Wealth Distribution and Central Banks

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Outline

- Wealth (and inequality): a fashionable topic, nowadays
- Central banks and the collection of wealth data
- Wealth growing importance
- Income and wealth
- Inequality and growth
- Distributive effects of monetary policies
- Concluding remarks

The central question: why should central banks care about wealth distribution?

Wealth (and inequality):
a fashionable topic, nowadays

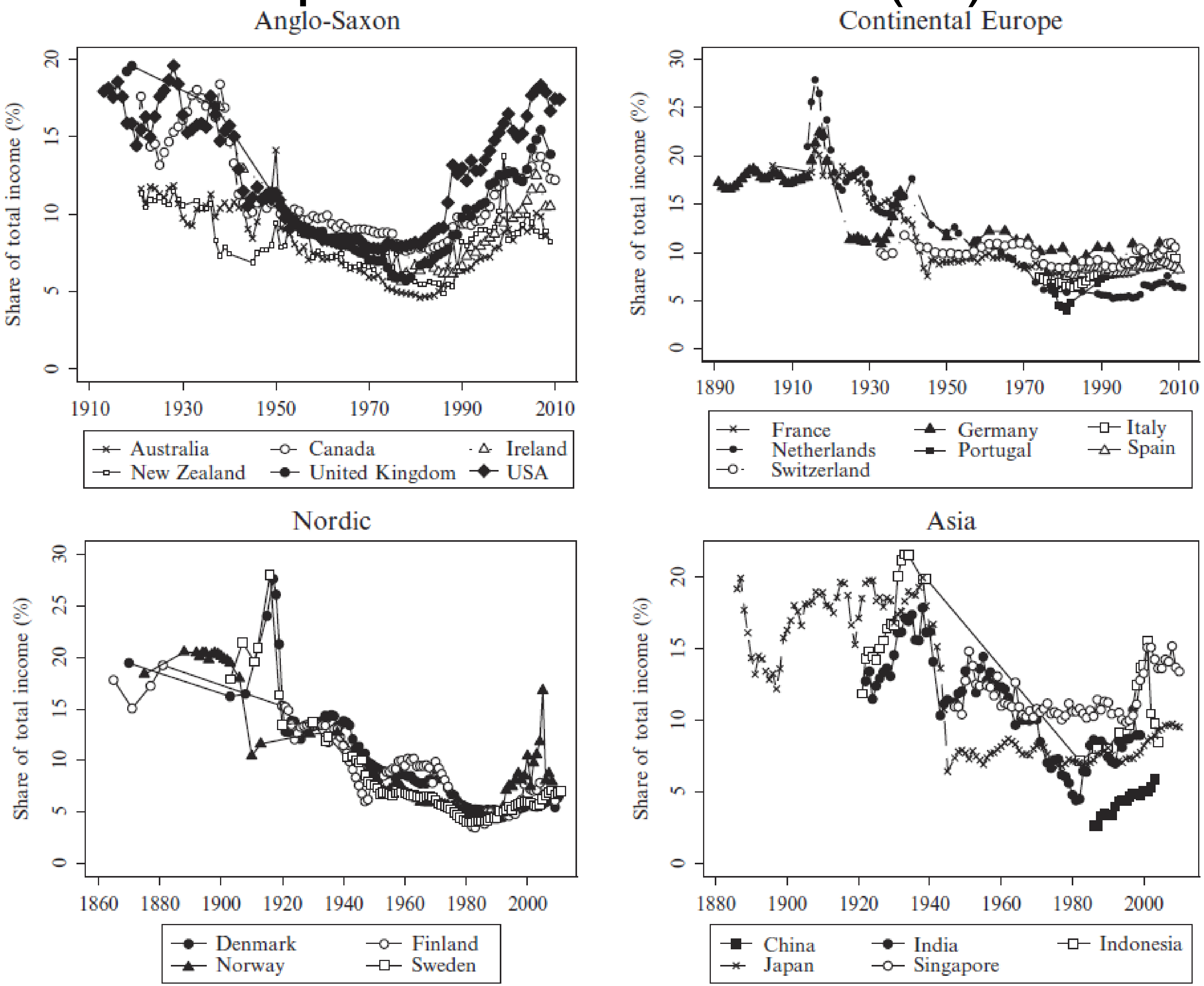
CAPITAL

in the Twenty-First Century

THOMAS PIKETTY

TRANSLATED BY ARTHUR GOLDHAMMER

Top 1% income share (%)



Source: Roine and Waldenström, Handbook of Income Distribution, Vol. 2A.

A worldwide public concern

- Anand & Segal 2015

  Interest in global inequality reaches far beyond academia and has increased dramatically in recent years—among activists and NGOs, the news media, and national and international institutions and policymakers.

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Tondo slum in Manila, Philippines, 2014. Photo: Dewald Brand, Miran for Oxfam

AN ECONOMY FOR THE 1%

How privilege and power in the economy drive extreme inequality and how this can be stopped

The global inequality crisis is reaching new extremes. The richest 1% now have more wealth than the rest of the world combined. Power and privilege is being used to skew the economic system to increase the gap between the richest and the rest. A global network of tax havens further enables the richest individuals to hide $7.6 trillion. The fight against poverty will not be won until the inequality crisis is tackled.

www.oxfam.org OXFAM

In 2015, just 62 individuals had the same wealth as 3.6 billion people – the bottom half of humanity.

Central banks and
the collection of wealth data

Central banks and wealth data

- Long-standing concern for **aggregate financial accounts**
- Early 1960s: **US Board of Governors**
  - Survey of Financial Characteristics of Consumers (1963), Survey of Changes in Family Finances (1964)
  - Precursors of Survey of Consumer Finances, run every three years since 1983
- Early 1960s: **Bank of Italy**
  - Survey of Household Income and Wealth (1965), still running

    Economic behaviours "… originate in significant part from the structural characteristics and distribution of income, the propensity to consume and save, the nature and concentration of wealth".

Central banks and wealth data

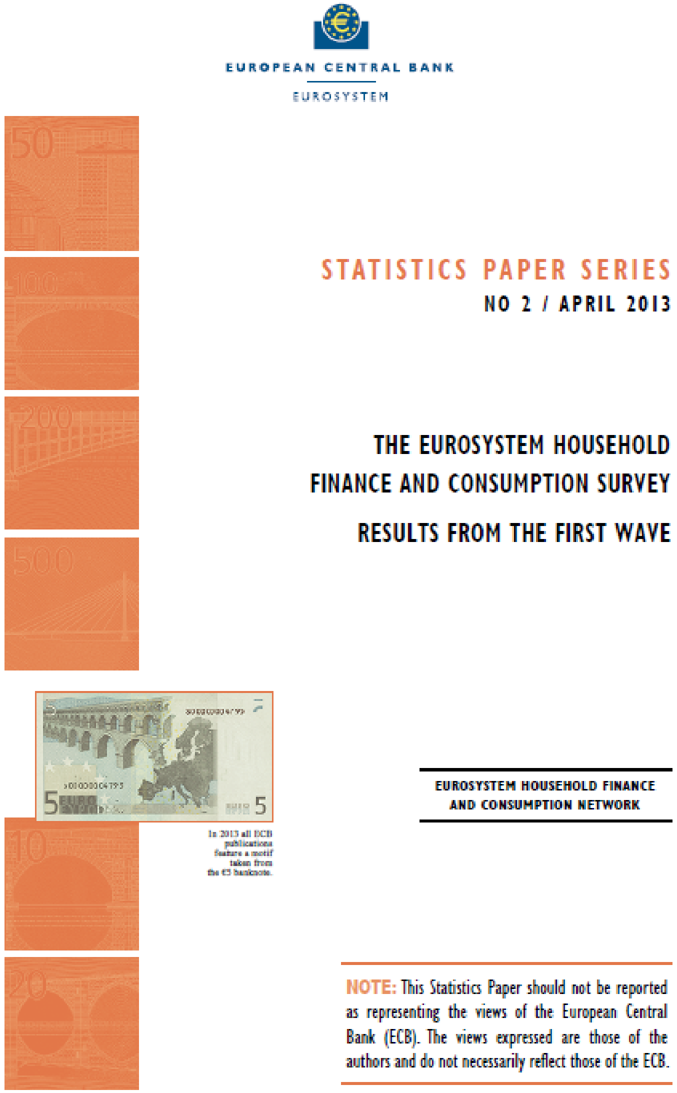
LWS household wealth surveys

Country	Name	Agency	Wealth year (1)	Income year	Type of source	Over-sampling of the wealthy	Sample size	No. of non-missing net worth	No. of wealth items
Austria	Survey of Household Financial Wealth (SHFW)	Österreichische Nationalbank	2004	2004	Sample survey	No			10
Canada	Survey of Financial Security (SFS)	Statistics Canada	1999	1998	Sample survey	Yes	15,933	15,933	17
Cyprus............	Cyprus Survey of Consumer Finances (SCF)	Central Bank of Cyprus and University of Cyprus	2002	2001	Sample survey	Yes	895	349	24
Finland............	Household Wealth Survey (HWS)	Statistics Finland	End of 1998	1998	Sample survey	No	3,893	3,893	23
Germany	Socio-Economic Panel (SOEP)	Deutsches Institut Für Wirtschaftsforschung (DIW) Berlin	2002	2001	Sample panel survey	Yes	12,692	12,129	9
Italy.................	Survey of Household Income and Wealth (SHIW)	Bank of Italy	End of 2002	2002	Sample survey (panel section)	No	8,011	8,010	34
Norway	Income Distribution Survey (IDS)	Statistics Norway	End of 2002	2002	Sample survey plus administrative records	No	22,870	22,870	35
Sweden...........	Wealth Survey (HINK)	Statistics Sweden	End of 2002	2002	Sample survey plus administrative records	No	17,954	17,954	26
United Kingdom	British Household Panel Survey (BHPS)	ESRC	2000	2000	Sample panel survey	No	4,867 (2)	4,185	7
United States...	Panel Study of Income Dynamics (PSID)	Survey Research Center of the University of Michigan	2001	2000	Sample panel survey	No	7,406	7,071	14
	Survey of Consumer Finances (SCF)	Federal Reserve Board and U.S. Department of Treasury	2001	2000	Sample survey	Yes	4,442 (3)	4,442 (3)	30

(1) Values refer to the time of the interview unless otherwise indicated. (2) Original survey sample. Sample size can rise to 8,761 when weights are not used. (3) Data are stored as five successive replicates of each record that should not be used separately; thus, actual sample size for users is 22,210. The special sample of the wealthy includes 1,532 households.
Source: LWS database.

- Central bank household wealth surveys also in Australia, Greece, the Netherlands, Portugal and Spain

Central banks and wealth data


EUROPEAN CENTRAL BANK
EUROSYSTEM

STATISTICS PAPER SERIES
NO 2 / APRIL 2013

THE EUROSYSTEM HOUSEHOLD
FINANCE AND CONSUMPTION SURVEY
RESULTS FROM THE FIRST WAVE

In 2013 all ECB publications feature a motif taken from the €5 banknote.

EUROSYSTEM HOUSEHOLD FINANCE AND CONSUMPTION NETWORK

NOTE: This Statistics Paper should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the authors and do not necessarily reflect those of the ECB.

18 euro area countries

- Austria
- Belgium
- Cyprus
- Estonia
- Finland *
- France *
- Germany
- Greece
- Ireland *
- Italy
- Latvia
- Luxembourg
- Malta
- Netherlands
- Portugal *
- Slovakia
- Slovenia
- Spain

* Joint with statistical institute

Central banks and wealth data

- Why should central banks be involved in collecting wealth data?
  - Historically, lack of usable information
  - Useful for other tasks carried out by central banks
  - Measurement issues benefit from central bank expertise
- **Prevent ‘divorce’ of users from producers** ⇨ Griliches (1985)

Economic data tend to be collected (or often more correctly “reported”) by firms and persons who are not professional observers and who do not have any stake in the correctness and precision of the observations they report. ... in general, the data collection and thus the responsibility for the quality of the collected material is still largely delegated to census bureaus, survey research centers, and similar institutions, and is divorced from the direct supervision and responsibility of the analyzing team.

Wealth growing importance

Why wealth matters

- **Ownership and control over "means of production"**: from classical economists Ricardo and Marx to Piketty

  David Ricardo *Principles of Political Economy and Taxation* 1821

  the principal problem in political economy is to determine the laws that regulate the distribution of *"the produce of the earth among . . . the proprietor of the land, the owner of the stock of capital necessary for its cultivation, and the laborers by whose industry it is cultivated"*

- Three aspects worth mentioning
  - **Crony capitalism** and the politically-connected wealthy
  - **Digital revolution**: Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age*, 2014
  - **Corporations vs. households**

Why wealth matters

- **Well-being**

  Income major determinant of economic behaviour and living standards but fails to represent the full amount of available resources: individuals can rely on real and financial assets

  - A sudden income drop need not result in lower living conditions if the unit can decrease accumulated wealth, or if it can borrow
  - Income can be above the poverty threshold, yet a family can feel vulnerable because it lacks financial resources to face adverse income shock
  - Assets and liabilities fundamental to smooth out consumption patterns when income is volatile.

Why wealth matters

- Jacob Hacker, *The Great Risk Shift*, 2006
  - labour market and welfare state changes have shifted economic risks from government and business to households
  - climate of **economic insecurity**
- Role of wealth as buffer rises (and debt as income-substitute)
- Mario Draghi, at the final LWS conference in Rome in July 2007:

  In a society where employment tends to be permanent and where the welfare state generously supplies education, health and housing benefits, covers against the risk of unemployment and protects old-age income levels, the regularity of actual and expected income flows ensures living standards are maintained and holdings of wealth are less important. When these conditions cease to hold, on account of greater job insecurity or reduced social expenditure, wealth takes on a new significance for household prosperity.

Why wealth matters

- **Lifetime equity**

  Possession of tangible and intangible assets major determinant of longer-term prospects of households and individuals

  - Chances in one's life depend on set of opportunities open to a person which are, in turn, a function of the person's intellectual and material endowments
  - Inheritances matter – from Josiah Wedgwood and Eugenio Rignano to Tony Atkinson and Thomas Piketty, ... – and with capital market imperfections, individuals with low endowments may be stuck in a poverty trap

    HFCS data open new opportunities for comparative research on importance of bequests

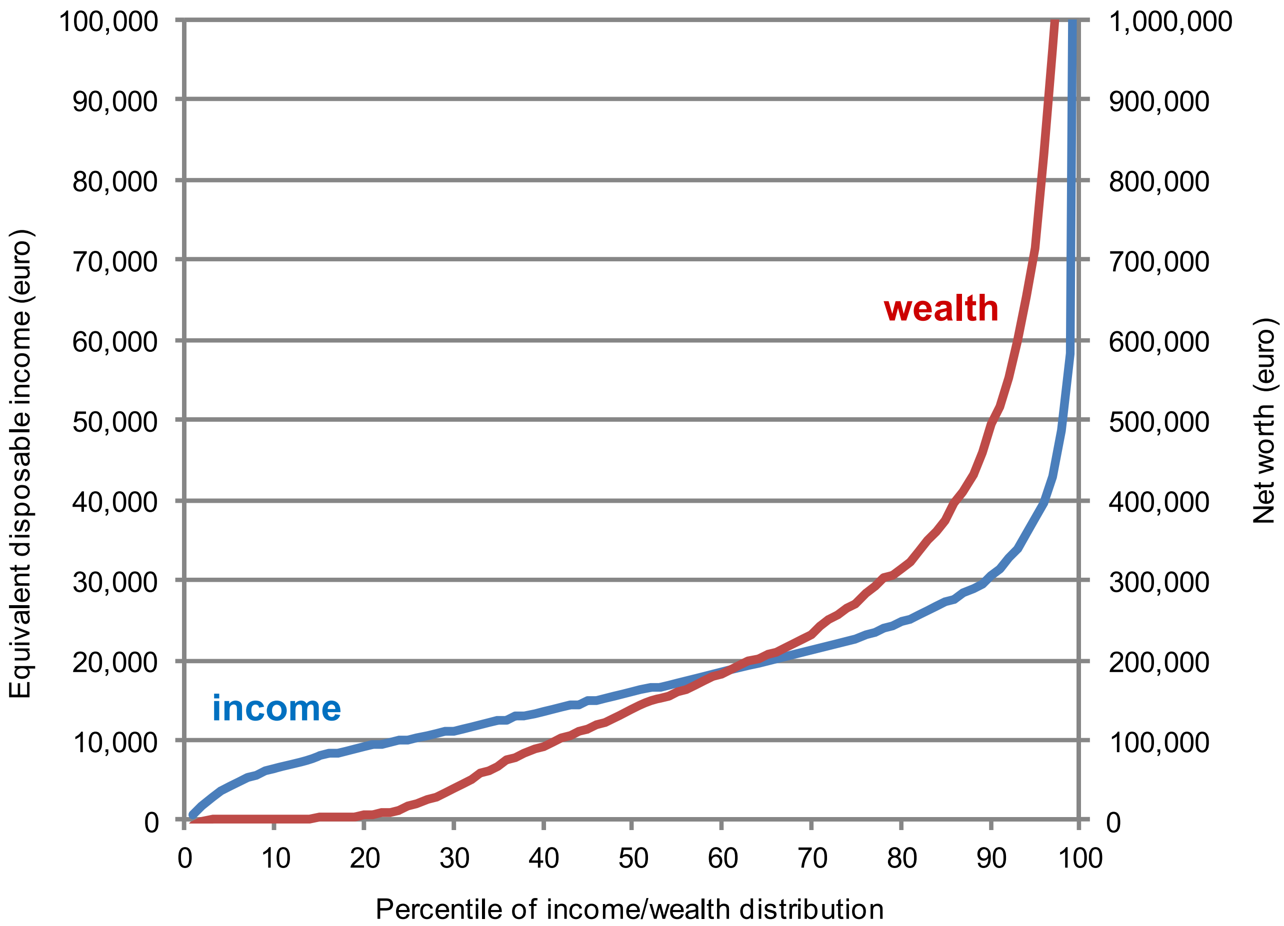
    ⇨ exploited especially in Austria! See Pirmin Fessler and Martin Schürz (2015) and Leitner (2016)

Income and wealth

Income and wealth

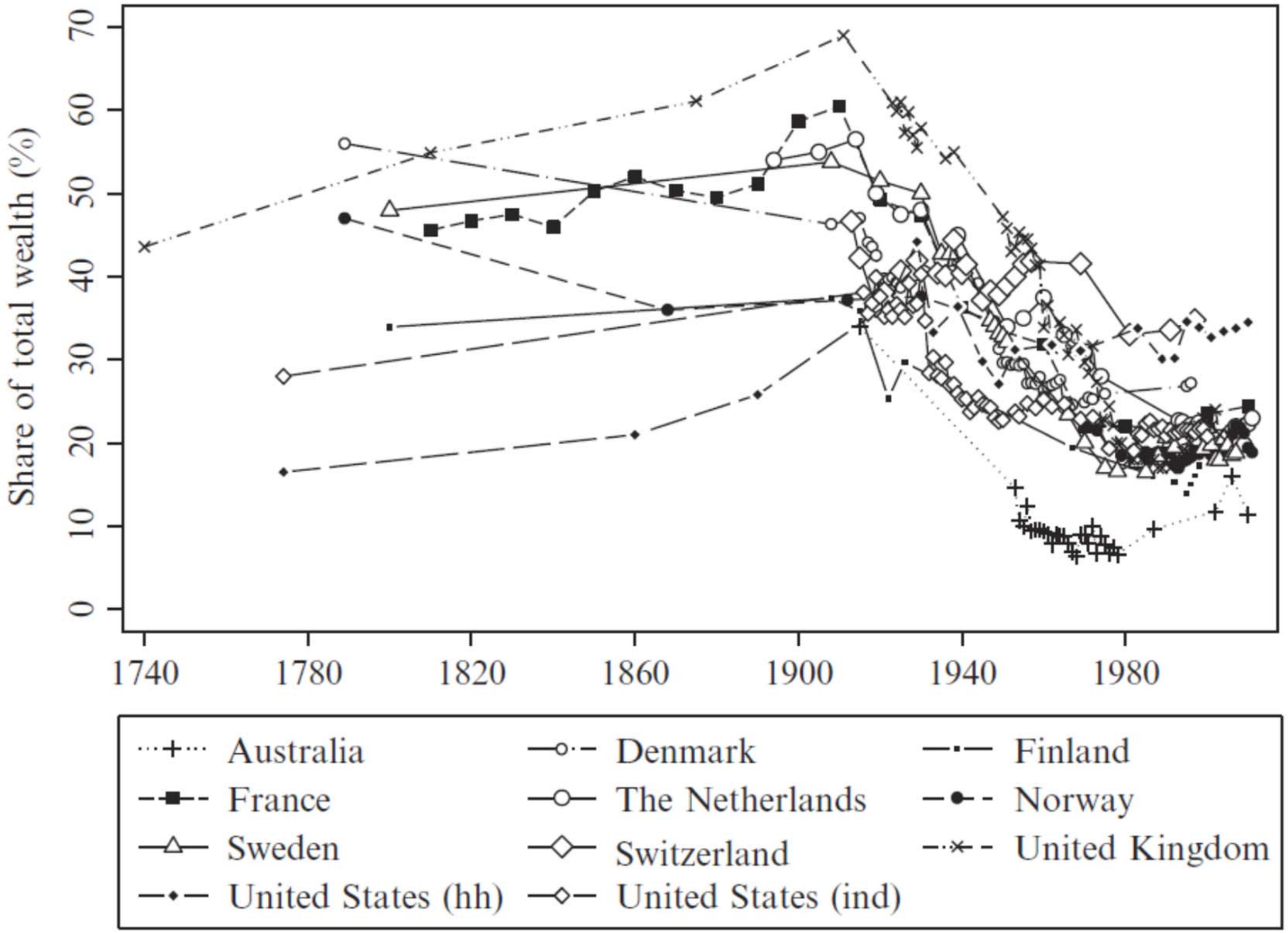
- For lack of wealth data, income often taken as proxy of wealth in many analysis
  - But income and wealth distributions differ
  - Income inequality higher than wealth inequality, but relationship varies across countries and time

“Pen Parades”: Italy, 2014
(income and wealth percentile values, euro)



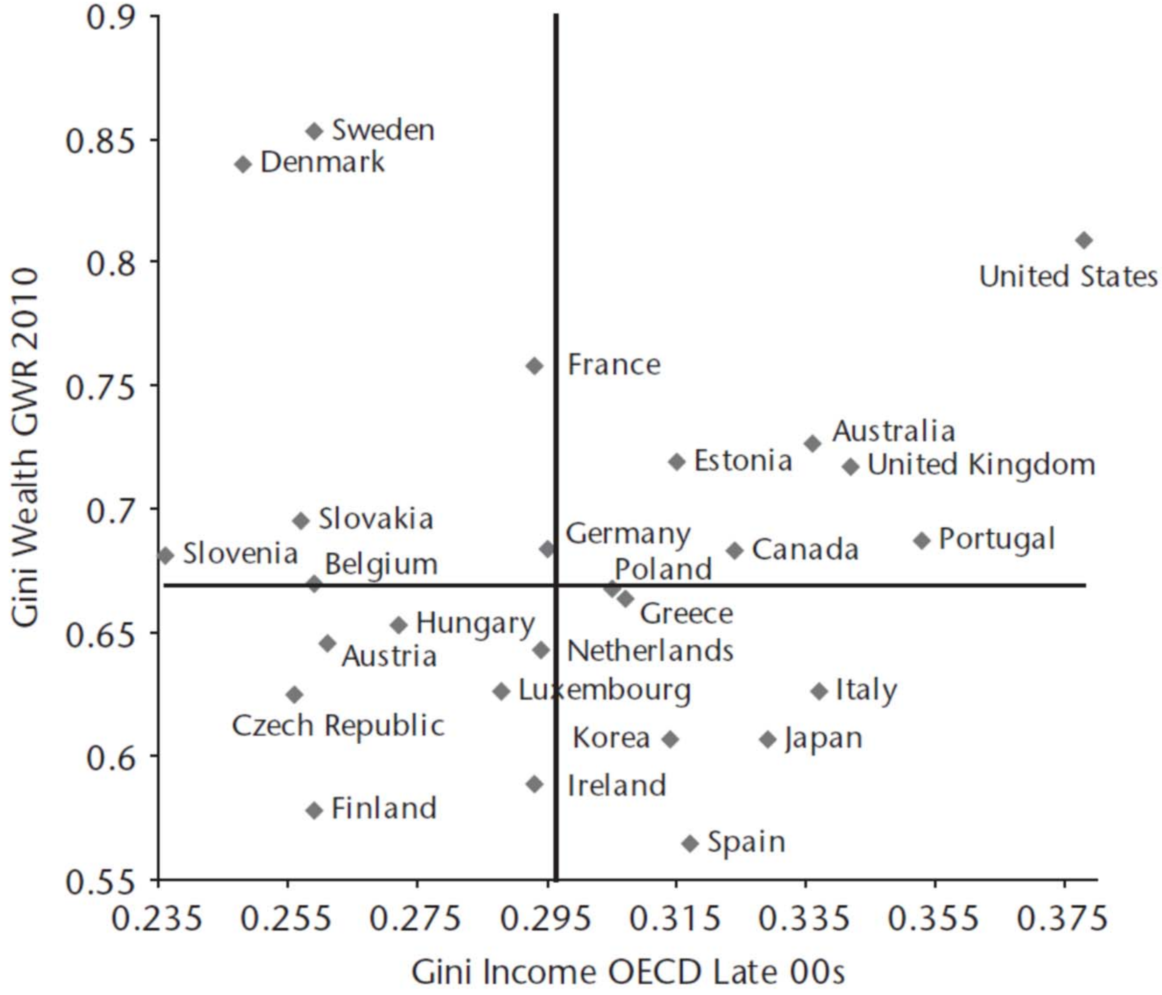
Source: elaboration on SHIW data.

Top 1% wealth share (%)



Source: Roine and Waldenström, Handbook of Income Distribution, Vol. 2A.

Wealth versus income inequality



Source: Maestri, Bogliacino and Salverda, “Wealth inequality and the accumulation of debt”, in Salverda et al (eds), *Changing Inequalities in Rich Countries*, 2014, Figure 4.7, based on data from Credit Suisse for net wealth and OECD for disposable income.

Income and wealth

- Challenge: **joint analysis of income and wealth**
  - build a conceptual framework
  - joint data-collection for both variable
- Warning: wealth even more difficult to measure than income
  - John Campbell at American Finance Association 2006

    *... households tend to guard their financial privacy jealously: Indeed, **it may be more unusual today for people to reveal intimate details of their financial affairs than to reveal details of their intimate affairs**. In addition, many households have complicated finances ... Even households that wish to provide data may have some difficulty answering detailed questions accurately*
  - Surveys are essential, but integration with administrative archives may be necessary to improve data quality

A framework for income and wealth

- Decompose income and analyse bidimensional space

  $CY = Y + r\,NW$

  Y incomes from labour, pensions, transfers
  $r\,NW$ property incomes (r interest rate, NW net worth)
  Z poverty line

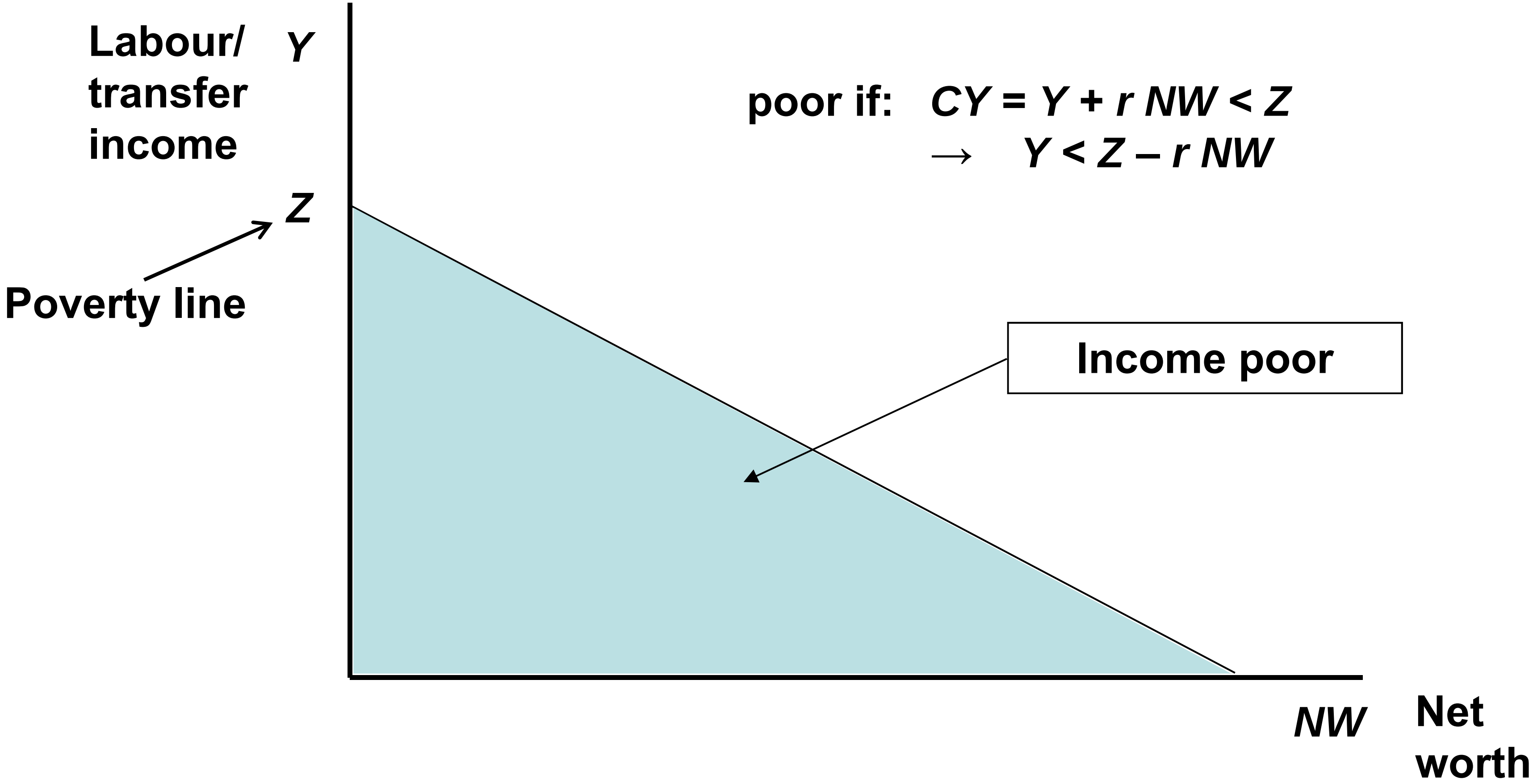
- **Poverty defined as insufficiency of current income**

  Poor if:

  $CY = Y + r\,NW < Z$

  $\rightarrow \quad Y < Z - r\,NW$

A framework for income and wealth



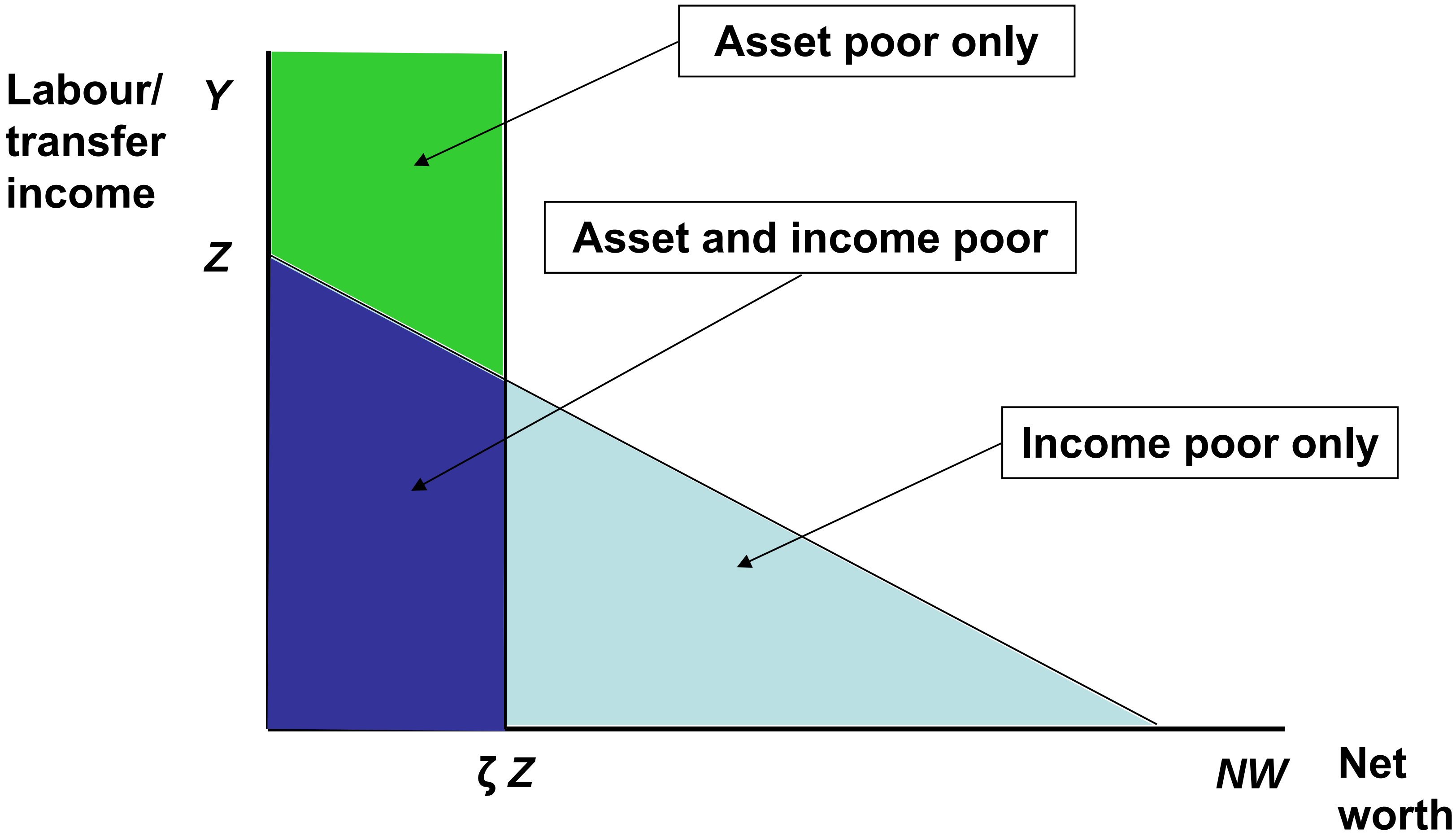
A framework for income and wealth

- Supplement income-based with asset-based poverty measures
- Exposure to potential risk that minimally acceptable living standard cannot be maintained if income falls (income-poverty refers to static condition)

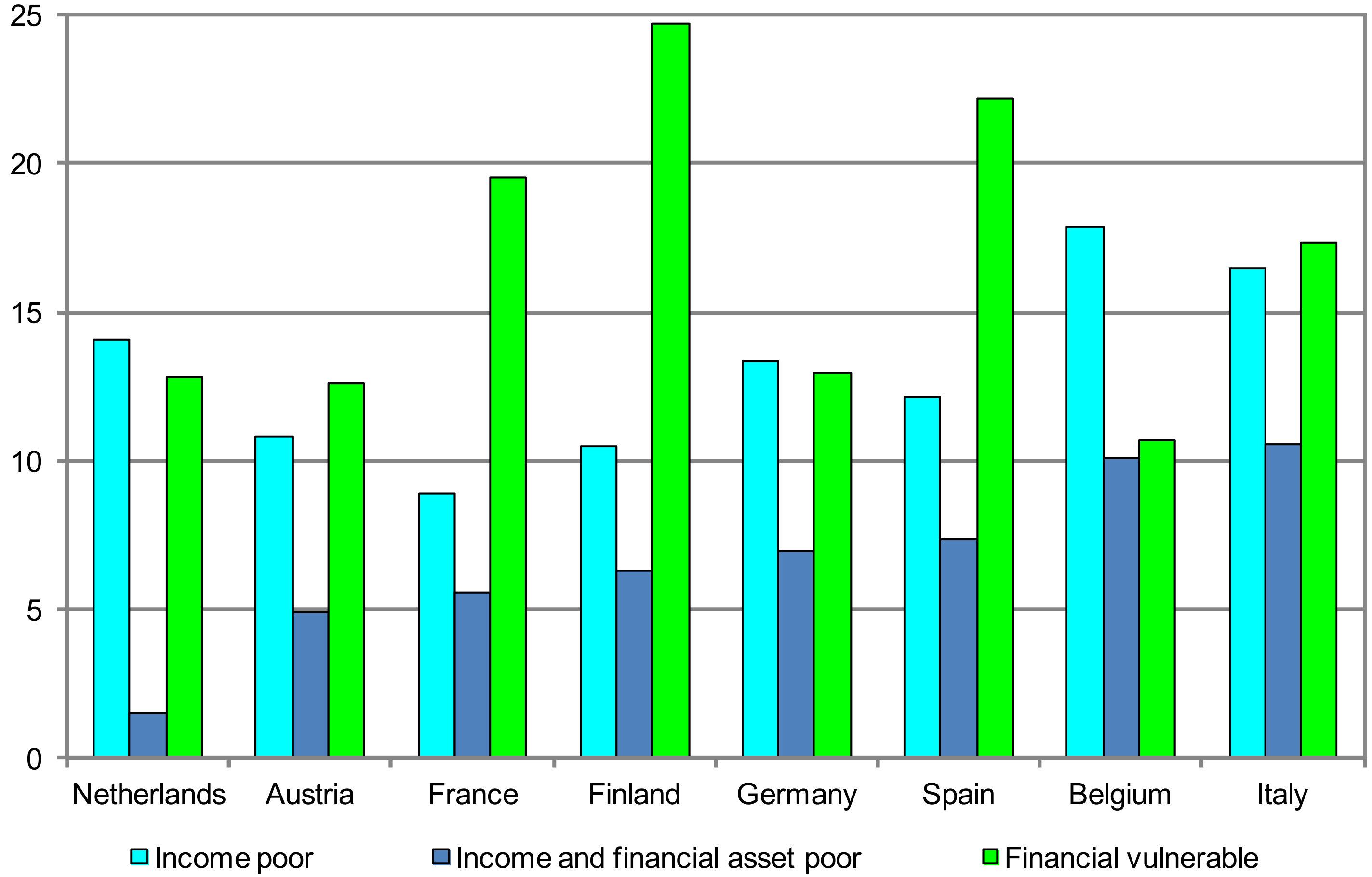
  → ***vulnerability*** more than *poverty*

- **asset-poor = wealth < fraction ζ of income poverty line**
- Wealth definition: Haveman and Wolff (2004)
  - net worth: indicator of “long-run economic security”
  - liquid assets: indicator of “emergency fund availability”
- Fraction of poverty line: ¼ or ½
  - studies of precautionary savings ⇨ Barceló & Villanueva 2009: temporary employees hold buffer of liquid wealth of 4-5 monthly earnings

A framework for income and wealth



Income and asset poverty (% of total persons)

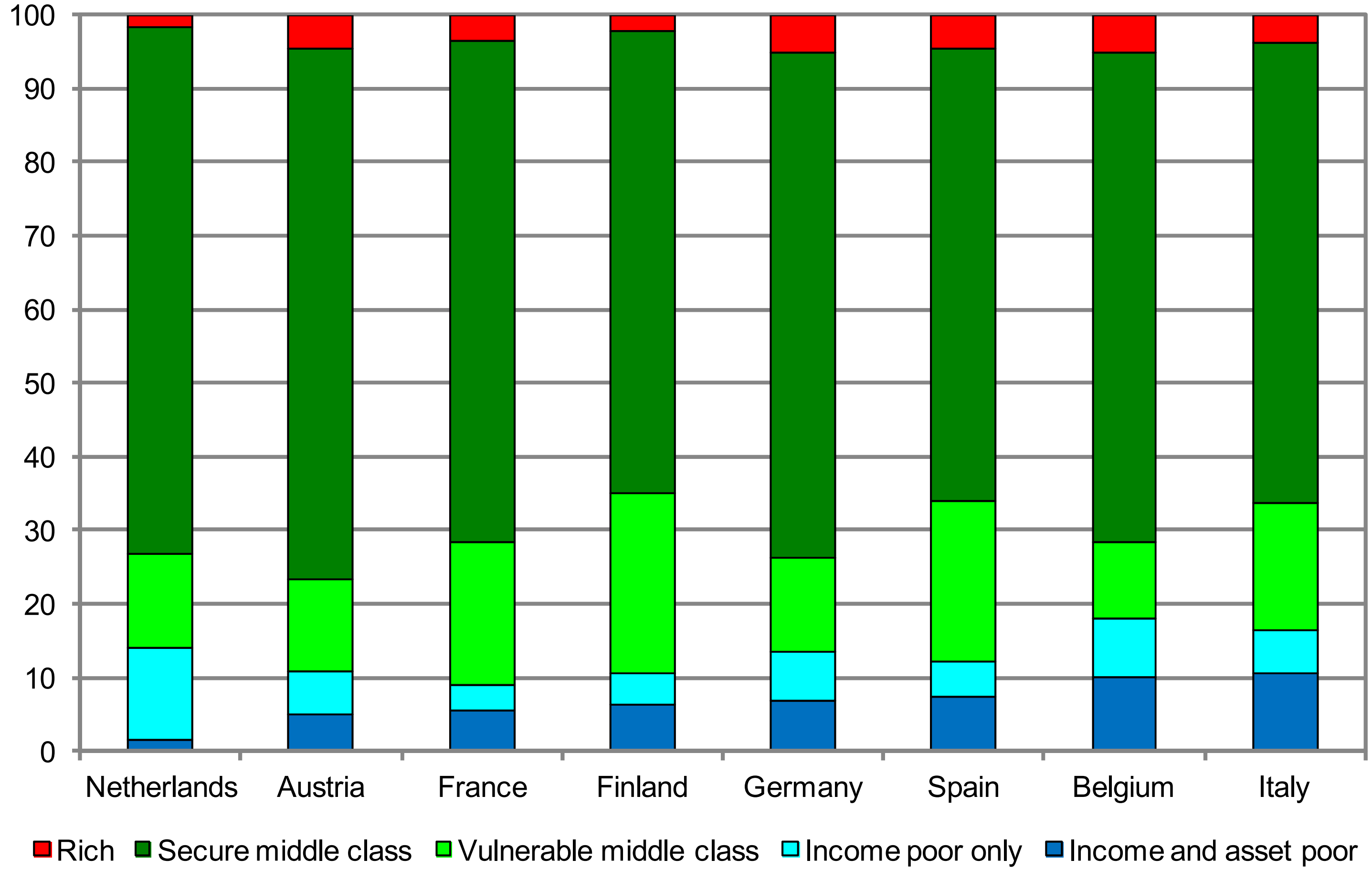


Source: calculations by R. Gambacorta from HFCS database. Equivalent gross income, with income poverty line at 50% of median; financial assets, with asset poverty line at ¼ of income line.

A framework for income and wealth

- Extend analysis to middle class
- Being comfortably clear of risk of poverty is feature of middle class
  - ⇨ it depends on buffer stocks
- Sense of precariousness associated with asset-poverty at odds with middle class
  - ⇨ **asset-poverty separates vulnerable from secure middle class**
- HFCS database: considerable proportion of middle class is vulnerable

Wealth and class structure (% of total persons)



Source: calculations by R. Gambacorta from HFCS database. Equivalent gross income, with income poverty line at 50% of median; financial assets, with asset poverty line at ¼ of income line; richness line at 300% of equivalent gross income.

Inequality and growth

Does inequality affect growth?

- **Traditional view**: high inequality good for growth
  - Incentive considerations: e.g. wage differentiation necessary for eliciting workers' effort
  - Investment indivisibilities: e.g. savings necessary to realise projects involving sunk costs when capital markets are imperfect
- **New theoretical developments around 1990**: different channels whereby inequality may influence growth (negatively, mostly):
  - Demand insufficiency: Murphy, Shleifer & Vishny 1989 (takeoffs); but now Stiglitz 2015, Auclert 2016
  - Political economy and median voter: Alesina & Rodrik 1994, Persson & Tabellini 1994, Bertola 1993, Perotti 1993, Saint-Paul & Verdier 1993
  - Market imperfections and liquidity constraints: Galor & Zeira 1993, Aghion & Bolton 1996
  - Political instability: Alesina & Perotti 1996

Does inequality affect growth?

- **Empirical findings in the 1990s**: mixed results
  - Mostly negative effects, but also positive effect (Forbes 2000)
- **A recent revival, but no firm conclusion yet ...**
  - IMF: Ostry, Berg & Tsangarides 2014

    lower net inequality is robustly correlated with faster and more durable growth, for a given level of redistribution ...

    ... redistribution appears generally benign in terms of its impact on growth; only in extreme cases ... it may have direct negative effects on growth
  - World Bank: Dollar, Kleineberg & Kraay 2015

    changes in inequality are on average small, less volatile than growth, and uncorrelated with growth

Does inequality affect growth?

- **Some interesting developments relating to wealth inequality**
  - Theory: Joan Esteban & Debraj Ray 2006

    with imperfect information, where lobbying provides information to policymakers, wealth inequality may distort the signals transmitted by economic agents. Profitable sectors have an incentive to lobby intensively but sectors dominated by wealthy interest groups find it easier to lobby more intensively. Even honest policymakers can make bad resource allocation decisions
  - Evidence: Bagchi & Svejnar 2015

    wealth inequality tends to have a negative effect on economic growth, income inequality has no or at most a weak positive effect on growth

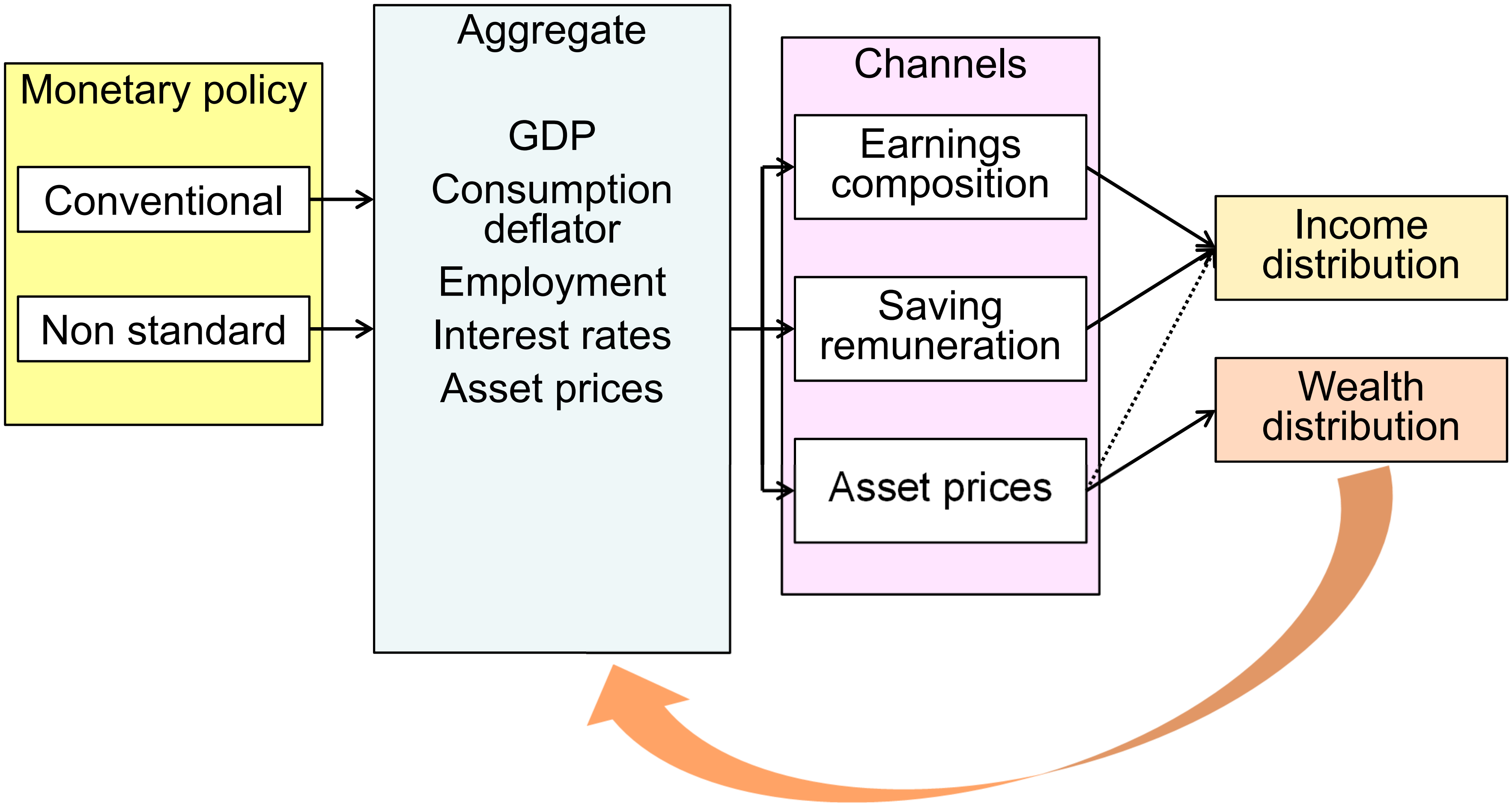
    ⇨ driven by the fact that some billionaires acquired wealth through political connections

Distributive effects of monetary policies

QE and not only

- Recent monetary policies criticised because of distributive effects
  - Lowering interest rates hurt savers to the advantage of debtors
  - Unconventional monetary policies raise asset prices and hence benefit the wealthy more, thus increasing inequality
  - Both claims correct, but partial
    - ⇨ different conclusion if general equilibrium view
    - ⇨ expansionary stimulus of loose monetary policies
    - ⇨ in reality, multiple channels

QE and not only



QE and not only

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    - ⇨ in reality, multiple channels

- **Overall distributive outcome of monetary policies theoretically ambiguous** and possibly different for income, wealth, consumption
  - Hence, no great surprise about recent polls of prominent economists at IGM Forum

CHICAGO BOOTH

IGM FORUM

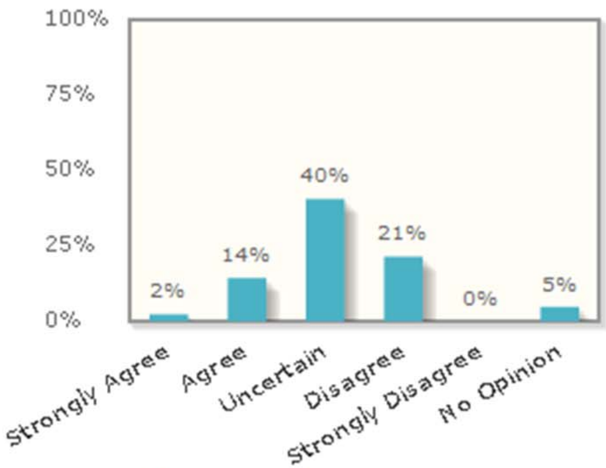
Home | Bloomberg Op-Eds by our Faculty | IGM Economic Experts Panel

Tuesday, June 07, 2016 11:48am

Inequality and Monetary Policy

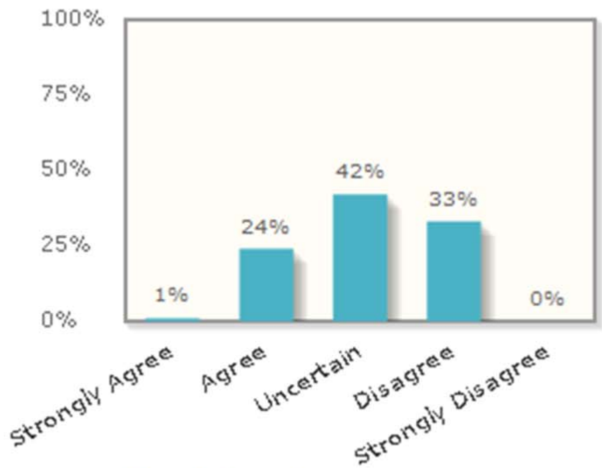
The ratio of the 90th to the 10th percentile of the US income distribution has been unaffected by the Federal Reserve's unconventional monetary policies since the financial crisis.

Responses



Source: IGM Economic Experts Panel
www.igmchicago.org/igm-economic-experts-panel

Responses weighted by each expert's confidence



Source: IGM Economic Experts Panel
www.igmchicago.org/igm-economic-experts-panel

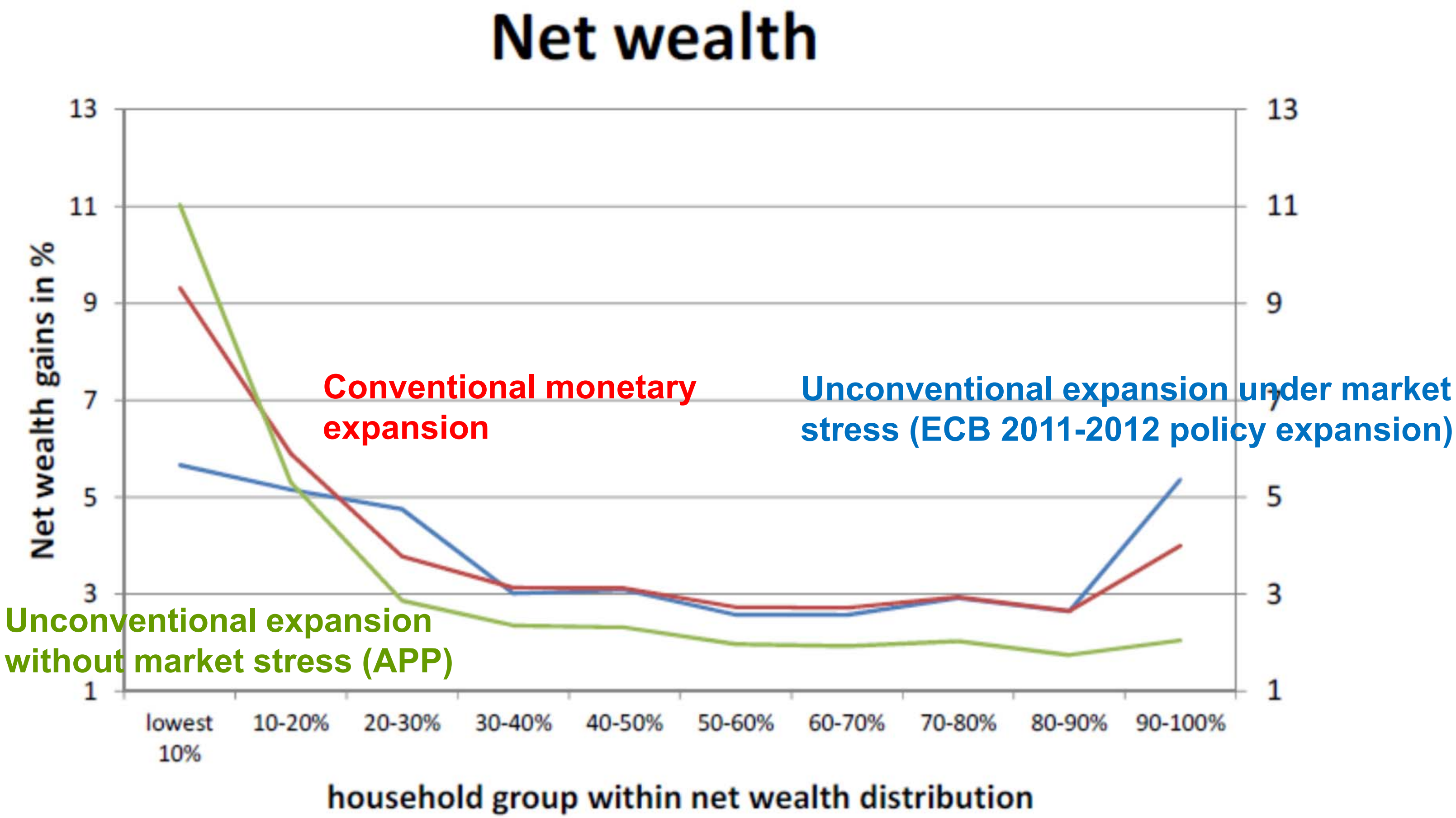
QE and not only

- Issue to be settled on empirical ground
- **Casiraghi, Gaiotti, Rodano and Secchi (2016)**: estimate distributive effects of alternative expansionary monetary policies in Italy
  - *Eurosystem policies in 2011-12 (government bonds purchases, liquidity injections and the announcement of the OMT); Asset Purchase Programme; reduction in official interest rates*

  Effects on inequality are negligible
- As regards the wealth distribution, U-shaped effect

  The ability to exploit capital gains does not vary monotonically with net wealth: richer households do benefit more than the average from a non-standard intervention, thanks to the capital gains on their holdings of financial assets, but households at the bottom of the wealth scale can also take a larger advantage, due to their higher leverage.

Change in net wealth caused my alternative monetary policies by wealth decile (%)



Source:Casiraghi, Gaiotti, Rodano and Secchi (2016).

QE and not only

- **Coibion, Gorodnichenko, Kueng and Silvia (2016)**: somewhat less reassuring, for the United States:

  Contractionary monetary policy shocks appear to have significant persistent effects on inequality, leading to higher levels of income, labor earnings, consumption and total expenditures inequality across households. Furthermore, while monetary policy shocks cannot account for the trend increase in income inequality since the early 1980s, they appear to have nonetheless played a non-trivial role in cyclical fluctuations in inequality.

QE and not only

- Two examples from a **rich and nuanced debate**
- Three comments
  - Surprise at the surprise

    To the extent that high inflation advantages debtors relative to creditors, a monetary policy aimed at taming inflation must also be redistributive

THE ECONOMICS *of* INFLATION

A STUDY OF CURRENCY DEPRECIATION IN POST-WAR GERMANY

by COSTANTINO BRESCIANI-TURRONI

PROFESSOR OF ECONOMICS IN THE UNIVERSITIES OF MILAN AND CAIRO

with a Foreword by

LIONEL ROBBINS

PROFESSOR OF ECONOMICS IN THE UNIVERSITY OF LONDON

translated by Millicent E. Sayers

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A TRACT

ON

MONETARY REFORM

BY

JOHN MAYNARD KEYNES

FELLOW OF KING'S COLLEGE, CAMBRIDGE

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON
1924

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In the first place, Deflation is not *desirable*, because it effects, what is always harmful, a change in the existing Standard of Value, and redistributes wealth in a manner injurious, at the same time, to business and to social stability. Deflation, as we have already seen, involves a transference of wealth from the rest of the community to the *rentier* class and to all holders of titles to money; just as inflation involves the opposite. In particular it involves a transference from all borrowers, that is to say from traders, manufacturers, and farmers, to lenders, from the active to the inactive.

QE and not only

- Two examples from a **rich and nuanced debate**
- Three comments
  - Surprise at the surprise

    To the extent that high inflation advantages debtors relative to creditors, a monetary policy aimed at taming inflation must also be redistributive

  - Exposed the **limits of representative agent models**

    Coibion and co-authors: necessary to develop “heterogeneous agent models with incomplete insurance markets” for monetary policy: heterogeneity affects monetary transmission mechanism

  - Heterogeneity means that information on top of income and wealth distributions may be insufficient: we **need to know whole distributions**

Conclusions

Conclusions

- Central question of my considerations

  Why should central banks care about wealth distribution?

- Tradition, expertise and resources for data collection
  - Challenge: integration of survey data with administrative data
- Analytical importance
  - Wealth distribution may affect economic growth
  - Heterogeneity matters: wealth distribution affects transmission mechanism of monetary policy
  - Monetary policies have distributive implications
- **Inequality is a political concern, not a target for monetary policy. But central banks must know.**

Thank you for your attention!