

Labour income inequality: not only human capital.

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Background

- Income inequality in almost all advanced countries today is much higher than 2 or 3 decades ago (whatever the index)
- Increasing inequality in labour incomes is one of the main causes
 - *“....income inequality is primarily determined by the inequality of labor income (which typically represents between two-thirds and three- quarters of total income) which has nothing to do with r-q” (Piketty, JEP 2015, p. 76)*
- The main explanation is the higher return to human capital due to some “forces of progress” like globalization and technological change

Questions

Q1. Is the HK explanation sufficient, in particular for Italy?

Q2. Which other factors, if any, are important? Are they “progressive” or reminiscent of a world of the past?

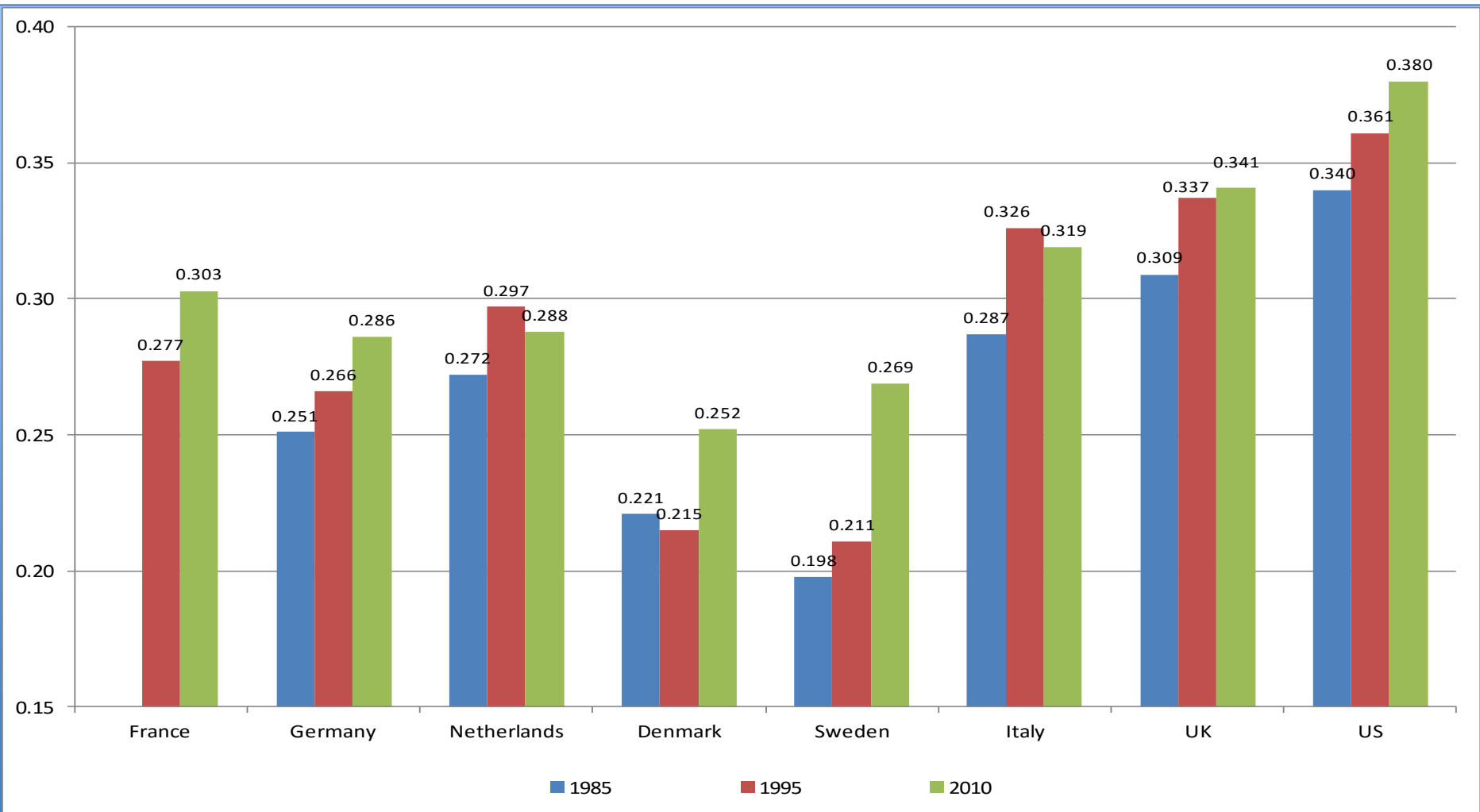
Q3. How important are regional differences for the overall labour income inequality in Italy?



1. INCOME INEQUALITY AND TOP INCOMES IN THE LAST DECADES

EQUIVALENT DISPOSABLE INCOMES INEQUALITY

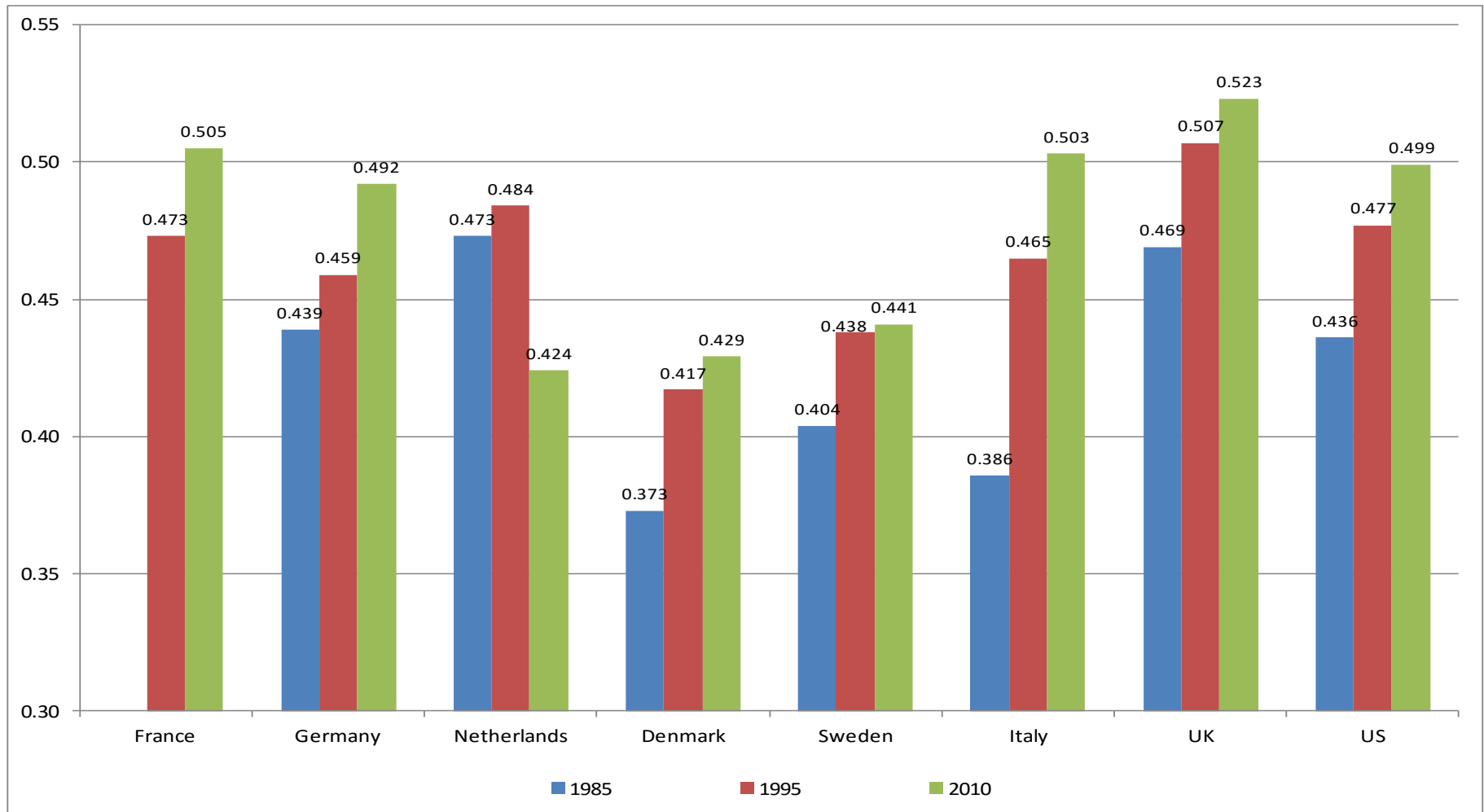
(GINI INDEX, OCSE DATA)



Generalized and sharp increase especially w.r.t. mid-80's

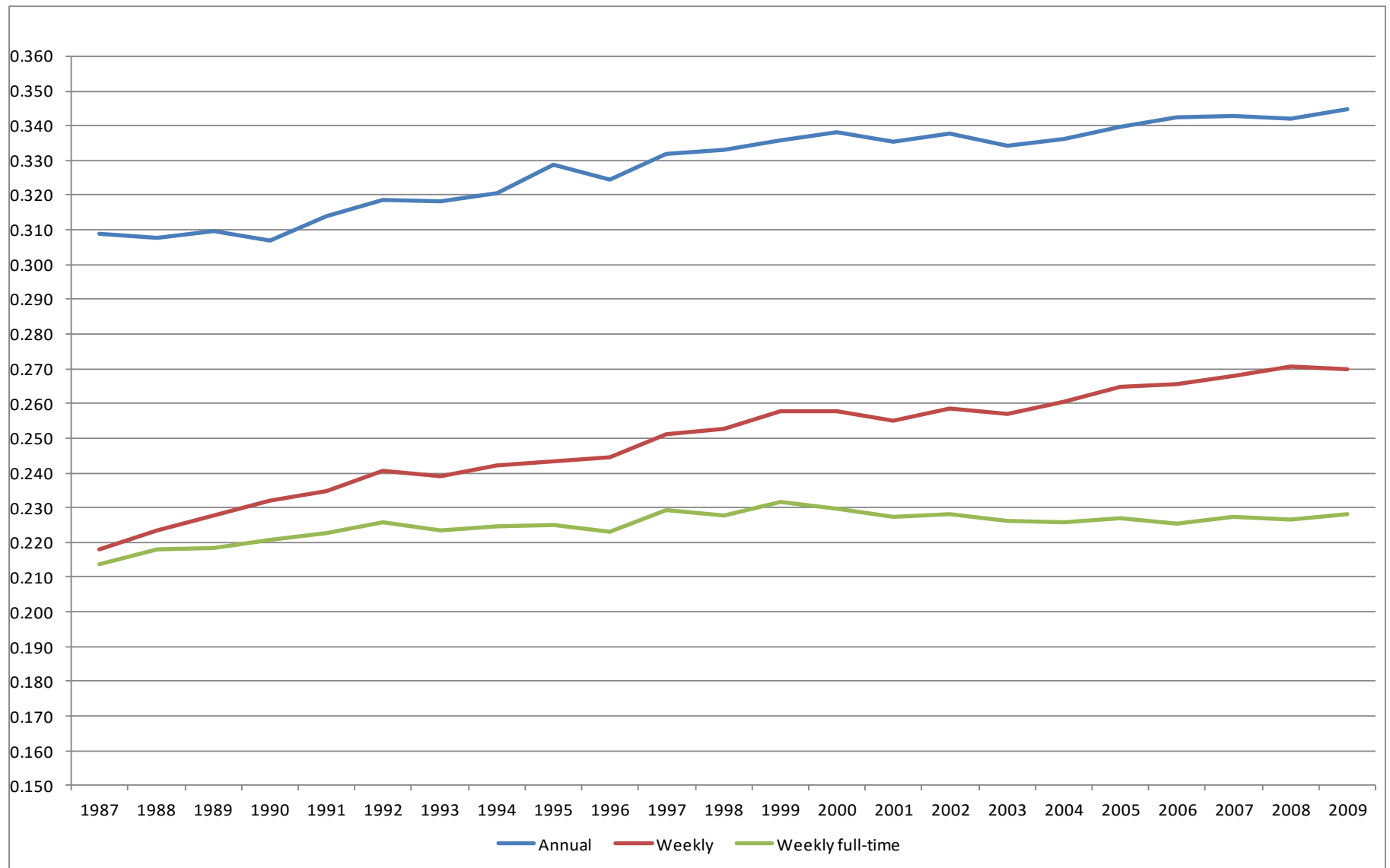
EQUIVALENT MARKET INCOMES INEQUALITY

(GINI INDEX, OCSE DATA)

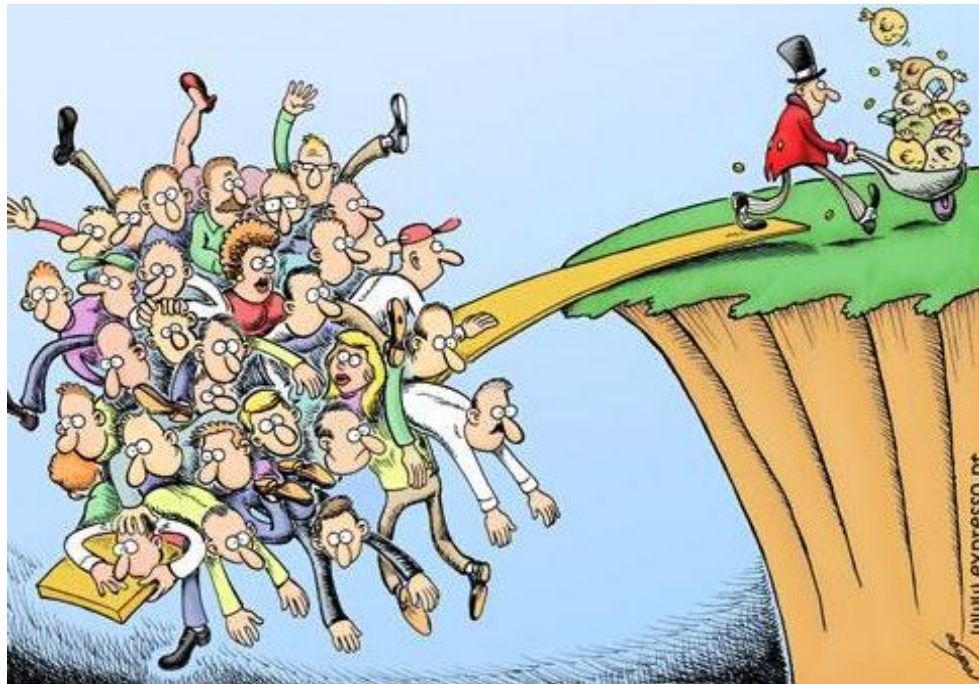


Much sharper and generalized increase (NL the exception).
Note: mkt inequality in I and F has become higher than in US

Inequality in employees' income, Italy



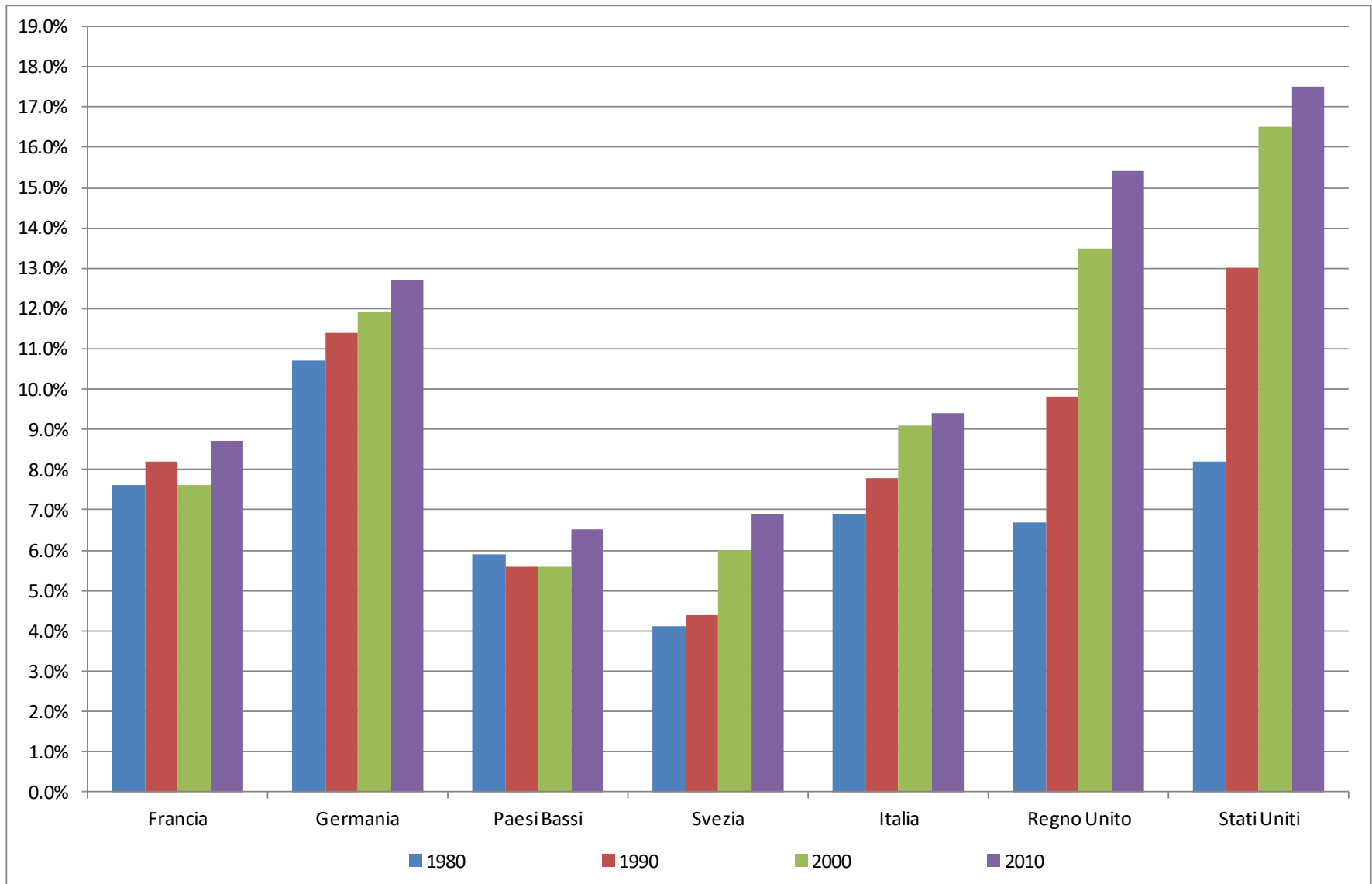
Growing inequality especially among annual income (due to unequal distribution of hours of work). Source: AD-Silc



CONCENTRATION AT THE TOP

INCOME SHARE OF THE TOP 1%

SOURCE: the World Top Incomes Data Base

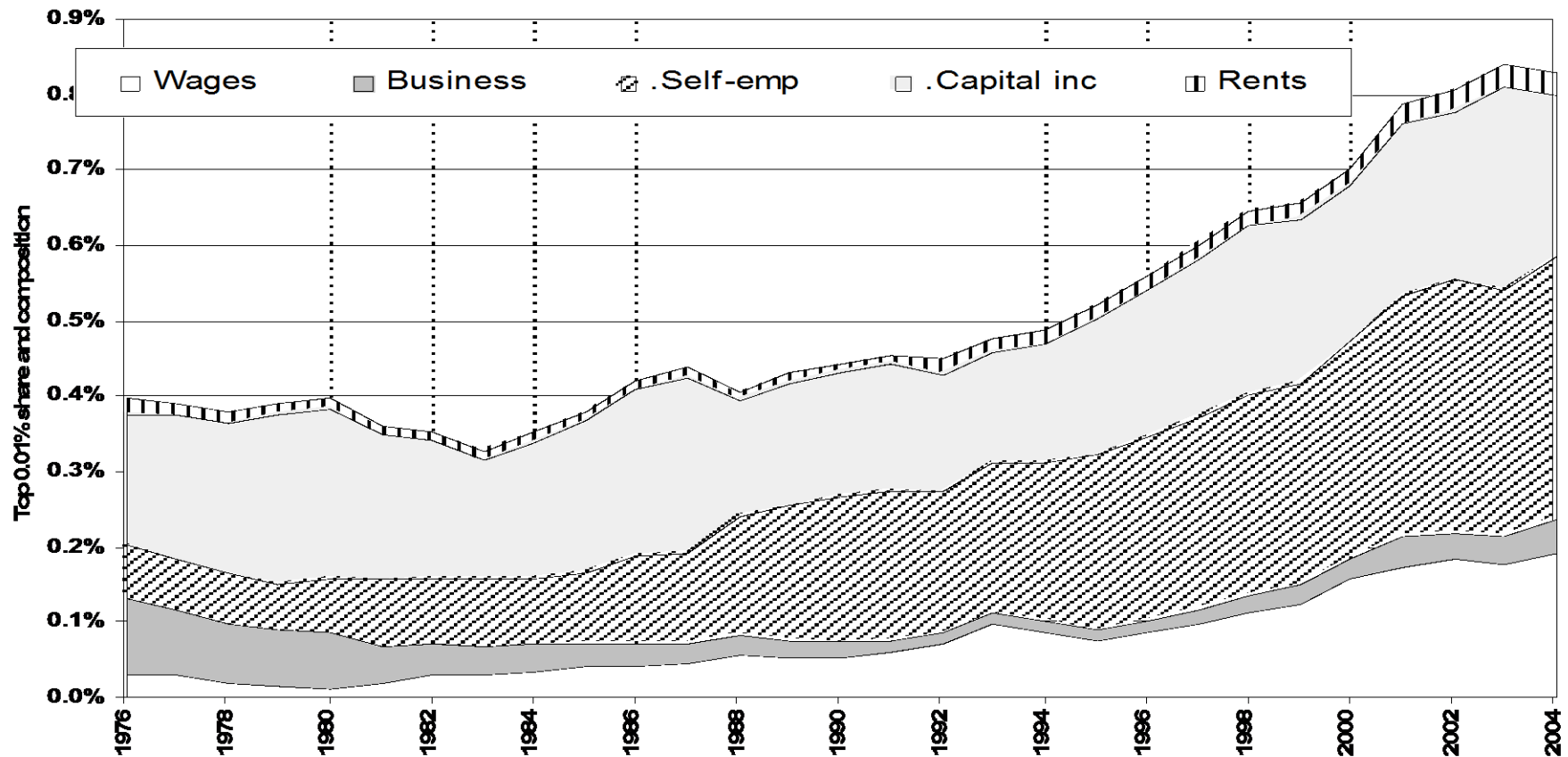


Generalized increase, especially w.r.t 1980. Huge increase in GB and USA

The top 1% average income compared to the average

	USA (dollars)	ITALIA (euro)
	Average income of the top 1%	
1980	355.296	94.150
2007	1.056.905	180.416
<i>Increase 1980/2007</i>	197,50%	91,60%
	Average income of the whole population	
1980	43.452	13.645
2007	57.669	18.296
<i>Increase 1980/2007</i>	32,70%	34,10%
<i>How many average incomes for 1 top income”?</i>	da 8,2 a 18,3	da 6,8 a 9,9

COMPOSITION OF THE TOP 0,01%, ITALY



LABOUR INCOME (both employee and self-employed) more and more important, not only in Italy

Remarks /1

- Sharp increase in market income inequality, partially mitigated by redistribution
- In particular, labour income inequality went up
- Growing concentration at the top, where labour incomes are much more important
 - Working poor alongside with “working rich”

2. *INEQUALITY BETWEEN AND WITHIN REGIONS IN ITALY*

Equivalent disposable income

Inequality across macro-areas

Three inequality indexes, *EU-SILC 2011 (yearly income, 2010)*

	MLD	Theil	Gini
N E	18,1	16,2	28,7
N W	22,8	17,8	30,7
Centre	25,2	18,4	31,6
S	32,6	20,5	32,8
Islands	44,2	22,3	34,9
Italy	0,281	0,197	0,324

The South and the Island are always the most unequal areas. 6 points of Gini are quite a lot

The 5 more unequal regions

GINI	Theil	MLD
Puglia	Campania	Sardegna
Campania	Lazio	Campania
Lazio	Basilicata	Calabria
Basilicata	Puglia	Basilicata
Sicilia	Sicilia	Sicilia

All of them are in the S or Islands, Lazio being the only exception. The more equal regions are in general Veneto, Umbria, Val d'Aosta

Decomposition of disposable income by region

MLD				Theil			
Within	Between	% within	% between	Within	Between	% within	% between
0,266	0,015	94,6%	5,4%	0,182	0,014	92,7%	7,3%

Decomposition of disposable income by macro-area

MLD				Theil			
Within	Between	% within	% between	Within	Between	% within	% between
0,26693	0,01384	95,1%	4,9%	0,18356	0,01317	93,3%	6,7%

Striking result: if average income were equalized across regions (no more dualism as usually measured) inequality in Italy would go down by no more than 7% of its current magnitude

Decomposition of labour income by region

MLD				Theil			
Within	Between	% within	% between	Within	Between	% within	% between
0,444	0,011	97,5%	2,5%	0,390	0,011	97,3%	2,7%

Decomposition of labour income by macro-area

MLD				Theil			
Within	Between	% within	% between	Within	Between	% within	% between
0,404	0,009	97,8%	2,2%	0,324	0,009	97,4%	2,6%

Labour income inequality in Italy would go down by a modest 2.5% (more or less) if average were equalized across regions or macro-areas

Remarks /2

- Inequality both in disposable and labour income would shrink very little if average income were equalized
- The largest part of inequality is “within” the regions and the macro-areas
- Inequality within Southern regions is higher

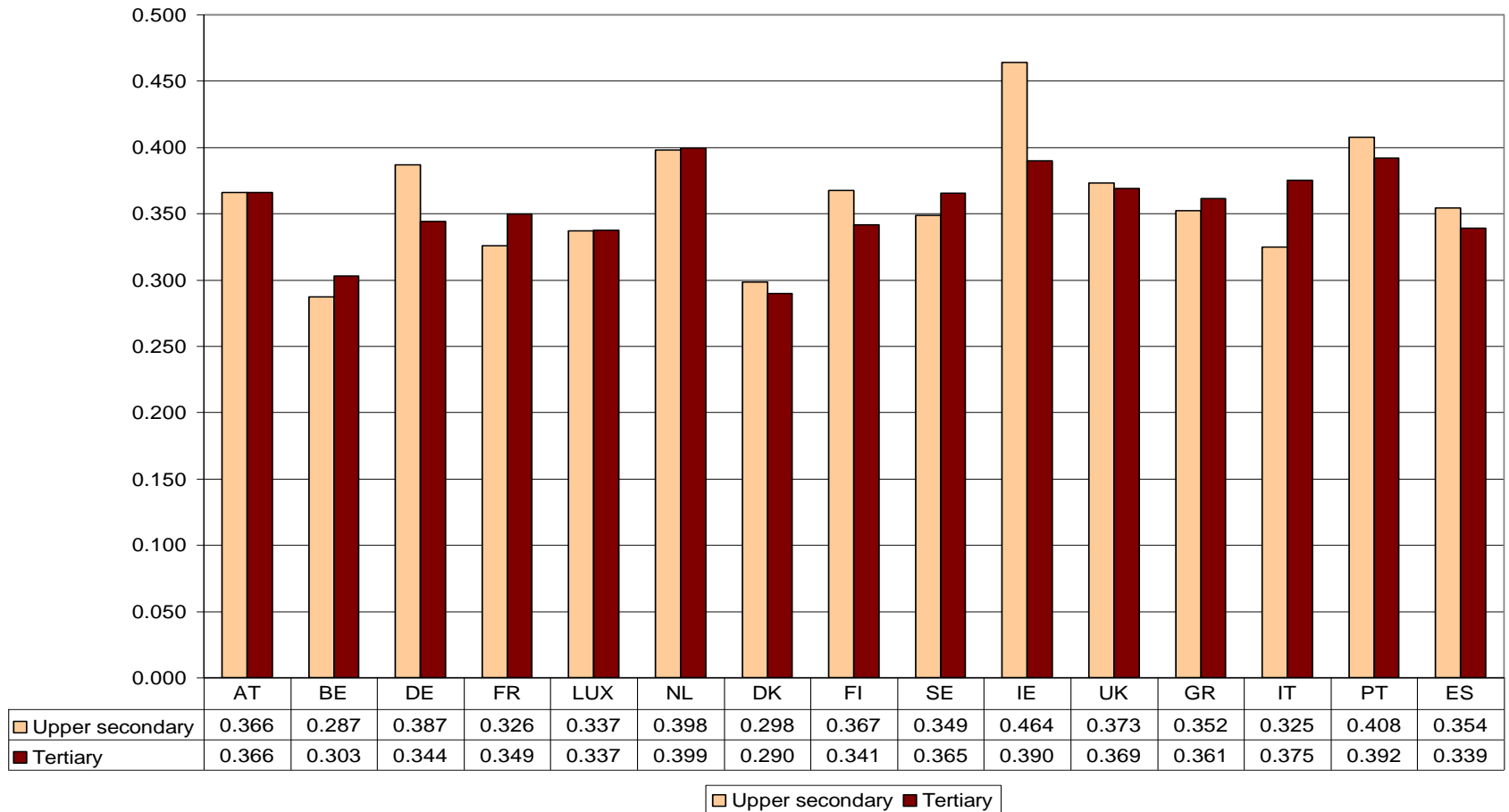
3. *HUMAN CAPITAL AND INCREASING LABOUR INCOME INEQUALITY*

MAIN EXPLANATIONS

- Globalization
- Technological change
- Labour market institutions
- *General assumption: rising return to human capital (usually measured through education) and therefore wider inequality according to HK endowments*
- *Is this a good explanation?*
- *True that in the average higher education yields higher income but....*
- Let us see with EuSilc 2007 data on gross yearly labour income for workers aged 15-64

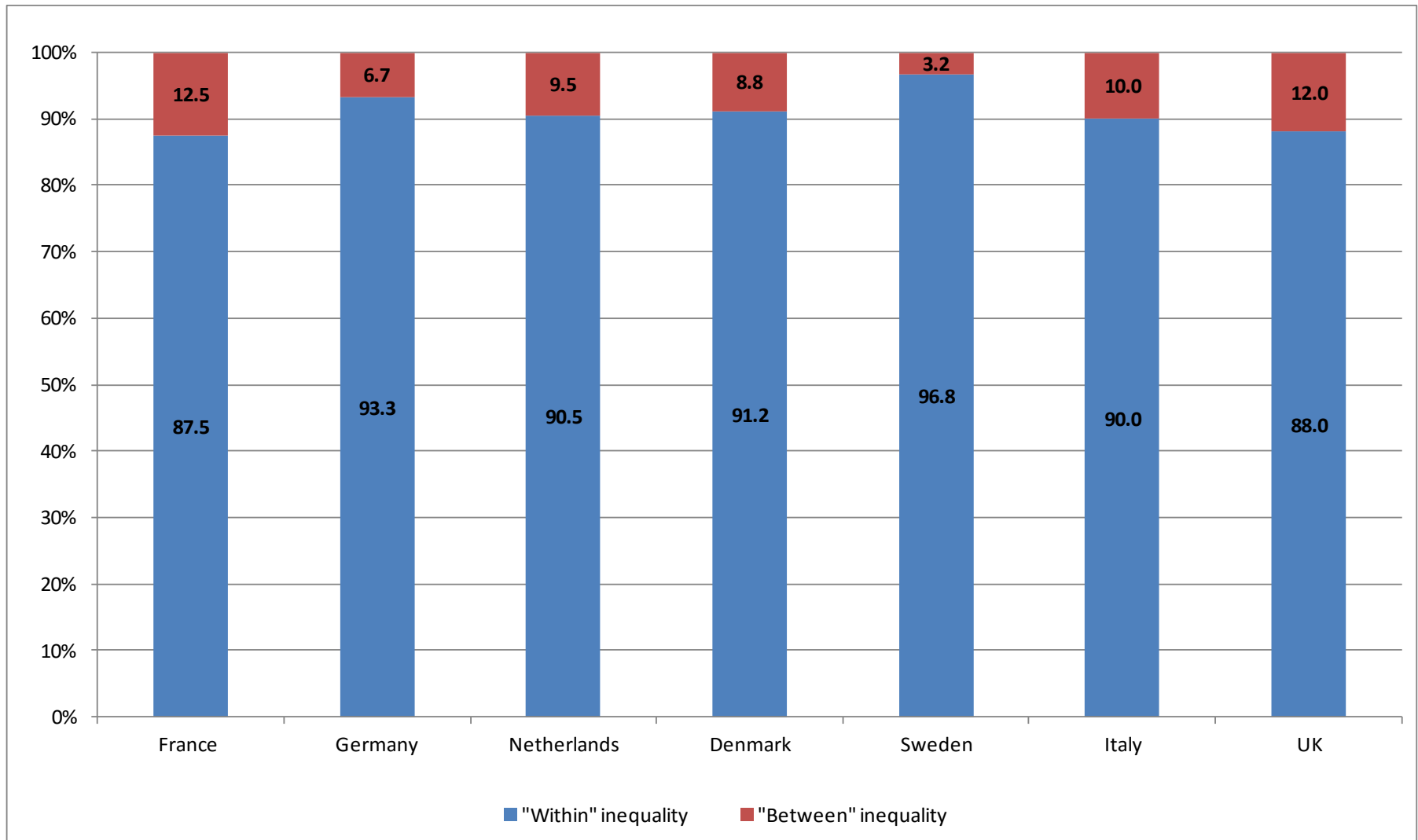
INEQUALITY WITHIN EQUALLY EDUCATED WORKERS

Gini index, gross annual wages



High inequality within groups of workers with the same “human capital”

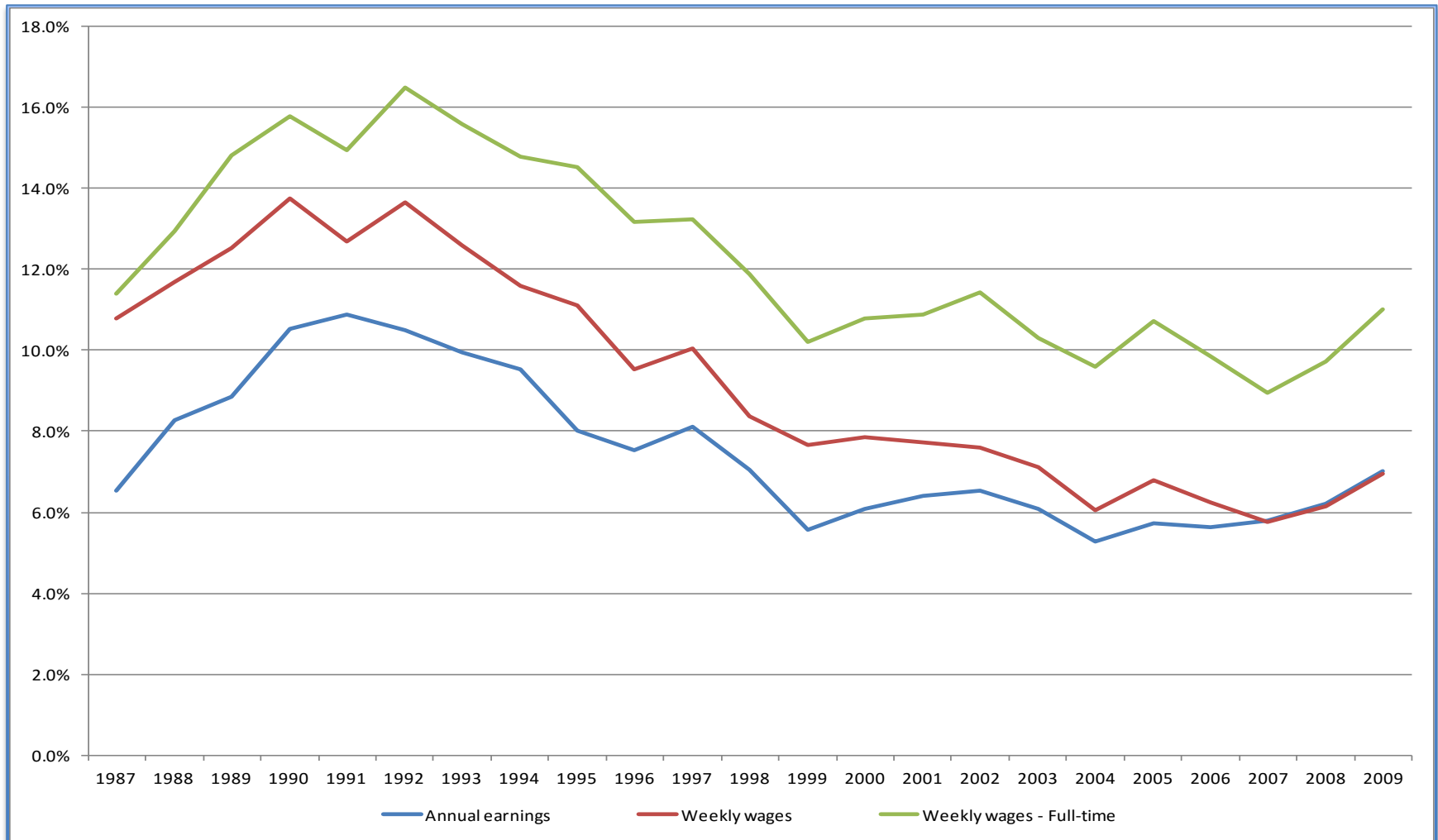
MLD DECOMPOSITION OF GROSS ANNUAL LABOUR INCOME BY EDUCATION LEVEL



Everywhere “within” inequality is overwhelming

BETWEEN INEQUALITY AS A SHARE OF TOTAL LABOUR INCOME INEQUALITY (ITALY. 1987-2009)

between MLD index | 1987 weights



Unexpectedly the importance of HK as a cause of inequality seems to have gone down in the years of globalization and ICT revolution

Decomposition by education: macro-areas

Gross annual labour income (employees and self-employed)

EU-SILC 2011

	MLD				Theil			
	Within	Between	% within	% between	Within	Between	% within	% between
NE	0,343	0,027	92,8%	7,2%	0,297	0,027	91,8%	8,2%
NW	0,367	0,031	92,3%	7,7%	0,288	0,031	90,2%	9,8%
Centre	0,380	0,034	91,8%	8,2%	0,295	0,034	89,6%	10,4%
S	0,387	0,040	90,7%	9,3%	0,297	0,041	87,9%	12,1%
Islands	0,341	0,043	88,9%	11,1%	0,247	0,044	84,8%	15,2%
Italy	0,375	0,034	91,8%	8,2%	0,298	0,034	89,7%	10,3%

Human capital seems to explain a larger share of inequality in the Mezzogiorno

Remarks /3

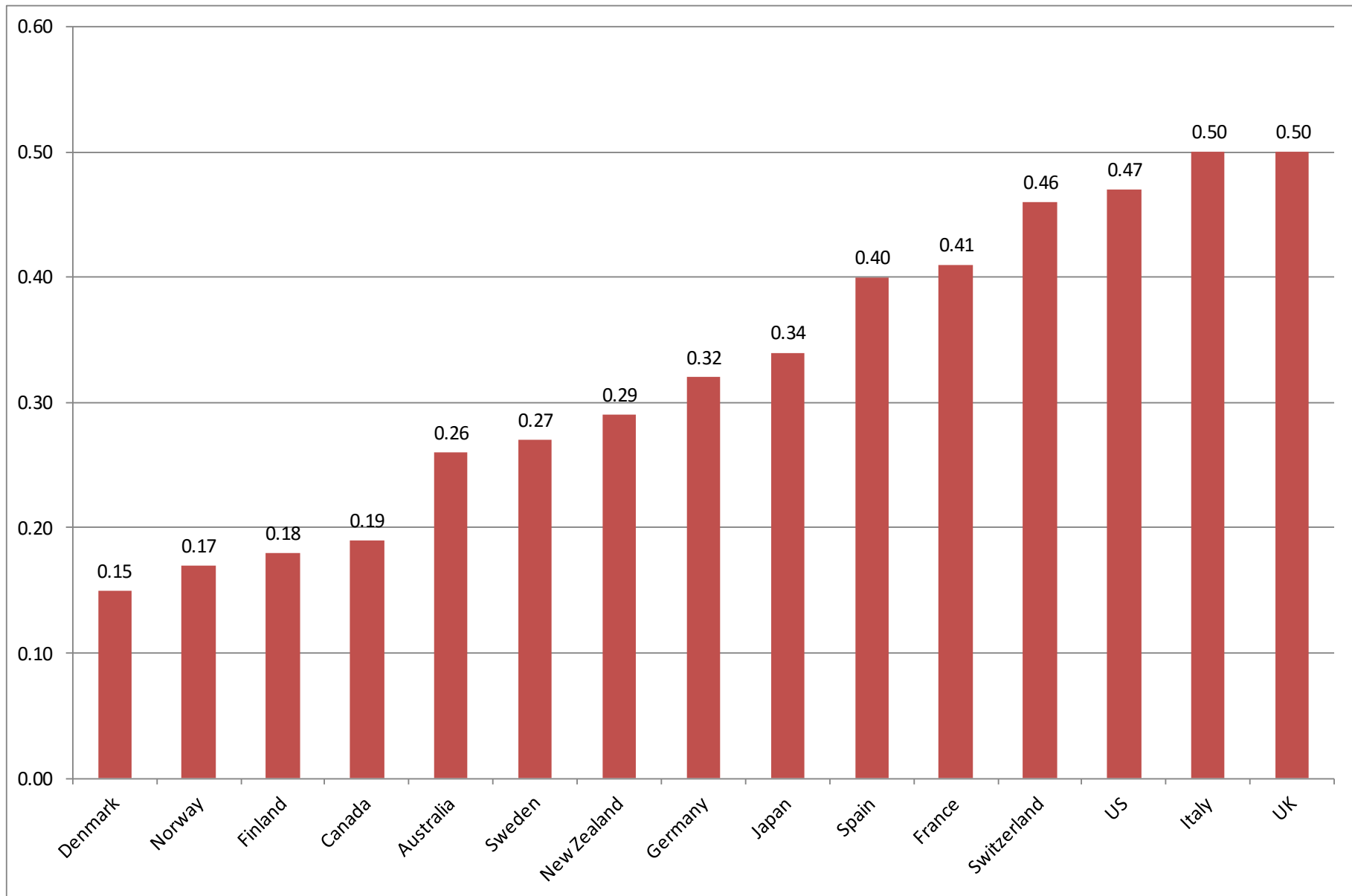
- Human capital as usually measured seems to explain little of labour income inequality. “Within” inequality is much more important
- In Italy, in particular, HK explain less inequality during a period in which it should explain more according to dominant views
- How can within-inequality be explained? Does the family background play a role in it?

4. *TRYING TO EXPLAIN WITHIN-INEQUALITY*

Possible drivers of within inequality

- Likely (often interacting) drivers:
 - Luck;
 - Cognitive abilities and (usually) unobservable skills affecting individual productivity, i.e. innate abilities, field of study, the quality of education, other hard skills;
 - Non cognitive abilities (i.e. soft skills);
 - Family and social ties.
- Note that family background can affect all drivers.

Intergenerational inequality: β coefficient



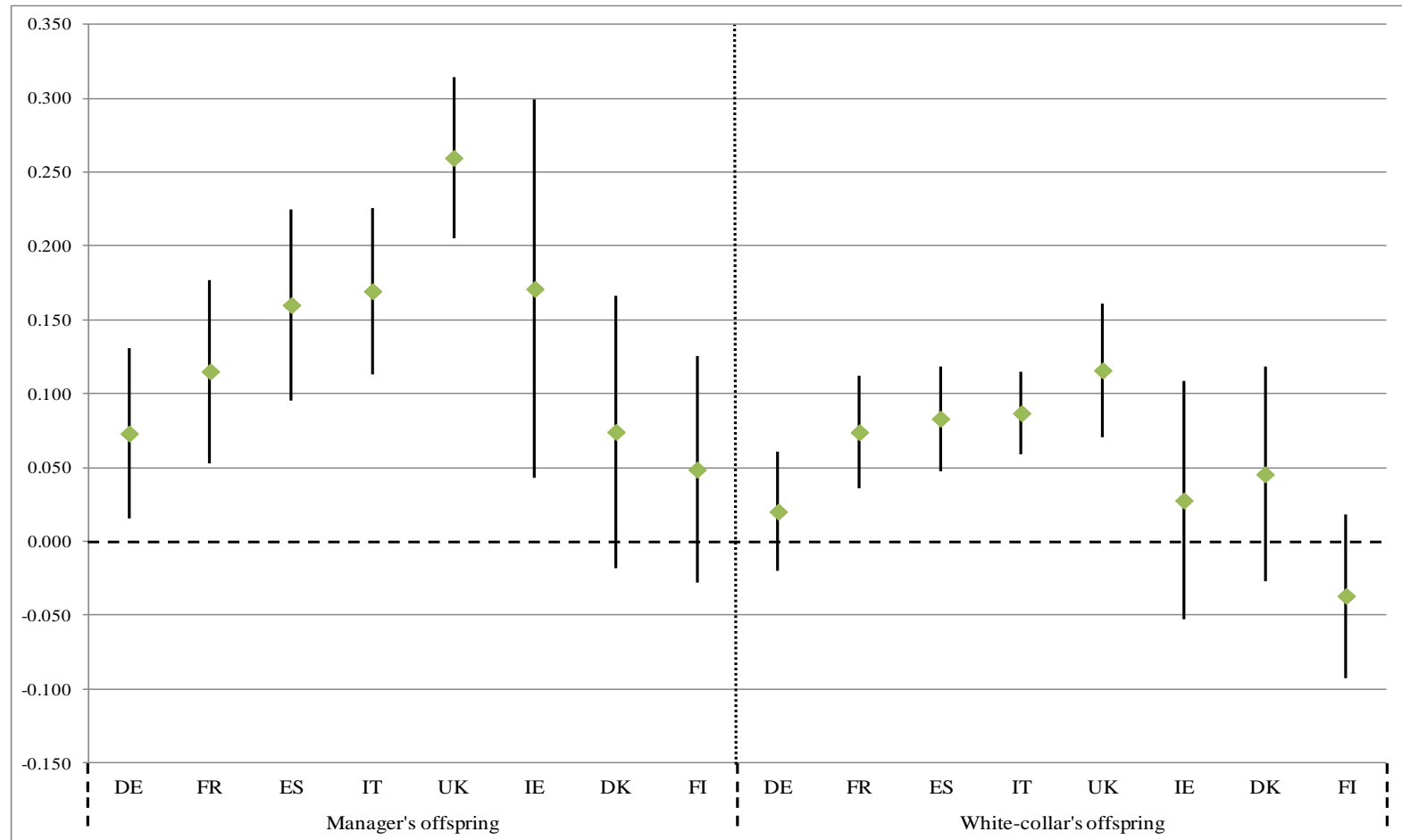
Family background acts through education. This is the conventional view.

TRUE but largely insufficient.

How much intergenerational inequality left after controlling for education (Residual Background Correlation)?

Parental background and offspring's earnings, controlling for education

90% interval of confidence. Blue-collar's offspring as reference category.



Managers' offspring enjoy a significant advantage over blue-collar (25% in UK and 17% in I) and white-collar's offspring

REMARKS/4

- RBC shows in almost every country, with variable intensity, however.
- Implication: FB has a direct influence (besides the indirect one through education) on earnings and can be at work also after education is completed
- Through which channels?

Disentangling the mechanisms

- The main source of RBC could be different across countries
- Strategy of identification: earnings of sons who are downwards (upwards) movers compared to sons in the same occupation (and education) but not moving downwards (upwards)
- Two possible effects:
 - *parachute* (If networks do not play a role, downward movers should not be rewarded)
 - *glass ceiling* (may be due to both better networks and acquired abilities).

Results (Raitano & Vona 2015 JOEI): in I and E clear parachute effects but not in UK.

Individual skills and within inequality in Italy

PIAAC data

Tab. 1: OLS regressions on log of hourly wages in Italy¹: residual inequality and adjusted R².
Employees working aged 15-65.

	M1	M2	M3	M4
	Mincerian controls	M1 plus field of study, ICT and firm change	M2 plus occupation, contracts and firm's characteristics	M3 plus literacy and numeracy scores
Residual Inequality	0.1924	0.1774	0.1381	0.1369
Adjusted R ²	0.1733	0.2135	0.3530	0.3573

¹ Control variables: M1: age, age square, seniority, seniority square, gender, dummies on citizenship and native language, educational attainment (coded by 2 digits ISCED), age when the highest education was attained. In M2 dummies about field of study and variables recording the number of firm's change in the last 5 years and a dummy about the computer experience are added. In M3 dummies about contractual arrangement, occupation (coded by 2 digits ISCO), sector of activity (coded by 2 digits ISIC) and firm's size (and its square) are added. In M4 the results of the PIAAC tests about literacy and numeracy (also their squares) are added.

Source: elaborations on PIAAC data

L'inclusione delle competenze matematiche e "letterarie" riduce di poco la disuguaglianza che non è spiegata dal capitale umano

Remarks/5

- RBC is a frequent and often gets high values
- FB influences labour incomes both directly and indirectly (through education). The combined effects can be very strong (and increasing?)
- In Italy, at least, (but not only) social networks seem to be an important channel of influence of the FB.
- This is not very “progressive” indeed.....

***CRUCIAL QUESTION:
WHAT MAKES IT POSSIBLE FOR PERSONAL AND
SOCIAL TIES TO BE REWARDED IN THE MARKET
(AND NOT ONLY IN POLITICAL CIRCUITS)?***

Work in progress. First results: more flexible labour market seem to reduce social mobility; more competitive product markets seem to foster it.

CONCLUDING REMARKS

*IMPLICATION OF LABOUR INCOME INEQUALITY NOT
RELATED TO HUMAN CAPITAL*

What should be done?

- Reducing inequalities in HK is important but not sufficient
- However, school reforms should aim at making the endowments of HK less unequal
- But this is not enough. What is needed is not only a more equal distribution of endowments but also a different working of the markets and more in general of the institutions (pre-distribution)

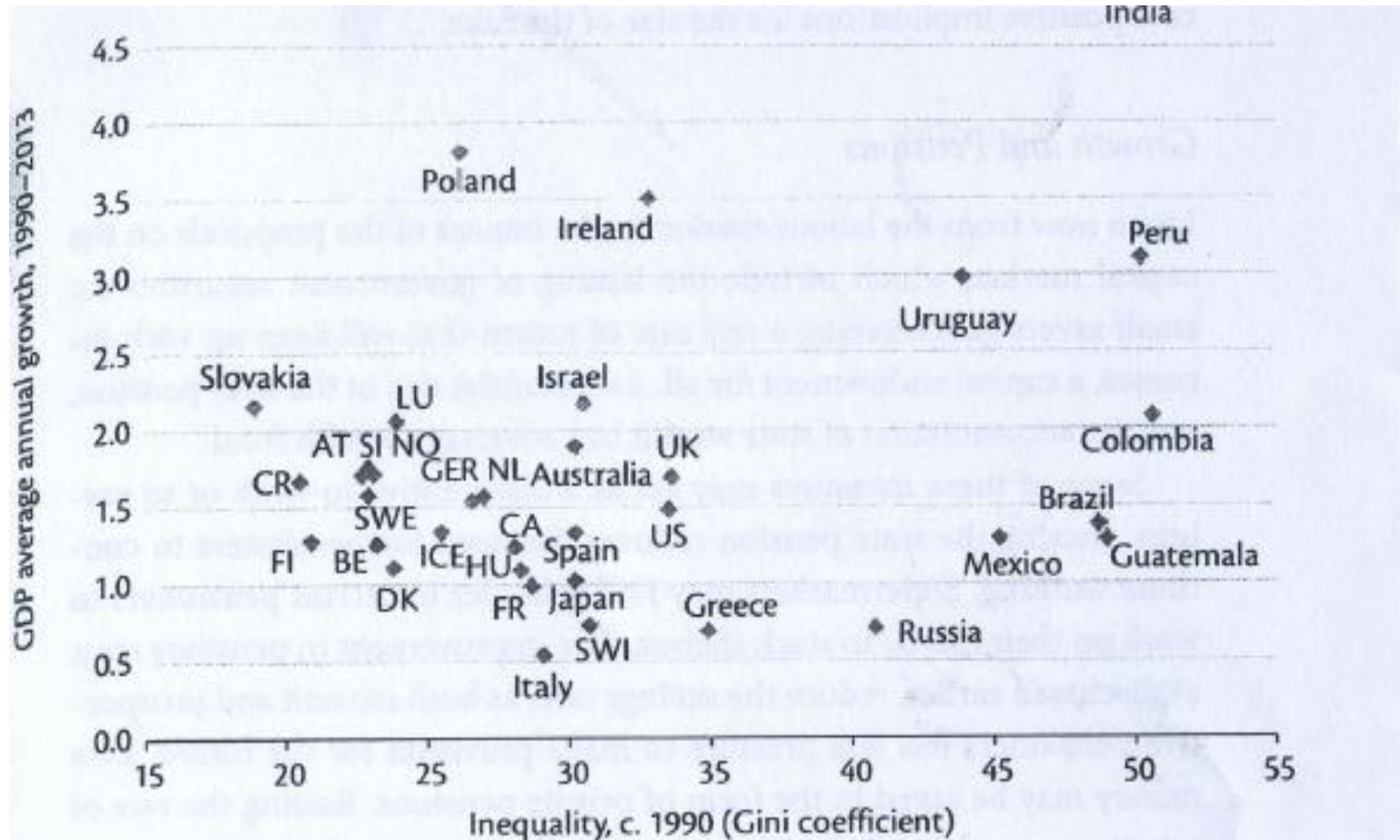
MAIN OBSTACLE:

“Inequality (also this inequality) is not a problem”

Who says that?

- He who benefits from it (with exceptions)
- He who believes that poverty not inequality is the problem
- He who believes that growth is all what matters and inequality favours growth
- He who believes that growth is also the solution to inequality
- He who nurtures odd ideas on social justice

Growth and inequality



Any correlation? (from T. Atkinson's new Book...Opposite effect:IMF,OECD...But old ideas hard

IS GROWTH THE SOLUTION?

LET US ASSUME THAT

- ITALY STARTS GROWING AT 2% A YEAR, AND GOES ON LIKE THAT FOR 18 YEARS (!!)
- “ADDITIONAL INCOME” IS DISTRIBUTED BETWEEN THE TOP 1% AND THE REMAINING 99% IN THE SAME PROPORTIONS AS IT DID IN THE U.S. BEFORE THE CRISIS

AFTER 18 YEARS THE AVERAGE INCOME OF THE 99% WOULD INCREASE BY 15% (FOR THE GREAT MAJORITY ABOUT 300 EUROS PER MONTH) WHILE THE TOP 1% WOULD HOLD ABOUT 30% OF THE WHOLE INCOME

*«I AM GOING TO REDUCE TAXES NOT
BECAUSE I AM IN SEARCH OF POPULAR
APPROVAL, BUT BECAUSE THIS IS
WHAT LEADS TO SOCIAL JUSTICE»*

Matteo Renzi, Rimini, August 26th, 2015

ARE YOU SURE MR. PRESIDENT?

GRAZIE

Also to my coauthors

Elena Granaglia, Mario Pianta, Michele Raitano e Francesco Vona