

Growth divergence and income inequality in OECD countries: the role of trade and financial openness

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ITSG

ITALIAN TRADE STUDY GROUP

Lecce, May 10-11, 2018

Motivation

- The impact of globalization on income level and distribution is at the center of the current international economic policy debate also at OECD level.
- Increasing trade and financial flows between countries, in conjunction with technological progresses, are often cited as worsening income inequality and growth rates disparity.
- The present study aims to analyse the effects of globalization on growth and income inequality in 35 OECD countries, where most factors explaining the divergence in emerging countries have arguably a minor effect

What is new?

This paper:

- i) studies separately the short and long run effects of trade and financial openness on income level and distribution,
- ii) focuses on OECD countries ,
- (iii) runs sensitivity analysis on the role of institutional quality, trade agreements and the Global Financial Crisis.

A preview of the main results

- Trade and financial openness reduce growth gaps across the countries but not income inequality
- The (contrasting) effects of financial integration is stronger in high income countries.
- Low and middle income countries benefit more from international trade.
- Financial openness had a positive and significant impact on growth only in the short run on middle income countries.
- It increased income inequality in the short term in low income countries and in the long term in high income countries.

A bird eye survey of the recent literature /1

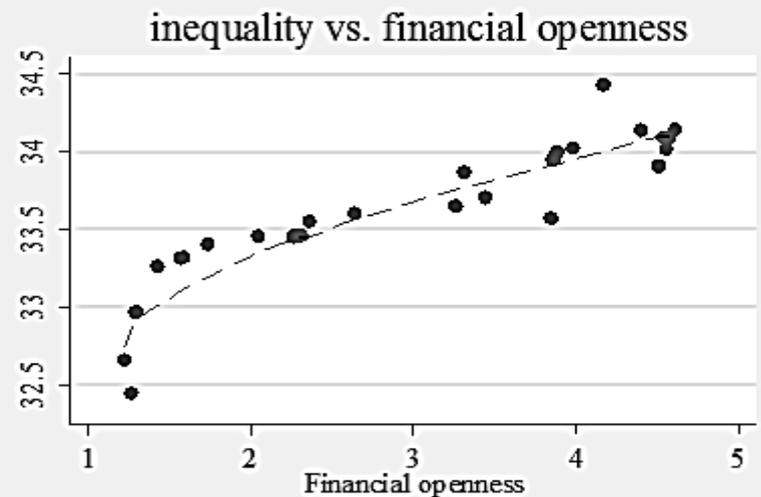
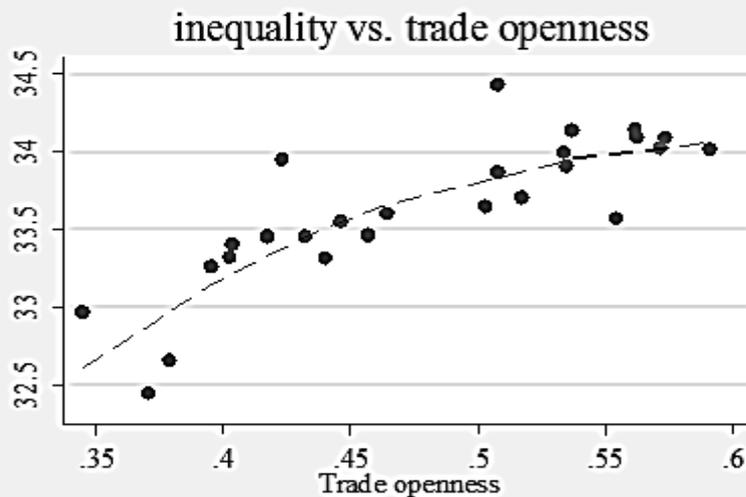
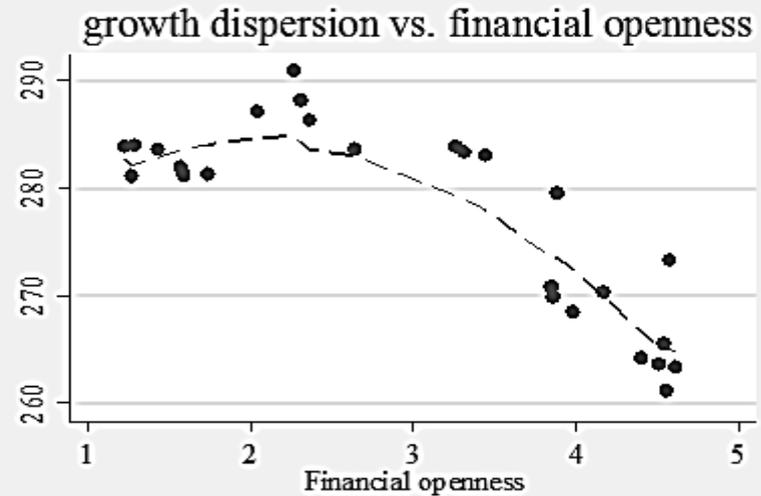
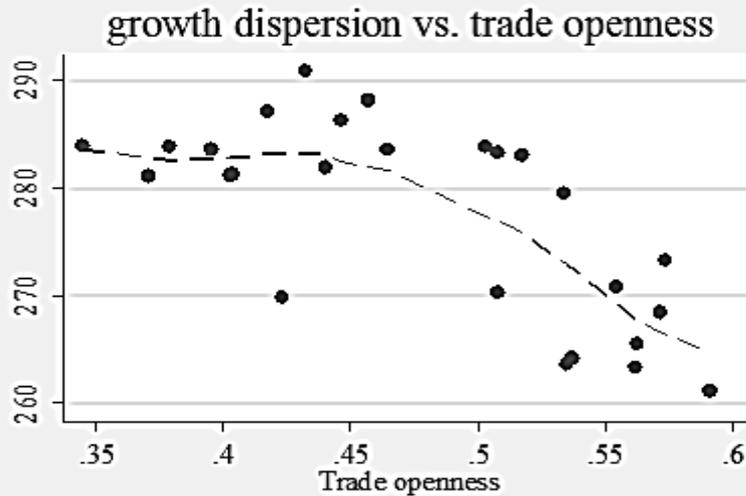
- Heckscher-Ohlin theorem had already foreseen that trade may damage workers in advanced countries (Feenstra and Hanson, 2003).
- An extreme consequence of the same theorem is immiserizing growth, i.e. a combination of terms of trade and labour shift across countries that worsens the economic conditions of some countries (Samuelson, 2004)
- On the other hand, international trade fosters income convergence between countries (Frankel and Romer , 1999)
- Results in favor of openness may arise because openness measures may be acting as a proxy for growth friendly policies, well functioning institutions and geography (Edwards, 1998; Rodriguez and Rodrik, 2000)

A bird eye survey of the recent literature /2

- Contrasting empirical evidence on the positive role of trade (Bourguignon and Morrisson, 2002; Dowrick and Golley, 2004; Sala-i-Martin et al., 2004; Munch and Skaksen, 2009 etc.)
- Trade openness raises inequality in developed countries: only few sectors and jobs gain from trade (Lim and McNelis, 2016; Bumann and Lensink, 2016; Helpman et al. ,2012; Akerman et al., 2013)
- Dabla-Norris et al. (2015) found that the Gini index that reacts (increases) mainly to financial openness, controlling for education, financial depth, the structure of population and labour market, public expenditure, etc.
- Roser and Cuaresma (2016) estimate a positive relationship also between inequality and trade openness

Some stylized facts /1

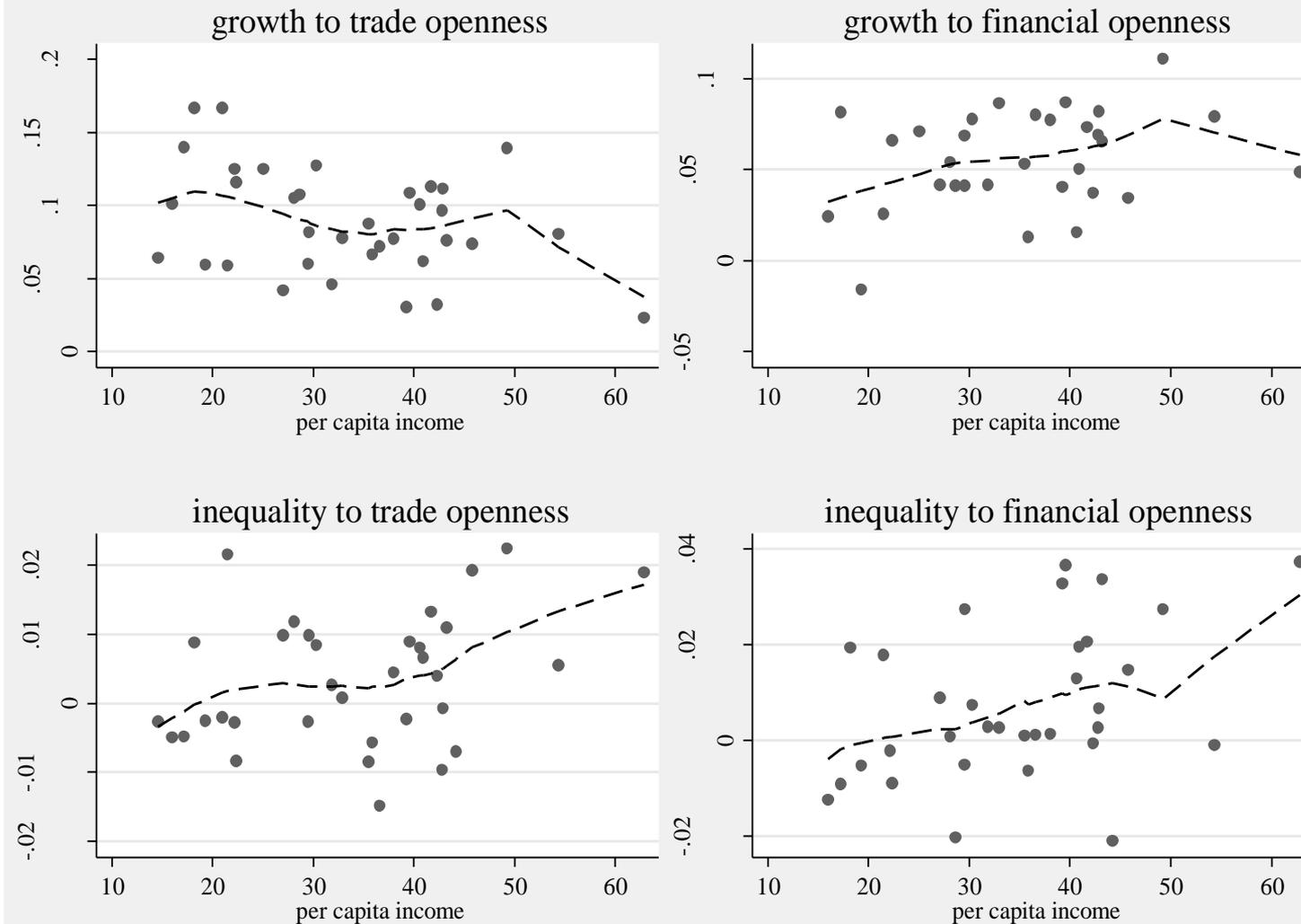
Globalization, growth and income inequality in OECD countries (yearly weighted averages)



Some stylized facts /2

Elasticity of per capita income and inequality

(country averages)



The model(s)

- We estimated panel error correction models (PECM) to distinguish between short and long run effects of explanatory variables on per capita GDP growth and the after tax Gini Index

$$\Delta y_{it} = \underbrace{\sum_j \alpha_j \Delta x_{jit}}_{\text{SR effects}} - \underbrace{\beta_0(y_{it-1} - \sum_j \beta_j x_{jit-1})}_{\text{LR effects}} + \underbrace{\delta_i + \theta_t + u_{it}}_{\text{Country-specific and common trend factors}}$$

- The model can be can be estimated consistently by running a standard fixed effects GLS Westerlund (2007)
- Estimation sample: 1995-2016 (with gaps); 35 OECD countries divided in 3 groups by income level

Explaining national growth

Per capita GDP is explained by :

- trade openness $(X+M)/Y(t-1)$; (+)
- financial openness $(FA+FL)/Y(t-1)$; (+)
- terms of trade; (+)
- the return on human capital (value added per employed person with tertiary education); (+)
- the public expenditure as percentage of $Y(t-1)$ (?)

(Expected signs in parentheses)

Explaining inequality

Another textbook model. After tax&benefits Gini index is explained by :

- trade openness $(X+M)/Y(t-1)$; (-)
- financial openness $(FA+FL)/Y(t-1)$; (+)
- terms of trade; (?)
- the return on human capital (value added per employed person with tertiary education); (-)
- the public expenditure as percentage of $Y(t-1)$; (-)
- the labour share (+)

(Expected signs in parentheses)

The main results of estimation

(Short run effect first; long run second)

		OECD	Low income	Middle income	High income
Trade openness	growth	$+/+$	$+/+$	$+/+$	$+/+$
	inequality	$-/-$	$-/-$	$-/-$	$+/+$
Financial openness	growth	$+/+$	$-/+$	$+/+$	$-/-$
	inequality	$+/+$	$+/-$	$+/-$	$+/+$

Signs in red are not statistically significant.

Sensitivity analysis: interaction with trade openness

(Short run effect first; long run second)

		OECD	Low income	Middle income	High income
Gov't quality	growth	-/-	-/-	-/-	-/-
	inequality	+/+	-/-	+/+	+/+
Euro	growth	-/+	-/-	-/+	+/+
	inequality	+/-	+/+	-/-	-/-

Signs in red are not statistically significant.

Concluding remarks /1

- Globalization has different impact on different countries (winners and losers)
- Positive effects of trade openness on GDP particularly in low income countries (catching up or delocalization?)
- Trade openness worsened inequality in low and mid income countries
- Financial openness favoured the growth of mid income countries only in the short run (it is not a driver for growth)
- It reduced inequality in low income countries in the short run and widened it in high income countries in the long run

Concluding remarks /2

- Public spending was counterproductive for growth, but improved income distribution in the long run
- Government effectiveness positively affects growth in low income countries but not in high income countries (austerity?)
- Euro affected negatively the growth in middle income countries and benefited the high income group
- It decreased inequality in middle income group and increased it in the high income group (a rationale for the surge of populist parties?)
- The very end: “one size fits all” policies might be the wrong strategy to foster growth and reduce inequality

Thank you for your attention

<https://www.researchgate.net/publication/324796889> Growth divergence and income inequality in OECD countries the role of trade and financial openness