



EUROPEAN CENTRAL BANK

EUROSYSTEM

Is the Financial Market Driving Income Distribution? – An Analysis of the Linkage between Income and Wealth in Europe

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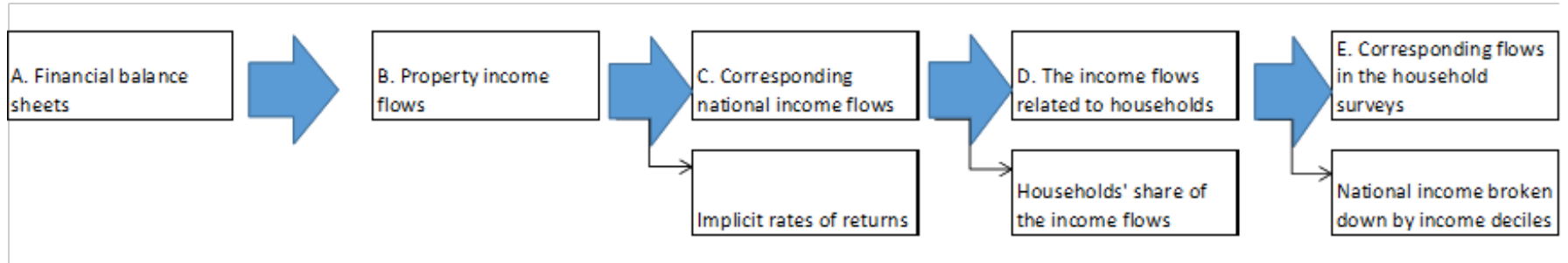
1. Introduction

- Piketty (2014): wealth plays increasing role in generation of income, return to the *Gilded Age*: **return on capital > economic growth** is leading greater wealth inequality
 - If the labour compensation grows slower than profit – change in the functional distribution
 - Wealth/property income usually accumulated to the right tail of distribution
 - Assumption that economic growth defines mainly labour compensation and property depends on return on capital
- Milanovic (2017): Piketty simplifies the relationship between functional income and household disposable income
- It is clear that since 1980s the role of wealth has increased – the financial market liberalisation

1. Introduction

- This article analyses wealth, income and economic growth in one integrated model based on national accounts
- Finland, France and Spain
- Links financial balance sheets with corresponding income flows (implicit rate of return), this is completed with part which is needed to complete national income (economic growth)
- Then households are separated from the rest of the income flows and finally flows are interlinked with corresponding micro data flows
- Utilizes financial and non-financial account, HFCS and EU-SILC data

2. Framework and the data



2. Framework and the data

Coverage rates (%) of EU-SILC estimated total amounts with respect to national accounts totals

	2007	2010	2013	2016	2017	2018
Wages and salaries						
ES	96	92	92	94	95	94
FI	96	96	97	96	97	96
FR	84	85	87	90	88	88
Self-employment income and rental income / mixed income (gross)						
ES	44	41	41	46	47	46
FI	73	71	73	68	68	70
FR	70	87	96	100	92	104
Imputed rents / operating surplus (gross)						
ES	142	130	115	119	120	121
FI	97	99	99	100	104	103
FR	77	77	75	70	71	67
Interest, dividends and profit sharing / interest received and distributed income of corporations						
ES	41	60	60	39	31	33
FI	60	71	73	74	78	79
FR	347	283	347	263	266	216
Interest repayments on mortgage / interest paid						
ES	40	43	44	42	40	36
FI	63	58	58	49	47	44
FR	43	42	47	43	48	47

- Sensitivity of income concentration to micro/macro discrepancies tested

3. Results: rates of return

- At the macro level rates of return not completely. The following definitions analysed:
 - The measure “total” covers all the received property income and retained earnings. This concept is line with that used by Piketty (2014)
 - The measure “hh” covers all the property income actually received by households. Compared to concept “total”, this excludes both property income received by other sectors and also retained earnings, as the latter are actually not distributed to households either
 - The measure “total wo. retained earnings” is the same as the concept “total”, but it does not include retained earnings. In principle, this covers all the property income actually paid

3. Results: rates of return

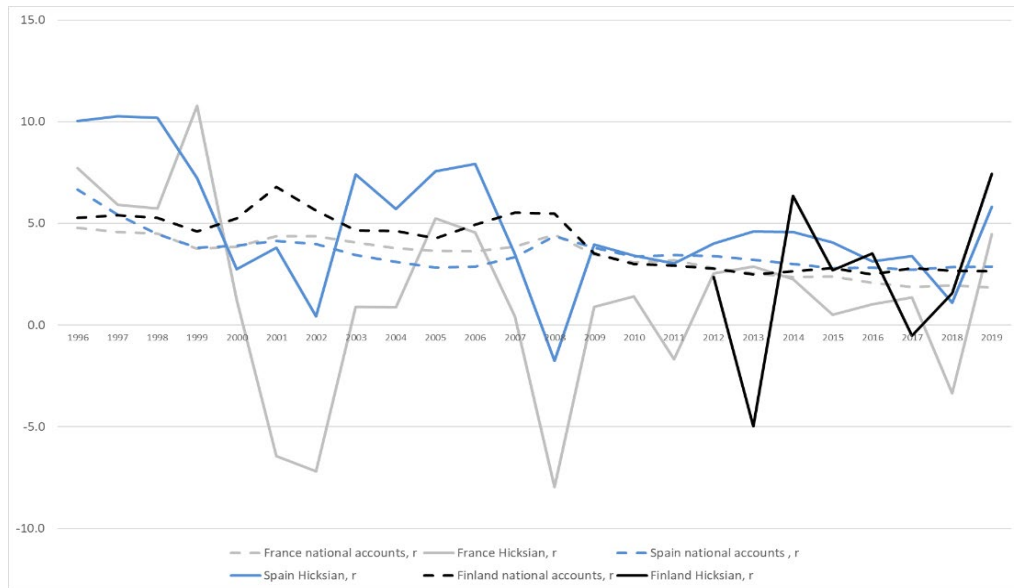
- The measure “returns (r)/compensation (c)” covers, as a numerator, the same measure as “total” and, as a denominator, wages and salaries and social contributions. As Piketty’s g is equal to $r+c$, when the ratio decreases, r grows more slowly than g and, respectively, when the ratio increases, r grows faster than g . This measure is added to illustrate the extent to which actual income distribution is dependent on rates of return
- Colour indicates growth

Note: decreasing returns!!!

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ES - total economy	5.90	8.28	6.69	5.56	4.71	4.90	5.25	5.11	4.40	3.96	3.56	3.63	4.19	5.40	4.68	4.21	4.26	4.21	3.97	3.74	3.49	3.53	3.41	3.57	3.60
FR - total economy	5.55	4.91	4.77	4.63	3.83	3.86	4.32	4.16	3.73	3.33	3.14	3.13	3.36	3.99	3.11	2.73	2.85	2.52	2.31	2.23	2.24	1.96	1.76	1.79	1.69
FI - total economy	5.98	5.24	5.37	5.25	4.50	5.08	6.53	5.34	4.50	4.50	4.13	4.75	5.36	5.60	3.51	3.05	3.14	2.85	2.47	2.69	2.82	2.52	2.71	2.68	2.66
ES - households	1.15	1.40	1.52	1.50	1.42	1.41	1.51	1.15	1.04	0.92	0.91	0.85	1.02	1.29	0.95	0.84	1.08	0.89	0.95	0.88	0.80	0.79	0.74	0.76	0.62
FR - households	3.11	2.81	2.75	2.64	2.30	2.24	2.25	2.03	1.76	1.59	1.46	1.48	1.53	1.83	1.59	1.53	1.54	1.52	1.32	1.30	1.23	1.12	1.05	1.14	1.10
FI - households	4.56	4.15	3.82	3.54	3.15	3.77	3.95	3.69	3.46	3.49	2.88	2.78	3.39	3.86	2.69	2.50	2.80	2.44	2.30	2.25	2.19	2.27	2.33	2.38	2.34
ES - total exc. retained earnings	4.20	5.97	5.04	4.30	3.62	3.94	4.47	4.15	3.49	3.20	3.14	3.31	3.87	4.59	3.50	3.13	3.32	3.09	2.86	2.56	2.23	2.18	2.07	2.22	2.19
FR - total exc. retained earnings	5.51	4.88	4.73	4.60	3.80	3.83	4.29	4.13	3.70	3.31	3.12	3.11	3.34	3.97	3.09	2.71	2.83	2.50	2.29	2.21	2.22	1.95	1.74	1.77	1.67
FI - total exc. retained earnings	4.53	3.83	3.60	3.60	3.10	4.10	4.95	3.85	3.31	3.16	2.93	3.58	4.20	4.62	2.90	2.36	2.61	2.42	2.15	2.22	2.29	2.01	2.07	2.05	2.07
ES - returns/compensation	0.49	0.49	0.44	0.41	0.36	0.39	0.45	0.40	0.37	0.36	0.40	0.46	0.56	0.62	0.50	0.45	0.50	0.50	0.46	0.41	0.35	0.34	0.32	0.33	0.32
FR - returns/compensation	0.41	0.39	0.40	0.41	0.40	0.41	0.42	0.41	0.40	0.39	0.41	0.43	0.46	0.47	0.41	0.39	0.40	0.37	0.36	0.35	0.36	0.34	0.33	0.33	0.33
FI - returns/compensation	0.53	0.47	0.50	0.51	0.51	0.58	0.71	0.58	0.52	0.55	0.53	0.65	0.75	0.72	0.49	0.48	0.50	0.47	0.40	0.46	0.50	0.45	0.51	0.51	0.53

3. Results: rates of return

- Hicksian vs. national accounts income concept (the role of holding gains)



Note: And even unrealized holding gains/valuations do not change the picture!!!

4. Results: labour and property income

Labour share of national income (net), labour share of household primary income and households' share of primary income

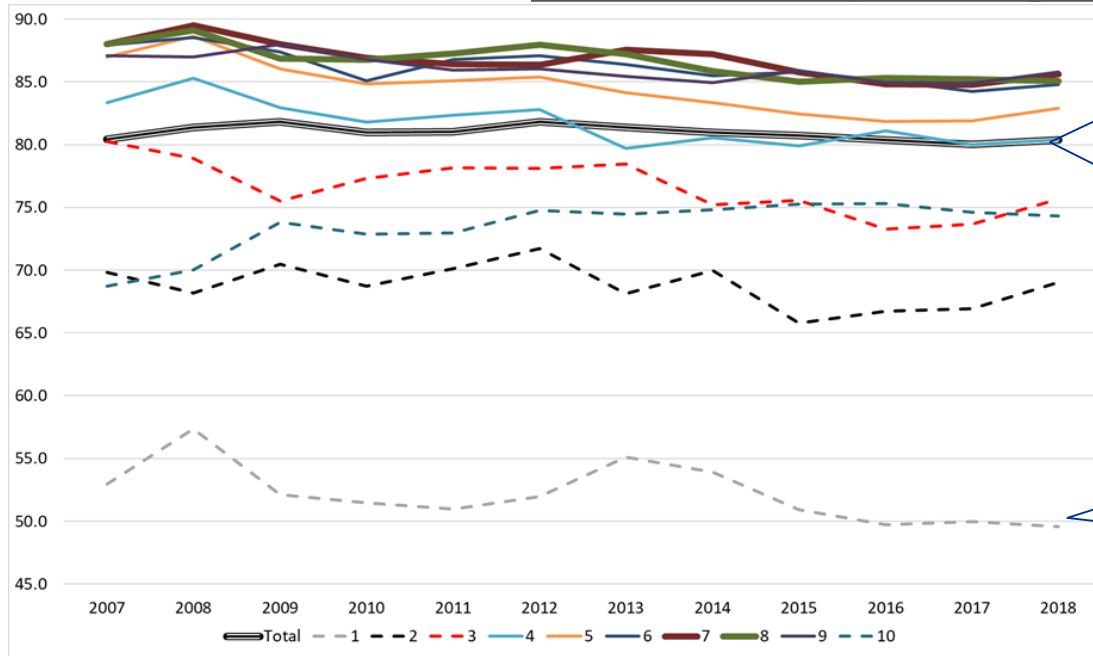
Colour indicates that cell value is above time series average

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	min	max	range	ave
HH share of primary income ES	79.6	79.9	81.0	81.0	80.6	81.1	82.0	80.9	80.4	80.1	80.0	79.6	79.6	80.1	79.1	78.7	80.4	77.5	77.5	77.0	76.2	75.5	75.5	75.2	75.2	82.0	6.9	79.1
HH share of primary income FR	79.2	79.1	78.1	77.3	76.9	77.9	78.6	79.5	79.2	78.7	78.4	78.7	78.5	79.3	80.8	80.3	79.7	80.7	79.7	79.8	78.8	78.9	78.7	79.0	76.9	80.8	3.8	79.0
HH share of primary income FI	75.1	74.3	71.6	70.5	70.8	71.3	70.1	69.9	71.1	70.1	70.4	69.8	69.3	70.9	74.9	73.6	73.8	75.0	75.0	74.1	73.4	73.2	71.3	71.3	69.3	75.1	5.9	72.1
labour share of NI ES	54.5	54.5	55.8	56.0	56.3	56.3	55.9	55.6	54.9	55.0	55.1	55.5	56.3	58.8	59.4	58.8	58.3	56.1	54.9	54.8	54.2	53.4	53.2	53.3	53.2	59.4	6.2	55.7
labour share of NI FR	60.2	59.8	59.1	58.4	58.6	58.9	59.2	60.3	60.4	59.8	59.8	59.6	59.1	59.6	62.0	61.6	61.2	62.1	62.2	62.3	61.6	61.8	62.0	62.2	58.4	62.3	3.9	60.5
labour share of NI FI	60.8	60.6	57.8	57.3	57.0	56.3	55.8	55.9	56.7	55.6	56.8	56.5	55.4	57.3	60.9	59.3	59.5	61.1	60.7	59.6	58.9	58.4	56.6	56.9	55.4	61.1	5.7	58.0
labour share of HH primary income ES	68.5	68.2	68.8	69.1	69.8	69.5	68.1	68.7	68.3	68.6	68.9	69.7	70.7	73.4	75.1	74.7	72.5	72.4	70.9	71.1	71.2	70.7	70.5	70.9	68.1	75.1	7.0	70.4
labour share of HH primary income FR	76.0	75.6	75.7	75.6	76.1	75.6	75.3	75.9	76.3	76.0	76.3	75.7	75.3	75.2	76.7	76.7	76.8	77.0	78.0	78.1	78.1	78.4	78.8	78.7	75.2	78.8	3.6	76.6
labour share of HH primary income FI	80.9	81.5	80.7	81.2	80.5	79.0	79.6	79.9	79.7	79.3	80.6	80.8	79.9	80.8	81.4	80.6	80.6	81.4	80.9	80.5	80.2	79.8	79.4	79.8	79.0	81.5	2.5	80.4

Note: Labour share might slightly decrease but so do HH share of primary income: labour share of HH primary income very stable/above average!!!

4. Results: labour and property income

FI Labour share of household primary income by income decile



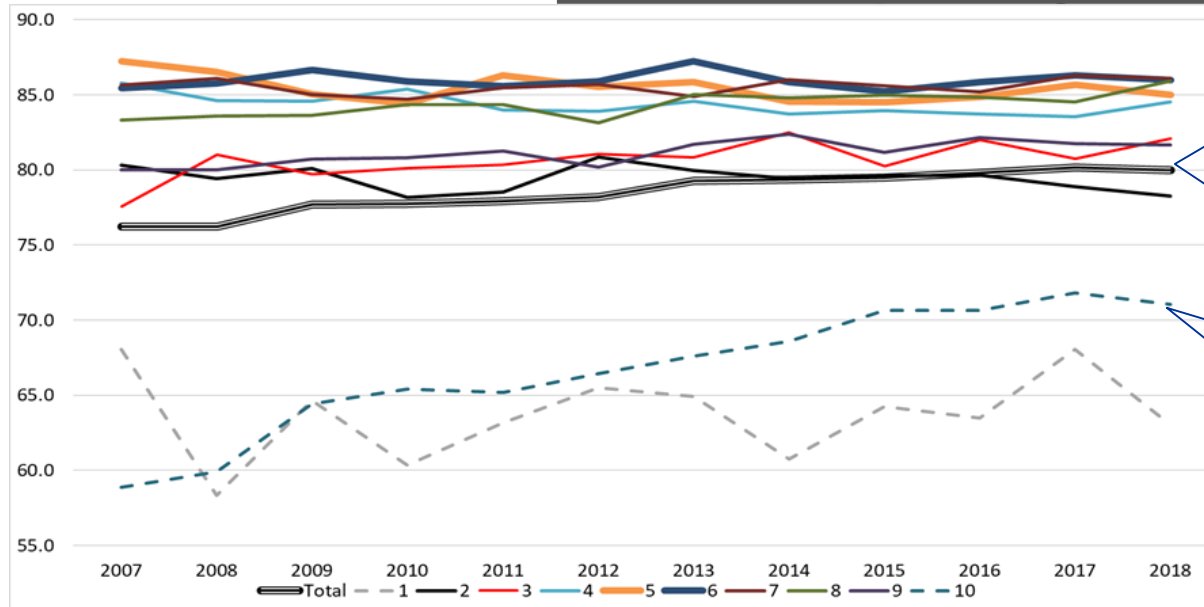
Stable overall development...

Middle/higher deciles above average – 10th decile income share increase – Milanovic and meritocratic capitalism???

Lowest deciles are below average and slight decrease: very little primary income (mainly transfers)!

4. Results: labour and property income

FR Labour share of household primary income by income



Overall labour share increases (lower than in Finland)

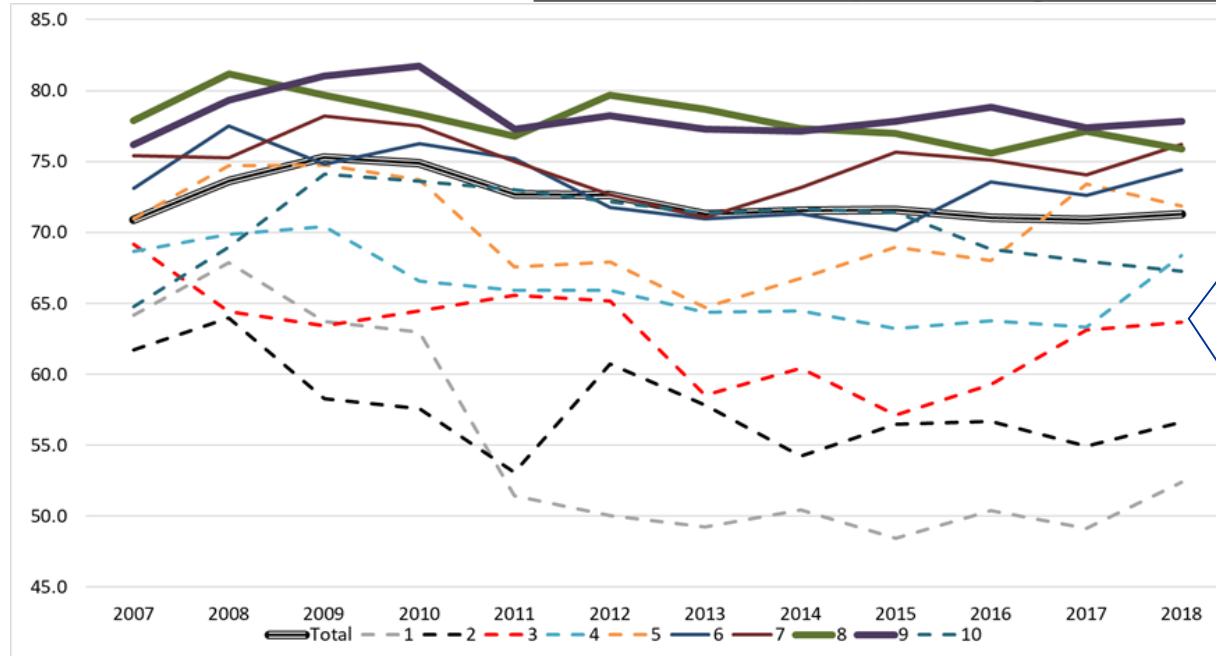
The majority of deciles has stable development!!!

But considerable increase in the 10th decile!

Arrival of meritocratic capitalism?

4. Results: labour and property income

ES Labour share of household primary income by income



Reveals a considerable structural difference compared to the Finnish and French economies: the labour share of all deciles from the first to the fifth is below the total share for hh

Additionally, the overall share is below FI and FR!

Relatively bad labour market situation...

5. Conclusions

- Piketty type of shift to the capital income is not evident...
- What is actually happening?
 - Stock of wealth has indeed increased much in recent decades
 - This increase is a result of increased investment in financial and non-financial assets, i.e., the investment of savings, price increase of assets
 - Returns were higher some decades ago, and *if they were similar to levels 20 years ago, the capital/labour ratio would have moved structurally towards capital*

Thank you.
