Tajana Toš Bublić Nikolina Pavičić Zlatko Rešetar

College of business and management "Baltazar Adam Krčelić", Zaprešić, Croatia Macroeconomic e-mail: <u>ttos@net.hr</u>

## FDI AND ECONOMIC GROWTH IN CROATIA ACCORDING TO ECONOMIC THEORY

JEL classification: F21,F43

### Abstract

The aim of this paper is to analyse influence of foreign direct investments (FDI) on economic growth of Croatia in period between 1995.and 2011. According to economical theory FDI have positive influence on economical growth of the country receiver of investments. The question that this paper is trying to answer is: Is economical theory in case of Croatia confirmed or are the circulation of chosen macroeconomic indicators of economical growth contrary to the expectations. In the paper is analysed the influence of the FDI on employment, GDP, export and investments.

The first part of paper describes economical theory and expected consequences of the FDI, the second part of the paper describes movement of the FDI in Croatia, with overview on the structure and short comparison with the transition countries. The third part of the paper is the analysis of FDI relating to each of above mentioned economical indicators of economical growth.

The analysis shows that foreign direct investments do not influence on chosen indicators or that FDI do not influence significantly. Based on the given results that are opposite to economical theory the conclusion is that problem is mainly in the structure of FDI with special emphasis on small part of greenfield investments.

Keywords: FDI, economic growth

# 1. ECONOMICAL THEORY AND EXPECTED CONSEQUENCES OF THE FDI

"Foreign direct investment (FDI) is a category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy in an enterprise that is resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. The direct or indirect ownership of 10% or more of the voting power of an enterprise resident in one economy by an investor resident in another economy is evidence of such a relationship." (4th Edition of the OECD Benchmark Definition of Foreign Direct Investment)

Economical theory explains the FDI through the motives of receiver and giver. In theory, expected consequences of the FDI are explained in context of country, and not in the context of specific company. Generally speaking, FDI is more suitable channel for accumulation then credits on international market. It is the best way for transfer the ideas, know-how and technology. Receiver motive, as well as expected consequences, is general social benefit through economical growth, decreasing unemployment, positive influence on foreign trade, increasing of export, increasing of labour productivity.

General social benefit directly follows from aspects such as paid income taxes by multinational companies to national budget, transfer of knowledge and skills, raising qualification of employees and quality of labour, increasing of domestic products on foreign market, increasing the efficiency of domestic manufacturing sectors by imposing competition and consequences from increasing efficiency of rest of the economy known as 'spillover'. According to theory and economical intuition FDI should increase demand for domestic row materials and domestic products in generally, and FDI should contribute to diversification of economy structure of country receiver of the investments. Generally, FDI, according to economical theory, has positive effect in national economy on macro as well as on micro level.

Positive effect of FDI on export was proven by Barry and Bradley(1997) on data from Irish. Their conclusion was that increasing of export was significantly influenced by foreign manufacturers because the investment was mainly focused on export. Similar positive connection between export and foreign investments found Jensen(2002) in Poland. His analysis showed that FDI influenced positive on technological intensity of polish export. FDI can directly induce commerce and economical activity for country receiver through increasing the efficiency of domestic investments. According to Bosworth and Collins(1999) the FDI has positive effect on investments in transitional countries. If the receivers of the FDI are transitional countries the effect of capital inflow can be covering the current account deficit and fiscal deficit.

Gruben and McLeod(1998) analysing countries in development confirmed positive connection between FDI and economical growth. The same year Borensztein, De Gregorio and Lee(1998.) confirmed the existing of positive relation between increasing efficiency of domestic investments and FDI using data from 69 countries in development. Analysing data form transition countries of Central and Eastern Europe Lovrinčević, Marić and Mikulić(2005) confirmed "crowding-in effect", positive relation between FDI and domestic investments. Verhon and Vasarevc(2011) confirmed that both domestic capital and FDI were statistically significant factors in producing the economy growth in Central and Eastern Europe during the 1992 – 2007 time period. Todaro and Smith(2003) state that the FDI is effective instrument in covering differences between planed government income and realised income. Kraft and Galac(2000) analysed increasing competitiveness trough inflow of foreign investments and effect on competitive environment in banking sector and concluded "It is obvious that arrival of foreign banks only partly intensified competition."

However, FDI can cause and negative effect on the receivers economy. According to Graham and Krugman(1995) one of the costs caused by inflow of the FDI is decreasing of employment as a result of labour rationalisation. The negative effect can be increasing of net import as a result of higher import from central companies or through impact on income in balance

of payment because of insignificantly investment of profit in companies made by FDI. Some authors are sceptical towards FDI due to the fact that it makes good platform for monopoly, and there by that it can have great influence on country economical policy. One of the possible disadvantages of FDI inflow is reducing manufacturing of domestic companies or reverse transfer of knowledge, technology and know-how from country receiver of investment to country that invests. Barry and Bradley(1997) deal with negative impact of multinational companies on domestic manufacturers by taking over part of the market. Furthermore, economical policy that is too concentrated towards multinational companies can cause economical instability in country receiver of investments.

There are a large number of studies regarding relation between FDI and economical growth and although most of them confirmed positive impact of FDI on economical growth, some of the studies confirmed negative impact of FDI on economical growth through monopoly and instability of country on its developing path through distracting country interests. Number of studies that we can't neglect doesn't find significant impact of FDI or even finds negative effects (Gorg,Greenaway,2003)

## 2. FDI IN CROATIA

Inflow of FDI in Croatia (Figure 1) can be divided into three periods. First period lasted up to 1998 with a minimum annual investment inflow of 2 billion euro of which 79% are equity investments. The second period is a result of privatisation of telecommunications, financial sector and Greenfield investments in trade sector from 1998 up to 2009 in which 55% are equity investments. The third period, in which Croatia is today, is a direct consequence of global crises and major downfall of FDI.

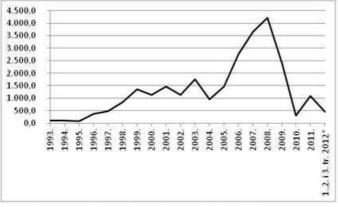


Figure 1. Inflow of FDI in Croatia (in million euro)

Source: Made by authors according to Croatian National Bank data

The latest data on foreign direct investments shown by UNCTAD's inward FDI performance index (Figure 2.) shows that Croatia has lowest ranking in the 2010. Rank is covering 141 economies, and according to this indicator Croatia is ranked 112th place in 2010 which is the lowest rank since 1993.(UNCTAD, 2011)

	1993	1995	2000	2005	2006	2007	2008	2009	2010
Croatia	80	105	46	52	36	31	27	44	112

#### Figure 2. Inward FDI Performance index

Source: UNCTAD, World investment report 2011.

Cumulative overview of investments in Croatia (Figure 3) clearly justifies Inward Performance Index. During the conflict period (1991 – 1995) average annual FDI inflow was only 189,2 million euro, with remark that data on FDI in Croatia are lead only from 1993. In period from 1993 to 2000 Croatia generated 4.488,4 million euro, while in the following 8 years Croatia generated 17.419,9 million euro of FDI inflow. After the war, FDI in Croatia took off, increasing significantly on the annual basis. Therefore, conflict period and consequences of war in Croatia lead to significantly FDI inflow not until 1996 when the inflow of FDI was higher than the sum of inflow from 1993 till 1995. Positive world investment climate, and a fact that significant number of companies went through privatisation process lead to rapid increase of foreign capital.

In the late 1990s, major privatisations occurred in the banking and telecommunications sector. Privatisation of service was particularly attractive to foreign investors because it was an easy market access and opportunity for the monopoly power. Export oriented manufacturing wasn't so attractive as it had limited access to the European market at the same time. In the 2000 the privatisation process slow down mainly due to the concerns of corruption. "In Croatia in 2012, the State holds a minority stake in over 600 companies and more than 50% of assets in over 60 companies. Seeking to leverage increased investor attention on the back of its accession to the EU, Croatia is set to reinvigorate its privatization drive." (UNCTAD, World investment report 2012) Regarding to listed date this is one of the most successful result accomplished in Central and East Europe. "Croatia compares favourably to its neighbours in terms of FDI attraction relative to the size of economy." (UNCTAD, World investment report 2012) But, by strengthening economical and financial crises Croatia deals with huge decreasing of FDI. In 2010 there was 4 billion euro of FDI less than in 2008 which is fall of 94%. (Martišković,Vojak,Požega,2012)

	Total	Cumulation
1993.	101	101
1994.	92,8	193,7
1995.	79,1	272,9
1996.	382,1	655
1997.	480,2	1.135,20
1998.	849,7	1.984,80
1999.	1.362,90	3.347,80
2000.	1.140,60	4.488,40
2001.	1.467,50	5.955,90
2002.	1.137,90	7.093,80
2003.	1.762,40	8.856,10
2004.	949,6	9.805,70
2005.	1.467,80	11.273,60
2006.	2.764,80	14.038,40
2007.	3.651,30	17.689,70
2008.	4.218,60	21.908,30
2009.	2.415,00	24.323,30

297.5

1.075.30

452.7

24 620 80

25.696.20

26.148,90

2010.

2011.

2. i 3. tr. 20

Figure 3. Total Fdi and FDI by cumulation

#### Figure 2 Total FDI and FDI by cumulation

#### Source: Croatian National Bank

Privatisation process can easily be followed by inflow of FDI (Figure 3). For example, in 2004 in Croatia data show decrease of FDI, and that is certainly consequence of lack of bigger privatisation project. Up to 1998 about 70% of investment was in processing industry, while in 1999 that percentage is only 20%. (Sisek, 2005)

Major fall of investments in 2010, 2011 even in 2012 can certainly be justified on grounds of crises. Negative and significant influence of crises in transitional country was proven by Globan(2011) But, when speaking of Croatia we have to mention bad rating as a country with high risk what most certainly is a great barrier for FDI inflow. When analysing Croatia's investment climate, the World Bank, the European Union and different commercial services all conclude that Croatia needs to improve business climate and deal with problems like corruption, bureaucratic procedures and high cost of doing business.

According to the World Bank Doing Business rakings 2013 Croatia is at 84<sup>th</sup> place among the 185 economies. In 2010 Croatia was 103<sup>rd</sup> among 183 economies. The country stands particularly low in "dealing with construction permits" (143<sup>rd</sup>) and "protecting investors" (139<sup>th</sup>). (World Bank, Doing business 2013 data for Croatia)

#### 2.1. Structure of FDI in Croatia

Analysing data on FDI inflow in Croatia one might conclude that Croatia (looking from prospective of positive influence of FDI mentioned earlier) is at enviable position towards other transitional countries. But, influence of the invested capital can not be judged only by its quantity. The structure and composition of the invested capital is of the greater importance than the quantity.

Most of the FDI in Croatia is a result of privatization processes and went into already existing companies. Although foreign capital that inflows trough privatisation could have same effects as greenfield investments, in Croatia privatisation process was based on acquitition of companies that were already successful even without privatisation therefore privatisation didn't influence as increase of the competetives of export sector.

The greenfield investments (investments into companies established only by foreign capital) are almost negligible. Besides that, most of the investments weren't in export or manufacturing sector. In period 1993-2004 less than 30% of total FDI inflows has been related to new investments. (Šohinger,Galinec and Škudar,2005)

In period 1993-2012 3<sup>rd</sup> quarter 33,7% were investments in financial intermediation, insurance and pension funds, 10,1% in wholesale trade and commission trade, 6,8% in real estate activities and 6,6% in post and telecommunications, 6,1% in manufacture of coke and petroleum products while 5,1% went into manufacture of chemical and chemical products and 4,9% in retail trade. Manufacture of other non-metallic mineral products had inflow of 3%, as well as other business activities. Real estate are at 2,5%, and all other activities are 18,2% of total investment inflow up to third quarter of 2012.

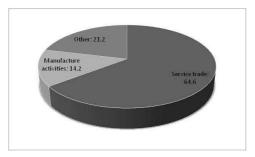


Figure 3 FDI by sector form 1993 to 2012

#### Source: Croatian National Bank

When reviewing structure of FDI in Croatia it is obviously that most of invested capital primarily went into service sector and has largely focused on serving the domestic market. Structure of service FDI is primarily to banking and telecommunications privatisation in late 1990s. Although the manufacturing sector attracted negligible part of investments it was an important recipient of foreign direct investment in the immediate after war period. The banking sector has been the largest recipient of FDI and up to 2000 the number of State owned banks dropped from 26 to 3, while number of privately-owned banks rose from 18 to 40. By 2000, foreign banks made up to 90% of total banking assets. (Kraft,Stučka 2002) The wholesale trade and commission trade and retail trade has received the second most FDI. The third largest sector for FDI inflows has been chemical and pharmaceutical industry. The petroleum refining sector only began receiving FDI in 2003 when privatisation of INA began, but since then has become fourth largest industry. The ICT sector has also driven FDI inflow by privatisation. FDI has also gone in real estate activities mostly because of tourism.

Already mentioned absence of greenfield investments and adverse structure of investments with mainly inflows in service industry is probably main reason for lack of stronger effects on macro economical indicators. Studies until 2004 confirm thesis that investments in processing sector didn't cause bigger effect on manufacture, productivity or export as it was case in some other transitional countries. (Škudar,2004) In latest Croatian National Bank report in 2012 it is clearly stated that only half of total FDI went into new projects. New projects are mostly in real estates, tourism and trade. Unfortunately, there are no major investments in manufacturing sector in 2012. (Report CNB, 187, 2012) It is also obviously that unsatisfactory structurally trend is continued in first quarter of 2013. The beginning of 2013 is characterized, next to global risk aversion and global decreasing of investments, by deteriorated perception of risk in Croatia in regard to most of comparable countries. (Report CNB 191, 2013)

Reviewing data on structure of FDI in Croatia it is obviously that Croatia has too little Greenfield investments and that the investments were mainly focused on privatisation of already existing more or less successful companies. Although, the world greenfield investments 2009 and 2010 had decline in values terms they held steady in 2011 and developing and transition economies hosted more than two third of the total value of greenfield investments in 2011.

#### **2.2.** Comparison of Croatia and the transitional countries

When speaking about the significance of FDI in the transition countries two effects are usually mentioned: effect on economic growth and effect on export performance.

Effect of FDI on transition economic was object of several studies. Kinoshita and Campos(2003) did the research for the period 1990-1998 including 25 Central and East European countries. The result of study confirms the hypothesis that FDI have significant positive effect on the economy growth. Lovrinčević, Mikulić i Marić(2004) studied efficiency of investments and FDI in eleven transitional countries in period from 1994 to 2002. Lovrinčević, Buturac and Marić(2004) analysed impact of FDI on domestic investments in transitional countries. Bogdan(2010) analysed relation between foreign investments and economic growth in Europe's post-transitional countries but he didn't find positive relation between analysed variables.

According to the data from UNCTAD world Investment report for 2012 in South-East Europe, manufacturing FDI increased, buoyed by competitive production costs and open access to EU markets. Also, FDI to the transition economies increased by 25 per cent in 2011. FDI flows to transition economies are expected to grow further in 2012 and exceed the 2007 peak in 2014. (UNCTAD World investment report 2012)

When comparing inflow of FDI in Croatia with neighbour countries in South-east Europe, statistic is more than satisfying. In 2006 out of total FDI gone into South-east Europe 35,9% went into Croatia, in 2007 39,8%, in 2008 48,8, in 2009 40,47%. The lowest inflow compared to other South-east European economies was in 2010 only 10%. In 2011 inflow rose again to 22,46%.

According to UNCTAD Investment report FDI to the transition economies of South-East Europe recovered strongly in 2011. In South-East Europe, competitive production costs and access to European Union markets drove FDI and inflows to transition economies are expected to continue to grow in the medium term reflecting a more investor-friendly environment.

Although Croatia because of the war wasn't in good position compared to other transitional countries, if GDP per capita is compared in some of transitional economies in period 1993 – 2012 conclusion is very interesting. Better than Croatia were only Czech Republic, Hungary and Estonia. The data given in Figure 4. looks very encouraging, but the impression is changed by looking at the structure of FDI and caused consequences.

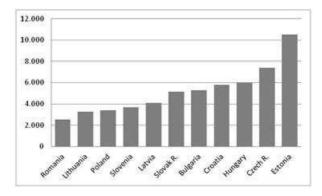


Figure 4 FDI per capita for selected transition economies, 1993 - 2012

Source: Croatian National Bank

## 3. ANALYSIS OF RELATIONS BETWEEN FDI AND SELECTED MACROECONOMIC INDICATORS

Considering the fact that capital in modern time is almost completely free to move between economies it is very interesting to see whether there is relation between FDI and some of the indicator of economic growth. For purpose of this paper we will try to determine whether there is relationship between FDI and employment, GDP, export and gross fixed-capital formation using linear regression. It is important to emphasize that most of the similar analysis didn't confirm FDI theory of positive impact on economy receiver of FDI.

## 3.1. Model and Data

FDI data was retrieved from Croatian National Bank, while employment, GDP per capita, export and gross fixed-capital formation data was retrieved from Croatian Bureau of Statistic. Data used in analysis is for period 1995 - 2012. Data is annual which means that there are eighteen observations.

The regression analysis was done using a model of simple linear regression. Dependent variable (Y) are export, GDP per capita, gross fixed-capital formation and employment, while independent variable is (X) foreign direct investment. Determining the characteristics of relationships between variables in Croatia starts with scatter diagram, and finishes with interpretation of results.

The regression equation is

$$y_i = \alpha + \beta x_i + \varepsilon_i, \quad i = 1, 2 \dots, n$$
(1)

where  $\alpha$  and  $\beta$  are unknown parameters, and variable  $\epsilon$  is error term in model. Model with estimated parameters is

$$\hat{y} = \hat{\alpha} + \hat{\beta}x.$$
(2)

The regression value is calculated by using the expression

$$\hat{y} = \hat{\alpha} + \hat{\beta}x_i, \quad i = 1, 2 \dots, n.$$
(3)

The regression value is estimation of dependent variable Y with real value of independent variable X, and difference between the regression value and real value of dependent variable is error term  $\hat{\epsilon}i$ .

## 3.2. FDI and export

The impact of foreign direct investments on Croatian manufacturing exports was analysed by Vukšić (2005). Vukšić concluded that foreign direct investment had positive and statistically significant impact on export, but that this impact was very weak. Kersan-Škabić and Orlić (2009) tried to determine whether there is a relationship between trade and FDI inflow in Croatian economy and in what direction. They came to conclusion that FDI have no direct link with trade. Kersan-Škabić and Zubin (2009) determined that FDI inflow doesn't have effect on the GDP growth and export.

Scatter diagram in Figure 5 is showing correlation between dependent variable export and independent variable foreign direct investment. Linear determination coefficient is  $r^2=0.633855$ , and corelation coefficient is r=0,79615. This is a reasonably large value, and indicates a real relatioship. The correlation is reasonably strong and positive between variables in period from 1995 to 2012 in Croatia.

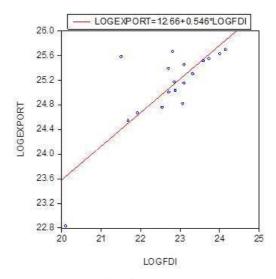


Figure 5 Scatter diagram and regression line for variables export and FDI in Croatia in period 1995-2012

 $LOGEXPORT = \log(EXPORT) \quad LOGFDI = \log(FDI)$ (4)

Equation of regression model with estimated parameters is

 $\hat{y}_{LOGEXPORT} = 12.6630252289 + 0546025389079 x_{LOGFDI}$ (5)

The linear regression result interpretation is:

If direct foreign investments increase by 1%, export will average increase by 0,546025%

Average deviation of empirical values of dependent variable from line of regression is shown by estimation of standard deviation  $\hat{\sigma}=0.419233$ . According to F-test and signification of regression for export, p-value is 0,0001 and with  $\alpha=0,05$ , null hypothesis of this test, that says that regression is not significant, is rejected. In model all assumptions that justify use of linear regression model have met.

## 3.3. FDI and employment

Already mentioned Kersan-Škabić and Zubin (2009) determined that impulse in foreign direct investment significantly influence on reducing employment in country, before as well as after takeover of company.

Scatter diagram in Figure 6 is showing correlation between dependent variable employment and independent variable foreign direct investment. Linear determination coefficient is  $r^2$ =0.416686 what means that FDI explains little of the variation in employment. The correlation coefficient is r=0,645512 which means that the correlation is relatively week and positive between variables in period from 1995 to 2012 in Croatia.

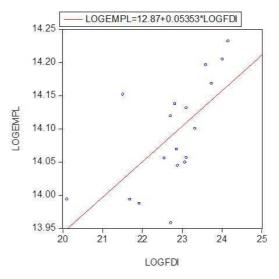


Figure 6 Scatter diagram and regression line for variables employment and FDI in Croatia in period 1995-2012

 $LOGEMPL = \log (EMPL) \quad LOGFDI = \log (FDI)$ (6)

Equation of regression model with estimated parameters is

 $\hat{y}_{LOGEMPL} = 12.87297 + 0.053528 x_{LOGFDI}$ (7)

The linear regression result interpretation is:

If direct foreign investments increase by 1%, employment will average increase by 0,053528%

Average deviation of empirical values of dependent variable from regression line is shown by estimation of standard deviation  $\sigma=0.063979$ . According to F-test and signification of regression for export, p-value is 0,0038 and with  $\alpha=0,05$ , null hypothesis of this test, that says that regression is not significant, is rejected. In model all assumptions that justify use of linear regression model have met, accept for assumption on autocorrelation. Referring to the Durbin-Watson test for the 5% significance level we reject the null hypothesis of no autocorrelation.

## 3.4. FDI and gross fixed-capital formation

Lovrinčević, Buturac and Marić (2004) analysed impact of FDI on domestic investments using regression analysis and data of transitional countries. They confirmed hypothesis that inflow of foreign direct investments in period 1993-2003 in average stimulated domestic investments.

Scatter diagram in Figure 7 is showing correlation between dependent variable gross fixed-capital formation (CAPITAL) and independent variable foreign direct investment (FDI). Linear correlation coefficient is  $r^2$ =0.579225 what means that fdi explains littel of the variation in gross fixed-capital formation. r=0,76106 what means that the correlation is relatively week and positive between variables in period from 1995 to 2012 in Croatia.

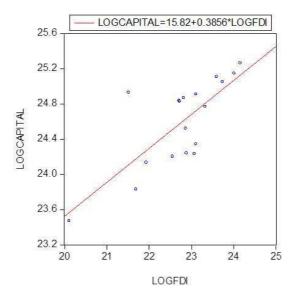


Figure 7 Scatter diagram and regression line for variables gross fixed-capital formation and FDI in Croatia in period 1995-2012

$$LOGCAPITAL = \log (CAPITAL) \quad LOGFDI = \log (FDI)$$
(8)

Equation of regression model with estimated parameters is

 $\hat{y}_{LOGCAPITAL} = 15.81583 + 0.385587 x_{LOGFDI}$ (9)

The linear regression result interpretation is:

If direct foreign investments increase by 1%, gross fixed-capital formation will average increase by 0.385587%

Average deviation of empirical values of dependent variable from regression line is shown by estimation of standard deviation  $\sigma=0.331997$ . According to F-test and signification of regression for gross fixed-capital formation, p-value is 0,0002 and with  $\alpha=0.05$ , null hypothesis of this test, that says that regression is not significant, is rejected. In model all assumptions that justify use of linear regression model have met, accept for assumption on autocorrelation. Referring to the Durbin-Watson test for the 5% significance level we reject the null hypothesis of no autocorrelation.

#### 3.5. FDI and GDP

This linear regression was made by using data from 1995 to 2011 on annual bases which means that there were 17 observations. Scatter diagram in Figure 8 is showing correlation between dependent variable GDP and independent variable foreign direct investment. Coefficient of determination is  $r^2$ =0.431204 what means that FDI explains little of the variation in GDP. The correlation is relatively week and positive between variables in period from 1995 to 2011 in Croatia.

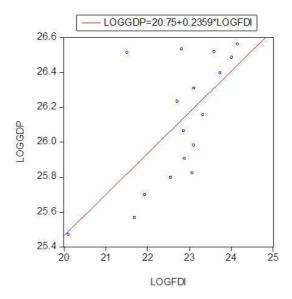


Figure 8 Scatter diagram and regression line for variables employment and FDI in Croatia in period 1995-2011

 $LOGGDP = \log(GDP) \quad LOGFDI = \log(FDI)$ (10)

Equation of regression model with estimated parameters is

 $\hat{y}_{LOGGDP} = 20.74644 + 0.235908x_{LOGFDI}$ (11)

The linear regression result interpretation is:

If direct foreign investments increase by 1%, GDP will average increase by 0,235908%

Average deviation of empirical values of dependent variable from regression line is shown by estimation of standard deviation  $\hat{\sigma}=0.393284$ . According to F-test and signification of regression for GDP, p-value is 0,0042 and with  $\alpha=0,05$ , null hypothesis of this test, that says that regression is not significant, is rejected. Model has problem with autocorrelation referring to the Durbin-Watson test for the 5% significance level we reject the null hypothesis of no autocorrelation.

According to linear regression analysis three out of four models have problem with autocorrelation. That means that deviations from regression line are unexplained changes of dependent variable in different time correlated and that they were impact by similar factors. Autocorrelation has negative effects on results, and it implicates possible neglecting of significant variables in model. The only model without the autocorrelation problem is model with export. Second problem with models is in their low representative. Again, the only model that has relatively strong representation is model with export as dependent variable. The only representative model, with all assumptions met is model with FDI as independent and export as dependent variable.

## 4. CONCLUSION

According to economic theory, the effect of the FDI on economic of receiver should be positive regarding economic growth, employment, export, labour productivity and almost all macroeconomic indicators. Although there are some economists that are warning about possible negative effect of FDI, most of them agree that FDI has positive effect on economy in long term.

Indicators for Croatia, as transition country, and FDI inflows could lead to conclusion that Croatia is very successful at attracting foreign investments but reviewing FDI structure one can instantly come to conclusion that Croatia has unfavourable structure of FDI inflow. Most of the inflow was directed into already successful companies through privatisation process, and there was very little of Greenfield investments that are mostly the main generator of positive effect on receiver economy.

Most of studies show that positive effect of FDI in Croatia wasn't accomplished in way that economic theory assumes. Also, studies that confirm economic theory are usually confirming that influence of FDI is not significant. To confirm theory, analysis of FDI and its impact on GDP, employment, export and fixed gross-capital formation was made using linear regression. After analysis three out of four models were ignored because of problem in assumptions of model. But, model with export as dependent variable shows that FDI has positive effect on export what is a confirmation of economic theory. This simplified analysis that is considering only the export is not enough to make general conclusion about impact of FDI on economic growth. Based on the given results of studies, that are opposite to economic theory the conclusion is that problem is mainly in the structure of FDI with special emphasis on small part of Greenfield investments.

## REFERENCES

Barry, F., Bradley, J. (1997) FDI and Trade: The Irish Host-Country Experience. Economic Journal, vol.107, issue 445, pp 1798-1811.

Bogdan,Ž., (2010) Istraživanje veze između inozemnih direktnih investicija i gospodarskog rasta europskih posttranzicijskih zemalja. Zbornik Ekonomskog fakulteta u Zagrebu, 8, pp.59-79.

Borensztein, E., De Gregorio, J., Lee, J. (1998) Hoe does foreign direct investment affect economic growth. Journal of International Economics, 45, pp. 115-135.

Bosworth,B.P., Collins,S.M., (1999) Capital Flows to Developing Economies:Implications for Saving and Investment. Brookings Papers on Economic Activity,No.1,pp.143-158.

Galac, T., Kraft, E., (2000) What has been the Impact of Foreign Banks in Croatia. Croatian National Bank.

Globan, T., Rezistentnost priljeva kapitala u uvijetima globalne financijeske krize: Slučaj europskih tranzicijskih zemalja. Zbornik Ekonomskog fakulteta u Zagrebu, 9, pp.191-214.

Gorg,H., Greenaway,D., (2004) Much Ado about Nothing? Do Domestic Firms Really Benefit from FDI? World Bank Research Observer,19,pp.171-197.

Graham, E.M., Krugman, P.R., (1995) Foreign Direct Investment in the US, 3rd Edition. Peterson Institute Press.

Gruben, W.C., McLeod, D., (1998) Capital Flows, Saving and Growth in the 1990s. The Quarterly Review on Economics and Finance, 38, pp. 287-301.

Croatian National Bank, Statistic data, http://www.hnb.hr/statistika/hstatistika.htm [accessed 03.03.2013].

Jensen, C., (2002) Foreign direct investment, industrial restructuring and upgrading of Polish exports. Applied Economics, 34, pp. 207-217.

Kersan-Škabić, I., Orlić, E., (2009) Does trade liberalization cause FDI inflow or vice versa? The case of Croatia. Ekonomska istraživanja, 22, pp.1-24.

Kersan-Škabić, I., Zubin, C., (2009) The influence of foreign direct investment on the growth og gdp, on employment and on export in Croatia. Ekonomski pregled, 60, pp. 119-151.

Kinoshita,Y.,Campos,N.F., (2003) Why does fdi go where it goes? New evidence from the transition economies. William Davidson Institute, Working Paper 573.

Kraft, E., Stučka, T., (2002) Fiskalna konsolidacija, inozemna konkurentnost i monetarna politika: odgovor WIIW-u. Hrvatska Narodna Banka, povremene publikacije, P-13.

Lovrinčević,Ž.,Buturac,G.,Marić,Z., (2004) Priljev inozemnog kapitala - utjecaj na domaće investicije i strukturu robne razmjene. Ekonomski pregled,55,pp.894-934.

Lovrinčević,Ž.,Marić,Z.,Mikulić,D., (2005) Foreign Capital Inflow - the Effects on National Savings, Domestic Investments and Balance of Payment of Countries in Transition in Centar and Eastern Europe. Ekonomski pregled,56,pp.163-184.

Martišković,Ž.,Vojak,N.,Požega,S.,(2012) Značaj Inozemnih izravnih ulaganja u RH. Zbornik Veleučilišta u Karlovcu, pp.125-135.

Sisek, B., (2005) Strane izravne investicije u Hrvatskoj-uzroci neuspjeha. Zbornik Ekonomskog fakulteta u Zagrebu, 3, pp. 89-108.

Škudar, A., (2004) Pregled i analiza izravnih ulaganja u RH. Hrvatska Narodna Banka, pregledi.

Šohinger, J., Galinec, D., Škudar, A., (2005) 5th International Conference "Economic Integration, competition and cooperation. Opatija, Croatia.

Todaro, M.P., Smith, C., (2003) Economic Development. Pearson Education Limited.

UNCTAD World Investment report 2011

http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/WIR2011\_WebFlyer.aspx [accessed 02.02.2013.].

UNCTAD World Investment report 2012

http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/WIR2012\_WebFlyer.aspx [accessed 18.03.2013].

Vukšić, G., (2005) Impact of FDI on Croatian Manufactoring Exports. Financial Theory and Practice, 29, pp. 131-159.

World Bank Privatisation database http://data.worldbank.org/data-catalog/privatization-database [accessed 01.04.2013].