



# Inequality and redistribution

## LEARNINGS FROM FRENCH DISTRIBUTIONAL NATIONAL ACCOUNTS\*

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INEQUALITY AND REDISTRIBUTION : LEARNINGS FROM DISTRIBUTIONAL ACCOUNTS

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*\*This presentation engages only its author and not the institutions to which he belongs*

**PRELIMINARY RESULTS – DO NOT CIRCULATE**

## PREVIOUS WORKS TO DISTRIBUTE NATIONAL INCOME AMONG CATEGORIES OF HOUSEHOLDS

- ✓ Usual measure of inequality and redistribution is centered on wages, property and mixed income, taxes on income and wealth and social benefits in cash. Micro-simulation model (INES in France) allows to include social security contribution and taxes on products (by pseudo merging with Family Budget Survey).
- ✓ OECD international expert group compute distributional accounts by category accounts based on SNA adjusted disposable income (disposable + in kind transfers). Computed in France since late 2000's (See Accardo 2009)
- ✓ Word Inequality Lab handbook (See Alvaredo *et al.* (2018/2020)) to compute DINA's, distributing 100% of national accounts over a large set of countries. In kind benefits or collective consumption are base on normative hypothesis (lump sum or proportional).

## Expert Group Report on the Measurement of Inequality and Redistribution

Insee Methods

2021 EDITION



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- ✓ INSEE initiated in 2018 an expert group which issued recommendations to measure properly redistribution, including a comprehensive micro-founded method to distribute the whole national accounts between households (See : Germain, André and Blanchet 2021: **Expert Group Report on the Measurement of Inequality And Redistribution**, Insee Methods, N°138, February 2021).
- ✓ In 2021, first INSEE publication based on expert group recommendations : «Reduction of inequalities: redistribution is twice as large by integrating public services », Accardo A., André M., Billot S., Germain J.-M., Sicsic M., Insee Références, mai 2021

Two academic papers being finalized in 2022:

**André M., Germain J.-M. and Sicsic M. (2022): Measuring Market Inequality and Redistribution Accounting For In-Kind Benefits from Health and Education**

- ✓ a deeper and finer analysis of primary incomes and redistribution (twentieth and micro)
- ✓ an examination of inequalities and redistribution over the (pseudo) life cycle, by fine age category, then by crossing age and diploma
- ✓ an exploration of other dimensions such as place of residence, type of household or gender of the reference person for single people or single parents with children.

**André M., Germain J.-M. and Sicsic M. (2022): Who Paid for the 2008 Crisis? Learning from Distributional National Accounts over the 2008-2019 Period**

- ✓ a breakdown into five categories of the population according to position in relation to the median standard of living: poor, modest, middle, upper middle and best-off
- ✓ an examination of the evolution of primary incomes, standard of living (usual and extended) and redistribution between 2008 and 2019

# A TABLE OF INTEGRATED DISTRIBUTIONAL ACCOUNTS (TIDA)

INEQUALITY AND REDISTRIBUTION : LEARNING FROM DISTRIBUTIONAL NATIONAL ACCOUNTS

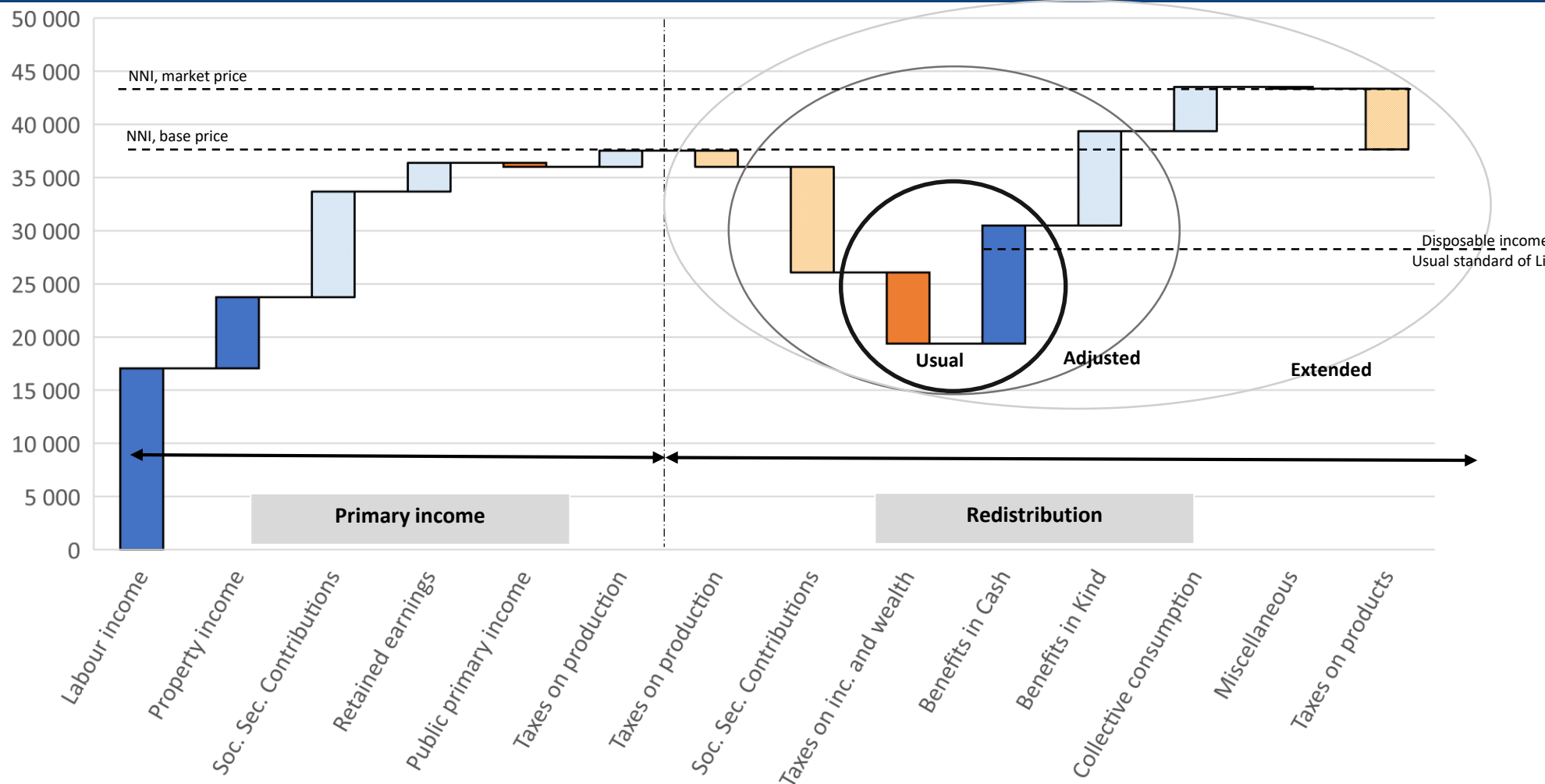
5

Table of integrated economic accounts								Table of integrated distributional accounts							
	Uses			Ressources			Net	Households							
	Compagnies	Households	Public auth.	Compagnies	Households	Public autho.	All inst. sectors	All households		Poor	Median	Middle	Up-Middle	Best-off	
Production and Allocation of Primary Income Accounts								Income Before Transfers -> Market income							
Labor, property and public									Labor, property and public						
Secondary Distribution of Income Account								Monetary redistribution							
Benefits in cash - taxes									Benefits in cash - taxes						
Disposable income								Diposable income -> usual standard of living							
Use of Income Account								Non monetary redistribution							
Collective consumption									Benefits from pub. services						
								Income After Transfer -> Extended Standard of Living							

# WHAT NEEDS TO BE DONE TO EXENTED USUAL APPROACH

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6



## Distribution method :

- ✓ monetary income and transfers : based on administrative data and micro-simulation with open source model INES
- ✓ education : based on children number and age and educational costs by level (primary school, college, high school, university, engineering schools...)
- ✓ health : based on social security reimbursement (INES-OMAR model)
- ✓ collective consumption : based on the distribution by living area of the payroll of civil servants
- ✓ time evolution of all transfers, except health transfers (actualized 2017 data) and consumption (actualized 2011 data).

# TABLE OF INTEGRATED DISTRIBUTIONAL ACCOUNTS BY FIVE INCOME GROUPS

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8

<i>€ per capita equivalized, 2019</i>	All	Poor*	Modest*	Median*	Upper-Middle*	Better-off*	Better-off / Poor Ratio	Top 1%
<b>Income before transfers** (1)</b>	<b>38 000</b>	<b>5 900</b>	<b>16 700</b>	<b>30 800</b>	<b>48 350</b>	<b>129 500</b>	<b>22</b>	<b>408 550</b>
<i>Factor income</i>	36 850	5 800	16 250	29 800	46 800	125 650	22	398 250
<b>Net Transfers (2)</b>	<b>0</b>	<b>+18 700</b>	<b>+13 000</b>	<b>+3 300</b>	<b>-7 100</b>	<b>-50 100</b>		<b>-195 700</b>
<i>Net Usual Monetary Transfers***</i>	-5 650	+5 100	+3 750	-2 100	-9 250	-45 300		-169 650
<b>Taxes &amp; SSC</b>	<b>-24 150</b>	<b>-6 100</b>	<b>-11 500</b>	<b>-19 950</b>	<b>-31 200</b>	<b>-74 850</b>	<b>-</b>	<b>-215 350</b>
<b>Benefits in cash or kind</b>	<b>+24 250</b>	<b>+24 700</b>	<b>+24 450</b>	<b>+23 300</b>	<b>+24 300</b>	<b>+25 500</b>	<b>-</b>	<b>+22 500</b>
<i>Benefits in Cash</i>	11 250	7 100	9 950	10 950	13 200	16 050	-	16 250
<i>Benefits in Kind</i>	13 000	17 600	14 500	12 350	11 100	9 450	-	6 250
<b>Income after transfers** (1)+(2)</b>	<b>38 000</b>	<b>24 600</b>	<b>29 700</b>	<b>34 100</b>	<b>41 250</b>	<b>79 400</b>	<b>3,2</b>	<b>212 850</b>
<i>Disposable income (national accounts)</i>	30 800	10 650	19 700	27 350	37 100	79 550	<b>7,5</b>	226 600
<i>Usual standard of living (****)</i>	27 500	11 000	18 600	25 150	34 000	62 850	<b>5,7</b>	134 950

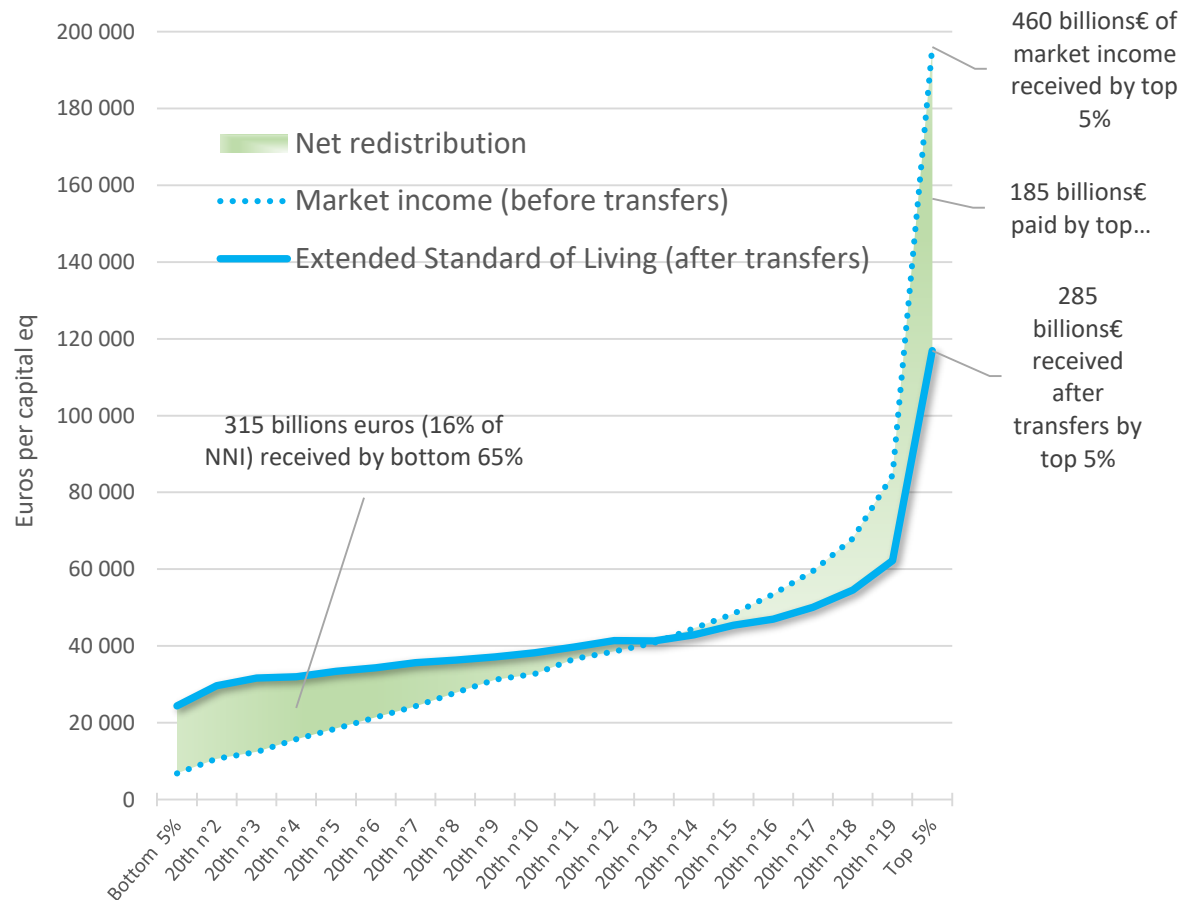
\*Poor : less than 60% of median standard of living ; modest : 60-90% ; median 90-120% ; Upper-Middle 120-180% ; better-off : >180%

\*\*Income before and after transfers at base price \*\*\*Excluding products and production tax

\*\*\*\*Usual extend of disposable which does not include imputed rent nor retained earning, but include housing subsidies (considered as in kind for SNA)

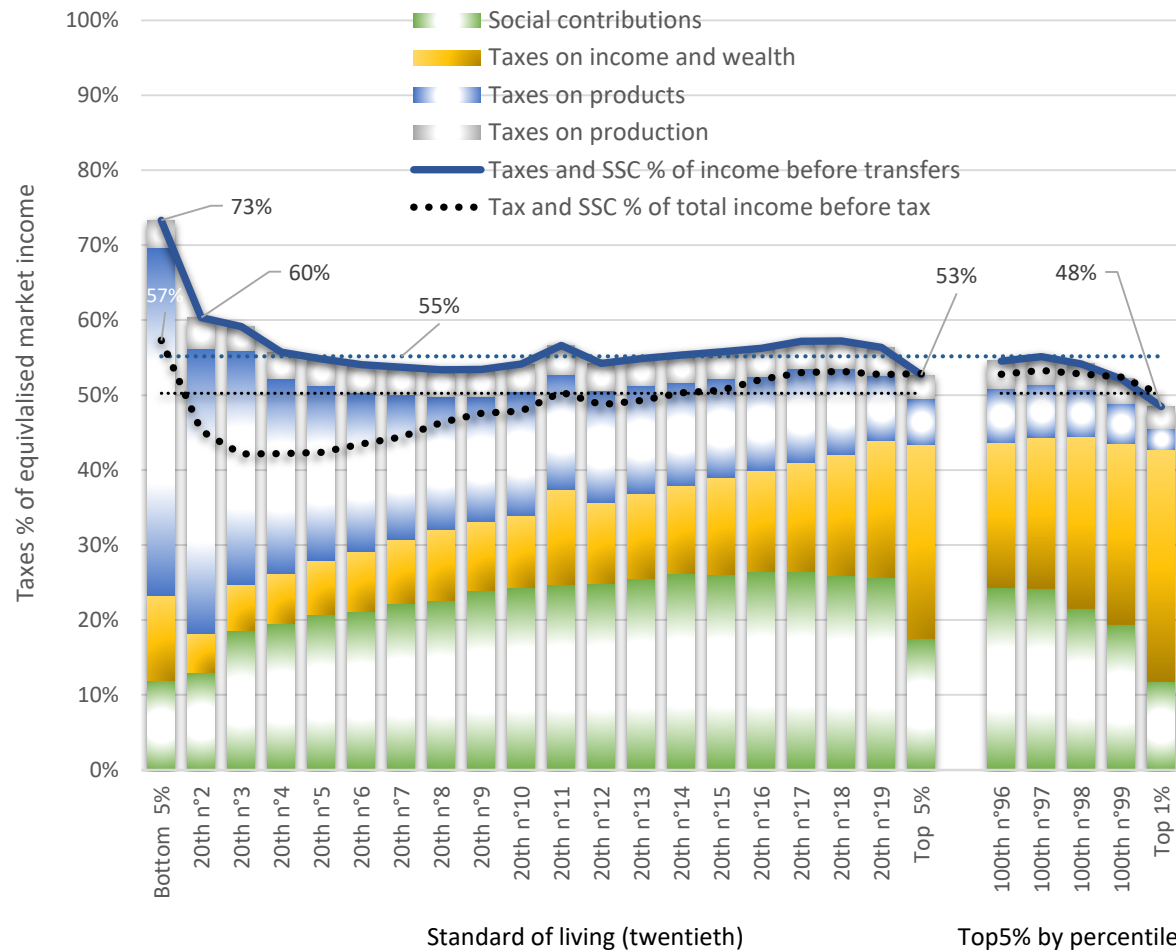


# TWO-THIRD OF NET BENEFICIARIES FROM EXTENDED REDISTRIBUTION



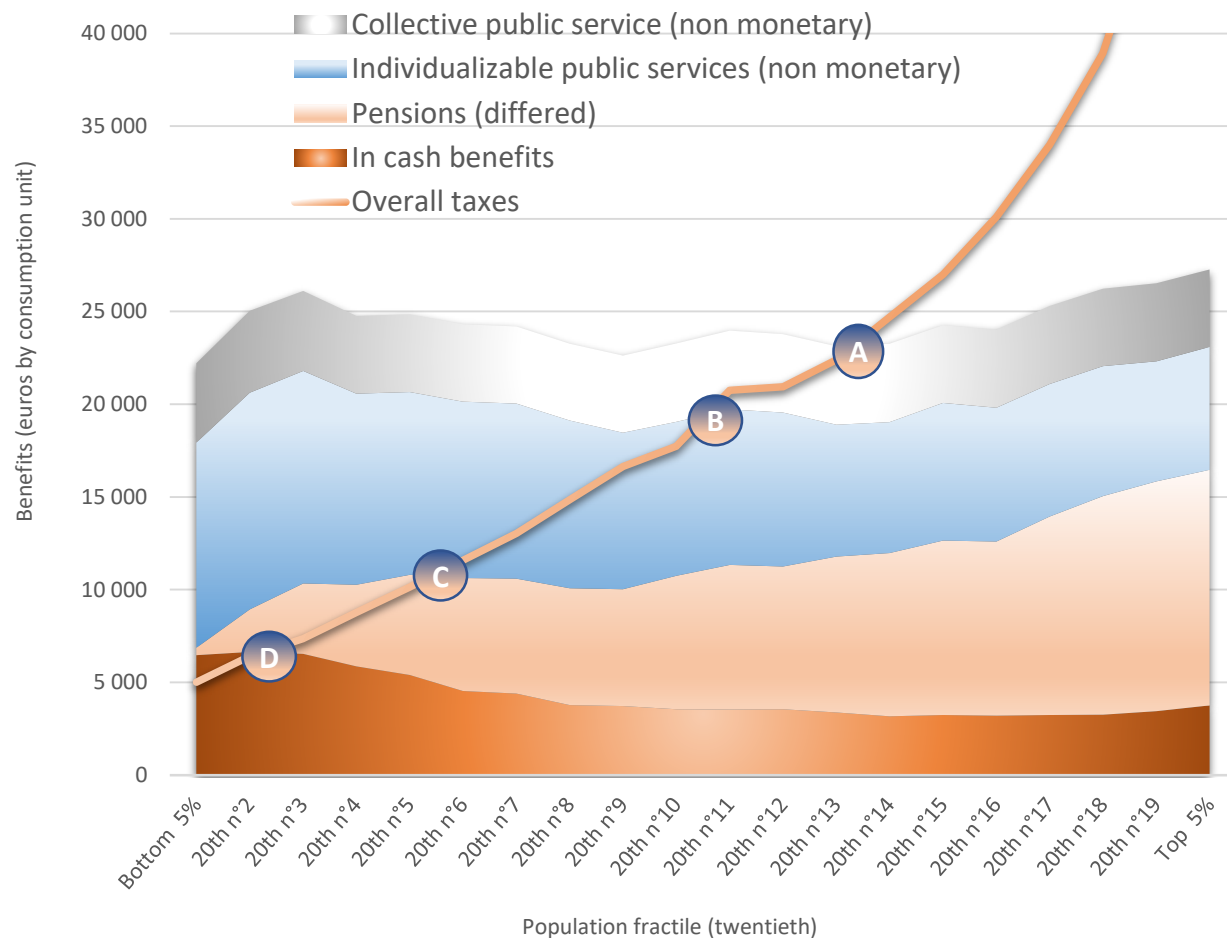
- ✓ the market net beneficiary are at the highest third of the scale of standards of living
- ✓ two third of the household appear net beneficiary of extended redistribution
- ✓ Net contributors pay 315 billion euros to the net receivers (16% of NNI)
- ✓ They represent 56% of the maximum distributable (would all income be equal, net transfers would reach 580 billion euro)

# A GLOBAL FLAT TAX RATE REPRESENTING OF 55% WITH DEGRESSIVITY AT THE EXTREMES



- ✓ Taxes and SSC are mainly proportional to primary income (55%), except at the two ends of the distribution (65% for the 10% poorest and 48% for the top 1%) ;
- ✓ Taxes on income and wealth are progressive (7,5% for the 10% poorest ; 26% for the top 5%) ;
- ✓ But counterbalanced by degressivity of taxes on products, which represent 46% of income before transfers of the 5% poorest, compared to only 6% for the 5% better-off.
- ✓ Adding to primary income transfer received in cash (dotted curve), overall tax rate starts at 57% of total income before taxes, lowers at 42%, then rises to 53%. Regressivity concerns top 3%, due to falling SSC (decreasing share labor income)

# IN FRANCE INEQUALITY ATTENUATION IS MAINLY DUE TO THE DIFFERENCE BETWEEN THE QUASI LUMP-SUM 24,000€ RECEIVED AND THE 55% PAID

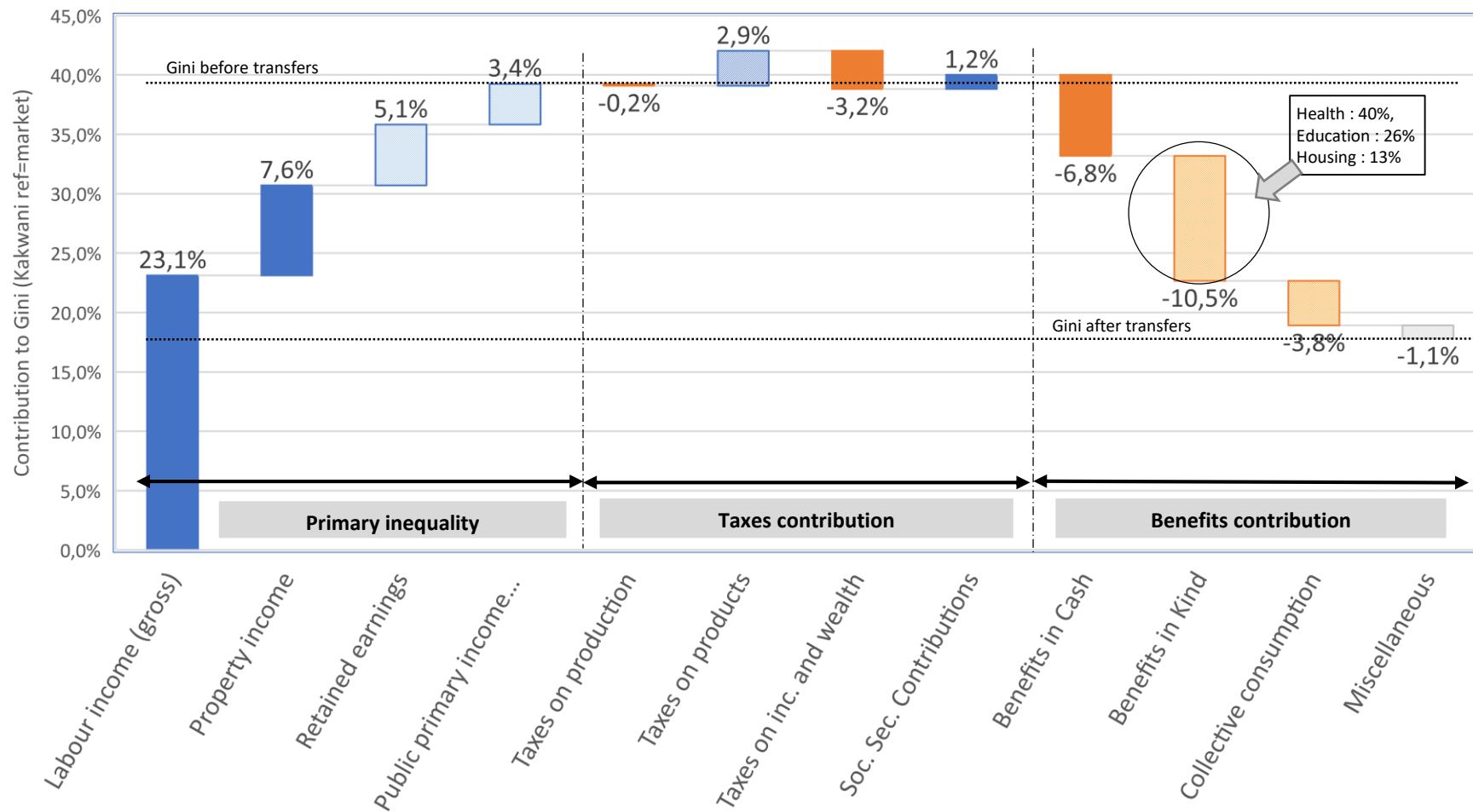


- ✓ almost lump-sum overall profile
- ✓ major role of individualized public services in kind,
- ✓ growing profile of cash transfers including pensions
- ✓ excluding pensions, decreasing profile cash benefits in kind
- ✓ **The redistributive nature of the public transfer system** comes mainly from the difference between :
  - ✓ the transfers paid, almost proportional to income (55%) ;
  - ✓ and those received, almost flat rate at €24,000 per CU.

# THE ORIGIN OF THE MAKING AND ATTENUATION OF INEQUALITY (KAKWANI DECOMPOSITION OF GINI INDEX - 2018)

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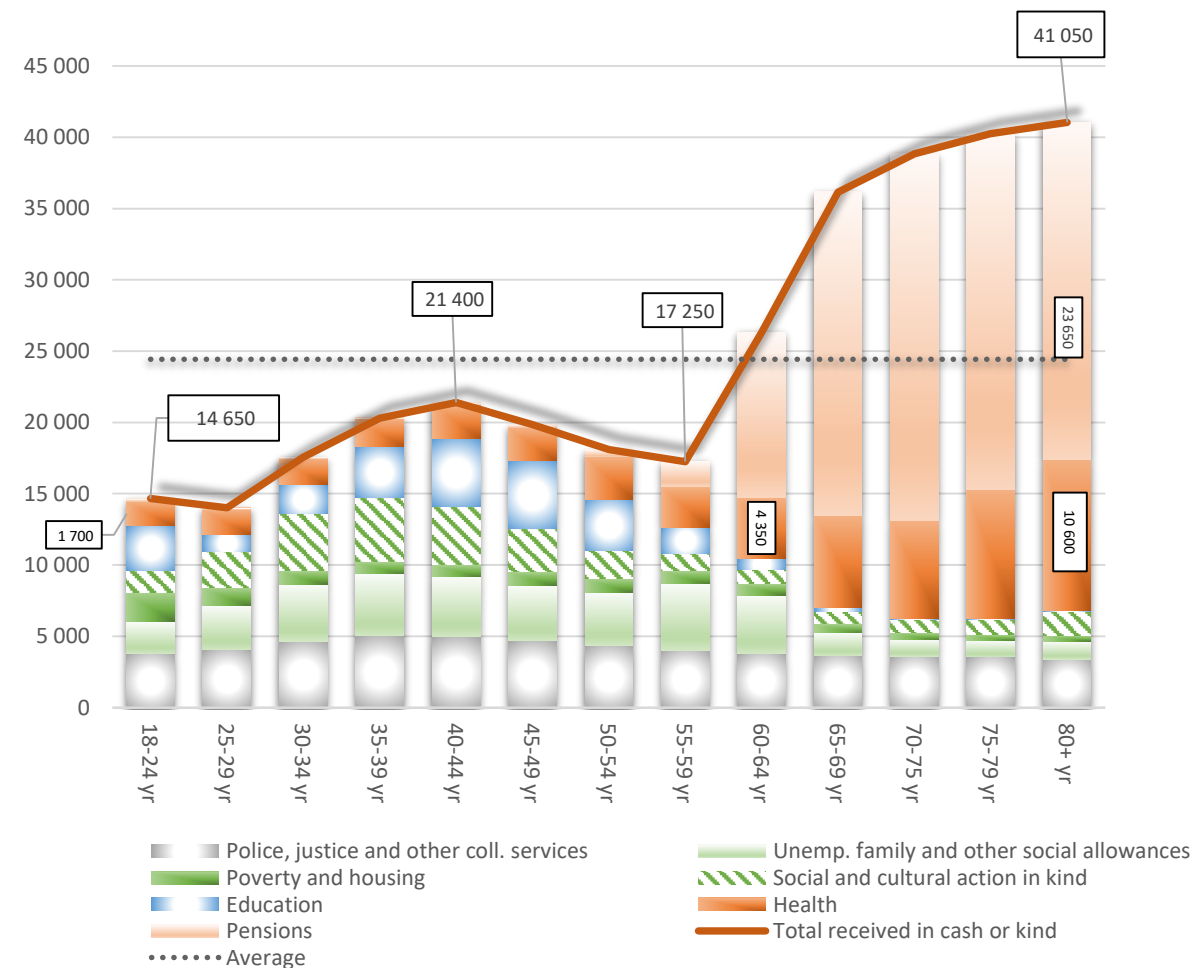
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# THE DIFFERED NATURE OF HEALTH SYSTEM BENEFITS ADDS TO LIFE CYCLE TRANSFERS OF PENSION SYSTEM

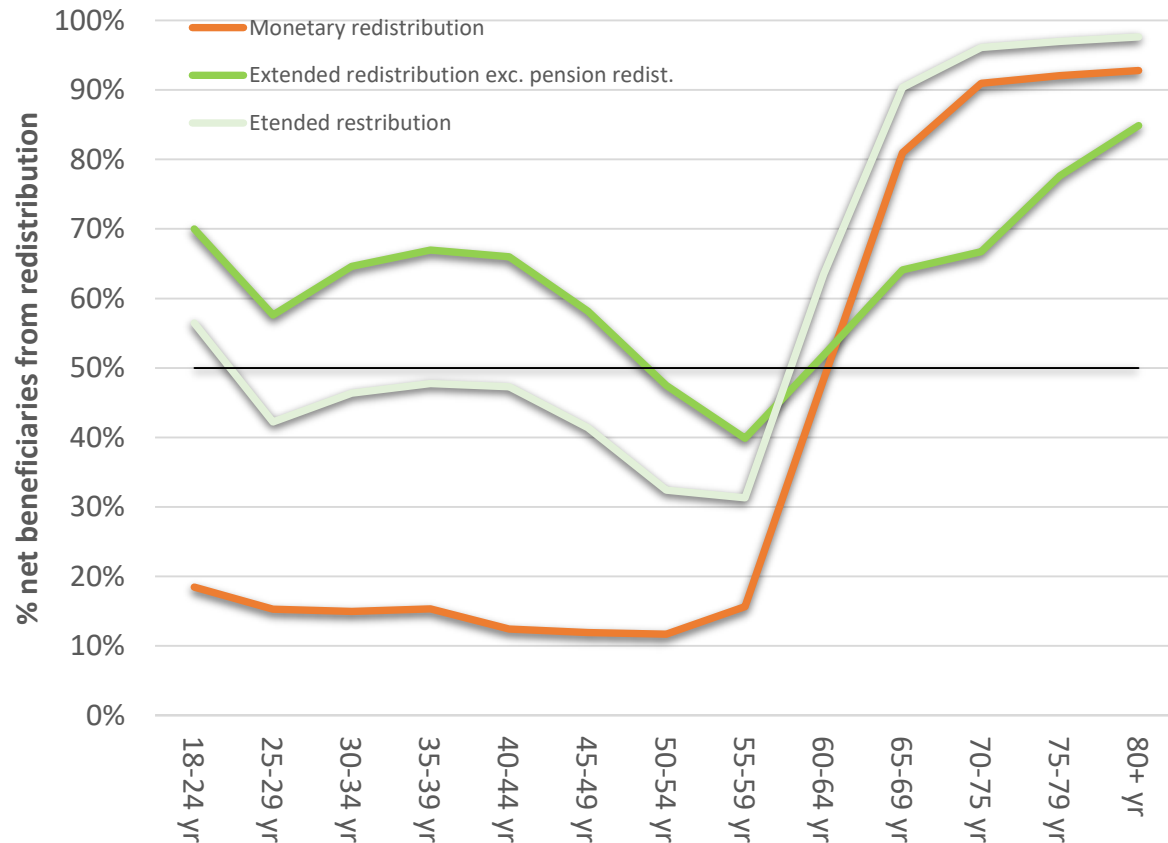
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13



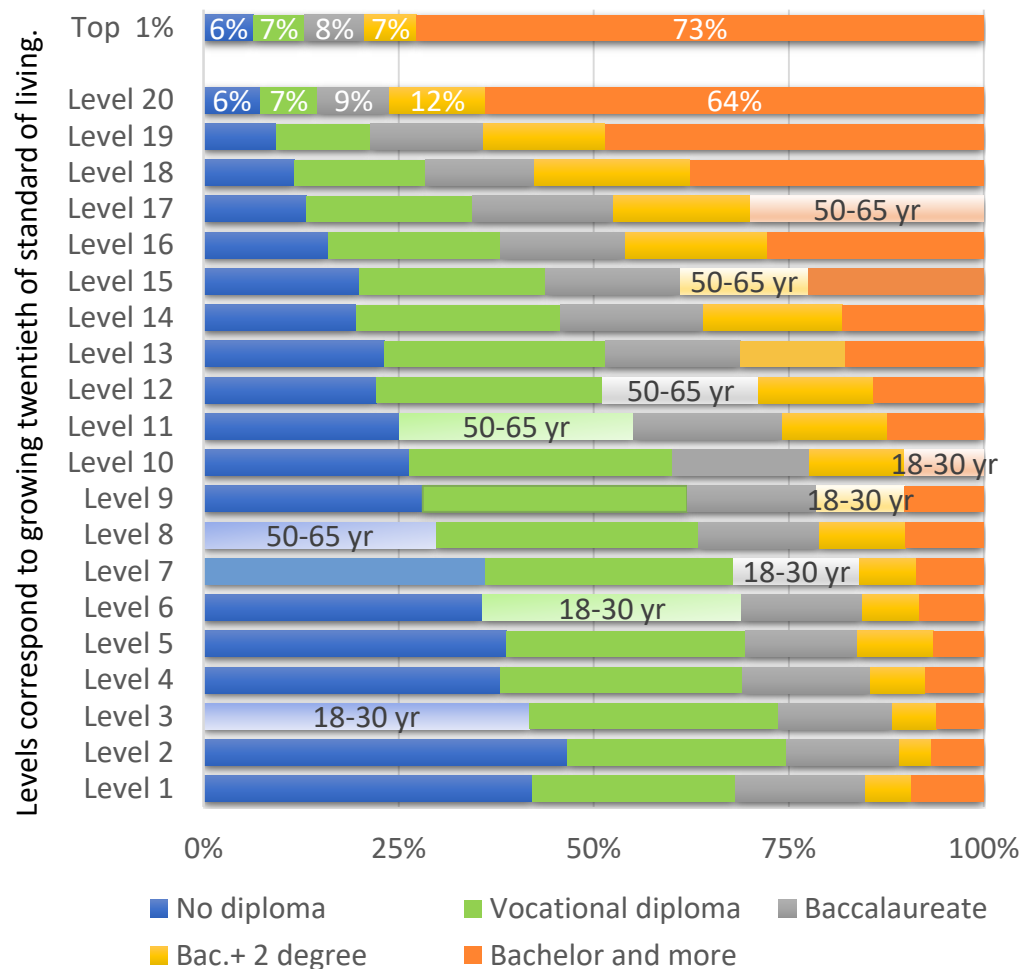
- Health (dark brown bar) and pensions (light brown bar) heavily concentrated on the over 60 age group
- Health represent 10600€ per capita equivalized for 80+ compared to 1700€ among the 18-24
- students and parents aged 30 to 54 years old are concentrating education benefits (blue bar)
- Unemployment and other cash benefits relatively evenly across under-60s

# A “TRAGEDY” OF HORIZONS : UNDER AGE 60, LESS THAN 20% NET IN CASH BENEFICIARIES



- Green curve displays, in each age group, the percentage of extended redistribution winners
- Excluding pension contribution and adding pension to retired people, a majority of “winners” except age 50-64 (dark green)
- Including pensions and pensions SCC (light green) tilts the balance in favor of retirees, but still 40% or more winners except 50-60.
- with only monetary redistribution, including pensions (red curve), the proportion of beneficiaries collapses to 20% under age 60

# PSEUDO LIFE-LONG SOCIAL ELEVATOR BY DIPLOMA HOLDED



- ✓ To approach lifelong inequality and redistribution, we use distributional account by age x diploma (5x5=25 categories of households).
- ✓ Would 2019 photography be frozen to correspond to actual career, in terms of standard of living :
  - the pseudo career of people **without diploma** would be between level 3 at age 18-29 and level 8 at age 50-64 ;
  - **bachelor holders** would start directly at level 10 and reach level 17.
- ✓ among those at level 20, 64% of Bachelor and more against 6% of non-graduates.

# THANKS !

[insee.fr](http://insee.fr)



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