

# EFFECT OF RISK CAPITAL ON COUNTRY'S COMPETITIVENESS: THEORETICAL ASPECTS

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## Annotation

*The article analyses the theoretical aspects of the impact of venture capital on country's competitiveness. Many scientists have proven that investment in technology, science and innovation are means of achieving national prosperity and a high level of competitiveness. Qualitative factors of economic growth prevail in the country as a result of the continuous development of R&D and acquiring results of R&D. Innovative businesses need a favorable way of financing. Most start-ups do not meet the eligibility criteria for loans and thus lack the capital to start a business. Venture capital is a vital alternative form of business financing to traditional financing, helping companies to develop their business. Venture capital investments provide not only financial but also intellectual capital to innovative and promising companies, thus positively affecting the country's competitiveness.*

**Key words:** *venture capital, innovation, technology, scientific research, national competitiveness.*

## Foreword

Venture capital is a frequent subject of scientific evaluation. M. Pece, O. E.O. Simona, F. Salicteanuc (2015) highlights the impact of venture capital investments on innovation. According to the authors, it has been empirically proven (OECD, 2006) that venture capital can only guarantee progress in an economy of high-level innovation and proper regulation. According to J.Markard and B.Truffer (2008), larger companies or their branches operating exclusively in the field of innovation are the main group capable of generating and disseminating technological innovation. It was determined that venture capital investment promotes technological progress and has a positive impact not only on companies' development but also on the economy as a whole (Schofer, Leitinger, 2002). This article from a theoretical point of view analyses venture capital and its potential impact on a country's competitiveness, exposing the need of venture capital for innovation, technological and scientific progress.

**The aim of the research** - to analyze from a theoretical point of view the impact of venture capital on a country's competitiveness.

## Research objectives:

1. After analysing empirical studies, summarise the importance of venture capital investments for a national economy.
2. To present the links between venture capital and innovation, technology and scientific research.
3. To systematize conceptual statements about the concept of country's competitiveness and its determinants.

**Methodology of research.** Comparative and systematic analysis of scientific literature.

## The significance of venture capital investment in the national economy: analysis of empirical research

The article considers venture capital as a type of private capital focused on start-ups. Venture capital funds start-up, early stage or expansion stage companies. These are mostly innovative companies because their financing is too risky for traditional financial institutions (European Venture Capital Association *EVCA*). An active venture capital market can boost economic growth by introducing new services and products created by innovation and leading entrepreneurs. Regarding the concept of venture capital, it is worth to take into account the place of venture capital in the context of investment. The development of the capital market and its favorable conditions encourage venture capital investment in the country.

S. R Jansma, J.F. Gosselt, M. Jong (2018) carried out a research based on a survey of 24 founders of technology companies about their experiences with innovation development processes. Many respondents argued that often promising technologies and patents cannot be further developed due to lack of funding. Venture capital funds that finance the activities of such

companies can help here. Venture capitalists are active investors who not only provide financing but also spend a lot of time advising and monitoring capabilities of start-ups to manage their portfolios. In addition, respondents identified the government as an important party which has interests and which on the one hand allocates the financial resources needed for technology (subsidies), but on the other hand it acts as a guardian that can prevent heads of technology companies to operate according to their own rules.

Venture capital has become an instrument of investment in scientific research in Israel which has contributed to the development of the national high-tech industry and economic growth (Zhang, Zhang, Wang, Huang, 2013). The rapid development of the venture capital market in Israel has shown that technological advancements play a catalytic role in venture capital area, which means that a high level of scientific, technological and scientific research development contributes to the development of Israeli venture capital, and in turn, venture capital development fosters technological advancement, corporate value growth and GDP growth. This creates a good circle of venture capital and technological progress.

It is also important to understand the peculiarities of venture capital funds and what determines their distribution. C. Mayer, K. Schoors, and Y. Yafeh (2003) analyzed about 500 venture capital funds in Germany, Israel, Japan and the United Kingdom, which have grown particularly rapidly over five years and have made significant investments in companies. The main objective of choosing these countries for the research was to assess bank-oriented financial systems (Germany and Japan) and financial market-oriented systems (the United Kingdom), which determine the sources of venture capital funds and the prevailing nature of companies financing in different systems of venture capital funds. Venture capital funds are found to have different investment policies, depending on the prevailing financial system in a country. Banks are the main sources of venture capital funds in both Germany and Japan, which are dominated by a banking-oriented financial system, while in the UK, pension funds investments are the most important source for venture capital funds. Private investors and large private corporations invest in venture capital funds in Israel. It is interesting to note that venture capital funds, which receive funds from banks, pension funds, insurance companies, generally invest in later stage companies, that is, they do not invest in start-ups but in advanced companies, whereas individual investors and companies, through venture capital funds, are investing in information technology and telecommunications, computer programmes, and electronics areas start-up companies. This shows that finances of banks, insurance companies and pension funds are associated with lower risk. In addition, these authors have found that banks and pension funds invest regionally and individual investors invest globally.

The relationship between venture capital investment and national competitiveness has been studied by P. Schofer and R. Leitinger (2002). The researchers analyzed the venture capital environment in Central and Eastern European countries and compared the results with selected Western European countries. The empirical assessment was based on the data of *IMD World Competitiveness Center's* criteria distinguished in the yearbook - economic, legal, social, and entrepreneurial. The study showed that there are considerable differences between regions and that one region lags relatively far behind the other in the venture capital sector. Central and Eastern European countries are lagging behind mostly in socio-economic area compared with EU average and the legal and entrepreneurial environment is quite close to European standards. The survey data were compared with the EU average to find the best performing countries. The range was set from 0 to 20 points. Top-ranked countries with the highest score (Table 1). 10 points are given when the criterion reaches 100% of the European average. If it is above average, more points are given (up to 20 points). If the criterion is worse than average, one point will be less for every 10% of the lower level (lowest 0 points).

Table 1

Scheme of Criteria Measurement

		Percentage of the European Average	
		The more the better (e.g. GDP per capita)	The less the better (e.g. corporate tax rates)
Max	20 points	200 %	0 %
	17.5 points	175 %	25 %
	15 points	150 %	50 %
	12.5 points	125 %	75 %
	10 points	100 %	100 %
	7.5 points	75 %	125 %
	5 points	50 %	150 %
	2.5 points	25 %	175 %
Min.	0 points	0 %	200 %

Source: P. Schofer, R. Leitinger (2002)

Let's suppose that the GDP per capita of country X is EUR 13,338 and the average GDP per capita of the European Union is EUR 25,196. According to Table 1, since country X's GDP per capita is 52.94% of the European average, country X receives 5.3 points. The weight of each measured criterion is equal. This allows for a neutral evaluation of each criterion.

It has been noted that start-ups in some EU countries find it much more difficult to receive venture capital than their US counterparts. Companies expanding in the EU find it even more difficult to expand and remain independent than US companies. In addition, there is an additional difficulty because venture capital is usually concentrated in a few places (and usually in the country's capital), although there are exceptions, such as the United Kingdom, where it is available from several places, partly due to support from regional development funds.

The EU Commission has taken the initiative of start-ups and expanding companies to create a pan-European venture capital fund to create more investment opportunities. This fund complements other financial instruments under the EU Program for Enterprise Competitiveness and SMEs, Horizon 2020 and InnovFin to facilitate access to guarantees, loans and equity for SMEs through local financial institutions in the member states (Seventh Economic, Social and Territorial Cohesion Report, 2017).

Venture capital funds are designed to promote / develop venture capital market, grow new venture capitalists, and thus to give wider access to capital for new prospective companies, that have limited access to business finance means offered by banks. The information in Figure 1 shows the availability of venture capital by area in different regions and countries during 2006-2017.

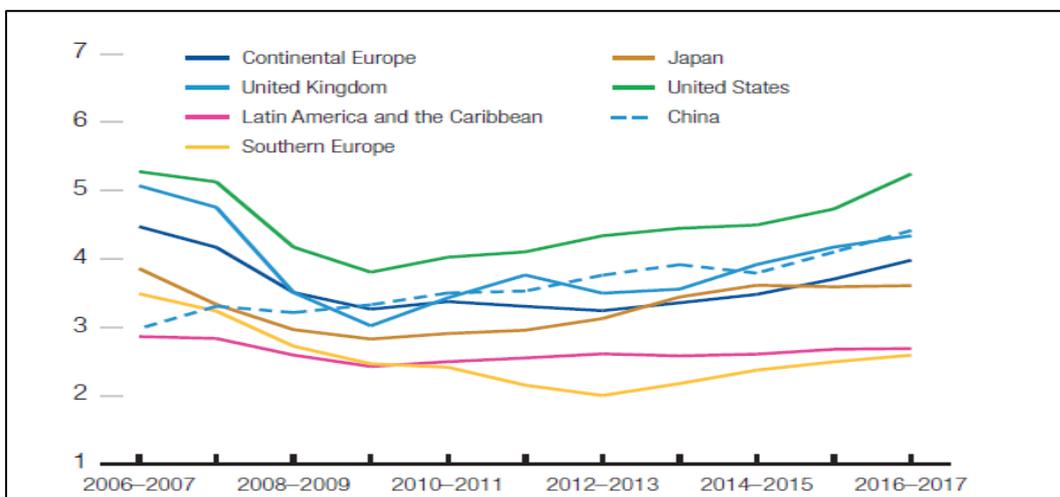


Fig. 1. Venture Capital Availability by Area During 2006-2017.  
Source: World Competitiveness Yearbook 2017-2018.

As shown in Figure 1, the availability of venture capital was affected by the financial crisis (2008) and its aftermath. This led to a decade-long stagnation in non-financial assets investment. Maintaining stability is essential to promote access to venture capital. Venture capital investment in the financial system is one of the key factors without which economic growth is impossible.

The links between venture capital and the components of the knowledge economy are analyzed below. The article defines this as innovation, technology and scientific research because these areas are considered affecting venture capital.

### Linking venture capital to innovation, technology and scientific research

Several researchers have demonstrated the link between venture capital and innovation, technological breakthroughs and R&D levels. Some empirical studies are analyzing the impact of venture capital on technological development, potential for new patent inventions, scientific research and experimental development. Other studies - the impact of venture capital as a specific investment and financing tool on innovative business and the outbreak of innovation (Cibulskienė, Padgureckienė, 2014).

**Innovation** is considered as an indicator of a country's ability to generate high added value in the leading countries and as a guarantee of economic growth. Innovation is considered one of the key factors:

- accelerating development of the economy,
- influencing development of high-tech industries,
- increasing the productivity of companies,

- contributing to competitiveness by reducing business costs,
- expanding product diversity in the global marketplace.

Scientists believe that there is a strong link between economic growth and innovation. The originator of this concept is J. Schumpeter, who in 1911 distinguished innovation as an important factor driving economic change (Bazhal, 2016). He claimed that technological innovation was necessary to encourage companies to develop new products and processes. J. Schumpeter's statements have become an essential basis for other scholars' works. R.M. Solow (1956) presented a model of economic growth. In this model, long-term economic growth depends on capital, labor and technological development. P.M. Romer (1990), a proponent of neoclassical growth theory, proved that long-term technological change is the engine of economic growth. This author has distinguished a new factor in the production functions - human capital and knowledge - an endogenous variable, leading to greater opportunities for higher education and profit. As a result, countries that accumulate more human capital are growing faster.

Countries with high innovation performance are generally countries with advanced economies and rising GDP per capita. According to T. Paas (2004), GDP per capita indicator (sometimes utilized to purchasing power parity) is the most widely used measure of standard of living and economic development. However, K. Kels (2016) states that GDP does not cover many aspects that can influence living standards. Other factors are also being assessed on the basis of these discussions. According to the author, it is important that these indicators can also be influenced by state policies. In most cases, however, these measures promote intermediate results but fail to achieve maximum national prosperity.

**Technologies** and technological development is one potential source of innovation. The term 'knowledge economy', which is often used in scientific literature, implies that economic activity depends on the level of knowledge available as well as its application to stimulate economic growth, on the ability of businesses to continually learn and update their knowledge base, and ultimately on scientific institutions' ability to carry out scientific and technological development and conduct both fundamental and applied scientific research. In the global world in the context of global economic competition and the rapidly evolving information society, in order to remain competitive businesses have to cope with extremely rapid demand and supply dynamics, extremely rapid technological development and as well as rapid change of knowledge (Kraujelytė, Petrauskas, 2007).

The role of long term technological progress is often analyzed in contemporary economic literature. The effectiveness of technological progress is determined by the quality of innovation and scientific research and by increasing capital efficiency (Gurgul, Lach, 2012). In addition, the results in these areas depend on the financial wealth concentrated in the country, since only rich countries can bring positive changes by funding scientific research. This is also supported by T. Paas (2004), who claims that countries can develop competitive and sustainable economic growth by increasing productivity and specializing in products and services where they are more productive and innovative. Foreign direct investment and joint ventures, on the other hand, help to integrate the national economy into the international production system and enable technological development.

Empirical studies on the increasing influence of **research and development (R&D)** and the impact of knowledge on productivity are carried out internationally, in industry sectors and at company level. Almost all studies that analyze this field assume that factors of production equally benefit innovation (Kristkova, Gardebroek, Dijk, Meijl, 2017). Studies in different countries and regions confirm this. E. Barajas, E. Huergo, L. Moreno (2012) conducted a study of Spanish companies that participated in R&D cooperation programmes during 1995-2005. The researchers assessed the relationship between R&D collaborative programmes, generating knowledge and economic results of a company. The results of empirical analysis confirmed that the technological capabilities of companies are positively related to productivity. A. Young (2013), Z. Dong, Y. Guoa, L. Wangb, J. Dai (2013), Y. Dissou, L. Karnizova, Q. Sun (2012), by examining the impact of external factors on productivity in the US, China, and Canada, have proven their crucial influence on technological change. Z. S. Kristkova, C. Gardebroek, M. Dijk, H. Meijl (2017) investigated the internal factors driving technical change in eleven member countries of Organization for Economic Cooperation and Development (OECD) from 1987 to 2007 and proved their impact on development of scientific research and R&D.

D. Comin (2004) claims that the R&D activities of small companies demonstrate that the use of new technologies increase economic growth and the standard of living. J. Fagerberg (1988) found a significant correlation between GDP per capita and technological progress, measured by R&D expenditures and number of patent applications. The study has proven that countries focused more on technologically advanced sectors to achieve better GDP growth rates than other countries. According to H. Gurgul, L. Lach, (2012) the number of patent

applications is often used to measure country's competitiveness and is considered a good indicator of technological progress. High number of patents and proper patent law can encourage investors to invest more in R&D.

The promotion of consortium between businesses, universities, scientific research centers and public actors in Europe has gained a promising role necessary for the further development of science and technology policy. Such studies have been supported by the European framework programmes (Amoroso, Coad, Grassano, 2017). A. Kraujelytė, R. Petrauskas (2007) state that new requirements are imposed on scientific institutions such as universities and scientific research institutes because the importance of scientific knowledge for the innovation process and entrepreneurship is recognised.

Mostly in developing countries, innovation and technology are problematic areas characterized by poor business models, political instability and governance, low educational attainment, insufficiently trained human resources, lack of world-class scientific research in universities, insufficiently or inadequately developed physical infrastructure and lack of technology (Ndesaulwa, Kikula, 2016).

Based on S. Sener, E. Saridogan (2011) following mechanism for interaction between knowledge economy subjects is presented which would lead to effective economic policy in the following areas:

- (1) development of policy for scientific technological innovation,
- 2) development of the infrastructure of scientific technological innovation,
- 3) scientific development,
- 4) technological development,
- 5) development of innovation,
- 6) increasing productivity, costs and product diversity,
- 7) enhancing global competitiveness
- 8) increasing revenue from economic factors and utilities functions,
- 9) generating revenue from economic factors,
- 10) economic growth, development and prosperity.

Such mechanism demonstrates the growth of innovation, technology and research policies, their impact on global competitiveness and national prosperity.

Recently, there has been an increasing focus on increasing the national competitiveness, reviewing policies aimed at territorial integration in the context of innovation, and proposing strategies for countries seeking to reduce inter-regional disparities.

### **National competitiveness and its determinants**

Definitions of abstract concepts such as "competitiveness" are never right or wrong. They can only be seen as conceptual tools in terms of their ability to know the specific issues they propose to address. As a result, there is often disagreement not over the definition itself, but over the issue that needs be studied and its implications (Kels, 2016).

The term "competitiveness" became prominent in the public debate in the 1980s, when the US was dominated by fears over Japan's nearly unstoppable economic growth, and competitiveness was linked to lower labor costs and policies that helped companies gain market share in the global market. At that time, this term was understood as a "game" whereby a country can improve its competitiveness at the expense of the other (Delgado, Ketels, Porter, Stern, 2012).

Although controversial and quite debatable the concept of country's competitiveness is a frequent subject of scientific research. Krugman (1994, 1995) described competitiveness as a way of expressing productivity, which also shows magnitude of technological progress. On the other hand, the scientist considered this definition to be "incorrect, dangerous" and inappropriate for assessing the level of the national economy. According to M.E. Porter (2004), "the most intuitive definition of competitiveness is the share of domestic products in global markets. This makes competitiveness a zero-value game because one country's revenue is the expense of the other countries." T. Paas (2004), T. Siudek, and A. Zawajska (2014) claim that it is not enough to explain the concept of competitiveness as productivity of a country, but it is also necessary to determine the competitiveness of economy and individual companies. It is not possible to measure the level of competitiveness on the basis of a single indicator, thus a set of variables describing the various aspects of competitiveness must be used. For this reason, efforts are being made to develop benchmarking for countries with different historical and political contexts and levels of economic development. R. D. Atkinson (2013) describes competitiveness as the ability of a region to create more value added in exports than in imports.

S. Marginean (2006) interprets the concept of competitiveness at the microeconomic and macroeconomic levels. The interpretation at the microeconomic level is based on the fact that wealth is not created primarily by countries, but by companies. From a broad perspective, a

country's competitiveness can be assessed using macroeconomic indicators. At the macroeconomic level, at least three ways of increasing competitiveness can be identified: efficiency, ability to create wellbeing and ability sell to external markets. According to M.E. Porter (2004), stable political, legal and social institutions and sound macroeconomic policy create the potential for national prosperity. He argues that microeconomic efficiency creates macroeconomic competitiveness. In other words prosperity is achieved first of all at the microeconomic level - the ability of companies to produce valuable goods and services using effective methods, and the ability of manufacturers to compete for market share, profits and export possibilities. This ability can be measured by market share, performance results, price ratio, cost of competitiveness or multiple factors.

Often competitiveness is interpreted at different levels of aggregation or otherwise known as objects of competitiveness. According to D.G. McFetridge (1995), M.E. Porter (1998) these are levels of company, industry, and country. The authors note that each level uses different competitiveness measures or indicators. T. Siudek, A. Zawajska (2014), V. Tomas (2011) offer a wider variety of levels to assess national competitiveness: supranational, national, regional, local, industrial, sector, as well as individual companies. I. Travkina, M. Tvaronavičienė (2010) claims that the country's competitiveness can be analyzed in different areas - technology, economy, policy, society and ecology, as well as in time perspective - the short, medium and long time span.

Other definitions and models have emerged from classical and modern economic theory to be applied at international, national, country, and municipal levels. The most famous at global level are: Global Competitiveness Report prepared by the World Economic Forum and Global Competitiveness Yearbook produced by the International Institute for Human Resources Development (Ochoa, Lara, Parra, 2017).

World Economic Forum is an organization that each year presents a Country Competitiveness Report that is used to measure the world economic development. She **defines competitiveness as a set of institutional, political factors that determine a country's level of productivity**. A competitive economy must be productive as it leads to growth, higher income levels which is closely linked to public welfare (World Economic Forum, 2016).

Another organization that does extensive research in this area is the IMD Center for Global Competitiveness, ranking the competitiveness of countries in 3 major groups: knowledge, technology and smart future. They are further subdivided into 340 criteria. The criteria are based on extensive research, using economic literature, international, national and regional sources, and by interviewing the business community. It is worth mentioning that the criteria are regularly updated and can be valuable in many areas (methodology and principles of World Competitiveness Centre, 2017).

It can be concluded that there is a wide variety of views on what constitutes a country's competitiveness and there are different sets of factors used to evaluate it. Therefore, it is important to understand factors that determine the chain of these events. Competitiveness indexes are used to assess country's competitiveness. Each index has its own components, and each of them has indicators and weighting coefficients. The World Economic Forum assesses countries in the world according to **Common Competitiveness Index (CCI)**. Table 2 shows that CCI is calculated by taking into account the assessments of respondents from all countries, the key macroeconomic indicators and the three sub-indexes: key requirements, productivity (effectiveness) drivers, innovativeness and business intelligence.

Table 2

Common Sub-indexes of the Competitiveness Index and Assessed Areas

Sub-index of essential requirements	Sub-index of factors driving performance (efficiency)	Sub-index for innovation and business intelligence
1. Institutional environment	5. Higher education and vocational training	11. Level of business development
2. Infrastructure	6. Product and service market efficiency	12. Innovation
3. Macro-economic environment.	7. Labor market effectiveness	
4. Health and initial education	8. Financial market expansion	
	9. Technological progress	
	10. Market size	

Source: World Economic Forum data, 2016

When calculating CCI following indicators are considered: GDP in billion Eur, annual rate of change in inflation, percent, population with university education, quality of education, technological application, use of ITC, export rate, percent from GDP, innovation capacity, quality of scientific research institutions, company expenditure for scientific research and

expansion, university-industry scientific research and expansion cooperation, number of patent applications, etc. Innovation is considered to be a more complex area for assessing competitiveness, since the innovation policy of innovative countries is based on world-class companies and scientific research institutions.

The general state of country innovation system is reflected by **Summary Innovation Index, SII**. National SII data are presented in the European Innovation Scoreboard, published annually since 2001. Table 3 shows the values of the indicators used to calculate the EU Summary Innovation Index.

This indicator is considered to be one of the most informative, showing the level of innovation in different countries. As the European Commission provides data on all EU countries, its data allows for comparative countries analysis to determine which factors have the biggest impact on achieving a high level of innovation in a country.

Table 3

Indicators calculated for assessing SII

Summary Innovation Index
<b>1. Economic Effects</b> <ul style="list-style-type: none"> <li>• Employment in medium and high technology sector, percent from the workforce</li> <li>• Employment in knowledge intensive industries, percent from the workforce</li> <li>• Export of medium and high technology products, percent from total exports</li> <li>• Export of knowledge intensive services, percent from total export of services</li> <li>• Sales of new products on the market, percent from turnover</li> </ul>
<b>1. Education</b> <ul style="list-style-type: none"> <li>• Participation in lifelong learning / 100 inhabitants (age 25-64)</li> <li>• Level of youth education achievement, number of persons having secondary education / 1000 inhabitants (age 17-19)</li> </ul>
<b>3. Financial contribution</b> <ul style="list-style-type: none"> <li>• Public R&amp;D expenditure, percent from GDP</li> <li>• Venture capital, percent from GDP</li> <li>• Private lending</li> <li>• Broadband Internet access in companies, percentage from the number of companies</li> </ul>
<b>4. Operation of companies</b> <ul style="list-style-type: none"> <li><b>4.1 Corporate investment</b> <ul style="list-style-type: none"> <li>• Business sector R&amp;D expenditure, percent from GDP</li> <li>• Expenditure for information technology, percent from GDP</li> <li>• Expenditure for innovation (not R&amp;D), percent from turnover</li> </ul> </li> <li><b>4.2. Cooperation</b> <ul style="list-style-type: none"> <li>• Local innovation of small and medium-size companies, percent from the number of companies</li> <li>• Cooperation of innovative small and medium-size companies with other companies, percent from the number of companies</li> <li>• Renewal of companies (number of small and medium-size companies entering the market and number of liquidated), percent from the number of companies</li> <li>• Public-private sector collaborative publications / 1 million inhabitants</li> </ul> </li> </ul>

Source: Vveinhardt, Kuklytė (2016)

According to this index, the EU countries are grouped into four groups: *Innovation Leaders*, *Innovation Followers*, *Moderate Innovators*, *Modest Innovators*.

**Technological Achievement Index (TAI)** helps to understand how a country develops and disseminates technology and what are human capabilities needed to participate in expansion of technological innovation. Following data is used for its implementation:

**1. Technology creation**

- 1.1. Patents for inhabitants (for million of people);
- 1.2. Revenue from royalties and license fees.

**2. Dissemination of new innovations**

- 2.1. Internet users (for thousand of people)
- 2.2. High-tech exports (percentage of manufactured exports)

**3. Dissemination of old innovations**

- 3.1. Electricity consumption (kWh per capita)
- 3.2. Number of mobile and landline phones (for thousand of people)

**4. Human Skills**

4.1. Proportion of engineering, manufacturing and construction science students out of all students

4.2. Average level of education in years (Ali, Kiani, Bashir, 2014).

A review of the scientific literature shows that there is much debate on the "right" definition of competitiveness, as the term is used to address different issues: macroeconomic sustainability, productivity or living standards. Each definition has validity as to the purpose for

which it was created (Kels, 2016). It has been clarified that the analysis of definitions of competitiveness may also be related to aggregation levels.

Analysis of scientific literature and empirical studies suggests that the factors determining a country's competitiveness are: macroeconomic, institutional and technological environment, labour market, financial market, venture capital, education, and innovation. In order to determine whether venture capital has an impact on a country's competitiveness, it is necessary to determine the criteria determining the country's competitiveness and to analyze whether there is a relationship between the latter and venture capital. Analyzed indexes - general competitiveness, cumulative innovation and technological achievement - would help measure the impact of venture capital on countries' competitiveness.

### Conclusions

1. The analyzed abundance of empirical studies in the field of venture capital shows the importance of the latter for the national economy. Start-up and expansion companies need capital, which can be provided by venture capital investments. Venture capital investment promotes the development of new sectors, companies that receive it are more innovative, generate new products and their businesses are more profitable. The added value of venture capital investment in the economy is a cornerstone of national competitiveness. Corporate venture capital financing determines the country's industrial and technological development as well as the economy.

2. A competitive economy must be productive as it leads to growth, higher income levels which is closely linked to public welfare. Scientific research, new technologies and innovation are the backbone of the knowledge economy as well as an effective way of ensuring country's competitiveness. It was determined that the development of the venture capital sector is driven by rapid technological development. As a result, venture capital has become appropriately linked to the financing of innovative inventions. The components of the knowledge economy, such as innovation, technology and scientific research, are directly related to venture capital and enables to analyze the impact of these areas not only on economic growth but also on the competitiveness of countries. Scientific and technological developments are shaping the motivating policy of science and the economic force aimed to ensure economic growth and development. Successful linking of innovation, technology and R&D levels requires that business has access to appropriate sources of finance, such as venture capital.

3. Competitiveness is a complex and multifaceted phenomenon. This concept is often described as a way of measuring whether a country is doing everything in its power to achieve continuous prosperity of its inhabitants. After summarizing and systematizing the conceptual statements, following factors determining the country's competitiveness were distinguished: macroeconomic, institutional, and technological environment, labor market, financial market, venture capital, education, and innovation. In order to assess the impact of venture capital on country's competitiveness, the criteria determining the country's competitiveness must be established.

National competitiveness is the ability of a country to achieve a high rate of economic growth, ensure steady growth in real wages and salaries, and promote internal market companies in a global market, which is comprised of high-quality clusters that improve the quality of products and services which create workplaces in future. It can be concluded that innovation, technology and scientific research are needed to create a competitive advantage. CCI, SII and TAI presented in the article help to assess the impact of venture capital on countries' competitiveness.

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