JEL Classification: C23, D22, O30, O47

## https://doi.org/10.21272/mmi.2020.4-25

Liudmyla Starchenko,

Ph.D., Associate Professor, Sumy State University, Ukraine

ORCID ID, 0000-0001-8606-7246 email: I.starchenko@fpkpo.sumdu.edu.ua

## IMPACT OF GENDER ASPECTS OF SUSTAINABLE ENTREPRENEURSHIP ON COUNTRY INNOVATIVE DEVELOPMENT

Abstract. This article generalizes arguments and counter-arguments within the scientific discussion regarding determining the influence of gender proxies of sustainable entrepreneurship on country innovative development. Systematization of the scientific findings on the problems mentioned above proves that there is a lack of empirical studies aimed at familiar issues, which, in turn, proves the necessity of further theoretical and empirical search in this sphere. Thus, it was developed a scientific and methodical approach based on the combination of correlation and panel data regression analysis to test the hypothesis about gender determinants' influence on country innovative development. In order to test this hypothesis it was developed a scientific and methodological approach that consists of several stages: 1) correlation analysis to eliminate multicollinearity problem between control variables; 2) analysis of descriptive dataset statistics; 3) realization of the panel data regression analysis and characteristics of its results. This research is realized within the Stata 12/SE software. The country sample consists of 9 countries (Czech Republic Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia, and Ukraine). Period of observation – 2008-2018. The results of panel data regression analysis revealed no significant relationship between gender proxies of sustainable entrepreneurship and country innovative development. Specifically, it was revealed that an increase in 1% of female labour force participation leads to 0.9 points increase of Global Innovation Index with 99% confidence probability; an increase of GINI Index in 1% results in an increase of Global Innovation Index in approximately 0.5 points with 90% confidence probability, while female labour force basic education and female unemployment have no statistically significant impact on it. That leads us to conclude that the gender perspective of sustainable entrepreneurship should be developed more rapidly to transform it into the vital mechanism of country innovative and sustainable development.

**Keywords:** gender aspects, innovative economic growth, innovative state management, panel data analysis, sustainable entrepreneurship.

**Introduction.** Traditionally business performance and efficiency were measured through financial indicators without considering social and environmental aspects. But the development of economic relationships at national and supranational levels together with the appearance of new economic concepts and approaches pushed business entities to the new stage of its development. Therefore, business success and prosperity highly depend on commercial indicators and social involvement, environmental responsibility, labour conditions and compensations, corporate culture, business ethics, and gender equality. It stands to note that over the last few decades these proxies become more and more relevant determinants of company sustainability and overall performance.

Moreover, at germinal stages of sustainable entrepreneurship concept development, it was mainly associated with environmental issues, but later social and gender aspects become more and more important. Nowadays, the modern sustainable enterprise is environmentally-friendly and actively involved in the local community and national social projects, provides sufficient labour conditions and compensations for employees, creates a positive emotional climate, builds up a corporate culture, and develops its business framework on competitive, fair and ethical background, etc. Thus, the modern profile of sustainable entrepreneurship is quite multidimensional.

Therefore, considering the huge importance of the aspects mentioned above, it is interesting from theoretical and practical perspectives that extending all these proxies of sustainable entrepreneurship influences country sustainable and innovative development. The problem of this research raised from the

Cite as: Starchenko, L.(2020). Impact of Gender Aspects of Sustainable Entrepreneurship on Country Innovative Development. Marketing and Management of Innovations, 4, 304-311. <a href="http://doi.org/10.21272/mmi.2020.4-25">http://doi.org/10.21272/mmi.2020.4-25</a>

following perception. The huge attention to the necessity of sustainable corporate development at the national and supranational level does not impact significantly on sustainable and innovative country development. Thus, this research aims to test the hypothesis about the impact of gender proxies of sustainable entrepreneurship on country innovative development.

**Literature Review.** Analysis of the relative scientific publications leads us to conclude that there are plenty of theoretical and empirical works, which characterized the advantages and damages of different proxies of sustainable entrepreneurship realization.

Specifically, Biewendt, Blaschke, and Bohnert (2020) pointed out that business sustainability issues and its financial efficiency up to some extent, contradict each other. Nevertheless, the authors highlighted that an enterprise could not be successful and sustainable in modern conditions without maintaining corporate and environmental sustainability issues. Moreover, they pointed out that both practical and scientific interest to Green Controlling, Green IT, and Green Manufacturing considerably increased over the last decade.

In turn, Bonamigo and Mendes (2019) pointed out that the increase in business value depends not only from external but also from internal factors. Specifically, the authors noted that enterprise performance and sustainability highly depends on cooperation and ethical preconditions. This empirical study proved the necessity of creating a friendly environment and relationships with different groups of stakeholders.

Goncharenko (2020), Goncharenko and Lopa (2020) found out the «digital financial technologies, ecommerce, information management are important factors that form the model of leadership and innovation in business. The development of risk management, risk assessment, profitability-risk-stability triangle balancing, which create relevant trends in the formation of business leadership models, has increasing importance for managers, clients and shareholders». Consequently, the author based on the bibliometric analysis pointed out that sustainable entrepreneurship is built on the expansion of new technologies implementation, research and development massive financing and comprehensive risk assessment and mitigation. Moreover, Lopez and Alcaide (2020) also came to the same conclusions. In turn, Brimah et al. (2020) argued that business performance and sustainability depend on the efficiency of personnel and top management communication mechanism and the corporate culture's efficiency. In turn, Kaya (2020) pointed out that business friendliness and sustainability depend on the business environment and regulatory quality and regulatory burden. Specifically, based on the regression analysis, the author found out that business entities were more willing to behave in a friendly manner than in severe business environments. Familiarly, Hanic and Jevtic (2020) analyzing Serbia and Bosnia and Hercegovina experience found out that entrepreneurship sustainability depends on the efficiency of business environment regulations and corruption level, judiciary system, etc. Otherwise, business entities that are forced to work in unfavourable business conditions demonstrate degradation and unethical behaviour.

Tommaso and Gulinelli (2019), Al-Khonain and Al-Adeem (2020), El Amri et al. (2020) researched on how corporate governance influence the company's financial and economic performance. Authors revealed that «corporate governance should not be a set of rules and mechanisms aimed at managing and controlling companies, but rather as a process by which companies become sensitive to stakeholder rights». Thus, authors underlined that sustainable and effective business management framework might be built on participatory and partner background. Tovmasyan and Minasyan (2020) researched how business performance and sustainability and personal employee efficiency depend on motivation and corporate climate, especially in vulnerable conditions (pandemic of COVID-19). Authors revealed that in the case of Armenia material factors play a crucial role in personal motivation. However, from the range of non-material factors, employees pointed out as follows «career advancement, healthy moral and psychological atmosphere of the organization, flexible work schedule, fair and equal conditions, training courses. According to employees, the organization's motivation policy affects their work efficiency and

plays an essential role in the organization's success». Thus, we can summarize that favourable moral working conditions and gender equality allow increasing working motivation. Mamun and Khan (2020) also researched different approaches to employees' motivation and personal growth. They found out that personnel motivation depends on mental health climate, coach programs, permanent reflexes, corporate culture, and favourable top management relationships. Moreover, Tsalikis and Seaton (2020) argued that consumers' satisfaction in different countries depends on price factors and service and communication factors. Thus, it can be summarized that business sustainability and economic performance based not only on financial parameters but also hugely affected by non-financial issues. Consequently, scientists researched on how different preconditions influence business performance and sustainability, and its impact on country innovative and sustainable development, but there is a significant lack of research on the impact of gender determinants on business sustainability and country innovative development that ground the necessity of further scientific and empirical research in this direction.

**Methodology and research methods.** The research aims to test the hypothesis about the impact of gender proxies of sustainable entrepreneurship on country innovative development. The Global Innovation Index (Index) was chosen as a measure of innovative country development. Experts from Cornell University, Business School INSEAD, and the World Intellectual Property Organization (WIPO) calculated it. This Index allows for measuring innovative macroeconomic development from the perspectives as follows: institutional development, human capital development, infrastructure development, market and business sophistication, knowledge and technological outputs, and creative outputs. The Index's higher value illustrates a higher level of country innovative development (maximum value – 100, minimum – 0).

For measuring gender proxies of sustainable entrepreneurship, it was chosen several indicators from Gender Statistics of the World Bank DataBank, namely:

- GINI Index (GINI).
- Labour force participation rate, female (% of female population ages 15+) (L1).
- Labour force with basic education, female (% of the female working-age population with basic education) (L2).
  - Unemployment, female (% of the female labour force), (modelled ILO estimate) (Unem).

It worth noting that each of the four independent variables would be included in the model one by one. Thus, it is necessary to add to the models a subset of control variables to improve the regression models' reliability. The traditional set of control variables for economic growth models are as follows:

- consumer price index, % (CPI);
- current account balance (current USD) (CAB);
- foreign direct investment, net (current USD) (FDI);
- gross capital formation (current USD) (GCF);;
- GDP growth (annual %) (GDPg);
- trade openness (ratio of total export and import amount to GDP), % (Trade).

All control variables are collected from the World Development Indicators collection of the World Bank. For testing the hypothesis about the impact of gender proxies of sustainable entrepreneurship on country innovative development, it was formed country sample from 9 European countries such as Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia, and Ukraine. Observation period – 2008-2018. The methodology of the research consists of several procedures are as follows:

- correlation analysis aimed at elimination control variables with multicollinearity problem:
- general characteristics of the data sample based on summative statistics;

 panel data regression analysis with each of the four independent variables aimed to test the hypothesis about the impact of gender proxies of sustainable entrepreneurship on country innovative development. All the stages mentioned above would be realized using Stata software.

**Results.** As far as mentioned before, the first stage of the research aimed to eliminate control variables with a multicollinearity problem considering correlation analysis results (Table 1).

Table 1. Correlation matrix of control variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) CPI	1.000					
(2) CAB	0.107	1.000				
(3) FDI	0.023	0.632	1.000			
(4) GDPg	0.068	-0.105	-0.208	1.000		
(5) GCF	-0.083	-0.656	-0.815	0.203	1.000	
(6) Trade	-0.119	0.562	0.473	0.306	-0.435	1.000

Notes: CPI – consumer price index; CAB – current account balance; FDI – foreign direct investment, net; GCF – gross capital formation; GDPg – GDP growth; Trade - trade openness (ratio of total export and import amount to GDP).

Sources: developed by the author.

Consequently, correlation analysis reveals a multicollinearity problem of some variables with the variable «current account balance». Considering that multicollinearity between variables might negatively affect modelling results, it is necessary to eliminate this curtain variable from the regression analysis stage. Therefore, at the next stage of the research, there is one control variable less. The realization of the general characteristics of the data sample's basic statistical values is proposed to analyzed information presented in Table 2.

Table 2. Descriptive statistics

Table El Becchipure etatlette								
Variable	Obs.	Mean	Std. Dev.	Min	Max			
Index	99	40.902	7.074	22.4	55.3			
CPI	99	110.329	24.452	78.9	261.07			
FDI	99	-2.53e+09	3.28e+09	-1.48e+10	2.03e+09			
GDPg	99	1.422	4.538	-14.81	7.44			
GCF	99	3.10e+10	3.17e+10	4.12e+09	1.32e+11			
Trade	99	135.286	28.757	75.23	190.16			
GINI	90	29.866	4.31	23.7	38.4			
L1	99	51.16	3.424	42.68	57.38			
L2	93	19.309	6.6	8.84	36.35			
Unem	99	8.657	2.961	2.8	16.28			

Notes: Obs – observations; Std. Dev. – Standard Deviation; Index – Global Innovation Index; CPI – consumer price index; FDI – foreign direct investment, net; GDPg – GDP growth; GCF – gross capital formation; Trade - trade openness (ratio of total export and import amount to GDP); GINI – GINI Index; L1 – Labour force participation rate, female (% of female population ages 15+) (modelled ILO estimate); L2 – Labour force with basic education, female (% of the female working-age population with basic education); Unem – Unemployment, female (% of the female labour force) (modelled ILO estimate).

Sources: developed by the author.

Thus, it should be noted that in 2008-2018 in researched 9 countries averaged value of the Global Innovation Index is 40.9. The maximum value (55.3) was in 2012 in Estonia, while minimum (22.4) – in 2008 in Ukraine. Consequently, we can underline that Ukraine is less innovatively developed country in a sample.

In terms of characteristics a subset of independent variables, it worth noting that average GINI coefficient is 29.9. The highest income inequality was in 2017 in Lithuania, while the lowest – in 2008 in Slovenia. Average female labour force participation rate is 51.16. Its minimum value was in 2008 in Poland, maximum – in 2018 in Estonia. As for the female labour force ratio with basic education, it might be pointed out that the average level of this gender indicator is 19.3 with the minimum value in Lithuania in 2016 and maximum value in 2016 in Estonia. Finally, the average ratio of female unemployment is 8.7%, its minimum value was in 2018 in the Czech Republic, maximum – in 2010 in Latvia. Thus, it is possible to conclude that among 9 European countries, Estonia has more sufficient level of gender development as one of the direction to ensure sustainable entrepreneurship. The next stage of the research aimed to characterize the panel data regression analysis (Tables 3-6).

Table 3. Results of the regression analysis on testing the hypothesis about the influence of the GINI Index on innovative country development

Girl mack on innovative ocurry development								
	Coefficient	Standard Error	t-value	p-value	95% Confide	Confidence Interval		
GINI	0.495	0.294	1.69	0.092	-0.081	1.071	*	
CPI	0.064	0.023	2.84	0.005	0.020	0.108	***	
FDI	0.000	0.000	0.07	0.945	0.000	0.000		
GDPg	-0.091	0.142	-0.64	0.524	-0.369	0.188		
GCF	0.000	0.000	-0.17	0.866	0.000	0.000		
Trade	0.305	0.045	6.77	0.000	0.217	0.393	***	
Constant	-21.735	12.221	-1.78	0.075	-45.688	2.219	*	
Mean dependent var		40.509	SD dependent var		7.243		_	
Overall r-squared		0.330	Number of obs		90.000			
R-squared within		0.621	R-squared between		0.275			

Notes: \*\*\* – significance at 1% level, \*\* – significance at 5% level, \* – significance at 10 % level, SD – standard deviation; GINI – GINI Index; CPI – consumer price index; FDI – foreign direct investment, net; GDPg – GDP growth; GCF – gross capital formation; Trade - trade openness (ratio of total export and import amount to GDP).

Sources: developed by the author.

Table 4. Results of the regression analysis on testing the hypothesis about the influence of labour force participation (female) on innovative country development

	Coefficient	Standard Error	t-value	p-value	95% Confid	ence Interval	Sig
L1	0.920	0.203	4.52	0.000	0.521	1.318	***
CPI	0.079	0.024	3.29	0.001	0.032	0.125	***
FDI	0.000	0.000	0.31	0.756	0.000	0.000	**
GDPg	0.024	0.149	0.16	0.872	-0.269	0.317	***
GCF	0.000	0.000	2.56	0.010	0.000	0.000	***
Trade	0.156	0.026	5.98	0.000	0.105	0.207	
Constant	-38.276	13.565	-2.82	0.005	-64.864	-11.688	
Mean dependent var		40.902	SD dependent var		7.074		_
Overall r-squared		0.473	Number of obs		99.000		
R-squared within		0.495	R-squared between		0.513		

Notes: \*\*\* – significance at 1% level, \*\* – significance at 5 % level, \* – significance at 10% level, SD – standard deviation; CPI – consumer price index; FDI – foreign direct investment, net; GDPg – GDP growth; GCF – gross capital formation; Trade - trade openness (ratio of total export and import amount to GDP; L1 – Labour force participation rate, female (% of female population ages 15+) (modelled ILO estimate).

Sources: developed by the author.

Table 5. Results of the regression analysis on testing the hypothesis about the influence of labour force with basic education (female) on innovative country development

labour force with basic education (lemaile) on millovative country development									
	Coefficient	Standard Error	t-value	p-value	95% Confide	ence Interval	Sig		
L2	0.108	0.154	0.70	0.481	-0.193	0.409	***		
CPI	0.083	0.032	2.61	0.009	0.020	0.145	***		
FDI	0.000	0.000	0.07	0.940	0.000	0.000			
GDPg	-0.061	0.154	-0.40	0.689	-0.362	0.239			
GCF	0.000	0.000	0.45	0.655	0.000	0.000			
Trade	0.265	0.041	6.44	0.000	0.184	0.346			
Constant	-6.906	8.514	-0.81	0.417	-23.594	9.782			
Mean dependent var		41.523	SD dependent var		6.726		_		
Overall r-squared		0.275	Number of obs		93.000				
R-squared within		0.588	R-squared between		0.187				

Notes: \*\*\* – significance at 1 % level, \*\* – significance at 5 % level, \* – significance at 10% level, SD – standard deviation; CPI – consumer price index; FDI – foreign direct investment, net; GDPg – GDP growth; GCF – gross capital formation; Trade - trade openness (ratio of total export and import amount to GDP); L2 – Labour force with basic education, female (% of the female working-age population with basic education).

Sources: developed by the author.

Table 6. Results of the regression analysis on testing the hypothesis about the influence of unemployment (female) on innovative country development

	Coefficient	Standard Error	t-value	p-value	95% Confide	ence Interval	Sig
Unem	0.014	0.185	0.07	0.941	-0.350	0.377	***
CPI	0.069	0.022	3.14	0.002	0.026	0.113	
FDI	0.000	0.000	0.06	0.950	0.000	0.000	***
GDPg	-0.011	0.136	-0.08	0.935	-0.277	0.255	
GCF	0.000	0.000	-0.03	0.976	0.000	0.000	
Trade	0.257	0.039	6.57	0.000	0.181	0.334	
Constant	-1.601	7.083	-0.23	0.821	-15.483	12.281	
Mean dependent var		40.902	SD dependent var		7.074		-
Overall r-squared		0.318	Number of obs		99.000		
R-squared w			R-squared between				

Notes: \*\*\* – significance at 1% level, \*\* – significance at 5 % level, \* – significance at 10% level, SD – standard deviation; CPI – consumer price index; FDI – foreign direct investment, net; GDPg – GDP growth; GCF – gross capital formation; Trade - trade openness (ratio of total export and import amount to GDP); Unem – Unemployment, female (% of the female labour force) (modelled ILO estimate).

Sources: developed by the author

Specifically, it should be noted that an increase of the GINI Index in 1% results in a rise in the Global Innovation Index in approximately 0.5 points with 90% confidence probability. Besides, among a subset of control variables, the only impact of inflation and trade openness is statistically significant (an increase of CPI in 1% results in the increase of the Index in 0.06 points. Herewith, the expansion of trade openness in 1% results in the increase of the dependent variable in 0.3 points). The variation of all independent variables explains only 33% of the dependent variable variation that might not be considered highly reliable. Therefore, the model's general quality is not so good.

In terms of characteristics of the influence of labour force participation (female) on innovative country development, this model has the highest value of the overall coefficient of determination (47.3%). Specifically, it was revealed that an increase in 1% of female labour force participation leads to 0.9 points

increase of Global Innovation Index with 99% confidence probability. Similarly to the previous model, it was underlined positive impact of inflation and trade openness on the independent variable. But in contrast to the previous model, it was specified that the increase in gross capital formation has a positive impact on innovative country development. Consequently, the regression analysis results presented in tables 5 and 6 illustrate that female labour force basic education and female unemployment are not statistically significant determinants of boosting or inhibiting country innovative development.

Conclusions. Nowadays, sustainable economic development significantly depends on numerous external and internal factors. Specifically, the principle of sustainability became an integral element of country, municipal and corporate management systems. Germinal stages of sustainable entrepreneurship development were only associated with environmental issues and solving of ecological problems. However, the complexity of economic relationships at different levels forced the expansion of sustainable entrepreneurship essence. In turn, it is no more associated with environmental issues and numerous other socioeconomic determinants (sufficient labour conditions and labour compensation, business involvement in social projects financing and realization, gender sufficiency, etc.). Basically, to the hypothesis about the impact of gender proxies of sustainable entrepreneurship on country innovative development, a scientific and methodical approach was realized based on the combination of correlation and panel data regression analysis. Unfortunately, under the modelling results, it was not strongly confirmed the hypothesis mentioned above. Specifically, it was pointed out that the most significant influence on country innovative development has female labour force participation. In turn, the GINI Index slightly stimulated innovative country development (at 10 % confidence level), while female labour force basic education and female unemployment have no statistically significant impact on it. Therefore, it is possible to conclude that despite increasing attention to gender problems at a supranational level, this proxy of sustainable entrepreneurship still has an insignificant impact on country innovative and sustainable development. In such circumstances, it becomes the crucially important further implementation of gender equality principles at corporate, municipal, national and supranational levels to transform it into the vital mechanism of country innovative development.

Funding: This research received no external funding.

## References

Al-Khonain, S., & Al-Adeem, K. (2020). Corporate Governance and Financial Reporting Quality: Preliminary Evidence from Saudi Arabia. Financial Markets, Institutions and Risks, 4(1), 109-116. [Google Scholar] [CrossRef]

Baranovskyi, O. I. (2020). Regulation of functional and structural transformational processes in the financial sector. Financial and credit activity: problems of theory and practice, 1(32), 292-306. [Google Scholar] [CrossRef]

Biewendt, M., Blaschke, F., & Böhnert, A. (2020). An Evaluation Of Corporate Sustainability In Context Of The Jevons. SocioEconomic Challenges, 4 (3), 46-65. [Google Scholar] [CrossRef]

Bilan, Y., Pimonenko, T., & Starchenko, L. (2020). Sustainable business models for innovation and success: bibliometric analysis. In E3S Web of Conferences (Vol. 159, p. 04037). EDP Sciences. [Google Scholar] [CrossRef]

Boiarko, I. M. (2016). Praxeological and situational approaches in the formation of strategic accounting. Financial and credit activities: problems of theory and practice, 2(21), 80-90. [CrossRef]

Bonamigo, A., & Mendes, D. (2019). Value Co-creation and Leadership: An Analysis Based on the Business Ecosystem Concept. Business Ethics and Leadership, 3(4), 66-73. [Google Scholar] [CrossRef]

Brimah, B. A., Olanipekun, W. D., Bamidele, A. G., & Ibrahim, M. (2020). Knowledge Management and its Effects on Financial Performance: Evidence from Dangote Flour Mills, Ilorin. *Financial Markets*. *Institutions and Risks*, 4(2), 34-42. [CrossRef]

Cebula, J., & Pimonenko, T. (2015). Comparison financing conditions of the development biogas sector in Poland and Ukraine. International Journal of Ecology and Development, 30(2), 20-30. [Google Scholar]

El Amri, A., Boutti, R., & Rodhain, F. (2020). Sustainable Finance at the time of Institutions: Performativity through the lens of Responsible Management in Morocco. Financial Markets, Institutions and Risks, 4(2), 52-64. [Google Scholar] [CrossRef]

Global Innovation Index Reports. (2020). Retrieved from [Link]

Goncharenko, T. (2020). From Business Modelling to the Leadership and Innovation in Business: Bibliometric Analysis (Banking as a Case). Business Ethics and Leadership, 4(1), 113-125. [Google Scholar] [CrossRef].

Goncharenko, T., & Lopa L. (2020). Balance Between Risk And Profit In The Context Of Strategic Management: The Case Of Ukrainian Banks. SocioEconomic Challenges, 4(1), 111-121. [Google Scholar] [CrossRef]

Hanić, A., & Jevtić, D. (2020). Human Resource Management Between Economy and Ethics–Research of Serbia and Bosnia and Hercegovina. *Business Ethics and Leadership*, 4(3), 127-136. [Google Scholar] [CrossRef]

Hrytsenko, L. L., Roienko, V., & Boiarko, I. M. (2018). Institutional background of the role of state in investment processes activation. Financial and credit activities: problems of theory and practice, 1(24), 338-344. [CrossRef]

Kaya, H. D. (2020). Business Friendliness, Firm Performance and Owner's Optimism. Financial Markets, Institutions and Risks, 4 (3), 13-23. [Google Scholar] [CrossRef]

Kuznyetsova A. Ya., Zherebylo I. V., Klipkova O. I., Kozmuk N. I. (2019). Creation of the value of national enterprises with the help of the innovation centers in the cluster formations. *Financial and credit activities: problems of theory and practice*, 2(29), 391-402. [Google Scholar] [CrossRef]

Lopez, B. S., & Alcaide, A. V. (2020). Blockchain, Al and IoT to Improve Governance, Financial Management and Control of Crisis: Case Study COVID-19. SocioEconomic Challenges, 4(2), 78-89. [Google Scholar] [CrossRef].

Mamun, M. Z. A., & Khan, M. Y. H. (2020). A Theoretical Study On Factors Influencing Employees Performance, Rewards And Motivation Within Organisation. SocioEconomic Challenges, 4(3), 113-124. [Google Scholar] [CrossRef]

Tommaso, F. D., & Gulinelli, A. (2019). Corporate Governance and Economic Performance: The Limit of Short Termism. Financial Markets, Institutions and Risks, 3(4), 49-61. [Google Scholar] [CrossRef].

Tovmasyan, G., & Minasyan, D. (2020). The Impact of Motivation on Work Efficiency for Both Employers and Employees also During COVID-19 Pandemic: Case Study from Armenia. *Business Ethics and Leadership*, 4(3), 25-35. [Google Scholar] [CrossRefl Tsalikis, J., & Seaton, B. (2020). Corporate Social Responsibility: A Cross-National Study of the Treatment of Consumers and Employees. *Business Ethics and Leadership*, 4(2), 6-15. [Google Scholar] [CrossRefl.

Umadia Sr, K., & Kasztelnik, K. (2020). The Financial Innovative Business Strategies of Small to Medium Scale Enterprises in Developing Country and Influence for the Global Economy Performance. *SocioEconomic Challenges*, 4(3), 20-32. [Google Scholar] [CrossRef]

World Bank DataBank. (2020) Retrieved from [Link].

## **Людмила Старченко,** к.е.н., доцен, Сумський державний університет, Україна Вплив гендерних аспектів сталого підприємства на інноваційний розвиток країни

Ця стаття узагальнює аргументи та контраргументи в рамках наукової дискусії щодо визначення впливу гендерних аспектів сталого підприємництва на інноваційний розвиток країни. Систематизація наукових напрацювань із вищезазначеної проблематики свідчить про недостатність емпіричних досліджень. Таким чином, подальші теоретичні та емпіричні дослідження у визначеному напрямку є актуальними. Метою статті є перевірка гіпотези про вплив гендерних детермінант сталого підприємництва на інноваційний розвиток країни. Для досягнення поставленої мети у роботі розроблено науково-методичний підхід на основі поєднання кореляційного та регресійного аналізів. У ході дослідження застосовано наступну логічну послідовність: 1) кореляційний аналіз з метою усунення проблеми мультиколінеарності між змінними управління; 2) аналіз описової статистики набору даних; 3) регресійний аналіз панельних даних та характеристика його результатів. Практичну реалізацію усіх етапів даного дослідження здійснено з використання програмного забезпечення Stata 12/SE. Емпіричне дослідження проведено на основі панельних даних, сформованих для вибірки з 9 країн (Чеська Республіка, Естонія, Угорщина, Латвія, Литва, Польща, Словацька Республіка, Словенія та Україна) за 2008-2018 роки. За результатами регресійного аналізу встановлено, що між гендерними аспектами сталого підприємництва та інноваційним розвитком країни не існує суттєвих взаємозв'язків. Зокрема, отримані результати свідчать про те, що збільшення частки жінок у робочій силі на 1% призводить до збільшення глобального індексу інновацій на 0.9 бала з ймовірністю 99%. При цьому збільшення індексу Джині на 1% призводить до збільшення Глобального індексу інновацій приблизно на 0,5 бала з 90% ймовірністю. Окрім цього, базова освіта жіночої робочої сили та безробіття жінок не мають статистично значущого впливу на результативний показник. За результатами дослідження автор приходить до висновку, що гендерна перспектива сталого підприємництва повинна розвиватися швидше, для того, щоб трансформуватися у дієвий механізм інноваційного та сталого розвитку країни.

Ключові слова: гендерні аспекти, інноваційне економічне зростання, інноваційне управління державою, аналіз панельних даних, стале підприємництво.

Manuscript received: 20.06.2020

© The author(s) 2020. This article is published with open access at Sumy State University