

The coupling between the dissolution of the old social pact and the emergence of new technologies in the (resistible) path toward the abyss

Giovanni Dosi¹
and
Maria Enrica Virgillito¹

¹Institute of Economics, Sant'Anna School of Advanced Studies, Pisa

Some long term patterns

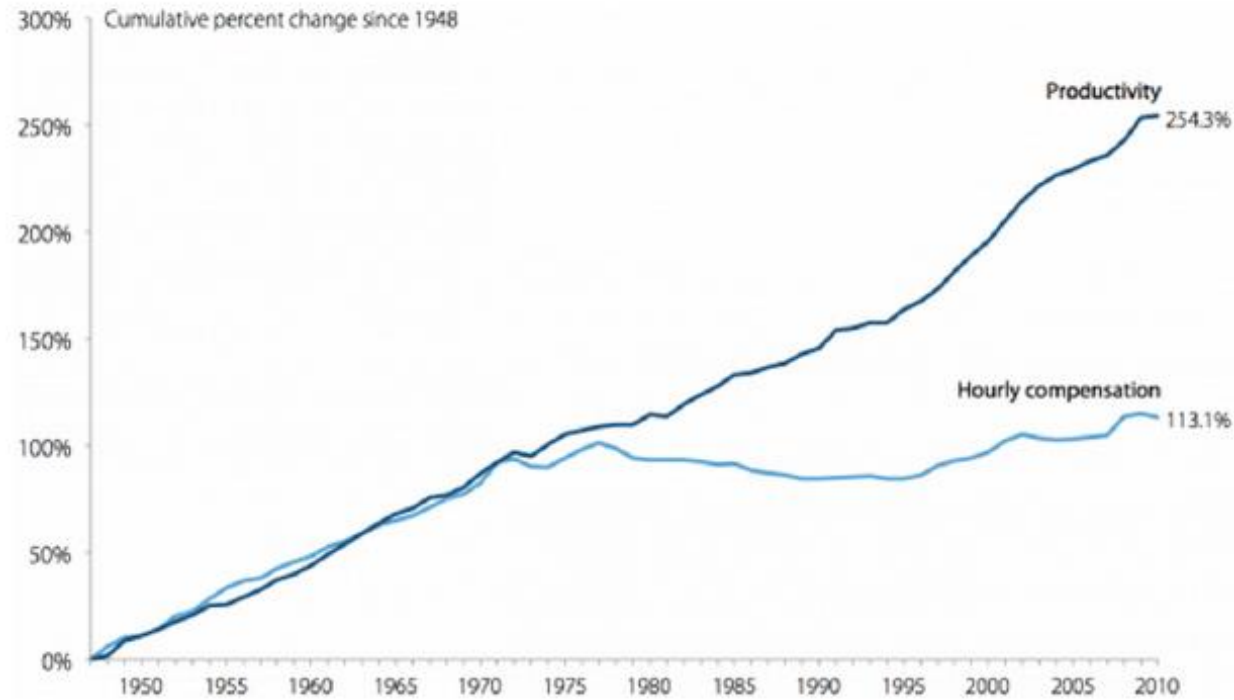
1. De-industrialization
2. Stagnant wages and divergence between productivity growth and wage growth
3. Declining labour share

And relatedly:

4. Massive surge in corporate profits, especially financial ones
5. Soaring inequality
6. Polarization and growing number of part-time jobs (gig-economy)

The wage productivity gap in the US Economy

Growth of real hourly compensation for production/nonsupervisory workers and productivity, 1948–2011



Note: Hourly compensation is of production/nonsupervisory workers in the private sector and productivity is for the total economy.

Source: Author's analysis of unpublished total economy data from Bureau of Labor Statistics, Labor Productivity and Costs program and Bureau of Economic Analysis, National Income and Product Accounts public data series

Real wage growth 1973-2012

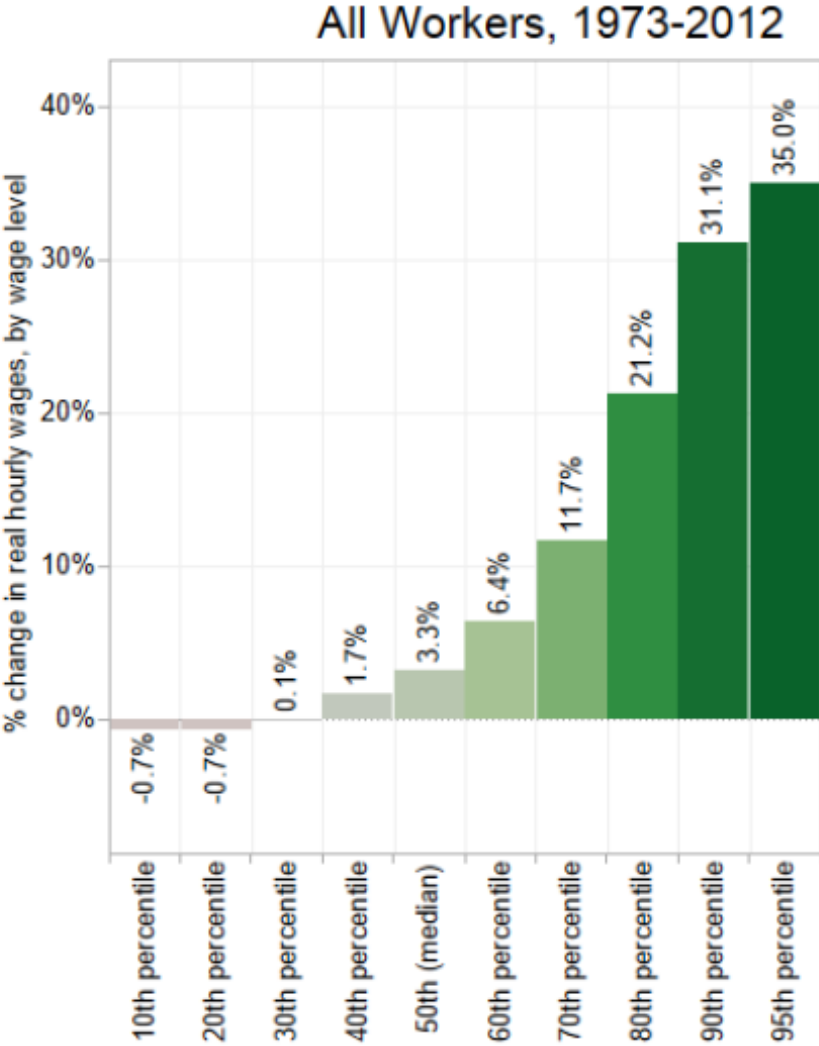


Figure: Source: Economic Policy Institute

Real wage growth 2007-2012

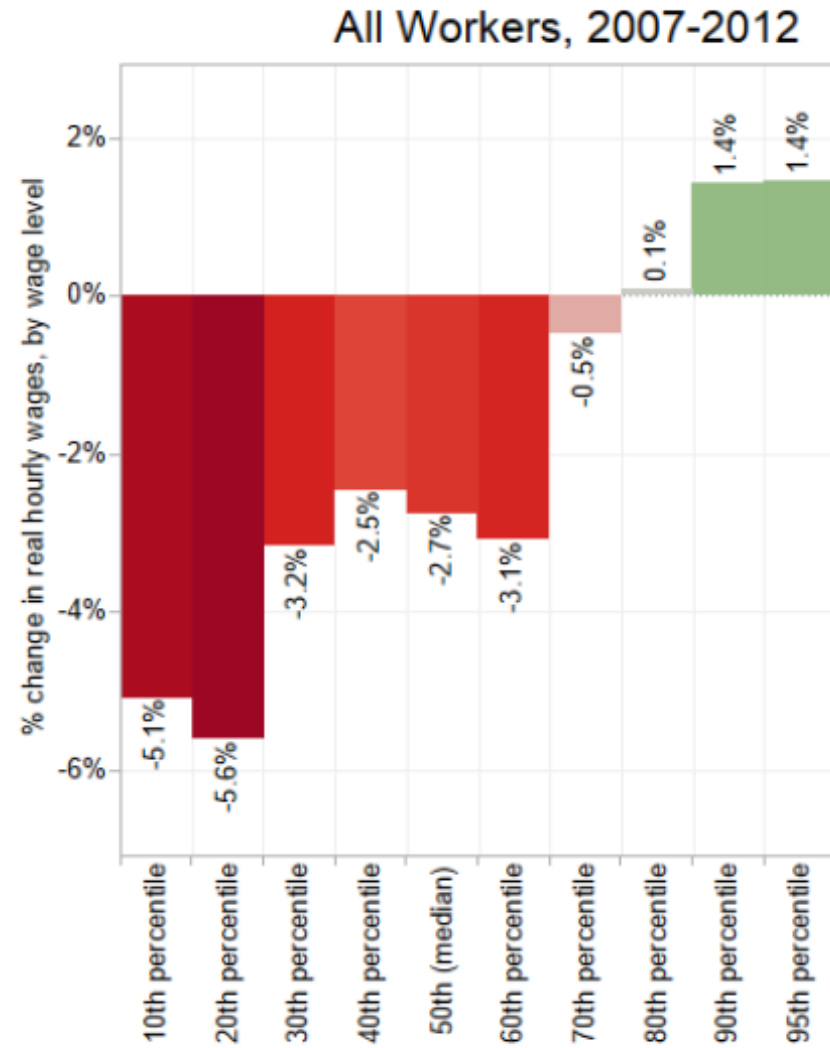
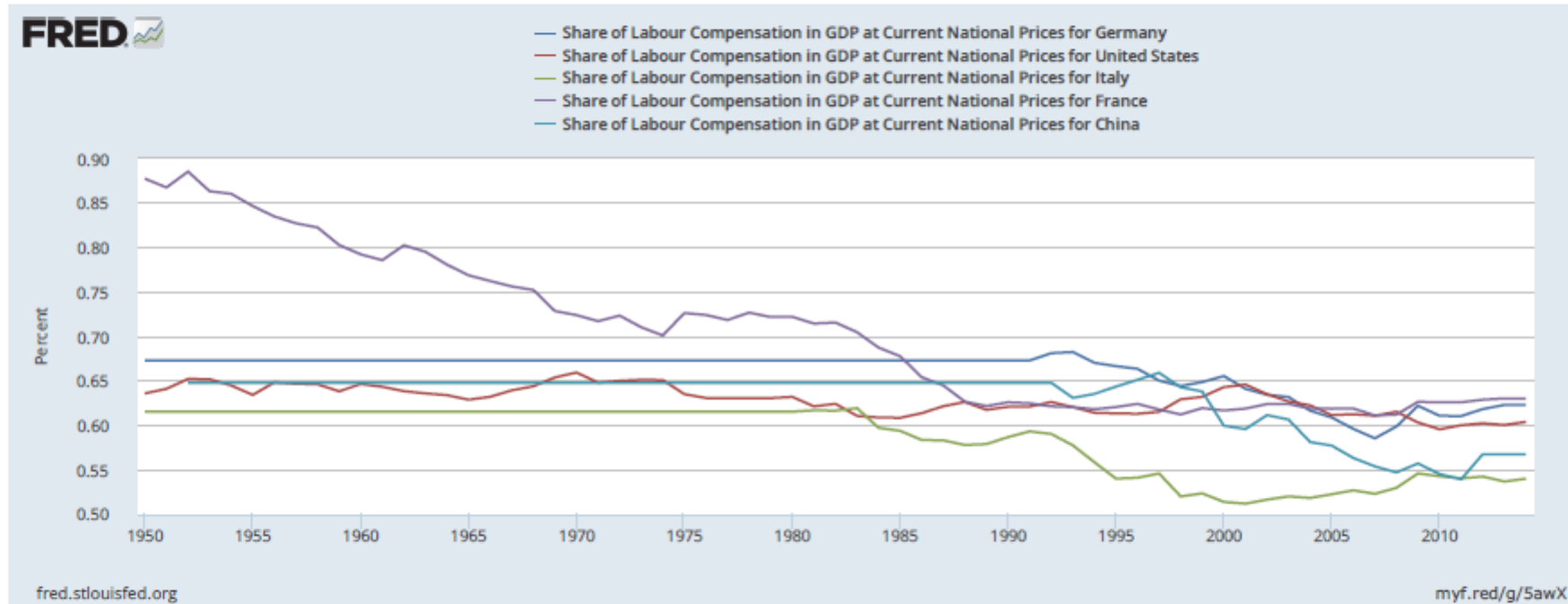


Figure: Source: Economic Policy Institute

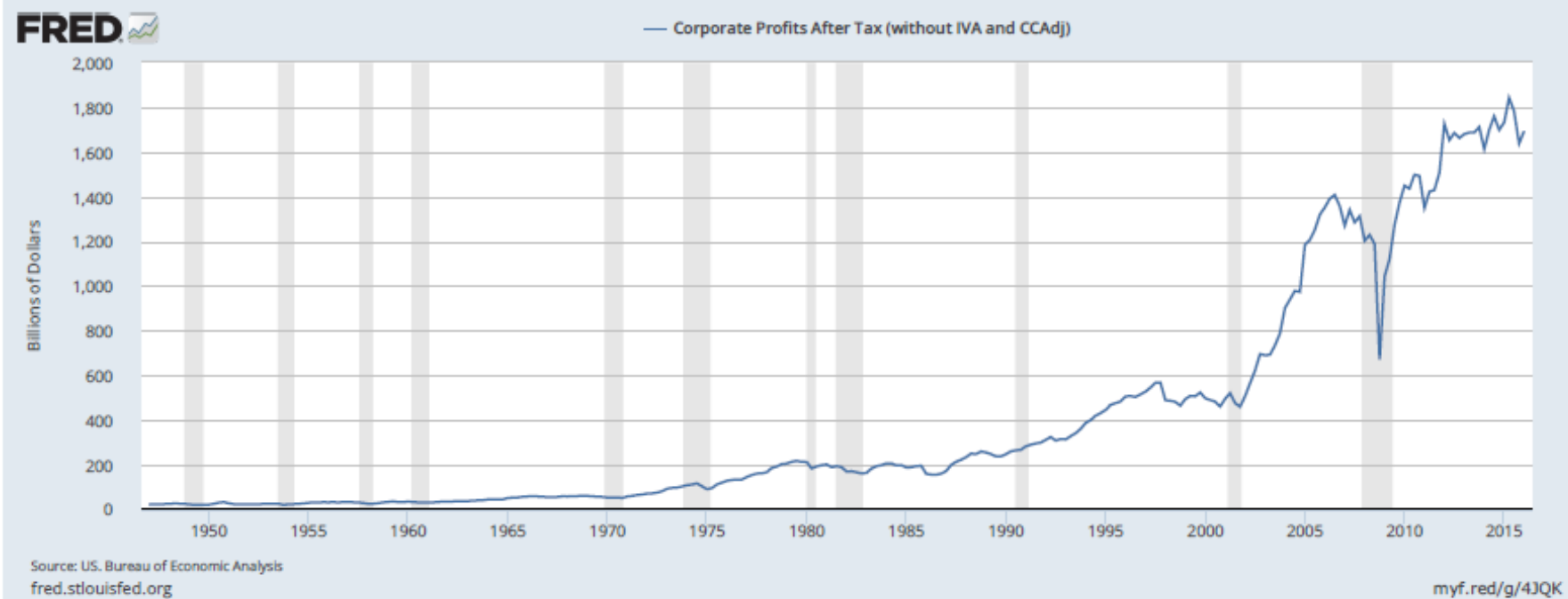
Decline of manufacturing shares



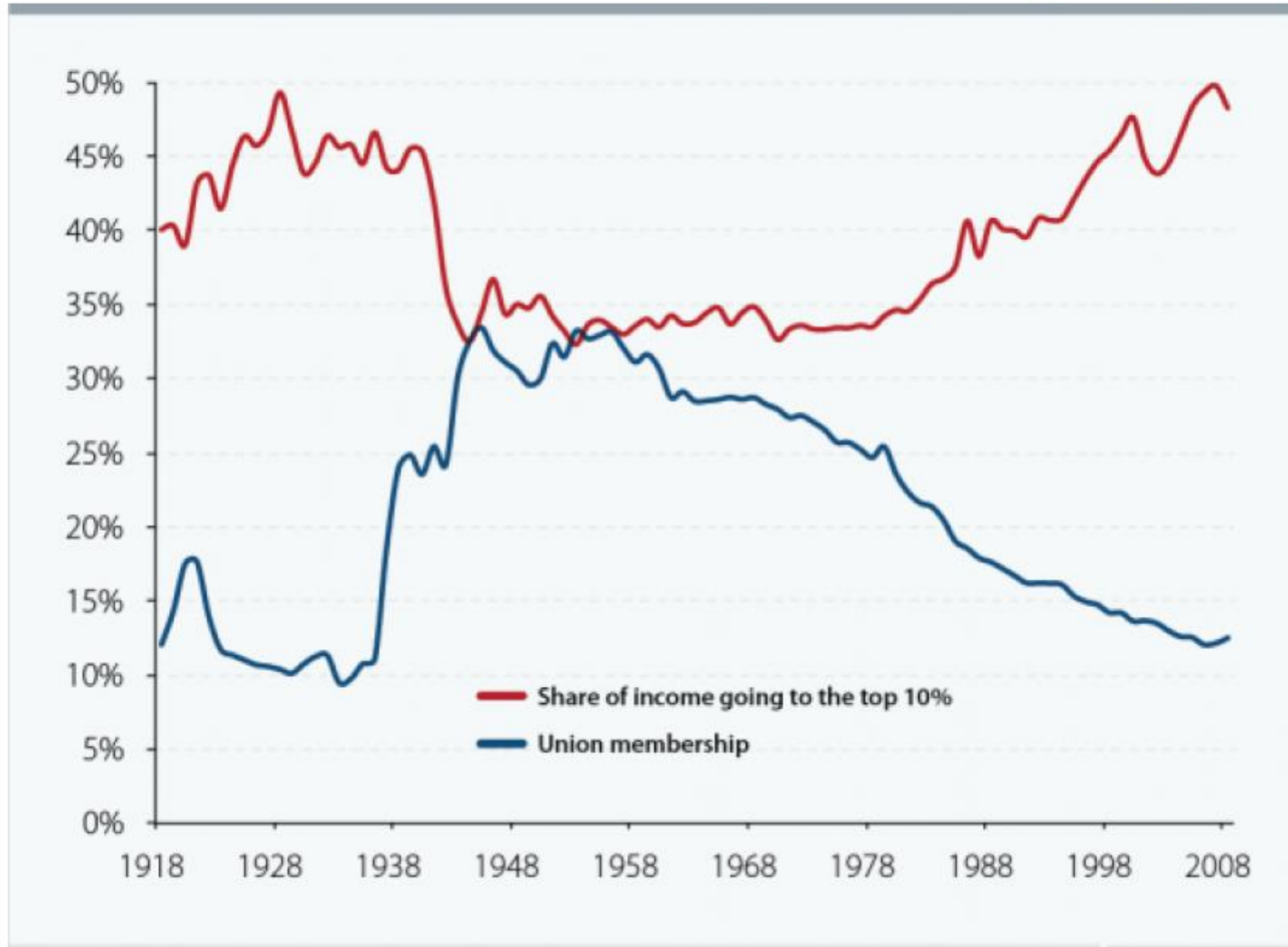
Decline of labour compensation shares



Surge of profits



Declining labor force unionization rate and increasing inequality



A fundamental dimension of the rising inequality: the rapid '*rentification*' of the economy and society

From Rents to Rentified Capitalism

Rentified capitalism

Rentified capitalism is a configuration of capitalism based on the progressive rentification of spaces of the social fabric. Rentification acts via:

- ▶ **Appropriation:** creation of artificial scarcity by redefinition of property rights
- ▶ **Exclusion:** restriction of the rights to use ex-ante non rentified assets
- ▶ **Commodification:** pricing of previously non-market services and universal rights (health, education, justice)
- ▶ This goes beyond even **pseudo-wealth** (Guzman and Stiglitz, 2020) and **financialization**: rentification of capitalism is not only ascribable to penetration of financial motives and incomes into the real economy.
- ▶ Rentification of capitalism brings **dispossession** from:
 - ▶ Rights to decent pays
 - ▶ Rights to decent housing
 - ▶ Rights to decent pensions
 - ▶ Rights to decent care

Spaces and attributes of rentified capitalism

Space	Attribute and Effects	Empirical evidence
Resource distribution	Appropriation Labour disempowering	Falling labour share and increasing managerial power
Economic crises	Exclusion Restructuring anti-redistributive phases	Profit-inflation spiral
Finance and Pseudo wealth	Financialization Speculation as a wealth generation machine	Exponentially growing financial assets
Finance vs Welfare state	Commodification Finance as provider of welfare state services	Increasing pension funds and life insurances
Housing	Commodification and Dispossession Reducing housing opportunity	Increasing financial returns from housing
IPR and Big Pharma	Commodification and Exclusion Limiting rights of care	Disproportionate patenting activity Declining breakthrough innovations Declining government approval of new OB products

Table: Understanding rentified capitalism

The long run decline of labour power vs the upsurge of managerial power

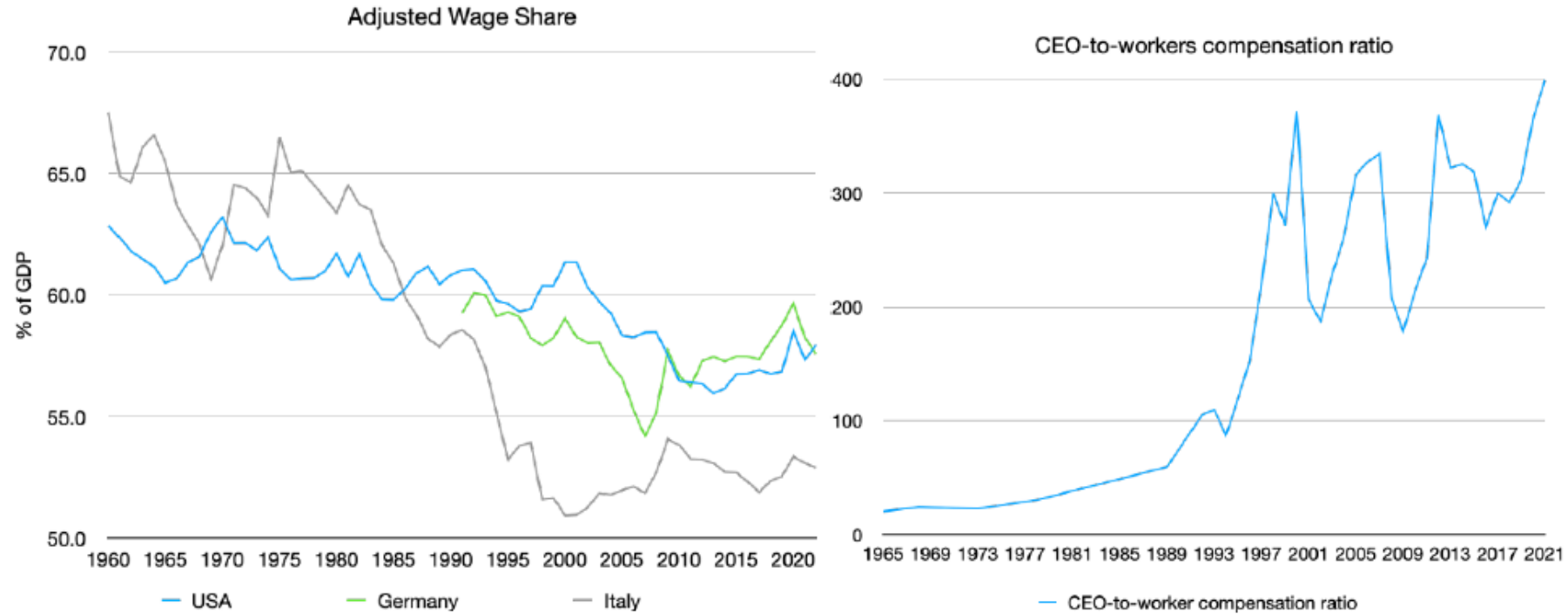


Figure: Adjusted aggregate wage share, Source AMECO (sx); CEO-to-workers compensation ratio (dx), Source (Bivens and Kandra, 2022)

- ▶ Labour power has been dramatically declining since the neoliberal turn in the eighties.
- ▶ A convergence trend among different varieties of capitalisms: wage compression has invested both Anglosaxon, Continental and Mediterranean capitalisms.
- ▶ Declining wage shares are not only a signal of wage compression and functional inequality but also a widespread signal of the reorganization of capitalism in favour of managerial power.

A common tendency toward explosive financialization

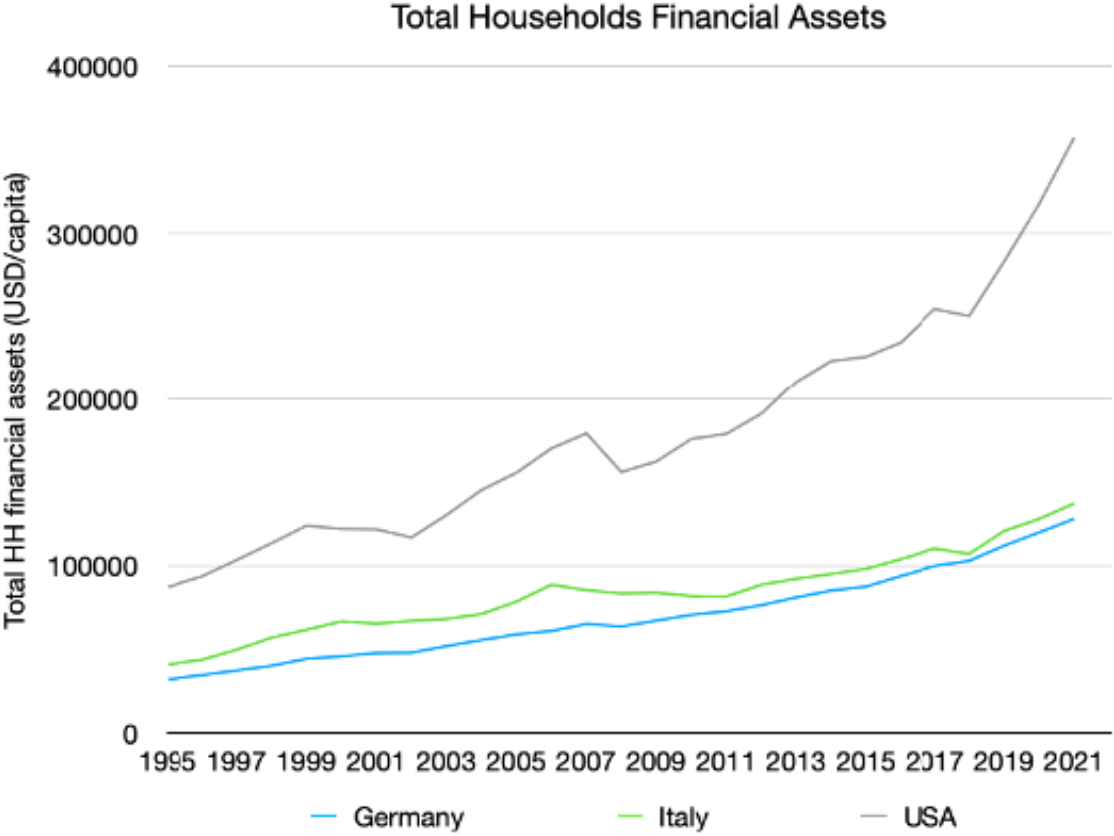


Figure: Total households financial asset by country (source: OECD data)

Varieties of capitalisms display common patterns of financialization

- ▶ Variety of capitalisms and the patterns of household investments: from tamed German capitalism (currency and deposits) to unbridled US capitalism (Shares and pension funds).
- ▶ Previous domains of the Welfare State, now spaces of financialization.
- ▶ Finance as a substitute to the Welfare State, provider of pension funds and life insurance.

Rents as an increasing source of income generation

- ▶ Variety of capitalisms in the type of leading asset returns (bond vs housing).
- ▶ Exploding role of housing returns in all three countries.
- ▶ Germany remains more tamed in its rentification when compared to the US.
- ▶ Italy shows a quite strong pervasive rentification via housing returns.

Rents as an increasing source of income generation - the US

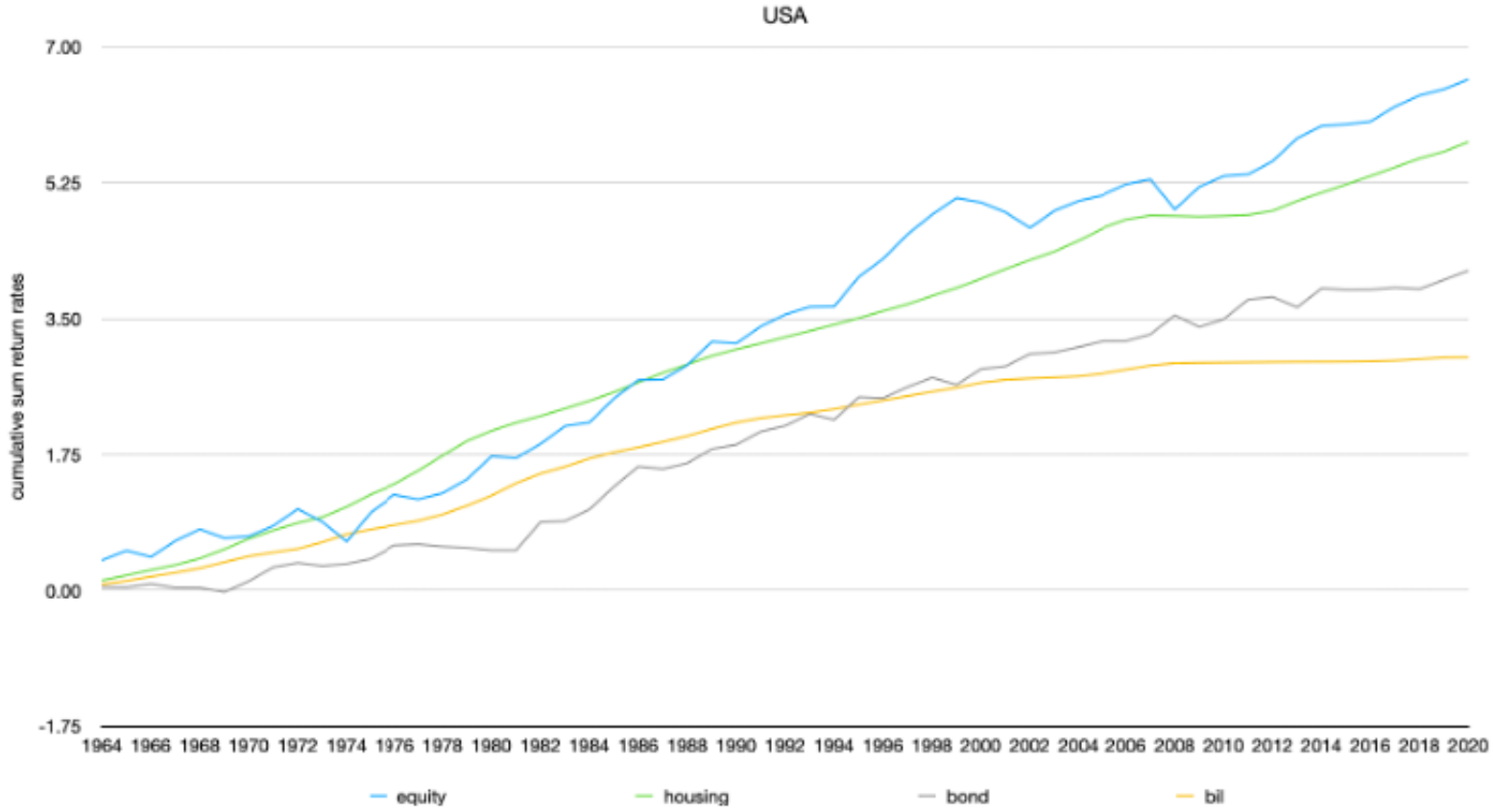


Figure: Cumulative (annual) sum of rates of returns (1963-2020) by type of asset: equities, housing, bonds, bills. Source: Jordà-Schularick-Taylor Macrohistory Database, 6th release

Rents as an increasing source of income generation - Germany

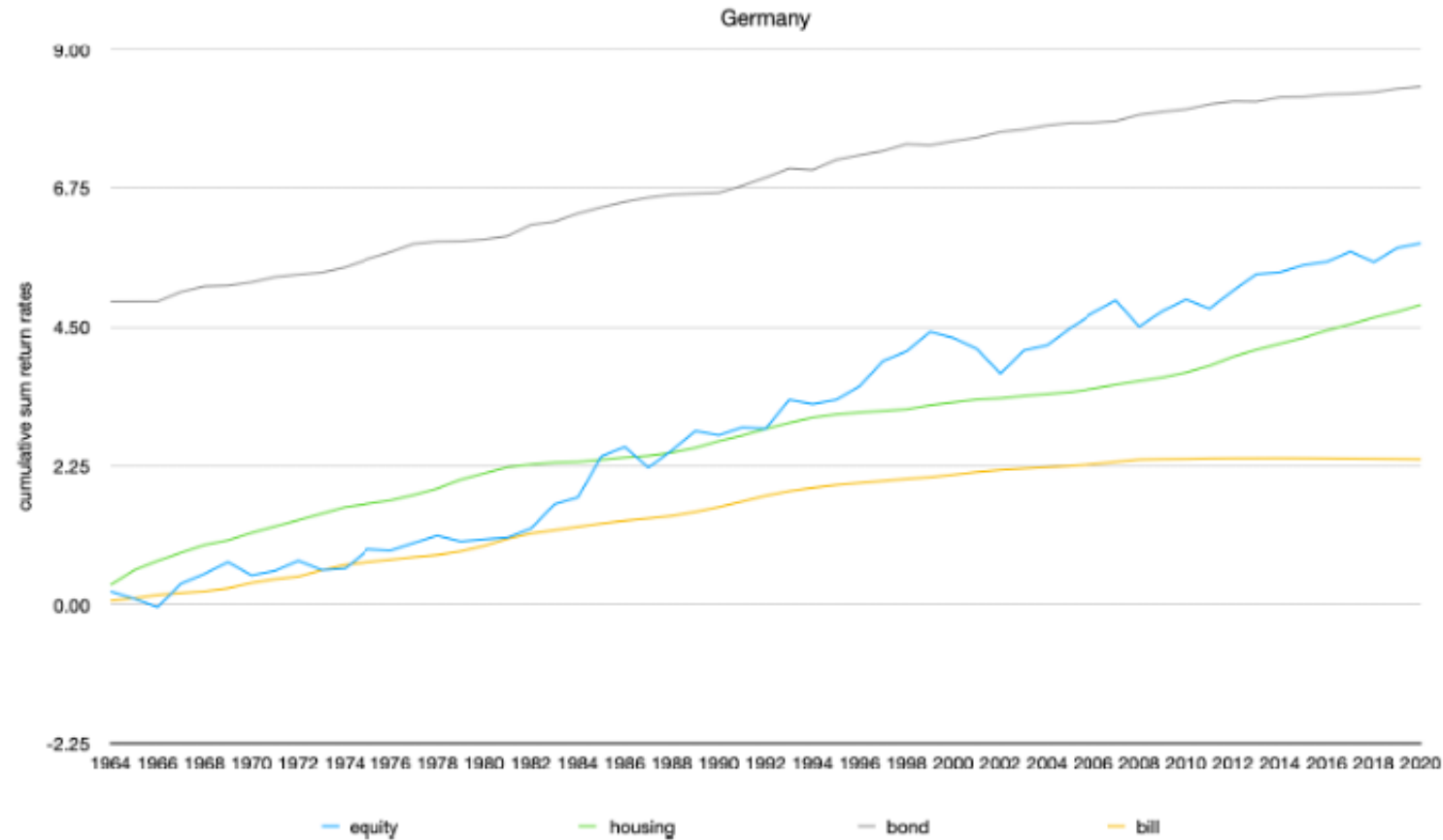


Figure: Cumulative (annual) sum of rates of returns (1963-2020) by type of asset: equities, housing, bonds, bills. Source: Jordà-Schularick-Taylor Macrohistory Database, 6th release

Measuring rentified capitalism

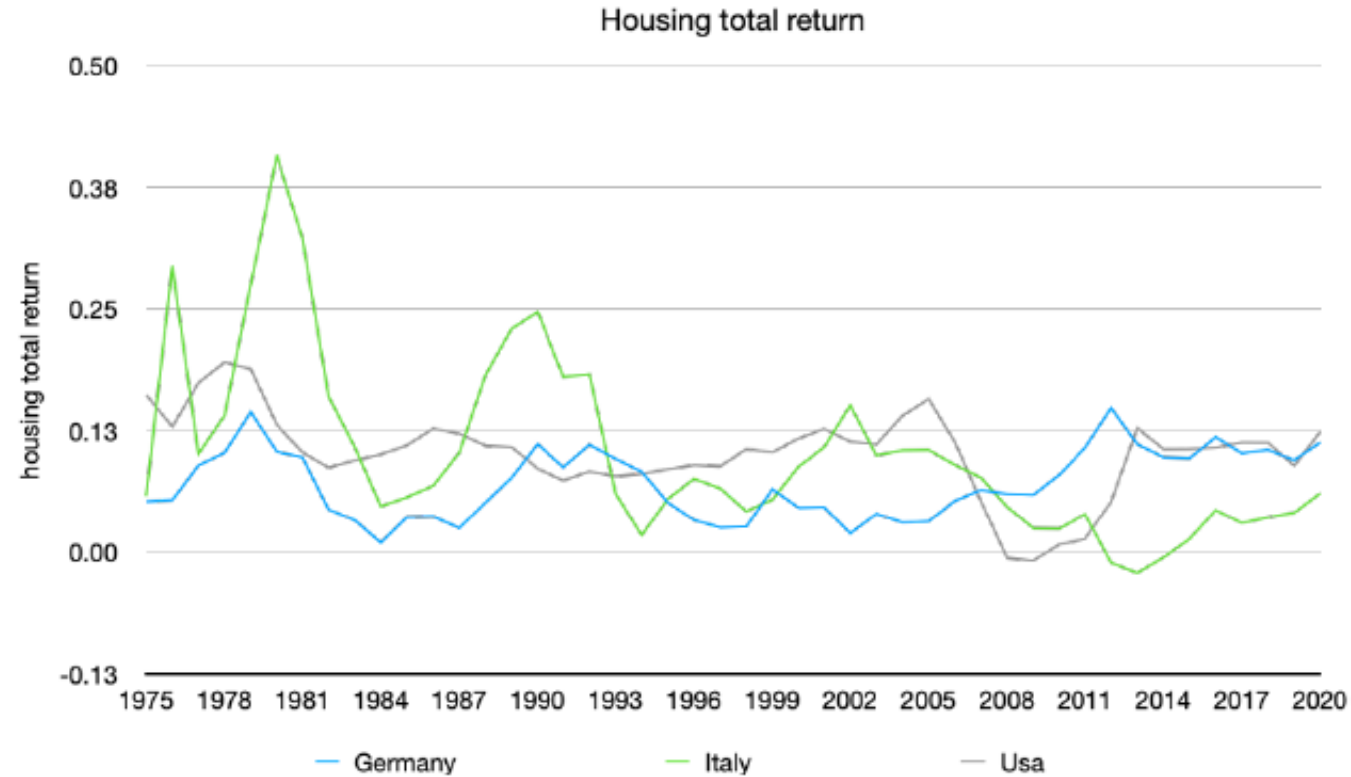


Figure: Housing total rate of returns. Source: Jordà-Schularick-Taylor Macrohistory Database, 6th release.

- ▶ Comovements across country level housing markets: housing cycles.

Measuring rentified capitalism: $r-g$

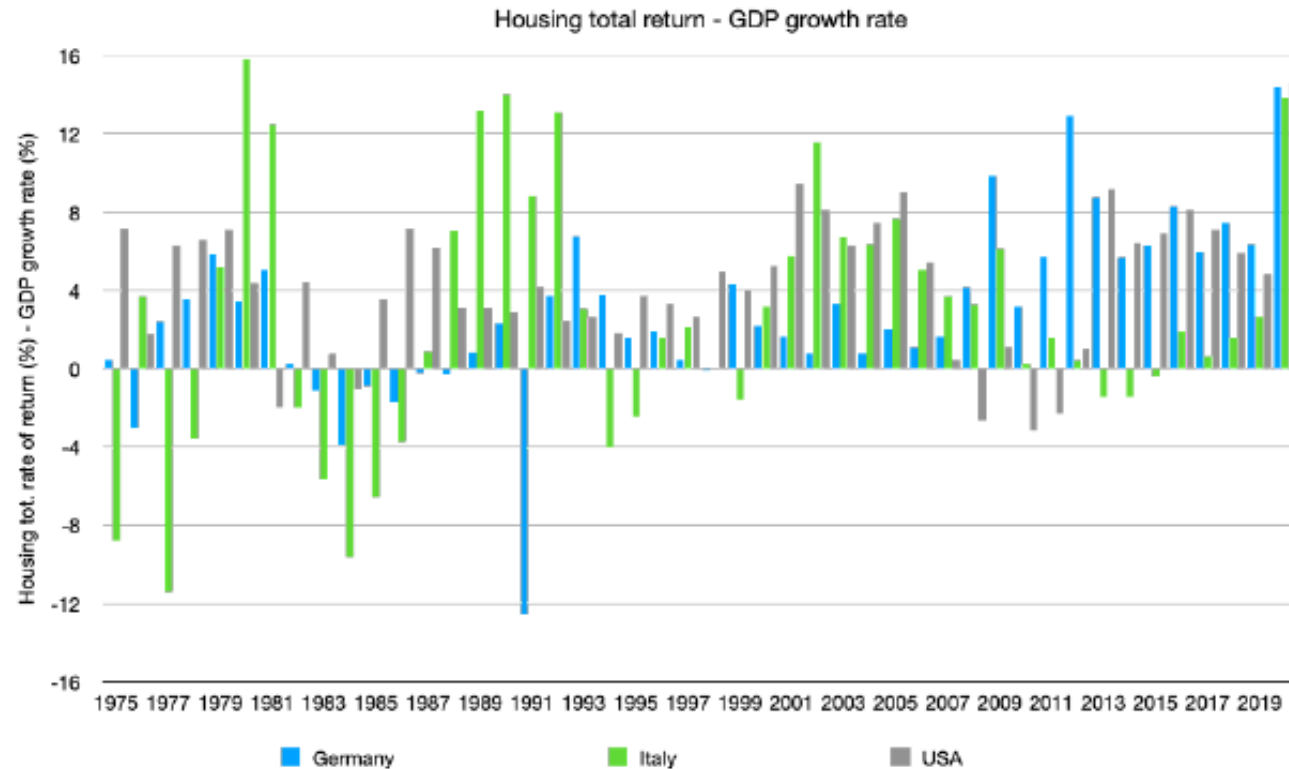
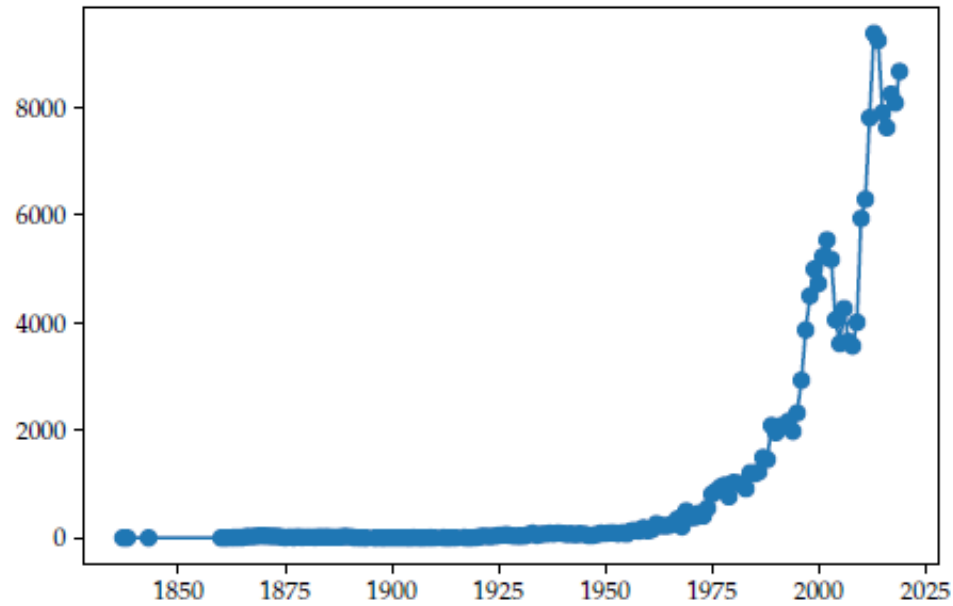


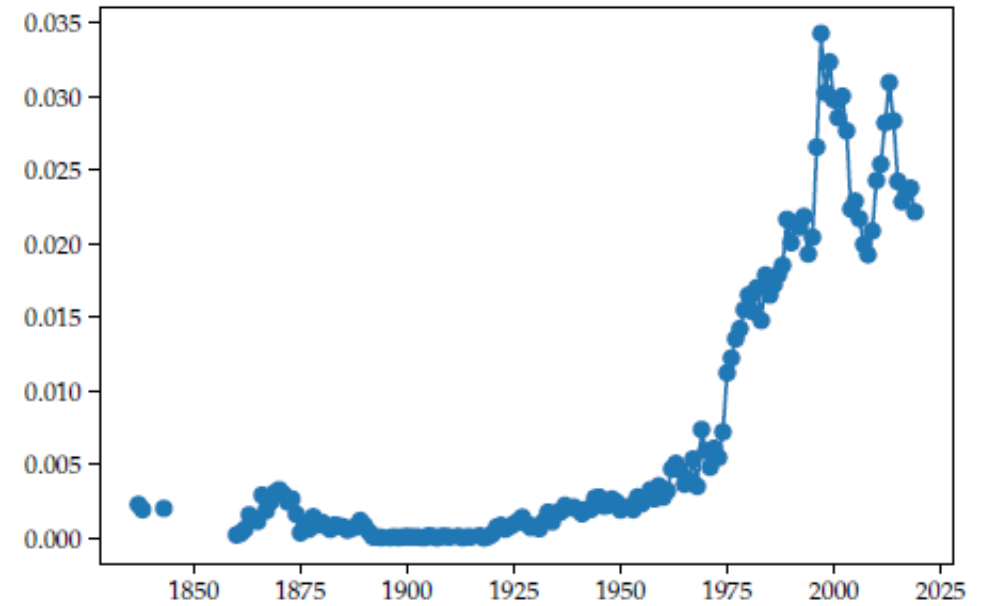
Figure: Housing total rate of return minus nominal GDP growth rate by country. Source: Jordà-Schularick-Taylor Macrohistory Database, 6th release.

- ▶ Prevalence of returns on housing higher than GDP growth in the majority of years (positive bars).
- ▶ The last decade has seen persistent excess of housing returns.
- ▶ The pandemic crisis has represented a new ascending phase of housing returns.

Long-run patenting activities in pharma (1837–2019)



(a) Absolute number of W16 patents



(b) Fraction of W16 over all patents

Figure: Source: Dosi et al. (2023). Big pharma and monopoly capitalism: a long-term view. *Structural Change and Economic Dynamics*, 65, 15-35.

IPR and monopoly capitalism: the case of Big Pharma

- ▶ increasing reliance on prior art and scientific knowledge
- ▶ low and decreasing amount of breakthrough innovations
- ▶ concentration of patenting into a few trade names
- ▶ decreasing government support, concentrated in few innovations
- ▶ fewer families with increasing size
- ▶ converging firm profit margins but diverging R&D intensity
- ▶ the explosion in patenting activity does *not* map into a corresponding growth in innovative activity
- ▶ pharma patents have increasingly constituted legal barriers to protect intellectual monopolies rather than an incentive and a reward to innovative efforts
- ▶ inside an overall pattern of increasing patenting activities in pharma, those patents receiving approval from FDI are extremely low: *what do the rest of patents do?*
- ▶ government involvement (i.e., financial support) **increases** for overall pharma patents while **decreases** for OB notwithstanding the very low numbers.

The coupled dynamics between the foregoing dissolution of the socio-economic pact of the '*glorious three decades*' with more recent technological advancements

A Blade Runner scenario?

- ▶ A blossoming debate on the effects of robotization upon both employment and inequality is spurring among scholars in the economic discipline.
- ▶ Should we expect an age of medieval techno-feudalism governed by a plutocracy which owns machines and robots, which will enjoy high standard of living, together with the most part of the population deprived of the benefits of technology?

Matching or mismatching between three subsystems

Technological determinism

Is it all about technology?

1. The system of technologies
2. The economic machine
3. The system of social relations and institutions

Distinguishing the productive and reproductive sphere

The emergence of a new techno-economic paradigm?

In many respects, the I4.0 strategy, fostering “leanness” in the production system, hardly represents a paradigm shift. Rather, the drive towards customisation, reduction of inventories, elimination of bottlenecks, tracking of errors, intensification and saturation of working time overlaps remarkably with the first wave of lean production which began in late 1970s.

What might hint instead at a paradigmatic change concerns more the pervasiveness of the collection and the use of data to achieve control over the social/reproduction spheres of individuals: **Big Data meets the Big Brother**

Coexistence of Old Taylorism and Digital Taylorism but without Fordism!

Two archetypes of labour relations both based on the **intensification of working conditions**:

- ▶ Old Taylorism: clear control and subordinate working activity, vertical industrial relation
- ▶ Digital Taylorism: soft-power, fictitious independence, myth of creativity and self-organization

Old Taylorism in the ICT era

The Foxconn archetype: Source: Pun Ngai, "Nella fabbrica globale", 2015

Among the biggest worldwide employers and the first Chinese exporter.

- ▶ Massive migration from agricultural areas of young workers (born after 1980s)
- ▶ Factory-cum-dormitory: *Dormitory Labour Regime*
- ▶ Every factory building and dormitory has security checkpoints with guards standing by 24 hours a day
- ▶ All employees, whether they are going to the toilet or going to eat, must be checked
- ▶ Physical and verbal violence is systemic in Foxconn system. Workers are harassed and beaten up without serious cause

Old Taylorism

The iPad case

The global value chain

- ▶ International brand-name corporations (Apple) who squeeze their suppliers
- ▶ To secure contracts, Foxconn minimizes costs, and transfers the pressure of low profit margins to frontline workers.
- ▶ Average wage quite close to the province minimum wage
- ▶ Massive reliance upon overtime hours

- ▶ price of the iPad : \$ – 499
- ▶ manufacturing costs: 9\$ equivalent to 1.8% \Rightarrow *Foxconn*
- ▶ costs of components: 250\$ equivalent to 50%

Source: Pun Ngai, "Nella fabbrica globale", 2015

Digital Taylorism - The Uber-Foodora-Deliveroo archetype

- ▶ Based on cheap, generally educated workers
- ▶ Without a workplace
- ▶ Being “your own boss”
- ▶ Transfer of the entrepreneurial risk from firms to workers
- ▶ Managed not by people but by an algorithm that communicates with workers via smartphones
- ▶ Disappearance of both collective and even individual labour contracts

When your boss is an algorithm?

Algorithmic management - Control

How to instruct, track and evaluate a crowd of casual workers you do not employ, so they deliver a responsive, seamless, standardised service.

- ▶ monitoring of the workers
- ▶ sending productivity evaluation messages (time to accept orders, time to deliver, travel time to restaurant, travel to customers, late orders)
- ▶ but... drivers can't be deemed employees because they have no obligation at all to log on to the app (Uber).

More generally:

New technologies and in particular AI driving a huge apparatus of social control

Is this time really different?

- ▶ The Industrial Revolution was no marriage party for the working classes: it was largely an era of degradation of social conditions and it took decades for productivity growth to trickle down to the working classes.
- ▶ Today there are worrying factors which hint that it might not be so in near future. And they have to do with both the impact of the new technologies and, even more so, with the ways the old socio-economic regime, call it “Fordist”, progressively exhausted its driving force.

Caveat:

the foregoing analyses have neglected three major dramatic processes:

1. The growing 'globalization' has increasingly de-linked (a weakening) political domain and a (dominant) economic one;

...and with that, the de-linking between popular representation and the loci of decision-making (..the international technocracy...)

2. The weakening of the hegemonic empire and the drive toward a 'Thucydides trap' ...

3. The acceleration of the environmental crisis, possibly near dramatic tipping points

The bottom line

We are at the cross road between a *Blade Runner Scenario* running toward war and environmental collapse and Keynes' vision (Economic Possibilities for our Grandchildren, 1930)

Public policies will make the difference

Some difficult but urgent proposals

- re-appropriation of sovereignty by the loci of representation and the sterilisation of the dominant military-industrial technocracies

- redress the power balance between social classes and reverse the current explosion of inequalities.

- A vast and socially just '*Green New Deal*', with the depth and urgency of a war