Managing Global Competitiveness: Impact of Talents on Innovations in Baltic States

The paper discusses the impact of global talent competitiveness (GTC) on managing the regional economic competitiveness. The complex evaluation and comparative assessment of GTC is a basis for effective knowledge resource distribution and investment into intellectual economic policy. Some conclusions concerning comparative evaluations of GTC and their impact on innovations in the Baltic States are presented.

Keywords: managing global competitiveness, evaluation knowledge skills, talents assessment criteria.

Introduction

The impact of talents is rather important when managing the innovative process and, as a result, regional economic competitiveness. Since 2001, the WEF adopted well known series of international comparisons of the intellectual development indices of the states helping to compare their global competitiveness by INSEAD (together with Human Capital Leadership Institute) on knowledge-based economy, such as the Global Innovation Index (GII), Network Readiness Index (NRI, it is interconnected with the Global Information Technology Index), and, last time, Global Talent Competitiveness Index (GTCI) (see Bilbao-Osorio et al., 2013; S. Dutta (2013); B. Lanvin, P. Evans (2013)\(^1\)). The advantage of this system of integral competitiveness indicators used by WEF is their wide
international comparability. Sometimes they are inadequate for more detailed analytical tasks of internal evaluation of regional or sector peculiarities which have necessarily to be accounted when correcting the global results by expert evaluations.

In particular, first, it is important to evaluate the structural changes in the renewed production functions, with the changing productive contribution of the intellectual resources within different sectors and regions. Second, it is necessary to integrate the more important estimates of intellectual resources, talents and intellectual capital into national social accounts. Third, the strategic development insights of the intellectual potential have to stimulate the workout of alternatives, to contribute to the general social and economic transformations and to diminish the emerging risks of innovations.

At the same time, the concept of talent in those interconnected nets is modified and deviated from traditional contents so as it is mostly oriented to human capital or, more exactly, to knowledge skills and the results of their application (innovations), i.e. pillars measured by GII and NRI determinant systems (Buracas, Zvirblis, 2013; Encyclopedia., 2014; Evans, 2011).

The Global Talent Index (GTI) was launched initially in 2007 and developed lately as some background for determining GTCI. The components of talents, innovations, network readiness are overlapping and interdependent to some degree; talents are grown within some family and/or social traditions, cultivated by changing educational systems, and their social significances depend on their successful contacts with entrepreneurship and best practices, also on network readiness. As a result, the global talent potential and its competitiveness strongly depend on partnership between skillful talented people, business, educational system and the government. As it is recognized in the foreword of the study on the GTCI, on the one side: “talent has become the key resource of the global economy”; on the other one: “countries apply very different strategies to develop and retain talent. The result is that some countries are talent champions, others underperformers, and there seems to be a clear correlation with their respective economic and labour market performances” (Lanvin, Evans, 2013).

Most of the countries are practicing the lifelong learning, many of them are promoting geographical mobility of talents what in some cases influence substantially their global national significance. The distribution of intellectual resources between branches and sectors of economic activity is also one of the actual directions of social policy when aiming to ameliorate the impact of talents on economic competitiveness. It is clear that adequate structure of talent potential can be developed mostly by big advanced economies, and the smaller countries have to cooperate when developing and retaining the necessary availability of highly-skilled workers and talent pool. As a result of huge progress in the world global talent potential and modern intellectual technologies’ development, first of all, in the 20th century, the part of world below the poverty line diminished from 52% in 1981 up to 22% in 2008 (Lanvin, Evans, 2013).

The study based on the GTCI estimated that only about 13% of world demand for high talented people will be satisfied in the next two centuries, it is why this approach is so important (Lanvin, Evans, 2013). As a favorably co-affecting process, the business investments in
knowledge-based capital who contributed up to 34% average labour productivity growth in the EU and the US are revealed (Supporting..., 2013).

The result of talents application are innovations or “talent is the engine of innovation” (Ken Hu). World Bank’s Knowledge Assessment Methodology (KAM) framework identifies four pillars to innovation processes: Economic incentive and institutional regime (policies and institutions for the protection of intellectual property, the rule of law, the ease of starting a business, etc.), education (human capital), innovation (universities, firms, and research institutes), and ICT (physical capital).

The GTCI was carefully audited by Joint Research Centre of the EC, also some professionals from the World Bank Institute. So, this approach is an additional effort to clarify some additional methodological aspects when applying the GTCI techniques in particular comparative cases of Baltic States – Latvia (30th place in the global rank out of 103 countries), Lithuania (39th place) and Estonia (23rd place).

The problem of this research is adequacy of the GTC system to contemporary management of the global economic competitiveness of the country and adequate international comparisons.

The object of the research is the international GTC criteria and indicator system, in particular, in the Baltic States.

The aim of the research is how to manage rationally the global talent formation policy as a component of the global country competitiveness.

The tasks of the research are revealing of main measurable criteria, also statistical indicators for the GTC system used by international experts; comparative evaluation of the GTC pillars and indicators for the Baltic States; and some conclusions concerning their reliability and adequacy for amelioration of the resource management in the process of sustainable regional development.

Main Measurable Talent Criteria

The measurement of the GTCI is oriented, first of all, as an analytical tool to implement better human resource management policies. In fact, it is simplified and mostly based on the knowledge and practical experience (training, etc.) to apply productively the necessary high-level skills, or global knowledge (GK) skills. It is substantial if these skills are linked to entrepreneurship, or leadership, and innovation. Other most significant component of GTCI, or indicator parallel for mid-level skills, are the labour and vocational (LV) skills (necessary for employment besides formal training) measured by labour productivity. Both these integrated indicators are substantially dependent from such important dimensions of the Social Progress index as access to basic knowledge, access to advanced education, tolerance and inclusion determinants, also satisfaction of basic human needs.

At the first approach, the GTCI measurement is pragmatic (“comprehensive, action-oriented, analytical and practical”) but, as mentioned, different from traditional meaning of talent as a personal ability to find creative solutions in the unfamiliar situations, realizable potency to find new technological, managerial, marketing, technical and/or other solutions.

According to the study under review, the talent competitiveness input, output and GTCI sub-indices are generated by using multiple criteria evaluation
approach (Metaeconomics..., 2013) The last one is average of the scores obtained on levels of those input and output pillars; input sub-index is determined by institutional enablers for talent development, also other means to attract, grow and retain talent; and output sub-index – evaluates GK and LV skills; as a total, 48 benchmarking indicators were included in the comparative evaluation of the GTCI for 103 countries producing 96.7% of the world’s GDP (Lanvin, Evans, 2013). On the one side, it is also shown that the innovative potential of an individual is not an instinctive feature and essential skills for innovation can be learned. As a result, on the other side, very important conclusion consists in developing of innovation-friendly environment as a substantial component of talent competitiveness.

Talent efficiency and adequacy can be evaluated as a result of more detailed comparisons of real differences and similarities in such main characteristics as dimensions of social and economic policies, cultural and historical development, size of economies, their GDP per capita, regional peculiarities, etc. For example, brain drain of the talents mostly goes from less developed countries to high developed ones, and this migration factor is substantially worsening the distribution and main dependencies within GTCI model. It is clear that global and regional or local range of those indicators usually has to be different, i.e. they must be adjusted in the last cases (Global Talent Risk, 2011; Global Talent Index, 2011).

It is possible to suppose that interactions between the GK and LV skills, on the one side, and innovativeness and competitiveness of the economies, on the other, are mutual: the skills determining talents require to be innovative economy and strong education; but higher levels of the GK and LV skills usually permit to expect the appropriate better ability to growth of economic potential, more innovative and higher-quality education.

### Comparative GTCI Assessment of Baltic States

The global score of the GTCI for Lithuania was 51.21 scores (GDP per capita at PPP – 21,615 USD), for Latvia – 53.93

| GTCI aggregated determinants | Latvia | Lithuania | Estonia |
|------------------------------|--------|-----------|---------|
| **Input**                    | 57.1   | 55.5      | 60.1    |
| Enablers                     | 57.4   | 62.2      | 65.1    |
| Attract                      | 54.3   | 48.6      | 51.6    |
| Growth                       | 52.4   | 49.5      | 53.8    |
| Retain                       | 64.1   | 61.7      | 69.7    |
| **Output**                   | 47.7   | 42.7      | 55.4    |
| Labour & vocational          | 46.8   | 41.4      | 51.9    |
| Global knowledge             | 48.6   | 43.9      | 59.8    |

*Note: all sub-index rankings are between 0 and 100. Expert evaluations for comparative analysis here and below were taken from B. Lanvin, P. Evans (2013).*
(18,255 USD) and for Estonia – respectively 58.5 scores (21,713 USD) (see Lanvin, Evans, 2013). The one of conclusions of the GTCI authors about strong correlation between GTCI scores and GDP per capita is not productive enough in the case of Baltic States global talent competitiveness comparison: as can be seen in Table 1, the differences in levels of main GTCI components were dependent also from many other factors. Perhaps the ways and forms of the skills upgrading and their using, and especially innovative investments of leading neighbours (first-of-all, Scandinavian) countries are of different efficiency in these countries.

The comparative evaluations of expert scoring for all three Baltic countries revealed their most differing institutional and infrastructural parameters (the expert evaluations here and below are based on data presented in Lanvin, Evans, 2013). All output sub-index rankings are on lower level for Baltic countries than their input sub-index rankings but about all of them are at comparable levels with higher significances in Estonia and little bit lower in Latvia and Lithuania (of both last, Lithuania prevailing by most of input factors) (see Fig. 1).

The more detailed understanding of the factors determining the differences in GTCI rankings of Baltic countries may be revealed by the detailed analysis of their revealed pillars. All of them but especially Lithuania suffer from unfavorable emigration of labour resources; also all of them are experiencing the brain drain of the most talented people. The foreign students’ inflow is rather week in Lithuania.

Some hypothesis concerning talents policy could be verified by this analysis, such as T. Hüsing et al. (2013) and K. Kumar, D. van Welsum (2013):

- the countries under review are experiencing the shortage for highly-skilled labour and losing its internal resources in competition with highly developed Western states;
- the finances, marketing, management and ICT sectors are the main competitors for the talented people;
- the ageing population request more young labour services, and that can minimize high unemployment of less-skilled youngsters.

![Fig. 1. Comparisons of GTCI aggregated determinants in Baltic States, 2013](image-url)

*Note: created by authors on the basis of the GTCI expert data.*
The talent impact is resulting measure determined by innovation output (see GII) and new product entrepreneurial activity (% of entrepreneurs producing new products or services). The innovation output is derived from aggregating knowledge and technology output (it covers knowledge creation, impact and diffusion) and creative output (the last one includes creative intangibles, creative goods and services and online creativity). The knowledge creation itself is measured by such parameters of inventive and innovative activities, as patent applications and recognized (cited) scientific publications. The knowledge impact is measured by innovations impact on real economy, such as increases in labour productivity, also by entry of new firms, by certifications and international standardization (Lanvin, Evans, 2013; Social Progress..., 2014).

| Selected GTCI scores by determinants | Latvia | Lithuania | Estonia |
|--------------------------------------|--------|-----------|---------|
| R&D expenditure                      | 13.3   | 17.7      | 36.6    |
| ICT access                           | 61.9   | 68.4      | 76.7    |
| Qualified labour inflow              | 35.5   | 28.0      | 39.3    |
| Technical/vocational enrolment       | 51.9   | 24.2      | 41.4    |
| Lifelong learning                    | 52.8   | 52.6      | 55.7    |
| Employable skills                    | 51.8   | 38.7      | 55.1    |
| Higher skills and competencies       | 47.0   | 54.0      | 58.1    |
| Talent impact                        | 50.1   | 33.9      | 61.6    |

Note: done by authors on the basis of the GTCI expert data.

Fig. 2. Comparison of selected GTCI sub-index scores directly determining talent effect in Baltic States, 2013

* Qualified labour inflow.

Note: created by authors on the basis of the GTCI expert data.
It is interesting that the significance of this very important GTCI determinant (or pillar) is much worse for Lithuania (34 scores) than for Estonia (61.6) and Latvia (50 scores) (see Table 2 and Fig. 2); and it is more distant than those of GTCI input and output sub-index rankings. It seems experts have evaluated the impact of some differences in the R&D expenditures (36.6 scores for Estonia against 13.3 for Latvia, 17.7 for Lithuania). The technical/vocational enrolment is high in Latvia (52 scores) against Lithuania (24) and Estonia (41.4 scores). At the same time the differences between expert evaluations of higher skills and competencies are not so substantial for Baltic States. In this context it is interesting to quote G. Scott and S. Vincent-Lancrin that: “numbers of students enrolled in science and technology subjects are not necessarily those that will produce young people with the creativity, critical thinking, and communication skills that innovative societies require” (Lanvin, Evans, 2013).

The more detailed review of the GTCI input sub-index rankings for enablers in the countries under review revealed following details (see Table 3 and Fig. 3).

The more significant differences on R&D expenditure's scores substantially depend on the funds (as part of GDP) allocated, also professional management (Estonia rather high 70.2 score, Lithuania 57.1, Latvia 55.6) which looks sufficiently objective. The situation with Labour market flexibility is about opposite with Estonia having less inelastic market comparing with other Baltic neighboring countries (Estonia 43.3 scores, Lithuania 74.1 and Latvia 58.9 scores). It results from still continuing emigration from Lithuania and Latvia to Western European and Scandinavian countries with much higher

**Table 3**

| GTCI input scores by components | Latvia | Lithuania | Estonia |
|---------------------------------|--------|-----------|---------|
| 1 Enablers                      | 57.4   | 62.2      | 65.1    |
| 1.1 Regulatory landscape        | 63.3   | 67.4      | 74.7    |
| 1.1.1 Government effectiveness | 53.4   | 53.3      | 68.9    |
| 1.1.2 Political stability       | 73.3   | 81.5      | 80.6    |
| 1.2 Market landscape            | 51.7   | 53.7      | 63.8    |
| 1.2.1 Intensity of local competition | 64.3 | 68.3      | 75.0    |
| 1.2.2 Venture capital availability | 32.4 | 23.1      | 36.0    |
| 1.2.3 Firm-level technology absorption | 58.5 | 66.9      | 75.0    |
| 1.2.4 R&D expenditure           | 13.3   | 17.7      | 36.6    |
| 1.2.5 ICT access                | 61.9   | 68.4      | 76.7    |
| 1.2.6 Ease of doing business    | 79.5   | 77.5      | 83.4    |
| 1.3 Business landscape          | 57.3   | 65.6      | 56.7    |
| 1.3.1 Labour market flexibility | 58.9   | 74.1      | 43.3    |
| 1.3.2 Reliance on professional management | 55.6 | 57.1      | 70.2    |

*Note:* edited by authors on the basis of the GTCI expert data.
wages and better social conditions. It is noteworthy to mention also the less favorable Innovation climate in Lithuania (23 scores; Estonia – 36.6 scores) measured by Venture capital availability; however this climate depend also on many other factors as bureaucracy and legal procedures, etc. Estonia also has much better Government effectiveness (69 scores, when Lithuania and Latvia – only about 53 scores).

GTCI input sub-index rankings for attract pillars in the Baltic States (Table 4) are more even except in particular the differences in levels of FDI inflow (Estonia –

**Table 4**

Comparison of the GTCI attract components’ rankings in Baltic States, 2013

| GTCI attract scores by components | Latvia | Lithuania | Estonia |
|-----------------------------------|--------|-----------|---------|
| 2 Attract                         | 54.3   | 48.6      | 51.6    |
| 2.1 External openness             | 47.7   | 35.9      | 41.0    |
| 2.1.1 FDI inflow                  | 42.3   | 22.6      | 10.1    |
| 2.1.2 Qualified labour inflow     | 35.5   | 28.0      | 39.3    |
| 2.1.3 Prevalence of foreign ownership | 65.3  | 57.0      | 73.5    |
| 2.2 Internal openness             | 61.0   | 61.3      | 62.3    |
| 2.2.1 Tolerance of minorities     | 66.6   | 64.1      | 60.7    |
| 2.2.2 Tolerance of immigrants     | 40.6   | 53.7      | 46.0    |
| 2.2.3 Social mobility             | 60.7   | 59.6      | 74.3    |
| 2.2.5 Female professionals and technical workers | 37.0 | 29.2 | 30.5 |

*Venture capital availability. **Reliance on professional management.

Note: created by authors on the basis of the GTCI expert data.
10 scores, Latvia 42 and Lithuania – 22.6 scores) and social mobility (Estonia – 74 scores, Latvia 61 and Lithuania – 60 scores).

The levels of FDI inflow are rather fluctuating in the Baltic States – after independence many years it was stably highest in Estonia but now it is significantly lagging; so in this case this sub-index characterized inaccurately its impact on competitiveness; or it shows that some GTCI sub-indexes are more reliable when compared by averaged time intervals (Fig. 4).

GTCI input sub-index rankings for growth pillars in the Baltic States (Table 5 and Fig. 5) are comparatively similar except the technical/vocational enrolment (Lithuania – only 24 scores when Estonia 41, Latvia – 52 scores). Lithuania evaluated its retarding in this aspect and this year started to protect the admissions to technical and/or more applied specialties.

Some differences concern parameters for Use of virtual social networks (Estonia more than 89, Latvia – 74 scores), also Voicing concern to officials (respectively Estonia more than 38, Latvia 40 and Lithuania – only 26 scores) and Quality of scientific research institutions (adequately Estonia – 65, Lithuania 61, but Latvia 46 scores).

The comparing of GTCI input sub-index rankings for retain pillars in the Baltic States (Table 6 and Fig. 6) reveal some differences at Extent and effect of taxation (Estonia about 59, when Latvia 34 and Lithuania – only 30 scores) and Safety at night (Estonia more than 65, Latvia 55 and Lithuania – only less than 46 scores). If many experts agree with evaluation that taxation in Lithuania is ineffective and unfavorable both for business and individuals comparing with other Baltic States, the comparative levels of Safety at night could be disputed and perhaps revealing not so correctly the trend situation.

Baltic States vary by retain sustainability between 58 and 79 scores. The retain services are measured insufficiently by only Physicians density so as it is too wide and expanding sector of activity.
Table 5
Comparison of the GTCI growth components’ rankings in Baltic States, 2013

| GTCI growth scores by components | Latvia | Lithuania | Estonia |
|----------------------------------|--------|-----------|---------|
| 3 Growth                         | 52.4   | 49.5      | 53.8    |
| 3.1 Formal education             | 54.8   | 44.5      | 47.1    |
| 3.1.1 Pupil-teacher ratio        | 95.3   | 94.6      | 94.1    |
| 3.1.2 Technical/vocational enrolment | 51.9 | 24.2      | 41.4    |
| 3.1.3 Performance of education system (tertiary enrolment) | 53.9 | 66.1 | 60.9 |
| 3.1.4 Reading, math and science scores | 64.2 | 61.1 | 74.9 |
| 3.1.6 International students inflow | 8.8   | 7.4       | 8.2     |
| 3.2 Lifelong learning (further education and training) | 52.8 | 52.6 | 55.7 |
| 3.2.1 Quality of management schools | 53.8 | 55.5 | 58.2 |
| 3.2.2 Extent of staff training | 51.9   | 49.6      | 53.1    |
| 3.3 Access to growth opportunities | 49.5   | 51.3      | 58.7    |
| 3.3.1 Use of virtual social networks | 74.4 | 84.1 | 89.4 |
| 3.3.2 State of cluster development | 37.1  | 33.8      | 41.9    |
| 3.3.3 Quality of scientific research institutions | 46.3 | 60.9 | 65.1 |
| 3.3.4 Voicing concern to officials | 40.1  | 26.4      | 38.2    |

*Note*: selected by authors on the basis of the GTCI expert data.

Fig. 5. Comparison of the GTCI grow sub-index rankings in Baltic States, 2013

*Note*: created by authors on the basis of the GTCI expert data.
Managing global Competitiveness: Impact of Talents on Innovations in Baltic States

GTCI sub-index rankings for output determinants are presented in Fig. 7 (labour and vocational pillars, based on Table 7) and Fig. 8 (global knowledge scores, based on Table 8). In Lithuania the situation concerning Employable skills (39 scores) is much worse comparing with its Baltic neighbours (Latvia – 52 and Estonia – 55 scores), in particular – with Secondary-educated workforce (Lithuania – 45 scores, Latvia – 72, Estonia – 73 scores). By Youth employment Lithuania (17 scores) is lagging from Estonia (about 33) and Latvia (28 scores); the components of Labour productivity results substantially in differences of the GDP per capita. It is interesting to compare the situation concerning the adult skills development in countries under review within wider context presented by the OECD (The Survey..., 2013).
The global knowledge pillar in GTCI concentrates most sensitive parameters directly determining professional competency of potential talents. Respectively, it reveals many differences of all countries under review: p. ex., Innovation output (Lithuania – 42 scores, Latvia – 51 and Estonia 71 scores), Talent impact (Lithuania – 34, Latvia – 50 and Estonia 62 scores) and New product entrepreneurial activity (Lithuania – 26 scores, Latvia – 49 and Estonia 52 scores) are much higher in Estonia. The most significant differences of the countries under review concerning sub index of Knowledge workers (Baltic States – between 51 and 56 scores), especially scores evaluating the potential of researchers. In fact, it depends also from regional specialization of main activities and also requires more detailed expertise so as we
can see some asynchrony waves of innovations and attendant new product implementation in smaller countries with comparatively not so big economic, technical and intellectual potential also mentioned by OECD experts (The Survey..., 2013).

The analysis done in this section of our detailed review revealed some premises for a GTC approach to strategic programming of sustainable economic expansion so as it exposed the week and strong global knowledge and innovation determinants or pillars in national talent competitiveness development. Some suggestions and/or generalizations are similar to (Stimulating., 2013).

### Table 8

| GTCI global knowledge scores by components | Latvia | Lithuania | Estonia |
|-------------------------------------------|-------|-----------|---------|
| 6 Global Knowledge                        | 48.6  | 43.9      | 59.8    |
| 6.1 Higher skills and competencies        | 47.0  | 54.0      | 58.1    |
| 6.1.1 Tertiary-educated workforce         | 59.0  | 66.7      | 80.9    |
| 6.1.2 Knowledge workers*                  | 56.2  | 51.1      | 50.6    |
| 6.1.3 Professionals                       | 50.0  | 66.8      | 58.8    |
| 6.1.4 Researchers                         | 23.0  | 31.4      | 42.2    |
| 6.2 Talent impact                         | 50.1  | 33.9      | 61.6    |
| 6.2.1 Innovation output                   | 50.9  | 41.8      | 71.2    |
| 6.2.2 New product entrepreneurial activity| 49.4  | 26.0      | 52.0    |

* Legislators, senior officials and managers.

**Note**: selected by authors on the basis of the GTCI expert data.

**Fig. 8.** Comparison of the GTCI global knowledge sub-index rankings in Baltic States, 2013

**Note**: created by authors on the basis of the GTCI expert data.
Conclusions

The GTCI evaluates the talent implementation results based mostly on the measurable skills of personality and their outcomes. This approach is similar but not adequate to the meaning of talent as a personal ability to find and realize new technological, managerial, marketing or technical etc. solutions. The GTCI is mostly oriented to knowledge skills and innovation measurements, i.e. big part of the same pillars measured by GII and NRI determinant systems.

The correlation between GTCI scores and GDP per capita, also between national economic competitiveness and global talent indices is more weaker than GTCI model authors expected (it is not applicable within small group of narrowly interconnected countries like Baltic States).

The global knowledge skills and levels of their implementation are substantially influenced by main social processes and level of reward; for example, the brain drain of the talents mostly goes from less developed countries to high developed ones, and that influence some deviations within main dependencies of the GTCI model.

Some deviations potentially evaluating the talent impact by experts for selected medium developed countries are resulting not only from direct brain drain but also from material obstacles to register statistically the real origin of, p. ex., innovations, patents, etc.

The smaller changes in the weighting of GTCI pillars do not alter substantially the rankings of sub-indices. Some asynchrony waves of innovations and attendant new product implementation in such smaller countries with comparatively not so big economic, technical and intellectual potential also distort the global knowledge sub-indices.

The GTCI as a total is useful analytical instrument for developing global talent management, for stimulating talented people when distributing the material and intellectual resources, also programming tax incentives for business innovations and to train employees. It also helps anticipating some shortages of human capital and highly skilled labour.

Notes

1 Both last publications were developed together with the World Intellectual Property Organization (WIPO) and Cornell University.
2 Some of data indicators used for calculations of GTI are similar to those of the GTCI but their grouping and specification are different; the main weights are given to university education and quality of labour force (both at 22.2 %); the values of most indicators were taken from the EIU Business Environment Rankings. Also, the 20 survey data series used for evaluations of GTCI are extracted from the WEF Executive Opinion Survey and the Legatum Prosperity Index, which draws on the Gallup World Poll (Lanvin, Evans, 2013).
3 It is defined as total number of pupils or students enrolled in technical/vocational programs at a given level of education, expressed as a % of the total number of pupils or students enrolled in all programs at that level. The level of educational attainment is based on International Standard Classification of Education (ISCED) Level 3.
4 Evaluated on the basis of Gallup World Poll in their Legatum Prosperity Index. The survey is conducted in different time periods across countries between 2007 and 2011 (Lanvin, Evans, 2013).
References

1. Bilbao-Osorio, B., Dutta, S., Lanvin B., eds. (2013). The Global Information Technology Report. World Economic Forum and INSEAD. Internet access: <reported/GII-2014-v5.pdf>, [accessed May 20, 2015].

2. Buracas, A., Zvirblis, A. (2013). Knowledge Potential: Main Aggregated Assessment Principles // Journal of Knowledge Economy and Knowledge Management, Spring. Vol. 2013, p. 63–85. Internet access: <http://beykon.org/dergi/2013/SPRING/ A.Buracas.pdf>, [accessed May 20, 2015].

3. Dutta, S., Lanvin, B., Wunsch-Vincent, S. eds. (2013). The Global Innovation Index 2014. The Human Factor in Innovation. Internet access: <reported/GII-2014-v5.pdf>, [accessed May 20, 2015].

4. Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship (2014). - Springer.

5. Evans, P., Pucik, V., Björkman, I. (2011). The Global Challenge: International Human Resource Management. - New York: McGraw-Hill.

6. Global Talent Index, 2011–2015. (2011). Ed. by Economist Intelligence Unit, Heidrick and Struggles. Internet access: <http://www.management-thinking.eiu.com/sites/default/files/downloads/GTI%20 FINAL%20REPORT%205.4.11.pdf>, [accessed May 20, 2015].

7. Global Talent Risk – Seven Responses (2011). World Economic Forum. Internet access: <http://www3.weforum.org/docs/PS_WEF_GlobalTalentRisk_Report_2011.pdf>, [accessed May 20, 2015].

8. Hüsing, T. et al. (2013). E-Leadership: e-Skills for Competitiveness and Innovation. Vision, Roadmap and Foresight Scenarios. Final report. Internet access: <http://ec.europa.eu/enterprise/sectors/ict/files/eskills/ vision_final_report_en.pdf>, [accessed May 20, 2015].

9. Kumar, K., van Welsum, D. (2013). Knowledge-Based Economies and Basing Economies on Knowledge – Skills a Missing Link in GCC Countries. Research Report RR-188-GCC, the RAND Corporation. – Santa Monica, CA.

10. Lanvin, B., Evans, P, eds (2013). The Global Talent Competitiveness Index. p. 42, 98, 143 a/o. Internet access: <http://global-indices.insead.edu/gtci/documents/gtci-report.pdf>, [accessed May 20, 2015].

11. Metaeconomics Approach & Intellectual Resources Evaluation. Multiple Objective Methods: integrating into Decision Making (2013). Ed. A. Buracas et al. Academic Publ. Co.

12. Social Progress Index (2014). Internet access: <http://www.socialprogressimperative.org/data/spi#data_table/countries/dim2/dim1, dim2, dim3>, [accessed May 20, 2015].

13. Stimulating Economies through Fostering Talent Mobility (2013). Geneva: World Economic Forum. Internet access: <http://www3.weforum.org/docs/WEF_PS_TalentMobility_report_2010.pdf>, [accessed May 20, 2015].

14. Supporting Investment in Knowledge Capital, Growth and Innovation (2013). - Paris, OECD.

15. Talent Shortage Survey Research Results (2012). Manpower Group Internet access: <http://www.manpowergroup.us/campaigns/talent-shortage-2012/pdf/2012_Talent_Shortage_ Survey_Results_US_FINALFINAL.pdf>, [accessed May 20, 2015].

16. The Global Competitiveness Report 2013-2014. Ed. by K. Schwab. Internet access: <http://reports.weforum.org/the-global-competitiveness-report-2013-2014/>, [accessed May 20, 2015].

17. The Survey of Adult Skills: Reader’s Companion (2013). OECD Publishing. – Paris. doi: 10.1787/9789264204027-en.

The paper submitted: April 21, 2015
Prepared for publication: June 1, 2015
Antanas BURAČAS, Vytas NAVICKAS

GLOBAUS KONKURENCINGUMO VADYBA: TALENTŲ ĮTAKA INOVACIJOMS BALTIJOS ŠALYSE

S a n t r a u k a

Straipsnyje aptariama globalaus talentų konkurencingumo (GTK) įtaka regioninio ekonomikos konkurencingumo vadybai. Atskleidžiama, kad GTK kompleksinis lyginamasis vertinimas yra veiksmingo žinių išteklių ir investicijų į šalies intelektinę ekonomiką paskirstymo pagrindas.

Pateikta GTK kriterijų ir rodiklių visuma darbe vertinama remiantis daugiakriterių ekspertinių metodų taikymo galimybėmis ir apžvelgiant Baltijos šalių GTK įtaką jų inovacijų vadybai. Grafinė žinių ir inovacijų determinantų priklausomybė reljefiškai išryškina lyginamųjų šalių inovacinių strategijų, jas išreiškiančių statistinių modelių stiprybes ir silpnybes. Šis tyrimas atskleidė, kad BNP 1 gyventojui dydis ir nacionalinio ekonominio konkurencingumo įtaka ne tokia reikšminga šių šalių GTK rodiklių skirtumams, nei tikisi tarptautiniai šios metodikos ekspertai. Tačiau socialiniai ir tvarios plėtros skirtumai turi didesnę įtaką daliai GTK rodiklių, pirmiausia inovatyvių kompetencijų ir gebėjimų diegimui, pvz., dėl protų nutekėjimo į turtingesnes šalis ir labiau išvystytų šalių paramos registruojant kitur parengtus naujovių projektus, apsaugant patentus.

Darbo išvadose sakoma, kad tarptautinė GTK metodika padeda atskleisti, kaip didinti kompetencijų ir kitų talentų ugdymo poveikį konkurencingumui; numanomos galimybės, kaip tobulinti mokesčių politikos programavimą skatinant inovacines investicijas, tarp jų ir į profesinę edukaciją. Pateikta lyginamoji Baltijos šalių GTK ir inovacinių veiksnių ekspertinė analizė rodo faktinius tam tikrų inovacinių investicijų sričių privalumus ir trūkumus siekiant didinti tvarios plėtros veiksmingumą ir ekonominį konkurencingumą.