# DOES ECONOMIC INTEGRATION PROCESS MATTER FOR INCOME INEQUALITY IN CENTRAL AND EASTERN EUROPEAN COUNTRIES?

### Maria Piotrowska

Wroclaw University of Economics, Chair of Mathematical Economics, Komandorska 118/120, 53–345 Wroclaw, Poland E-mail: maria.piotrowska@ue.wroc.pl or

piotrowska@wbz.uni.wroc.pl

Economic integration can be defined as the expansion of markets from the national to the regional or to the world level. Therefore, two channels of market integration can be determined: regional integration, for instance, within the EU, and globalization. The purpose of this paper is to investigate the impact of the economic integration process on differences in income among and within Central and Eastern European countries (CEECs). The hypotheses on 1) the economic integration relevance and 2) the mechanisms through economic integration affecting income inequality are tested with data on 10 CEECs (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovakia, Slovenia, Romania) for the 2000–2006 period. An unbalanced panel induces to estimate Random-effects regressions and fixed-effects regressions. The results show that globalization contributed significantly to income inequality among CEECs as well as to the upward trend in income inequality within the societies of these countries, while regional integration with and within the EU did not explain considerably the changes in income distribution over the study period.

Keywords: European integration, globalization, income inequality, economic development, welfare state

### Introduction

The deepening of market (economic) integration of the Central and Eastern European Countries (CEECs) during the period 2000–2006 proceeded through two channels: regional integration within the EU and globalization. The purpose of this paper is to investigate the impact of the economic integration process on in income inequality among

and within the CEECs. The research addresses the following questions: 1) could European integration or globalization be a significant factor that has contributed to changes in income inequality between and within the CEECs? 2) if so, how have these two channels of market integration affected income inequality? What mechanisms have been important? Are the effects on the welfare

state or the pressures of international wage and employment competition involved? These hypotheses are tested with data on 10 CEECs (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovakia, Slovenia, Romania) for the 2000-2006 period. The dependent variable is the Gini coefficient, a measure of income inequality. The Eurostat is a primary data source. European integration is measured as the percentage of a country's total exports that go to European Union countries or the intraregional trade share. Globalization is reflected by two measures: 1) foreign direct investment (FDI) intensity, or the average value of inward and outward FDI flows, divided by GDP; and additionally 2) trade integration, or the average value of imports and exports of goods and services, divided by GDP. The econometric models include control variables for economic development, national welfare spending and labour market. The data form an unbalanced panel, with countries contributing different numbers of observations, depending on the data availability. This problem suggests to estimate Random-effects regressions and/or fixed-effects regressions. The small size of the sample results in insufficient degrees of freedom necessary to estimate coefficients for all the control variables. The solution is to estimate the baseline model, to add each of the other controls sequentially, and finally to estimate the model with a full complement of controls.

The structure of the paper is as follows:

1) the discussion on the mechanisms through
which regional integration and globalization

- two channels of economic integration - can
affect income inequality; 2) the methodology;

3) the results that verify the hypotheses on the
relevance of European integration and

globalization for explaining the differences in income inequality among and within the CEECs; 4) conclusions.

# Economic integration and income inequality

Economic integration can be defined as the expansion of markets from the national to the regional or to the world level. Therefore, two channels of market integration can be determined: regional integration, for instance, within the EU, and globalization. There are three key distinctions between these channels (Beckfield, 2006: 7-8). First, regional integration is geographically bounded, while globalization is most often meant as an intensification of cross-border flows. Second, regional integration is more strongly institutionalized than globalization. The EU requires its candidates to meet some requirements and its members to meet, for instance, the convergence criteria before joining the currency union. Third, regionalization has progressed further than globalization. Fligstein and Stone Sweet (2002) note that nearly half of all world trade occurs within the EU. The question arises how European integration and globalization influence income inequality.

Both regional integration and globalization open economies. It results in 1) changes in the employment structure, and 2) an increase in wage competition among workers. Globalization stimulates foreign investment that can benefit more capital than labour and decline union power. Scheve and Slaughter (2004) found evidence that foreign investment declines economic security among workers in industries. Economic openness can be responsible for an increase in income inequality. On the other hand, raising the volume of

international trade and investment is a strong factor of growth. Liberal economics gives the highest priority to growth in an incomeinequality reducing strategy (Brady, 2003b).

There are the additional mechanisms linked to European integration, mostly to its institutional character (Beckfield, 2006). Institutional economics highlights the importance of political and institutional factors in explaining income inequality and poverty due to their impact on redistribution. Many researchers show that the welfare state reduces inequality and poverty (Blank, 2000; Burtless, Smeeding, 2001; DeFina, Thanawala, 2001; Page, Simmons, 2000; Korpi, Palme, 1998; Smeeding et al., 2001; Kenworthy, 1999; Brady, 2005; Brady et al., 2005; Moller et al., 2003). European integration influences the welfare state generosity through three mechanisms. First, the convergence criteria require the fiscal discipline, and this requirement leads to cuts in social transfers. Second, EMU is concentrated on low inflation. However, low inflation benefits mostly the rich. The poor require full employment policy, not tight monetary policy (Boix, 1998; Hibbs, 1987). Third, the EU stimulates market-oriented policies, such as deregulation, privatization, tax competition. Finally, European integration is much more a "negative" than "positive' integration, or it is focused much more on the removal of barriers to trade and market regulations than on the correction of market dysfunctions (Scharpf, 1996, 1999). Advocates of the welfare state blame free market for increasing income inequality. Liberal economics presents quite an opposite argument. Free market is one of fundamental factors for growth and thus for the reduction of income inequality (Brady, 2003b).

Research on income inequality and poverty is usually concentrated on three social

forces that drive inequality: economic development (Nielsen, Alderson, 1995, 1997), welfare state (Brady, 2003a; Brady, Esping-Andersen, 1990; Kenworthy, 1999) and globalization or investment dependence (Alderson, Nielsen, 1999, 2002; Bluestone, Harrison, 1982; Dixon, Boswell, 1996; Firebaugh, 1992, 1996). The effect of regional integration has received less attention. Empirical findings presented in the literature show that the EU expands inequalities by contracting the welfare state (Boje et al., 1999) or suggest that European integration can resist globalization's effect on inequality (Moses, 1995) as well as reveal that the impact of regional integration on inequality is uneven, with certain inequalities (gender inequality) alleviated by the "regulatory suprastate" (Walby, 1999). Recently Beckfield (2006) has found evidence that European integration increased income inequality within the EU members during the period of 1973-1997, though the effect of economic integration was attenuated at the highest levels of integration.

The consequences of economic integration for income inequality in the CEECs should be also examined.

# Methodology

Variables. The dependent variable is the Gini coefficient, a measure of inequality that varies from 0 to 1, where 0 is perfect equality and 1 is perfect inequality. In calculation, the Gini coefficient is multiplied by 100.

There are two <u>basic independent variables</u> that represent two channels of economic (market) integration: European integration and globalization. European economic integration is measured as the percentage of a country's total exports that go to the EU (25 countries), or the intraregional trade share (Frankel, 1997; Beckfield, 2006). Globali-

zation is reflected by two measures: 1) foreign direct investment (FDI) intensity, or the average value of inward and outward FDI flows, divided by GDP; and additionally 2) trade integration, or the average value of imports and exports of goods and services, divided by GDP.

Control independent variables. The analysis includes: 1) GDP per capita in PPS (EU27=100) to control for the relationship between development and inequality; 2) social benefits paid by general government (% of GDP) to investigate the welfare state effect on inequality;

Additional controls to examine the mechanisms through economic integration could affect income inequality: A. variables of labour market: unemployment rate, long-term unemployment rate; female employment rate; employment rate, by highest level of education attained (% of age group 25–64 years) – primary, secondary, tertiary education; B. labour market institution – union power<sup>2</sup> measured by workers involved in strikes per 1000 workers; C. inflation rate (HICPs) – as a goal of macroeconomic policy.

Data on 10 CEECs (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovakia, Slovenia, Romania) for the 2000–2006 period come from the Eurostat. Unfortunately, data on the European

integration measure are not available for Bulgaria and Romania.

Method. The data form an unbalanced panel, with countries contributing different numbers of observations depending on the data availability. This problem suggests to estimate Random-effects regressions (REM - random-effects model) and/or fixed-effects regressions (FEM - fixed-effects model). The REM preserves both between-country and within-country variations. If the independent variables are significant in the REM, it means that these variables explain both inter- and intra-country variations. The FEM differences remove all inter-country variation in subtracting each observation from the intracountry mean. The FEM can be interpreted as explaining intra-country variation and control of all time-invariant inter-country variation.

The small size of the sample (N = 10, T = 7) results in insufficient degrees of freedom necessary to estimate the coefficients for all the control variables. The solution is to estimate the baseline model, to add each of the other controls sequentially and finally to estimate the model with a full complement of controls.

### **Trends**

The result presentation starts from the analysis of trends in the variables during the period 2000–2006. The value of the coefficient in the REM(FEM) regression and t-statistics are shown in Table 1.

Income inequality. The transformation process in the 90s resulted in an increase of income inequality in the Central and Eastern European countries. This upward trend kept strongly during the period 2000–2006.

European economic integration. The EU is the main trade partner of the CEECs. The

¹ Social benefits are transfers to households, in cash or in kind, intended to relieve them from financial burden of a number of risks or needs (by convention: sickness, invalidity, disability, occupational accident or disease, old age, survivors, maternity, family, promotion of employment, unemployment, housing, education and general neediness) made through collective schemes, or outside such schemes by government units (Eurostat's definition).

<sup>&</sup>lt;sup>2</sup> The number of observations on trade union density in the CEECs is too small (OECD data).

Table 1. Trends in the variables, 10 CEECs, 2000–2006, random-effects regressions (REM) and fixed-effects regressions (FEM)

Variable	Coefficient f	or time trend	Adjusted R <sup>2</sup>	
	REM	FEM	REM	FEM
Income inequality	0.418	0.417	0.91	0.88
	(4.13)	(3.98)		1
European integration	-1.130	-1.130	0.90	0.89
	(-6.98)	(-6.91)	l	
Globalization	, ,			
1) FDI intensity	0.457	0.461	0.40	0.33
,	(3.45)	(3.46)		1
2) trade integration	1.491	1.491	0.95	0.94
,	(6.60)	(6.55)		
Economic development		1		
1) GDP per capita	2.89	2.089	0.99	0.98
	(17.09)	(16.96)		
2) unemployment	-0.671	671	0.86	0.84
,	(-6.17)	(-6.13)		
long-term unemployment	-0.329	-0.329	0.85	0.83
, ,	(-4.36)	(-4.33)	l	
Social benefits	-0.173	-0.173	0.94	0.93
	(-4.02)	(-3.99)		
Female employment rate	0.424	0.424	0.88	0.86
	(4.01)	(3.98)		
Employment rate, by highest level				
of education attained:				
– primary	-0.442	-0.442	0.93	0.92
	(-3.13)	(-3.10)		
- secondary	0.341	0.341	0.79	0.75
	(2.75)	(2.73)		
- tertiary	0.356	0.356	0.64	0.59
	(3.20)	(3.18)		
Number of workers involved in	-0.306	-0.239	0.04	0.03
strikes	(-0.65)	(-0.48)		
Inflation rate	-1.028	-1.028	0.61	0.56
	(-3.69)	(-3.66)		

Note: t-statistics in parentheses. Source: Author's estimates.

share of trade with the EU in total exports varied from 63% (Lithuania) to 88% (Slovakia). However, it is surprising that trade with the EU (exports to the EU divided by total exports) show a strong downward trend.

Globalization. Both measures, the FDI intensity and trade integration (imports plus exports as a percentage of GDP), show the upward trends. The trade integration trend was especially strong. The upward trend in

globalization and the downward trend in trade with the EU suggest that globalization crowded out economic integration with the EU over the study period.

Economic development. The GDP per capita very strongly increased and the unemployment strongly declined, reflecting a considerable progress in the economic development of the CEECs during the period 2000–2006.

Social benefits. The downward trend was statistically significant but not especially strong. The generosity of social policy tended to decline.

Changes in the employment structure. The upward trend was the strongest in the female employment rate. Employment rates for secondary and tertiary education had also the upward trends, while employment rate for primary education tended to decline.

Union power. The number of workers involved in strikes was completely insignificant.

Inflation rate tended considerably to decline.

# The relevance of economic integration channels

Table 2 shows the results of appying the random-effects and fixed-effects models to regressions of income inequality under European integration and globalization (two measures). Model 4 includes the measure of European integration (the percentage of total exports from a country sent to the EU-25) and the first measure of globalization, the FDI intensity. Model 5 includes the measure of European integration and the second measure of globalization, trade integration (imports plus exports divided by GDP). The results show that only globalization is significant in all types of models, suggesting that globalization explains differences in income inequality among the countries as well as the rising inequality within the countries. The coefficients of European integration occur to be completely insignificant in both models.

The literature points to economic development and the welfare state as the factors that are important in explaining income

Table 2. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of income inequality on European integration and globalization, 10 CEECs, 2000–2006

Dependent variable = Gini coefficient

Independent variable	Model 1 REM FEM	Model 2 REM FEM	Model 3 REM FEM	Model 4 REM FEM	Model 5 REM FEM
European	-0.177 0.193		-	-0.076 -0.087	-0.08 -0.06
integration	(-2.06) (-2.11)			(-0.80) (-0.82)	(-0.9) (-0.7)
FDI		0.295 0.295	_	0.306 0.293	
intensity		(2.84) (2.72)		(2.17) (1.92)	
Trade			0.131 0.160		0.173 0.199
integration			(2.88) (3.21)		(2.8) (2.9)
Adjusted R <sup>2</sup>	0.84 0.87	0.88 0.86	0.89 0.87		

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

inequality. The results support these hypotheses rather weakly. The regressions of the Gini coefficient on GDP per capita or on social benefits show that economic development can explain differences in income inequality mainly within the countries, while social benefits do it only among the countries and weakly (Table 3). Unemployment occurred to be statistically insignificant (Table 3).

The findings suggest that market integration affected income inequality in the CEECs in the period 2000–2006 through globalization. One should test whether these estimates of globalization effects hold up to controls. Tables 4 and 5 show the results for both measures of globalization and controls. Models 10 and 13 introduce GDP per capita, models 11 and 14 introduce spending on social benefits,

Table 3. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of income inequality on economic development and welfare state, 10 CEECs, 2000-2006

### Dependent variable = Gini coefficient

Independent variable	Model 6 REM FEM	Model 7 REM FEM	Model 8 REM FEM	Model 9 REM FEM
GDP per capita	<b>0.77 0.126</b> (1.70) (2.50)			
Unemployment		-0.08 -0.09 (-0.70) (-0.92)		
Long-term unemployment			-0.09 -0.10 (-0.54) (-0.55)	
Social benefits				-0.53 -0.29 (-1.86) (-0.85)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

Table 4. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of income inequality on FDI intensity (first measure of globalization) and controls, 10 CEECs, 2000-2006

## Dependent variable = Gini coefficient

Independent variable	Model 10 REM FEM	Model 11 REM FEM	Model 12 REM FEM
FDI intensity	0.258 0.220	0.283 0.284	0.265 0.265
	(2.22) (1.79)	(2.75) (2.68)	(2,58) (2.44)
GDP per capita	0.37 0.075		
	(0.75) (1.28)		
Social benefits		<b>-0.461</b> -0.274	
		(-1.63) (-0.83)	
Inflation rate			-0.074 -0.077
			(-1.58) (-1.53)

Notes: t-statistics in parentheses; significant coefficients at 0.05 level are bold

Source: Author's estimates

Table 5. Random-effects regressions (REM) and Fixed-effects regressions (FEM), both, of Income inequality on Trade Integration (Second Measure of Globalization) and Controls, 10 CEECs, 2000-2006

Dependent variable = Gini coefficient

Independent variable	Model 13 REM FEM	Model 14 REM FEM	Model 15 REM FEM
Trade integration	0.114 0.127	0.100 0.182	0.126 0.152
	(2.16) (2.19)	(1.99) (3.14)	(2.79) (3.11)
GDP per capita	0.032 0.064		
• •	(0.63) (1.15)		
Social benefits		-0.264 -0.270	
		(-0.87) (-0.75)	
Inflation rate			-0.074 -0.077
			(-1.73) (-1.76)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

and models 12 and 15 introduce the inflation rate. The coefficient estimate for globalization (for both its measures) remains significant after each control variable is incorporated into the model. The coefficient for GDP per capita is insignificant at the 0.05 level in all types of models, while the social benefit coefficient is very weakly significant only in the REM regression, which includes the FDI intensity and is

completely insignificant in the models with trade integration. Considering inflation, its coefficient is weakly significant only in the models with trade integration. The results suggest that globalization almost fully explains the effects of both economic development and social policy on income inequality.

This conclusion is supported by findings from other models (Tables 6 and 7) which

Table 6. Random-effects regressions (REM) and fixed-effects regressions (FEM), of FDI intensity (first measure of globalization) on controls, 10 CEECs, 2000-2006

Dependent variable = FDI intensity

Independent variable	Model 16 REM FEM	Model 17 REM FEM	Model 18 REM FEM	Model 19 REM FEM	Model 20 REM FEM
GDP per capita	0.8 0.8 (3.1) (3.1)				
Unemployment		-0.3 -0.3 (-2.6) (-2.6)			
Long-term unemployment			-0.2 -0.2 (-2.6) (-2.6)		
European integration				-0.5 -0.6 (-2.9) (-3.2)	
Social benefits					-0.008 -0.007 (-0.2) (-0.14)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

Table 7. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of trade integration (second measure of globalization) on controls, 10 CEECs, 2000-2006

Dependent variable = Trade integration

Independent variable	Model 21 REM FEM	Model 22 REM FEM	Model 23 REM FEM	Model 24 REM FEM	Model 25 REM FEM
GDP per capita	0.53 0.54 (5.2) (5.0)				
Unemployment		(-0.2) (-0.3) (-4.9) (-5.4)		-	
Long-term unemployment		_ · ·	(-0.1)(-0.14) (-3.8) (-4.3)		
European integration				-0.2 -0.3 (-2.4) (-3.3)	
Social benefits					-0.07 -0.08 (-4.3) (-4.4)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

show that globalization stimulated economic development (it increased GDP per capita and declined unemployment) and crowded out trade with the EU (globalization was associated with a decline in the measure of European integration) as well as trade integration was strongly associated with a decline in social benefits.

Globalization affected income inequality through changes in the employment structure. There are two hypotheses how trade integration may contribute to the distributional changes (Hoffmeister, 2006). First, advanced economies specialize in the production that requires high-qualified labour. It increases the demand for skilled workers and declines the demand for unskilled labour force. As a consequence, the gap between earnings obtained by skilled and unskilled workers extends, and trade integration contributes to the income inequality increase. Second, less developed countries offer the output that requires large resources of less skilled labour force. It evokes a higher increase in low wages. Finally, trade integration reduces income inequality in these

countries. The results presented in Tables 8 and 9 support the first hypothesis. Opening the CEECs, on the one hand, has generated demand for skilled workers with secondary and tertiary education; on the other hand, the increasing trade integration has been associated, although very weakly, with a decrease in the employment rate for workers with primary education<sup>3</sup>.

The data listed in Tables 8 and 9 show a strong positive relationship between globalization (both measures) and the female employment rate. The increasing participation of women in the paid labour force may affect income inequality in two ways. A higher female employment rate may lower women's average earnings (Thurow, 1987) or it may increase women's wages in middle-income households (Cancian, Danzinger, Gottschalk, 1993). The effect may depend on the selection

<sup>&</sup>lt;sup>3</sup> The coefficient for the employment rate for workers with primary education in the REM regression of trade integration is low and significant only at a 0.1 level (Table 5).

Table 8. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of FDI intensity (first measure of globalization) on controls, 10 CEECs, 2000-2006

Dependent variable = FDI intensity

Independent variable	Model 26 REM FEM	Model 27 REM FEM	Model 28 REM FEM	Model 29 REM FEM	Model 30 REM FEM
Female	0.32 0.33				
employment	(3.2) (3.2)				
Employment		-0.06 -0.05			
Primary	1	(-0.4) (-0.3)			
education					
Employment			0.23 0.23		
Secondary			(1.9)(1.9)		
education					
Employment				0.24 0.30	
Tertiary				(2.3) (2.8)	
education				·	
Inflation					-0.2 -0.2
					(-0.9) (-0.9)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

Table 9. Random-effects regressions (REM) and fixed-effects regressions (FEM), both, of Trade Integration (second measure of globalization) on controls, 10 CEECs, 2000-2006

Dependent variable = Trade integration

Independent variable	Model 31 REM FEM	Model 32 REM FEM	Model 33 REM FEM	Model 34 REM FEM	Model 35 REM FEM
Female	0.15 0.17				
employment	(3.6) (3.6)				
Employment		-0.09 -0.06			
Primary					
education		(-1.4) (-0.9)			
Employment			0.15 0.16		
Secondary			(3.4) (3.0)		
education					
Employment				0.09 0.16	
Tertiary			i	(2.5) (3.4)	
education					
Inflation					-0.12 -0.08
					(-1.3) (-0.6)

Notes: t-statistics in parentheses; coefficients significant at 0.05 level are bolded.

Source: Author's estimates.

of societies to be investigated (Alderson, Nielsen, 2002; Nielsen, Alderson, 1997). The results of the REM and FEM regressions reveal a positive relationship between FDI and the female employment rate, but only for women with a secondary and especially a tertiary education. The increasing participation of women in labour force, induced by globalization, has deepened income inequality in the CEECs.

#### Conclusions

- Globalization occurrs to be the only factor that has significantly explained the differences in income inequality between the CEECs as well as the upward trend in income inequality within societies of these countries over the period 2000–2006.
- Regional integration with and within the EU did not contribute conside-

- rably to changes in income distribution.
- The relationships between foreign investment or trade integration (the measures of globalization) and income inequality appear to be a net of statistical controls for other factors which are suggested by the economic theories as determinants of the distributional changes, including economic development and welfare retrenchment.
- Globalization affected the income inequality increase in the CEECs through changes in demand for labour. Openness of the economies stimulated employment for skilled labour force.
- In the short run embraced by the research, globalization induces an increase in income inequality. Whether globalization will reduce income inequality via growth in the long run, as liberal economics suggests, still remains an open question.

#### REFERENCES

- 1. Alderson, A., Nielsen, F. (1999), Income inequality, development, and Dependence: a reconsideration, *American Sociological Review*, No 64, p. 606-631.
- 2. Alderson, A., Nielsen, F., (2002), Globalization and the great U-turn, *American Journal of Sociology*, No. 107, p. 1244–1299.
- 3. Beckfield, J. (2006), European integration and income inequality, LIS Working Paper Series, No. 447.

Blank, R., (2000), Fighting poverty: lessons from recent U.S. history, *Journal of Economic Perspectives*, No. 14, s. 3–19.

<sup>5.</sup> Bluestone, B., Harrison, B. (1982). The Deindustrialization of America – New York, Basic Books.

<sup>6.</sup> Boix, C., (1998), Political Parties, growth, and Equality: Conservative and Social Democratic Economic Strategies in the World Economy - New York, Cambridge University Press.

Boje, T., Van Steenbergen, B., Walby, S. (1999),
 in: T. Boje, B. Van Steenbergen, S. Walby, eds.,
 European Societies: Fusion or Fission - London,
 Routledge, p. 1-18.

Brady, D. (2005), Structural theory and relative poverty in rich western democracies, 1969–2000. LIS Working Paper Series, No. 407.

Brady, D. (2003a), Rethinking the sociological measurement of poverty. Social Forces, No. 81, p. 715–752.

<sup>&</sup>lt;sup>4</sup> The FDI intensity coefficient was significant at the 0.05 level in both the REM and FEM regressions of female employment rate for secondary and tertiary education, respectively 0.196 (1.72) and 0.197 (1.69) for secondary education; 0.236 (1.81) and 0.371 (3.05) for tertiary education, (t-statistics in parentheses) – Piotrowska (2007, Table 7).

- 10. Brady, D. (2003b), The Poverty of Liberal Economics, LIS Working Paper Series, No. 343.
- Brady, D., Beckfield, J., Seeleib-Kaiser, M. (2005), Economic globalization and the welfare state in affluent democracies, 1925–2001, American Sociological Review, No 70, p. 921–48.
- 12. Burtless, G., Smeeding, T. (2001). The level, trend, and composition of poverty, in: *Understanding Poverty*, Danziger S., Haveman R., eds. New York, Cambridge, MA.: Russell Sage Foundation and Harvard University Press, p. 27-68.
- 13. Cancian, M., Danzinger, S., Gottschalk, P. (1993). Working wives and family income inequality among married couples, p. 195–221, in: *Uneven Tides: Rising Inequality in America*, Danzinger S., Gottschalk P., eds. New York, Russell Sage Foundation.
- DeFina, R., Thanawalda, K. (2001), The impact of taxes and transfers on alternative poverty indexes. Review of Social Economy, No. 59, p. 395–416.
- 15. Dixon, W., Boswell, T. (1996), Dependency, disarticulation, and denominator effects: another look at foreign capital penetration. *American Journal of Sociology*, No. 102, p. 543–584.
- 16. Esping-Andersen. (1990), Three Worlds of Welfare Capitalism Princeton, NJ: Princeton University Press.
- 17. Firebaugh, A. (1992), Growth effects of foreign and domestic investment. *American Journal of Sociology*, No. 98, p. 105-130.
- 18. Firebaugh, A. (1996), Does foreign capital harm poor nations? New estimates Based on Dixon and Boswell's measure of capital penetration. American Journal of Sociology, No. 102, p. 563-575.
- Fligstein, N., Stone Sweet, A. (2002), Constructing polities and markets: an institutionalist account of european integration. *American Journal of Sociology*, No. 107, p. 1206–1243.
- 20. Frankel, J. (1997), Regional Trading Blocs in the World Economic System Washington, D.C.: Institute for International Economics.
- 21. Hibbs, D. (1987), *The Political Economy of Industrial Democracies* Cambridge, MA: Harvard University Press.
- 22. Hoffmeister, O. (2006), Inequality of personal income in the enlarged EU: the role of the welfare states, regional cohesion policies and economic integration. Luxemburg Income Study Working Paper Series, No. 440.

- 23. Kenworthy, L. (1999), Do social welfare policies reduce poverty? A cross-national assessment. *Social Forces*, No. 77, s. 1119–1140.
- 24. Korpi, W., Palme, J. (1998), The paradox of redistribution and strategies of equality: welfare state institutions, inequality, and poverty in the western countries. *American Sociological Review*, No. 63, s. 661–687.
- Moller, S., D. Bradley, E. Huber, F. Nielsen,
   J. Stephensen, (2003). Determinants of relative poverty in advanced capitalist democracies. *American Sociological Review*, No. 68, s. 22–51.
- Moses, J. (1995). The social democratic predicament in the emerging European Union: a capital dilemma. *Journal of European Public Policy*, No. 2, p. 407–426.
- Nielsen, F., Alderson, A. (1995). Income inequality, development, and dualism: results from an unbalanced cross-national panel. *American* Sociological Review, No. 60, p. 674–701.
- 28. Nielsen, F., Alderson, A. (1997). The Kuznets curve and the great U-turn: Patterns on income inequality in United States counties, 1970–1990. *American Sociological Review*, No. 62, p. 12-33.
- 29. Page, B., Simmons, J. (2000), What Government Can Do: Dealing with Poverty and Inequality Chicago: The University of Chicago Press.
- 30. Piotrowska, M. (2008), Determinants of Poverty in the CEECs, forthcoming.
- 31. Scharpf, F. (1996), Negative and Positive integration in the Political Economy of European Welfare States, in: G. Marks, F. Scharpf, P. Schmitter, W. Streeck, eds., Governance in the European Union, London: Sage. p. 15-39.
- Scharpf, F. (1999), Governing in Europe: Effective and Democratic? Oxford, Oxford University Press.
- 33. Scheve K., Slaughter, M. (2004). Economic insecurity and the globalization of production, *American Journal of Political Science*, No. 48, p. 662–74.
- 34. Seeding, T., Rainwater, L., Burtless, G. (2001), U. S. poverty in cross-national context, *Understanding Poverty*, (eds. S. Danziger, R. Haveman New York, Cambridge, MA.: Russell Sage Foundation, Harvard University Press, p. 162–189.
- 35. Thurow, L., (1987). A surge in inequality, Scientific American, No. 256, p. 30-37.
- 36. Walby, S., (1999), Between Class and Market: Postwar Unionization in Capitalist Democracies Princeton, NY: Princeton University Press.