UDC:
DOI: 10.5937/AnEkSub2500015S
Original scientific article

Анали Економског факултета у Суботици – The Annals of the Faculty of Economics in Subotica
Vol. XX, No. XX, pp. XX-XXX
Received: 03/07/2025
Revision: 15/09/2025
Accepted: 25/09/2025
Published online: 18/11/2025

Determinants of venture capital fundraising – example of Germany

Утицај детерминанти на прикупљање средстава фондова ризичног капитала – пример Немачке

Milica Šušljik[*]
University of Novi Sad, Faculty of Economics in Subotica, Subotica, Republic of Serbia
milica.susljik@ef.uns.ac.rs https://orcid.org/0009-0007-2448-9209
Vera Mirović
University of Novi Sad, Faculty of Economics in Subotica, Subotica, Republic of Serbia
vera.mirovic@ef.uns.ac.rs https://orcid.org/0000-0002-1465-4692
Nada Milenković
University of Novi Sad, Faculty of Economics in Subotica, Subotica, Republic of Serbia
nada.milenkovic@ef.uns.ac.rs https://orcid.org/0000-0001-9810-3021
Snježana Zarić
University of East Sarajevo, Faculty of Economics Brčko
snjezana.zaric@efb.ues.rs.ba https://orcid.org/0009-0005-6075-7480

Abstract

Purpose: Venture capital is essential for developed markets as they provide possible start-ups with capital, especially the ones which have great prospects of success and growth. There are a few factors which influence the venture capital. Therefore, the study aims to investigate which factors affect significantly venture capital fundraising in Germany.
Methodology: This research is conducted by using a log-lin regression model which covers the data from 2015 to 2024 in Germany. The dependent variable is the amount of venture capital fundraising, whereas independent determinants are unemployment rate, global innovation index, price-to-book ratio, corporate tax rate and industrial index.
Findings: The results show that unemployment rate, global innovation index and corporate tax rate have a significant effect on the dependent variable. However, price-to-book ratio and industrial index have no significance on venture capital fundraising. As a result, venture capital in Germany is mostly influenced by macroeconomic environment.
Originality/value: The results show which macroeconomic determinants have the largest impact on the fundraising of the venture capital funds in Germany, thereby allowing the policy makers to improve the environment for the growth of the venture capital activity. Furthermore, when compared with the results of other studies, this research indicates that there are differences in the impact between developed countries as well. The findings of this research, especially associated with the effects of the impact of the innovation index, are valuable and indicate that investors are not inclined to invest in radical innovations that are associated with high risks and therefore a high possibility of failure.
Practical implications: The results can be used by policymakers and venture capital fund managers in order to attract investors to raise funds for venture capital investments.

[*] Corresponding author

Limitations: One of the limitations is the fact that study covers the period from 2015 to 2024. Also, the results of the research cannot be applied to emerging countries.

Keywords: venture capital fundraising, regression model, Germany, macroeconomic environment

Сажетак

Циљ: Ризични капитал је важан за развијена финансијска тржишта јер обезбеђује почетни капитал за компаније које се оснивају и које имају тенденцију развоја и успеха. Велики број фактора утиче на овај тип капитала у свету. Рад има циљ да испита који фактори значајно утичу на прикупљање средстава фондова ризичног капитала у Немачкој.
Методологија: У истраживању се користи log-lin модел који обухвата податке од 2015. до 2024.године. Зависна варијабла представља износ ризичног капитала који се прикупља за оснивање фондова, док независне варијабле обухватају стопу незапослености, глобални индекс иновација, P/B рацио, корпоративна пореска стопа и индекс индустријске производње.
Резултати: Log-lin модел показује да стопа незапослености, глобални индекс иновација и корпоративна пореска стопа имају значајан утицај на зависну варијаблу. Међутим, P/B рацио и индекс индустријске производње немају статистички значајан утицај на зависну варијаблу. Може се произвести закључак да на индустрију ризичног капитала у Немачкој најчешће утиче макроекономски амбијент.
Оригиналност/ вредност: Резултати показују који макроекономски индикатори највише утичу на фондове ризичног капитала у Немачкој, а на овај начин креатори монетарне политике омогућавају да се на тржишту развијају активности ризичног капитала. Последично, овај рад, у поређењу са резултатима других истраживања, указује да постоје разлике у утицају и међу развијеним државама. Резултати истраживања рада, поготово резултати који се односе на утицај глобалног иновационог индекса, су корисни и показују да инвеститори нису вољни да инвестирају у радикалне иновације које укључују висок ризик и као резултат велику могућност од губитка.
Практична примена: Резултате истраживања могу применити креатори монетарне политике и менаџери фондова ризичног капитала како би привукли инвеститоре да прикупљају средства путем ризичног капитала.
Ограничења истраживања: Једно од ограничења представља чињеницу да студија обухвата период између 2015. и 2024.године. Такође, резултати истраживања се не могу применити на земље у развоју.

Кључне речи: фондови ризичног капитала, регресиони модел, Немачка, макроекономски амбијент

Introduction

Benefits of venture capital fundraising have spread globally for several decades and consequently became a source of finance for small innovative firms which are at the beginning of the life cycle. Also, venture capital caters for firms which cannot afford to get a loan from a bank in order to set up new a business. Moreover, Jeng and Wells (2000) put forward a view that on financial market venture capital interferes between supply and demand side when there is difficulty in raising capital. Venture capital funds are considered to make high-risk investments, where it is crucial to outline that firms, which require venture capital investments, should have prospects for development, long-term growth and success. Milenković and Kalaš (2020) imply that venture capital funds invest in small firms without collateral and business track records as well as small enterprises with growth prospects and limited business track records. Additionally, the authors (Milenković and Kalaš, 2020) emphasize the need for these firms to raise investments in the early stage, i.e. startup investments, especially if they are specialized for creating new products. It is of great significance to state that a lot of companies which are blue-chip nowadays used to

acquire startup capital from venture capital funds, e.g. Microsoft, Apple Computer, Amazon, Instagram, SpaceX (Grilli, Latifi, & Mrkajic, 2019). In addition, Bertoni, Colombo and Grilli (2011) claim that venture-capital companies are usually more successful in terms of growth. One of the reasons might be the fact that venture capital funds choose firms which have more potential to flourish. The authors (Bertoni, Colombo, & Grilli, 2011) strongly claim that the second and main reason is the fact that venture capital funds take care of investments in newly founded firms and keep up-to-date with their improvement.

Although venture capital is a part of private equity investing (Jeng & Wells, 2000), investors are not limited to accredited investors; they can range from public wealthy individuals to privately held companies. Initially, venture capital appeared on the USA market and later spread to European financial market. Somehow, the USA has held a leading position on the global market (Grilli, Latifi, and Mrkajic, 2019). Nonetheless, venture capital is a contemporary means of providing additional capital across Europe, and venture capital fundraising process has attracted many companies that need capital. There are many countries which are highly supportive of venture capital fundraising.

Becker and Hellman (2003) mention in their study that Germany made an attempt to help venture capital funds flourish on a national level. The authors (Becker and Hellmann, 2003) point out that the attempt faced a lot of struggles primarily because Germany is a bank-oriented market. As a result, the German first venture capital fund faced a failure and much effort was required to keep venture capital funds stable. As German venture capital market has been in the spotlight concerning Europe, the focus of this study is on Germany itself. The aim of the research is to identify to which extent unemployment rate, global innovation index, price-to-book ratio, corporate tax rate and industrial production influence venture capital fundraising in Germany. The first part of the study concentrates on literature related to variables already mentioned, whereas the second one focuses on methodology and suitable data for multiple regression. In the final section, the results about the interdependence between venture capital and independent variables are discussed along with the relevance of the literature review to the research findings.

1. Literature review

The determinants of venture capital are numerous, so this part of the study explains the variables among other literature regarding this topic. Ning, Wang and Yu (2014) investigated in their study the impact of various determinants on venture capital investments, as a dependent variable. Along with that, Ning, Wang and Yu (2014) implied that greater industrial index and lower unemployment rate lead to more venture capital investments. In order to test these relationships between variables, multiple regression models were used including lagged-variables models, and the authors are oriented to the USA.

According to Groh and Wallmeroth (2015), it is tested to which extent corporate tax rate, innovation index, unemployment rate and other determinants influence venture capital.

By using regression model and panel data from 118 emerging markets, the authors (Groh & Wallmeroth, 2015) have concluded that innovation index has a positive and significant effect on venture capital investments. Furthermore, the unemployment rate and corporate tax rate did not show significance in the study of said authors, who consider other variables more important.

In the aspect of innovation index, Cui, Zhang & Wang (2024) conducted a research on bidirectional influence between venture capital and innovation by using data from 284 cities in China. One of the findings considering the issue is based on the premise that there is a positive interdependence between venture capital and innovation as it was suggested by the previous group of authors.

According to Jaoui, Amoussou & Kemeze (2022), venture capital fundraising is positively influenced by lower corporate tax rate as well as better innovation prospects. In the case of innovation, the authors used high-technology exports one year lagged in order to carry out a study, which covers determinants of venture capital investments from 25 African countries. Furthermore, they concluded that innovation represents a primary driver of venture capital investment, as ventures characterized by high-risk yet promising innovative potential are most likely to attract funding.

Additionally, Grilli, Latifi and Mrkajic (2019) stated that both corporate tax rate and industrial production do not have a significant effect on venture capital activity. On the other hand, a dynamic panel data model identified that stock market capitalization strongly influences fluctuations of venture capital. Therefore, it can be concluded that P/B ratio can be an explanatory variable which should be taken into account. In order to obtain relevant results, Grilli, Latifi and Mrkajic (2019) employed snowballing technique on available data. Apart from that, their study covers the data from developed countries (the USA, United Kingdom, Japan and Germany).

Poterba (1989) highlighted the dependence of corporate tax rate on venture capital activity on the USA market. Poterba put forward a view that a link between taxation and venture capital activity is stronger when the focus is on the investments in start-up firms. Eventually, the author came to the conclusion that reductions in the capital tax rate would positively affect venture capital activity and make venture capital investments more attractive. Consistent with their focus on corporate taxation, Edwards and Todtenhaupt (2019) also claim that corporate tax rate makes a negative and significant impact on venture capital funding. Their analysis relies on data concerning venture capital investments in early-stage companies, exclusively related to the USA.

Apart from that, Cherif and Gazdar (2011) questioned whether unemployment rate influenced venture capital both in the form of early-stage investments and in the form of already raised funds. Having tested the data from 21 European developed countries, they realized that unemployment rate had a strong effect on venture capital activity in early stage, whereas unemployment rate did not influence venture capital fundraising.

The study of Gompers and Lerner (1999) stated that lower capital gains tax rates would increase attractiveness of venture capital fundraising in the United States. This was

proven by examining venture capital organizations. As far as unemployment rate and P/B ratio are concerned, Félix, Gulamhussen and Pires (2013) pointed out in their research that P/B ratio does not significantly affect venture capital activities in European developed countries. However, unemployment rate has a strong negative impact on venture capital, and this variable should be examined. This study was broadened by the findings of Felix, Nunes & Pires (2022), who claim that unemployment rate both negatively and significantly contributes to venture capital demand, as well as that unemployment rate is a strong deterrent to entrepreneurial activity. This particular case was tested on data covering European developed countries.

In the light of innovation and unemployment rate, Jandrić and Geršl (2024) point out the importance of unemployment rate and innovation, among other variables, in European developed countries. By using Bayesian model averaging and panel data analysis, they realized that unemployment rate makes a negative and significant impact, whereas innovation positively and significantly influences venture capital fundraising. The authors used research and development to represent innovation in their study.

Further research related to innovation is conducted by Khan, Khan & Hameed (2020), who outline that innovation has a major and positive effect on venture capital. Their collected data refers to developed European and Asia-Pacific countries and the authors generalized two stage least square (G2SLS) in order to examine the factors.

In her study, Dalal (2021) explores groups of variables which have positive and significant effect on venture capital activity in a sample of developed countries. The main findings are based on the premise that innovation (as part of technological factors) as well as unemployment rate (as part of macroeconomic factors) influence venture capital in a mentioned way.

According to study of Plško (2024), venture capital activities in emerging countries from Central and Eastern Europe are insignificantly affected by capital gains tax rate and unemployment rate. Furthermore, the author (Plško, 2024) suggested other concerning factors. On the other hand, Bonini and Alkan (2011) concluded that corporate tax rate has a negative, but significant effect on venture capital investments in developed countries. The authors used panel data regression to illustrate where non-linear logarithmic transformations apply to all variables.

A better understanding of the literature review regarding the impact of explanatory variables on venture capital fundraising is provided by Table 1 and Table 2 below, which separate authors based on the research results and the type of country they are referring to.

Table 1: List of authors according to the results of their studies

Variable	Negative impact (-)	No significant impact (0)	Positive impact (+)
Unemployment rate	(Ning, Wang, & Yu , 2014), (Félix, Gulamhussen & Pires, 2013), (Felix, Nunes & Pires, 2022), (Jandrić & Geršl, 2024)	(Groh & Wallmeroth, 2015), (Cherif & Gazdar, 2011), (Plško, 2024)	(Dalal, 2021)
Global innovation index			(Groh & Wallmeroth, 2015), (Cui, Zhang, & Wang, 2024), (Jaoui, Amoussou & Kemeze, 2022), (Jandrić & Geršl, 2024), (Khan, Khan & Hameed, 2020), (Dalal, 2021)
Price-to-book ratio		(Félix, Gulamhussen, & Pires, 2013)	(Grilli, Latifi & Mrkajic, 2019)
Corporate tax rate	(Poterba, 1989), (Gompers & Lerner 1999), (Bonini & Alkan, 2011), (Jaoui, Amoussou & Kemeze, 2022), (Edwards & Todtenhaupt, 2019)	(Groh & Wallmeroth, 2015), (Grilli, Latifi & Mrkajic, 2019), (Plško, 2024)	
Industrial production		(Grilli, Latifi & Mrkajic, 2019)	(Ning, Wang & Yu, 2014)

Table 2: List of authors according to type of country

Variable	Emerging countries	Developed countries
Unemployment rate	(Groh & Wallmeroth, 2015), (Plško, 2024)	(Ning, Wang & Yu, 2014), (Félix, Gulamhussen & Pires, 2013), (Cherif & Gazdar, 2011), (Felix, Nunes & Pires, 2022), (Jandrić & Geršl, 2024) (Dalal, 2021)
Global innovation index	(Groh & Wallmeroth, 2015), (Jaoui, Amoussou & Kemeze, 2022)	(Cui, Zhang & Wang, 2024), (Jandrić & Geršl, 2024) (Khan, Khan & Hameed, 2020), (Dalal, 2021)
Price-to-book ratio		(Félix, Gulamhussen & Pires, 2013), (Grilli, Latifi & Mrkajic, 2019)
Corporate tax rate	(Groh & Wallmeroth, 2015), (Plško, 2024), (Jaoui, Amoussou & Kemeze, 2022)	(Poterba , 1989), (Gompers & Lerner, 1999), (Grilli, Latifi & Mrkajic, 2019), (Bonini & Alkan, 2011), (Edwards & Todtenhaupt, 2019)
Industrial production		(Ning, Wang & Yu , 2014), (Grilli, Latifi & Mrkajic, 2019)

2. Methodology and Data

This part of the study focuses on the independent and dependent variables and the appropriate model in order to accurately test formulated hypotheses. As far as dependent variable is concerned, it is transformed into logarithmic number and as such used in the model. On the other hand, all the independent variables are used as they are derived from the source, i.e. in their original form. The data used in the research is taken from Invest Europe, Data World Bank, Country Economy, Companies Market Cap, and Trading Economics. Further information about the sources and variables considered for the model can be found in Table 3.

The adequate method for the study is multiple non-linear regression. More precisely, the examination is transformed into log-lin model and the results of the model will be introduced in the next chapter along with descriptive statistics. The whole statistical research is done in Data Analysis as a part of Excel program.

Table 3: Variables

Variable	Notation	Calculation	Source
Dependent variable			
Venture capital fundraising	log(VC)	Billion dollars	Invest Europe
Independent variables			
Unemployment, total (% of total labor force)	UR	Percent	Data World Bank
Global innovation index	II	Index	Country Economy
Price-to-book ratio	P/B R	Ratio	Companies Market Cap
Corporate tax rate (%)	CTR	Percent	Trading Economics
Industrial production (%)	IP	Percent	Trading Economics

It is crucial to mention that venture capital fundraising refers to the amount of raised venture capital in Germany on an annual basis. This variable will be tested and consequently the results will provide feedback on its fluctuations. Unemployment rate is derived as the exact values from the source and it was calculated as a percentage of total labor force. Global innovation index measures an economy's effectiveness and success. Also, it highlights how the country is ranked among the other countries in terms of economic growth, innovation performance, education, infrastructure and so on (WIPO, 2025). Since it is an index, it can take a value from 0 to 100. Apart from that, all stocks in banks with venture capital entities are included in the study to calculate price-to-book ratio. This indicator is calculated as a subtraction between market stock value and its book value (Mirović, Pjanić, Andrašić & Kalaš, 2024). Corporate tax rate refers to a tax rate that applies to companies. The last variable to be used in the model is industrial production. Its value is expressed in percentage and in Germany industrial production measures the output of companies within the industrial sector of the economy (Economics, 2025).

Once all the variables are explained, it is necessary to make the equation which represents the log-lin regression model:

$$Log(VC)=\beta_0+\beta_1 UR+\beta_2 II+\beta_3 P/B\ R+\beta_4 CTR+\beta_5 IP+\varepsilon \quad (1)$$

In order to identify whether the independent variables have a significant effect on the raised venture capital in Germany, it is essential to formulate hypotheses:

H_1 : Unemployment rate positively affects venture capital.

H_2: Innovation index has a significant positive effect on venture capital.

H_3 : P/B ratio negatively affects venture capital.

H_4: Corporate tax rate has a positive effect on venture capital.

H_5: Industrial production negatively affects venture capital.

3. Results and discussion

This chapter provides the summary statistics regarding independent variables together with regression summary for venture capital. Prior to presenting the results of the model, there is Table 4 below showing descriptive statistics.

Table 4: Descriptive statistics

	log(venture capital)	unemployment rate	innovation index	P/B ratio	corporate tax rate	industrial production
Mean	3.40817	0.03611	57.75600	0.34811	0.29920	-0.00850
Standard Error	0.07090	0.00156	0.22086	0.03455	0.00042	0.01046
Median	3.37912	0.03500	57.98500	0.33140	0.30000	-0.01800
Standard Deviation	0.22421	0.00492	0.69843	0.10927	0.00132	0.03307
Sample Variance	0.05027	0.00002	0.48780	0.01194	0.00000	0.00109
Minimum	3.20303	0.03068	56.55000	0.22650	0.29700	-0.04500
Maximum	3.93676	0.04612	58.80000	0.51920	0.30000	0.06500
Sum	34.08173	0.36113	577.56000	3.48110	2.99200	-0.08500
Count	10	10	10	10	10	10

Source: Author's calculations

Tables 5 and 6 show the results of log-lin regression considering all relevant statistical measurements, followed by an explanation.

Table 5: Summary statistics: independent variables

Regression Statistics	
Multiple R	0.921853214
R Square	0.849813348
Adjusted R Square	0.662080034
Standard Error	0.130333061
Observations	10

ANOVA					
	df	SS	MS	F	Significance F
Regression	5	0.384469057	0.076893811	4.526705074	0.08428795
Residual	4	0.067946827	0.016986707		
Total	9	0.452415884			

Source: Author's calculations

Table 6: Regression summary for venture capital fundraising

	Coefficients	Standard Error	t Stat	P-value
Intercept	109.5671053	30.32052993	3.61362765	0.022484024
UR	-107.4314938	27.11430332	-3.962170537	0.016647366
II	-0.393072593	0.106223712	-3.70042229	0.020827731
P/B R	0.500106447	0.489713623	1.021222249	0.364886124
CTR	-266.5647566	83.83467215	-3.179648107	0.033546496
IP	-0.60297644	1.876884569	-0.32126453	0.76409595

Source: Author's calculations

In Table 5, R-squared shows that 84.98% of variations of venture capital is explained by variations of unemployment rate, innovation index, price-to-book ratio, corporate tax rate and industrial production. However, standard error shows that the average distance of original data from regression model is 13.03%.

The main part of the regression model presents p-values, which is used for examining statistical significance. Table 6 offers the explanations by emphasizing that unemployment rate, innovation index and corporate tax rate have p-values which are below 0.05. Furthermore, it is concluded that H_1 and H_4 are accepted, meaning that the unemployment rate and corporate tax rate have a significant effect on venture capital, whereas H_2 is rejected since the results show that industrial index has a negative effect on venture capital fundraising.

On the other hand, price-to-book ratio and industrial production have p-values, which are above 0.05 meaning that these two variables do not have significant effect on venture capital fundraising on the significance level 95%.

After the research results, it can be stated that the results partially correspond to the studies of the authors from the review. Firstly, Groh and Wallmeroth (2015), Cherif and Gazdar (2011) and (Plško, 2024) concluded that the unemployment rate has no significant effect on venture capital fundraising, which does not correspond to the results of this research where it is stated that the unemployment rate has a negative and strong influence on venture capital activities. On the other hand, the findings of Ning, Wang and Yu (2014) and Félix, Gulamhussen and Pires (2013) show the same results as presented in this research.

When it comes to global innovation index in Germany, the results show negative significance between the variable and venture capital activity. It was to be expected, based on the nature of venture capital, that the innovation index would have a positive impact on capital raising, as some authors have proven. Although innovation is generally considered a driver of startup success, and therefore of venture capital fundraising, the negative effect of the innovation index can be explained by the fact that excessive or radical innovation can deter venture capital investments due to higher associated risks, longer commercialization times, and uncertainty regarding market fit. In this context, a high innovation index can signal projects that are too experimental or disconnected from immediate market needs, thereby reducing their attractiveness to investors. However, (Groh & Wallmeroth, 2015) pointed out that innovation index has a positive impact on dependent variable. The results of the next variable - price-to-book ratio, suggest no impact of the ratio on the venture capital, which corresponds to the research of Félix, Gulamhussen and Pires (2013). On the other hand, Grilli, Latifi and Mrkajic (2019) imply that positive interdependence exits between mentioned variables.

The results from this study show that corporate tax rate has a negative, but significant effect on dependent variable. The same results are claimed in the studies of Gompers and Lerner (1999), Poterba (1989) and (Bonini & Alkan, 2011). However, Groh and Wallmeroth (2015), Grilli, Latifi and Mrkajic (2019) and (Plško, 2024) came to a different conclusion, i.e. corporate tax rate makes no impact on venture capital fundraising.

The results of the last independent variable - industrial index, show no significance for the dependent variable, which is also concluded by Grilli, Latifi and Mrkajic (2019). However, Ning, Wang and Yu (2014) present positive interdependence between the variables.

In addition, it is necessary to note that the results vary based on the development of countries. Following the list of authors from Table 2 together with the research results, it could be assumed that unemployment rate, corporate tax rate and global innovation index significantly impact venture capital fundraising in developed countries. However, it is inconclusive for other groups of countries, since the listed authors that discuss emerging countries presented quite the opposite results.

Conclusion

Since venture capital activity is thought to be one of many tools for gaining start-up capital for a number of companies, it is necessary to consider its crucial determinants. This research suggests that the factors of great significance are unemployment rate, global innovation index and corporate tax rate. These determinants should be considered since they influence the dependent variable. On the other hand, price-to-book ratio and industrial index might not be under examination as they do not influence venture capital activities in the period 2015-2024.

Consequently, investors should consider determinants that have a positively significant impact on venture capital fundraising, as these are considered to be leading factors for attracting this type of capital.

The primary rationale for undertaking this type of research is to outline main factors which have significant impact on venture capital fundraising. Thus, this research could be a reliable source of information for both Germany and other developed countries. Keeping in mind the outcomes of the research, policymakers as well as venture capital fund managers in mentioned countries should devote more attention to macroeconomic setting and create a suitable environment concerning significant factors. Apart from them, entrepreneurs who are in need of this particular capital also have to consider macroeconomic events because the prospects of their start-ups highly depend on these events.

As far as limitations are concerned, it is essential to outline that the period in study covers years from 2015 to 2024 and therefore many conclusions regarding the topic might not be applied to the years which are not included in the research. Also, research results might not be used as a relevant example among emerging countries since their macroeconomic environment differs up to an extent.

All things considered, since this is a contemporary issue, further research into the venture capital industry is warranted to identify additional factors that may influence fundraising in the foreseeable future. Numerous factors influence venture capital activity on financial markets, and tracking these dynamics closely is crucial for safeguarding financial stability in developed countries.

References

Becker, R., & Hellmann, T. (2003). The genesis of venture capital - lessons from the German experience. CESifo, 1-6., Doi: https://dx.doi.org/10.2139/ssrn.386763

Bertoni, F., Colombo, M. G., & Grilli, L. (2011). Venture capital investor type and the growth mode of new technology-based firms. *Small Business Economics*, 2-5., Doi: http://dx.doi.org/10.1007/s11187-011-9385-9

Bonini, S., & Alkan, S. (2011). The Political and Legal Determinants of Venture Capital Investments around the World. SSRN, 23-31. Doi: https://dx.doi.org/10.2139/ssrn.945312

Cherif, M., & Gazdar , K. (2011). What Drives Venture Capital Investments in Europe? New Results from a Panel Data Analysis. *Journal of Applied Business and Economics* vol. 12(3), 126-136.

Cui, J., Zhang, Q., & Wang, Q. (2024). Investigating the Interactive Effects between Venture Capital and Urban Innovation Capabilities: New Evidence from a Spatial Simultaneous Equations Model. 3-10. Doi: http://dx.doi.org/10.2139/ssrn.4801955

Dalal, A. (2021). Meta-analysis of determinants of venture capital activity. *Entrepreneurial Business and Economics Review*, 1-10., Doi: https://doi.org/10.15678/EBER.2022.100108

Economics, T. (2025, March). Germany Industrial Production. Retrieved from Trading Economics: https://tradingeconomics.com/germany/industrial-production

Edwards, A., & Todtenhaupt, M. (2019). Capital Gains Taxation and Funding for Start-Ups. *Journal of Financial Economics*, 17-35., Doi: https://doi.org/10.1016/j.jfineco.2020.06.009

Félix, E., Gulamhussen, M., & Pires, C. (2013). The Determinants of Venture Capital in Europe - Evidence Across Countries. *Journal of Financial Services Research* , 259-279., Doi: http://dx.doi.org/10.1007/s10693-012-0146-y

Felix, E., Nunes, J., & Pires, C. (2022). The impact of concentration among venture capitalists: revisiting the determinants of venture capital. *An International Journal of Entrepreneurial Finance*, 10-16., Doi: https://doi.org/10.1080/13691066.2022.2147876

Gompers, P. A., & Lerner, J. (1999). What drives venture capital fundraising? *NBER*, 3-36. Doi: https://dx.doi.org/10.2139/ssrn.57935

Grilli, L., Latifi, G., & Mrkajic, B. (2019). Institutional determinants of venture capital acitivity: an empirically driven literature review and a research agenda. *Journal of economic surveys*, 1095-1105., Doi: https://doi.org/10.1111/joes.12319

Groh, A. P., & Wallmeroth, J. (2015). Determinants of Venture Capital Investments in Emerging Markets. SSRN, 2-20., Doi: https://dx.doi.org/10.2139/ssrn.2605452

Jandrić, A., & Geršl, A. (2024). Exploring institutional determinants of private equity and venture capital activity in Europe., Available at: https://hdl.handle.net/10419/303256

Jaoui, F., Amoussou, O., & Kemeze, F. H. (2022). "Catch me if you can" on drivers of venture capital investment in Africa. *African Development Review*, 12-28.,

Doi: https://doi.org/10.1111/1467-8268.12655

Jeng, L. A., & Wells, P. C. (2000). The determinants of venture capital funding: evidence across countries. *Journal of Corporate Finance*, 245.

Doi: https://doi.org/10.1016/S0929-1199(00)00003-1

Khan, M., Khan, Z., & Hameed, A. (2020). Institutions, Digitization, Innovation and Venture Capital: Evidence from Europe and the Asia-Pacific . Journal of Applied Economics and Business Studies, 1-15.

Milenković, N., & Kalaš, B. (2020). Banke versus fondovi rizičnog i privatnog kapitala - supstitut ili komplement? Kultura polisa, 655-657. Available at: https://kpolisa.com/index.php/kp/article/view/152

Mirović, V., Pjanić, M., Andrašić, J., & Kalaš, B. (2024). Hartije od vrednosti. Subotica: Ekonomski fakultet u Subotici.

Ning, Y., Wang, W., & Yu , B. (2014). The driving forces of venture capital investments. Springer, 316-334. Available at: https://www.jstor.org/stable/43553052

Plško, R. (2024). Macroeconomic and Institutional. Charles University, 37-44. Available at: http://hdl.handle.net/20.500.11956/193565

Poterba , J. M. (1989). Venture capital and capital gains taxation. NBER, 50-66. Available at: https://ssrn.com/abstract=1684424

WIPO. (2025). Global Innovation Index. Available at WIPO: https://www.wipo.int/en/web/global-innovation-index