

# UNPRODUCTIVE ACCUMULATION IN THE USA

Tomás Rotta

University of Greenwich, London

Greenwich Political Economy Centre (GPERC)

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# UNPRODUCTIVE ACCUMULATION IN THE USA

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# Objective

## Broad Question

What is happening in the US economy?

## Entry Point

The accumulation of unproductive capital

## Specific Question

What are the **causes**, **historical patterns**, and economic **effects** of unproductive accumulation in the US?

# Methods

## Theoretical

Political Economy

Marxist Theory

## Empirical

Descriptive analysis

Input-Output matrices and NIPA

New methodology to transform official accounts into PE concepts

Time series econometrics

# Terminology

More accurate to speak of **activities** rather than sectors

Because sectors and companies comprise a mix of productive and unproductive activities

**Productive activity (PA)** = economic activity that produces **value**

**Unproductive activity (UA)** = economic activity that does **not** produce value

**Accumulation** = increase in the **flow of income** or in the **stock of assets**

**Productive accumulation** = increase in the flow of income or in the stock of assets in PA

**Unproductive accumulation** = increase in the flow of income or in the stock of assets in UA

# Terminology

## Productive activities (PA)

Produce new commodities with value

Produce new value, and hopefully new surplus value

**Total Value of PA** = Constant Capital in PA + **Marxist VA**  
= Constant Capital in PA + Value of LP + Surplus Value

## Unproductive activities (UA)

Do not produce new commodities with value

Claim a share on the values produced by PA

**Gross Income of UA** = Constant Capital in UA + **Net Income of UA**

# Unproductive Activities

1. Trade = wholesale + retail
2. Finance + Insurance
3. Real estate brokerage + Land rents
4. Some Government activities
  - National defense + police
  - Federal, state, and local administration
5. Advertising; law firms; security firms
6. **Knowledge and Information**
  - Software
  - Recorded music + Movies
  - Scientific knowledge (journals, books etc.)
  - Pharmaceuticals
  - Commodified data and information

# Knowledge and Information

Why is the **production of knowledge and information** an **unproductive activity**?

Many scholars have misunderstood Marx's concept of value, as if:

Labor time necessary to **produce** a commodity → Amount of Value



# Knowledge and Information

But according to Marx himself...

## ***Capital I:***

“however young and full of life the machine may be, its value is no longer determined by the necessary labour-time actually objectified in it, but by the labour-time necessary to reproduce either it or the better machine. It has therefore been devalued to a greater or lesser extent”

## ***Capital III:***

“the value of commodities is determined not by the labor-time originally taken by their production, but rather by the labor-time that their reproduction takes”

“The value of any commodity - and thus also of the commodities which capital consists of - is determined not by the necessary labour-time that it itself contains, but by the socially necessary labour-time required for its reproduction. This reproduction may differ from the conditions of its original production by taking place under easier or more difficult circumstances”

# Knowledge and Information

## **Labor theory of value of commodified knowledge:**

Knowledge and information are commodities with zero value

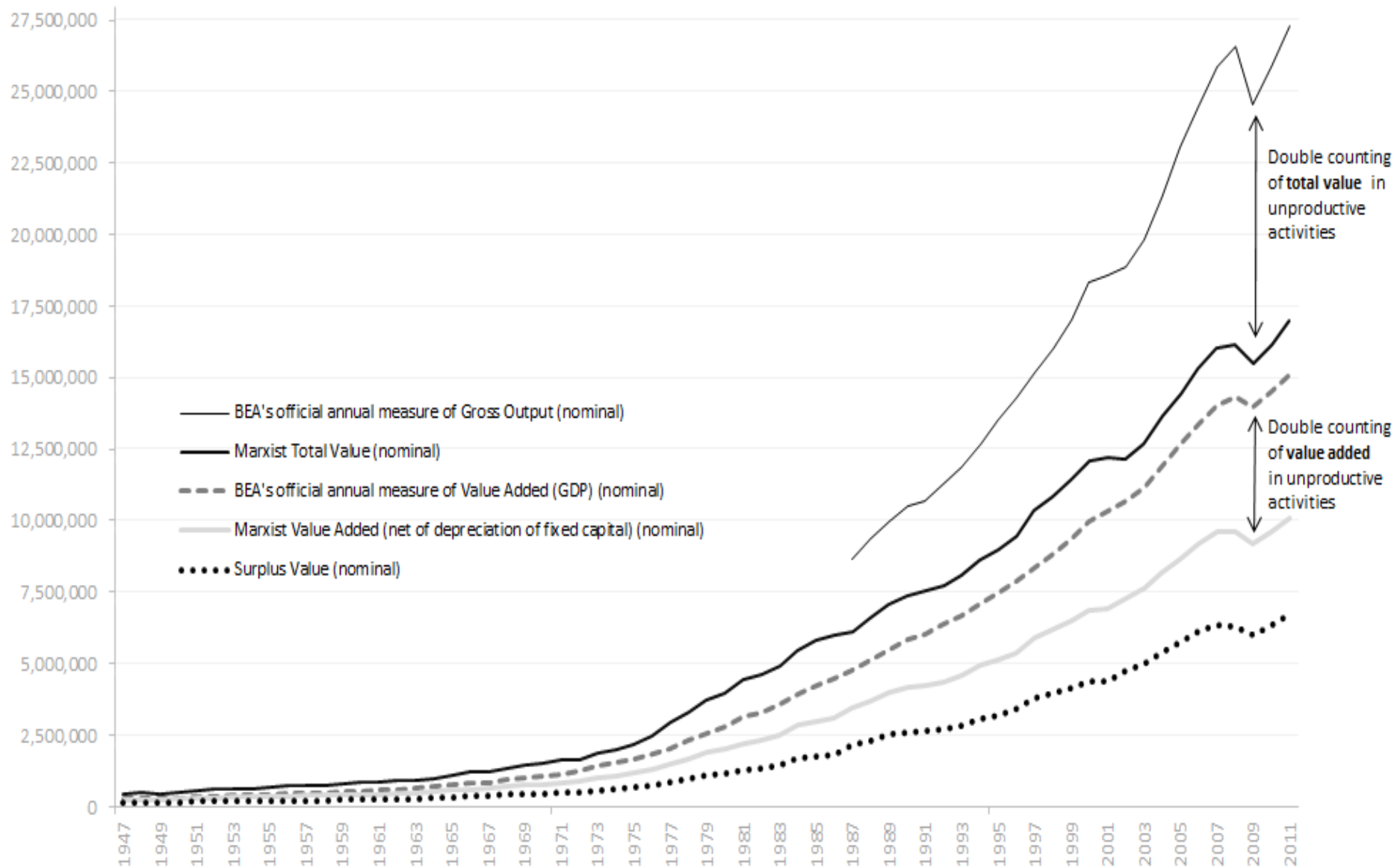
→ Knowledge-commodities

No value → No surplus value → Unproductive Activity (UA)

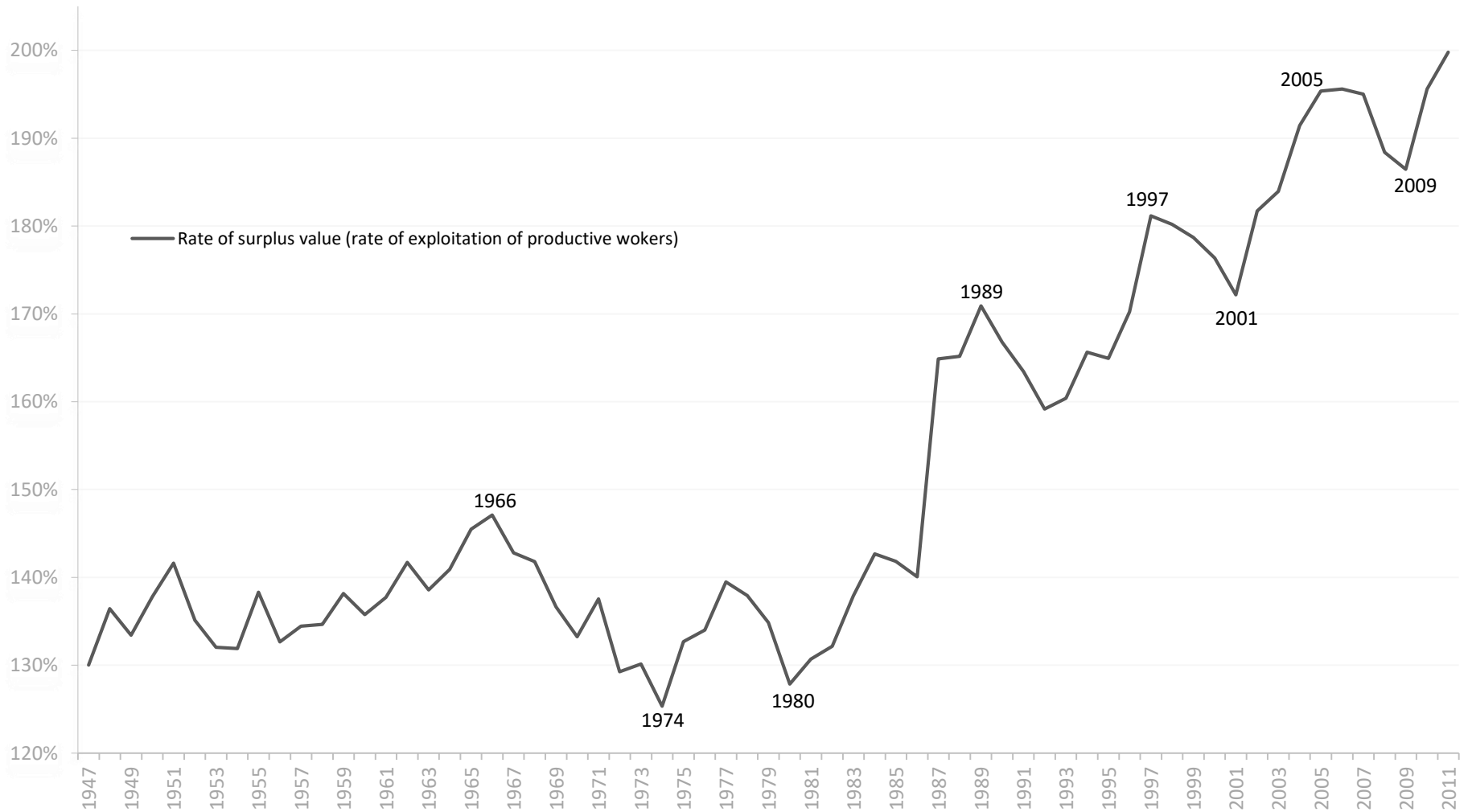
Knowledge production → Knowledge-rents + Knowledge-lords

# Historical Trends in the USA

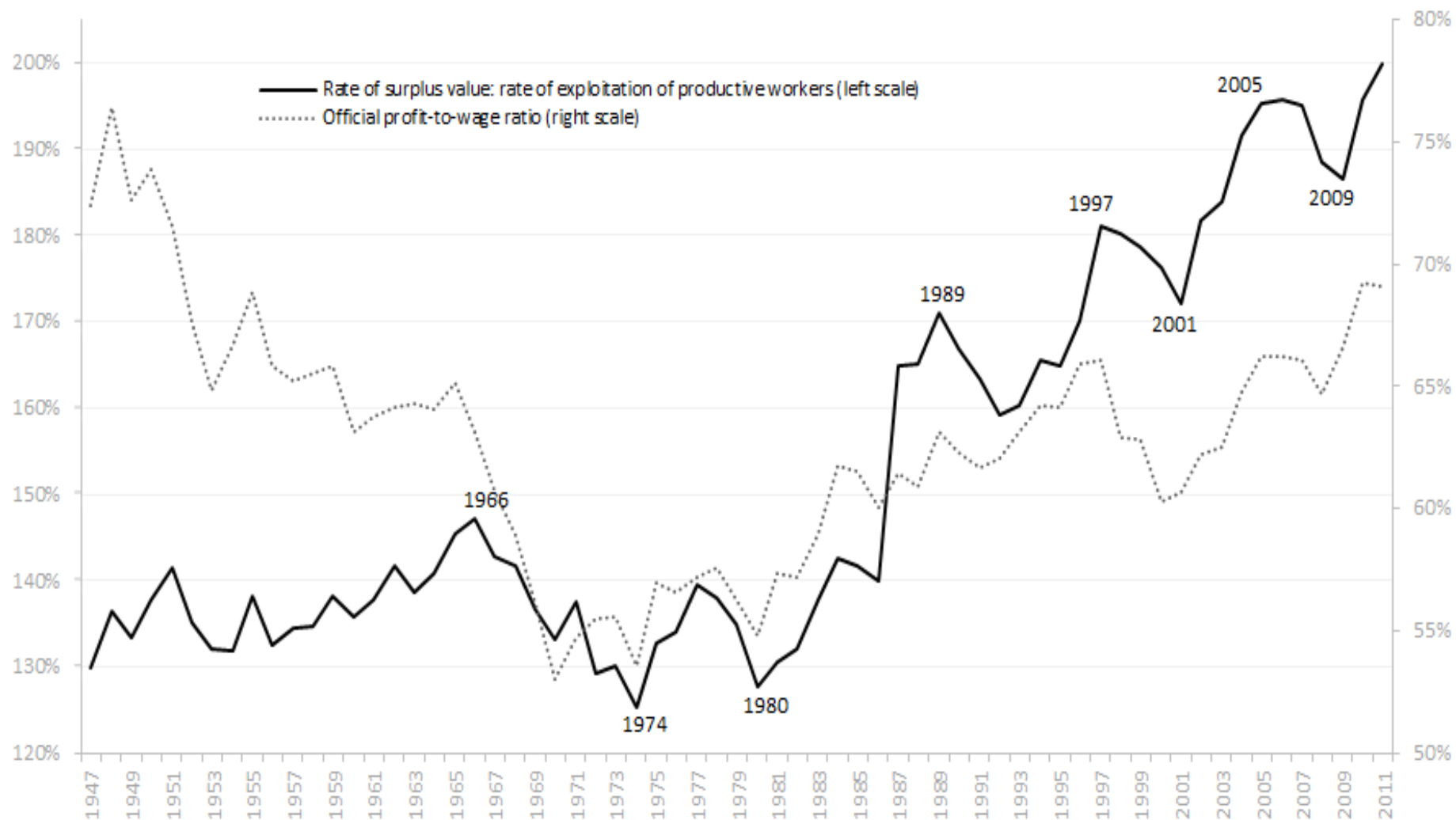
# Marxist Categories and Official Measures of Output (1947-2011) – Millions of Dollars



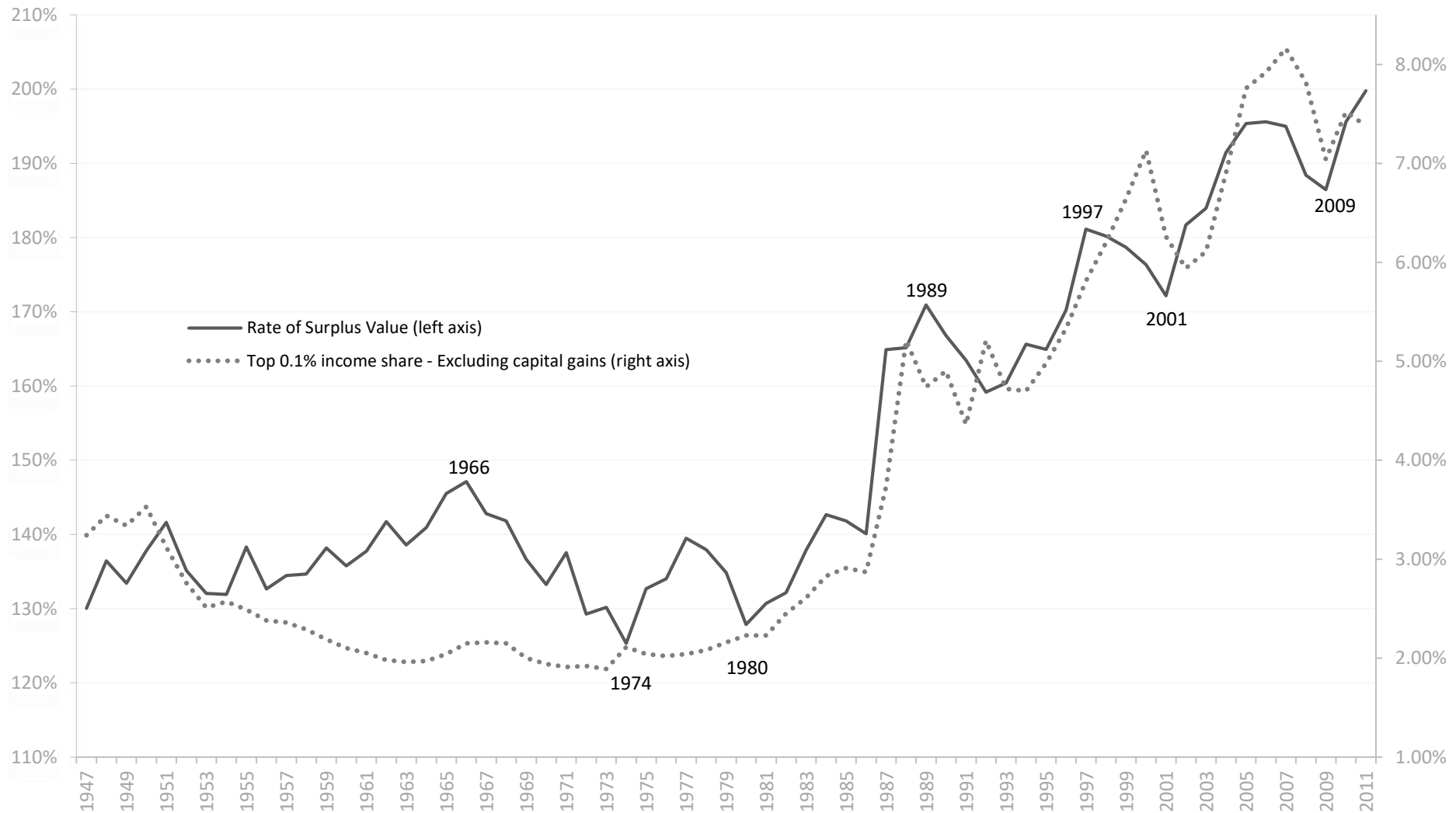
# Rate of Surplus Value (rate of exploitation of productive workers)



## Rate of Surplus Value (rate of exploitation of productive workers)



# Rate of Surplus Value + Top 0.1% income share (excluding capital gains)



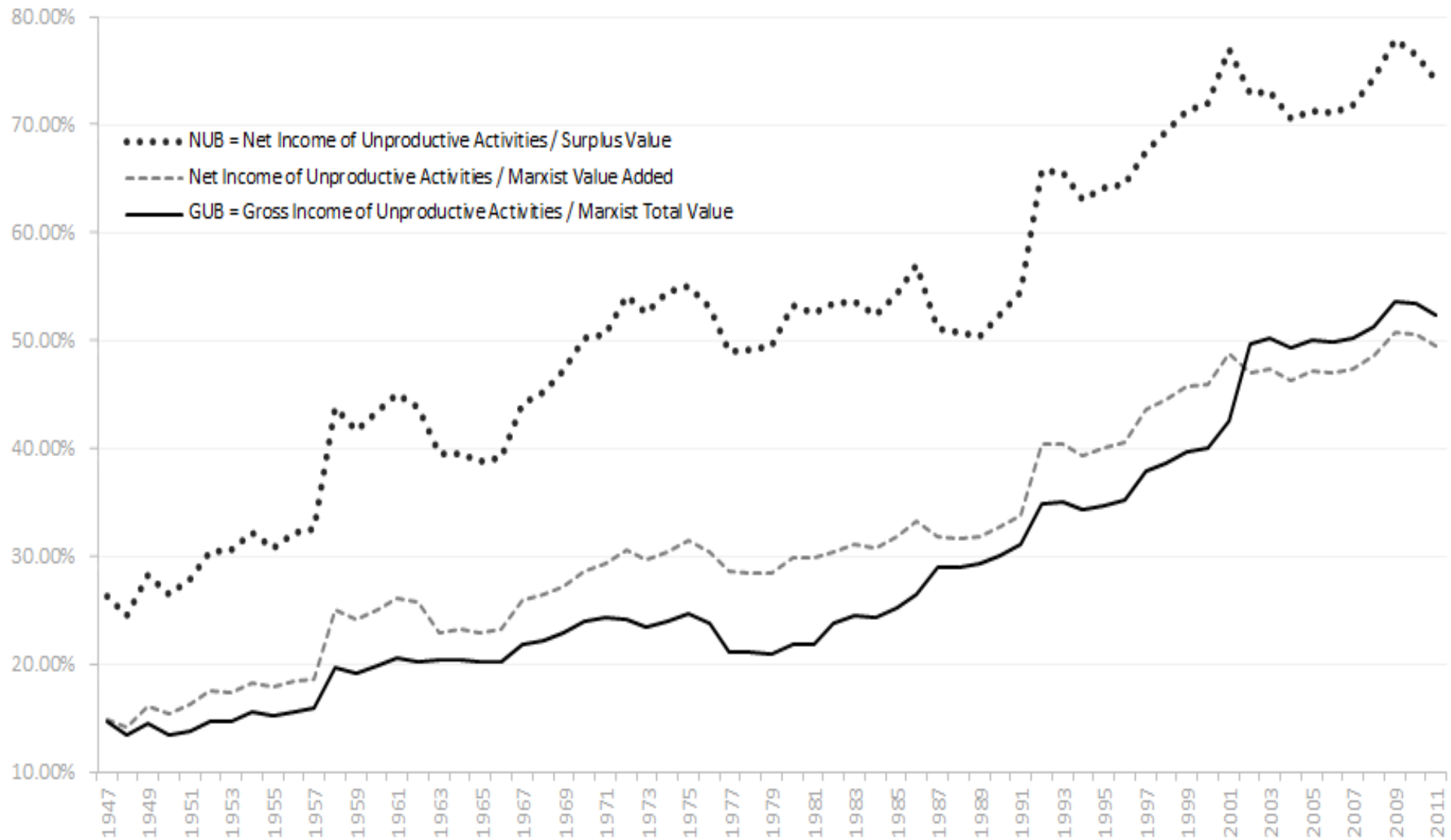
**Table 2.1: Exploitation and Inequality in the United States – Correlations (1947-2011)**

	Correlation
Rate of Surplus Value (from Rotta) and Top 1% income share - 1947 to 2011	0.95
Rate of Surplus Value (from Rotta) and Top 0.1% income share - 1947 to 2011	0.96
Rate of Surplus Value (from Rotta) and Inverted Pareto-Lorenz coefficient - 1947 to 2011	0.94
Rate of Surplus Value (Shaik and Tonak 1994) and Top 1% income share - 1948 to 1989	0.05
Rate of Surplus Value (Shaik and Tonak 1994) and Top 0.1% income share - 1948 to 1989	0.26
Rate of Surplus Value (Shaik and Tonak 1994) and Inverted Pareto-Lorenz coef. - 1948 to 1989	0.45
Rate of Surplus Value (from Rotta) and Top 1% income share - 1948 to 1989	0.63
Rate of Surplus Value (from Rotta) and Top 0.1% income share - 1948 to 1989	0.71
Rate of Surplus Value (from Rotta) and Inverted Pareto-Lorenz coefficient - 1948 to 1989	0.70
Profit-Wage Ratio (from BEA) and Top 1% income share - 1947 to 2011	0.41
Profit-Wage Ratio (from BEA) and Top 0.1% income share - 1947 to 2011	0.34
Profit-Wage Ratio (from BEA) and Inverted Pareto-Lorenz coefficient - 1947 to 2011	0.29

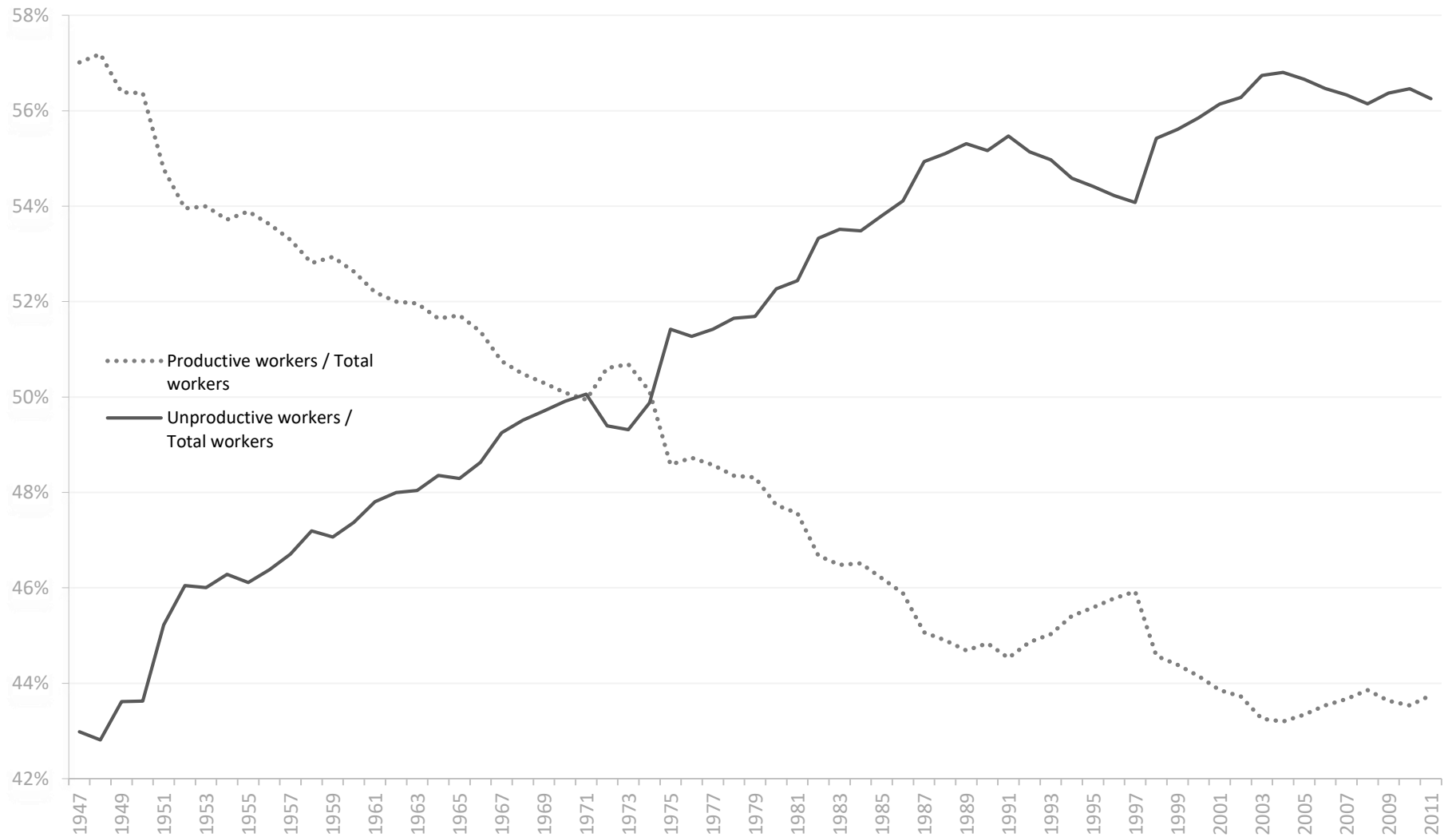
*Sources:* Author's calculations; Shaikh and Tonak (1994); Piketty (2014); Alvaredo, Atkinson, Piketty, and Saez (2014); and BEA.



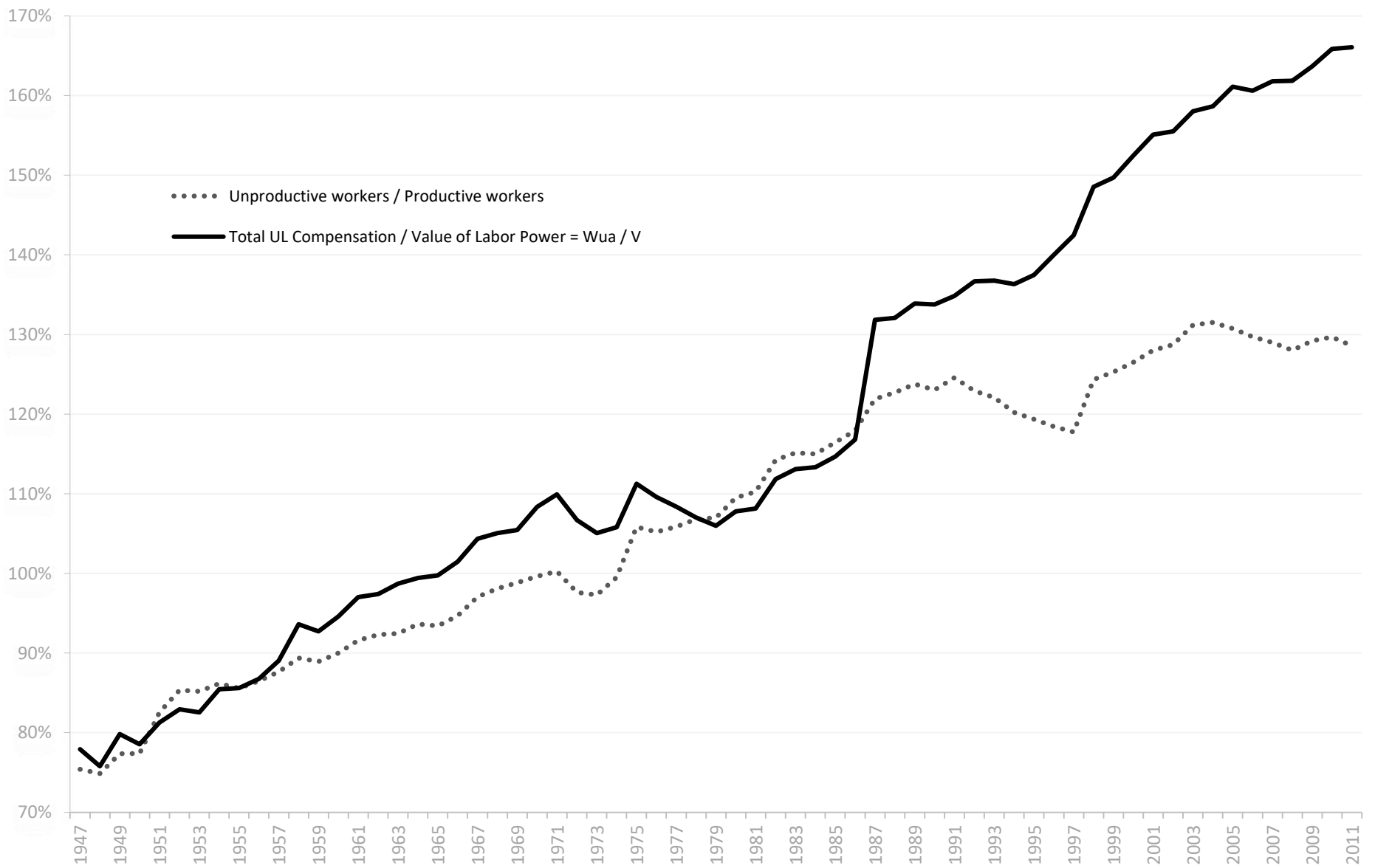
## Measures of Unproductive Accumulation (relative flows of income)



## Productive and Unproductive Workers (shares of total employment)

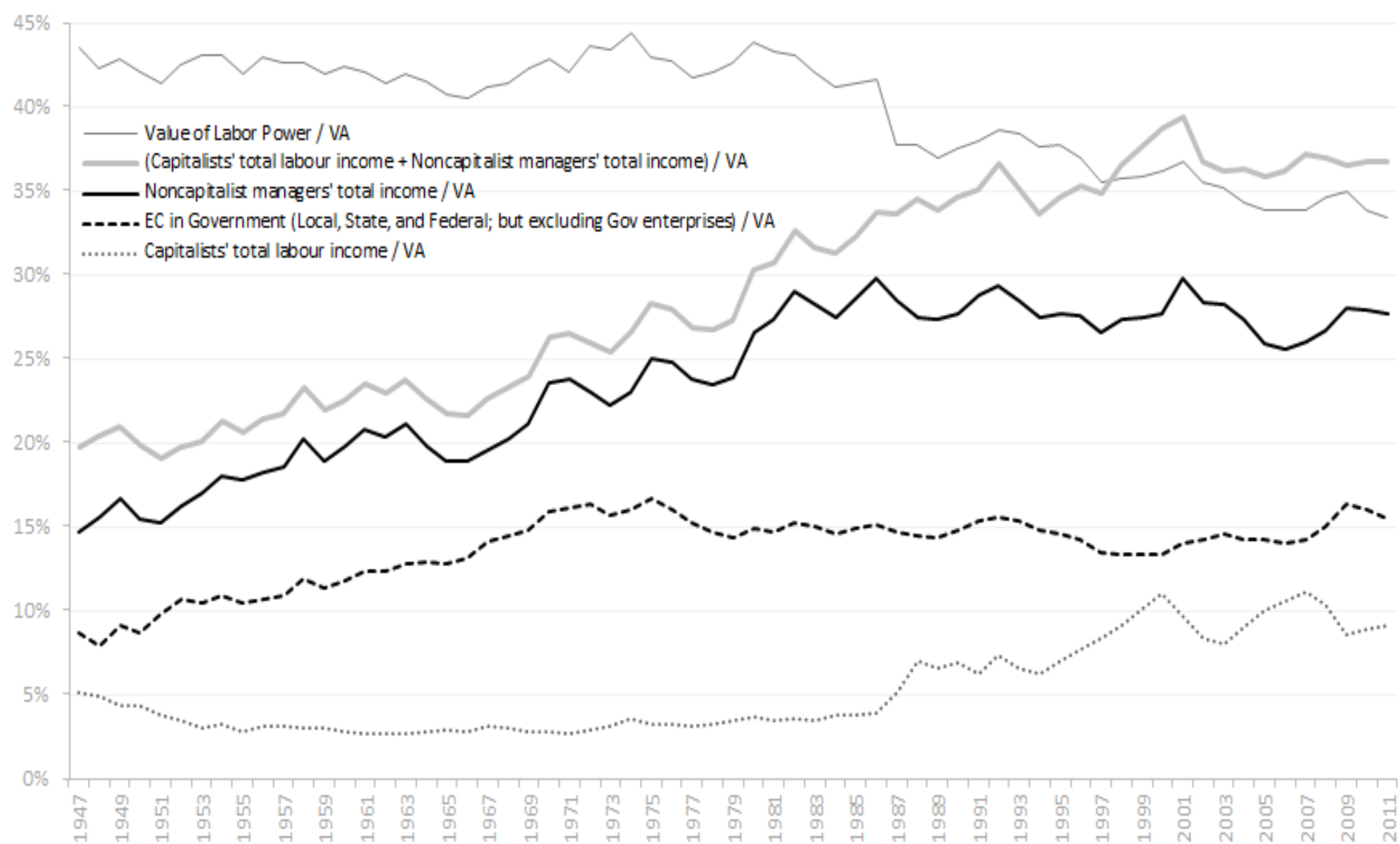


## Productive and Unproductive Workers



## Labor Income Shares of (Marxist) Value Added

Only labor income is included for managers and capitalists. Because of the overlap between functional and personal distributions of income, percentages do not have to add up to 100%.



## General and Net Profit Rates

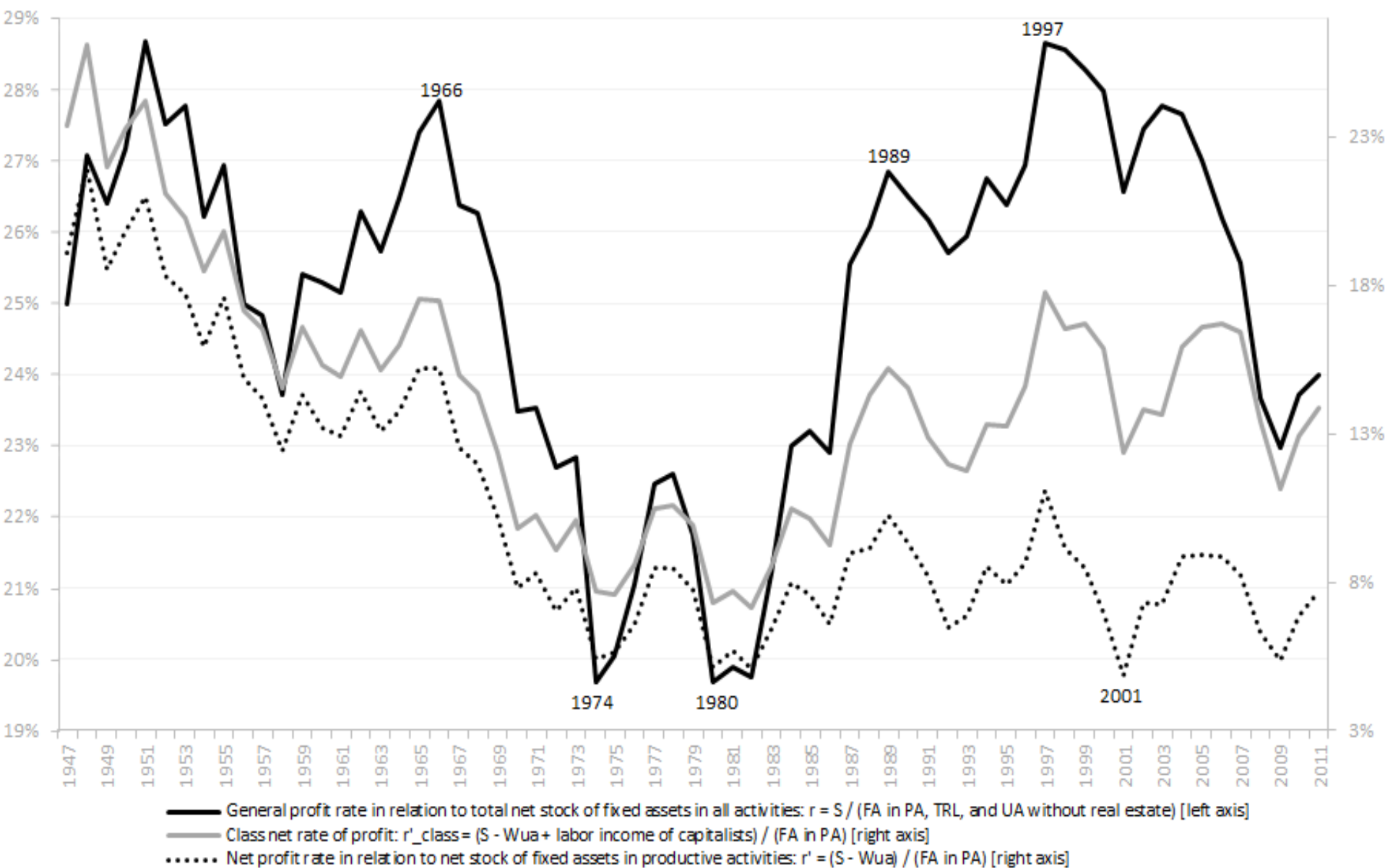
general profit  
rate:

$$r = \frac{S}{K} = \frac{S}{K_{PA} + K_{UA}} = \frac{\frac{S}{V}}{\frac{K_{PA}}{V} + \frac{K_{UA}}{V}} = \frac{s}{OCC + UCC}$$

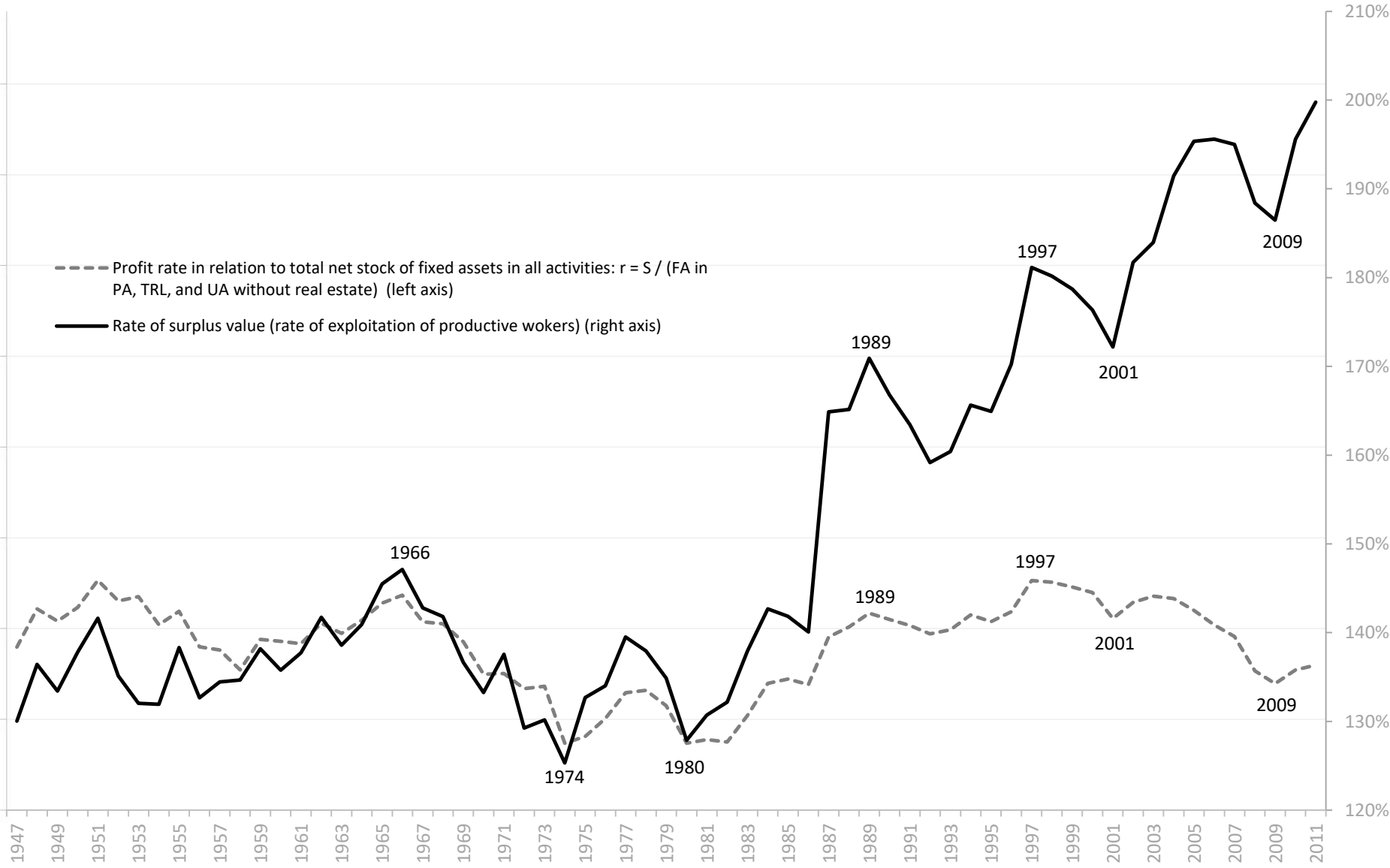
net profit rate  
in PA:

$$r' = \frac{\Pi}{K_{PA}} = \frac{S - W_{UA}}{K_{PA}} = \frac{\frac{S}{V} - \frac{W_{UA}}{V}}{\frac{K_{PA}}{V}} = \frac{s - \frac{W_{UA}}{V}}{OCC}$$

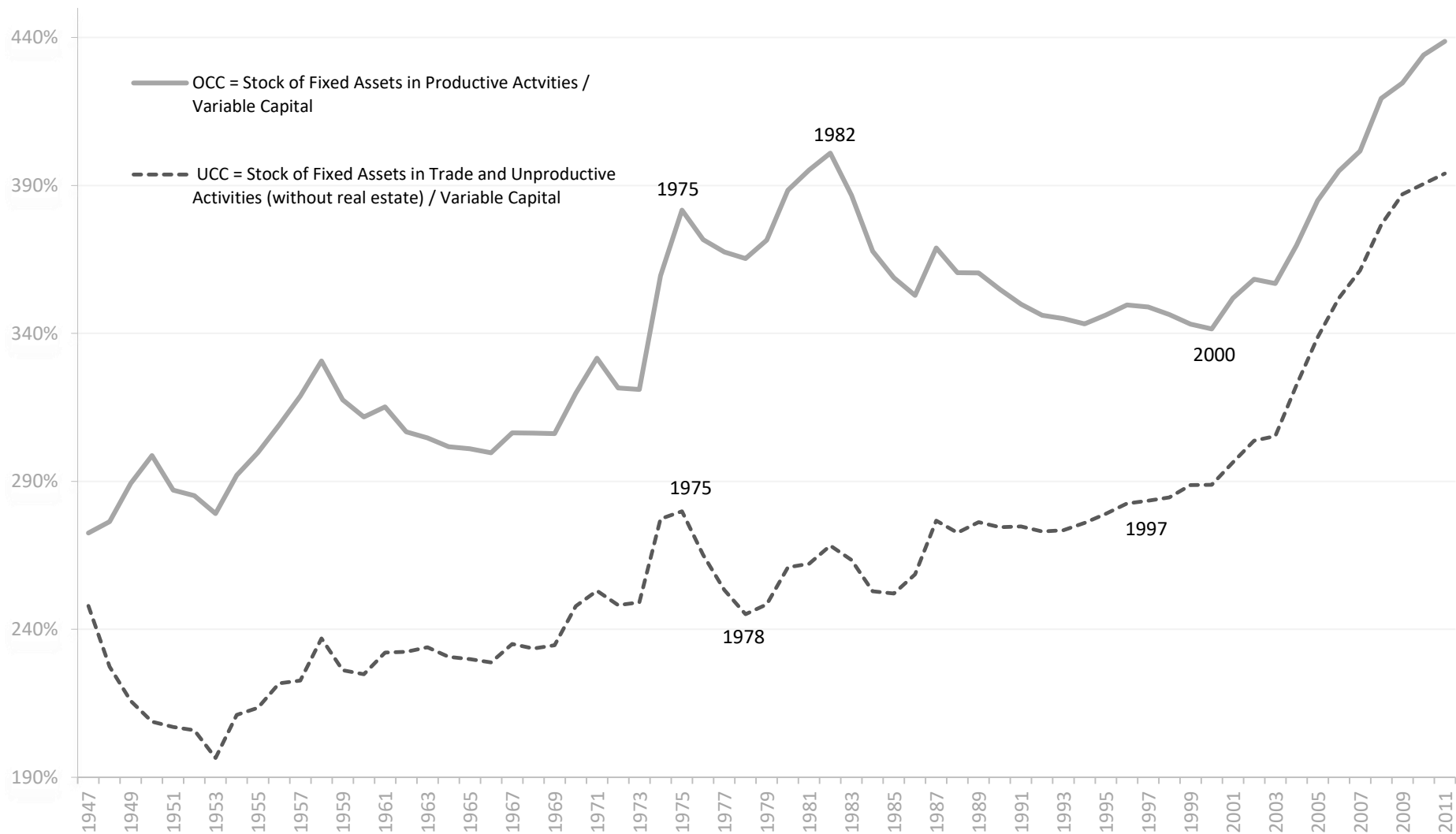
## General and Net Profit Rates



# Exploitation and Profitability

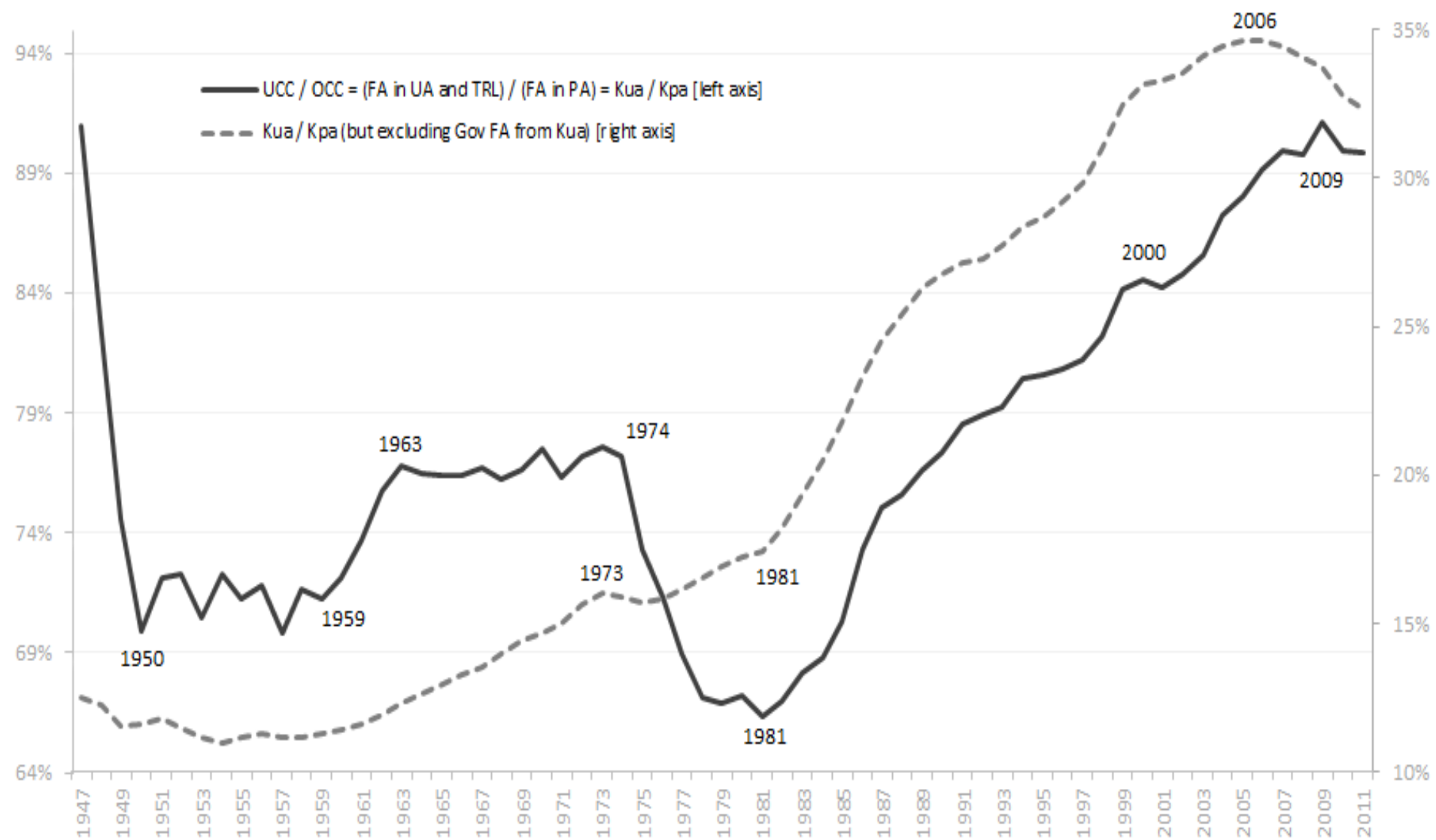


$$OCC = \frac{K_{PA}}{V} \quad \text{and} \quad UCC = \frac{K_{UA}}{V}$$

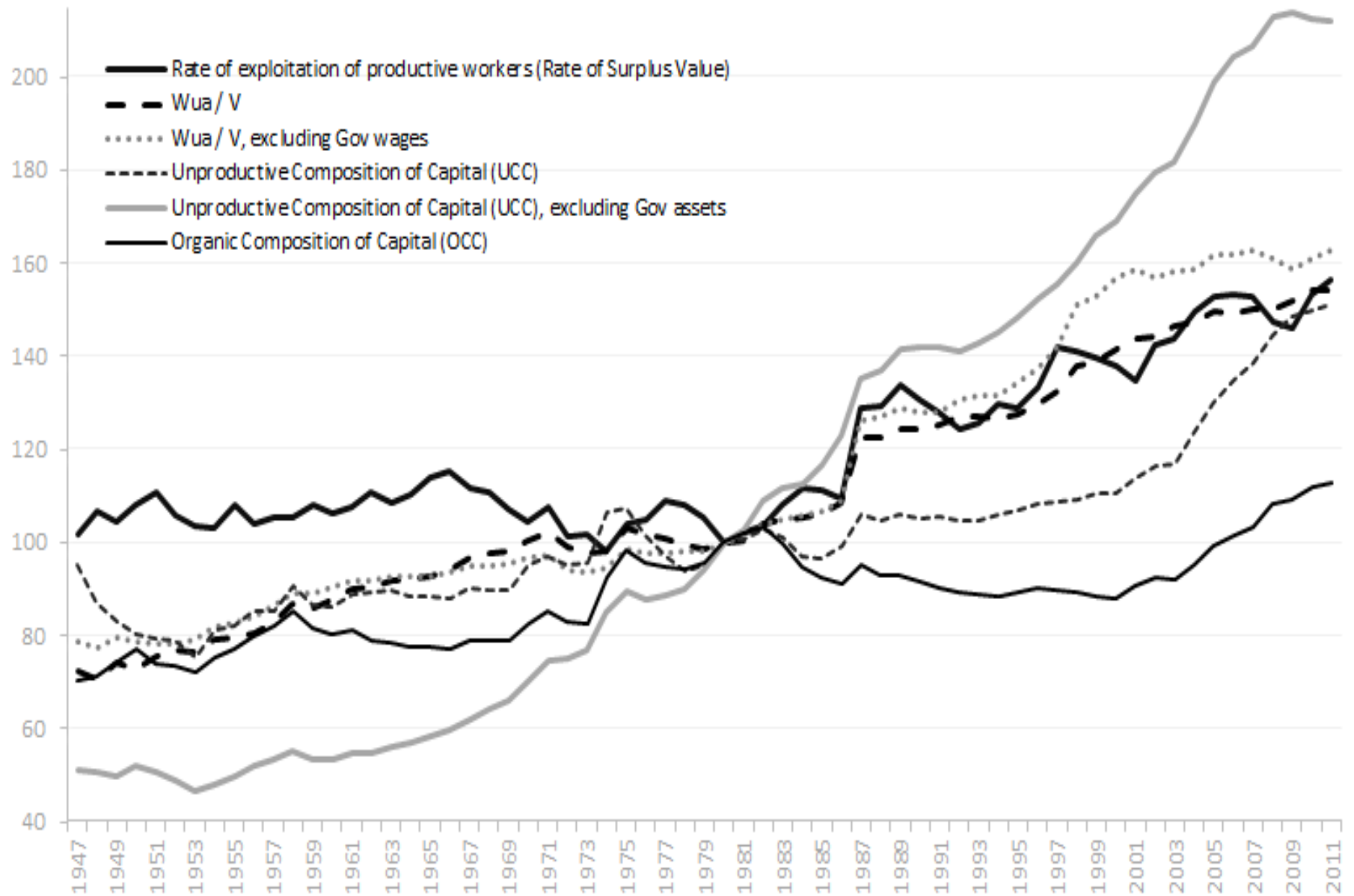




$$\frac{UCC}{OCC} = \frac{K_{UA}}{K_{PA}}$$



# Determinants of Profitability (1980 = 100)

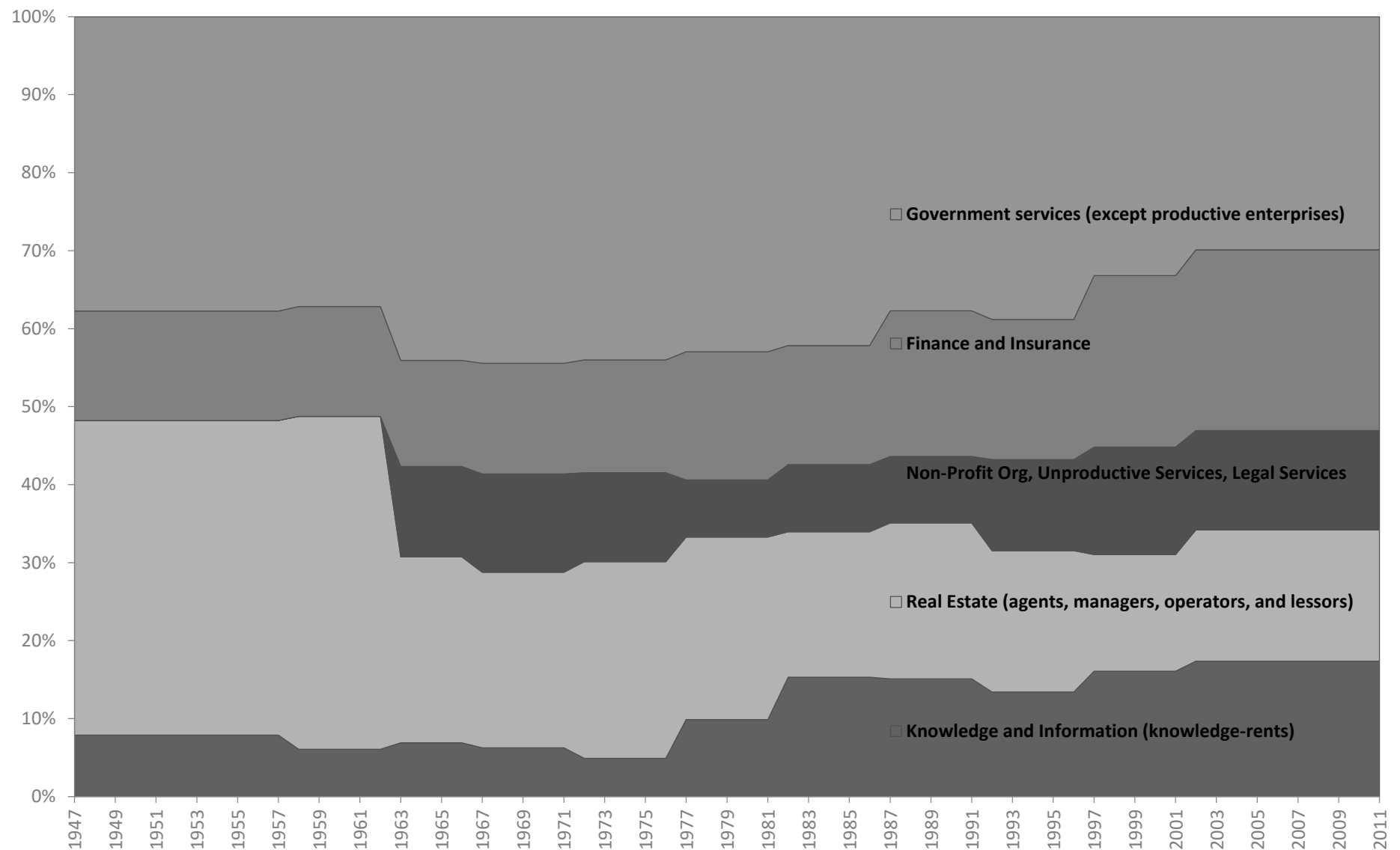


**Table 2.** *Determinants of profitability–cumulative growth rates (1947–2011)*

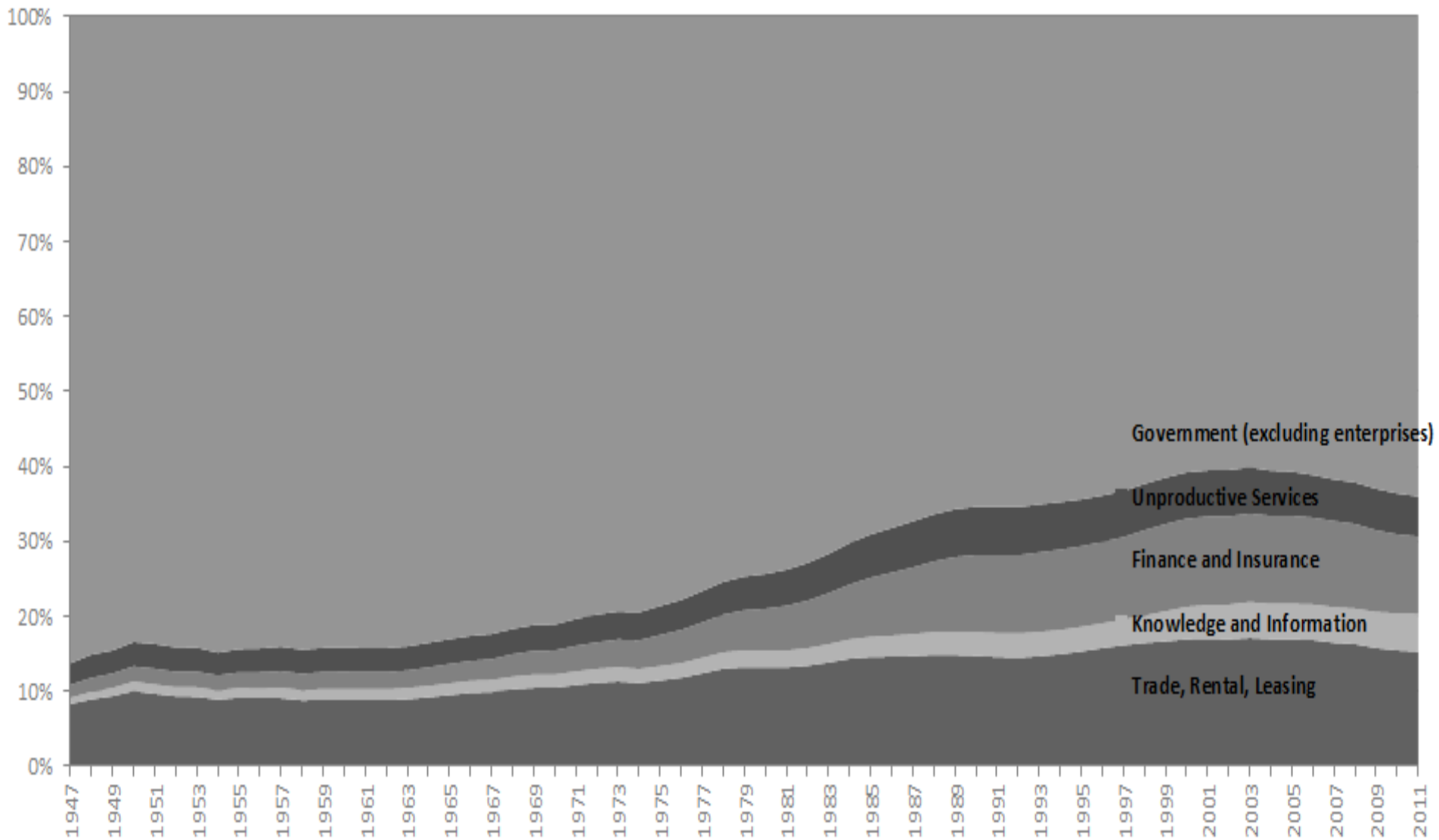
	<b>Whole period (1947–2011)</b>	<b>Regulated period (1947–80)</b>	<b>Neoliberal period (1980–2011)</b>
Rate of exploitation	53.6%	–1.7%	56.2%
OCC	61.0%	42.5%	12.9%
UCC	58.9%	5.3%	51.0%
UCC (without gov assets)	316.0%	96.4%	111.8%
Wua / V	113.1%	38.3%	54.1%
Wua / V (without gov wages)	106.7%	27.1%	62.5%

*Sources:* Author's calculations. Growth rates are cumulative for the time periods indicated.

# Decomposition of the Net Income of UA



## Decomposition of the Capital Stock of UA



**Table 3.** *Average annual real growth rates (1948–2011)*

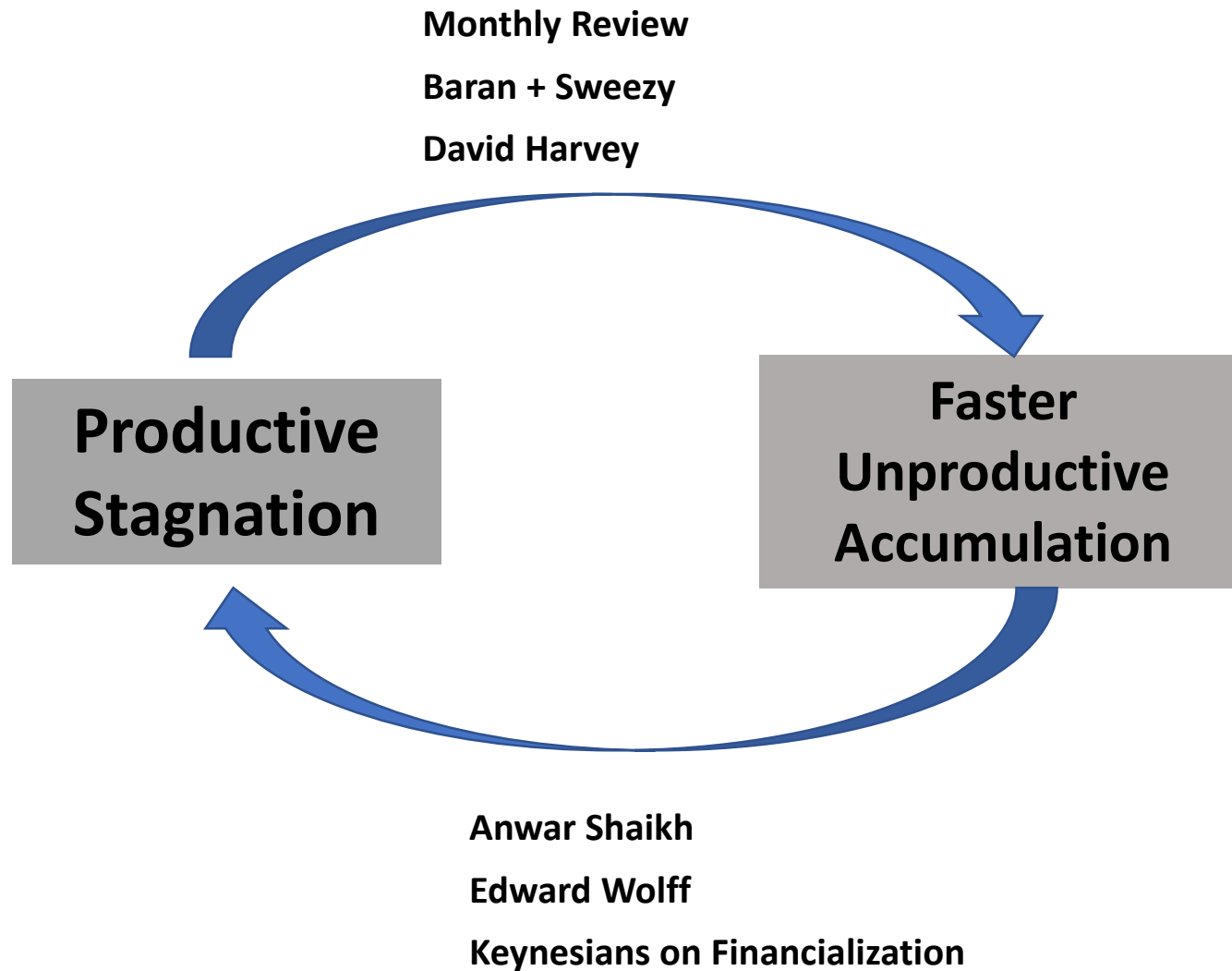
	<b>Whole period (1948–2011)</b>	<b>Regulated period (1948–79)</b>	<b>Neoliberal period (1980–2011)</b>
<b>Productive activity (PA)</b>			
Total value of PA	2.66%	3.46%	1.86%
Marxist value Added of PA	2.89%	3.42%	2.37%
Surplus value of PA	3.19%	3.50%	2.89%
Capital stock of PA	3.30%	4.44%	2.16%
<b>Unproductive activity (UA)</b>			
Gross income of UA	4.73%	4.61%	4.84%
Net income of UA	4.90%	5.62%	4.19%
Capital stock of UA (nonresidential, with Gov)	3.29%	3.47%	3.12%
Capital stock of UA (nonresidential, without Gov)	4.87%	5.45%	4.29%

*Source:* Author's calculations. Real growth rates are all in 2005 dollars.

*Notes:* Real growth rates were obtained by deflating nominal flow measures by the implicit GDP deflator, and nominal stock measures by the producer price index (PPI). Marxist VA, surplus value, gross and net incomes of unproductive activities are all net of depreciation of fixed assets.

## Final Remarks

# Causality?





# Final Remarks

The commodification of knowledge and information boosts the **rentier** aspect of capitalism:

**Knowledge-commodities** and **knowledge-rents**

In principle, UA are not necessarily bad or useless:

UA just do not produce new value

Some types of UA are necessary and useful

However, **since 1980**, close relation between:

Faster unproductive accumulation (in flows and stocks)

Productive stagnation

Rising exploitation of workers

Rising inequality

# Final Remarks

Unproductive activities have a tendency to **generate abstract forms of wealth** that are increasingly **autonomized** from the production of value in productive activities

Even though unproductive accumulation occurs together with **rising levels of exploitation** of productive workers, unproductive activities generate **unproductive incomes** that increasingly **obscure** the source of new value in the exploitation of labor

Capitalism has a **self-correction mechanism** to re-align the creation of autonomized forms of wealth with the production of value:

**Autonomization crisis**

# THANK YOU

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