THE RESEARCH ON INTERFACE BETWEEN LITHUANIAN DIRECT INVESTMENT ABROAD AND FOREIGN TRADE FLOWS

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Abstract. The scientific research results related to foreign trade and direct investment abroad (DIA) are discussed in the article. The relation of the direct investment abroad and foreign trade is still under the discussion as there is no clear answer whether foreign trade is supplemented or replaced by the direct investment abroad. Since 1997 the flows of the direct investment abroad increased greately in Lithuania. Consequently, it is important to define the link between the DIA and foreign trade considering each country separately. Direct investment abroad and trade links in Lithuania in 1997–2014 are analyzed in the article. The research analysis involves Lithuanian direct investments in the developed countries except some countries, such as Belorus, Russia and Ukraine. It is defined that there is a positive bilateral link between Lithuanian direct investment abroad and foreign trade. It is also observed the impact of general development of Lithuanian direct investment abroad (considering certain countries) on the countries economy itself – imports can exceed exports. Engle-Granger causality test is applied in the research paper for the purpose of defining the impact of the DIA on the import and export range.

Keywords: direct investment abroad, export, import, Engle-Granger Causality test, foreign trade.

JEL Classification: F14, F21.

1. Introduction

Scientists are greately interested in the impact of the direct investment abroad (DIA) on the trade. However, both scientific analysis models and empirical evidence obtained concerning the direct investment abroad impact on foreign trade are not the same. Two attitudes considering direct investment abroad and foreign trade are formed in the scientific literature: some authors (Mundell 1957; Fonseca *et al.* 2010) claim that direct investment abroad and foreign trade substitutes each other, while others (Schmitz, Helmberger 1970; Pfaffermayr 1996) argue that direct investment abroad has not only positive links with foreign trade but can also supplement it.

Lithuania (the same as other countries) takes active part both, in global trade and stock movement, though recently enough. Following the data of the Statistics Lithuania in 1997 Lithuanian direct investment abroad was 30.08 Eur mill. where 5.88 Eur mill. to EU countries and 23.42 Eur mill. to Commonwealth of Independent States (CIS) countries. In 2015 the flow of Lithuanian direct investment abroad increased by 2052.60 Eur mill. where 1860.68 to EU countries and 170.01 Eur mill. to CIS countries. So, the questions arise: Does Lithuanian direct investment abroad act as a foreign trade supplement or replacement? What is the economical impact on the country?

The aim of the article is to estimate the impact of Lithuanian direct investment abroad on foreign trade from 1997 to 2014, while analysing the impact of direct investment abroad on foreign trade considering each country separately.

Engle-Granger Causality test is applied in the research work for the purpose of defining the impact of the direct investment abroad on the import and export range.

2. The analysis of preceding empirical investigations of direct investment abroad and foreign trade relation.

Two attitudes are formed in scientific literature: one – direct investment abroad and foreign trade substitutes each other, and the other – direct investment abroad and foreign trade act as a supplement to the trade. While estimating scientific literature it is noticed chronologically by previous research that capital export and foreign trade substitutes each other, however, it is defined by later research that direct investment abroad might supplement foreign trade.

Mundell (1957) was one the first to analyse the link between trade and movement of production factors (two countries, two goods, two production factors) referring Heckscher-Ohlino Model. However, while entering international mobility of production factors between the countries, it was defined that international capital export and foreign trade act as substitutes.

It is assumed in Schmitz and Helmberger (1970) model, that production factors are mobile as well as international production functions are not identical. Mundell (1957) model claims production functions to be homogenous and identical in both of the countries. Schmitz, Helmberger (1970) concludes that direct investment abroad is a supplement to foreign trade.

With the aim to estimate the relation of direct investment abroad with export "vertical" (Helpman 1984) and "horizontal" (Markusen 1984) models of integration analysis appeared. The case of "vertical" integration involves the intermediate product sale between subsidiaries in rich with stock countries to rich with work places countries, that's why foreign trade might be supplemented. "Vertical" integration is considered to be the case when different segments of production process are set out in different countries. "Vertical" model of direct investment seems to be more linked to the investments

of developing economies (Markusen *et al.* 1996). "Horizontal" integration is the case when a subsidiary is formed in the country where the same or similar production to the market of the host country is manufactured (Markusen 1984), thus the export to the country might be changed by the investment. Such a conclusion is made by Ekholm *et al.* (2003). They claim that "horizontal" integration acts as a substitute and "vertical" – as a supplement. One more conclusion is made by Markusen *et al.* (1996) that „horizontal" model dominates in the countries of the same size and have average or big marketing costs.

Empirical research work is made and both, model of gravity and econometric were applied. However, there is no one opinion considering the question, so as it is confirmed by the empirical research that direct investment abroad acts as foreign trade substitutes or might act as a supplement. Austrian direct investment abroad was analysed by Pfaffermayr (1996) and positive bilateral relation between direct investment abroad and export was defined. Bajo-Rubio, Montero-Muñoz (1999) made analysis of relation between Spanish direct investment abroad and export, so the conclusion was made that direct investment abroad has a positive impact on the growth of export. The authors claim, that direct investment abroad is very important as the way to promote export.

Also, links of direct investment abroad and export was analysed by Fontagné (1999) and the conclusion was that direct investment abroad promotes the growth of export as well as supplement foreign trade. Analysis showed that each dollar invested directly abroad leads to 2 additional export dollars, "One Direct investment abroad dollar is related to 2.3 additional export dollars and 1.9 dollars of additional import".

Portugese direct investment abroad and foreign trade was analysed by Fonseca *et al.* (2010) and it was noticed that investment had a negative impact on the balance of trade with the exception trends in Angola and Spain. Gross Domestic Product (GDP) per capita, the distance from Lisbon to other countries, Portugese direct investment to 15 EU countries, USA, Brazil, Angola, Japanese and China was analysed by the study and the conclusion was made, that Portugese direct investment abroad is negatively related to export, the substitution effect was noticed.

Falk and Hake (2008) analysed the links of export and direct investment abroad and claimed that direct investment abroad might be promoted by export but not vice versa. It was written by the authors that export is supplemented but not substituted by direct investment abroad.

Seo and Suh (2006) estimated Korean direct investment to Asian countries, that is Indonesia, Malaysia, Philippines, Thailand applying econometric model. It was noticed that direct investment abroad doesn't have the impact of substitute neither on export nor on import, though it was clear that by that time the flows of direct investment abroad could give slight contributions to Korean reagional export. Kang (2012) made analysis on the impact of Korean direct investment abroad and export to the developed as well as developing countries. The conclusion made was, that Korean export to the developing

countries might be enhanced by direct investment to those countries. Foreign trade with developing countries is supplemented by the flows of direct investment abroad, though it has no impact on the trade with develped countries.

The analysis of the impact made on direct investment abroad in Asian countries was made by Ahmad *et al.* (2015) and the conclusion was, that direct investment abroad is a supplement to foreign trade. Significant positive factors of four Asian countries (Malaysia, Philippines, Singapore and Thailand) were obtained. Chow (2012) analyzed the effect of outward FDI, both country by country and host groups as a whole, on Taiwan's exports. It is concluded that outward FDI has a complementary effect on home country's export in Taiwan.

The scientific literature gives no unambiguous answer to the question: what the impact is of direct investment abroad on foreign trade. The final conclusion can't be made following the research performed to find out whether the flows of direct investment abroad in a small developed country give some contribution to the growth of foreign trade and what the impact on trade balance is as the obtained results differ.

3. The research methoodology

Lithuania is involved in the movement of international stock just most recently in comparison to other countries, where they have long experience, though today the country involved in the process handles both, import and export. Nevertheless, Lithuania is rather small country but it is classified as developed country used by UNCTAD.

The data range from 1997 till 2014 was used for the research work. There was analysed direct investment abroad and foreign trade with such countries as Belorus (BY), Estonia (EE), United Kingdom (UK), Cyprus (CYP), Latvia (LV), Poland (PL), Russia (RU), Germany (DE), the Netherlands (NL), Sweeden (SE), Ukraine (UA), Italy (IT). One region of the country e.g. Kaliningrad region of Rusian Federation (KAL) was separated for analysis, because direct investment to this region is very important and consist a big part of all investment abroad. Matching the data presented by the Department of Statistics in 1997–2014 these countries are considered to be the most important partners of export and import. The statistic information of data basis owned by Lithuanian Republic Department of Statistics (Official… 2016b) as well as the information presented on the website (Official… 2016a) was used. Furthermore, the research had the use of annual data of direct investment abroad flows in Lithuania as well as the extent of annual export and import in each country separately (Official… 2016c; UNCTAD 2014; Eurostat 2016).

To identify, whether direct investment abroad changes do have the impact on import and export range, Engle-Granger Causality Test was applied. Engle-Granger Causality Test because of its versatility is applied in most of the spheres. In this case it was used to check whether a pair of indictors are cointegrated and if long-term relation exists among the indicators.

Engle-Granger Causality Test is performed in several stages (Kvedaras 2005; SAS/ETS®9.2 2010):
- Checking the stacionarity of indicators aplying expanded Dickey-Fuller test (ADF);
- Regression is defined by the least squares method, X and Y;
- Dickey-Fuller test is used to determine the margin of error of regression model having the aim to check the margin of error of stationarity;
- In case the margin of error is stationary error correction model (ECM) is worked out. Otherwise it might be claimed the indicators are not cointegrated.

The first stage is to check analyzed indicators (a pair of indicators) whether they meet assumption of stationarity. This study involves checking the time lines stationarity in the broadest sense. The process cosidered to be stationary in the broadest sense if:

1. $EY_t^2 < \infty$, for any $t \in T$;

2. $EY_t^2 = EY_0$, for any $t \in T$; $\qquad\qquad\qquad\qquad\qquad$ (1)

3. $\text{cov}(t,s) = \text{cov}(t+h, s+h)$ for any $t,s,h \in T$.

To check the stationarity extended Dickey-Fuller test is used. In case analyzed nominal indicators don't meet the assumption of stationarity, the indicators are integrated by the first line ($I(1)$), that is, indicator changes to previous period are calculated.

If the data doesn't meet stationarity definition the indicators are integrated by the second line ($I(2)$). Usually indicators integrated by the first line are used for econometric research because of the interpretation simplicity.

By using ADF it is defined whether the time line is matched to the integrated process in the first line involving stochastic trend component, also, if the time line is matched to the stationarity process involving determed trend component.

Model (2) is used to perform Dickey-Fuller test:
$$\Delta Y_t = c + \beta \cdot t + \gamma \cdot Y_{t-1} + \delta_1 \cdot \Delta Y_{t-1} + \ldots + \delta_p \cdot \Delta Y_{t-p} + \nu_t , \qquad (2)$$
Where: c and β – constants , and p – delay line.

Hypothesis tested:
$$\begin{aligned} H_0 &: (c, \beta, \gamma) = (c, 0, 0); \\ H_a &: (c, \beta, \gamma) \neq (c, 0, 0). \end{aligned} \qquad (3)$$

Having performed the stationarity test, it is moved to the next stage where regression model is worked out. The regression equation is calculated by using the method of the least squares:
$$y_t = c + \beta \cdot x_t + e_t , \qquad (4)$$

Next, the square sums of both equation remains are compared:
$$\text{RSS}_1 = \sum_{t=1}^{T} \hat{u}_t^2 , \quad \text{RSS}_0 = \sum_{t=1}^{T} \hat{e}_t^2 . \qquad (5)$$

The test statistics (S_1) is calculated by formula 6.

$$S_1 = \frac{T(RSS_0 - RSS_1)}{RSS_1} \sim \chi^2(p),$$ (6)

If the test statistics exceeds critical value of theoretical statistics, then hypothesis H_0 (claiming X is no Y Granger cause) is rejected.

Models of Panel Data. There are formed 2 types of panel data regression models in order to define the impact of direct investmant abroad on import and export. Indicator changes ($I(1)$) and fixed effect regression is used in the study.

DIA impact on import and export indicator factors are defined by these 2 models.

$I(1)$ mathematical presentation of regression model:

$$\Delta Y_{it} = \beta \cdot \Delta TUI_{it} + \Delta \varepsilon_{it} ,$$ (7)

where: ΔY_{it} – import/export annual changes in the i country; ΔTUI_{it} – DIA annual changes in the i country; β – DIA impact on import/export; ε_{it} – casual margin of error; t – time period; i – the country.

Mathematical presentation of fixed effect model:

$$(Y_{it} - \overline{Y}_i) = \beta \times (TUI_{it} - \overline{TUI}_i) + \varepsilon_{it} ,$$ (8)

where: Y_{it} – import/export indicator in the i country; TUI_{it} – DIA indicator in the i country; β – DIA impact on import/export; $\overline{Y}_i$ – DIA average in the i country; $\overline{TUI}_i$ – import/export average in the i country; ε_{it} – casual margin of error; t – time period; i – the country.

Rating of model parametres and testing of statistic significance. For regression of changes in indicator $I(1)$ rating as well as rating of fixed effects and model parametres the least squares model (formula 4) is used.

The main goal of this stage is to obtain ratings of matched parametres. It is also of great importance to have ratings of worked out model parametres being statistically significant. Statistically significance of model parametres rating is defined having tested hypothesis:

$$H_0 : \beta_0 = 0;$$
$$H_a : \beta_0 \neq 0.$$ (9)

For H_0 hypothesis testing F-statistics is used. In case hypothesis H_0 is rejected, the conclusion arises that the model is statistically significant so, DIA variation is justified by export (import) variation.

4. Empirical test results

4.1. Import, export and direct investment trends in investigated countries

In order to perform analysis of indicator relation, the survey of import, export and DIA variation in different countries during a certain time period is made.

As it is shown in the Figure 1 (in horizontal axix years is represented and ranges from 1997 to 2014), the import of Poland is much bigger having compared with the other countries during the testing time period. Russia and Latvia are the leading countries considering the import extent. The import extent of the other countries are similar.
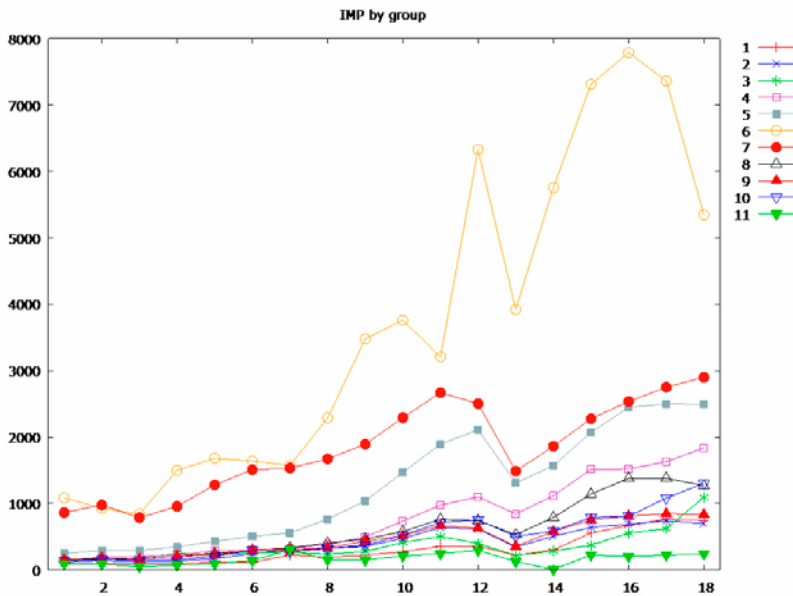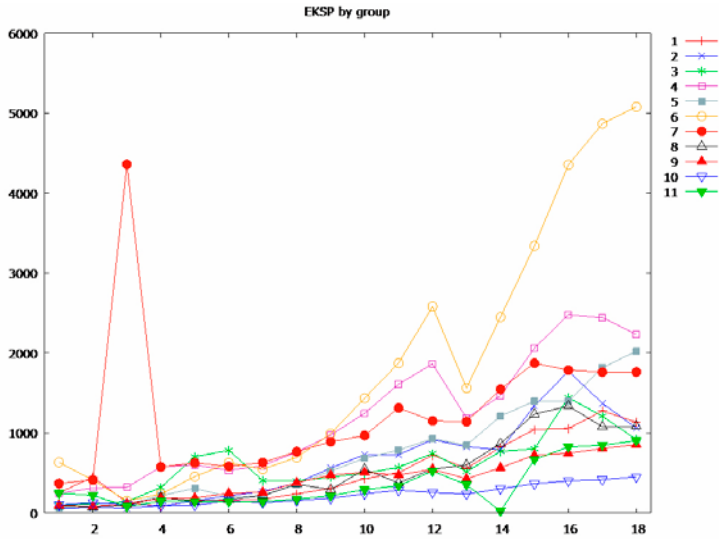

1 = 'BY'; 2 = 'EE'; 3 = 'UK'; 4 = 'CYP'; 5 = 'LV'; 6 = 'PL'; 7 = 'RU'; 8 = 'KAL'; 9 = 'DE'; 10 = 'NL'; 11 = 'SE'

Fig. 1. The import index variation in different countries (Eur mill.)
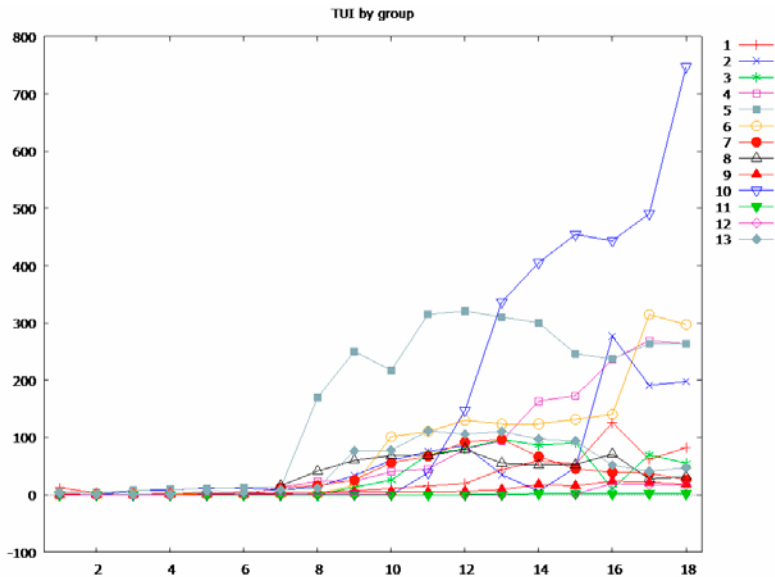(source: created by authors)

While analysing export standard variation it's clearly seen that in 1999 Russian export was greately enlarged in comparison with the export extent in other countries. Though, the other years data shows that Poland was the leading country considering the export extent. While analysing the crisis impact on the export extent it's clear, that in 2009 the export extent was decreasing in all the countries (Fig. 2) (in horizontal axix years is represented and ranges from 1997 to 2014).

Monitoring the rate variation of different DIA indicators it's clear, that significant growth of investment is fixed in Lithuania from 2003 (Fig. 3) (in horizontal axix years is represented and ranges from 1997 to 2014).

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Fig. 2. The export index variation in different countries (Eur mill.)
(source: created by authors)

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Fig. 3. DIA index variation in different countries (Eur mill.)
(source: created by authors)

In Latvia DIA rates were steady during the testing time period. The biggest DIA rates were in the Netherlands starting from 2009 and it remains at the same position till 2014.

4.2. Granger causality analysis

Before analysis started, stationarity assumption of analysed indicators was tested, so as the assumption of indicator cointegration is such that indicator data must be stationary. Dickey-Fuller expanded criteria was applied to test stationarity data. The results obtained showed, that all the indicators (DIA, export and import) meet the stationarity assumption because $p < 0.05$ (see Table 1).

Table 1. Static results (Dickey-Fuller test) of export and import index and DIA (source: created by authors)

	DIA	EXP	IMP
test statistic: tau_c(1)	–4.13658	–5.19251	–3.50822
asymptotic p-value	0.0008412	8.107e-006	0.007806

In the other stage of study Granger Causality test was applied. The goal of using this test is to define whether the DIA indicator is the cause of Granger import/export, that is if DIA extent variation impacts the changes of import/export. During the analysis both, the test statistics and error assumption is calculated. The obtained results showed, that DIA is the cause of export Granger indicator, as tau_c(1) = –4.159 ($p = 0.004 < 0.05$). And besides DIA is the cause of import Granger indicator, as tau_c(1) = 4.387 ($p = 0.0018 < 0.05$). It means, that the margin of error of both worked out regression models (having not depending variable export/import extent) meet the stationarity assumption and it indicates accordingly the rate of cointegration.

While analysing relation of export/import indicator variation it was defined that, these indicators have specific bilateral links as Granger causality criterion results are statistically significant, when not depending regression variable standard is both, for export and import (respectively, $p < 0.05$) (Table 2).

Table 2. Granger causality test results (source: created by authors)

	test statistic: tau_c(1)	asymptotic *p*-value
DIA – EXP	–4.15916	0.004155
EXP – DIA	–1.00775	0.9002
DIA – IMP	4.38715	0.001817
IMP – DIA	–0.8893	0.9198
EKSP – IMP	–6.47986	7.614e-008
IMP – EXP	–4.54145	0.001002

Summing up Granger casualty results, it must be said, that DIA variation is related to export/import extent variation. This study deals with analysis of indicator relation in the sense of cointegration, so the discussed relations occur during the long time period.

4.3. DIA impact on import and export

In further stage of study using Granger causality test defined relation trends were analysed, so as it is important to know not only if there are links related to the indicators, but also tendency of DIA impact on export/import ratings. Cosequently, there was worked out two types of models having one regression factor: (a) $I(1)$ regression and (b) fixed effect models.

The first model is specific as there rating variation considering the previous time period were analysed but not the nominal value of index. The obtained results shows, that having integrated the indexes in the first line the DIA impact on import extent is not important statisticly, because d_DIA = 0.266 (p value = 0.742 > 0.05) (Table 3). Besides, determination coefficient of the worked out model is rather low ($R^2 < 0.1$), that's why the model results are not acceptable and it's necessary to modify the model of regression.

Table 3. $I(1)$ regression IMP-DIA results (source: created by authors)

	Coefficient	Std. error	t-ratio	p-value	
Const	81.3813	34.6743	2.3470	0.0201	**
d_DIA	0.266265	0.80745	0.3298	0.7420	

R-squared: 0.000636.
** The value of parameter is statistically significant when statistical significance level is 0.05.

Analogous situation is monitored and the impact of DIA integrated index on export extent is analysed in the first line. The impact of investment is not significant statistically, so as d_DIA = 0.709, p value = 0.1089 > 0.05 (Table 4). It shows, that DIA annual growth in the countries doesn't have statistically significant impact on the growth of export. The determination coefficient of the worked out model is also low enough ($R^2 < 0.1$), so the results obtained by the model are not acceptable and it is necessary to modify the model of regression.

Table 4. $I(1)$ regression EKSP-DIA results (source: created by authors)

	Coefficient	Std. error	t-ratio	p-value	
Const	77.7222	18.8999	4.1123	<0.0001	***
d_DIA	0.709218	0.440115	1.6114	0.1089	

R-squared: 0.01.
***The value of parameter is statistically significant when statistical significance level is 0.01.

Summing up *I*(1) the results of regression models it can be said, that using the general sample data (*pooled OLS*), modelling DIA impact on import and export is not acceptable in different countries, as it's not taken in consideration the range of indicators of each country separately what causes error while calculating the parametre estimations.

In the other stage of study the alternative strategy of modelling is used, applying the panel model of fixed effects which enables to estimate rating changes in each country separartely. While working out the model, the average of DIA and import/export ratings are calculated in each country and making further calculations using regression equation, differentiated values matching the general rating of each country are applied but not nominal DIA and import/export rating values. The modelling process mentioned above gives us the possibility to eliminate wrong relation between analysed ratings in different countries.

The results of fixed effect model show that DIA impact on import extent is significant statistically, because DIA = 4.26 (p value = 0.0001 < 0.05) (Table 5). General determination coefficient of created model is 0.699 (least-squares dummy variables (LSDV)) and it means that average data of created model is appropriate. More important is *within* determination coefficient which equals 0.2496. It shows that created panel regression justifies 25% on average the dissemination of import index in each country, according to DIA changes.

Table 5. Fixed effects regression IMP- DIA results (source: created by authors)

	Coefficient	Std. error	*t*-ratio	*p*-value	
Const	669.743	66.5765	10.0597	<0.0001	***
DIA	4.26214	0.561813	7.5864	<0.0001	***

LSDV R-squared: 0.699311.
Within R-squared: 0.249632.
*** The value of parameter is statistically significant when statistical significance level is 0.05.

In case of estimated regression in export range it was defined that DIA impact on export standard is significant statistically, because DIA = 3.53 (p value = 0.0001 < 0.05) (Table 6). LSDV determination coefficient of created model equals 0.52, it shows the model average data is appropriate. *Within* determination coefficient equals 0.28, so the panel regression justifies 28% on average the dissemination of export index in each country, according to DIA changes.

Table 6. Fixed effects regression EKSP- DIA results (source: created by authors)

	Coefficient	Std. error	*t*-ratio	*p*-value	
Const	522.154	50.8122	10.2762	<0.0001	***
DIA	3.53282	0.428784	8.2392	<0.0001	***

LSDV R-squared: 0.516438.
Within R-squared: 0.28181.
*** The value of parameter is statistically significant when statistical significance level is 0.01.

Summing up the panel regression models it might be said that better explanation of import and export indicators range in different countries according to DIA range is given by the panel fixed effect model than by *I*(1) regression models. It says, it's very important to estimate the economical impact of individual country applying fixed effect regression. Nevertheless, it's possible to develop worked out fixed effect models, eliminating monitoring which gives rather big divergency from the dominant tendency. Thus, the import and export extent of Poland is much more bigger comparing to other countries during the test period, so, when the Polish data is removed, developed fixed effect models are worked out and the estimation of DIA impact on import and export might be given (not including Polish data). The obtained results show, that DIA impact on import extent remains positive and statistically significant, because DIA = 2.62 (p value = 0.0001 < 0.05) (Table 7). LSDV determination coefficient of the worked out model equals 0.77, what is the evidence of high coherence of data. Within determination coefficient equals 0.39. In comparison to previous worked out models, the new model describes by 15% more data dissemination, so the removing the Polish data had the positive impact on general coordination of the model.

Table 7. Fixed effects regression IMP- DIA results (having Polish indicators removed) (source: created by authors)

|	Coefficient	Std. error	*t*-ratio	*p*-value	
Const	494.05	30.7291	16.0776	<0.0001	***
DIA	2.623	0.261405	10.0342	<0.0001	***

LSDV R-squared: 0.770154.
Within R-squared: 0.392253.
*** -The value of parameter is statistically significant when statistical significance level is 0.01.

Figure 4 shows (in horizontal axix years is represented and ranges from 1997 to 2014), the model gives rather exact range description of import index in different countries. The biggest variations of import index from modelled values are monitored in Latvia, Russia and Germany, that is the countries where import and DIA extent had the biggest range.

The obtained results show, that DIA impact on export extent is also positive and statistically significant, because DIA = 2.26 (p value = 0.0001 < 0.05) (Table 8). LSDV determination coefficient of the worked out model equals 0.50, it shows medium coherence of data. Within determination coefficient equals 0.25. In comparison to initial panel model (full taken), the quality of this model became slightly worse, so, removal of Polish data didn't have the positive impact on general coordination of the model. However, initial and new export regression models are equivalents considering predicted accuracy.
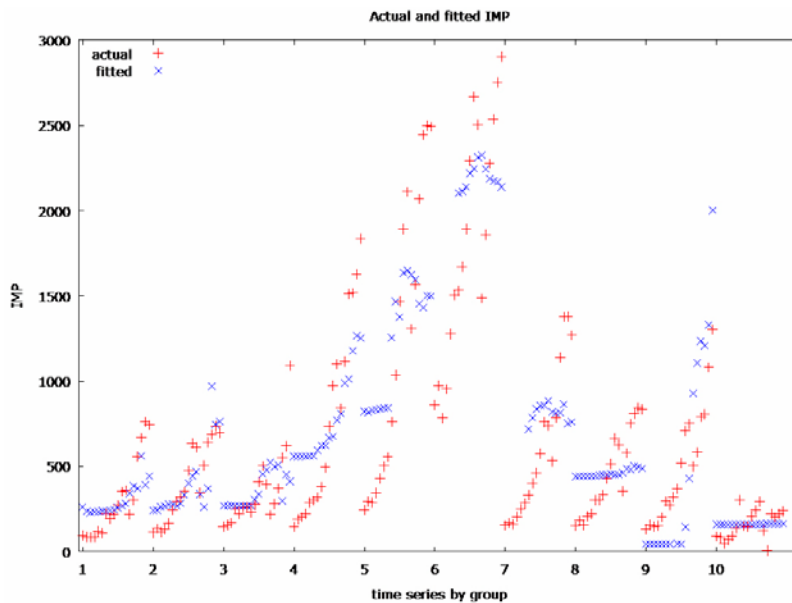
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Fig. 4. Fitted and actual values of the import regression model (source: created by authors)

Table 8. Fixed effects regression EKSP- DIA results (having Polish indicators removed) (source: created by authors)

|	Coefficient	Std. error	*t*-ratio	*p*-value	
Const	500.499	36.7683	13.6123	<0.0001	***
DIA	2.26132	0.312778	7.2298	<0.0001	***

LSDV R-squared: 0.503417.
Within R-squared: 0.250971.
*** The value of parameter is statistically significant when statistical significance level is 0.01.

Figure 5 shows (in horizontal axix year is represented an range are from 1997 to 2014) that export index range in different countries is described with high precision by the model. The data of Latvian export extent is described poorly so, as in Latvian sample of data outliers is observed (export extent > 4000).

Summing up fixed effects of import and export regression models results it might be said, these are the best alternatives for panel data modelling in comparison with the regression models of general sample. Fixed effect regression results show, that having DIA increase of 1 Eur mill. the import extent of the country has an average increase
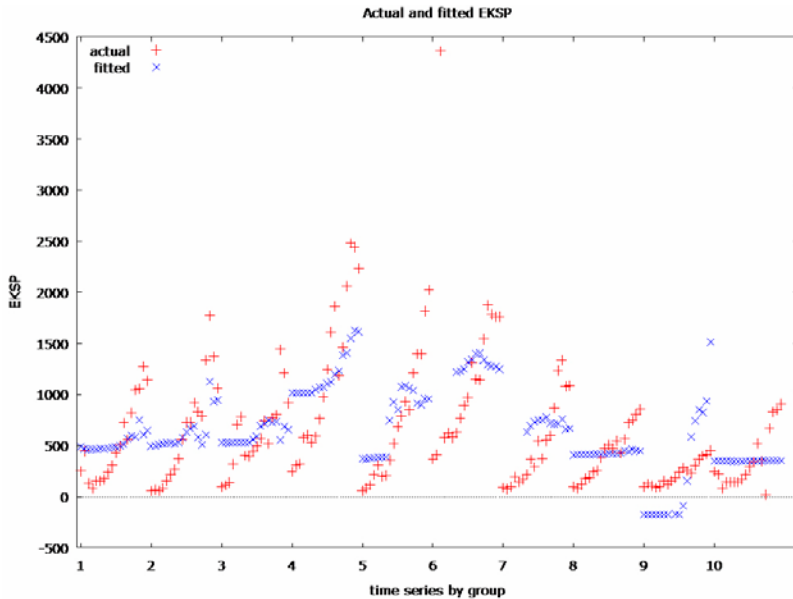
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Fig. 5. Fitted and actual values of the export regression model
(source: created by authors)

of 2.62 Eur mill. While analysing DIA impact on the export extent, it might be said, that having DIA increase of 1 Eur mill., export extent in the countries has an average increase of 2.26 Eur mill. So it is seen from the research data that foreign trade and Lithuanian direct investment are supplements.

5. Conclusions

The question of relation between the direct investment abroad and trade is under the discussion in the scientific literature, so as there is no unambiguous answer whether the direct investment abroad is a supplement or substitution of the trade. Obtained conclusions of empirical studies are quite different: there is a positive bilateral link between direct investment abroad and foreign trade, direct investment abroad supplements trade (motivates foreign trade) or may add its slight contribution to the export growth, direct investment abroad substitutes the trade. Just recently Lithuania takes part in the international stock movement. Since 1997 the flows of the direct investment abroad increased greately in Lithuania, today its bigger part has EU countries. The research analysis involves Lithuanian direct investments in the developed countries except some countries having economy in transition, such as Belorus, Russia and Ukraine. It is determined by

the study, that the range of Lithuanian direct investment abroad is related to the range of export and import extent and also there is a positive bilateral link. It is also observed the impact of general development of Lithuanian direct investment abroad (considering certain countries) on foreign trade and DIA supplement foreign trade.

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