Lufei Teng Qianwen Bi

Abstract Income inequality is a concerned topic that attracts academia studies for many reasons. Among the long list of factors offered by scholars that contribute to income inequality, the impact of globalization has been extensively studies. This study uses a three-step analysis to examine the influence of Foreign Direct Investment (FDI) inflows on income distribution for Organization for Economic Cooperation (OECD) countries through panel data analysis techniques. FDI flows into OECD countries are generally driven by high skilled works. FDI inflows to OECD countries increase GINI coefficients and widen income gaps due to their skill-intensive nature. A high level of education should be encouraged as indicated by its negative relationship with the GINI index.

Keywords Income inequality Foreign Direct Investment (FDI) Organization for Economic Cooperation (OECD)

Income inequality within a nation is a concern shared by both developed countries and developing countries. An i in areas such as educational opportunities and quality of health care. The concern of income inequality comes from its effects on disparity in human capital, health care and so on, which may further worsen income inequality. Decades of worldwide efforts have been devoted to breaking this vicious circle of inequality, aiming to establish a virtuous circle. Besides its harmful impact on social development, increasing income inequality can also negatively affect on long-term economic growth. Estimated by the Organization for Economic Cooperation and Development

Lufei Teng Assistant Professor Department of Economics and Finance Muhlenberg College 2400 Chew Street Allentown, PA 18104 lufeiteng@muhlenberg.edu

Qianwen Bi Assistant Professor Department of Finance and Economics Woodbury School of Business Utah Valley University MS 280, 800 West University Parkway Orem, Utah 84058 Rachel.Bi@uvu.edu

(OECD) (2015), the growing income inequality from 1985 to 2005 has dragged down cumulative growth by 4.7% between 1990 and 2010 across 19 OECD countries. World Development Report

according to the income and expenditure Gini coefficients. Relatively lower inequality occurs in high-income countries.

There is a long list of factors offered by scholars that contribute to the income inequality issue. The list varies from institutional to economic levels and ranges from local to international scales. Among these concerns, the impact of globalization on income inequality

that can be offered by high income OECD countries. Specified by the OECD education report (2014), about 75% of adults from 25 to 64 have received at least

Exchange rates effects are examined by a large body of studies. One group of studies assesses how the appreciation and depreciation of a given currency influences FDI flows. Froot and Stein (1991) conclude that the depreciation of domestic currency can increase FDI inflows by promoting foreign acquisitions. Blonigen (1997) further confirms this conclusion by using the sample of merger- and acquisition FDI into the U.S. by Japanese companies. Another group of studies focuses on the effects of volatility of exchange rates on FDI decisions. By using the sample of 61 U.S. wholesale industries, Campa (1993) finds that the fluctuations of the exchange rate are negatively related to the number of foreign investments in these industries. In contrast, Goldberg and Kolstad (1994) believe that exchange rate volatility does not significantly affect investment shares when monetary shocks dominate exchange rate activity.

Tax rate is another firm-level factor that has been methodically examined. This literature is pioneered by Hartman (1984). The sensitivities to taxes of certain types of FDI is tested and the findings show that the effect of taxes on FDI is strong. A long list of studies on the effects of taxes has appeared since then. Most studies focused on corporate income taxes, but more recently they have begun to include other indirect taxes, such as, international tax treaties.

It is widely accepted by scholars that firms are more likely to pursue foreign production opportunities to avoid the costs of trade protection. Additionally, institutions are also key determinants, especially for underdeveloped host countries. It is hypothesized understandably that poor institutional conditions are negatively related to FDI inflows, which is proved by Wei (2000).

General equilibrium analysis of FDI decisions has become more prominent in recent studies. This analysis suggests three patterns of FDI activities: horizontal, vertical and export-platform FDI.

First, horizontal FDI exists when firms duplicate generally the same activities in multiple countries. Formally modeled in Markusen (1984), horizontal FDI is motivated by access to consumers and avoidance of the trade costs. Markusen (1984) suggests that R&D and marketing usually can concentrate in one location while the same innovation or R&D can be used and produced in multiple locations. This explains why multi-plant economies exist. Brainard (1993) finds that only around 13% percent of overseas production yielded by U.S. multinationals came back to the States and the remainder was mostly sold locally in the 1990s. Many U.S. multinationals are motivated by the desires to get closer access to foreign markets. Yeaple (2009) shows that more productive U.S. firms invest in a large(c)12(k)23217.h2aTJET7(o5 G[(sho)25(w)17(s)25(p)23(r)-7(od

cheap and less-skilled labor, which supports the notion that vertical FDI does occur and is important to the host countries. Horizontal and vertical FDI are encompassed in the Knowledge-s (2002) work. The KC model is further proved empirically by Braconier, Norback and Urban (2005b).

A third pattern is called export-platform FDI. Different from horizontal FDI, export-platform FDI is motivated by exports opportunities to markets other than host or home markets. Many studies, for example Bergstrand and Egger (2004), show the possibilities of export-platform FDI. The motivation of this kind of FDI is cheap trade cost and easy access countries other than host. Ekholm, Forslid and Markusen (2003) generate a model with three regions: two large high-cost economies and a small low-cost economy. They find that horizontal FDI takes place between large, similar countries, and vertical and export-platform FDI occur between a high-cost economy and a low-cost economy. Export-platform FDI arises when a high-cost economy has a plant in the low-cost economy to serve the other high-cost economy. More recent studies began to use spatial econometrics techniques to study the FDI location decision (for example, Blanc-Brude et al. (2014)).

The series study of general equilibrium framework offers both theoretical and empirical approaches to categorize FDI types. The implications of FDI patterns show how FDI flows are driven and motivated and they are important factors in determining the effects of FDI inflows on income distribution. Hence, in this study, independent variables will be chosen according to the general equilibrium framework.

The relationship between inward FDI and income inequality has been specifically and broadly studied yet remains a controversial topic. There has been no consistent and widely accepted theory or empirical evidence that confirms whether the relationship should be positive, negative or not relevant.

Tsai (1995) suggests that FDI is positively related with income inequality for developing countries, especially Asian countries. Basu and Guariglia (2007) employ a panel of 119 developing countries over the years 1970 to 1999 to find a positive association between FDI and human capital inequality. Choi (2006) finds that income inequality increases as FDI stocks increase by using pooled Gini coefficient data for 100 countries. Figini and Gorg (2006) analyze the effects of FDI on wage inequality for both developing countries and developed countries. The results indicate that wage inequality increases with FDI for developing countries and decreases with FDI for advanced host countries. Jaumotte, Lall, and Pagageorgiou (2008) find that FDI is associated with an increase in inequality.

Im and McLaren (2015) introduce an instrumental variable approach and demonstrate that FDI helps to reduce inequality. By using a sample of 18 transition countries over the period 1990-2006, Franco and Gerussi (2013) concludes that FDI is not relevant in affecting income

inequality. Panizza (2002) conducts fixed effects and GMM estimation from American data and suggests that there is no significant relationship between FDI and income inequality. Chintrakarn, Herzer and Nunnenkamp (2012) find that inward FDI has a significant negative effect on income inequality in the United States by applying panel co-integration techniques. Herzer and Nunnenkamp (2012) perform panel co-integration and causality techniques to explore the relationship between FDI and income inequality for a sample ten European countries over the period of 1980-2000. They conclude that the short-run effect of FDI on income inequality is positive and the long-run effect is negative on average.

There are some possible explanations for these ambiguous conclusions: diverse data samples are applied and FDI has different effects on different country groups; varied empirical analysis approaches are applied with different underlying assumptions. The explanations from the previous studies for their conclusions are based on time horizons, geographic factors, or developing stages. This present study tries to explain this issue from the perspective of FDI features.

OECD countries constitute those with the highest economic development and openness levels in the world. Compared to other endowments, such as natural resources, potential market, and cheap input prices, one of the biggest advantages for OECD countries to attract foreign capital is their abundant skilled labor resource. As discussed above, OECD countries have the highest average education level and labor costs. Before studying how FDI affects income inequality, one should first address what factors attract FDI flow into OECD countries and what features of the FDI flows are.

The first hypothesis is that FDI inflows to OECD countries are positively associated with their skilled labor resources. The second hypothesis is that FDI inflows to OECD drive up income inequality. This hypothesis assumes that FDI into OECD countries is driven by skilled labor resources and is based on related previous theoretical work as follows:

First, Raveh and Reshef (2014) investigate how the composition of capital imports affects relative demand for skill and the skill premium by using a sample of developing countries. It is indicated that imports of R&D-intensive capital equipment will raise the skill premium, and that less R&D-intensive capital equipment will reduce the skill premium. R&D-intensive capital and skilled labor being complementary to each other provides the explanation for how trades will affect inequality. For example, developing countries tend to attract less R&D-intensive investment due to cheap labor costs. Marginal product of labor will increase faster than marginal capital by attracting labor-intensive FDI; the income gap between labor suppliers and capital owners may be narrowed in this case. This is the first study that theoretically addresses how the compositions of foreign capital affect income distribution. Previous literature about the effects of R&D-intensive FDI on income inequality specifically is fairly limited, partially because of

the limitations of data availability regarding R&D intensive FDI. Instead of deconstructing FDI, this empirical study will assess whether FDI is skill-intensive or not; it is expected that skill intensive FDI increases the income gap between skilled and unskilled workers.

Second, Initial human capital distribution is significant when discussing the effects of foreign capital on inequality. In their theoretical analysis, Basu and Guariglia (2007) suggest that countries with low initial human capital may find it difficult to catch up with the technologies induced by FDI inflows. In the short term, FDI promotes human capital inequality. In the long term, the poor may eventually gain access to the new technologies and catch up with the rich. Hence, it is concluded that the relationship between FDI and inequality may vary during transitional periods, depending on the initial human capital distributions.

Third, as indicated in Im and McLaren (2015), whether inward FDI is more skill intensive compared to domestic industries also matters. Suppose the ratio of skilled to unskilled worker is for domestic industries and for foreign capital. If , the sectors with foreign capital begin to compete with domestic sectors for skilled workers. To restore the labor market equilibrium, the relative wage ratio of skilled to unskilled workers will increase and wage inequality is exacerbated. By contrast, if , inequality is reduced. The conclusions of these studies further prove the necessity of assessing input endowments of host countries before

Our estimation sample utilizes annual data for OECD countries from 2004 to 2012. The heterogeneity problem can be better controlled by the application of the data sample with geographic and economic similarities. As shown above, the labor force of OECD countries is featured for its high level of education and expensive compensation cost. Hence, OECD countries are an appropriate sample examined to justify how FDI inflows are driven by skilled labor resources and their effects on income distribution. There are 34 OECD countries. Six countries are deleted from the sample due to their missing value problems. Most countries in the study sample are European developed countries. A listing of countries can be found in Table 2.1.

Country Name	Country Name
Austria	Belgium
Canada	Chile
Czech Republic	Denmark
Estonia	Finland
France	Germany
Greece	Hungary
Iceland	Ireland

( )

This study uses the Gini index estimated by the World Bank as a dependent variable to measure income inequality. The Gini index is calculated based on the Lorenz curve, which describes the relationship between aggregate share of total wealth and cumulative fraction of population. The index of zero means perfect equality. Higher values of the index indicate higher levels of inequality.

In OECD countries, the total income of the richest 10% of the population is 9.6 times that of the poorest 10%. This ratio was about 7:1 in the 1980s and rose to 8:1 in the 1990s and 9:1 in the 2000s. The growing gap between the rich and the poor has been explained by many factors summarized by two main categories: the evolution into globalization and rapid technological progress (OECD, 2015). These processes create more demand for high-skilled workers and usually reward high-

OECD countries were affected the most by this crisis, with a dramatic decrease in total income and an increase in unemployment. Slow recoveries from the recession were seen after 2009.

Nearly 30% of the total labor force across OECD countries holds tertiary education, representing a very high education level from a global perspective. Normally, high economic development levels are associated with high levels of education, with more public resources devoted into education improvement. Research and development is more highly encouraged and intellectual property is better protected in developed countries. Along these lines, the higher level of education is rewarded by both market and institutional systems. People are encouraged to pursue more education to seek better opportunities.

The average GDP growth rate is around 1.8% with around 4% standard deviation. The average economic growth rate is around 4% for African countries since the mid-1990s and around 7% for the largest developing countries, such as China, Brazil and India, over the last decade. However, for developed countries, a slow but stable growth rate is currently prevailing. A two percent growth rate can represent the typical economic development trend for most developed countries. A relatively high level standard deviation can be partially explained by the economic fluctuations caused by the 2007-2008 financial crisis.

OECD countries emphasize regional corporations and actively participate in international activities. The size of total trade is around 102% of GDP, which means exports and imports together are greater than the total production on average. The economies rely heavily on international trade.

Gross capital formation (CAP) measures the size of fixed assets and net changes in inventories. It is associate

and production conditions. On average, up to 23% of GDP constitutes the fixed assets foundations with low deviations across OECD countries.

OECD countries have the lowest average population growth rate (0.62%) in the world. Negative growth can even be seen in many developed countries, such as Germany. GDP per capita is calculated by total GDP divided by population and reflects a given

of living. OECD countries represent the highest level of standard of living with their substantial GDP foundation and low population growth rate.

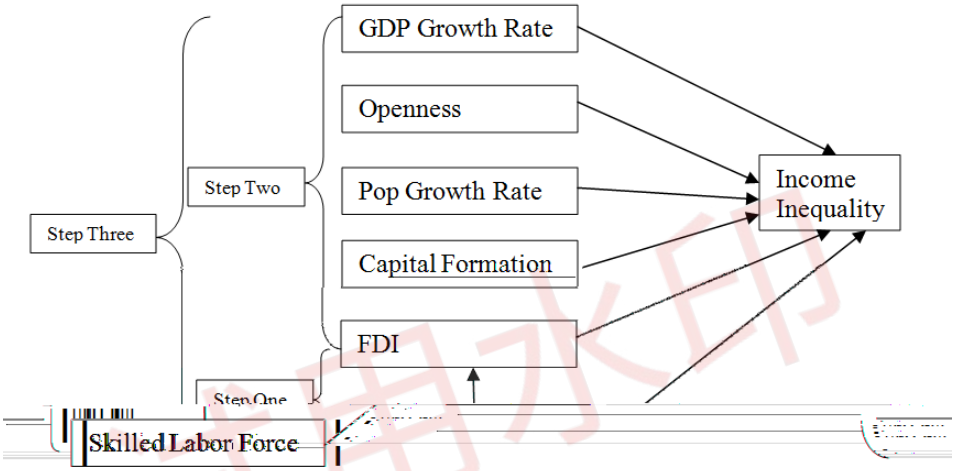
Table 2.2. Summary Statistics

Name	Description	Number of observations	Mean	Standard deviation	Min	Max
GINI*it*	Indicator of income inequality	221	31.35	4.42	23.72	52
FDI*it*	Foreign direct investment net inflows (% of GDP)	252	7.23	15.25	-58.98	142.26
SKILL*it*	Labor Force with tertiary education (% of Total)	238	28.53	8.3	13.1	50.6
GDPGR*it*	GDP growth rate (%)	252	1.89	3.56	-14.74	10.83
OPENNESS*it*	Trade (% of GDP)	252	101.6 g0 G[( )] TJETQEMC/P <1	4.39	1	273.479980 Tm0 g0 G[( )

Gros aditat fortation (% of GDP)

Panel data analysis techniques, Generalized Method of Moments (GMM) estimation, fixed effects model, random effects model, and pooled OLS, have been widely used in most recent studies on this subject. Efficiencies of the results generated from different models are based on how the underlying assumptions are satisfied and should be assessed by test results accordingly.

In this empirical analysis, to prove the two proposed hypotheses, the estimation process follows three steps. As illustrated by Figure 2.2, the first step addresses the relationship between FDI inflows and high skilled labor endowments to determine the features of FDI inflows in OECD countries. The second step is to decide how FDI is related to the GINI index. The third step describes the role of skilled labor endowments in effects of FDI inflows on income inequality.



The first step is designed to explore the motivations of FDI inflows to OECD countries and prove that the FDI inflows of OECD countries are skill intensive. In other words, the FDI inflows are driven by skilled workers or higher levels of human capital. Therefore, FDI inflow (FDI) is the dependent variable and the skilled labor force (SKILL) is used to measure human capital and constitutes the most important independent variable.

As illustrated in the literature review, FDI determinants are very exclusive and complicated. Basically, they can be summarized into three categories based on the general equilibrium model: 1) Access to local market (horizontal FDI). GDP growth rate (GDPGR) is introduced as one of the control variables to reflect the local market potential. GDP is equal to the total expenditures of the whole economy. Its growth rate predicts a market s potential spending ability. 2) Access to production input resources (vertical FDI). This determinant is reflected by the variable of gross capital formation (CAP) in the model. A country s capital formation is directly associated with its physical capital and production conditions, such as factories, machinery, and facilities. These inputs could be attractive factors for FDI inflows. 3) Access to the third markets (export-platform FDI).

The ratio of total international trade to GDP (OPENNESS) is used to measure a country s ability to reach third markets in the model. A platform with great openness indicates its ability to sell products not only in domestic markets but also in foreign markets, which could also attract FDI inflows. To summarize, the first step produces a regression to examine how FDI is motivated by skilled workers with GDP growth rate, capital formation and openness as control variables. It is expected that FDI inflow and share of skilled labor force is positively related. The equation is established as

(2.1)

The second step is to explore the relationship between FDI and income inequality measured by the GINI coefficient (GINI). It is expected that they are positively related due to the skill-intensive nature of the FDI inflows. The control variables used here are found in previous studies (Basu and Guariglia, 2007 and Im and McLaren, 2015). The regression equation is estimated as follows:

(2.2)

Equation (2.2) will provide the empirical results that can show the relationship between FDI inflows and the GINI index. The third step is expected to provide further explanations on this relationship. Also, it may present an endogenous problem if FDI is significantly related with the variable of SKILL from equation (2.1). Therefore, the skilled labor force (SKILL) is added and an interaction term between FDI and SKILL is created in the third step. Adding the interaction term is expected to demonstrate how the interactions between FDI and the human capital factor affect income inequality. The third step equation is derived as follows:

(2.3)

In the three above equations, *i* denotes countries and *t* denotes time. is the unobservable individual effect of country *i* and is the remainder disturbance. The reason to include is because every country is different from each other in terms of their own geographic, demographic, and institutional characters; it is not possible to consider all in empirical studies. The necessity of including this term will be further addressed through the F-test in the following section.

Note that has different interpretations from equation (2.2) to equation (2.3). In equation (2.2), reflects the comprehensive effects of FDI on inequality as follows:

In equation (2.3), is interpreted as the effects of FDI on inequality with the effects of skilled labor force included. As shown in equation (2.5), can be either positive or negative. While is expected to be positive, FDI inflows drive up the inequality through the skill level.

Different from regular time-series regressions or cross-section regressions, the double subscripts indicate that panel data regression should be applied The fixed effects method is conducted through the analysis. The F-test results show that unobservable specific effects exist across countries and should be included in the panel data analysis. In addition, according to the Hausman test results, specific country effects are related with the regressors. Therefore, compared to the random effects model and pooled OLS model, the fixed effects model is more reliable.

This section shows how the appropriate model is chosen according to the test results; empirical results are presented in three-step order.

The results derived from equation (2.1) are reported in Table 2.3. According to the test results, the fixed effects model is more reliable. Two conclusions can be drawn from the fixed effects results. First, FDI inflows in OECD countries are attracted by their highly educated workers. FDI inflow is significantly and positively related with the portion of labor force with tertiary education. The coefficient of 0.99 indicates that the share of skilled labor and FDI/GDP ratio move together proportionally. More FDI will be attracted into countries with a growing number of skilled workers. Rather than pursuing a cheap less-skilled labor force, FDI inflows to OECD countries will more likely go to R&D intensive sectors. The first hypothesis is proved. Second, capital formation is also positively related to foreign investment inflows. Similar to domestic investment, capital formation reflects the physical foundations and production conditions of a country. The higher the level of fixed assets a country has, the more the FDI inflows are attracted.

It is generally concluded that most FDI inflows to OECD countries can be categorized as vertical FDI, as they are motivated by production factors such as skilled workers and fixed assets resources, rather than access to local and foreign markets. This is consistent with the conclusions of Ekholm, Forslid and Markusen (2003): horizontal FDI are likely to ensue among similar economies while vertical FDI likely occur among diversified economies. World Investment Report (2015) states that around 32% of the mergers and acquisitions by Multinational Enterprises (MNEs) from developing countries in 2014 targeted developed countries in 2014. Indicated by the results, the endowments of highly skilled workers and physical capital are the production factors that those investments pursue. Hence, the FDI inflows to OECD countries can be defined as skill-intensive FDI.

Dependent Variable: FDI	
Variable	**Fixed Effects**
SKILL*it*	**0.99** **[0.49]**
GDPGR*it*	**-0.18** **[0.35]**
OPENNESS*it*	**0.06** **[0.11]**
CAP*it*	**0.9**** **[0.38]**
Number of observations	**238**
	Prob>F=0.0387
R-square	within=0.0476 between=0.2051 overall=0.0940
Note: *p<0.05, **p<0.01,*p<0.001**	

Step two is intended to establish whether skill-intensive FDI into OECD countries increases income inequality with its demand for highly skilled workers. A positive relationship between the GINI index, the dependent variable, and FDI is expected. The results of fixed effects analysis presented in Table 2.4 are consistent with this expectation. FDI inflow has a significantly positive relationship with the GINI index. Higher levels of FDI inflows are expected to drive up the income inequality for OECD countries. To explain the reasons for this, the nature of the FDI inflows must be carefully considered. Addressed in the step one results, it is suggested that FDI inflows to OECD countries stem from the desire for highly educated and highly skilled workers, whose wage levels already tend to be higher than those of unskilled laborers, widening the income gap. This result is consistent with the findings of Raveh and Reshef (2014) and the second hypothesis is also proved. However, how the effects of FDI are related with its nature is not explained by the regression (2.2) and will be further discussed in step three.

Openness is negatively related to GINI, which means it is a positive factor that can narrow income gaps. As discussed in the literature review, the effects of globalization on income distribution have been a subject of interest and widely studied for years. But no agreement has been achieved. The process of globalization includes both international trade indicated by openness and international finance indicated by FDI in our model. According to this step s findings, the effects of international trade and finance on income disparity head in different directions. Hence, to study the effects of globalization, it is also important to include the whole picture of international interactions. As with openness, population growth eases the inequality. The effects of population size could be very small due to the low population growth rate cross OECD countries. It is also found that GDP growth rate and capital formation are not significantly related with income inequality.

Dependent Variable: GINI	
Variable	**Fixed Effect**
FDI*it*	**0.01** **[0.006]**
GDPGR*it*	**0.04** **[0.03]**
OPENNESS*it*	**-0.02**** **[0.01]**
CAP*it*	**0.01** **[0.04]**
POP*it*	**-0.59*** **[0.31]**
Number of observations	**221**
	Prob>F=0.0240
R-square	within=0.0660 between=0.0477 overall=0.0429
Note: *p<0.05, **p<0.01,*p<0.001**	

In step two, the indicator of skilled labor force is not included, which may lead to a problem of endogeneity, especially when it is proved that FDI inflows are highly related to skilled labor force resources. Hence, the skilled labor variable is included in equation (2.3), and an interaction term between FDI inflows and skilled labor force is also added, which can extend the analysis and further access the hypothesis.

Presented in Table 2.5, the coefficient (of FDI inflows changes its sign from positive to negative but remains significant. Note that after adding an interaction term, the interpretation of the coefficient is changed. The coefficient in equation (2.2) is interpreted as comprehensive effects of FDI inflows on the GINI index. The new coefficient generated by equation (2.3) measures the effect of FDI inflows on the GINI index when the variable SKILL is equal to zero. In other words, the FDI inflows that are not driven by skilled workers tend to ease income inequality. Demand of this kind of FDI is inclined toward less-skilled workers, which will increase the wage level of the low-income group.

The total effects of FDI are represented by the term: + . The coefficient of the interaction term is significantly positive, which means the effects of FDI on income inequality are positive through its demand for skilled workers. This conclusion is also consistent with the expectations of both the H-O model and the Kremer and Maskin (2005) model. Due to the skill-intensive nature of labor needs, expansion of FDI in developed countries broadens the income gap. Due to the limitations of available data, it is hard to deconstruct the FDI according to whether it is skill intensive or not. However, the results here indirectly prove that whether or not it is skill intensive matters when examining the effects of FDI on the disparity in income.

The portion of skilled labor force is negatively related income inequality. The bigger the skilled labor force share, the less is the income disparity. People with lower economic status face fewer opportunities and more limited social resources. Pushing higher education creates more opportunities and a more competitive environment for lower income people. It follows that education equality leads to income equality.

Dependent Variable: GINI	
Variable	**Fixed Effect**
FDI*it*	**-0.07** **[0.03]**
GDPGR*it*	**0.03** **[0.03]**
OPENNESS*it*	**-0.00** **[0.01]**
CAP*it*	**-0.01** **[0.04]**
POP*it*	**-0.61*** **[0.31]**
SKI*it*	**-0.17***** **[0.05]**
(SKI*FDI)*it*	**0.002**** **[0.00]**
Number of observations	**217**
	Prob>F=0.0002
R-square	within=0.1394 between=0.0072 overall=0.0016

This paper examines the influence of FDI inflows on income distribution for OECD countries through panel data analysis techniques. It follows a three-step analysis. 1) Explore the features of FDI inflows to OECD countries. 2) Examine the relationship between FDI inflows and income inequality. 3) Connect the features of FDI with its effects on income equality. By applying the fixed

First, FDI flows into OECD countries are skill-intensive and driven by input factors. Significant relationships are found between FDI inflows and skilled labor resources, as well as FDI inflows and capital formation. Highly educated labor resources and a higher level of fixed assets promote FDI inflows. This indicates the vertical FDI exists in developed countries, because their advanced input endowments, such as R&D resources, educated labor, and developed physical capital, are attractive factors for foreign investment from developing countries.

Second, FDI inflows to OECD countries increase GINI coefficients and widen income gaps due to their skill-intensive nature. Consistent with the previous theoretical results, the results of the empirical study show that skill-intensive FDI inflows increase income inequality due to their greater

[7] Bergstrand, J. H., & Egger, P. (2004). A theoretical and empirical model of international trade and foreign direct investment with outsourcing: Part I, developed countries. University of Notre Dame Working Paper (April).

[8] Blanc-Brude, F., Cookson, G., Piesse, J., & Strange, R. (2014). The FDI location decision: Distance and the effects of spatial dependence. International Business Review, 23(4), 797-810.

[9] Blonigen, B. A. (1997). Firm-specific assets and the link between exchange rates and foreign direct investment. The American Economic Review, 447-465.

[10] Blonigen, B. A. (2005). A review of the empirical literature on FDI determinants. Atlantic Economic Journal, 33(4), 383-403.

[11] Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. Journal of econometrics, 87(1), 115-143.

[12] Braconier, H., Norbäck, P. J., & Urban, D. (2005). Multinational enterprises and wage costs: Vertical FDI revisited. Journal of International Economics, 67(2), 446-470.

[13] Braconier, H., Norbäck, P. J., & Urban, D. (2005). Reconciling the Evidence on the
-786.

[14] Brainard, S. L. (1993). An empirical assessment of the proximity-concentration tradeoff between multinational sales and trade (No. w4580). National Bureau of Economic Research.

[15] Campa, J. M. (1993). Entry by foreign firms in the United States under exchange rate uncertainty. The Review of Economics and Statistics, 614-622.

[16] Chenery, H. B., & Strout, A. M. (1966). Foreign assistance and economic development. The American Economic Review, 56(4), 679-733.

[17] Chintrakarn, P., Herzer, D., & Nunnenkamp, P. (2012). FDI and income inequality: Evidence from a panel of US states. Economic Inquiry, 50(3), 788-801.

[18]

[24] Ekholm, K., Forslid, R., & Markusen, J. R. (2003). Export-platform foreign direct investment. NBER Working Paper 9517.

[25] Figini, P., & Gorg, H. (2006). Does foreign direct investment affect wage inequality? An empirical investigation. University of Nottingham Research Paper, (2006/29).

[26] Franco, C., & Gerussi, E. (2013). Trade, foreign direct investments (FDI) and income inequality: Empirical evidence from transition countries. The Journal of International Trade & Economic Development, 22(8), 1131-1160.

[27] Froot, K. A., & Stein, J. C. (1991). Exchange rates and foreign direct investment: an imperfect capital markets approach. The Quarterly Journal of Economics, 427(4), 1191-1217.

[28] Harms, P., & Lutz, M. (2006). Aid, governance and private foreign investment: some puzzling findings for the 1990s. The Economic Journal, 116(513), 773-790.

[29] Hartman, D. G. (1984). Tax policy and foreign direct investment in the United States. National tax journal, 475-487.

[30] Herzer, D., & Nunnenkamp, P. (2012). The effect of foreign aid on income inequality: Evidence from panel cointegration. Structural Change and Economic Dynamics, 23(3), 245-255.

[31] GCE. (2015). Education aid watch 2015. www.campaignforeducation.org.

[32] Gohou, G., & Soumaré, I. (2012). Does foreign direct investment reduce poverty in Africa and are there regional differences?. World Development, 40(1), 75-95.

[33] Goldberg, L. S., & Kolstad, C. D. (1994). Foreign direct investment, exchange rate variability and demand uncertainty (No. w4815). National Bureau of Economic Research.

[34] Griffin, Keith. "Foreign capital, domestic savings and economic development." Bulletin of the Oxford University Institute of Economics & Statistics 32.2 (1970): 99-112.

[35] Im, H., & McLaren, J. (2015). Does Foreign Direct Investment Raise Income Inequality in Developing Countries? A New Instrumental Variables Approach. Mimeo.

[36] Karakaplan, U. M., Neyapti, B., & Sayek, S. (2005). Aid and foreign direct investment: International evidence. Bilkent University Discussion Papers, (05-05).

[37] Kimura, H., & Todo, Y. (2010). Is foreign aid a vanguard of foreign direct investment? A gravity-equation approach. World Development, 38(4), 482-497.

[38] Klein, M. U., Aaron, C., & Hadjimichael, B. (2001). Foreign direct investment and poverty reduction (Vol. 2613). World Bank Publications.

[39] Kosack, S., & Tobin, J. (2006). Funding self-sustaining development: The role of aid, FDI and government in economic success. International Organization, 60(01), 205-243.

[40] Kremer, M., & Maskin, E. (2006). Globalization and inequality. Harvard University, Department of Economics. Unpublished manuscript.

[41] Krugman, P. (2007). Trade and Inequality, revisited.

[42] Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. Journal of international economics, 16(3), 205-226.

[43] Markusen, J. R., & Maskus, K. E. (2002). Discriminating among alternative theories of the multinational enterprise. Review of international economics, 10(4), 694-707.

[44] Milanovic, B., & Squire, L. (2005). Does tariff liberalization increase wage inequality? Some empirical evidence (No. w11046). National Bureau of Economic Research.

[45] Moreira, S. B. (2005). Evaluating the impact of foreign aid on economic growth: A cross-country study. Journal of Economic Development, 30(2), 25-48.

[46] OECD. (2011). Statistics on resource flows to developing countries. OECD, Paris.

[47] OECD. (2015). In it together: Why less inequality benefits all. OECD Publishing, Paris.

[48] [48]Panizza, U. (2002). Income inequality and economic growth: evidence from American data. Journal of Economic Growth, 7(1), 25-41.

[49] Papageorgiou, C., Jaumotte, F., & Lall, S. (2008). Rising Income Inequality: Technology, or Trade and Financial Globalization? International Monetary Fund.

[50] Papanek, Gustav F. "The effect of aid and other resource transfers on savings and growth in less developed countries." The Economic Journal 82.327 (1972): 934-950.

[51] Papanek, G. F. (1973). Aid, foreign private investment, savings, and growth in less developed countries. The Journal of Political Economy, 120-130.

[52] Rahnama, M., Fawaz, F., & Gittings, K. (2016). The effects of foreign aid on economic growth in developing countries. Working Paper.

[53] Raveh, O., & Reshef, A. (2016). Capital imports composition, complementarities, and the skill premium in developing countries. Journal of Development Economics, 118, 183-206.

[54] Robbins, D., Gonzales, M., & Menendez, A. (1995). Wage Dispersion in Argentina, 1976 93: Trade Liberalization amidst Inflation, Stabilization, and Overvaluation. Harvard Institute for International Development.

[55] Robbins, D. J. (1996), "Evidence on Trade and Wages in the Developing World", *OECD Development Centre Working Papers*, No. 119, OECD Publishing, Paris.

[56] Robbins, D., & Gindling, T. H. (1999). Trade Liberalization and the Relative Wages for -154.

[57] Rosenstein-Rodan, P. N. (1943). Problems of industrialisation of eastern and south-eastern Europe. The Economic Journal, 53(210/211), 202-211.

[58] Selaya, P., & Sunesen, E. R. (2012). Does foreign aid increase foreign direct investment?. World Development, 40(11), 2155-2176.

[59] Tsai, P. (1995). Foreign direct investment and income inequality: further evidence. World Development, 23(3), 469-483.

[60] UNCTAD. (2015). World Investment Report 2015. United Nations Publications, Geneva.

[61] U.S. Bureau of Labor Statistics. (2013). International Labor Comparisons.

[62] Wei, S. J. (2000). How taxing is corruption on international investors?. Review of economics and statistics, 82(1), 1-11.

[63] World Bank. (2005). World development report 2006: Equity and development. Oxford University Press, Incorporated.

[64] World Bank. (2014). World development indicators 2014. Washington, DC: World Bank.

[65] Yeaple, S. R. (2009). Firm heterogeneity and the structure of US multinational activity. Journal of International Economics, 78(2), 206-215.

[66] World Bank. (2016). World development indicators 2016. Washington, DC: World Bank.

[67] World Bank. Africa Regional Office. Office of the Chief Economist, World Bank. Africa Regional Office. Operational Quality, Knowledge Services, & World Bank. Development Data Group. (2006). Africa Development Indicators. World Bank Publication.