



## The rise of income inequality in OECD countries. Is globalization one of the causes?

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1. Main contributions and limitations

Inclusion of institutional variables

• Analysis of the direct and indirect impacts of globalization on income inequality

PVAR estimation

 Low number of variables considered in the analysis

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2. Objectives

- 1. Contrast the impact of globalization on income inequality in OECD countries between 1989 and 2013.
- Identify the mechanisms through which such impact has taken place and for how long
- Evaluate how these mechanisms interact over time and the effects of such interaction on inequality



3. Literature review

#### Drivers of income inequality:

- a) Technological progress: "Skill biased technological change" (Tinbergen, 1975; Katz and Murphy, 1992; Autor et al, 1998; 2003; Goldin and Katz, 2008; Kristal, 2010).
- b) Trade globalization: Heckscher-Ohlin and Stolper-Samuelson models. Lundberg and Squire (1999), Bergh and Nilsson (2010), Bourguignon (2015) or Helpman (2016)
- c) Financial globalization: greater returns to capital (Rodrik, 1997; Slaughter, 1999, Das and Mohapatra, 2003; Jaumotte, Lall, & Papageorgiou 2013; Dabla-Norris et al, 2015; De Haan & Sturm, 2017) vs more credit for poor deciles (Greenwood and Jovanovic, 1990; Beck, Demirgüç-Kunt and Levine, 2007; Agnello, Mallick and Sousa, 2012; Delis, Hasan and Kazakis, 2014)

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3. Literature review

#### INSTITUTIONAL DETERMINANTS OF INCOME INEQUALITY:

- <u>Labor institutions</u>: unions (Feenstra, 1998; Blanchard and Giavazzi, 2003; Kristal, 2010; OECD, 2011, Gordon, 2012; Guschanski and Onaran; 2017; Tridico, 2018); labor legislation (Card et al., 2004; OECD, 2011; Chusseau and Dumont, 2012; Bogliacino and Maestri, 2014; Dabla-Norris et al. 2015; Tridico, 2018; Nolan et al. 2019)
- Redistributive capacity of states: tax reduction (Piketty and Saez, 2003, 2007; Alvaredo et al., 2013; Piketty, Saez and Stantcheva, 2014), social spending cuts (Besley, Griffith and Klemm, 2001; Devereux and Griffith, 2002 ; Lassen and Sorensen, 2002; Razin, Sadka and Nam, 2005; Krautheim and Schmidt-Eisenhor, 2011), "race to the bottom" (Besley, Griffith and Klemm, 2001; Devereux and Griffith, 2002; Lassen and Sorensen, 2002; Razin, Sadka and Nam, 2005; Griffith and Klemm, 2001; Devereux and Griffith, 2002; Lassen and Sorensen, 2002; Razin, Sadka and Nam, 2005; Krautheim and Schmidt-Eisenhor, 2011) vs. Compensation Thesis (Rodrik, 1998; Swank, 2002; Brady et al., 2005; Gozgor and Ranjan, 2017)



## 4. Hypothesis





Source: own elaboration

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# 5. Inequality trend

Table 1	Evolution of inequality from 1989 to 2013					
Indicator	Gini coefficient		Palma index		90/10 ratio	
Year/growth	2013	2013/1989	2013	2013/1989	2013	2013/1989
OECD	30,62	1,14	1,34	1,10	9,85	1,25
More unequal countries	21/29		17/29		16/29	

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Source: own elaboration based on Solt (2019) and Povcalnet Database (2020).

6. Methodology: PVAR models

### Structural form:

$$AX_{it} = C(L)X_{it-1} + U_{it}$$

Reduced form:

$$X_{it} = B(L)X_{it-1} + e_{it}$$

Cholesky decomposition: {X1, X2, X3}



6.1. Variables and indicators

• <u>Inequality</u>: *net Gini coefficient* (Solt, 2019), *Palma index* and *90/10 deciles ratio* (Povcaltnet Database, 2020)

- <u>Globalization</u>: *KOF Globalization Index* (Gygli et al., 2019): economic, social and political.
- <u>Compensatory Institutions</u>: *redistributive capacity of States* (Solt, 2019), *Union density* (Visser, 2015; US Bureau of Labor Statistics, 2016)



# 6.2. Estimation results

Cholesky decomposition: {GLO, CI, INE}: *model 1* {glo rc gini} *model 2* {glo ud gini} *model 3* {glo rc palma} *model 4* {glo ud palma} *model 5* {glo rc dec\_90/10} *model 6* {glo ud dec\_90/10}

Number of lags: 2 (Schwarz information criteria)



# 6.3.1. Testing endogeneity

#### **Granger Causality Test** (*p*-values in brackets)

Dependendt/Independent	Globalization (GLO)			
Union Density (UD)	0.005 (model 2) 0.001 (model 4) 0.002 (model 6)			
Redistributive Capacity (RC)	0.000 (model 1) 0.000 (model 3) 0.000 (model 5)			

Source: own elaboration

### 6.3.2. Impulse Response Functions

#### Figure 1

Impulse responses of Gini coefficient

Globalization shock (model 1)

Globalization shock (model 2)



Redistribution capacity shock





Union density shock



Source: authors' calculations.

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### 6.3.2 Impulse Response Functions

#### Figure 2

#### Impulse responses of Palma index

Globalization shock (model 1)



Globalization shock (model 2)



Redistribution capacity shock



#### Union density shock



Source: authors' calculations

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### 6.3.2. Impulse Response Functions

#### Figure 3

Impulse responses of 90/10 percentile ratio

Globalization shock (model 1)



Globalization shock (model 2)



*Redistribution capacity shock* 



Source: authors' calculations.

Union density shock





6.3.2. Impulse Response **Functions** 

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#### Impulse responses of institutional variables to globalization shocks

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## 7. Conclusions

•Globalization has contributed to the increase in inequality in OECD countries.

 Public institutions and policies keep being effective instruments to reduce these inequalities.

The results seem to confirm the compensation thesis (Rodrik, 1998), according to which States have intensified their redistributive policies with the aim of compensating the losers of globalization.



## 7. Conclusions

- The analysis recognizes in the deterioration of the bargaining power of unions a second way through which globalization would have helped increase inequality.
- The higher net inequality suggests that the increase in redistributive capacity has not been sufficient to neutralize the distributional effects of globalization
- The results show that the poorest deciles have been more sensitive, both to the distributive effects of globalization and public policies and institutions



Thanks for your atention!

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