of nations. Nevertheless, the League of Nations proved to be powerless stopping or preventing different conflicts, especially the rise of Japanese, Italian or German imperial nationalism leading to the IWW.

Once again, the war was a direct consequence of the aggressive behavior of several nations rather than an ideological conflict, as the alliance between USA and USSR (Kirch, 2004, 38-40), or the different behavior of the German occupation forces in areas like Norway or France and Yugoslavia or Russia. Nationalism was to be blamed for the conflict by Altiero Spinelli in his *Manifesto per Europe*. Jean Monnet wanted to overcome the national differences among the Allies, Salvador de Madariaga presented the national differences as the cultural wealth of Europe, but a political curse. It is remarkable their defense of the different national identities in the cultural level, seeing the nations as something precious to be kept and enjoyed, but insisting on the separation of culture and politics; nation and state.

The main options in the process were adding a new level of identity above the national-state level functioning as a Matryoshka doll, or building a new political society centered in the political rights

rather than the national issues: citizenship against nationality. The path initiated by the first European Community, the European Coal and Steel Community, was a hybrid solution, a new community based on political rights, equality of the members, with a high potential for developing a new national identity at the European level.

There are two main schools dealing with national states or the merger of politics and cultural identity, the French and the German. The second believed in the idea of the existence of the nation before the state; afterward, the nation provides itself with political institutions, as we can see in the *Addresses to the German Nation* (*Reden an die Deutsche Nation*, 1808) by German philosopher Johann Gottlieb Fichte. The concept of *Volkgeist*, or spirit, or soul of the folk is understood as something autonomous from the humans forming it; the *Volkgeist* as something that is alive, needs to be cared of, needs to grow, needs to develop. The best way to fulfill these necessities is providing the society with a political structure, the nation creating the state. On the other hand, the French tradition prioritizes the State over the nation, believing that the state is the spring of the nation, as unifying standards promoted by the state can increase the cultural similarities among the subjects in the territory, increasing the convergence of the cultural groups included in the state, and hence, creating the nation.

The European integration process is a hybrid system, where the integration started with the economy, leading to a closer political approach. Nevertheless, in the Schuman declaration, the target of the creation of the United States of Europe is clearly included as the most desirable target of the integration in Europe. The integration has followed in many cases the neo-functionalism approach, especially the spill over effect (Troitino, 2013, p. 9). The pattern is based on integration in areas of low politics, where the public opinion is not a concern and hence the public resistance to the process is minimal, avoiding conflicts. The integration in these areas provides benefits, and more involvement in the process of those obtaining the benefits, but also new problems that normally can be solved just with deeper integration or dismantling the previous integration. It is a continuous process that theoretically will include more and more fields in the sphere of

influence of the European integration, including also political aspects at the end of the process, fields with an important link to the public opinion and democracy. The previous integration would have included most of the economic areas, attracting to the supporters of the European integration all the economic and political actors involved in the project. (Troitino, 2010, p. 87) Following this theory, the European States of Europe would be a must for the European Union in order to avoid the collapse of the organization and to protect the already integrated fields and would be supported by the European citizens as the best and more rational option.

The model has worked astonishingly well in the economic field, but it is generating political problems, specifically a lack of identification by the European citizens with the project. The transfer of sovereignty from the state level to the European level has been successfully achieved in many fields, but the direct cession of sovereignty from the citizens to the European level shows a democratic deficit as the participation in the European elections is always far below the participation in the national elections. The rationality of the neo-functionalism theory clashes with the emotional identification of the people with the European project; a democratic system cannot survive without the support of the members of the society; the citizens.

The lack of interest of the European citizens in the European Union is linked with the absence of a strong common identity. Obviously, there is a European identity and it is growing, but the late expansion of the Union has made it more diffuse in a moment when the organization is reaching the cultural borders of Europe and the political integration is growing. Countries as Serbia, Montenegro, Bosnia and Herzegovina, Macedonia or Albania do not generate many problems in the cultural level of further integration in the organization, as they are widely accepted as Europeans and shared most of the common values of the member states. Even though Europe is a cultural mosaic, there is a common set of values widely accepted by the European people. The main concern is related to their capacity to adopt the European socioeconomic model. On the other hand, Belarus and Ukraine, are more problematic, because of the influence of the

Russian world, a different civilization strongly linked with Europe but having its own identity. The case of Ukraine is more problematic as the country itself is divided between Russian and Western influences. The problem of common identity grows more concerns in the Caucasus area, and the Georgian dream of becoming a member of the European Union. Other countries as Armenia or Azerbaijan could also claim membership in the European Union if Georgia will succeed in its European aspirations, increasing the lack of common identity and decreasing the possibilities of political integration at the European level. The case of Turkey is the maximal exponent of this conflict, as for centuries the Ottoman Empire was seen as an occupation force in Europe and its society model differs in major issues with the European standards. The problem is not linked with religion, as many Muslims are already living inside the European Union, or Albania and Bosnia and Herzegovina will, most probably, become members of the Union in the future, but with the influence of religion in the public life, clearly against the European laicism tradition, the role of women in the society, the freedom of speech, and other European cultural aspects clearly different in Turkey. It is not a competition to define what is better or worse, or a matter of European discrimination against Turkey, rather than common values basic to build a common political structure. If the Turkish society feels unease with these values promoted by Europe, it should follow its own way to achieve a harmonic society. Nevertheless, as already mentioned, the borders of Europe are flexible, and the situation could change in the future. Turkey was implementing laicism and other Western reforms since the time of Mustafa Kemal as a state policy, but currently, the process is being reversed by a government elected democratically. It is including more and more religious elements as a way to fulfill the ideological, cultural and religious demands of the Turkish, those citizens who chose the government in free and fair elections. Nevertheless, there is still an important part of the population closer to the European standards, but currently they are a minority in the country. Turkey must choose its way, laicism and European standards in human rights, role of women in the society, equal treatment of the citizens or no discrimination of the minorities, educational model, or on the other

hand a society based on the principles of Islam, more traditional, with more influence of the religion in the public life, and perhaps more suitable for the Turkish population according to the electoral results in the last 20 years.

The internal sphere of the EU in terms of cultural identification is basically linked with two options; to keep on the integration process, because the tensions of the current system can be just solved with deeper integration, or dismantling the already integrated policies bringing them back to the national control. The integration possibility includes more political aspects until the full integration represented by the European States of Europe against a more economic approach, based on a British concept of free trade area without political integration link with political cooperation. This option already was followed by the European States included in the European Free Trade Association, or by United Nations in political terms, without the same level of success of the European Union. Countries as Turkey could easily join an organization based on free trade and political cooperation even if its citizens opt for a model of society different from the European tradition, but if the option chosen in Europe follows the path of deeper political integration, future members of the Union must share a common major identity with the rest of the members.

Hence, the enlargements of the European Union are in a crucial stage generating tensions inside the European Union and among the possible candidate countries. The process will be defined in the coming years by the model of organization chosen by the member states, currently the main actors in the process (Risse, 2003, 487-505).

There is another formidable obstacle to the creation of a strong common identity among the European citizens, nationalism. Europe is the birth land of political nationalism; its geography has allowed an important cultural diversity and the creation of numerous cultural groups or nations. Europe developed the idea of the identification of the nations with the political state, merging the cultural and political spheres, and exporting it to the rest of the world (McLaren, 2006). The aggressive behavior of the national political states in Europe was understood as the main reason for the IWW by outstanding European intellectuals, as Altiero Spinelli, politicians, as Robert Schuman,

philosophers as Ortega y Gasset, and policy makers as Jean Monnet. The best proposal to overcome the conflicts generated in Europe was breaking the identification between nation and politics. Nevertheless, nationalism is still nowadays seen as the main source of social loyalty from the citizens towards the state because it is based on feelings and ideas, providing a strong cohesion to the society, and hence strong support to the political state. The lack of European national identity is one of the reasons of the low cohesion in social terms in Europe, and a handicap for the so much needed popular support of the European people to the European integration process, as it is based more on a rational approach rather than feelings and emotions.

### 3 THE EUROPEAN STATE AND THE EUROPEAN UNION INSTITUTIONS

The first European Community, the European Coal and Steel Community, created the skeleton of the current European institutions. The original target included in the Schuman declaration of a future European state was included in the structure of the institutions with an executive power, the High Authority (currently the European Commission), independent judicial system (High Court of Justice) and a bicameral legislative power with a Common Assembly (The European Parliament of the EU) and a Council where the member states would be represented.

These first institutions were to be developed in a process leading to a supranational entity able to overcome the divergence among the nations involved in the integration process. Hence the Common Assembly was merely an advisory body without direct representation, but has evolved to a real parliament elected by the citizens in the European elections and a powerful institution in the decision-making of the European Union that in most of the legislative procedures stands in equal terms with the Council (Troitino, 2014, p. 15). The representation of the member states and its power has followed the opposite direction, reducing its influence in the European affairs or at least sharing its power with the European parliament and decreasing the power of the individual states transforming the voting system inside the Council from unanimity (Full sovereignty and

independence for each state) to qualified majority (sharing the sovereignty with the other members of the Council).

The Court system also has been developed from a tribunal based on the economic field of Coal and Steel to a system of different tribunals that are influencing the life of all the Europeans with their decisions, applied in all the member states and prevailing over the national legislation.

Other former institutions, as the Consultative Committee (similar to the current Economic and Social Committee), pretended to bring closer to the European integration the civil society of the member states, but have declined and currently have no real power in the institutional framework of the European Union. Nevertheless, new institutions have been created to fulfil the necessities generated by the integration, as the European Central Bank, the European Court of Auditors, the European External Action Service (EEAS), the Committee of the Regions, the European Investment Bank, the European Investment Fund, the European Ombudsman, the European Data Protection Supervisor and some Interinstitutional bodies and Agencies of the EU. But they are not the last European institutions as the integration will follow deepening and more institutions will be required in order to manage commonly the new areas under the influence of the European Union.

Obviously, the current institutional framework of the European Union cannot be equated with the institutions of a State, but its development proves a growing power and higher capacity influencing the European population. (Troitino, 2014, pp. 37-41)

Following the French model of nation state, where the state somehow creates the nation or is a driving force in the process of national integration, these European institutions could solve the problem of lack of support of the European citizens to the European Union promoting the creation of a common identity in Europe, creating the nation from the top, rather than the German model of the nation creating the State, the creation of the state from below. There is a palpable opposition from the national state level to accept this process as it is seen as a threat to the different national identities of Europe and an artificial movement to

break to cohesion of the diverse national identities of Europe, but if we accept the premises of the French model, the nations have been created by the political power, and hence the creation of the European nation will be a natural process consequence of the political integration and growing power of the organization (Hedetoft, 1998). Also, against the local nationalist prejudices, the European nation has been presented as an addition to the current national identity of the Europeans rather than a substitute; national identities are to be respected as a primary element of a higher level of identification following the model of the Matryoshka dolls. The Europeans often have a local identity complemented by a regional identity, part of a wider national identity that could create a new level, the European identity. Obviously, a minimum common understanding among the nations is needed in the process, but we can find it in Europe as different pillars of the European civilization already mentioned in the introduction of this research, as democracy, human rights, laicism, equality, no discrimination, etc. This new level of identity could provide the European integration with the popular support it lacks currently, making the process more democratic and obtaining the loyalty of the citizens and more participation in the process.

## 4 THE BUILDING OF THE EUROPEAN IDENTITY

The Schuman declaration included in the targets of the European building process the creation of a European federation, but also pointed out the necessity to develop the process step by step, in a continuous growth. Since then, different measures have been undertaken in order to build the needed common identity following the French model where the political structure of the society provides elements for the internal cohesion of the population. These actions can be divided into two main groups, direct measures implemented by the European Union and indirect actions from other organizations influencing the process of common European identity.

### 4.1 Direct actions

The most visible initiatives in the field of the European identity are the European symbols created to become an icon for all the European

Union citizens, representations to be felt as a belonging of all the Europeans regardless their nationality. The development of these symbols has not been a very creative process as it has followed the pattern established before by most of the European national states; it is an obvious process of imitation with the intention of obtaining similar results. The most visible symbol is the European Union flag, a circle of 12 gold stars on a blue field, providing common identification for all the Europeans and increasing the international presence of the EU in the world (Bruter, 2003, 1150). The European flag was not included in the European treaties, but was adopted by the EU Council, and afterward by the rest of the European institutions, including the EU Parliament. Its design, based on stars representing all the member states of the Union, resembles the flag of the United States of America. The European flag is also used by the Council of Europe, an institution not belonging to the European Union, providing a wider European perspective to this symbol. It also has been used to represent Europe in sports events increasing the commonality of Europe, as the Ryder Cup. The flag as a symbol is a success as most of the Europeans recognize it, and somehow feel some attachment to it. The flag also has been widely accepted as a European symbol, implying the cultural values of Europe, as democracy, as the use of the European flag during the Maiden protests in Ukraine showed.

The European anthem is another symbol created to unite the Europeans, again following the model of the national anthems of the national states of Europe. The melody used to symbolize the EU comes from the Ninth Symphony composed in 1823 by Ludwig Van Beethoven, when he set music to the "Ode to Joy", Friedrich von Schiller's lyrical verse from 1785. This anthem pretends to express the European ideals of freedom, peace and solidarity, the common values of all the Europeans (Bruter, 2004). It is identified with Europe by most of the Europeans providing the feeling of belonging to the same community.

The European Capital of Culture is a city designated by the European Union for a period of one calendar year during which it organizes a series of cultural events with a strong European dimension pretending to share and spread the cultural aspects of all the Europeans increasing

the common cultural consciousness. The European Union does not have a capital city, imitating the national states, where the capital plays an important integration role as the common space of all the citizens belonging to the state, as the EU institutions are located in three main locations, Strasbourg in France, Luxembourg, and Brussels in Belgium. However, there have been initiatives to relocate the main institutions in Brussels, a city that in the European popular imagination works as the capital of Europe.

Other symbols created are not widely known by the Europeans, and hence, are not properly working as an emblem uniting the European people in a common ideal. The European day, 9<sup>th</sup> of May, the day of the Schuman declaration, represents a common festive of all the Europeans, as the national days in the member states. But the festivity is unknown by most of the EU citizens. The popular power of the event celebrated, a speech in Paris, cannot be compared with the emotional strength of the national days, as in the case of Spain Christopher Columbus's first arrival in the Americas, the French celebration to the Storming of the Bastille and the French Revolution, the day of the West and East reunification in Germany, or the many independent days in other European states, as for example Estonia. The exception is the United Kingdom, without a common national day, but the birthday of the queen, another national symbol, performs the same function. As the possibility of a European monarchy is a utopia it is more likely to change the European national day to some other day with higher emotional charge, as the 8<sup>th</sup> of May, the end of the IIWW. The idea is not far-fetched because the former European day was celebrated the 5<sup>th</sup> of May commemorating the foundation of the Council of Europe.

The EU motto, „United in diversity", first came into use in 2000 and is and is little known to Europeans. Its meaning is obvious and represents properly the European building process, but its power as a symbol is negligible because it lacks symbiotic influence. The French motto, Liberty, equality, fraternity or the USA in God We Trust, have become symbols uniting the people and are internationally known; The European Union motto must be more actively promoted in order to archive its original function.

The so-called Fathers of Europe, as Konrad Adenauer (Germany), Joseph Bech (Luxembourg), Johan Willem Beyen (Netherlands), Winston Churchill (United Kingdom), Alcide De Gasperi (Italy), Walter Hallstein (Germany), Sicco Mansholt (Netherlands), Jean Monnet (France), Robert Schuman (France), Paul-Henri Spaak (Belgium) and Altiero Spinelli (Italy), do not have the power of other national symbols, as George Washington in the USA, Mustafa Kemal in Turkey or Mahatma Gandhi in India. Even Churchill, included as a European symbol, is mostly known as an icon of the British nationalism, a dichotomy which shows the weakness of this symbol. The impossibility of choosing a common icon for the whole Europe because of their low identification with Europe, as for example Julius Caesar, or their implication in European wars, as Napoleon, makes extremely difficult to use the symbol of the father of the nation to unite the European people (Delanty, 1997, 290-296). The role of European person representing all the citizens could be a cultural person, as Einstein, Shakespeare, Picasso, Leonardo Da Vinci, but their attraction as a European symbol is reduced by their universality, as they are symbols of the whole humanity.

In political terms, the European citizenship is an important milestone as it enforces the idea of the European Union as a common political entity, a supranational organization. The EU citizenship was introduced by the Maastricht Treaty (1992) as a supplement to the state citizenship, following the same model of Matryoshka doll proposed for the creation of a European common identity, adding a new level respecting the lower levels of identity. The main rights of the EU citizenship (Eder & Giesen, 2001) are voting in European elections and local elections in any member state, the right to free movement, settlement, and employment across the EU, and the right to consular protection by other EU states' embassies when a person's country of citizenship does not maintain an embassy or consulate in the country they need protection in. The concept of common citizenship is strongly linked with the idea of a European federation where the subjects are the members of the society holding political rights, no matter their nationality. It is a powerful tool creating the European identity but its effects are mostly felt by those Europeans living in another state of the

Union, a small percent of the total population of the European Union.

The general principles of European Union Law provide a common set of rules for all the Europeans. The empire of Law is part of the European common identity coming from the Roman Empire contribution to the Europeanisms. It also gives legal certainty to the Europeans, as the same rules applied in their respective states are also implemented in the rest of the members of the Union. Hence, the creation of EU law provides and an important signal of commonality in Europe. According to the European Court of Justice, these rights are fundamental rights, proportionality, legal certainty, equality before the law and subsidiarity. The general principles are complemented by the European Union law, based on regulations and directives, which have direct effect or indirect effect on the laws of European Union member states. The supremacy of the EU law over the national legislation creates the idea of a higher legal entity, establishing same rights and duties all over the territory of the Union.

The Schengen agreement, originally an international treaty signed by France and Germany outside of the European Treaties, and hence outside of the influence of the European Union, was designed as a free movement of workers complementing the European market and the economic relations between these two countries. Nevertheless, soon it included more European countries till the majority of the member states of the European Union were also participating in the Schengen area. (Atger, 2008) The Amsterdam Treaty incorporated it into European Union law while providing opt-outs for the only two EU member states which had remained outside the Area: Ireland and the United Kingdom. Beside its original economic reasons, the Schengen area has had a big impact in the European common identity as it abolished the internal borders of the Union with external border controls for travelers entering and exiting the area. It works like a single state in terms of movement of people eliminating the psychological state borders; (Pascouau, 2011) the fact of crossing a border controlled by the national authorities increased the feeling of being abroad, being in other territory outside of the motherland opposite to the idea of no control inside the European Union

encouraging the feeling of being in the same territory, of being still at home (Bertozzi, 2008). The increasing number of trips and movement of people inside the common European area has spread this feeling of a common entity to an important part of the European population (Grabbe, 2007, 530). It has become a very important tool creating the common European identity eliminating a traditional barrier link with the nation-state.

The common currency, the Euro was meant as a complement to the European market in order to abolish restrictions to trade created by the instability of the national currencies and the uncertainty affecting the European trade relations. The force of the common currency as a symbol of the union is very strong (Risse, Engelmann-Martin, Knope, & Roscher, 1999, pp. 147-187). The currency has been used as a propaganda item since the first civilizations, promoting common values and including common symbols in the coins as a way to integrate the whole territory included in the same economic system. The numismatic of the Roman Empire is a clear example of it, including the effigy of the emperors and their family as a figure uniting the empire under a common authority (Maguire, 1999, 17-29). The national states used this powerful symbol incorporating the national currencies as a basic step to achieve the national unity. The Euro has generated economic problems as the loss of financial autonomy by the national authorities without a realistic alternative at the European level and still needs reforms to work effectively. But from the national point of view, from the feeling of belonging to the same community has been extremely effective. The fact of using through most of the territory of the European Union the same currency is giving the European citizens a common identity, a feeling of being in the same territory (Bauboeck, 1997). The common design of the euro notes includes common symbols generating a common feeling, are based on architectural styles and ages developed in Europe and influencing all the European states. For example, the 5 euro note has a generic rendition of Classical architecture, the 10 euro note of Romanesque architecture, the 20 euro note of Gothic architecture, the 50 euro note of the Renaissance, the 100 euro note of Baroque and Rococo, the 200 euro note of Art Nouveau and the

500 euro note of modern architecture. The election of these symbols was based on their power of transmitting a common past and to reduce a rejection by the public opinion through the ethereal political implications of architectural styles. The Euro coins have their obverse designs chosen nationally, while the reverse and the currency as a whole is managed by the European Central Bank. The original design of the €0.01, €0.02, and €0.05 coins showed Europe's place in the world as a whole. The €0.10 coins and above showed either the 15 countries that were the European Union in 2002 or if minted after 2007, the whole European continent. (Luna-Arocas, 2001, 447-449) The national side includes national symbols, but there are, however, some restrictions on the design: it must include twelve stars. Nevertheless, the psychological importance of the Euro is more important than anything else, the fact of using the same currency in other states of the Union provides a strong common feeling to the Europeans living under the Eurozone.

Education is a fundamental pillar according to the French approach to the creation of the nation from the state. The European Union has developed different policies in the field of education influencing the Europeans and providing them with a sense communitarian identity based on common values (Kaelberer, 2004, 161-167). The main initiatives of the Union have focused on higher education, with the creation of the Erasmus program and the Bologna process. The Erasmus program under its different names is based on university student mobility all over the territory of the European Union. It has been a great success as more than 3 million European students have enjoyed the program and its numbers are growing exponentially with its popularity (Souto-Otero, Huisman, Beerkens, De Wit, & Vujic, 2000, pp. 70-77). The political scientist Stefan Wolff has argued that in 25 years' time Europe will be run by leaders with a completely different socialization; the so-called 'Erasmus generation', a European generation. The most popular countries reviving Erasmus students are Spain, France, and Germany, western European states, the same countries send out more students under the program (Teichler, 2001, 201-227). The highest increase in out-bound students was noted in Croatia (+62%), which joined the Programme in 2009-10. It was followed by Denmark (+20%),

Slovenia and Turkey (+17% each). 11 countries experienced a growth above the average of 8.3%. The program, among other objectives, wanted to promote language learning, but many times the social relations between Erasmus students from different countries are stronger than with the local population, thus increasing European cultural concept and use of English as the language of Europe. The program has created a common identity for those enjoying it and those locals whose classmates are from other parts of Europe. (Dervin, 2007) In terms of education, from a more academically approach, the Bologna process ensures comparability in the standards and quality of higher education qualifications all over Europe, harmonizing academic degree structures and standards as well as academic quality assurance throughout the EU Member States and in other European countries, going beyond the national borders.

The concept of solidarity inside the European Union is based on the idea of national solidarity already developed in all the European states. The need to balance the economic and social development inside the states drifted important amounts of economic resources from the most developed areas to those less fortunate. The philosophical approach to the system is based on the concept of a common society, where the members help each other, the wealthy helps the poor, the strong the weak. The social solidarity was united with the concept of nation, as a community of people sharing similar cultural values and in the case of the national state, also political rights and duties. The nation had the intellectual and emotional force to support the concept of social solidarity as the majority of the Europeans identified themselves as members of a national community. The European Union has developed an important action in this field through the structural funds, as the European Regional Development Fund, European Social Fund, the Cohesion Fund, and the Common Agriculture Policy now more focus on rural development rather than production subsidies. All these funds account for most of the European Union budget, being crucial in the creation of a common European identity. The previous national boundaries reasons cannot be used in the case of the European solidarity, being substituted by the concept of European unity and solidarity among its

members. (Meehan, 2003, 174) The concept of European solidarity has created internal and international problems for the member states. The concept of cultural community in the EU is still not high enough to support the European solidarity. For example, the Catalan nationalism is strongly linked with the concept of the state solidarity, rejecting the idea of Spanish solidarity using Catalan financial resources because their identification with the Spanish nation is reduced. The main claim of the supporters of the independence for Catalonia is the use of the taxes collected in this territory in the solidarity of the Catalan nation, not beyond. Hence it is unacceptable a financial transfer to the less developed territories of Spain, a different cultural group. The same case can be found in Italy, where the North League claims a similar. On the European level, complaints about the European solidarity are numerous, as the Germans transferring funds to the less developed economies, as the Greek. (Streeck, 2000, 253) The German nation is seen as the limit of the solidarity, the financial support of West Germany to East Germany was accepted by a huge majority of the German citizens. But solidarity beyond the national boundaries rises much more concerns among the population. There are economic reasons for the solidarity, as the problems generated by the European Union interior market, the important profits for German companies due to their better economic performance, and the incapacity of the economic agents of the less developed countries to compete on equal terms because of their lower competitiveness (Michalski, 2006). But they are not a part of the debate for the general opinion on the national issue still dominates the concept of solidarity. The development of a higher level of identification among Europeans will decrease the tensions and improve the system at the European level.

## 4.2 Indirect actions

There have been different actions not initiated by the European Union institutions that have influenced the creation of a common identity as an embryo of the European nation. The sport has traditionally been a sphere of influence of nationalism. The idea of a sportsman or a sports club representing a wider community, a nation, has a great power of junction between citizens.

Football as the most popular sport in Europe, and probably of the world, is an important force for the idea of belonging to a common space. The UEFA, Union of European Football Associations, and its main competitions, the Champions League and the Europa League, work as an addition to the national leagues, surpassing them in terms of audience and social importance in many European countries. Teams as Real Madrid, Manchester United, Bayern Munich or AC Milan go beyond the previous national borders with supporters all over Europe. The UEFA is an association independent from the European Union but was influenced by the European market and the principle of no discrimination because of the nationality (Briggs, 2005, 439). The Bosman ruling by the High Court of Justice of the EU abolished a previous regulation limiting the number of foreigners in the European teams, as no European citizen could be considered a foreigner inside the territory of the European Union. (Altbach, 2001, 5-25) It clearly broke the national spirit of the European football clubs and helped in the creation of a new level of identity, the European. Other sports as Basketball, Handball or Volleyball have followed the same development, becoming European rather regional. (Garcia, 2007) Perhaps the more obvious example in sports is the Ryder Cup, a golf tournament between the USA and the Europeans, conforming the first European national team competing internationally. Nevertheless, in terms of national teams, the European sport will surely follow the British model of different national teams inside the same political structure.

The power of the market-unifying rules and standards to abolish obstacles to trade is an important force homogenizing the Europeans, as the adoption of the metric system instead of the imperial units in the United Kingdom (Manners, 2002, 255-257). The treaty of accession to the European Economic Community, which the United Kingdom joined in 1973, obliged the country to incorporate into domestic law all EEC directives, including the use of a prescribed SI-based set of units for many purposes within five years. By 1980 most pre-packaged goods were sold using the prescribed units. Mandatory use of prescribed units for retail sales took effect in 1995 for packaged goods and in 2000 for goods sold loose by weight. Hence all the national differences inside the Union affecting trade must be abolished

or respect the principle of proportionality to affect as less as possible the European trade. Obviously, this is an action focus on increasing the economic transactions in the European market by decreasing the national obstacles to trade but has had an important impact establishing common standards all over Europe, common understandings, common identity.

Eurovision, a song context, is also providing a common cultural association link with music, even though it includes countries whose Europeanisms is discussed, as Azerbaijan, Turkey, Russia or Israel. (Yair, 1993, 150-153) The song context counts with around 50 countries when the EU counts with 28 members currently. Nevertheless, every year an estimated amount of some 180 million viewers watch the Eurovision Song festival, and most winning songs were performed in English (26 times) reaffirming the dominance of the English language in Europe and creating a common cultural organization for Europe and its neighbors

The Council of Europe is an autonomous organization not belonging to the European Union. The organization promotes co-operation between European countries (versus integration in the EU) in the areas of legal standards, human rights, democratic development, the rule of law and cultural co-operation (Bjoernberg, 2007). It counts with 47 member states, 5 Council observers and 3 Assembly observers. Even though its real impact is much reduced due its cooperative soul without binding rule, it is a symbol of Europe, especially in the field of human rights. As the Organization for Economic Co-operation and Development (OECD), including 34 countries, most of them Europeans. It is a forum of countries describing themselves as committed to democracy and the market economy, providing a platform to compare policy experiences, seeking answers to common problems, identify good practices and coordinate domestic and international policies of its members. (Hyde-Price, 2000) Originally it was created to help administer the Marshall Plan, the American financial aid to Europe. The influence if the USA in the European commonality feeling can be also felt in the defense field, as NATO (Fierke, 1999, 732-733), the North Atlantic Treaty Organization. It works in practice as the European

defense community, including USA, Canada, and Turkey.

Finally, the issue of an official language has been a crucial aspect in the creation of the national identity all over Europe. The state normally has promoted a normative approach to the official language eliminating the regional differences and dialects inside the territory, in cases like France, by direct legislation. Or in other national states by the economic predominance of the central area of the state normally also working as the publishing center of the state and hence most of the books edited in the country will follow the same language patterns eliminating regional differences. Another option chosen in more linguistically diverse countries has been including co-official languages as in the case of Spain, a country whose national identity was built by the state following the French tradition.

Obviously, the case of France cannot be used in the European Union, as there are around 150 regional and minority languages in Europe and 24 official and working languages in the EU. The co-official system of Spain seems more appropriate, but raises concerns about what language should be chosen to be official all over the territory of the Union. The German language, with around 90 million speakers, is the most widely spoken mother tongue of Europe, but French has enjoyed traditionally a dominant role in the European institutions because of the importance of France in the genesis of the EU development and the previous role of the French language as a cultural and intellectual vehicle. But English, despite the cold involvement of UK in the process of European construction, has become the lingua franca of Europe, as more than 50% of the Europeans can communicate using it. (Hogan-Brun, 2009) Obviously, the lingua franca has been traditionally linked with a powerful nation dominating the European politics, as the Latin from the Roman Empire till the middle age, then the language of the Christian Church, French with the political power of the last Bourbons and the Napoleonic wars or English during the maximum splendor of the British Empire (Orwell, 2001). Currently, the importance of the English language is more link with the dominant position of the USA in the world politics. (Ammon, 2002) The English language is the sole official language of England and Gibraltar

and one of the official languages of Ireland, Scotland, Wales, Malta, the Isle of Man, Jersey, Guernsey and the European Union; 13% of EU citizens speak English as their native language. Another 38% of EU citizens state that they have sufficient skills in English to have a conversation, so the total reach of English in the EU is 51% (Cenoz, 2000). Nevertheless, there are 34 official languages in the EU member states and 3 main working languages, French, German and English in the EU institutions. The importance of a common language, co-official to the native language of the Europeans, is basic to create a common identity (Phillipson, 2003), and hence should be promoted as sole working language of the EU, despite the opposition of Germans and French, as an act of social realism and a necessary measure to increase the European cohesion.

## 5 CONCLUSIONS

The European Union is reaching high levels of integration, the integration process has developed a new community strongly united in economic matters and more mildly in political affairs. Brexit will test the unity of Europe, as the UK is historical, economically and socially an important European country, but if the transition is successful it will probably trigger deeper integration in the EU in a very close future. The current European Union is just a transitional organization in the constant evolution towards a closer political Union. Primary the importance of economic issues in the process did not generate a problem of loyalty of the citizens involved in the process, but the current importance of political issues inside the European Union is growing higher suspicions by the main political subjects, the people, who somehow still feel attached to their national identity in terms of politics. Obviously, it is impossible to develop a common political system in Europe, the birthplace of democracy, without the European citizens, and their involvement and support can come just from a common European identity, a common cultural community of shared values, a common identification building a basic social cohesion. According to the French tradition, the nation can be created by the state, promoting and supporting actions to integrate the different subjects of the society but respecting their cultural differences, the Matryoshka doll model. The main problem

applying this model, successfully implemented in many European states, as France, Spain or Italy, is that the European Union is not a real state, and hence it does not have the power, and the will, to implement the necessary measures in order to achieve the target of a new level of identity, the European nation. The most obvious parallel is the USA, a multinational state that from the federal level after the civil war confronting north and south, created the American nation, currently a strong link uniting the people of the States. This model is not desirable in Europe, as it assimilated the cultural differences into a new level of identity.

Nevertheless, the European Union has developed different areas in order to increase the common identity of the Europeans, as the creation of new symbols imitating the national building process of Europe, common political institutions, and other important achievements as the Schengen area and the common currency, or important advances in the field of common education. Other actions outside of the EU initiatives are uniting the European people, as sports or the use of English as the lingua franca of Europe, but still, the common cultural group of Europeans does not have enough power to transfer the loyalty of the citizens from the national level to the European level.

Supranationality has been used on many occasions at the European level, but the increased political integration needs or the support of the people, or the political maturity of the citizens by differentiating nationality from citizenship. A combination of both aspects should be the way chosen by the European Union but the resistance of the national powers to lose their privileged position in our societies is a formidable obstacle.

The creation of a European nation, even if respecting the regional national identities, could

generate new problems, as it can lead to a world confrontation. If the IWW was a conflict of nations and the European Union a peace system breaking the political links between the nation and the state, the creation of the European nation could lead to major confrontations to other blocs or areas of the world reproducing the problem but in a bigger and more destructive scale.

On the other hand, a European nationalism could lead to the higher integration of immigrants in the European society, following the example of USA. A more cohesive society with wider cultural common values regardless the nationality could create common basic standards, easier to internalize for those who come to live in Europe, helping them to integrate into the European society. But it could also create negative side effects, as barriers for further enlargements of the European Union as the common European identity becomes stronger and more different from those outside the Union. It could increase the differences with the countries outside the Union unless they included in their identity the European culture, following the Transactional theory of integration.

The current model of the European Union and its relatively weak institutions will probably lead to a hybrid system of identification, where the local national identity will be still cohabitating with the European national identity, undermining the benefits of a common identity. New generations of Europeans have already a stronger European cultural identification and the foreseeable political development of the Union will require new measures to increase the involvement of the citizens in the process. Hence more drastic measures will be needed in the future promoting the creation of a strong European identity.

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# EFFECTS OF MIGRATION ON EUROPEAN ECONOMY

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## **Abstract**

*The author of the article deals with the reasons for the existence of obstacles preventing the successful integration of migrants in the democratic societies of the EU member states. The article examines the various aspects of migration in relation to their benefits for the society mainly in economic, but also social terms. The basis for the study is the statistical data published by international organizations actively involved in the migration crisis in Europe, such as UNHCR, FRONTEX, IOM, etc. The author evaluates the measures taken by political leaders of the European Union and draws conclusions and assessments based on them. His aim is to outline the possible solutions in order to spend the expenditures of the EU in the most proper way.*

**Keywords:** *European Union, European Commission Asylum System, Migration Crisis, Economic Data, EU Member States, Social System.*

## **1 INTRODUCTION**

There has been an intensive rise of immigration from Africa and the Near East into the European Union these last five years. The cost-effectiveness of the current migration, that has been presented as in long-term perspective and which has been supported by the top political leaders of EU, seems to be unrealistic. The reason is that the vision has been built upon the unreasonable conditions of integration of more than one million immigrants in the European Union. The uncontrolled influx of immigrants is likely to result in the closing of borders of European countries, the reintroduction of border controls, which will influence the freedom of movement for people and

goods with the negative impact on the economic growth in Europe. European Union leaders are considering the increase in sales tax on fuel for citizens in order to cover the increased expenditure on the migration crisis. (Daily Mail, dátum neznámy). Similar measures can be put in the near future basis for the European tax system, (European Commission, dátum neznámy), which is significantly going to reduce the fiscal sovereignty of the Member States of the European Union. The current mass migration from the Middle East and Africa in the near future invokes one of two possible alternative scenarios of action by the European Union leadership. Either the integration of the EU Member States will continue to strengthen, or the collapse of the European common currency and the Schengen system will cause chaos and a high decline of EU countries GDP. Germany and France, as the most powerful member states of the European Union, exert their

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influence at a political and economic level. The first phase was the admission quotas for refugees, which is probably going to be followed by the joint management of the care of refugees in financial and organizational aspect as well. The basic framework for the implementation of these measures is establishing a Common European Asylum System (CEAS) and presentation of the European Commission's Policy Plan on Asylum in June 2008. As stated in the Policy Plan, three pillars underpin the development of the CEAS: bringing more harmonization to standards of protection by further aligning the EU States' asylum legislation; effective and well-supported practical cooperation; increased solidarity and sense of responsibility among EU States, and between the EU and non-EU countries (European Commission, n.d.).

The arguments of the pro-immigration-policy supporters were manifested as the demonstration of humanity and multiculturalism. When the European political leaders became aware of the unsustainability of the situation, they focused the information campaign on the alleged economic benefits of immigrants, according to the trend of aging of the European population. They are justifying their acts by increased costs of social and health systems that should be covered by the income from the economic growth, increased consumption and integration of immigrants.

The focus of the article is the comparison of the positive and negative factors affecting the economic prosperity and economic stability in the European countries. In the end of the article, the author draws attention to the risks associated with the lack of implementation of key actions which may result in various forms of economic impacts of the current immigration crisis.

The author uses the standard scientific methods, in particular, the analysis of the various impacts on the economy, and the synthesis, by which deduces complex judgments and suggestions for solving of the possible economic impacts. The article also uses the scientific method of comparison on the various alternatives used for the elimination of the economic impacts on the EU due to the immigration crisis. It also compares the different views of the usefulness of the influx of immigrants to the European Union.

## 2 ASPECTS OF COSTS OF EU TO ADDRESS IMMIGRATION ISSUES

In the case of less qualified migrants the economic benefits for the employers can be expected, since the immigrants should supplement the lack of manpower in the labor market. If there is enough manpower, the new workforce will represent a benefit only for the employer, who can create a competitive environment, thus reducing operating costs. On the other hand, there are locals that suffer because employers can decrease wages. The state itself will suffer, because of the reduction of revenues to the budget and because they get fewer funds from taxes and contributions. Another economic dimension of mass migration is the length of time needed to get returns on funds invested immediately after the apprehension migratory flows to the country. The cost structure mainly includes the initial costs associated with the arrival of migrants. The biggest amount is spent on the detention of illegal migrants at the state border and its protection. The funds are assigned for the accommodation and food for the migrants. Given the significant majority of economic migrants that will not be granted refugee status according to the Geneva Convention (United Nations, n.d.) and will not obtain asylum, there is a need for funds related to their deportation. Each migrant should be checked by security and intelligence forces in order to eliminate the risk of criminals and terrorist "Sleeper Cells" (Encyclopedia.com, 2009) infiltrating the country. The integration of those migrants who meet the statutory conditions for asylum entails the cost of their education, including the teaching of the language of their host country and the cost of obtaining professional qualifications.

According to information available in the press, gathered from healthcare organizations, a huge part of immigrants suffers from serious, sometimes even fatal diseases, whose treatment consumes considerable financial resources (Express.co.uk, n.d.).

The hosting states provide accommodation, at least until the immigrants become financially independent. They are also provided a regular non-repayable grant, the amount of which differ from each other depending on the state of the economy of a particular Member State. For example, Germany provides to each immigrant

670 euros monthly, from which the immigrants do not have to reimburse the expenses for accommodation and meals, as they are provided free of charge by the German Federal Government. For this purpose, the Federal Government provided of about € 3.7 billion (Sputniknews, 2015).

The intensive increase of the number of migrants in Germany causes a problem in the continuity of the registration of asylum, processing of applications, as well as in providing food and accommodation. In many places, the accommodation facilities may be only temporarily available for unexpected needs. The successful economic integration of migrants, who wish to remain in Germany, requires investments in the following three areas:

1. Accommodation: The lack of accommodation capacities in big cities will continue to increase. Therefore, Germany has stepped up the construction units and also takes the

initiative for the effective use of free accommodation facilities for immigrants.

2. Schools and day care centers: A large number of underage migrants will increase the number of students in the medium term. They need the education to be satisfied. This calls for more investment in education infrastructure and additional expenses for teachers and support staff.

3. Human resources: Germany, according to its representatives, depending on the targeted immigration of skilled workers to mitigate the decline in the working-age population. The intention of the German Government is purposefully investing in human capital as the knowledge of the German language, systematic identification of the skills and appropriate measures in education are essential prerequisites for successful integration into the labor market (Leifels & Zeuner, 2015)

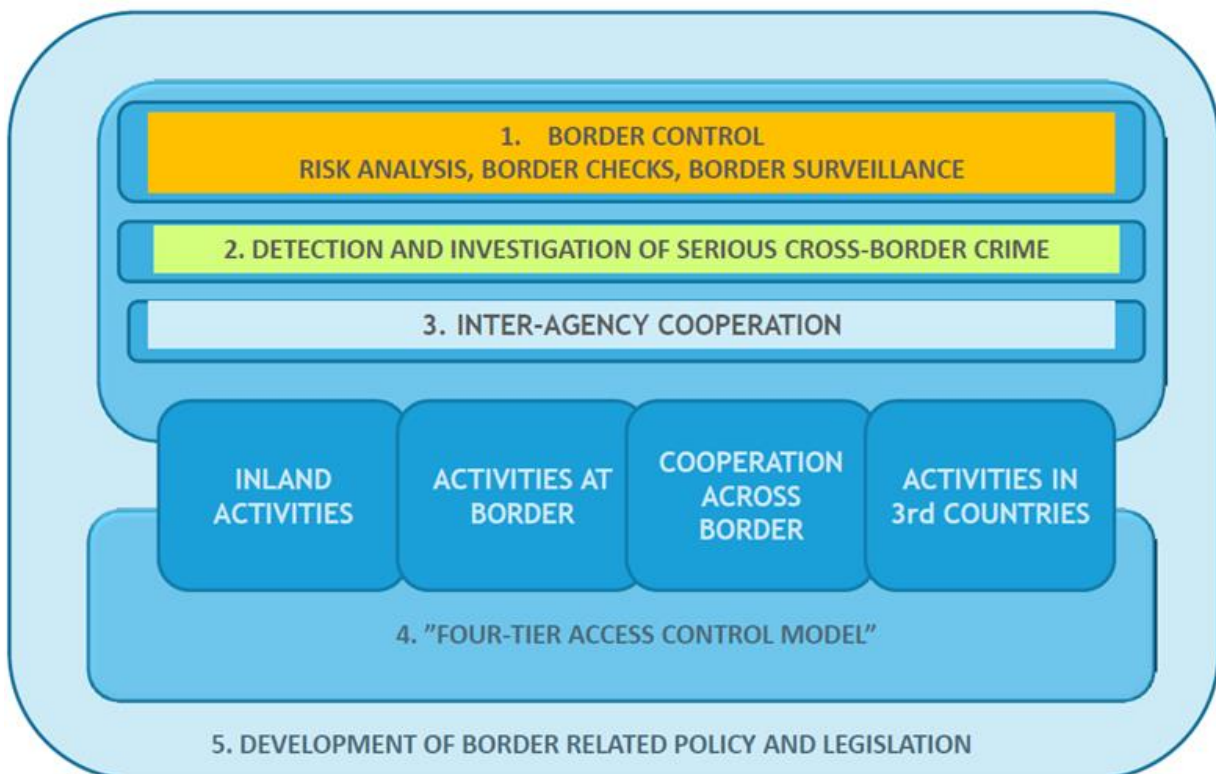


Figure 1 EU concept on Integrated Border Management (IBM)

Source: (Suchanek, 25. – 27. 08. 2015)

In connection with the arrival of immigrants in Europe, we more often than before notice about the public order violation, as well as a significant increase in violent crimes, especially of a sexual

nature (DailyWire, 2016). The high increase occurred in the number of crimes against property, mainly theft, and robbery (Corcoran, 2016). However, the relevant statistics are currently not

available, as to investigate these offenses creates a hardship because the law enforcement proceedings are often under political and media pressure. This also implies difficulties in quantifying damages caused by committing this type of crime and the impossibility of proving a negative economic impact. Perhaps the greatest financial burden will deal with crisis situations caused by migration from the Middle East, by providing financial grants to Turkey amounting to three billion euros (Reuters, 2016). Although representatives of the European Union (Jean-Claude Juncker, Donald Tusk, and Federica Mogherini) are convinced that the agreement with Turkish President Erdogan will be signed, Turkey increased its demand by another 3 billion (Reuters, 2016). The content of negotiations between Turkish President Erdogan, the European Commission president Jean-Claude Juncker and European Council President Donald Tusk of 14 .11.2015 in Antalya the administration of both sides refused to publish and comment.

The mandate of the cooperation of the national border guards securing its external borders belongs to FRONTEX (Established by the Council Regulation (EC) Nr. 2007/2004 as of 26 October 2004). FRONTEX strengthens border security by ensuring the coordination of Member States' actions in the implementation of Community action in the field of management of external borders, see figure 1. The most important task and crucial activity of FRONTEX in the last two years have been mainly the elimination of illegal crossing of the Schengen area external borders by immigrants coming from Africa and the Middle East. The activities of FRONTEX are funded by the European Union. For the year of 2015, 114 millions of euros have been allocated. The statistics of cases where the Agency recorded illegal migrants crossing the Schengen area over the period 2009 - 2014 are shown in the following figure:

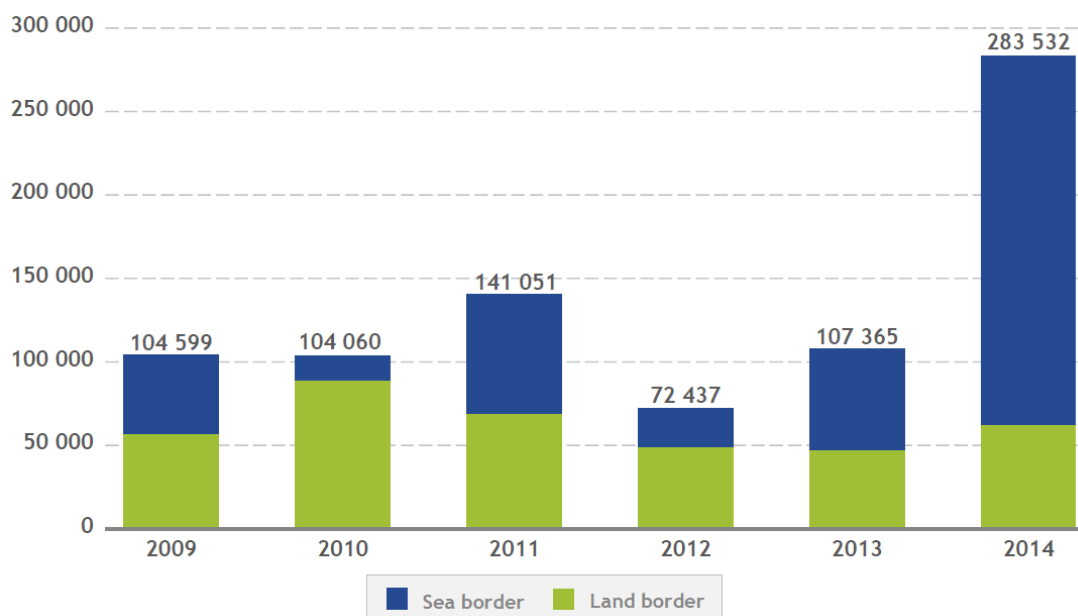


Figure 2 Illegal border crossings 2009–2014

Source: (Suchanek, 25. – 27. 08. 2015)

As it is seen in the figure, the combination of effects, such as the military conflict in Syria and desperate living conditions in the Middle East and Africa have launched the immigration wave of unprecedented proportions in recent years. The number of migrants in 2014 nearly tripled comparing with the previous year and more robust growth is expected for 2015.

There are also opposing views on the economic impact of the "invasion" of immigrants represented. Analysts and representatives of various international institutions provide statements and process studies that show the economic benefits for the EU Member States. In September 2015 there was a study written by economic analysts of the World Bank

Massimiliano Cali and Samia Sekkarie published, using the comparative method of arguments in favor of current immigration (Cali & Sekkarie, 2015). In their article, they reported that 513 580 applications for asylum were filed in the European Union as of July 2015 (Including the inhabitants of Syria and other countries). Since January 2012 this number reached the level of 1.9 million migrants, representing 0.37% - of the share of the total population of the European Union. During the same period, Lebanon registered 1.1 million immigrants, representing one-quarter of Lebanon's population. Under this instrument, the European Union should take 127 million migrants. Even if the European Union followed the example of Turkey and integrated "only" 2.6 percent of its own population as immigrants, would allegedly easily solve the problem by integrating 13 million of the total 14.4 million refugees registered by UNHCR. In terms of impact on the economy, analysts demonstrated 2.5% growth in the economy. A similar scenario was presented by the example of Jordan that accepted 630,000 refugees from Syria (Cali & Sekkarie, 2015). The paper reports that Lebanon benefits from refugees by the increase in the demand for local services offered, financed partly from their own savings, remuneration for work performed, the contributions of the family sent from abroad, as well as material assistance from international humanitarian organizations.

Based on a recent World Bank report it estimated that each percentage increase in the number of refugees in Lebanon increases the export of services in Lebanon by 1.5 percent. UNHCR and the Development Program of the United Nations (U. N. Development Program) expect the similar result from 800 million US dollars that the United Nations sends each year to Syrian refugees in Lebanon. The study compares a similar economic effect that was reportedly observed in Tanzania, which in the nineties accepted war refugees from Rwanda and Burundi. The report also seeks to meet the concerns of European Union citizens, that number of immigrants has caused a significant drop in wages in Europe. A recent research carried out in Turkey reportedly showed, that although Syrian refugees – the majority who do not have work permits, pushed out of the labor market untrained workers and part-time employees, also created more jobs outside

agriculture, and increase the average wage for Turkish workers. Moreover, the many Turkish workers who have been forced out of the labor market returned to study and thus created the potential to increase their wages in the future. The research provided the similar output also in the case of Jordan, where on the territories populated by Syrian refugees they found jobs in sectors with no special requirements for skills and qualifications, as these jobs are not popular Jordanians. The authors of the study also pointed out the considerable financial burden that immigrants already represent to the economies of the European Union Member States, and the current development of the situation does not offer optimistic prospects for its improvement. Nevertheless, the study tries to point out that although this is a large sum of money, there is no indication that this expenditure would endanger the fiscal sustainability in the European Union. The authors again operate with the arguments from Turkish example, which reportedly invested in migration camps more than EUR 5.37 billion since the arrival of the first immigrant from Syria. In the end of the report, the authors point to the obligation of countries of the European Union to be more sympathetic to refugee issues where willingness to accept migrants would be presented as a sign of goodwill and humanity. They also stress that with proper planning the European Union can take much more immigrants than before (Cali & Sekkarie, 2015).

### 3 IMMIGRATION AS THE AID TO REVERSE THE TREND OF POPULATION AGEING

Studies of population trends indicate that the global median increase from 26.4 calculated in 2000 to 36.8 expected in 2050 (United Nations Population Division, 2003).

Public attention in the global scope currently focuses primarily on the aging population in developed countries. Research and forecasting population trends, however, show that population aging does not concern only the developed countries but sooner or later aging will expose the population of all nations. The table below shows the representation of population growth on a global scale published in the Report of the United Nations.

Table 1 Average annual growth rates of the total population and the population in broad age groups, by major area, 2000-2050 (Medium Variant)

Major area	Age group				Total population
	0-14	15-59	60+	80+	
World.....	-0.04	0.72	2.29	3.39	0.77
More developed regions.....	-0.26	-0.32	1.06	2.24	0.04
Less developed regions.....	-0.01	0.92	2.79	4.20	0.91
Least developed countries.....	0.99	2.19	3.24	3.90	1.84
Africa.....	0.78	1.98	3.03	3.85	1.64
Asia.....	-0.28	0.63	2.61	4.06	0.70
Latin America and the Caribbean.....	-0.36	0.70	2.98	4.09	0.78
Europe.....	-0.62	-0.71	0.81	2.08	-0.28
Northern America.....	0.30	0.49	1.65	2.39	0.70
Oceania.....	0.06	0.66	2.02	2.83	0.78

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2003)

Heller (Heller, 2003) demonstrate this trend on the example of the United Arab Emirates, which is expected to increase the proportion of older people in the population from two percent to 28 percent by 2050.

The following chart shows the trend of population growth ratio of developed and developing regions:

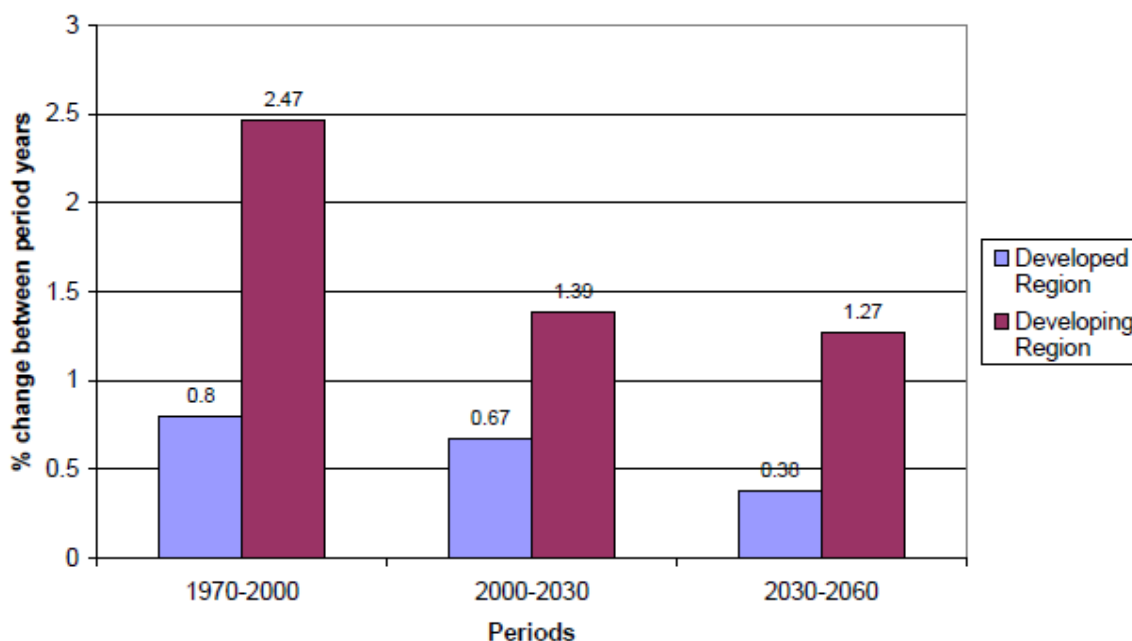


Figure 3 Population Growth Rates in Developed and Developing Regions

Source: (Tosun, 2009)

A significant consequence of the aging population is increasing fiscal pressure to lower government spending on social security, healthcare, and other social expenditures. These measures are necessarily resulting in a reduction of spending of government for youth. Labour mobility has a dual effect on the economy. Apart from the direct contributions of young migrants into the country's economy as workers, their contribution is also accomplished indirectly through collecting

savings. In connection with the integration of immigrants in Europe, today is relatively rarely mentioned the impact of immigrants on the political scene. The voting right of immigrants in the future can influence policy shifts and decisions with significant impact on the programs of the government, such as education, which can have profound effects on the well-being and the economic growth (Tosun, M. S., 2005).

## 4 CONCLUSION

People that are granted protection under international law, often have difficulties with the integration into the community and finding adequate support and living conditions. In the target countries are mostly also other obstacles, such as the lack of professional and language skills, which are a prerequisite for successful integration.

The author describes the challenges of an economic nature which the European Union has to face in connection with the immigration crisis. In order to address the immigration crisis, it is necessary to perform a number of measures, the financing of which is covered by the national budgets. Measures are connected to the border security of the Schengen area and related security measures. Later, during the implementation of the asylum procedure, there are by other measures performed in relation to the integration of immigrants.

The author confronts his opinion on the economic aspects of immigration into the European Union with the views of representatives of international organizations that believe in the economic benefits and disregard the economic burden. According to the opinion of the World Bank's economic analysts, the main benefit of the immigration crisis is boosting the economy by employing young workers - immigrants who will increase the consumption of goods and services. The government will benefit from the taxes and contributions to the state budget. The second most serious benefit is the rejuvenation of the population of the European Union.

The current European immigration issue is very complex, and it requires a proper assessment of risks and the implementation of suitable security, economic and social measures to make the integration process beneficial for immigrants and the European Union as well

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# RHETORICAL ASPECTS OF ECONOMIC ANALYSIS

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## Abstract

*With the growth of knowledge, the theory is becoming more complicated, which reduces the opportunities for their rational and accessible presentation. Research of the phenomena in the development, it engaged a large number of scientists. There are different positions about nature, principles, and approaches on the rhetoric of economic analysis. But what is the result of its rapid development? - The answer is not unequivocal. Disclosed are the majority of the patterns on the economy. This, unfortunately, does not create sufficient conditions for conflict-free and sustainable development. There are many reasons, but one of them undoubtedly lies in the shortcomings of public speaking at the presentation of economic analysis. The practical implementation of the conclusions of the economic analysis is based on the subjective choice that can be manipulated. This means that not only adjusting the subjective choice, but also the behavior to achieve certain objectives is the purpose of speaking.*

**Keywords:** Economics analysis, rhetoric, manipulation, argumentation impact development

## 1 INTRODUCTION

At the beginning of the XXI century, it seems that everything is discovered, analyzed and systematized. It remains only better to understand and apply in practice. Unfortunately, this is not so. With the growth of knowledge is complicated theoretical, and this reduces opportunities for their rational and accessible presentation. Research of the phenomena in the development engaged a large number of scientists. There are different positions about nature, principles, and approaches. But what is the result of rapid

development? - The answer is not unequivocal. Disclosed are the majority of the patterns on the economy. This, unfortunately, does not create sufficient conditions for conflict-free and sustainable development. The reasons are many, but one of them undoubtedly lies in the shortcomings of public speaking at the presentation of economic analysis. The practical implementation of the conclusions of the economic analysis is based on the subjective choice that can be manipulated. At the same time established a rule that the specific characteristics of the processes are considered a priori to known and established practice. This undoubtedly is concept error, but along with it is conscious or unconsciously sought compromise outcome.

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## 2 RHETORIC AND MANIPULATION

One means of adjusting the subjective choice, but also the behavior to achieve certain objectives is speaking. This function of rhetoric has accompanied the entire history of mankind. The importance of public speaking increases with changes in social environment. At the same time, the role of the rhetoric is changing with the growth dynamics of the development and complication of social processes.

In recent years we have seen a worse talking about the economy. The reason for this should not be sought only in negativity and incompetence on the part of the speakers, but in discarding the economy, and the rhetoric of the dynamics and needs of society. We need to change attitudes towards the development and application of these sciences in practice.

It is necessary to develop and define new approaches and techniques for the integration of modern economic analysis and rhetoric. Such unity can be achieved by revealing the fundamental processes of economic development and the role and place of rhetoric and speakers in them (Petho, 2005). The foundation of this concept is revealing interdisciplinary connections and dependencies and includes a wide range of knowledge from other sciences in the organization of public speaking. This is especially useful for the formation of a large number of models for the analysis of different objects. And also for the presentation of rhetorical argumentation as a major factor for the integrity of social systems, which are subject to economic analysis. The topicality of the issue of the social importance of argumentation in the modern world is growing as a consequence of the growth of the role of information technology. Information society imposes increasingly clear presentation of arguments on various points, especially in terms of economic development.

The main tasks that need to be addressed can be summarized as follows:

- Analyzing the problems of theories of rhetoric and economic analysis in order to highlight the impact on public awareness through public speaking appearances, the formation of public value systems, as well as particularly topical

aspects of rhetorical theory as communicative and its impact on economic development.

- Develop an algorithm to analyze the rhetorical events, which make it possible to study complex arguments and their structure and place in the economy.
- Study of the linguistic means for forming images of economic development in the rhetorical works.

## 3 SOCIAL COMMUNICATION AS A TOOL OF ECONOMIC ANALYSIS

These tasks can be solved by integrating logic analysis with the analysis of discourse in the study of rhetorical arguments for presentation of economic analysis. Public speeches are directed not only towards the creation and preservation of social norms but also to change and update of reality. In this sense, the rhetoric has the function of an organizer of social communication, without which it is impossible economic development. Especially important are communicative aspects in the process of argumentation that should be seen as a form of communication.

In modern language, the word "rhetoric" is often loaded with bad sense. It usually refers to "empty speech" by politicians or traders who want to deceive the voters or customers, using well-represented discourse in order to conceal the truth and manipulation.

This is only part of the truth about rhetoric because the way in which researchers present their work is almost as important as the content itself. Argumentation, which is a structural element of the rhetoric is widely used approach for the communication of science, so that they can be understood and others to benefit from them. In this sense, the art of argumentation is essential for the development of knowledge through scientific communication. The rhetoric here can be defined as a motivated way to argue that gives clarity of meaning and arguments. Thus the rhetoric becomes part of scientific inquiry, says McCloskey (McCloskey D. N., 1983) Key features of communication are standard. These are words or tools that are understood and accepted by the community. According to McCloskey (1998): "Even in the most narrow technical issues economists have shared beliefs about what makes a strong argument." This means that the

scientific community of economists has developed standards for what is a convincing and unconvincing argument. A problem arises when these standards are used to justify insufficiently studied phenomena or to communicate with poorly trained specialists.

For example: In the rhetoric of economists, quantitative methods are the most widely used, i.e. everything is written in numbers, it is clear and true. This perception, however, is often wrong. The problem is that numbers are important just because people give them meaning. Two is a lot or a little, depending on what we're talking about. The brain thinks about it by its relative value. I.e. two, in our case, counts only as something the brain refers to the process of comparison and reference. The question: "How big is big?" No one can answer. Mathematics without the brain that controls the mathematical tools is useless. According to McCloskey, the economy, and in particular econometrics, have made a big mistake they have placed mathematics before rhetoric in importance. Fetishization of mathematics transforms economic rhetoric in the pseudoscientific ceremony. At the core of this transformation stands the replacement of scientific relevance with statistical significance. „It seems that economists want to explain what is happening in a world that can be formalized, not in the real world." (McCloskey D. , 1998)

"The rhetoric is a system of practical tools for impact." In the politics, as professor writes (Aleksandrova, 2012) "Public opinion is influenced by discussions of truth, morality, and justice, but neither their result nor under their control." But discussions about the economy do not lead to the same result. Here the main parts of the economic performance are the result of public opinion formed by public influence and in many cases, through manipulation.

We will analyze the rhetoric of some of the leading economists and politicians in the world. Changes in the economy have rarely been predicted and often were not recognized until they happen. Economists are divided into two groups: those who cannot know the future, but they think they are able and those who recognize the "inability" to do so. In rhetoric, both economists and politicians (speaking of the economy) is a characteristic combination of rhetorical figures between them

and combining them with arguments and psychological mechanisms in the communication act. The first models of social communication appear in the rhetoric. Aristotle rhetorical model emphasizes the role of the speaker, who through his speech must convince the audience in the power of their arguments.

In the model of Shannon and Weaver (1949), along with traditional elements in the process of direct communication has introduced a new element - noise. The introduction of noise in the process of communication is linked to the idea of the factors that can modify the message. Noise can be physical (related to the characteristics of the physical environment in which unfolds in communication) or semantic (caused by the action of a variety of psychological obstacles in the process). For the purpose of our study, it is important primarily semantic noise, which is determinative of the outcome of the impact of economic rhetoric.

N. Wiener enriched data model of Shannon and Weaver with a new, extremely valuable component - feedback that indicates how well understood the message. Feedback is an indicator for how the rhetoric supports the process of shaping opinion in the audience and decision-making.

In the rhetoric of economists, rhetorical figures are not very widely used. Here dominates informative function of speech implies reduced application of verbal decorations and clear, concise and accurate expression. Attracting and retaining the attention has been achieved through effective use of rhetorical figures before or after the rhetorical arguments.

In contrast to the rhetoric of economists, in political speech, the speaker does not allow communication barriers and misunderstanding of what it says. "The political rhetoric has the opportunity to reconstruct the political reality for members of the audience, based on which they make decisions and act in accordance with them." (Aleksandrova, 2012)

Rhetorical effect on political speech for the economy has not a momentary effect, but the result of planned and prepared communicative strategy. High frequency of use of figures that do not lead to difficulties in attending to decode their

meanings. Preferred the figures that create the impression of a dialogue with the audience.

#### 4 ECONOMIC RHETORIC AND SOCIAL DEVELOPMENT

Unfortunately, is widespread bad practice to offer intuitive models for economic development with the tag "rational". The reasons for this are the result of "rational wave" when mathematical modeling, computerization, and Automation of the process were accompanied by expectations that they will solve "all" problems. Scientists and managers who launched the economy based solely on the qualities of economists and social communication missed several important events:

- Much of the activities (processes) really become more technical and thus rationalized, but partially. These activities are already "scored" in "rational technological frameworks" and economists are now depending on them, whether they recognize it or not.
- Because of the more technical take place partly the use of these revolutionary areas (e.g. information provision) for now does not give the expected results. Understanding this problem is of key importance. The paradox is that this "more technical" rational part, even when it is the reason for conducting higher costs, there is no need be waived and that no longer is possible.
- Later it understood that technological approach cannot be applied to all processes in the economy.
- Directly related to the above problems is to understand the simple fact that in society there are processes that can be strictly formalized technical, mathematical and other means, and those not subject to exactly describe and "technology provision." This does not mean that they cannot define a technological sequence to form models, rules, techniques, principles.

It is high time economic rhetoric to recognize that society is dynamic, evolving system. Its completeness is an integral and not a result of mechanical parts collected. These simple truths already understood by all. It remains to be the basis of the real scientific explanation of phenomena and be part of the essence of

economic and rhetorical practice using their ability to influence social development.

- Society is an appropriate functioning system, which requires development issues to be considered by the following items:
- Social development does not take place in some imaginary social space. It always is realized through structural configurations with certain properties and certain mechanisms of influence.
- Society originated as a natural phenomenon but is increasingly subjected to the artificial impact of the person.
- The systemic essence of society presupposes the existence of row. The order is impossible without structures organized so as to ensure the functional essence in the way of social communication. The order also represents clear objectives arising respectively appropriateness of social activities; determine the parameters and the way to achieve their goals through planning, design, construction, regulation, resource provision.
- All the above actions are the essentially subject of rhetoric; the main task is to build a society that is stable, predictable, with a clear orientation and sustainable over time.
- Because of the inevitability of social transformation, rhetoric should support processes are under control and conflict-free transition with minimal losses. The other alternative is confusion, apparent row with ambiguous results, lack of logic and sense unclear orientation

Regardless of the dynamics of social development and the changing environment, the effectiveness of economic rhetoric as an instrument of transformation depends on the stability of society. An important condition for this is to cover unity "all" factors that determine sustainability. The impact is most often based on concrete objectives that are not included in a single system that reflects the integrated features of society. This leads to a variety of criteria divergence in action, rude practicality and subjectivity and lack of unity in solving practical tasks.

From the above, we can conclude that we need serious thought and pre-depth study to proceed with the preparation of arguments in determining the approaches and objectives of social

development. In other words, they must present arguments to convince the audience, regardless of its heterogeneity. The task is complicated, given also that the arguments used in the economy by them are tendentious and stochastic, and are not necessarily correct and true. For example, "Free trade is good" and "Taxes reduce the production" are statements that many economists dispute. Some economists argue that they are 60% correct, and some 90%... The heart of the argument is Enthymeme how economist defends probability of 60 or 90 percent as "true enough".

The purpose of economic rhetoric supporting social development does not just understand the arguments and their improvement. The ability to improve through further development is actually practical freedom. The achievement of this freedom is not easy; the secret is communication in which actors should engage more frequently.

Many of the arguments in the economy are difficult to "takeover". However, there may be good reasons to think that the reasons for an argument are in fact unreliable. Or you could simply think that the speaker is an untrusted because retransmit foreign claims. The effectiveness of the reason or the type of evidence depends on the audience and what it generally is convincing.

The persuasiveness of the argument depends on the parts of ethos (character, personal prestige, and reputation) of the speaker and the expectations of the audience. The first step of the speaker is to create its ethos. Experts build ethos by publishing original research in scientific journals and books, as well as lectures on senior appointments. The next step is to introduce the works of the best economists studying the arguments that they find compelling and on this basis to create their own arguments. The argument should not be based solely on emotion. Clarity is needed to be based both on their own values and interests, as well as the values of others.

Economists use the terms "positive" and "normative" in order to distinguish between "what is" of "what should be." They cannot refuse to accept the world as both positive and normative. There is no such thing as a single point of view, which is... Lack point of view! Usually, one perspective is "I do not like ... Something or someone" and argumentation is built solely on not

liking. Positive statements point out the facts, and can, in theory, be checked. One fact can always be checked, and then decide whether to support a statement or not. Such statements are true - in the sense that the facts are consistent with the statement or false - in the sense that it did not support the allegation. Normative statements express value judgments. This is about opinions, which usually cannot be verified.

Normative statements relate to morals and ethics and they are often used or given words and phrases such as "should" and "would be good." We cannot check the facts in order to decide whether the statement is true or not. Decisions on whether to accept a normative statement or not, form the basis of economic policy and often made on the basis of political values.

Discovering the positive and normative reasoning in direction, facilitates and simplifies talking about economics, but that makes it even more important need for a clear separation of these strands in the argument. Normative conditions tend to dominate discussions where people try to imagine what they want. Positive discussions tend to dominate among scientists because they want to understand how the world works, and believes they do not come in finding regulatory issues.

This is just one example, but sufficiently indicative of fragmentation systematic talking about the economy. The social development suggests economics speakers speak in positive statements and conditions and to refrain from apparently legal advice unless you are asked for them. So, economists should think of themselves as therapists of society (by talking about treatment not acquire the feeling of being sick themselves or through their impact not sick other healthy until then). This does not mean that normative discourse should be ignored completely. The systematic approach requires a combination of positive and normative in the economy to ensure sustainable social development.

## 5 CONCLUSIONS

From the above here are the following conclusions:

- Compression of the problems in the late 20th and early 21st century is the result of

- misunderstanding the global nature of the social system. This leads to continuous attempts with fragmented solutions.
- Neoliberalism in economics, argues global solutions based on local arguments, it only leads to further problems. Moreover, results in the creation of new, unknown until now problems that result from the destruction of the welfare state.
  - Economic crises are so clean that you can speak of a continuous crisis since 1987, which could not be stopped with "revolutionary" economic transformations in the post-Soviet space, despite the hopes of many apologists of neoliberalism.
  - Economic rhetoric, despite the efforts of economists and politicians, fails to present the methods and approaches in a sufficiently convincing manner neither decision-makers nor ordinary citizens. This is confirmed by examples that are given by one of the top economists and leading politicians. Their speeches are "lean" on to argument here include both species diversity of arguments and their substantive characteristics.
  - Speaking Economists and politicians are close to each other, and as this process deepens it becomes a sign of hopelessness. This has another consequence: in the modern language, the word rhetoric is often loaded with bad sense. It usually refers to "empty speech" and well-presented discourse is to hide the truth and manipulation.
  - The economic performance increasingly is the result of public opinion formed through public action and in many cases, through manipulation.
  - Increasingly offer intuitive models for the development of the economy as they put the tag «rational»
  - Still not understood that the integrity of the social system is an integral and not a result of mechanical parts collected. The impact is most often based on concrete objectives that are not included in a single system that reflects the integrated features of society. This

has serious implications for social development.

- It needs depth study prior to proceeding with the preparation of arguments in determining the approaches and objectives of social development. The task is complicated, given also that the arguments used in the economy by themselves are tendentious and stochastic, and are not necessarily correct and true.
- The probability of the argument depends in part on the speaker's ethos and expectations of the audience, they increasingly difficult to synchronize, because of problems in both countries.
- There is fragmented, unsystematic talking about the economy. The systematic approach requires a combination of positive and normative in the economy to ensure sustainable social development

It is known that nothing remains permanent and unchanging, eternal is the only change. It may be the very dangerous application of theory, which is not consistent and does not reflect the true state of society. And between the state of society and economic development, there is a special kind complex causality. Only adequate analysis and presentation of economic problems can contribute to the accelerated and efficient development of society. But in the course of this development is changing as content analysis and public representation. For this reason, any theory including and the economy has and will have its historical limits within which it adequately reflects its object.

The more the economic analysis is released by its function to explain social systems and increasingly developed function of a factor for the development of society. More often will be forced to "adapt" to changes and ever will be a short historical time of the existence of theory-object of speaking.

All described problems here are classic, but needed new tools to solve them. Economic development and the impact of rhetoric on these processes should lead to a common future based on resolving contradictions, not the future, programmed by some people with a tolerance for "use" of all.

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# AN OPTIMIZATION OF THE FINANCIAL RESULT BY THE PRICE ELASTICITY OF SALES METHOD

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## **Abstract**

*Nowadays, companies operate in conditions of market economy. These market conditions, although providing entrepreneurial freedom and opportunities for initiative, in their deepest essence are too vague and dynamic. This uncertainty is further exacerbated by the growing globalization. In such an economic environment, it is imperative that managers objectively assess and manage their business. The financial results of sales are key business indicators to assess the business activity. The latter is determined by various factors - direct and indirect. Revenues from sales are one of the direct factors. The magnitude of these revenues is determined by both sales volume and sales prices. In this regard, the selling price, as one of the determining factors regarding financial results should be subject to ongoing research by management. This study examines the method "price elasticity of sales" as one of the important tools for economic management. This is a method that provides the capability to optimize the ratio of "price – sales". Optimizing this ratio regarding specific products ensures maximum profit and increases the profitability of the enterprise. Continuous analysis to determine the elasticity of specific products in respect to their price suggests also the implementation of an adequate pricing policy. This study presents not only the analysis methodology but also an exemplary case study demonstrating the application of the model of the price elasticity of sales. The conclusion of the report highlights that maintaining optimal ratio between price and sales volume is a key factor to improve profitability. The dynamics of market factors requires that the elasticity of products should be continuously monitored and targeted corrected.*

**Keywords:** Optimization, financial results, management, price elasticity of sales

## **1 INTRODUCTION**

Market conditions, within which the business operates today, are characterized by competitiveness, dynamism, and uncertainty. In

such an economic environment, it is imperative that the managers objectively assess and manage their business. A key indicator of business activity assessment within a given reporting period is the financial result of sales. The positive financial result of sales (profit) leads to an increase in equity of the company. In this sense, profit is the main inner source of funding regarding new long-term

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investments of the enterprise. In this connection, the greater magnitude of profit is, the less the need to involve more expensive external capital sources is. This enables the company to finance itself.

The financial result is indirectly affected by the selling price of the product or service that a company offers to the market. The selling price, along with sales volume, determines the value of sales revenue. Achieving an optimal balance between the two factors - revenue from sales and selling price ("price-sales") would result in the desired financial results. In this regard, the selling price as one of the determining factors regarding financial results should be subject to consistent study by the management.

Certainly, the business activity is unthinkable without the usage of techniques and technologies for the study of price, as it ultimately makes a profit. This determines the desire of management to optimize the price, which on its part would lead to optimization of the financial result. Achieving optimal financial result requires a precise analysis of the effect as a result of the increase or decrease of the price.

The pricing of products within a competitive market environment, there are two aspects - this of the company and another of the market. When considering the company (corporate) aspect, the price is formed on the basis of costs (productive and commercial) and adding the desired norm of profit or rate of profitability (or on the basis of the critical point). From the point of view of the market aspect, the price is highly dependent on market behavior, i.e. on the demand and supply. From the economic theory, it is known that the demand, respectively the sales, are heavily dependent on the price with an inverse relationship. The relationship between the volume of sold products and their prices is determined by the impact of market factors. Normally, the prices increase is accompanied by a reduction in sales and vice versa. This dependence of sales on prices is not identical concerning various types of products within the market. For some products, this dependence is very clear, while for others - it is weak or even does not exist. The intensity with which sales respond to changes in price can be measured by the so-called *Coefficient of price elasticity of demand*.

The irrefutable fact is that the demand is influenced by a number of variables, but the change of products prices is the most important one. This is the reason for the presence of a great interest to this variable. This is because if the reduction of price increases the demand it will be very important for company management to know how high sales' increase will be at given price reduction, e.g. 10%. The answer to this question gives the index *Coefficient of price elasticity of demand (also Price elasticity of sales)*.

The present report examines the method "price elasticity of sales" as one of the most important tools for economic management. This is a method that allows optimizing the ratio "price - sale." Optimizing this ratio regarding specific products ensures maximum profit and increases the profitability of the enterprise. The continuous analysis to determine the elasticity of specific products to their price suggests the implementation of an adequate pricing policy.

The main purpose of the report is to show the importance of the rational pricing of products (material or nonmaterial) to achieve desired business results. The pricing policy of the company is an integral part of corporate and marketing strategies for the development of the company and as such is very important to be reasonably managed.

## 2 THEORETICAL ASPECTS OF THE METHOD "PRICE ELASTICITY OF SALES"

Knowing the market conditions, as well as the right understanding of price elasticity of sales has a crucial role in implementing successful business. This would help management to show flexibility in pricing of products.

Measuring the rate at which the sales respond to changes of price is done through the coefficient of price elasticity of demand ( $E_d$ ) (Savov, 1999, p. 33).

$$E_d = \frac{\Delta q \times 100}{\frac{q_0}{\Delta p \times 100} p_0} \times (-1) = \frac{\%q}{\%p} \times (-1)$$

where:

%q - percentage change of sales volume for a given period of time;

%p - percentage change of production price for the same period.

There are generally four types of products depending on the magnitude of the coefficient of price elasticity of demand:

- *First group* - lacking elasticity (the coefficient is zero);
- *Group Two* - inelastic (the coefficient is less than one);
- *Third group* - normal elasticity - (the coefficient is equal to one);
- *The fourth group* - elastic (the coefficient greater than one).

Products with lacking elasticity (first group) are characterized by the fact that the volume of sales is keeping the same regardless of the price change. Regarding inelastic products (second group) - the price changes affect very slightly on sales, i.e. customers are less sensitive to price. For this group of products, the price increase with a greater percentage (e.g. 40%), leads to a reduction of sales with a smaller percentage (e.g. 10%).

In the case of products with normal elasticity (third group), every price change (e.g. 5% increase) corresponds to an equivalent change of sales inversely (in this case - 5% decrease). Elastic products (fourth group) are characterized by the fact that the sales volume is very strongly influenced by changes in price. It could be said that customers are highly sensitive to the price. A minor price increase (e.g. 5%) would lead to a significant reduction of sales (e.g. 23%).

Knowing the type of offered products, managers can better manage the financial result in their desired direction. Since the elasticity determines the effect of price changes on the total revenue from the sale of production it is necessary to know of the relationship between them. In general, the correlation between price elasticity and total revenue can be interpreted in the following way:

- Inelastic product and total revenue - regarding inelastic products, if the price is reduced, the total revenue is also decreased. In this case, the company has an interest to increase the price.
- Normal elastic product and total revenue - concerning normal elastic products, in the

case of price reduction, the total revenue remains unchanged. In the interest of the company is to maintain a stable price, because if it is decreased, the volume of sales has to be increased to keep a constant level of the total revenue.

- Elastic products and total revenue - regarding this type of products any fall of the price leads to an increase of the total revenue. In this case, the company has the interest to reduce the price.

When trying to optimize the ratio between product price and sales volume (in order to gain maximum profit) the methodology for applying the method "Price elasticity of sales" can be represented as follows. It starts from the assumption that regarding a particular product a coefficient of price elasticity of demand is determined (based on a preliminary done market research). High values of the coefficient suggest that the optimal price is lower than the base price.

The low values of the coefficient (for elastic products) show the opposite situation - the optimal price is higher than the base one. In the first case, the profit can be optimized by reducing the price of the product, whereas concerning the second case maximum profits will be realized through the increase of the selling price. The following equations are used In order to obtain the percent (ratio) of price adjustment (Todorov, 2003, p. 67).

- obtaining the rate of price reduction:

$$\pi = (q + E_d \times q \times x) \times (p - p \times x) - (q + E_d \times q \times x) \times b - a \quad (1)$$

- obtaining the rate of price increase:

$$\pi = (q - E_d \times q \times x) \times (p + p \times x) - (q - E_d \times q \times x) \times b - a \quad (2)$$

where:

- $\pi$  - an arbitrary value of profit greater than the base one;
- $q$  - sales value;
- $E_d$  - coefficient of price elasticity of demand;
- $x$  - searched coefficient of reduction/increase of price (unknown in the equation);
- $p$  - selling price
- $b$  - average variable cost
- $a$  - fixed costs of the enterprise for the entire period.

### 3 INTERPRETATION OF THE METHOD "PRICE ELASTICITY OF SALES" WITH PRACTICAL CASE

In order to illustrate the application of method "Price elasticity of sales" the following case will be developed and solved:

Company "ABC" Ltd produces product "X". For this product, as a result of a market survey a coefficient of elasticity  $E_d = 4$  is determined. The basic situation at the time of the survey is as follows (Table 1):

Table 1 Basic situation in the company "ABC" Ltd

Indicators	Basic situation
Sales volume (pcs.)	1 000
Selling price (eur)	50
Sales revenue	50 000
Variable costs per unit	25
Total variable costs	25 000
Fixed costs	15 000
Full cost of sales	40 000
Gross profit from sales	10 000

The goal is: maximizing the profit by applying the method of price elasticity of sales. By market research, it is figured out that the coefficient of elasticity of this product is 4. This indicates that from the point of view of the relationship between price and volume of sales this price is not optimal.

In other words, a selling price of EURO 50 does not give maximum profit.

Given the high coefficient of elasticity, it can be assumed that the optimum price will be lower than the base one. Then, an arbitrary value of profit, greater than the base profit, is chosen. Let this arbitrary value of profit is 11 500 EUR. These exemplary data are put in equation (1) because it was determined that the price of the product should be reduced.

$$11500 = (1000 + 4000x) \times (50 - 50x) - (1000 + 4000x) \times 25 - 15000$$

$$200x^2 - 50x + 1,5 = 0$$

In as much as this is a square equation, it has two solutions, i.e. the relationship between the selling price and profit has the shape of a parabola (Fig. 1).

$$x_1 = \frac{50 + \sqrt{1200}}{400} = 0,21$$

$$x_2 = \frac{50 - \sqrt{1200}}{400} = 0,038$$

Therefore, the coefficient of price reduction is defined as the average of the two solutions.

$$x = \frac{0,21 + 0,038}{2} = 0,124 = 12,4\%$$

In order to verify the correctness of the obtained result regarding the coefficient of price reduction some calculations are made (shown in Table 2). In such a way the trend of profit depending on price reduction is studied (on the order of 5% to 20% and  $E_d = 4$ ).

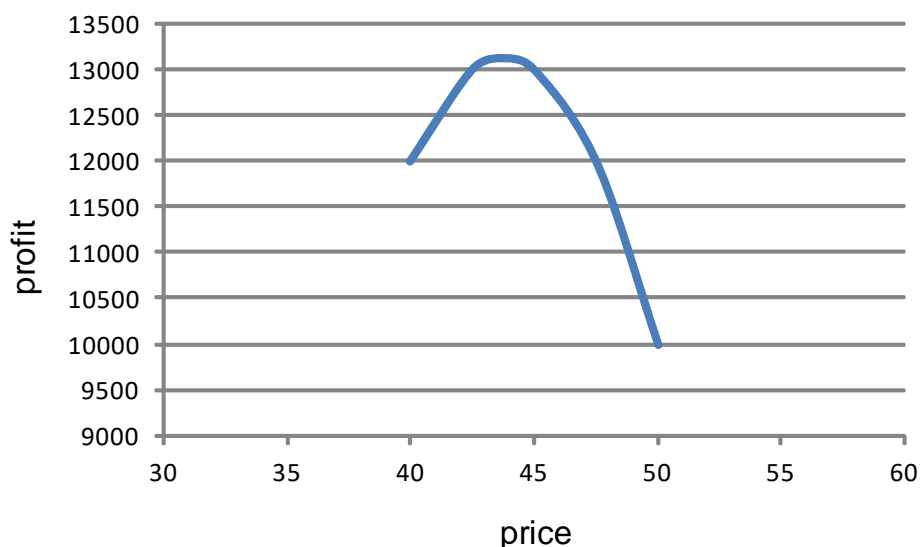


Fig. 1 Correlation between profit and cost by coefficient of elasticity

Table 2 The behavior of a profit by the reduction of price

Indicators	Base situation	Reduction of the price by 5%	Reduction of the price by 10%	Reduction of the price by 12.4%	Reduction of the price by 15%	Reduction of the price by 20%
q	1000	1200	1400	1496	1600	1800
p	50.00	47.50	45.00	43.80	42.50	40.00
TR	50000.00	57000.00	63000.00	65524.80	68000.00	72000.00
b	25	25	25	25	25	25
VC	25000	30000	35000	37400	40000	45000
FC	15000	15000	15000	15000	15000	15000
TC	40000	45000	50000	52400	55000	60000
GP	10000.00	12000.00	13000.00	13124.80	13000.00	12000.00

where:

- q - sales volume
- p - sale price
- TR - total revenue
- b - average costs
- VC - variable costs
- FC - fixed costs
- TC - total costs
- GP - gross profit

For example, at 5% price reduction, the expectation is that sales will increase by 5% x 4 = 20%, i.e. they will be 1200 units. Moreover, the magnitude of revenue will be 57 000 EUR.

At other equal conditions, the total costs will be 45 000 EUR. The profit will increase by 2 000 EUR and will be 12 000 EUR. At the rest percentages of price reduction (10%; 12.4%; 15%; 20%) following a similar way, the increase in sales volume and corresponding profit can be obtained. The data are shown in Table 2.

It is important to know that any price adjustment affects the coefficient of elasticity.

In the considered case, the profit is maximized when the price is reduced by 12.4%. In other words, the optimal price of product "X" is 43,80 EUR, with an initial coefficient of elasticity  $E_d = 4$ .

In view of having a more certain result an additional check could be done:

$$13124.80 = (1000 + 4000x) \times (50 - 50x) - (1000 + 4000x) \times 25 - 15000$$

$$200x^2 - 50x + 3,12 = 0$$

$$x_1 = \frac{50 + \sqrt{0}}{400} = 0,124$$

$$x_2 = \frac{50 - \sqrt{0}}{400} = 0,124$$

The made calculations (discriminantly is equal to zero) show that there is only one solution - a profit of 13,124.80 EUR, which will be implemented in a price reduction by 12.4%. The fact that  $x_1 = x_2$  shows that the point with coordinates (43.80, 13124.80) is the highest point of the parabola.

In economic theory, it is known that empirically the following fact is established - the elasticity of product increases with increasing competition between manufacturers. In this case, with minor differences in the quality of the product, users are attracted to this one with the lowest price. The essential thing is that the company can take advantage of the reverse relationship between price and sales volume only when its production capacity allows it. Otherwise, the reduction of price is pointless.

## 4 CONCLUSIONS

Maintaining optimal ratio between price and sales is one of the main factors to increase the

profitability of the enterprise. The dynamics of market factors requires the elasticity of the products to be continuously monitored and corrected. No rare cases where companies fail to maximize profits due to non-compliance of prices with the ongoing state of the market and its trends. Since the reduction of price can increase the sales, this would impact on the cost price per unit of product, i.e. would increase trade profitability.

The adjustment of price based on the inverse relationship between price and volume of sales

would be possible only if the production capacity of the company allows it. For products where there is no price elasticity of sales or it is very slight, optimization of the price is completely pointless. In such a situation, the company takes the market prices of products for granted. In the end, despite the usefulness of the coefficient of elasticity, its importance should not be absolutized, since pricing is influenced by a number of other factors.

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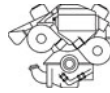
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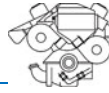
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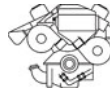
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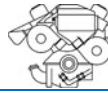
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<b>General comment</b>	
Introduction	
Methodology	
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**SECTION II (continue)** (Click on the box next to the appropriate answer and check in one of the categories, or delete unnecessary in the event that you are unable to check the desired box)

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**SECTION III**

Please rate it from one of: (1 = Excellent) (2 = Good) (3 = Correct) (4 = Poor)

Originality	
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