

Myths and Facts about Inequalities in Thailand

NADA WASI

SUPHANIT PIYAPROMDEE

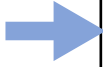
NUARPEAR LEKFUANGFU

PONPOJE PORAPAKKARM



Unequal opportunities

**Human Capital
Endowment**



**Employment
Job choices**

Unequal opportunities

**Human Capital
Endowment**



**Employment
Job choices**



Unequal income

Income
Earnings
Transfer income
Capital income

Unequal income, consumption, savings

Human Capital
Endowment



Employment
Job choices



Income
Earnings
Transfer income
Capital income



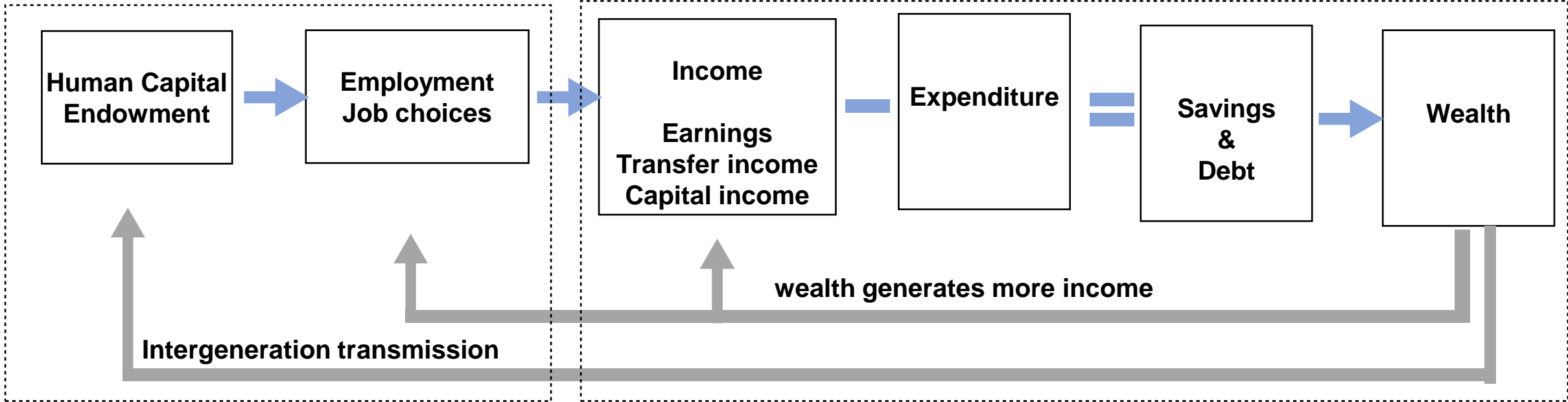
Expenditure



**Savings
&
Debt**

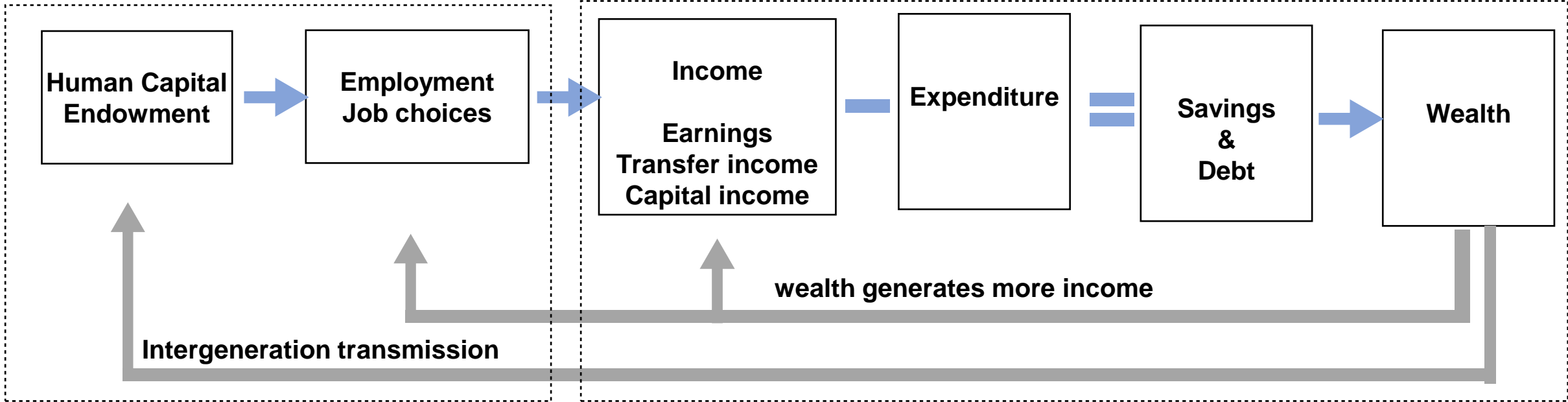
Unequal opportunities

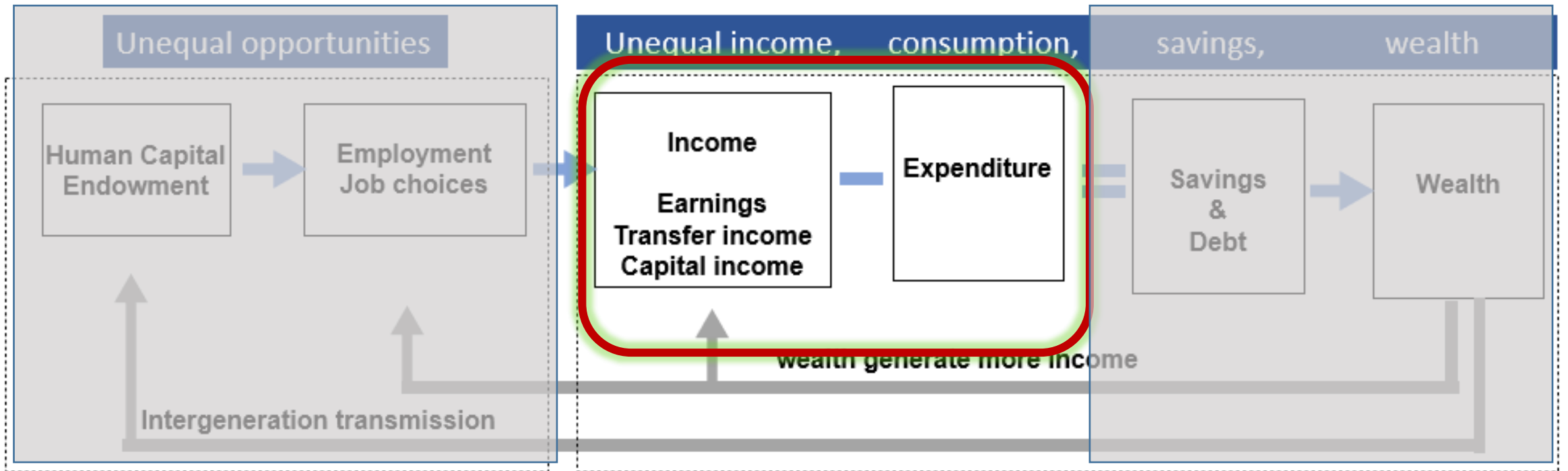
Unequal income, consumption, savings, wealth



Unequal opportunities

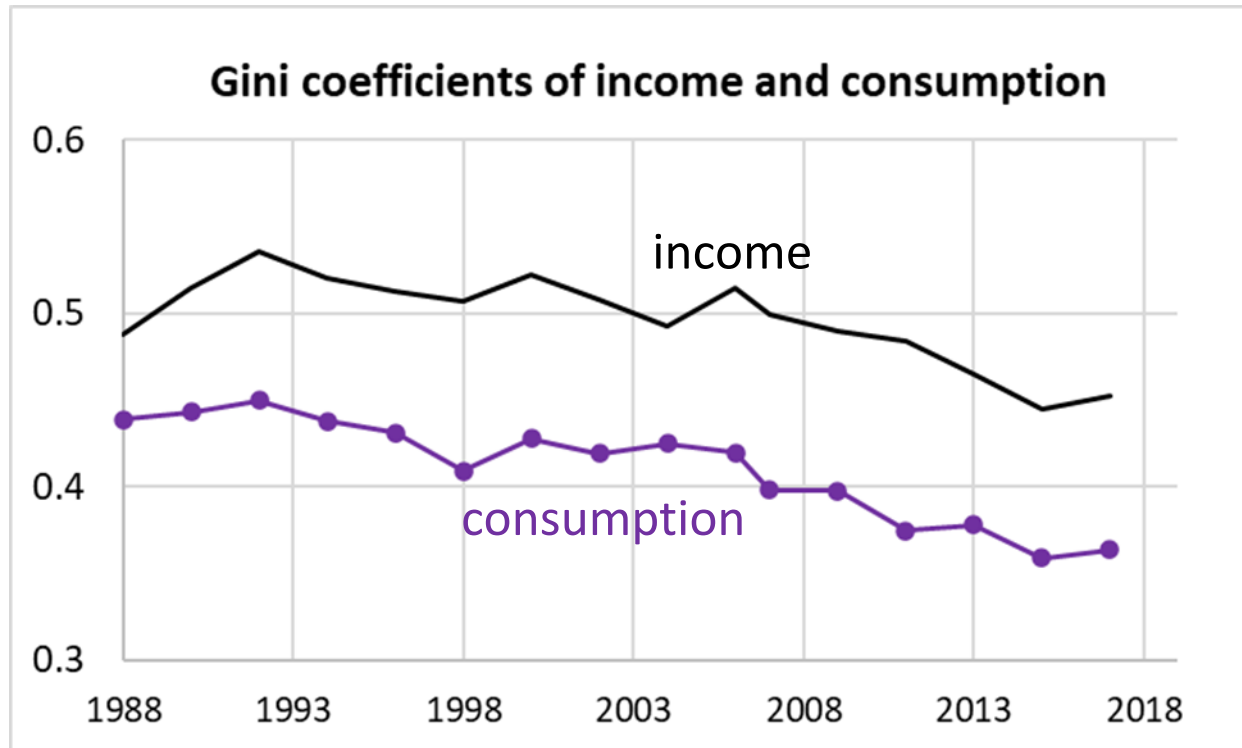
Unequal income, consumption, savings, wealth





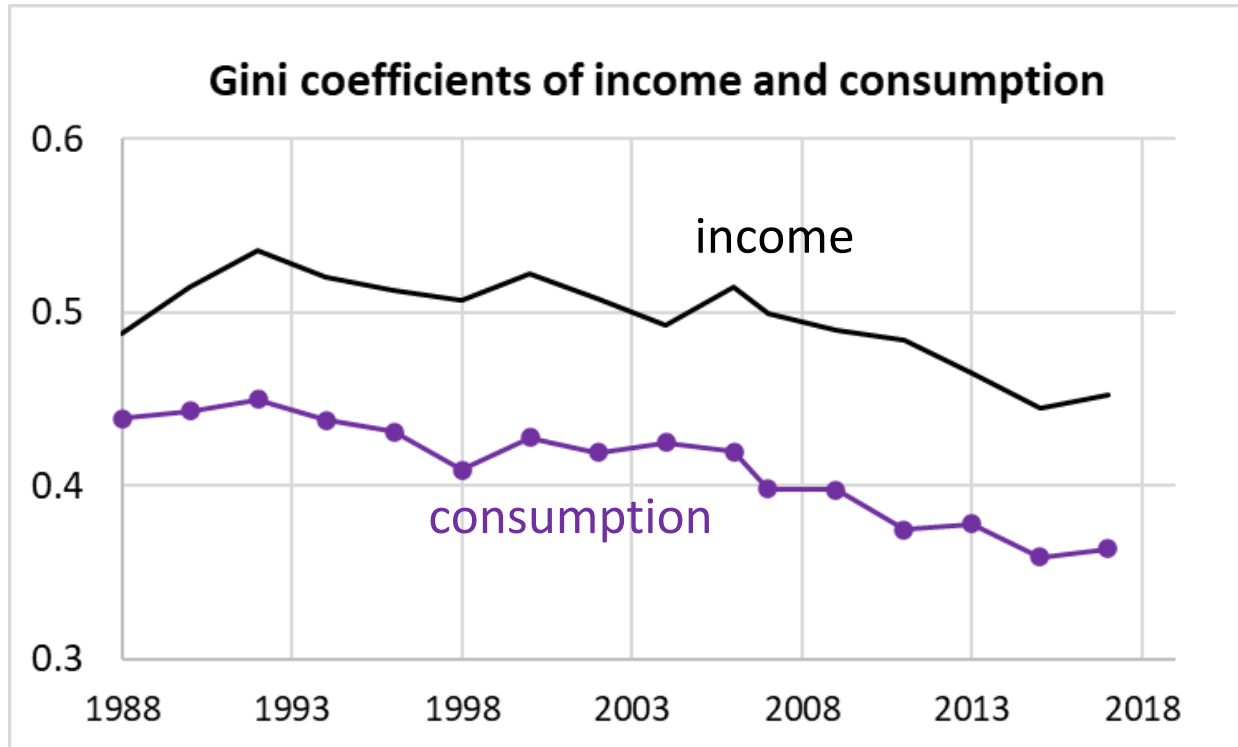
- What drive the changes in income & consumption inequalities?
- Would the picture change post-Covid 19?

Officially: income and consumption inequalities have declined



Source: NESDC calculated from Household Socio-Economic Survey (SES)

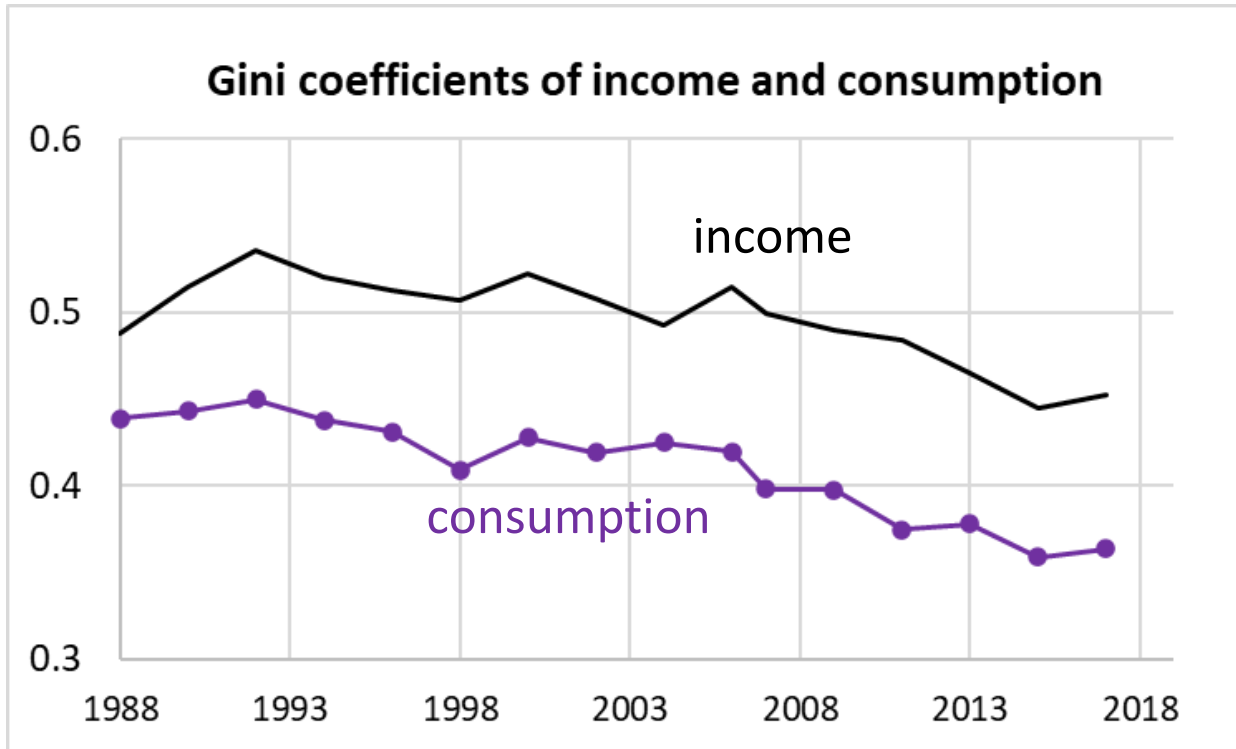
Officially: income and consumption inequalities have declined



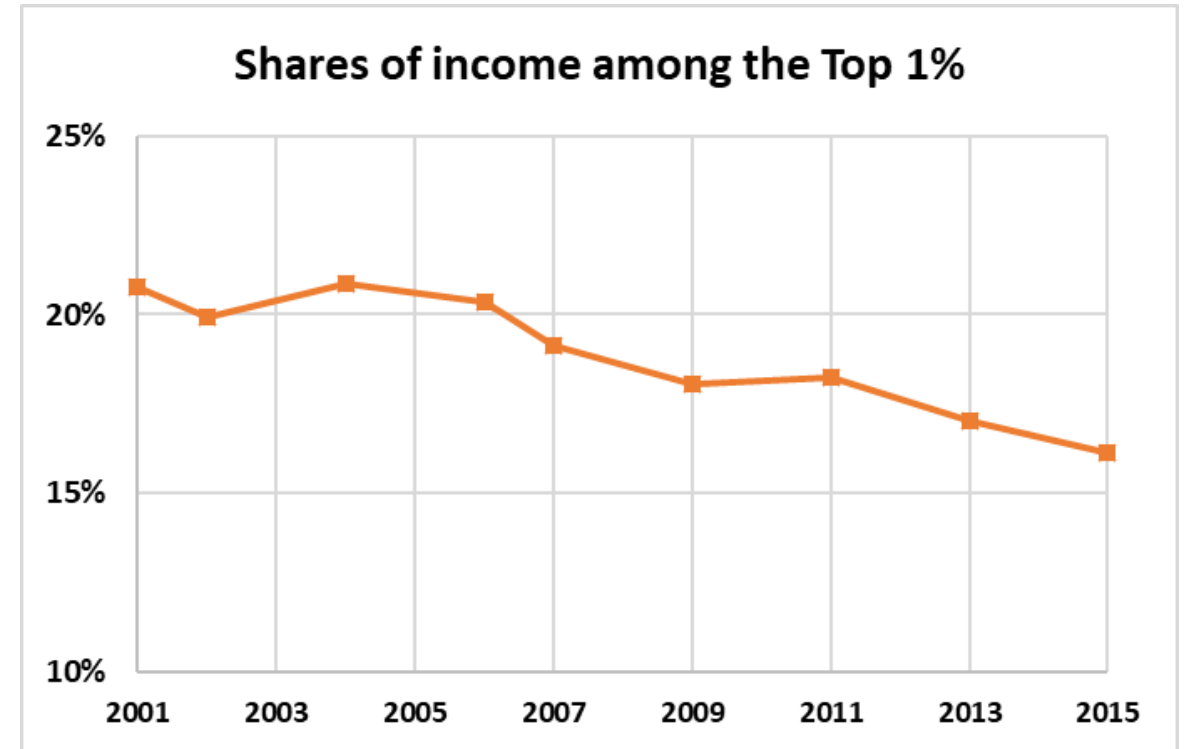
- Household surveys under-sample top 1%.

Source: NESDC calculated from Household Socio-Economic Survey (SES)

Adding tax data does not reverse the trend

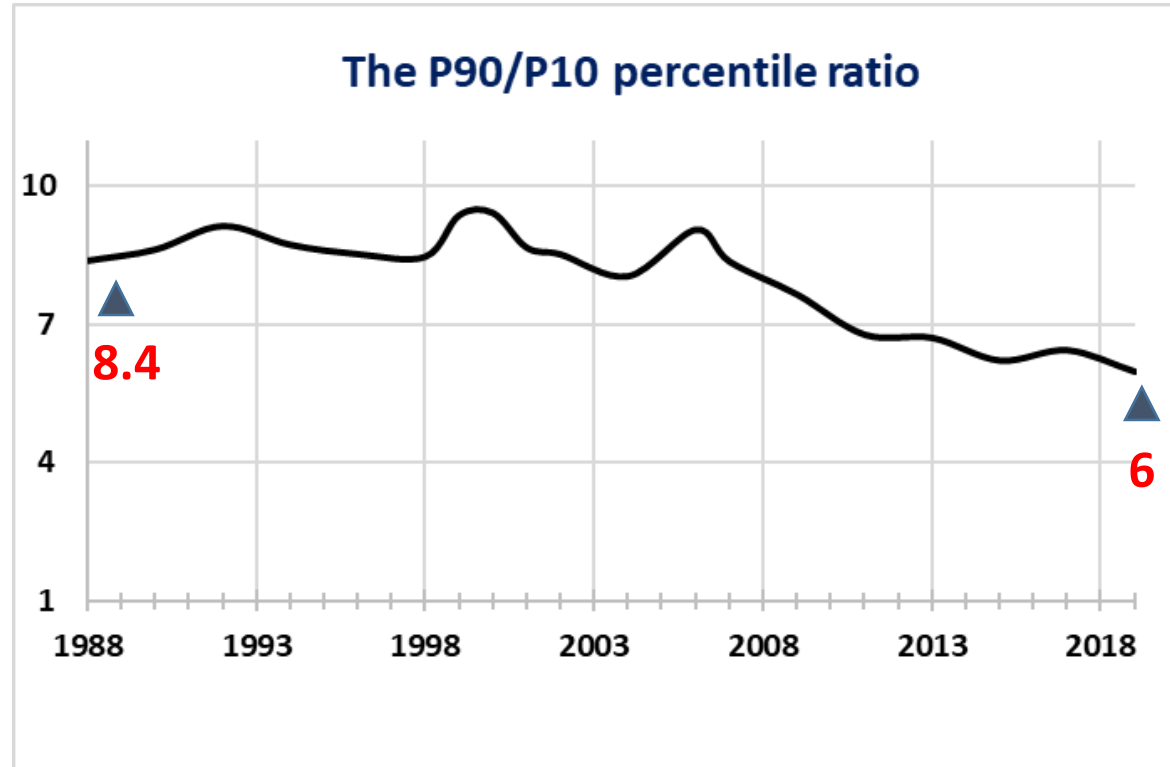


Source: NESDC calculated from Household Socio-Economic Survey (SES)



Source: Jenmana (2018) calculated from combining SES with tax data

Robustness of declining income inequality



Source: Authors calculated from SES

Drivers behind 'declining income inequality'
are **concerning and unsustainable.**

Data

I. On income & consumption inequalities

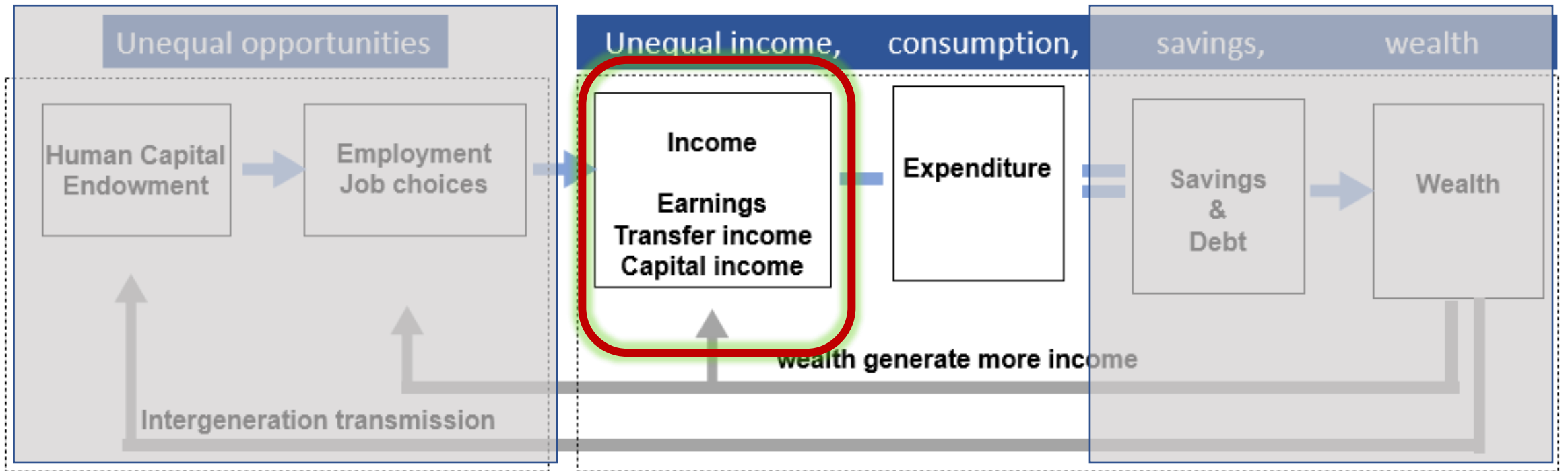
Annual SES: 1988-2019

- Household level
- Unit : real value at 2000
adjusted to per adult per month

II. On Covid-19 impact

Quarterly LFS: 2019-2020

- Individual-level

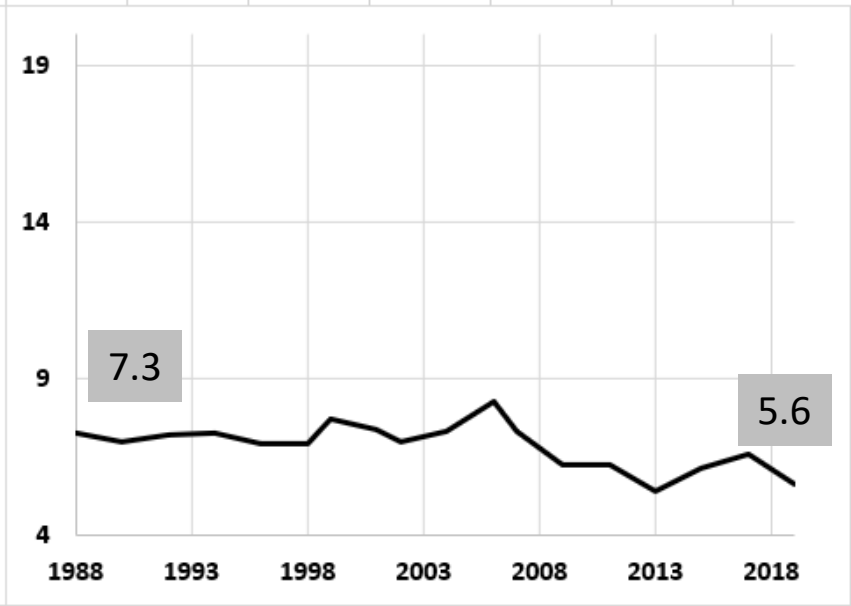
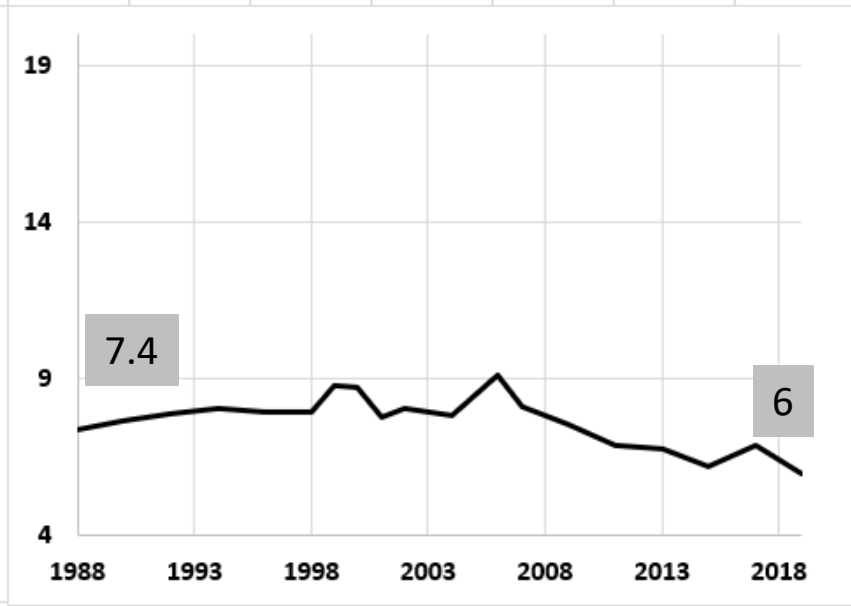
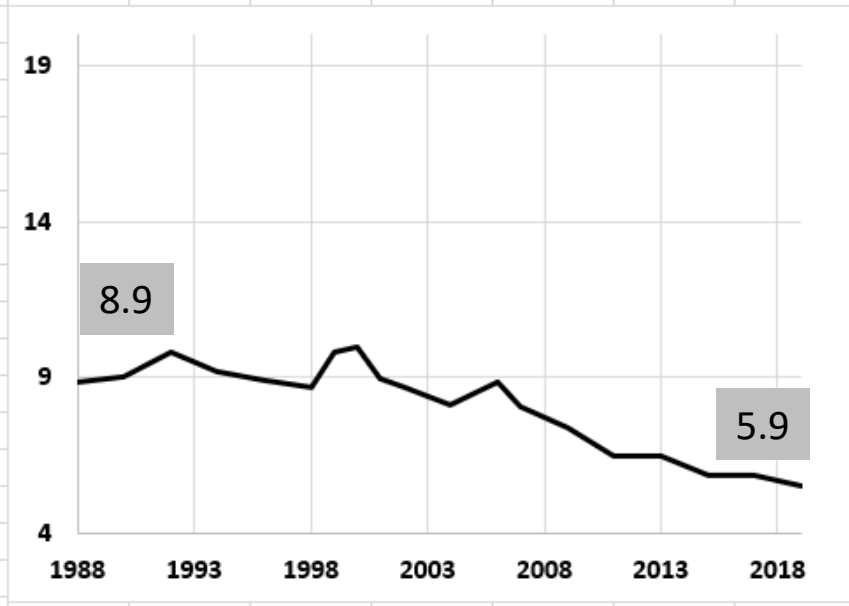


What drive the changes in income & consumption inequalities?

Would the picture change post-Covid 19?

Total income inequality declined for all ages

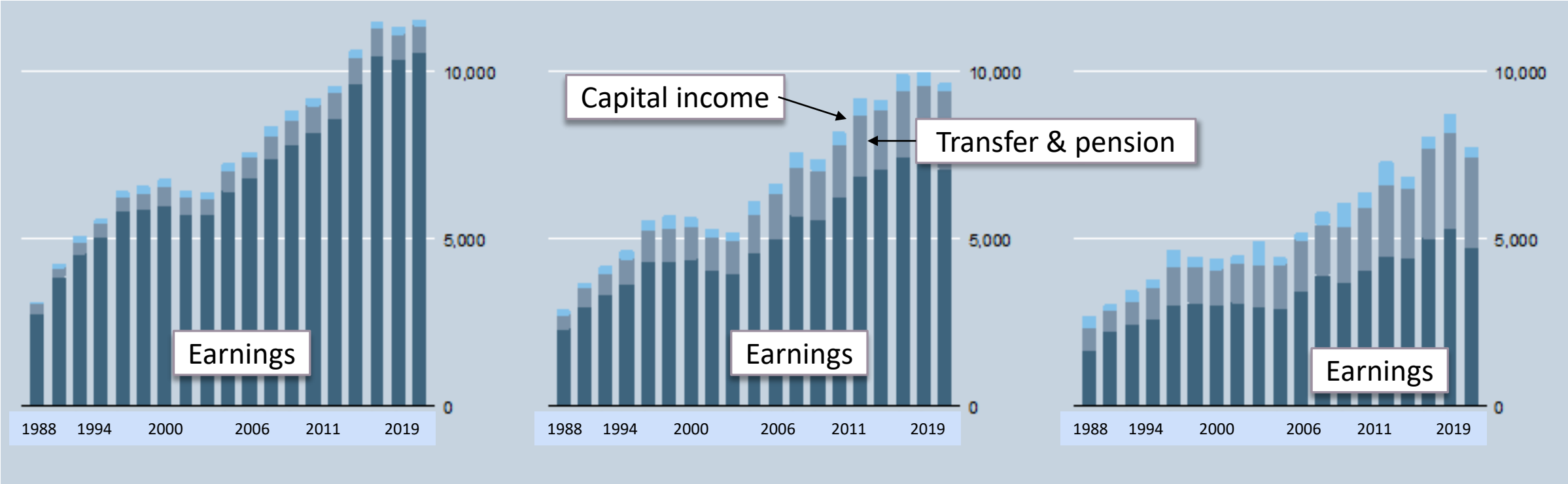
25-54 prime-age HHs 55-69 transitioning-age HHs 70+ senior HHs



The P90/P10 percentile ratio of total income

For each age group, income components differ

25-54 prime-age HHs 55-69 transitioning-age HHs 70+ senior HHs



Source : SES (household-level)

More public transfer policies More households relying on transfers

Public transfer programs

- Elderly allowance
- Disability allowance

Shares of households by main sources of income

1988-1990

Main source of income	Earnings	Transfer & Pension
Age 55-59	92%	7%
Age 60-64	88%	10%
Age 65-69	84%	15%

2017-2019

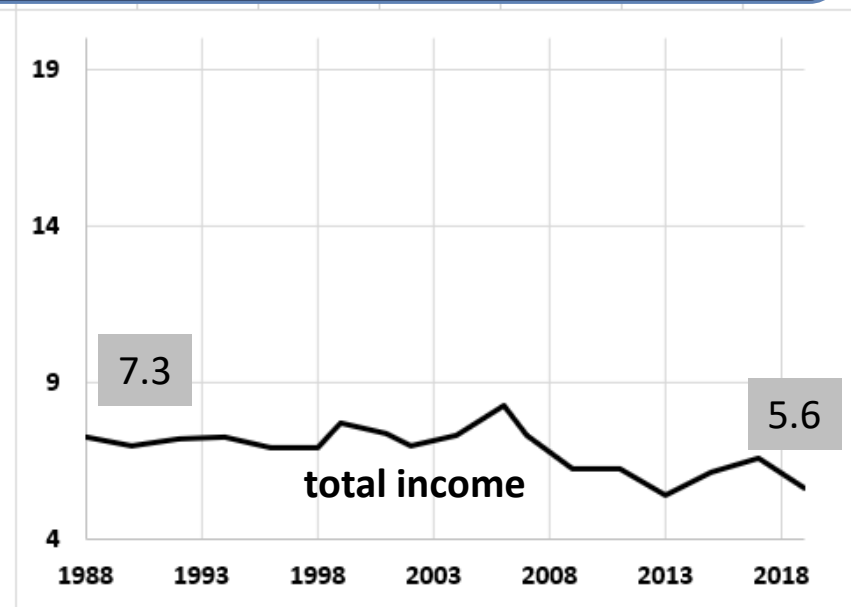
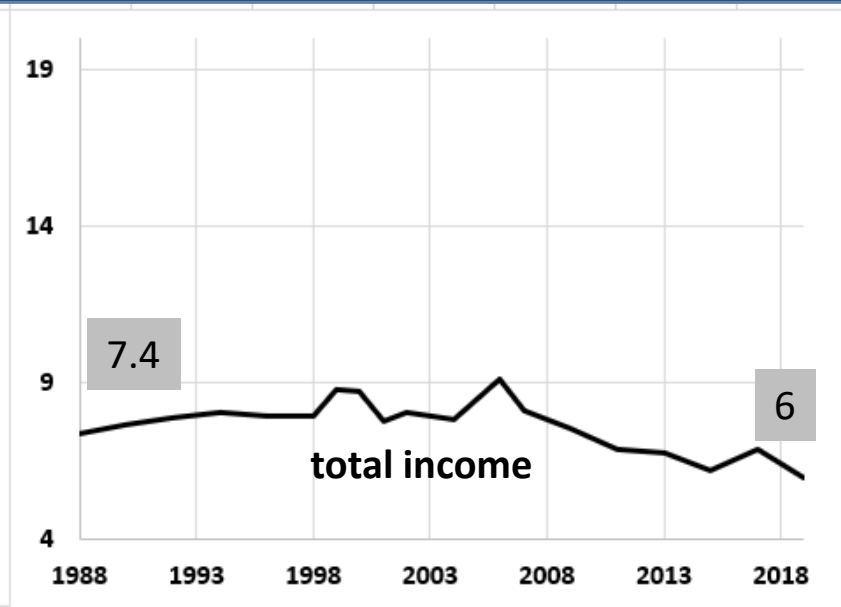
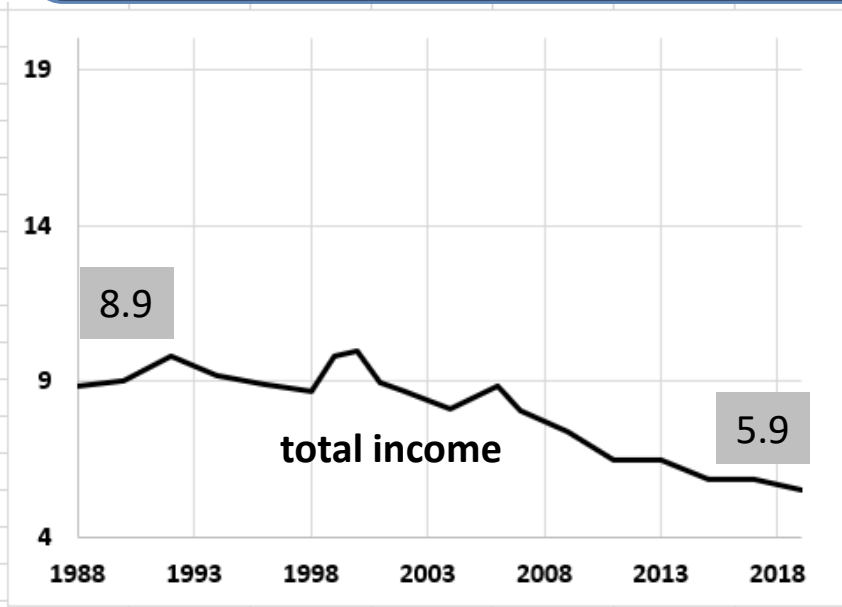
Main source of income	Earnings	Transfer & Pension
Age 55-59	87%	12%
Age 60-64	72%	27%
Age 65-69	61%	37%

Counterfactual experiments if transfer components were removed

25-54
prime-age HHs

55-69
transitioning-age HHs

70+
senior HHs



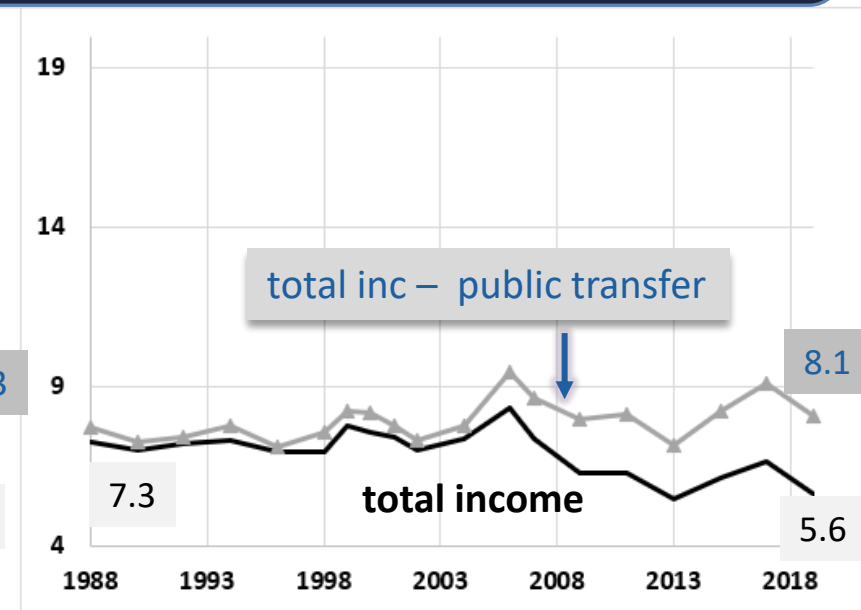
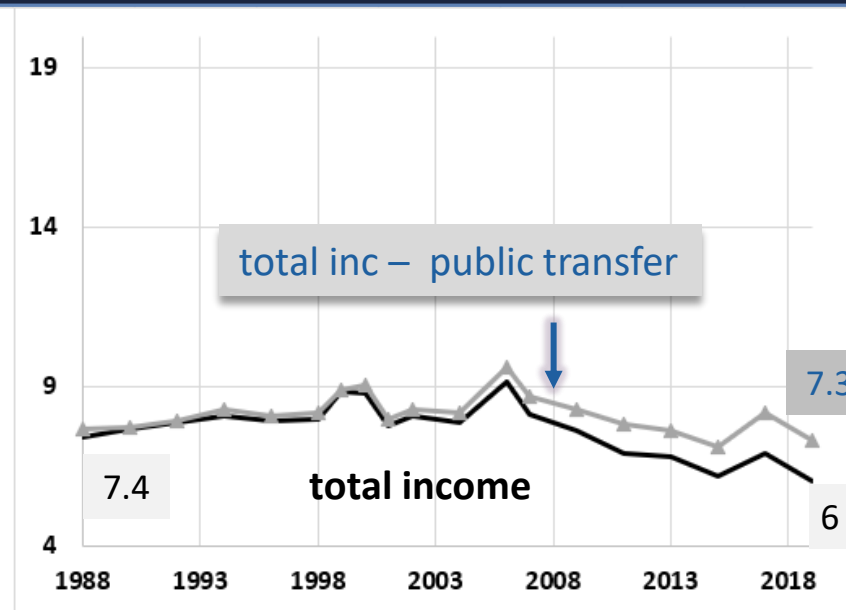
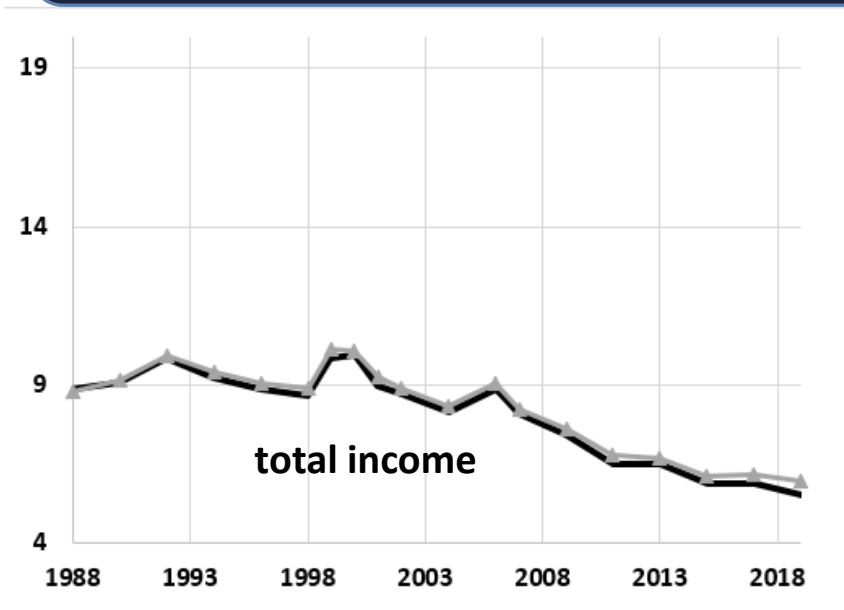
The P90/P10 percentile ratio

Removing public transfer, inequality would slightly increase

25-54
prime-age HHs

55-69
transitioning-age HHs

70+
senior HHs



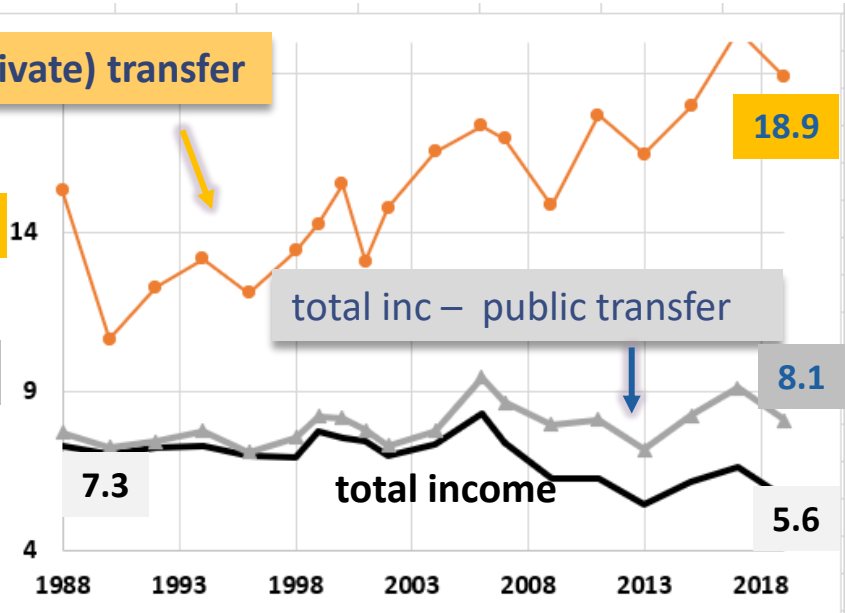
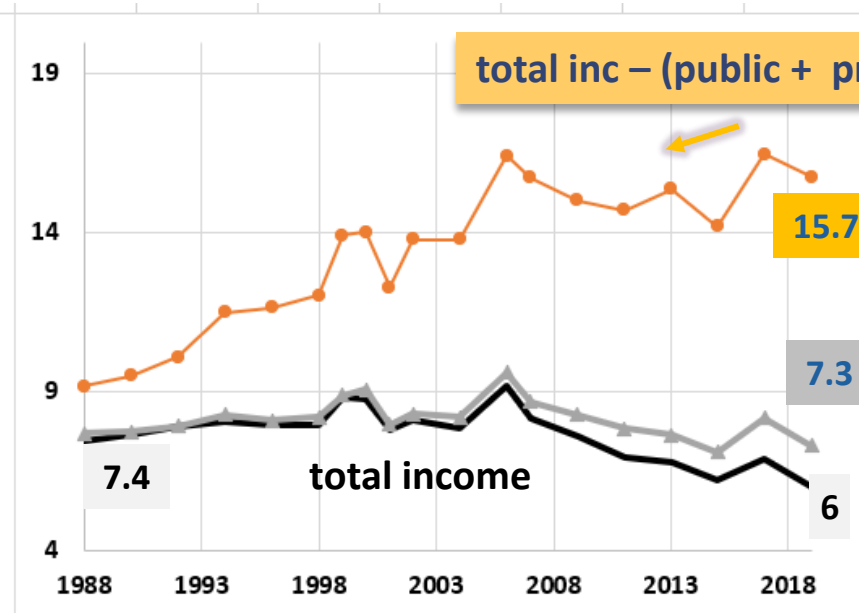
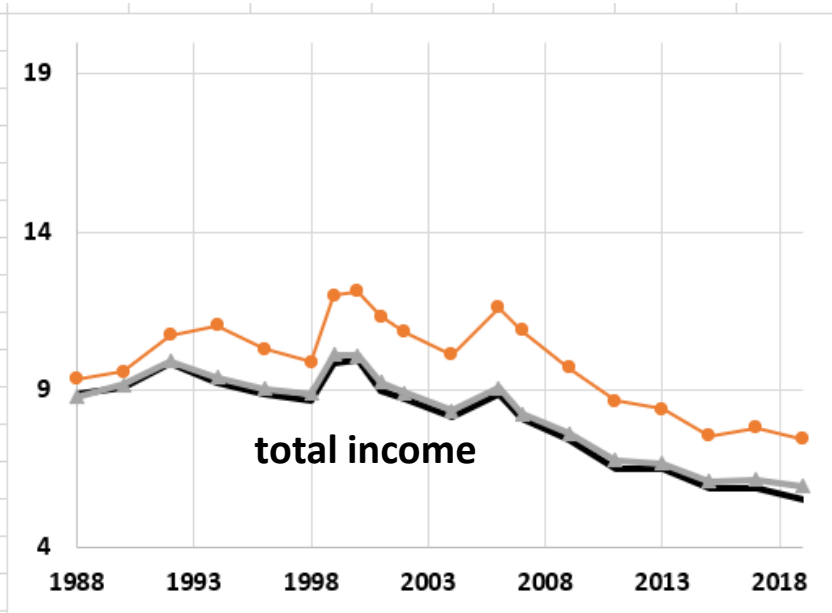
The P90/P10 percentile ratio

Removing public & private transfer, inequality would largely increase

25-54
prime-age HHs

55-69
transitioning-age HHs

70+
senior HHs



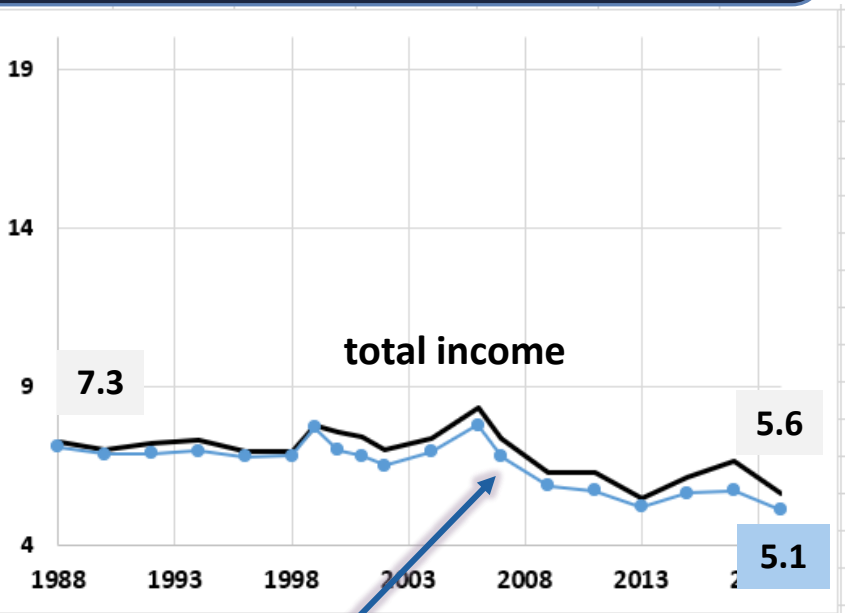
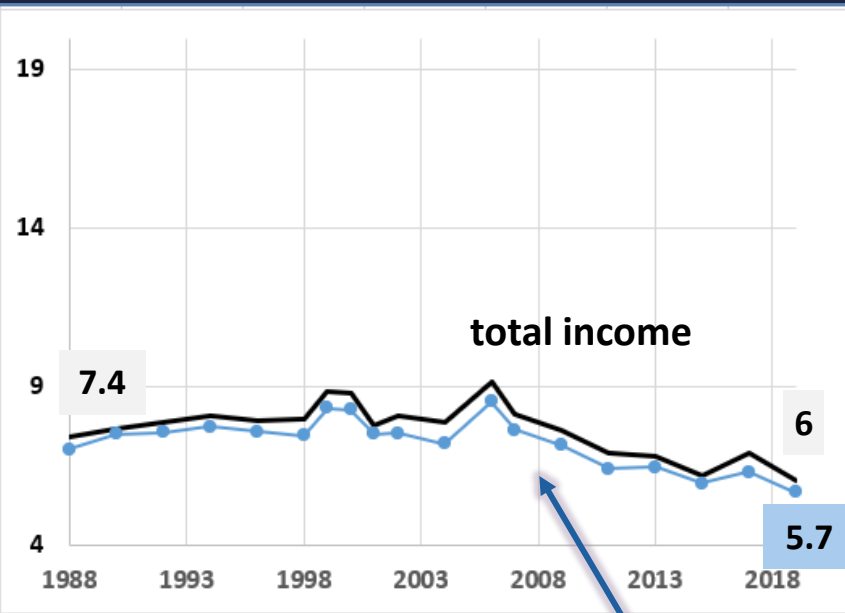
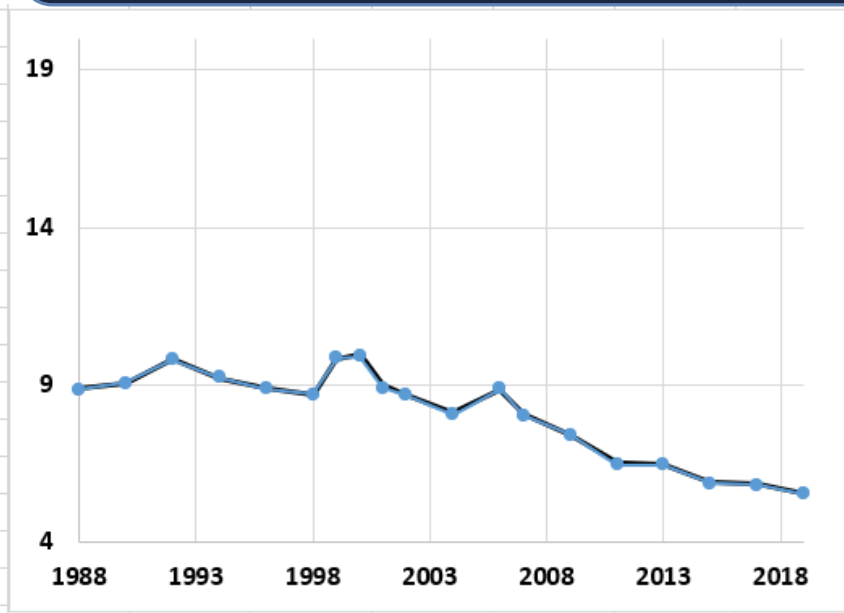
The P90/P10 percentile ratio

Regressive role of current pension system

25-54
prime-age HHs

55-69
transitioning-age HHs

70+
senior HHs



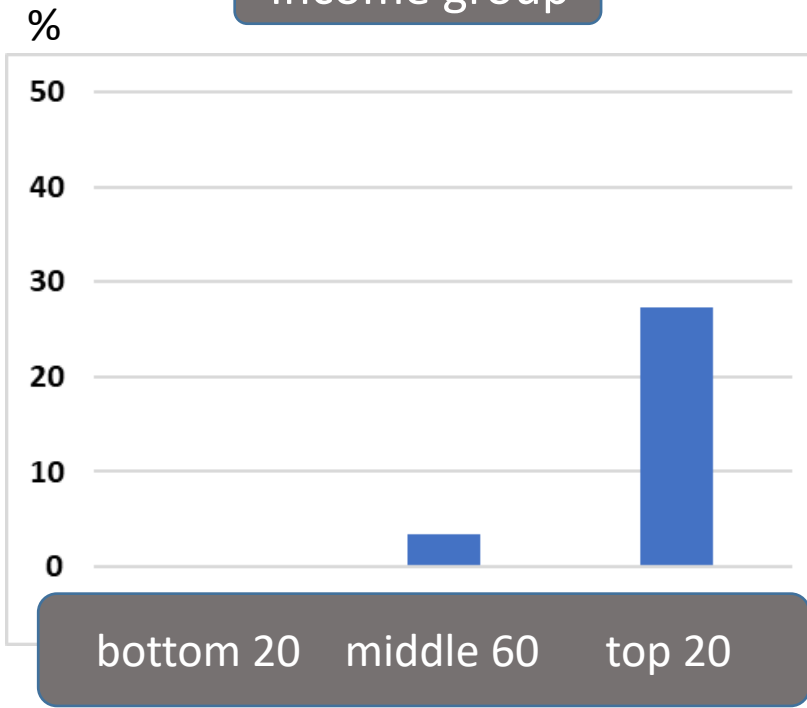
total income - pension

The P90/P10 percentile ratio

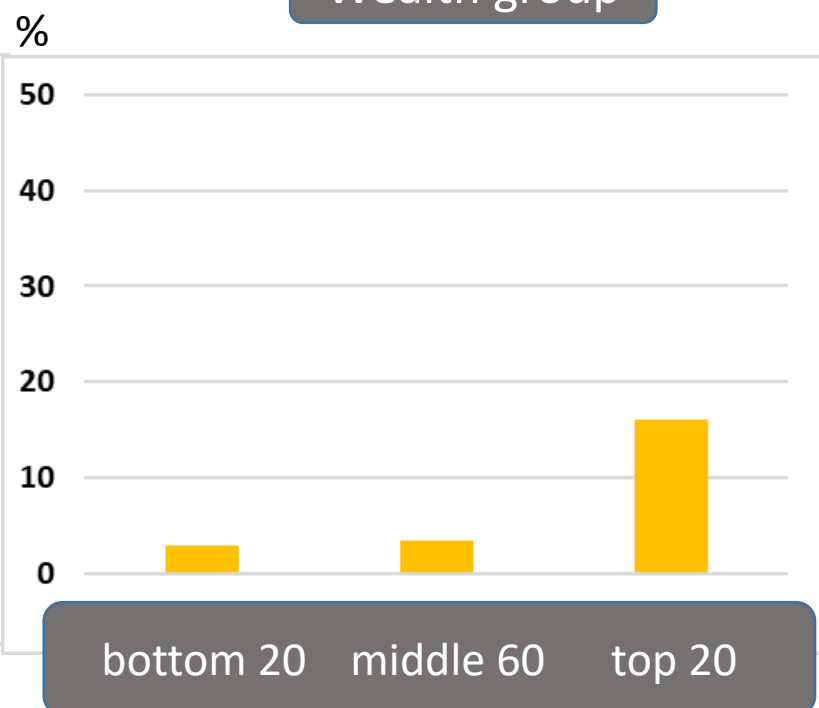
Pension concentrated in rich households

Shares of households 55+ years old with pension

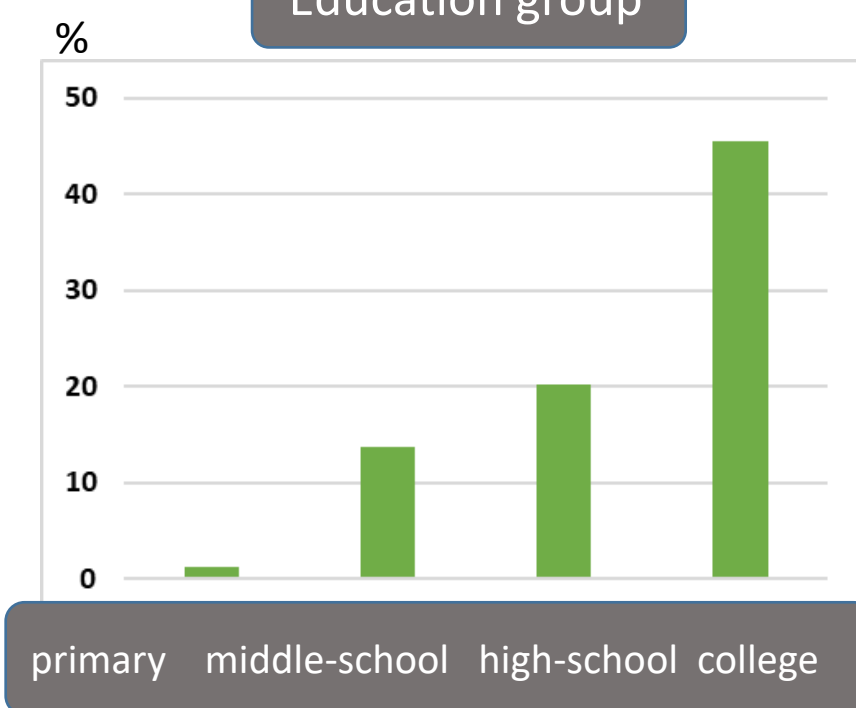
Income group



Wealth group



Education group



Source : SES (household-level) : 2017-2019

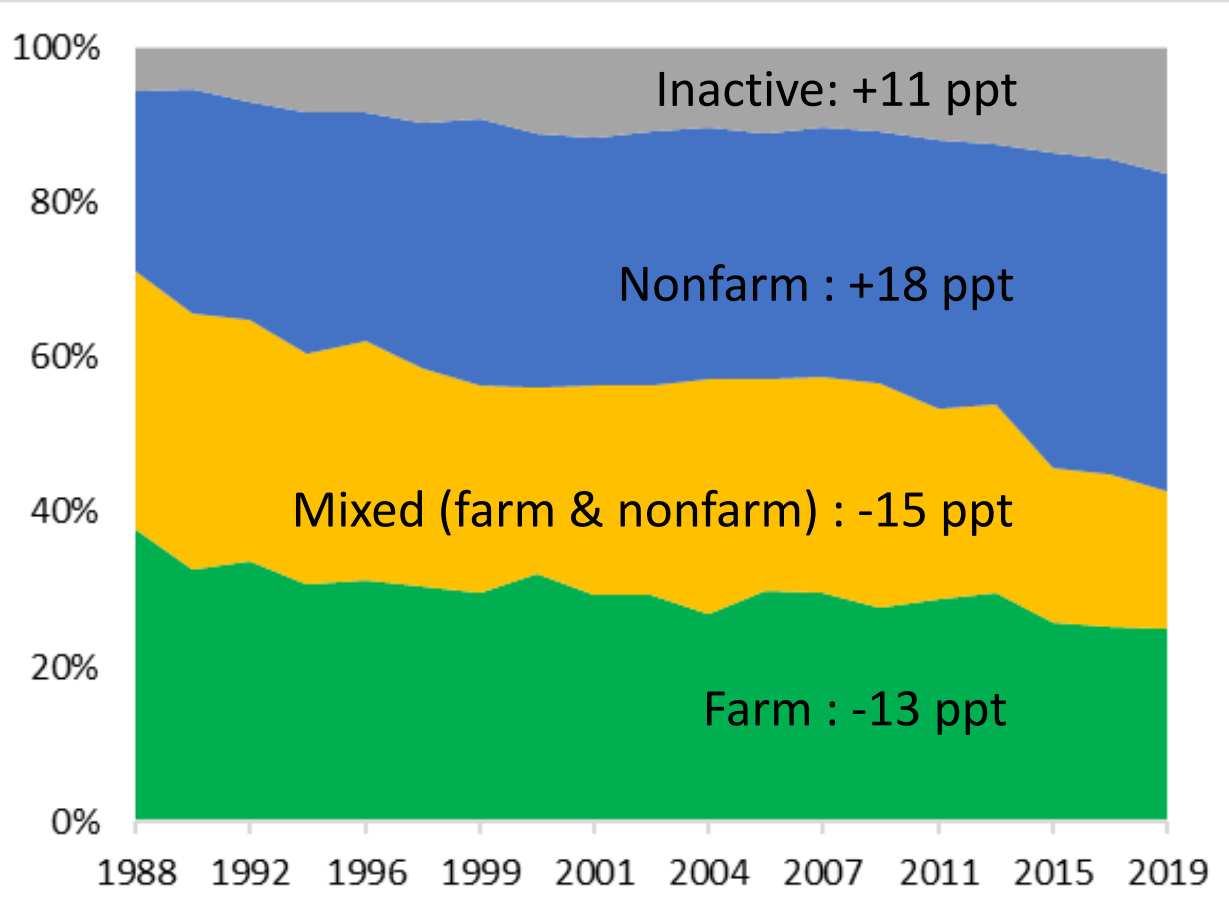
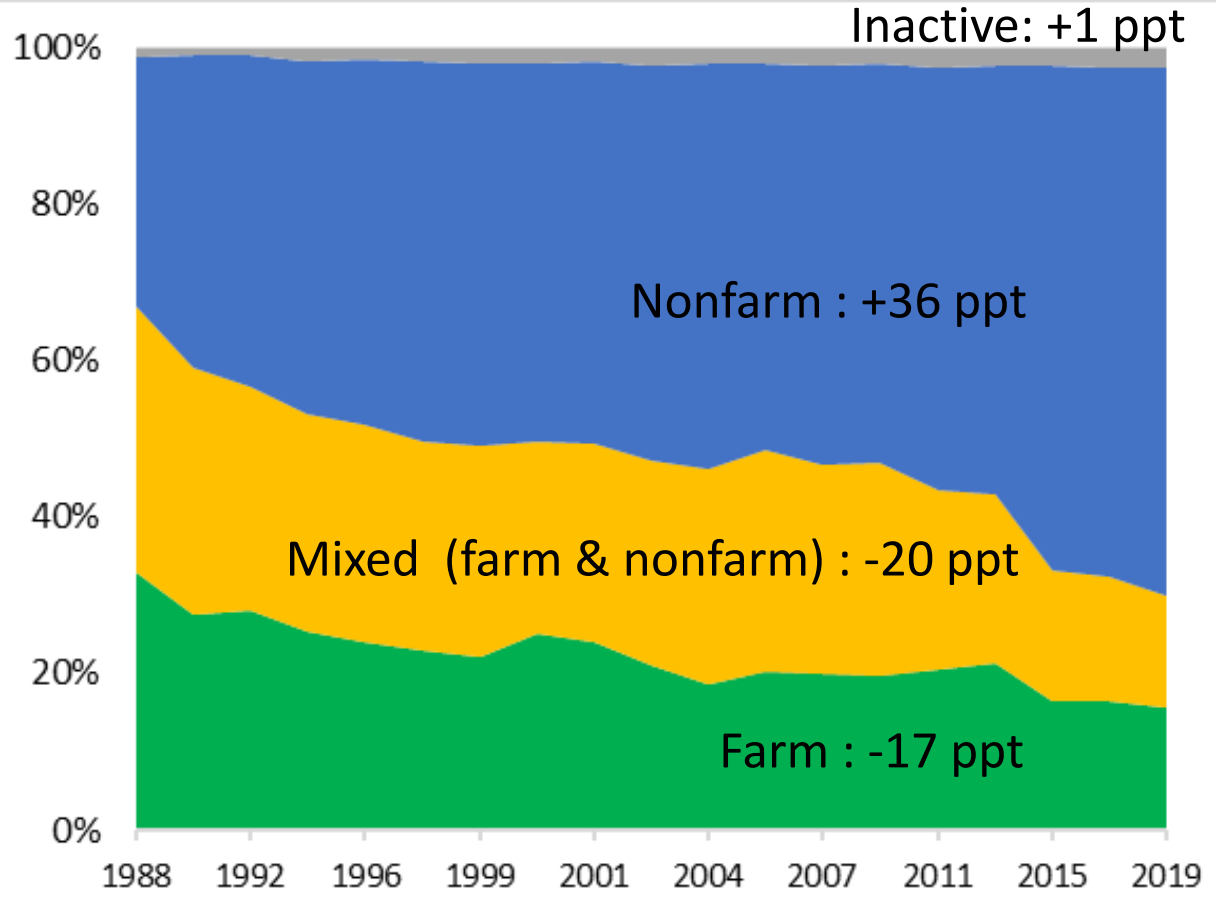
Fact #1 :

Transfer income keeps total income inequality stable for older households.

Sources of household earnings have changed over time

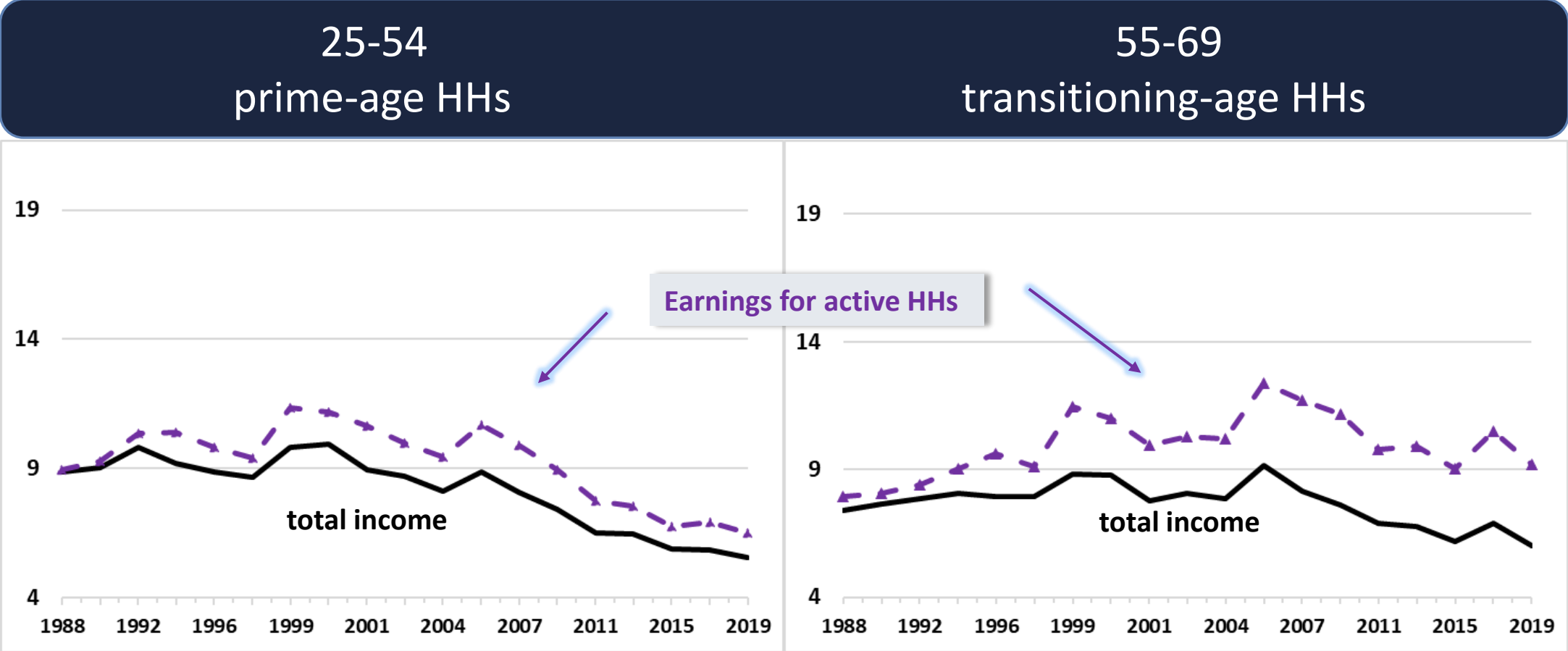
25-54
prime-age HHs

55-69
transitioning-age HHs



Source : SES (household-level)

Earnings inequality

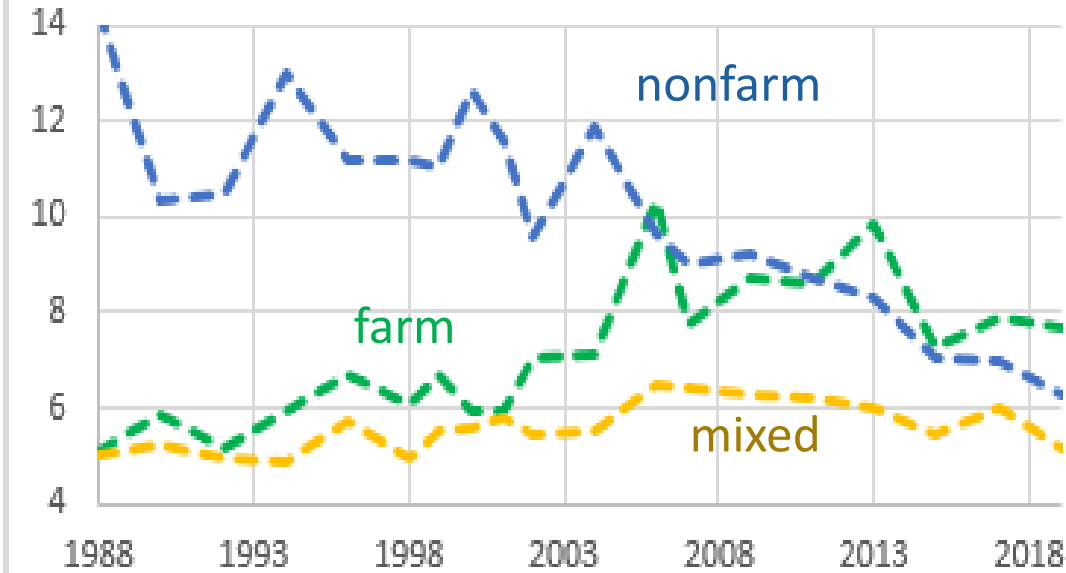
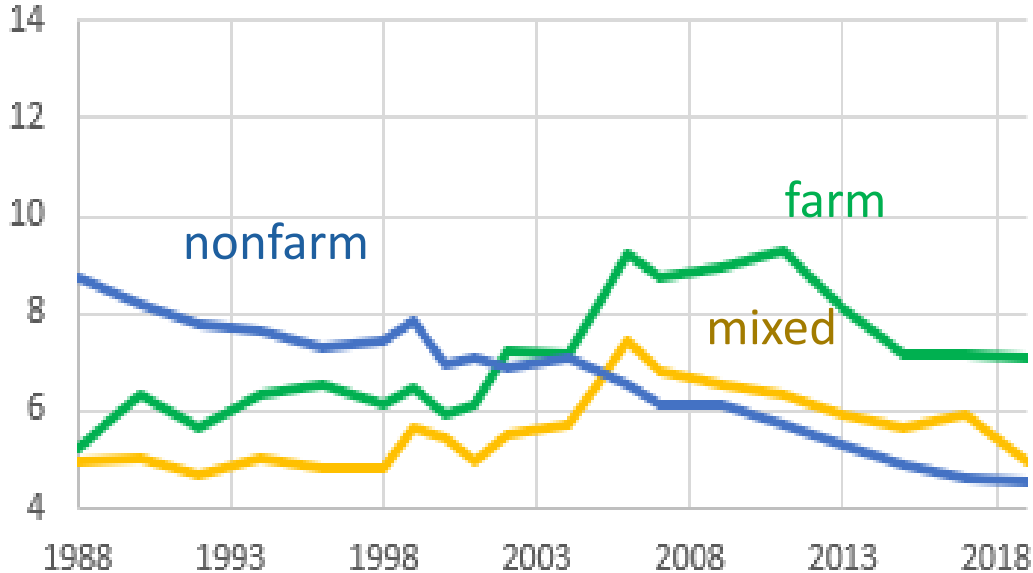


The P90/P10 percentile ratio

Source : SES (household-level)

Inequality increased among farming HHs, but declined among non-farming

25-54 prime-age HHs 55-69 transitioning-age HHs



The P90/P10 percentile ratio

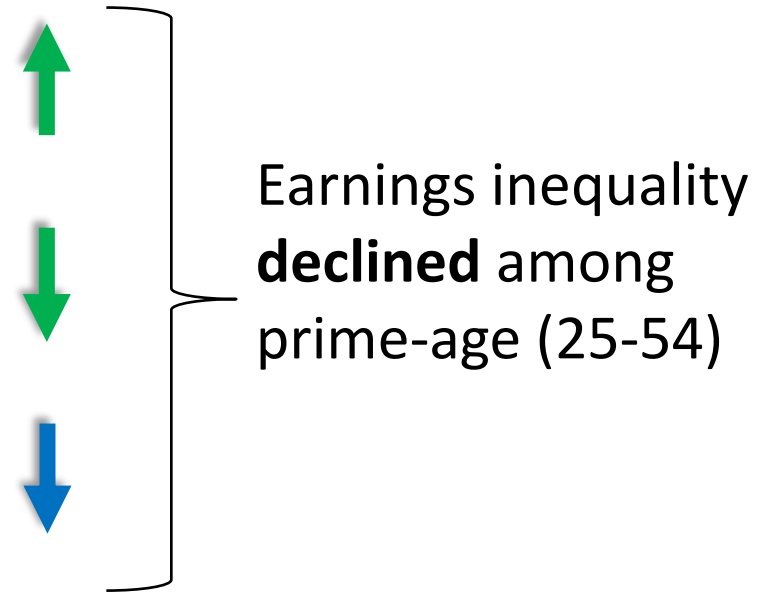
Source : SES (household-level)

Fact #2:

Earnings inequality among farming households:

Share of farming households:

Earnings inequality among non-farming households:

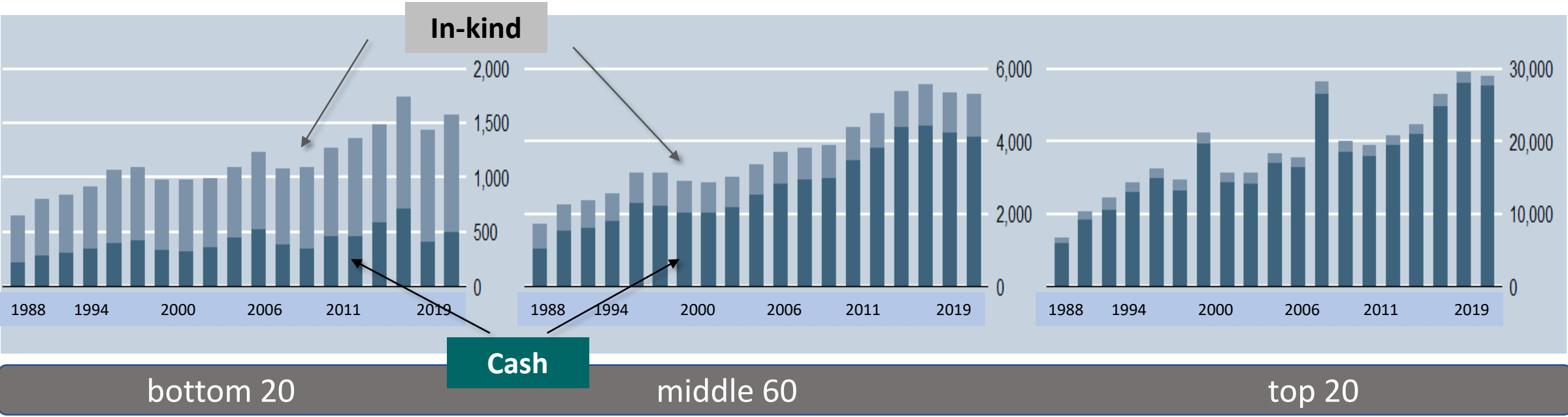


Hidden Fact 1:

Poor farming households :

large share of earnings is in-kind → less liquidity

Earnings component of farming households

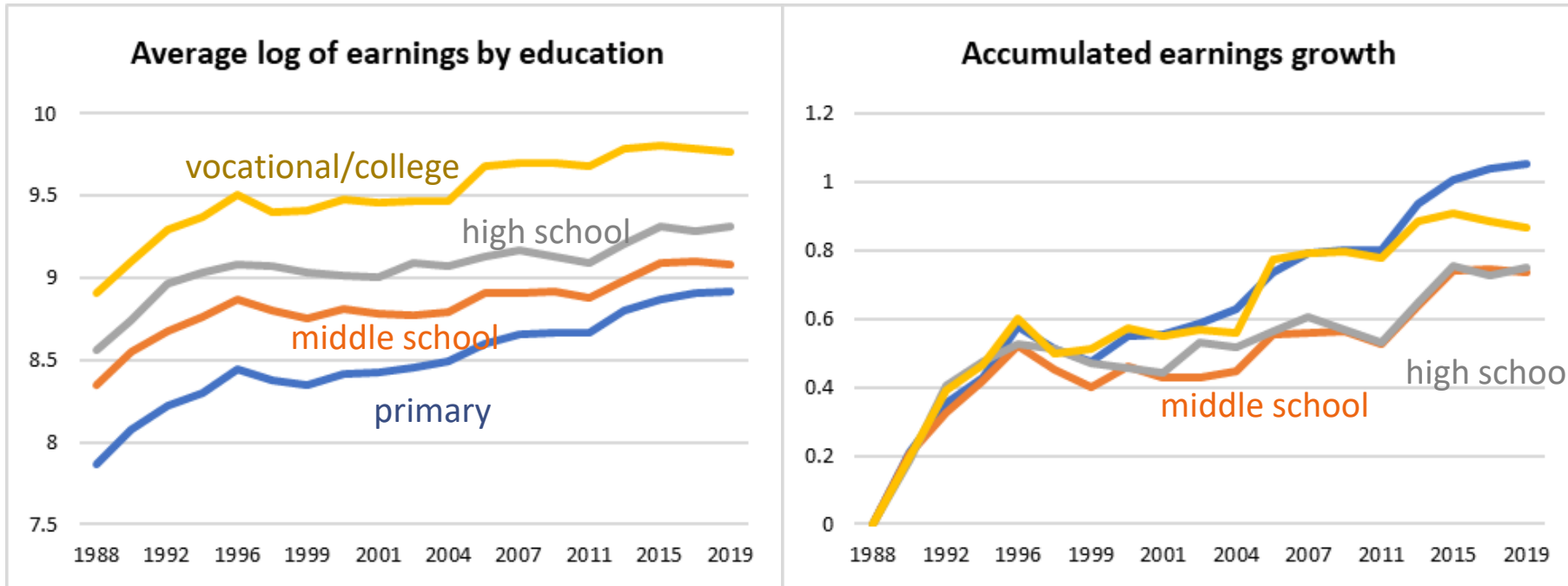


Source : SES (household-level)

Income group

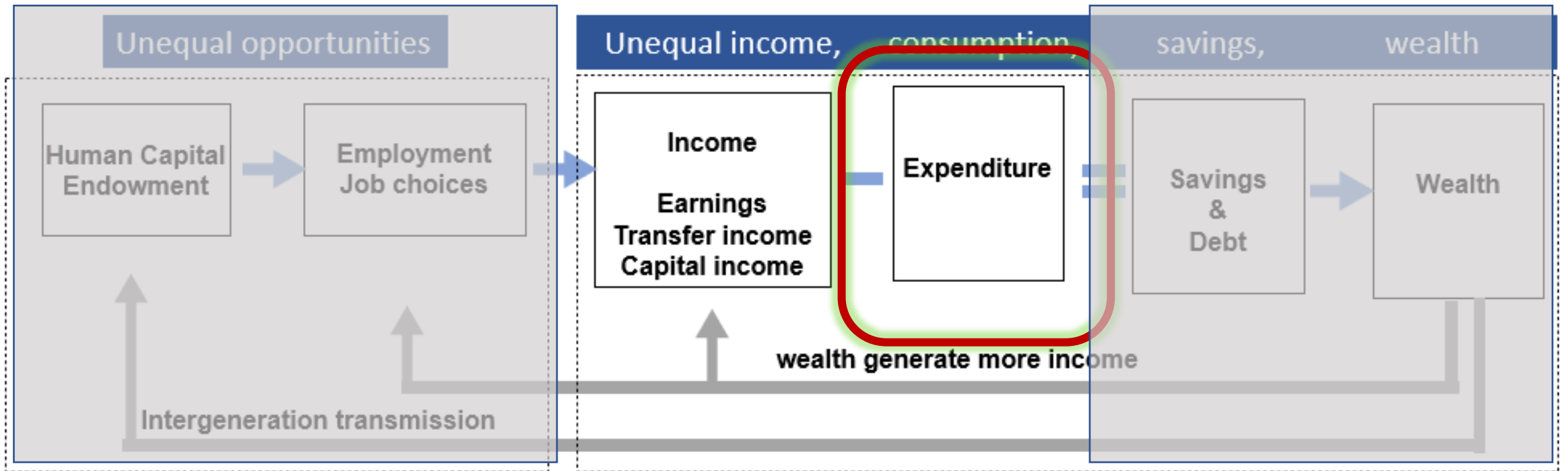
Hidden Fact 2 : Earnings inequality among non-farming declined but slow growth of middle and high school earnings

Non-farming households : age 25-54



change in shares

	1988	2019	Change
Primary	63%	33%	-30
Middle school	11%	17%	+6
High school	9%	28%	+19
Voc./ College	16%	20%	+4



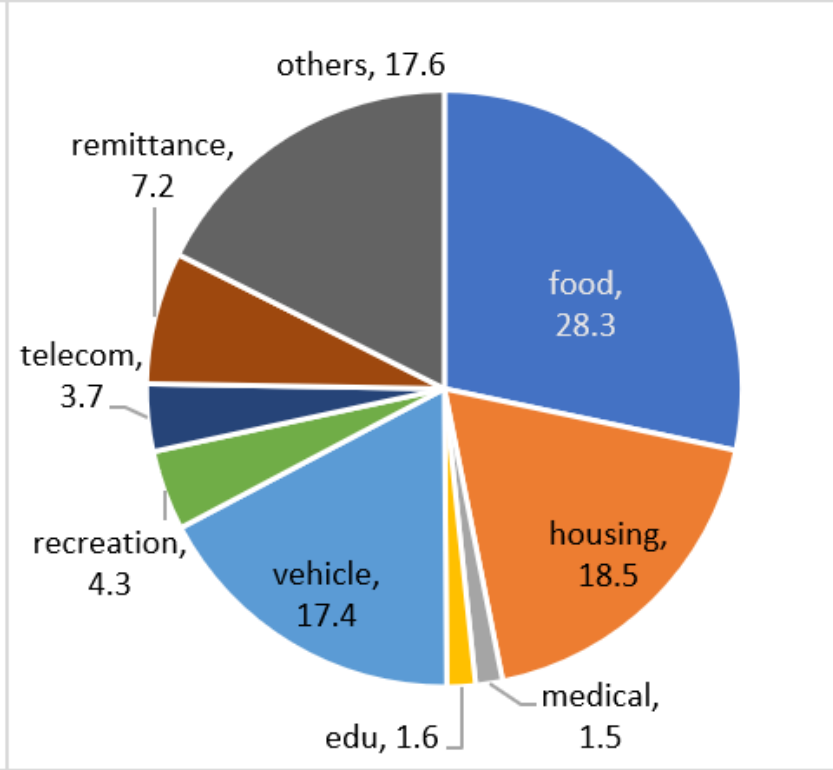
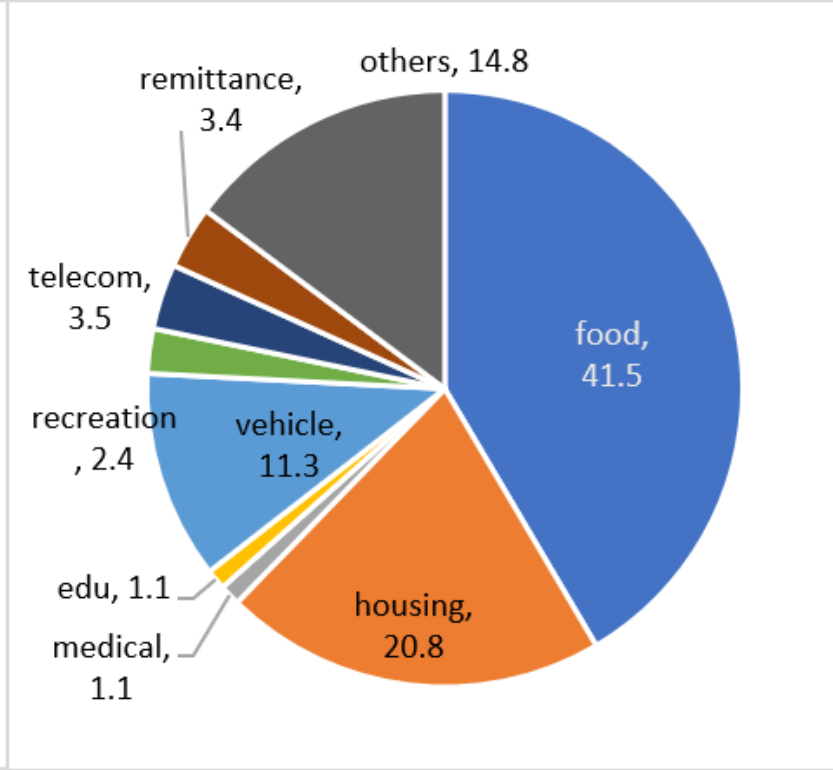
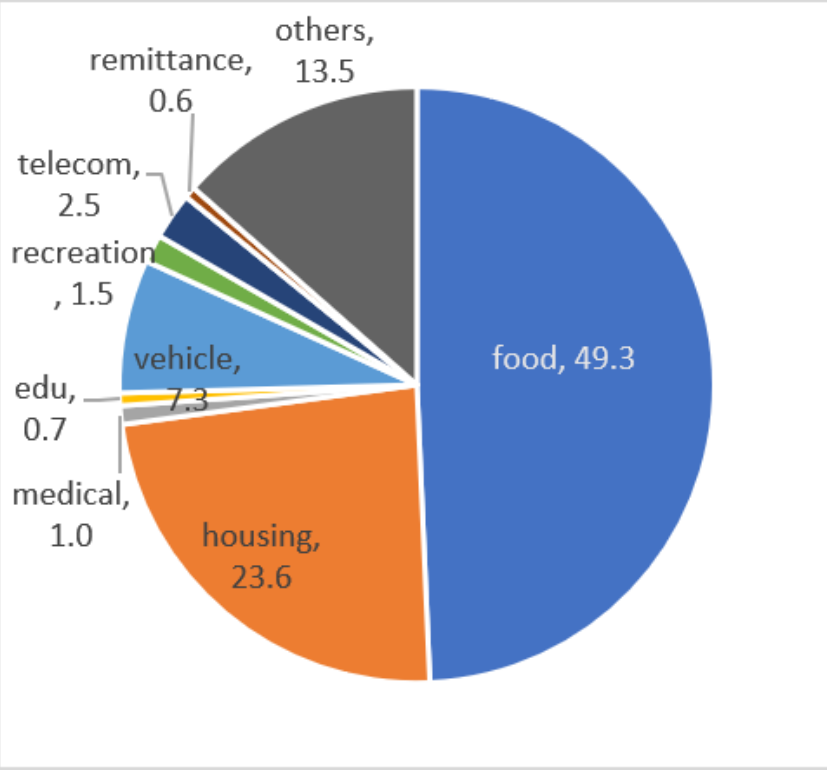
What drive the changes in income & consumption inequalities?

Would the picture change post-Covid 19?

Expenditure components (2017-2019)

Income group

bottom 20 middle 60 top 20



Source : SES (household-level)

Fact 3: the poor less able to absorb shocks

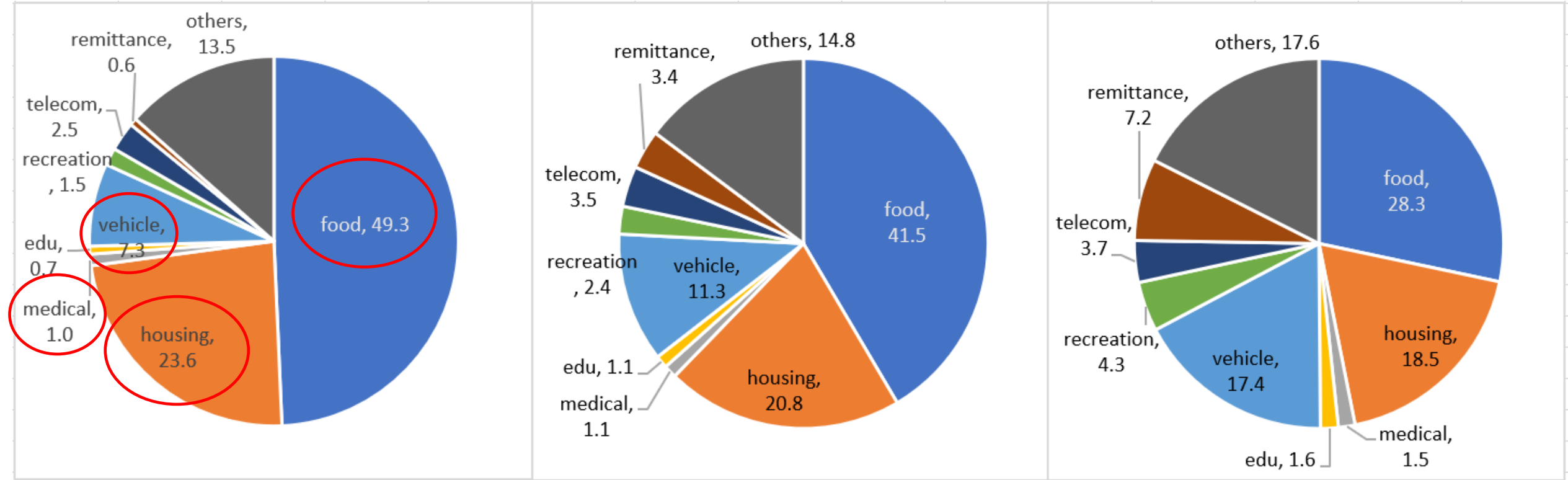
Expenditure components (2017-2019)

Income group

bottom 20

middle 60

top 20



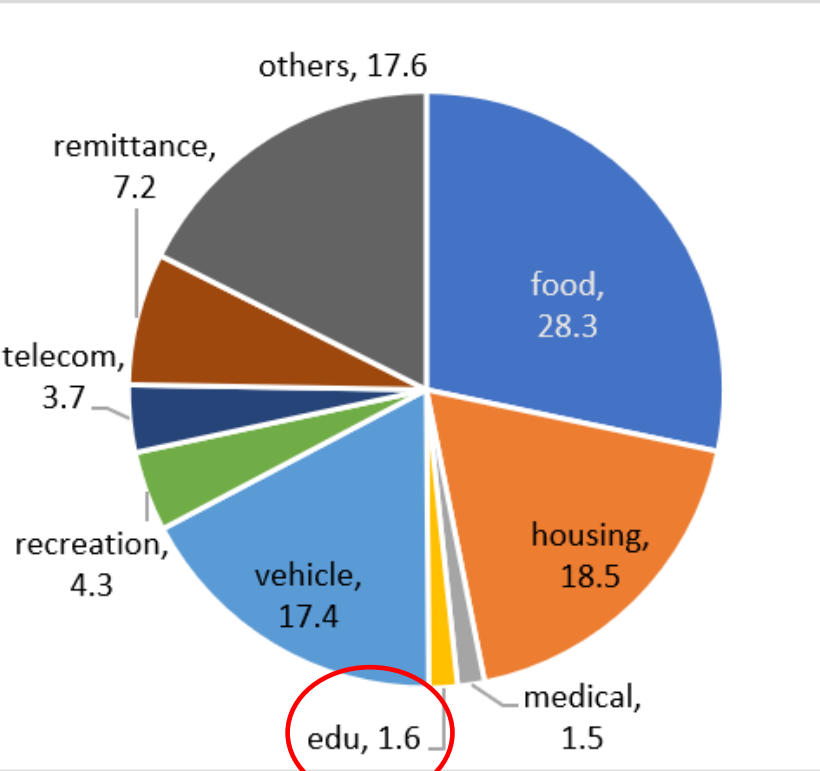
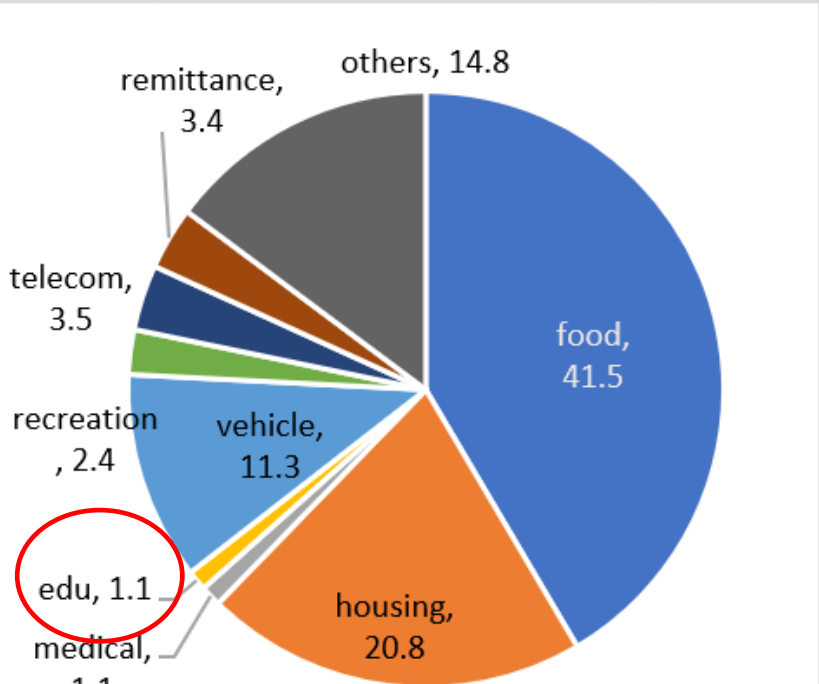
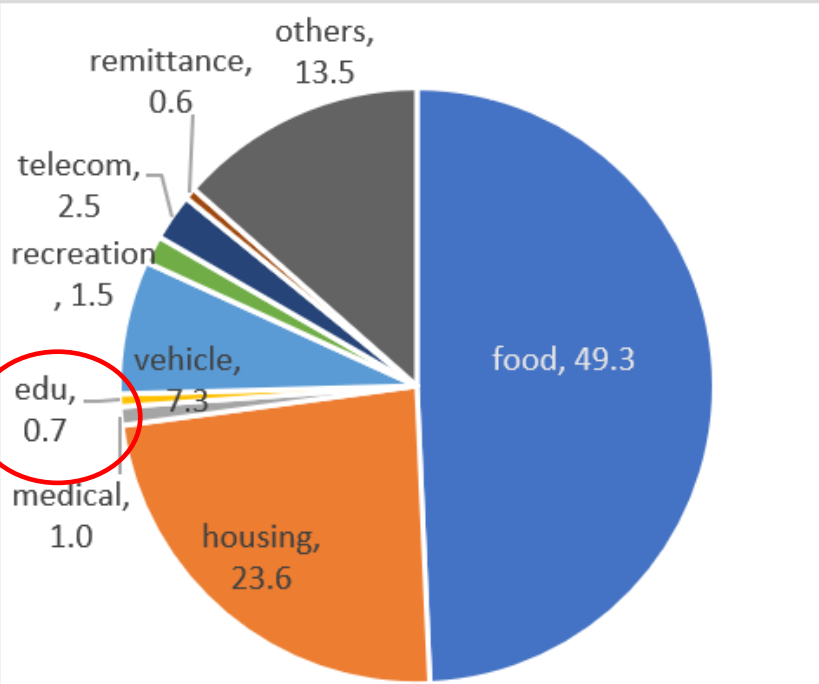
	Bottom 20	Middle 60	Top 20
% essential spending	81%	75%	66%

Low income has low education investment

Expenditure components (2017-2019)

Income group

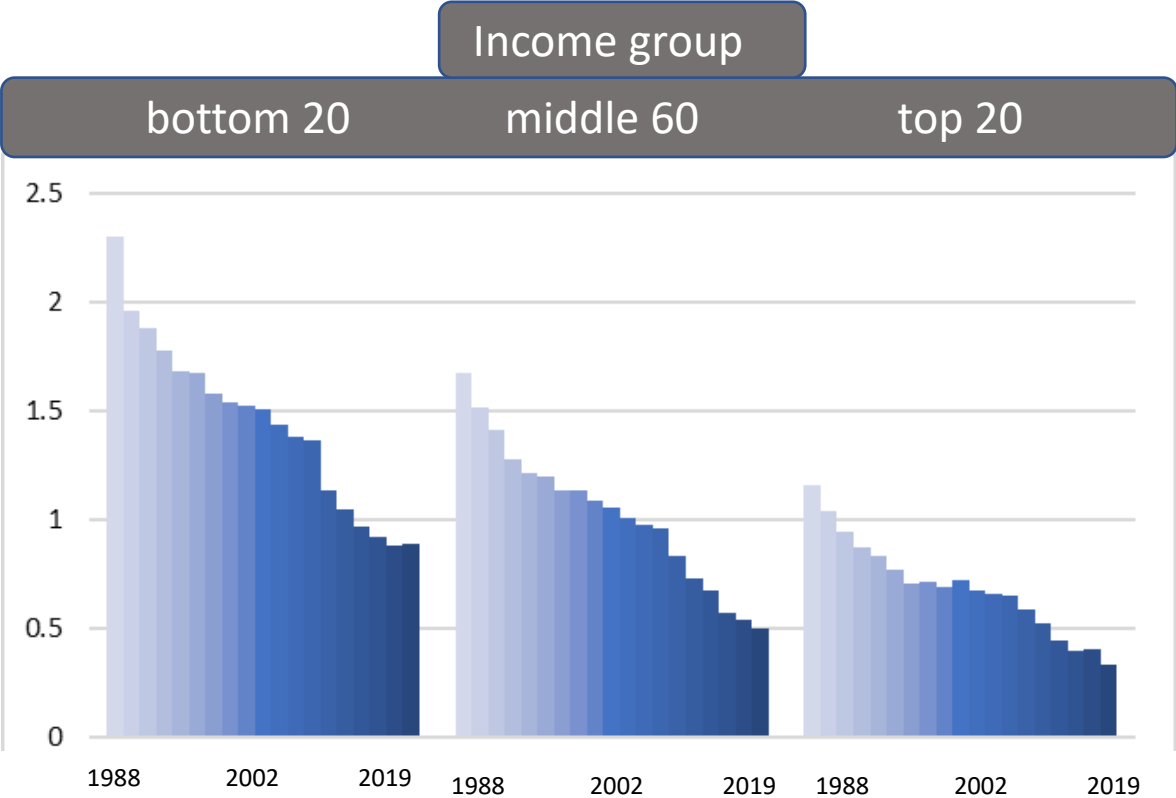
bottom 20 middle 60 top 20



	Bottom 20	Middle 60	Top 20
% education	0.7%	1.1%	1.6%

Poor households have more children, yet spend less

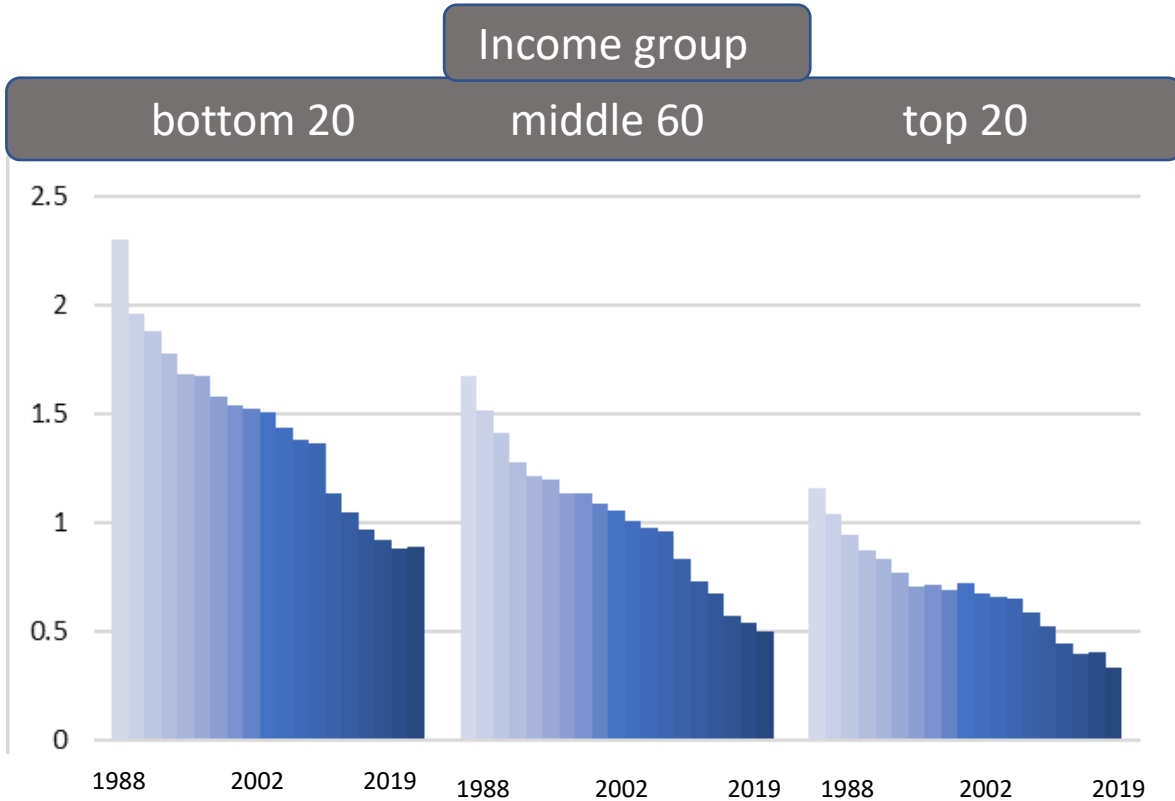
Average number of children age (0-14) per household



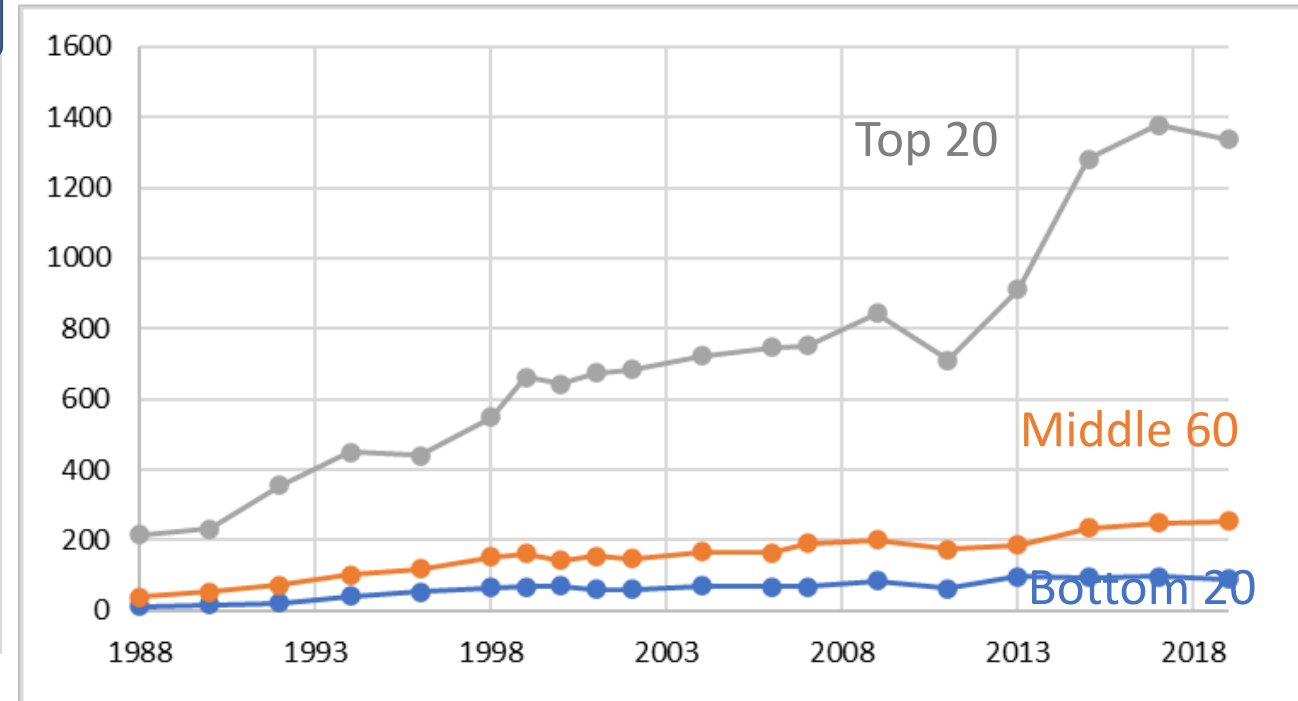
Source : SES (household-level) : head age 25-54 years old

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Average number of children age (0-14) per household



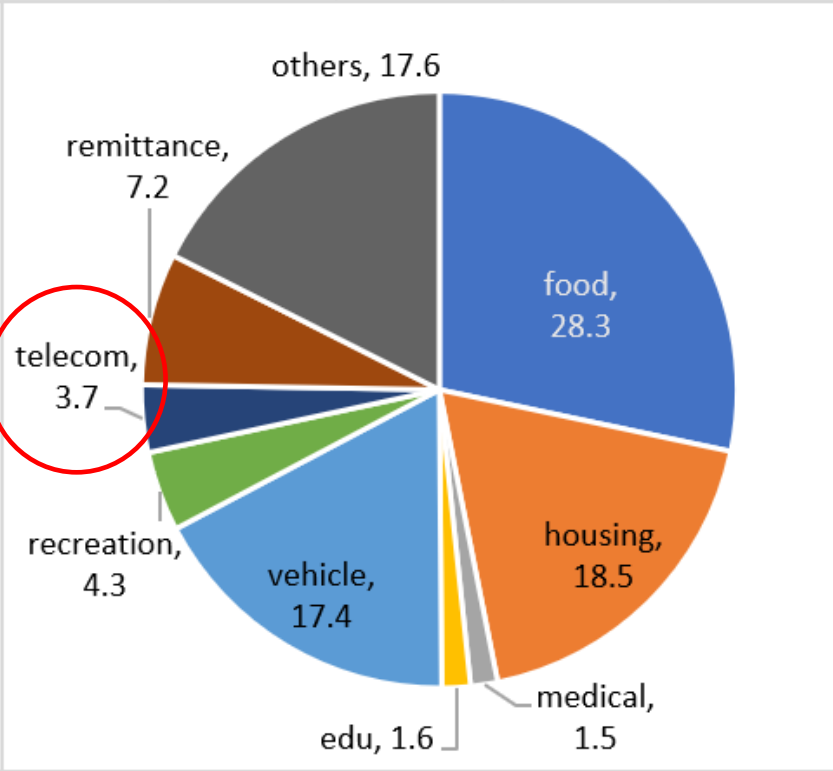
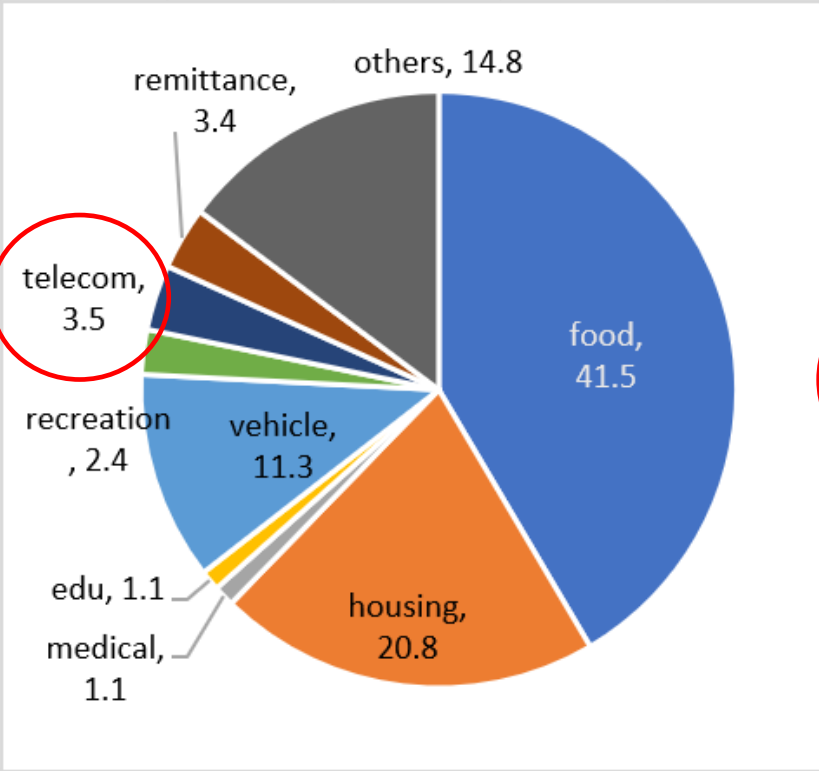
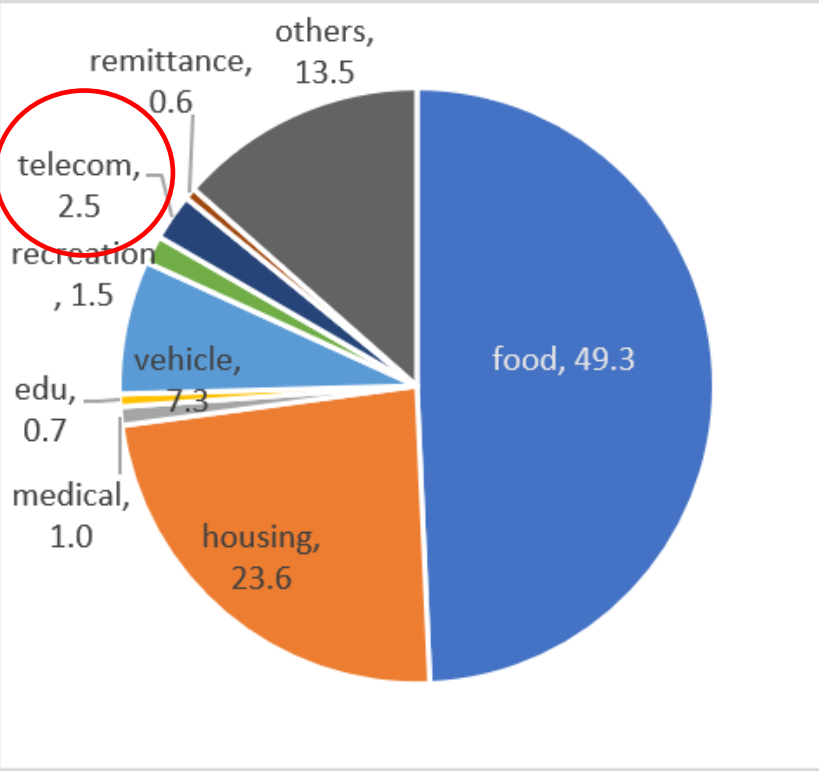
Median education spending per child



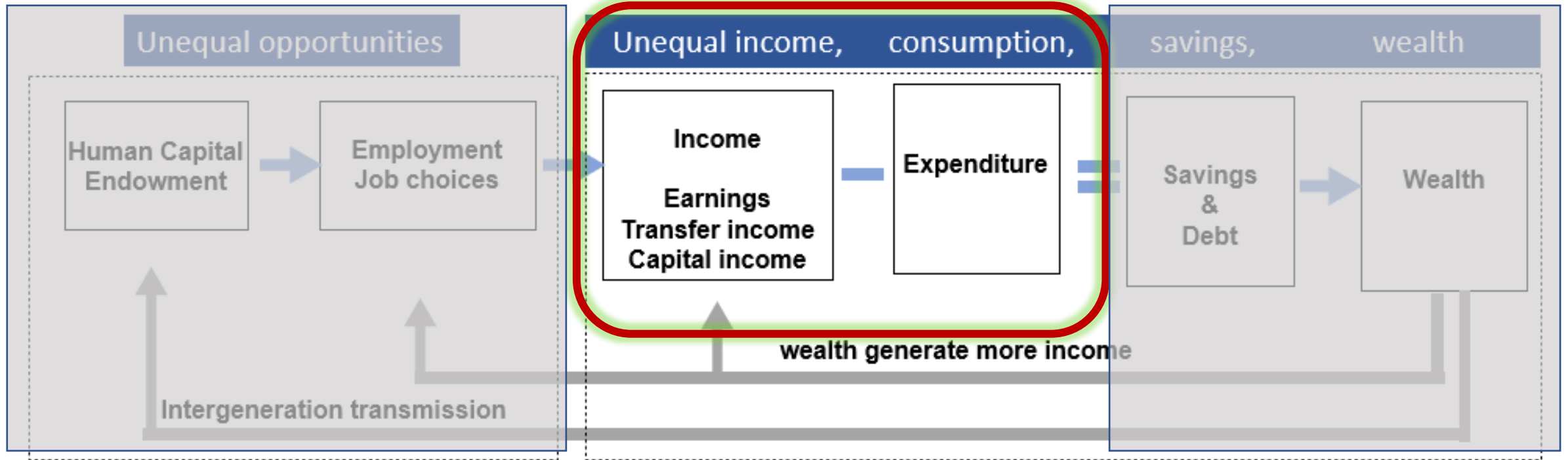
Low income more exposed to covid-19 shocks?

Income group

bottom 20 middle 60 top 20



	Bottom 20	Middle 60	Top 20
% telecom	2.5%	3.5%	3.7%



- What drive the changes in income & consumption inequalities?
- Would the picture change post-Covid 19?**

Employment impact

	2019q1	2019q2	2020q1	2020q2
In labor force:	37,795,296	37,891,141	37,559,172	37,548,286
Employment No.	37,444,158	37,514,203	37,165,400	36,803,120
	99.07%	99.01%	98.95%	98.02%
Employed with zero hours	551,543	428,066	649,137	2,509,266
	1.47%	1.14%	1.75%	6.82%
Average weekly hours (>0)	41.5	43.2	41.1	40.6

- Mild decline in labor force size and employment rate
- **Big jump** in employed with **zero hours**
- **Average weekly hours dropped**

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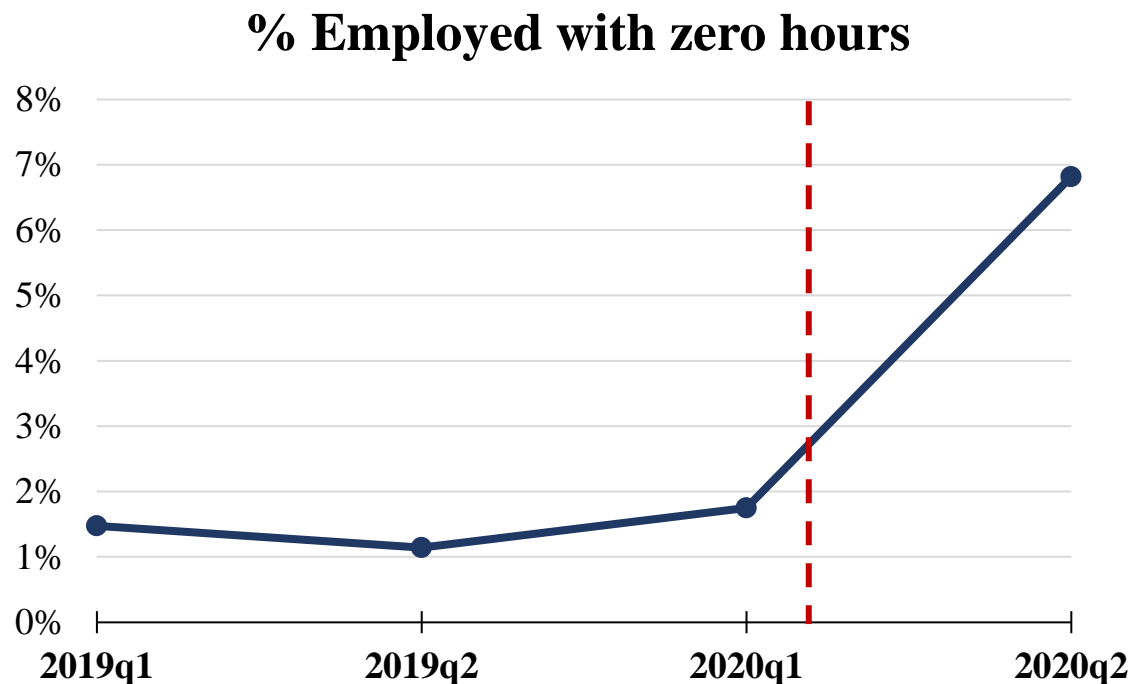
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Measuring the pandemic effect by Difference in Difference (DID)



1. Control for seasonal

$$\left(Y_{2020,Q2} - Y_{2019,Q2} \right)$$

2. Remove macro time trend

$$\left(Y_{2020,Q1} - Y_{2019,Q1} \right)$$

<-----pre-pandemic-----> <-post-pandemic ->

$$\text{Pandemic effect} = \left(Y_{2020,Q2} - Y_{2019,Q2} \right) - \left(Y_{2020,Q1} - Y_{2019,Q1} \right)$$

Pandemic effect

	2019q1	2019q2	2020q1	2020q2	DID
In labor force:	37,795,296	37,891,141	37,559,172	37,548,286	-106,731
Employment No.	37,444,158	37,514,203	37,165,400	36,803,120	-432,325
	99.07%	99.01%	98.95%	98.02%	-0.87%
Employed with zero hours	551,543	428,066	649,137	2,509,266	1,983,606
	1.47%	1.14%	1.75%	6.82%	5.40%
Average weekly hours (>0)	41.5	43.2	41.1	40.6	-2.1

Who are the additional 5.4% employed with zero hours?

Pre-pandemic

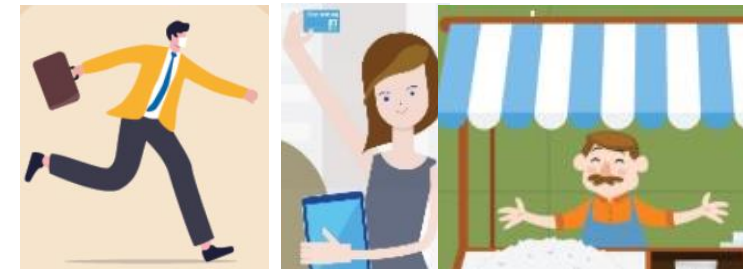
- Over 70% in agriculture
- 70% self-employed
- 50% in Northeast



Seasonal workers

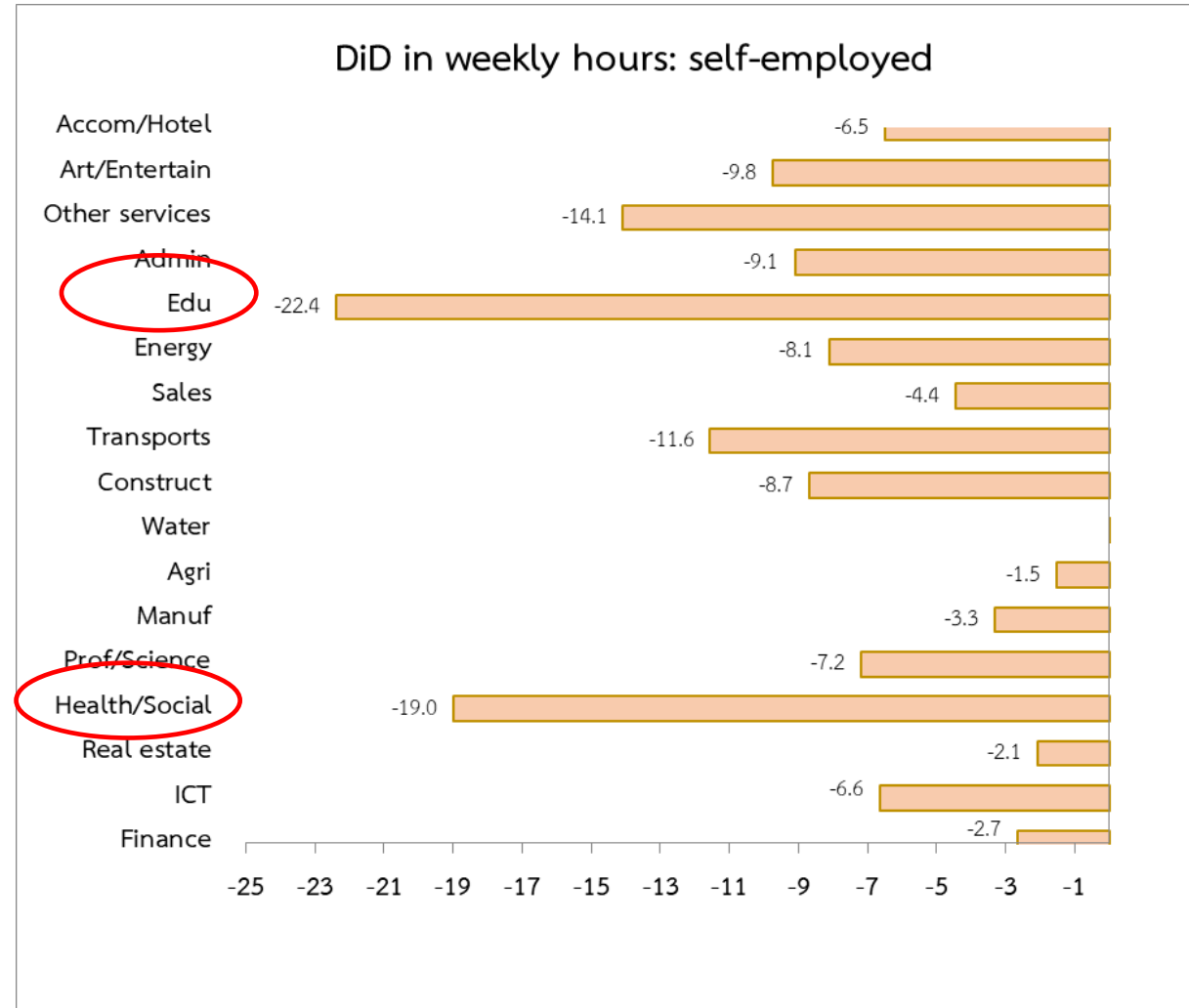
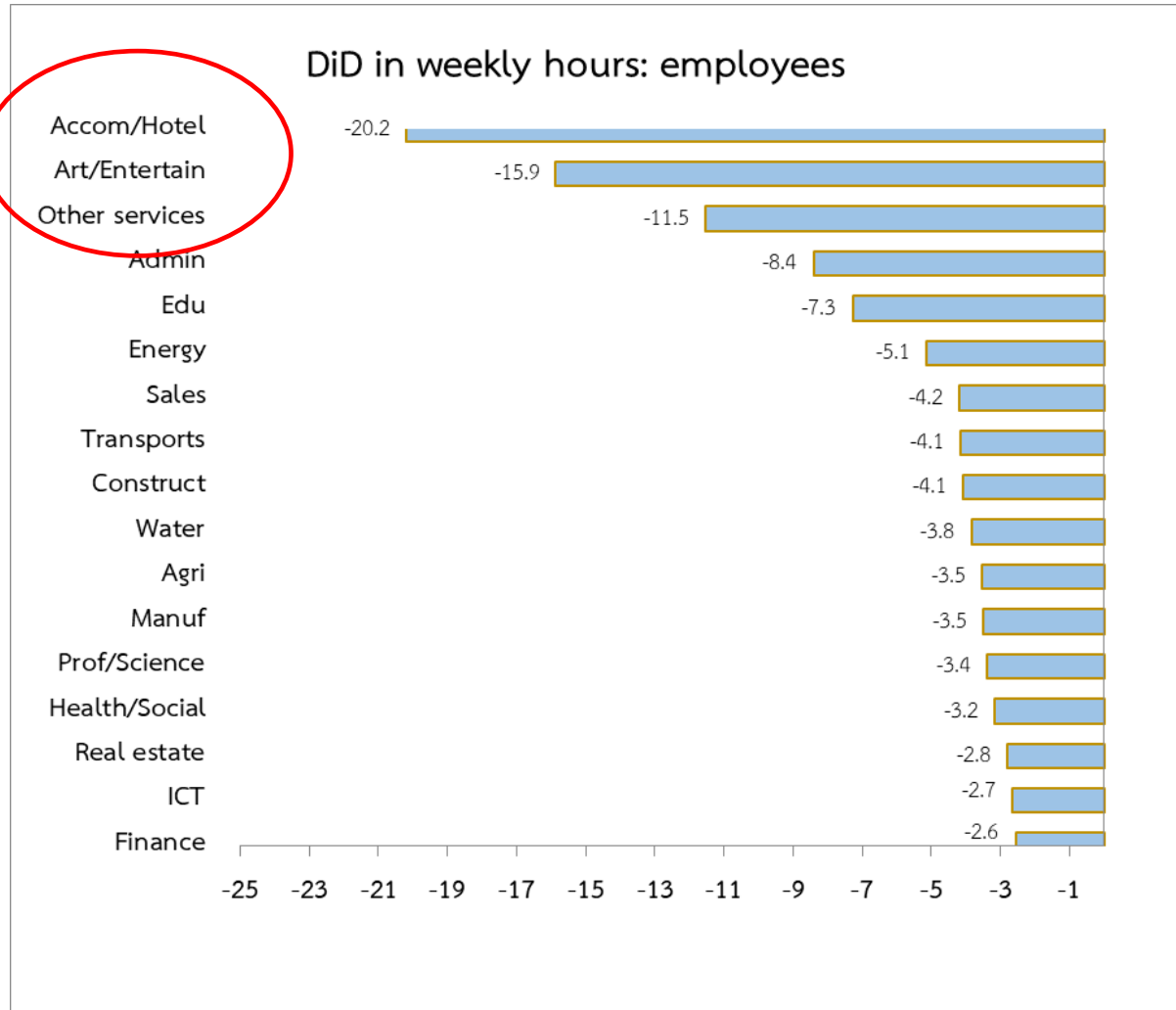
Mid-pandemic

- 30% in sales/services
- 46% are employees
- More in BKK and Phuket



Lockdown workers

Overall weekly hour by industry and work status



Controls: region, occupation, age, education

Overall weekly hour effects by education

	Employee (18.38 mil)	Self-employed (18.37 mil)
Primary	-4.98	-2.92
Middle	-6.25	-4.34
Highschool	-4.60	-4.84
VC/college	-4.16	-5.55

Controls: region, occupation, industry, age

- Similar effects (3-6 hours).
- Most negative effect: middle school employees.

Earnings are observed only for employees

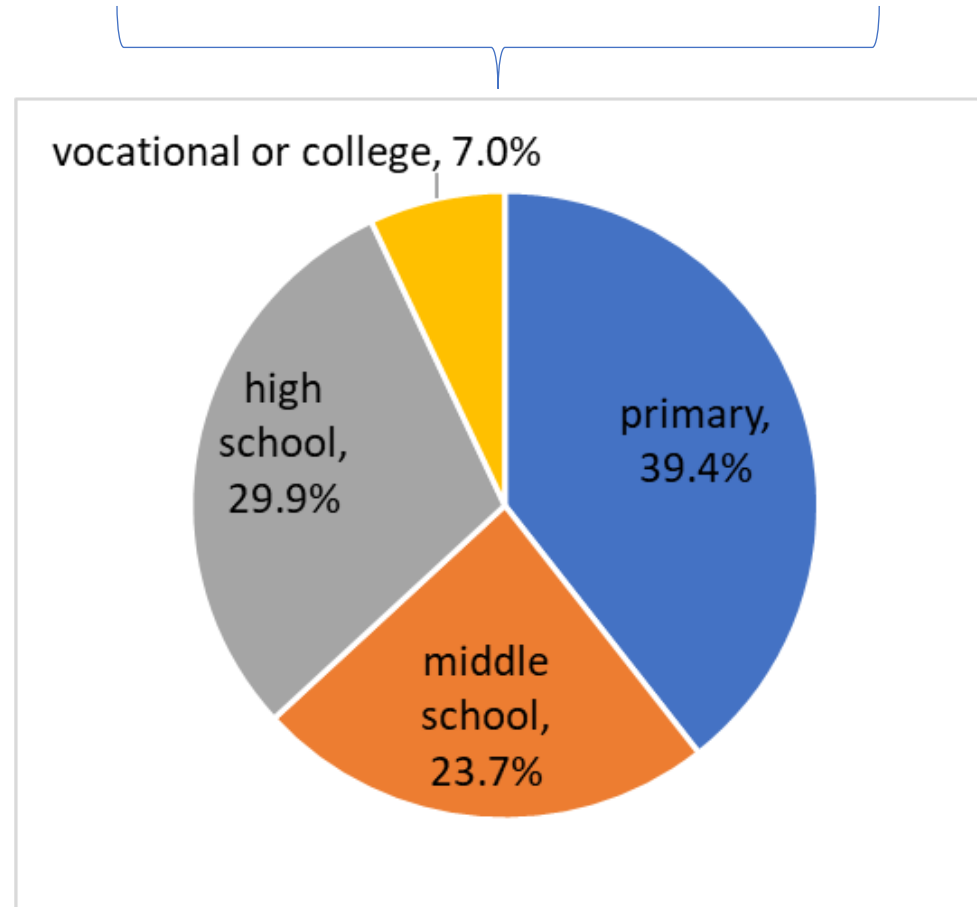
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Controls: region, occupation, industry, age

- Similar effects (3-6 hours).
- Most negative effect: middle school employees.

Earnings are observed only for employees

- Hours reduced but most workers still reported positive earnings.
- Among lockdown workers: 46,000 had zero earnings.



Earnings effects of employees by education

	Monthly (12.3 mil)		Hourly/daily (5.9 mil)	
	Positive hour	Zero hour	Positive hour	Zero hour
Primary	-0.7%	-6.8%	-6.0%	-8.9%
Middle	-0.5%	-6.7%	-0.8%	-3.7%
Highschool	0.0%	-6.1%	-2.3%	-5.1%
VC/college	0.1%	-6.1%	1.2%	-1.6%

- Lockdown workers are more affected
- Particularly the case for primary educated with non-monthly pay

Earnings effects of **employees** by education

	Monthly (12.3 mil)		Hourly/daily (5.9 mil)	
	Positive hour	Zero hour	Positive hour	Zero hour
Primary	-0.7%	-6.8%	-6.0%	-8.9%
Middle	-0.5%	-6.7%	-0.8%	-3.7%
Highschool	0.0%	-6.1%	-2.3%	-5.1%
VC/college	0.1%	-6.1%	1.2%	-1.6%

- Lockdown workers are more affected
- Particularly the case for primary educated with non-monthly pay

Earnings effects of **employees** by education

	Monthly (12.3 mil)		Hourly/daily (5.9 mil)	
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Source : LFS (individual-level) : age 15-54 years old

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- High paid workers not affected
- Earnings inequality among employees slightly increased in the short-run
- U shape or L shape?

Conclusions & Policy implications

Facts on income & consumption inequalities in Thailand

#1 Transfer keeps Inequality stable among older households

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- the left behind poor farmers
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#3 Poor are vulnerable to shock

- unable to adjust consumption
- higher risk of employment loss

Which restructuring do we need?

#1 Transfer keeps Inequality stable among older households

Transfer is uncertain: living longer & fewer children

affected by children's earnings loss

Restructure the system for households to be more self-reliant at old age

- More work opportunities for older workers
- Retirement income policy (sufficient, inclusive, fiscal sustainable)

Which restructuring do we need?

- #2 Aggregate earnings inequality masks hidden problems
 - left behind poor farmers
 - stagnant earnings of high school graduates

Productivity problem

Re-investigate lessons from the past & start experimental mind-set

- Village fund (Kabowski & Townsend, 2011)
- Farmers & technology (Chantararat et al., 2019)
- Education system (Kilenthong, 2017)

Which restructuring do we need?

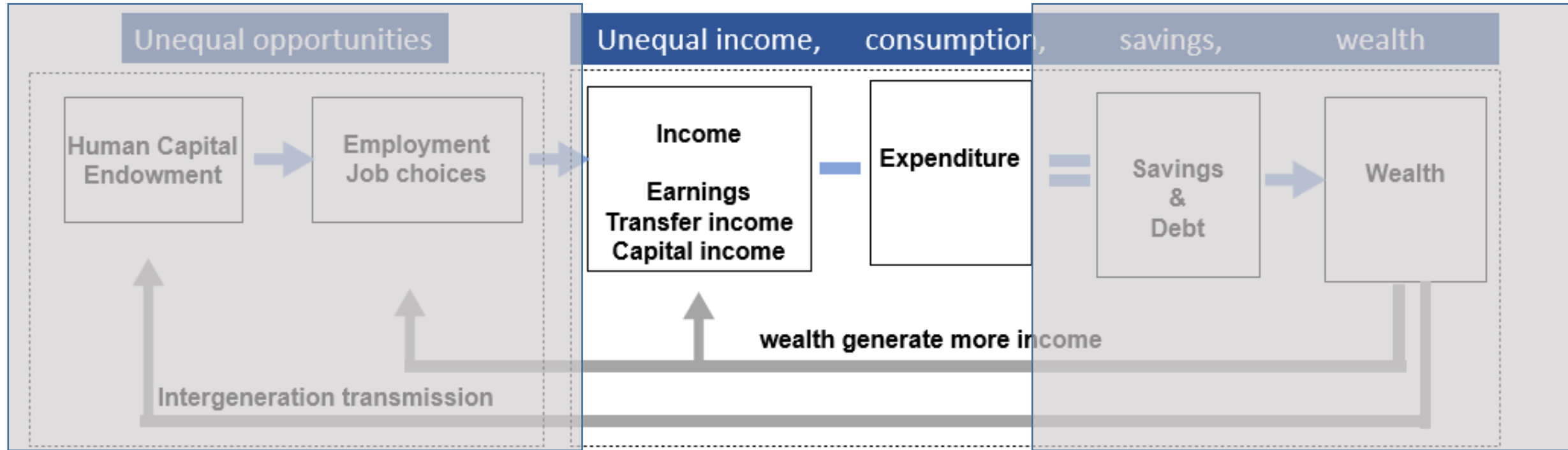
#3 Poor are vulnerable to shock

- unable to adjust consumption
- higher risk of employment loss

Data revolution (safety net for all requires all in the system)

- Normal time : welfare & taxes ; updated information
- Crisis time : timely response, accurate, no exclusion error

Focusing on reducing income & consumption inequalities alone is insufficient



Work opportunities for all ages

Public transfer

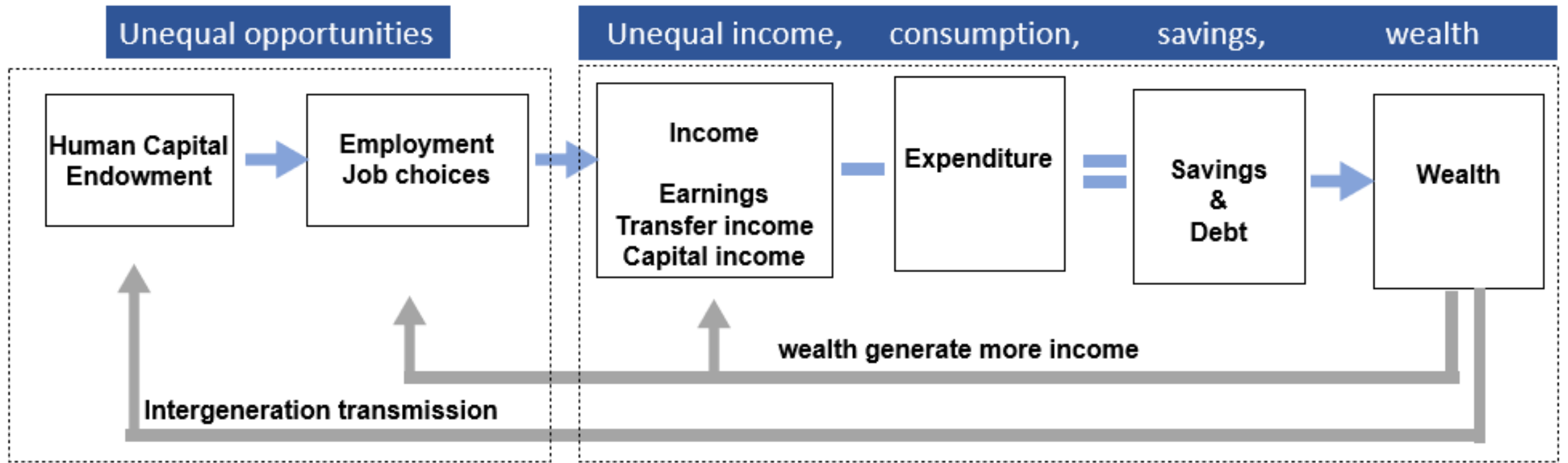
Matched savings

Improve productivity via technology

Safety net

Pension reform

Focusing on reducing income & consumption inequalities alone is insufficient



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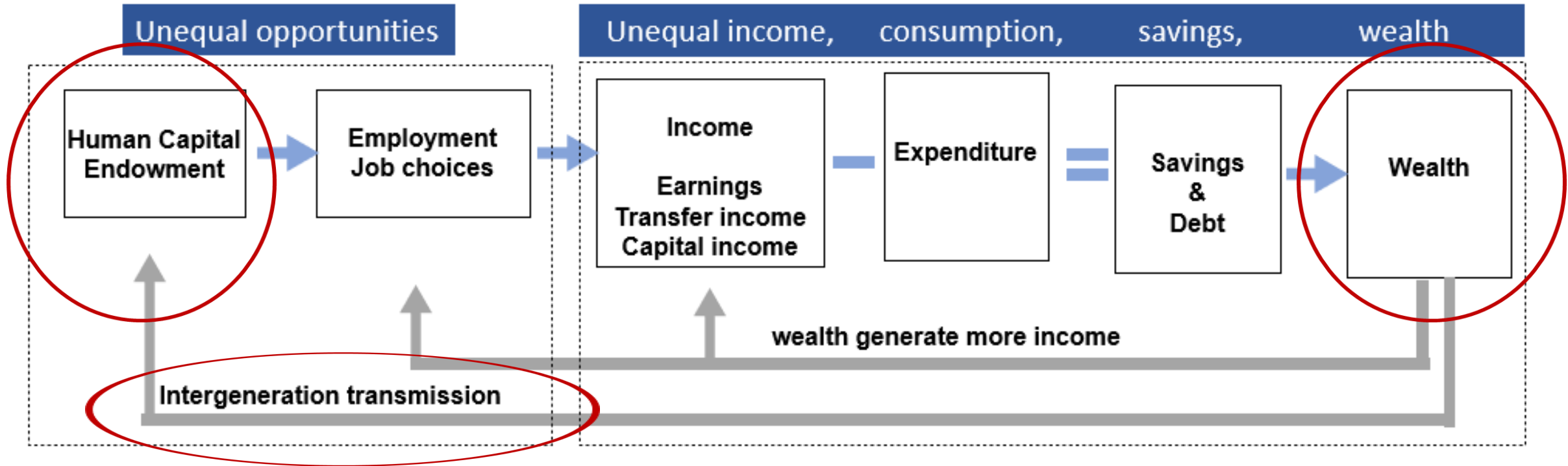
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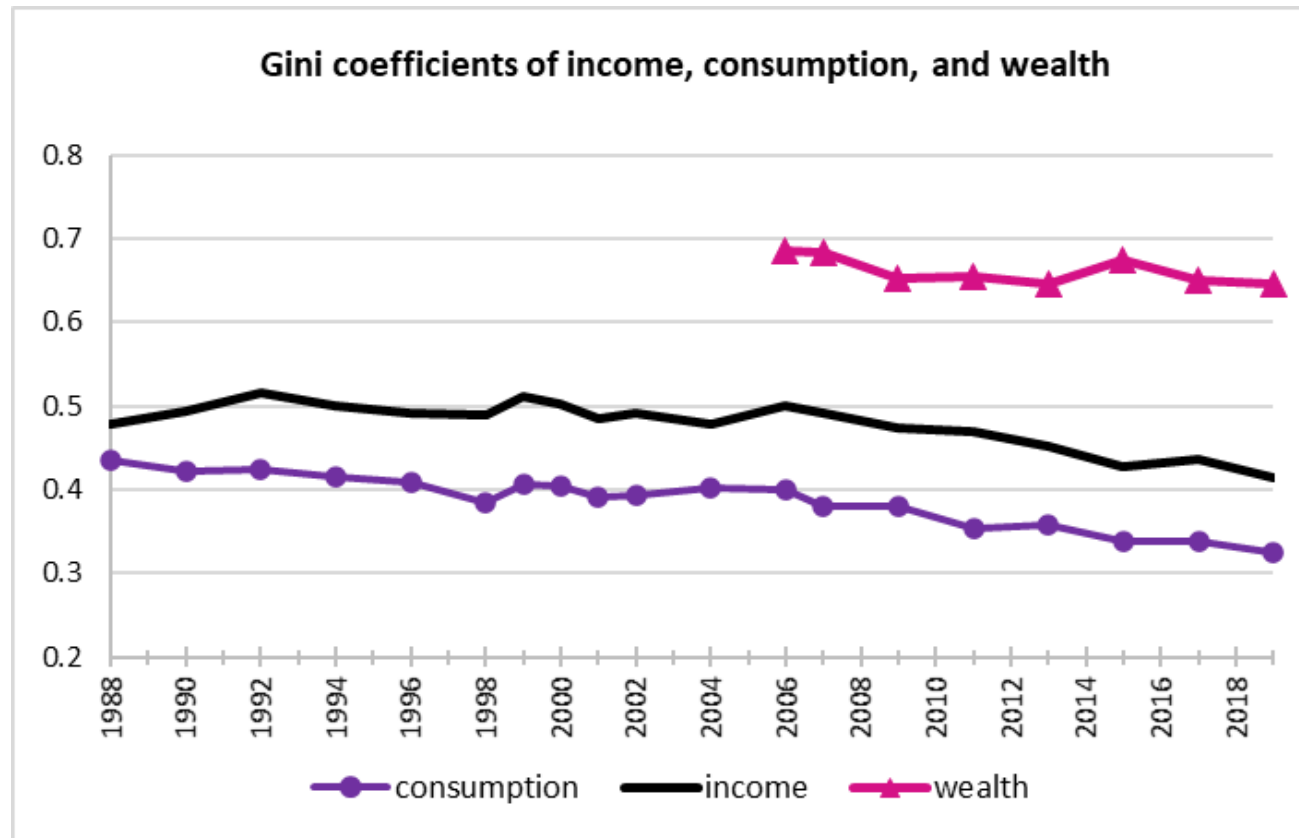
Pension reform

To reduce intergeneration transmission, more interventions are needed.



- | | | | | |
|--------------------|-------------------------------------|-----------------|-----------------|-----------------|
| Quality education | Work opportunities for all ages | Public transfer | Matched savings | Wealth tax |
| Quality healthcare | Improve productivity via technology | Safety net | Pension reform | Inheritance tax |

Thailand's wealth inequality is starkly larger than income inequality (even among the bottom 99%)



Wealth

Income

Consumption

**Tackling inequalities is never easy.
The longer we wait, the more we pay.**

