

FDI- EXPORTS-GDP NEXUS IN THE REPUBLIC OF MOLDOVA

Ph.D., Zinovia TOACA

Academy of Economic Study of Moldova, Republic of Moldova
E-mail: toaca@ase.md

Victoria FALA

National Institute of Economic Research, Republic of Moldova
E-mail: fala.victoria@ince.md

Abstract: Exports and FDI are important tools of Governments to stimulate economic growth and prosperity. Many countries implemented successfully export led-grow models in their development path. Being a small European transition economy affected by mass migration, Moldova is trying to change its consumption led growth model fueled by remittances by an investment and export growth led model, were FDI have to be an important driver. Though, FDI inflows in Moldova are small comparative to many European countries, the economic growth is slowing down on long term, while there is slight improvement in export competitiveness. The aim of this paper was to analyze the long term causality between FDI, GDP and exports of goods in the Republic of Moldova. Estimations were performed based on the available data for the period 1995-2021. The Granger causality approach has been applied to test the relationship between the 3 variables based on annual data. The authors found a unidirectional causality relationship running from FDI to GDP, FDI to exports, and a Granger causality from GDP to merchandise exports. An impulse-response analysis has been performed based on VECM models. A 1% growth in FDI in Republic of Moldova causes an increase of GDP by 0.09 p.p. and of exports of goods by 0.08%.

Keywords: exports, foreign direct investments, economic growth, Granger causality, VECM model, transition economy.

JEL Classification: F13, F14, F17, F43.

1. Introduction

The relationship between foreign direct investments (FDI), economic growth and exports is a widely researched topic that is of particular interest for decision makers as well. Investments and exports can be important economic development enablers in developing countries, especially small one.

Growing up labor productivity, determined by capital accumulation and total factor productivity (TFP) is essential for a sustainable economic growth. It is a precondition for ensuring population with revenues from sustainable sources. FDI inflows proved to be an important source of human capital, tangible and intangible assets in host countries (Simionescu, 2016) and a driver for increasing productivity. The firms undertaking FDI tend to be more productive compared to the domestic firms and increase the competitive pressure in the local markets having a direct and indirect impact on the host economy productivity (Anuj Joshua Mathew, Kenneth Koo et. all, 2021).

The improvements on a country's productivity has a positive impact on its external competitiveness. Exports in turn may increase firms productivity by learning in the process of internationalization (Wagner J., 2005), by accessing a greater and more sophisticated markets that allow to reduce production costs and motivates them to diversify and produce more value-added products.

Mite Miteski and Dijana Janevska Stefanova (2017), Hlavacek P., Bal Domanska B. (2016), Cičak K. (2015) found that FDI had a positive impact on GDP growth in Central Europe and South-East European Economies (CESEE). According to Moraru C. (2013), the increase by one monetary unit of the FDI inflows in the Romanian economy lead to the increase of the GDP by 1.8 units. A positive bidirectional Granger causality between GDP and FDI was found for the most EU countries by Simionescu M. (2016). However, there are situations when GDP causes FDI growth (Cičak K., 2015; Simionescu M., 2016), corroborating the theory that investors are prone to stable macroeconomic conditions.

According to the Ludosean B.M. (2012) estimations based on a VAR mode for the time periode 1991-2009, FDI have had little effect on Romania's GDP in the first five years of transition. The same positive shock of FDI caused the contraction of GDP in the following years while a shock of + 1% in GDP generated a significant increase in FDI flow, especially in long-term.

FDI inflows to new countries that joined the EU during the previous two decades, especially coming from other members, have played a major role to boost exports in these countries. Foreign investment projects brought to exports restructuring in these countries by making them more technological intensive in the medium term. An example is the development of the automotive industry in these countries. Thouth, many of the Central and South Eastern European countries at the begining managed to attract foreign investors in labor intensive activities by offering a cheaper labor force. This lead to a slow increase in the domestic value-added content of the production (Jirasavetakul, F., Rahman, J., 2018).

Abamu, B. E., Pietrzak, J. (2019) argue that there is a complementary link between vertical FDI and exports. Verticat FDI are efficiency seeking investments projects that are determined by differences in production factors and costs between countries. They lead to value chain fragmentation in different countries accompanied by an increase in export product on in host countries.

2. Some facts about FDI, Exports and GDP evolution in Republic of Moldova

Republic of Moldova is among the transition countries that resumed its economic growth after the Soviet Union collapse late in 90's. Since 2001 the economy has begun to recover with relatively high growth rates, recording an impressive growth in investments and external trade. Althout the world crisis at the end of 2000s disrupted GDP, investments and external trade growth in 2009. The economy recovered fast at its pre-crisis GDP level. But after some years of relatively high economic growth, since 2014 the economy was hit again by a domestic financial crisis in 2014-2015; the crisis caused by the Covid-19 pandemic in 2020 and frequent climatic shocks that impacted negatively the agricultural sector that accounts for about 10% of Moldovan GDP. The economic growth slowed down during the past decade, increasing at significant lower rates comparative to the National Development Strategy targets. On average Moldovan economy grew up slightly faster compared to Central European countries, but the its economic growth is to slow to close the significant gap in GDP per capita compared to these countries (Stratan A., Toaca Z., Fala V., 2021). Moldova's GDP per capita, PPP was 15.6 thousand USD comparative to 36.9 thousand USD in Central Europe.

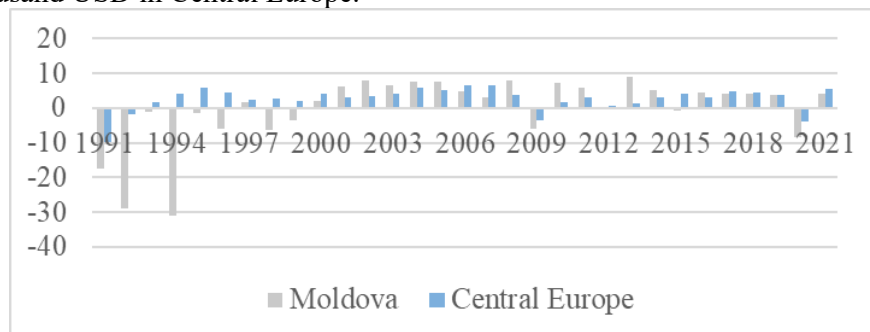


Figure nr. 1. Economic growth in Moldova and Central Europe, YoY % change, 1991-2021

Source: National Bank of Statistics of Moldova, World Bank

The intensity of private and public capital is very low in Moldova. Investment activity declined significantly during the first decade of economic transition and resumed its growth in 2001, both public and private investments increasing at fairly high rates until 2007. Investments in fixed assets slowed down significantly in 2008 and dropped in 2009, because of a sharp contraction of investments in the private, foreign and mixed sectors. Since then, their annual value reached the pre-crisis level only in 2021. Accordingly Gross Fixed Capital Formation (GFCF) relative to GDP reached the highest values in 2007-2008 (34%). Since that its decreased significantly amounting 24% in 2021. The poor investment performance in Moldova is explained by many critical constrains linked to the business and market sophistication, political and regulatory environment, quality and affordability of infrastructure, human capital that also hinder innovation activity (Dutta S. et al, 2021).

FDI used to be an important tool applied by Governments in many central european countries to restructure their economies. Although, the existing researches states that to foster productivity the value of FDI inflows should be in sufficient amounts while linkages between domestic and foreign owned firms have to be developed. Moldova can't be considered a successful case of transition european economies in attracting FDI. During the last 2 decades, Moldova attracted on average 270 mil USD of net FDI annually that is extremely a small amount comparative to other small european countries. In the three Baltic states: Estonia, Latvia, Lithuania the net FDI inflows value were 4 or even more higher than in Moldova during this periode. Moldova attract less FDI per capta (93 USD in 2021) comparative to most european countries (1200USD in Estonia, about 700 USD in Czechia and Latvia, 570 USD in Slovenia, 530 USD in Lithuania, about 400 USD in Serbia and Poland and others). Thus the inward FDI stock was about 4,8 billion USD at the end of 2021 year or about 35% as a share of GDP value. Computed by head of population it amounted to 1.8 thousand USD and by employed person 5.7 thousand USD in 2021, maintaining the large gap compared to countries from central Europe figure nr. 2). Overall the FDI enterprises represent 7.5% of reporting enterprises in Moldova, including 4.6% are foreign owned enterprises. Although there are yet a very weak link between foreign and local companies (World Bank, 2015; World Bank, 2019; NIER, 2020; BIS, NIER, 2021) that is an important action including in public development documents.

As many other countries in the region, Moldova is most attractive for vertical FDI inflows. Most of the greenfield FDI projects do not go to technological sophisticated activities and are labor intensive, although some of these investments are made in economic activities that are considered in EU medium –high technological intensive.

Manufacturing is one of the top sectors that have attracted most of FDI in Moldova. Due to FDI inflows has born a new industry in Moldova - manufacture of motor vehicles, trailers and semi-trailers. About half of enterprises in this branch are foreign owned and the production is export oriented. Yet, the sales per employee of firms with this economic activity, including of foreign owned ones, is twice lower compared to the average recorded in the manufacturing industry.

Free Trade Zones (FTZ) was an important incentive to attract FDI in Moldova, especially in manufacturing. Although since their creation or in two decades the stock of investments in FTZ increased only to 458.9 mil. USD in 2020.

The Republic of Moldova became as well part of the regional value chains in the production of other low value added products like clothes, shoes, furniture. Despite many concerns about these sectors low productivity that are intensive in cheap labor force, there have been achieved low progress in increasing the value added content of the created production.

The gross value added content of manufacturing production in Moldova is the lowest compared to other economic activities. It amounted on average about 34% during 2017-

2020, increasing slightly from about 29% in 2010. Accordingly, manufacturing industry share in GDP (9% in 2011) is rather small if consider the experience of other comparator countries and the high share of agriculture (about 10% in 2021).

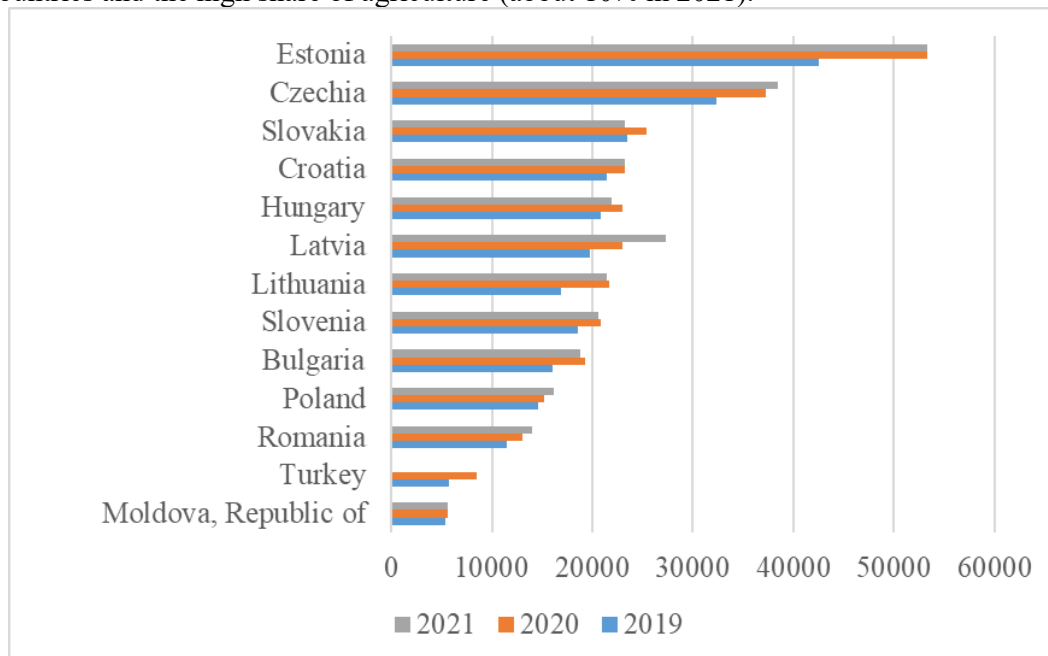


Figure nr. 2. Inward FDI stock per employed person in Central Europe, USD
Source: World Investment Report, UNCTAD

Services accounts for the highest share of GDP, more than 60%. Following manufacturing, the financial services and trade are two economic activities that proved to be the most attractive for foreign investors. But the two sectors are mainly market-oriented investments. Since last decade computer services develops rapidly. Different policy actions were implemented under the National Strategy for Informational Society Development „Digital Moldova 2020” and the Strategy for investment attraction and export promotion 2016-2020 to support the ICT sector. In 2018 was created the Moldovan IT park with the main scope to create a “Silicon Valley” atmosphere and infrastructure in Moldova. The number of residents doubled during 2018-2020, representing 658 companies, from which 22% was foreign own enterprises. These services are export oriented and has a positive impact on export of services, changing its patterns towards a more knowledge intensive structure.

Moldovan external trade accounted for 12 billion USD in 2021, including 9.3 billion USD or 77% the merchandise trade. Despite the relative small share of services in external trade, Moldova is a net exporter of services. On the contrary, the merchandise trade balance is negative and the deficit is huge as relative to GDP share amounting for -31% in 2021. This imbalance in merchandise trade causes a large current account deficit. The three-year backward moving average value of the current account balance as a percent of GDP since 2010 ranges from -5% to -8.8%.

Moldova is exporting less comparative to other countries in the region. It’s market shares in world exports of services is increasing faster comparative to merchandise exports, although in both cases the indicator shows low values comparative to other European countries with similar territorial and population size. The market share of Moldovan merchandise exports remains largely unchanged since the beginning of the economic transition and was about 0.014% in 2021. Other countries in the region have advanced at a

faster pace. Latvia has increased its share of world merchandise exports from 0.021% to 0.094% during 1992-2021, Lithuania from 0.054% to 0.183%, Estonia from 0.01% to 0.10% etc.

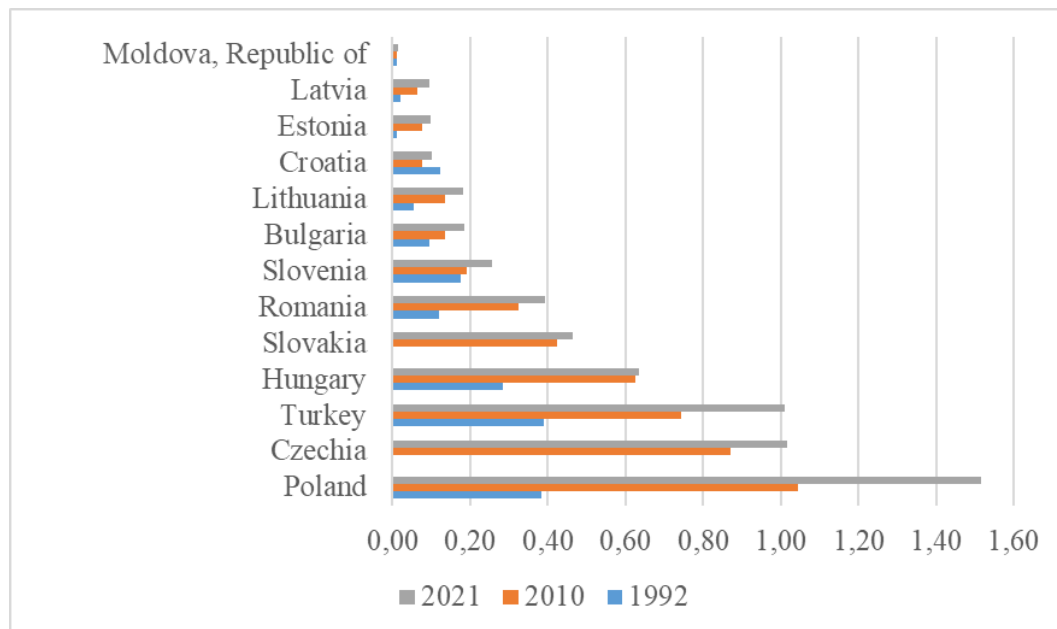


Figure nr. 3. Merchandise exports market share, %

Source: UNCTAD statistics

The average unit value of Moldovan merchandise exports is increasing slow because of its relative low technological sophistication. As of 2021, about 31% of merchandise exports are primary products, 15% resource intensive products, about half are low and medium intensive products and only 2% high tech products. The export of medium technology intensive products has increased significantly during the last two decades having a major contribution to exports growth. Although the value added content of exported goods is rather low (Stratan A., Fala V., 2021). The main commodities exported by Moldova are insulated wires, wheat, sunflower seeds, corn, fruits, wines, apple juice, apparel, furniture, shoes etc. Also the basket of exported merchandise is less diversified and records a higher concentration index (measured by Herfindahl Hirschman Index) on products and markets compared to most Central European countries (Fala V., Fala A., 2019).

The National Strategy for Investments Attraction and Exports Promotions 2016-2020 aimed to rise the exports value and diversification by making the molovan economy more attractive for FDI investments. Although the targets set for FDI inflows, GFCF and GDP growth have not been achieved. Export competitiveness in the Republic of Moldova is hindered by many supply-side constraints: small domestic market, inappropriate quality of institutions and backbone services (World Bank, 2015), weak infrastructure, large informal sector, reduced business sophistication, limited access to external financing, which is expensive etc. At the same time Moldova needs to develop it's institutional infrastructure to suport business, innovations, investments and exports. Special focus should be given as well to attract more FDI projects in high value added activities, to increase and diversify financial support programs that target development of innovative entrepreneurship, productivity and exports and to strenghten the links between foreign and local investors. .

The gap in labor productivity is large in Moldova compared to Central European countries. Despite exporters are prone to be more productive (World Bank, 2019) comparative to non-exporting enterprises, the share of firm exporting directly 10% of their sales was 12% in Moldova according to the World Bank Enterprise Survey (2019) compared to 27.6% in Latvia, 20.7% in Lithuania, 31% in Estonia, 42.8% in Slovenia, 13.3% in Slovakia etc.

The authors hypothesized that FDI inflows have a positive impact on GDP growth and exports of merchandise in Moldova, although the slow economic growth is not an encouraging factor to attract FDI in the country that determines their small level.

3. Methodology and Data

The aim of this research is to estimate whether there is a causality relation among FDI inflows, GDP and merchandise exports growth in the Republic of Moldova and how does one variable influence each other.

Structural models, which include the analysis of time series have been used to test the causal links between the FDI inflows and GDP and Exports. Annual frequency data were used, covering the period 1995-2021. Once FDI and Export are in dollars, it was decided to transform the statistical information of GDP into dollars. For the homogenization of information, the data have been transformed into logarithmic values.

The econometric analysis has been performed following many stages:

I. **Stationarity testing.** In order to be considered stationary, time series must satisfy the following conditions:

- The mean of the time series must be constant or, in other words, the observations must fluctuate around the mean;
- The series variance should be constant.

From an economic point of view, a series is stationary if a shock on the series is temporary (absorbed over time) and not permanent. If a series is not stationary, a stationary series is obtained by differentiation. The order of integration of the series represents the number of successive differentiations necessary to obtain a stationary series. In the case of the studied variables, the stationarity at the level of the series was first tested using ADF (Augmented Dickey-Fuller), PP (PhillipsPerron) and KRSS (Kwiatkowski – Phillips – Schmidt – Shin) tests, resulting in the series not being stationary or otherwise said, it has a unitary root. For stationary series, the 1st order differentiation of the series is applied, and the results indicate that these series are integrated of the first order (they do not have a unit root or are I (1)).

II. **Causality test Pairwise Granger** verifies the extent to which the current level of the variable is due to its previous levels and is showing whether adding the previous values of another variable can improve the explanation. The order of the variables is not important in the process of estimating a VAR or VECM, but it becomes essential already when determining the response-impulse functions.

III. **Testing the cointegration of the variables.** For the selection of the lag, the “VAR Lag Order Selection Criteria” test was considered (Table 1), which illustrates that for 3 criteria only one lag is recommended, and for 2 criteria - 2 lags.

Table nr. 1. VAR Lag order selection criteria

Lag	LogL	Sequential modified LR test statistic	Final prediction error	Akaike information criterion	Schwarz information criterion	Hannan-Quinn information criterion
0	-22.38590	NA	0.001530	2.030872	2.177137	2.071440
1	36.40432	98.76756*	2.87e-05	-1.952345	-1.367285*	-1.790074*
2	46.53230	14.58430	2.73e-05*	-2.042584*	-1.018728	-1.758610

Source: Data processed by authors using EViews 9.

The research considered the possibility of including in the model both one lag and two lags. Since the analyzed series are I(1) it is necessary to test the presence of cointegration between variables, which will determine the model used. If the recommended number of lags of the tests is p, then p-1 lags are included in testing the cointegration relations. If it is considered that in the VAR model, there is only one lag, then when testing the number of cointegration relations 0 lags are taken into account. According to the "trace" test, no cointegration relations are tested, and according to the "maximum eigenvalue" test – one cointegration relation. The presence of cointegration relations was tested and for two lags (Table 2).

Table nr. 2. Results of testing the number of cointegration relationships

The number of lags included in the testing of cointegration relations	Number of cointegration relationships	
	Test „trace”	Test „maximum eigenvalue”
0	0	1
1	2	2
2	1	0

Source: Data processed by authors using EViews 9.

The analysis of the obtained results does not lead to unequivocal conclusions. It is necessary to test several variants of VECM, but also a VAR, of course in finite differences in case there is no cointegration. Thus, several models were estimated and subjected to econometric testing. The final model was chosen based on the AIC test.

Table nr. 3. Results of AIC test

Estimated model	VECM(01,12)	VECM(1,2)	VECM(2,1)	VAR3(1)
Test AIC	-1,59	-1,74	-1,45	-1,04

Source: Data processed by authors using EViews 9.

According the lowest value of the AIC test in the analysis, a VECM (1,2) with 1 lag and two cointegration equations was considered.

¹ Number of lags

² Number of cointegration relationships

³ The variables were included in finite differences

$$D(L_FDI) = - 0.72*(L_FDI(-1) - 0.72*L_EXPORT(-1) + 0.05) + 0.99*(L_GDP_\$(-1) - 1.35*L_EXPORT(-1) + 1.37) - 0.027*D(L_FDI(-1)) + 1.33*D(L_GDP_\$(-1)) - 0.0005*D(L_EXPORT(-1)) - 0.018;$$

$$D(L_GDP_\$) = - 0.032*(L_FDI(-1) - 0.72*L_EXPORT(-1) + 0.05) + 0.46*(L_GDP_\$(-1) - 1.35*L_EXPORT(-1) + 1.37) - 0.07*D(L_FDI(-1)) - 0.02*D(L_GDP_\$(-1)) + 0.57*D(L_EXPORT(-1)) + 0.06;$$

$$D(L_EXPORT) = - 0.11*(L_FDI(-1) - 0.72*L_EXPORT(-1) + 0.05) + 1.07*(L_GDP_\$(-1) - 1.35*L_EXPORT(-1) + 1.37) - 0.06*D(L_FDI(-1)) + 0.22*D(L_GDP_\$(-1)) + 0.49*D(L_EXPORT(-1)) + 0.014;$$

The LM test for autocorrelation gives satisfactory results. The null hypothesis of the lack of autocorrelation for a 12th order lag cannot be rejected at the significance level of 5%. Also, according to the White test, the null hypothesis of homoscedasticity of the residual variance cannot be rejected. In the analyzed model, the hypothesis of the normal distribution of the residual is not violated, because the Jarque Bera test does not reject the null hypothesis of the normal residual distribution for all conventional levels of significance. The stability of the observed VECM model was also examined. It was found that all the roots of the characteristic polynomials are inside the unit circle, therefore the model is stable.

IV. Impulse-response analysis. The impulse-response function shows the propagation over time of the effect of changing the value of one variable (shock, innovation) on another variable. In other words, impulse response functions follow the effects of a shock in the dynamics of one variable on another variable in the VECM. The variance decompositions provide information on the relative importance of each innovation on the effect on the dynamics of VECM variables.

4. Discussion of results

The first pair of the Pairwise Granger causality test (Table 4) suggests that for a lag of 3 (which is not suitable for a 1 or 2 lag), the null hypothesis is not rejected, as GDP does not cause Granger FDI, and the assumption that FDI does not cause Granger GDP cannot be accepted. Therefore, the results indicate that in the case of the Republic of Moldova the inflow of FDI influences GDP, while GDP does not cause the change in FDI.

Table nr. 4. Pairwise Granger Causality Tests

Lags: 3 Null Hypothesis:	Obs	F-Statistic	Prob.
L_GDP_\$ does not Granger Cause L_FDI	24	0.45348	0.7182
L_FDI does not Granger Cause L_GDP_\$		2.52207	0.0924
L_EXPORT does not Granger Cause L_FDI	24	0.27624	0.8417
L_FDI does not Granger Cause L_EXPORT		3.39655	0.0420
L_EXPORT does not Granger Cause L_GDP_\$	24	1.39777	0.2777
L_GDP_\$ does not Granger Cause L_EXPORT		3.51383	0.0379

Source: Data processed by authors using EViews 9.

From the second pair of tests we can conclude that FDI causes Granger Export and the conclusion from the third pair is that GDP causes Granger Export. Therefore, the order in the cause-and-effect chain was determined according to the Granger causality test:

$$L_FDI \Rightarrow L_GDP_ \$ \Rightarrow L_EXPORT$$

The impulse response functions demonstrate a positive reaction of GDP and Export to the impulse coming from FDI for the whole period. The study shows that a 1p.p. increase in FDI inflows, determines GDP grow by 0.09 p.p. and exports rise by 0.08 p.p. in the first period. The effects on output will increase further reaching a maximum level in the 6th period that will remain stable in the following years. In case of exports the biggest impact will be reached in the second year, and then will decrease slowly, but will remain positive (figure 4).

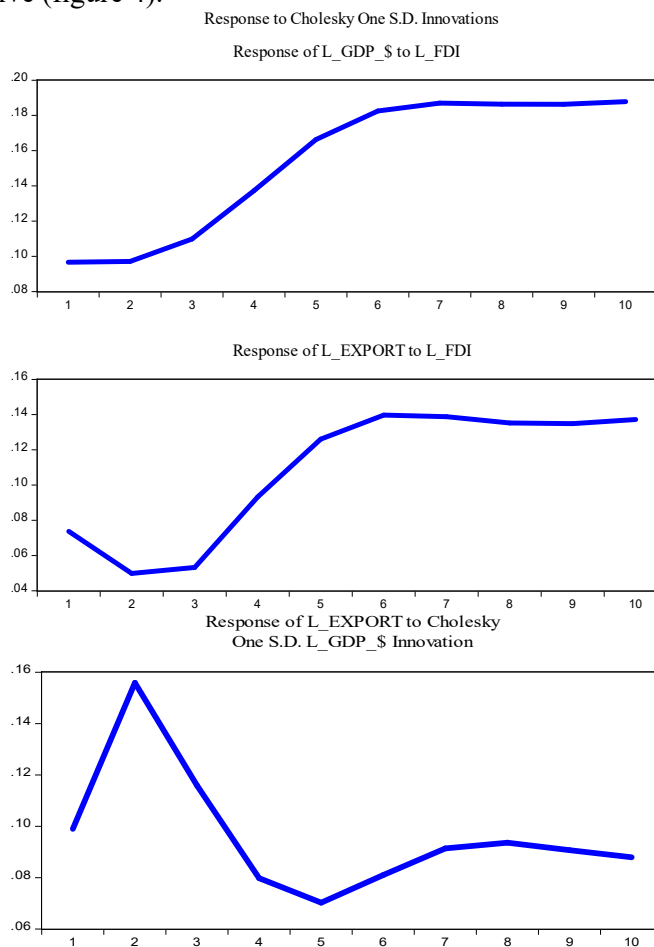


Figure nr. 4. Impulse response functions of the VECM model
Source: Data processed by authors using EViews 9.

The Pairwise Granger causality test and variance decomposition of GDP and exports reveals that Republic of Moldova is following rather a growth lead export development model. In the first period, changes in GDP are caused mainly by its own evolution in the previous year (57%) and that of FDI inflows (43%). The effects from exports arrive only beginning with the third period, rising slightly accompanied by an increase in FDI inflows. Further decomposition of exports growth reveals the small impact of exports on their own dynamics relative to the impressive contribution of GDP and FDI inflows. Innovations in

GDP are important for exports (starting with 53% and stabilizing at around 45%), as well as innovations in FDI starting with 30% and increasing up to 52% along the way.

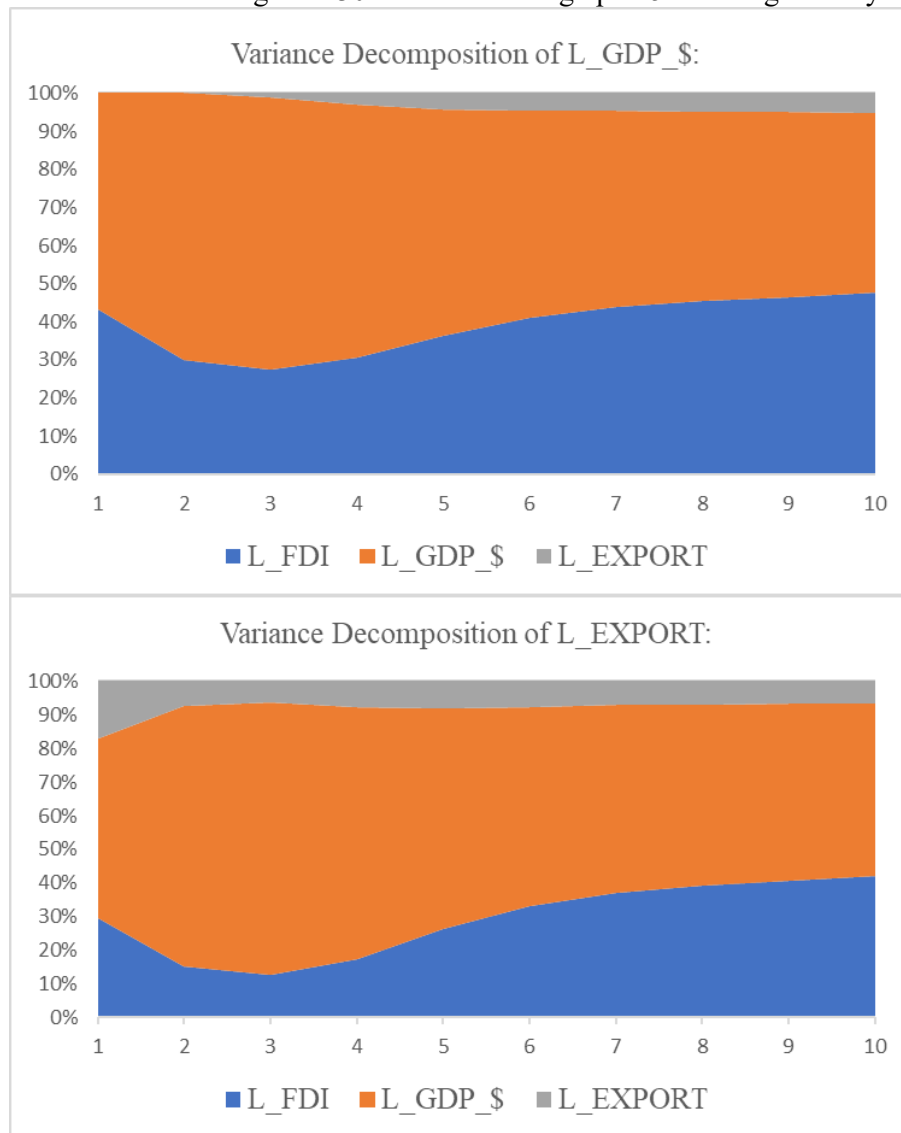


Figure nr. 5. Variance decomposition of GDP and merchandise exports
Source: Data processed by authors using EViews 9.

Moldova has a small low diversified production sector that needs time, money and competences to grow, diversify and meet the international market conditions. To increase export competitiveness should be developed an efficient institutional infrastructure for supporting investors and productive exporters.

4. Conclusions

The present research let the authors to draw the following conclusions. The first conclusion is that FDI inflows are a major determinant of economic growth and exports in Republic of Moldova. At the same time, economic growth and export are not leading to FDI growth in the national economy. An explanation may is the slow economic growth and thje existance of many supply side critical constraints that hinder investment and innovation activity of both local and foreign owned firms. Thus, despite being an important

tool to boost economic growth and exports value, Moldova attracts only a small amount of FDI per capita.

The second conclusion suggests that in Moldova there is rather a unidirectional relationship between GDP and exports, the economy following a grow lead export model. About half of exports dynamics is explained by GDP evolution. Exports have a small effect on GDP dynamics that appears only after several years, compared to GDP and FDI's great influence.

The third conclusion is that the previous National Strategy for Investments Attraction and Exports Promotions 2016-2020 had set the right scope to attract FDI for rising exports value in Republic of Moldova. Although the targets set for FDI inflows, GFCF and GDP growth have not been achieved. Trade policy should focus more on consolidating local producers' productivity, while more efforts are needed to eliminate supply side export constraints that should spur both: local and Foreign Direct Investment.

References:

1. Abamu, B.E., Pietrzak, J., 2019. Relationship between FDI and international trade – evidence from Nigeria. *International Business and Global Economy 2019*, 38, pp. 105–118.
2. Anghelache, C., Jweida, I., Popovici, M., Stanciu, E., 2016. Analysis of the correlation between direct foreign investments and export. *Romanian Statistical Review – Supplement*, 10, pp. 78-84.
3. Cičak, K., Sorić, P., 2015. The Interrelationship of FDI and GDP in European. Transition Countries. *International Journal of Management Science and Business Administration*, 1(4), pp. 41-58.
4. Dutta, S. et. all., 2021. Global Innovation Index. Tracking innovation through the Covid-19 crisis. *WIPO*, 2021.
5. Medina-Smith, E.J., 2000. Is the export-led growth hypothesis valid for developing countries? a case study of Costa Rica. *UNCTAD, Policy issues in international trade and commodities study series no. 7*, New York and Geneva 2001.
6. Evaluation report of the activity of the "MOLDOVA IT PARK" in 2020. Chisinau, 2021. [online] Available at: <https://date.gov.md/ro/system/files/resources/2021-08/raport_de_evaluare_it_park_2020.semnat.pdf> [Accessed 2 June 2022].
7. Fala, V., Fala, A., 2019. Performanța exporturilor, diversificarea acestora și creșterea economică (cazul Republicii Moldova). *Experience. Knowledge. Contemporary Challenges. Innovative economic-social Approaches in the Knowledge Society: international symposium*, 5th edition, 12-13 december 2019. Artifex University of Bucharest. București: Editura „ARTIFEX”, 2019, pp. 513-537.
8. Hlavacek, P., Bal-Domanska, B., 2016. Impact of Foreign Direct Investment on Economic Growth in Central and Eastern European Countries. *Inzinerine Ekonomika-Engineering Economics*, 27(3), pp. 294–303.
9. Humnath, P., Devkota, M.L., Banjade, D., 2022. Exports and Imports Led Growth: Evidence from a Small Developing Economy. *Journal of Risk and Financial Management*, 15, p. 11.
10. INCE, BIS, 2017. Foreign Direct Investments. The impact on the economy of Republic of Moldova. [pdf] Available at: <https://fia.md/wp-content/uploads/2021/09/FIA-Report_FDI-Impact-on-Moldovan-Economy.pdf> [Accessed 2 June 2022].
11. Jirasavetakul, F., Rahman, J., 2018. Foreign Direct Investment in New Member States of the EU and Western Balkans: Taking Stock and Assessing Prospects. *IMF Working Paper*, WP/18/187.

12. Ludoșean (Stoiciu), B.M., 2012. O analiză VAR a conexiunii dintre ISD și creșterea economică în România. *Economie teoretică și aplicată*, Vol. XIX (2012), 10(575), pp. 102-117.
13. Mathew, A.J., Koo, K., Hatwell, E., Johnson, M., Hamroush, S., Needham, M., Johnsen, T., 2021. Understanding FDI and its impact in the United Kingdom for DIT's investment promotion activities and services. *The UK Department for International Trade*.
14. Miteski, M., Stefanova, D.J., 2017. The Impact of Sectorial FDI on Economic Growth in Central, Eastern and Southeastern Europe. *Working Paper*, No. 1/2017. National Bank of the Republic of Macedonia, Skopje.
15. Moraru, C., 2013. Investițiile străine directe și creșterea economică în România. *Economie teoretică și aplicată*, 5(582), pp. 123-133.
16. OECD, 2020. *Promoting Exports and Supply-Chain Linkages in the Food Industry in the Republic of Moldova*. Paris: OECD Publishing.
17. Simionescu, M., 2016. The Relation Between Economic Growth and Foreign Direct Investment During the Economic Crisis in the European Union (July 27, 2016). Zbornik radova Ekonomskog fakulteta u Rijeci, časopis za ekonomsku teoriju i praksu - Proceedings of Rijeka Faculty of Economics. *Journal of Economics and Business*, 34(1, 2016, pp. 187-213, Available at SSRN: <https://ssrn.com/abstract=2803140>;
18. Stratan, A., Toacă, Z., Fala, V., 2021. Progresele reformării economiei moldovenești în vederea asigurării tranziției sale la economia de piață. In: *Creșterea Economică în Condițiile Globalizării = Economic Growth in the Conditions of Globalization: conferința internațională științifico-practică, ediția a XV-a, 15-16 octombrie 2021*. Institutul Național de Cercetări Economice. Chișinău: INCE, 2021, vol. 1, pp. 159-173;
19. Stratan, A, Fala, V, 2021. Competitiveness and the Role of Science. In: *Creșterea Economică în Condițiile Globalizării = Economic Growth in the Conditions of Globalization: conferința internațională științifico-practică, ediția a XV-a, 15-16 octombrie 2021*. Institutul Național de Cercetări Economice. Chișinău: INCE, 2021, vol. 1, pp. 11-18;
20. Wagner, J., 2007. Exports and Productivity: A survey of the evidence from firm level data, HWWA Discussion Paper, No. 319, Hamburg Institute of International Economics (HWWA), Hamburg;
21. Walter, W., Luecke, M., Lupusor, A., 2017. The economic impact of FDI in Moldova-Results from an empirical analysis. German economic Team Moldova. Policy Study Series [PS/01/2017];
22. World Bank, 2015. Republic of Moldova Trade Study. Report No: ACS17523 . The International Bank for Reconstruction and Development/ The World Bank, 2015.