UNPRODUCTIVE ACCUMULATION IN THE UNITED STATES: A New Analytical Framework

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QUESTIONS

Broad Question

What is happening with the US economy?

Entry Point

The accumulation of unproductive capital

Specific Question

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

METHODS

Theoretical

Political Economy

Marxist Theory

Empirical

Descriptive analysis

Time series econometrics

Input-Output matrices

New methodology to transform NIPA and I-O into PE concepts

TERMINOLOGY

Wealth = anything that is useful but that requires labor to be produced Commodity = the form of wealth in capitalism

Value = abstract/universal character of labor in capitalismUse-value = concrete/particular usefulness of the product of labor

Exploitation = workers pay to work

Rate of exploitation = how much workers pay to work

Surplus = what workers pay to work

Productive activity (PA) = an economic activity that produces surplus

Unproductive activity (UA) = an economic activity that does not produce surplus

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

Total Value of PA = Constant Capital + VA = Constant Capital + Value of LP + Surplus Value

ECONOMIC ACTIVITIES

PRODUCTIVE ACTIVITIES (PA)

Produce new commodities with value

Produce new value

Produce surplus value

UNPRODUCTIVE ACTIVITIES (UA)

Do not produce new commodities with value

Claim a share on the values produced by PA

UNPRODUCTIVE ACTIVITIES

Examples

- 1. Trade = wholesale + retail
- 2. Finance + Insurance
- 3. Real estate brokerage + Land rents
- 4. Some Government activities
 - National defense + police
 - 2. Federal, state, and local administration

Knowledge and Information *

- Software
- 2. Recorded music + Movies
- 3. Scientific knowledge (journals, books etc.)
- 4. Pharmaceuticals

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**

But according to Marx in 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"

Knowledge and information are valueless commodities

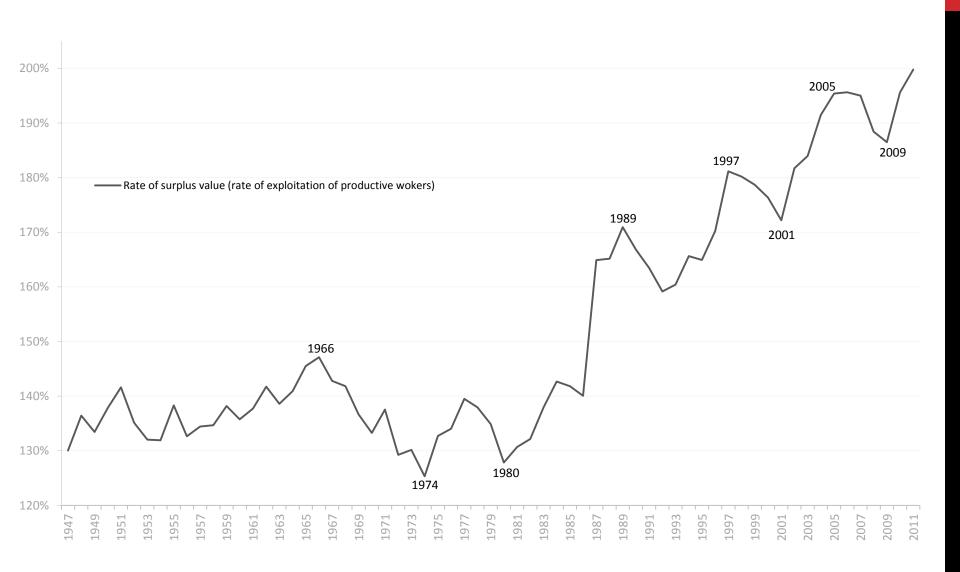
No value → No surplus value → Unproductive Activity (UA)

Knowledge production → Knowledge-rents + Knowledge-lords

Labor Theory of Value of Knowledge in Capitalism

HISTORICAL TRENDS

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



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

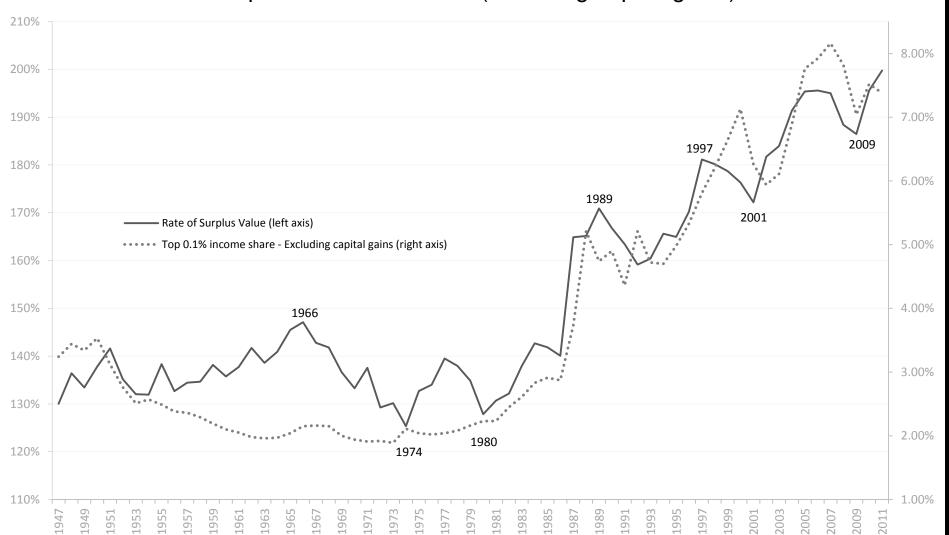
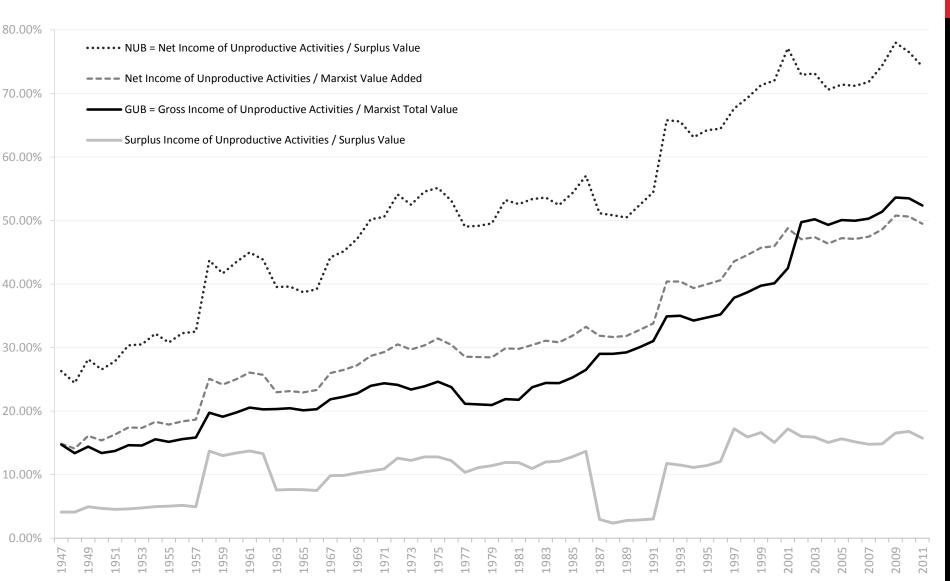


Table 2.1: Exploitation and Inequality in the United States – Correlations (1947-2011)

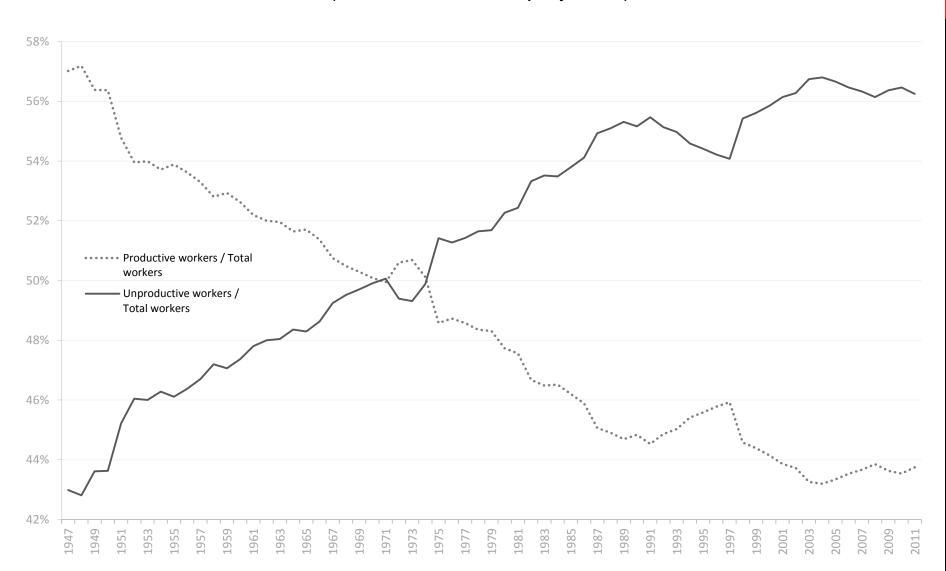
	Correlation
Rate of Surplus Value (from Rotta) and Top 1% income share - 1947 to 2011	0.95
Rate of Surplus Value (from Rotta) and Top 0.1% income share - 1947 to 2011	0.96
Rate of Surplus Value (from Rotta) and Inverted Pareto-Lorenz coefficient - 1947 to 2011	0.94
Rate of Surplus Value (Shaik and Tonak 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.

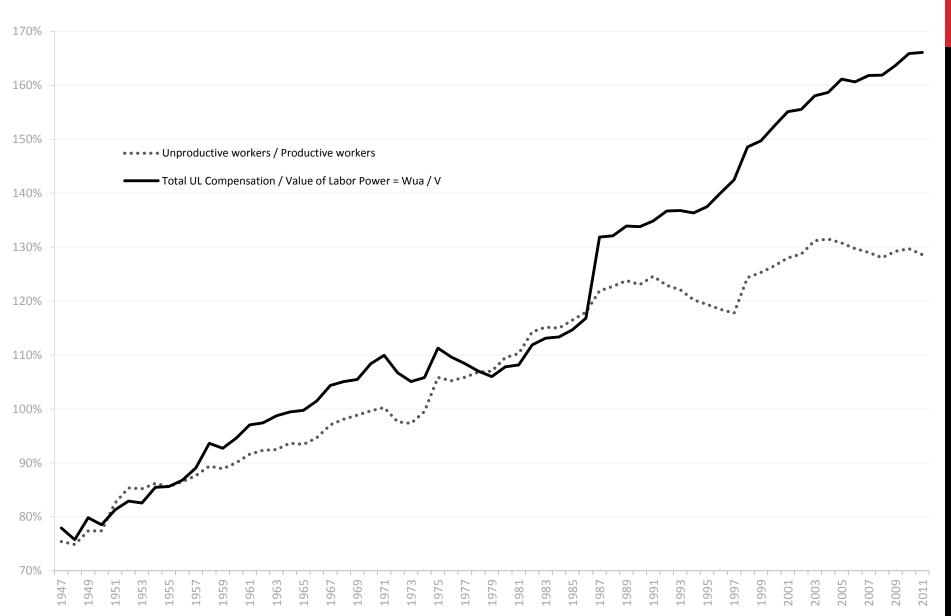
Measures of Unproductive Accumulation (relative flows of income)



Productive and Unproductive Workers (shares of total employment)



Productive and Unproductive Workers



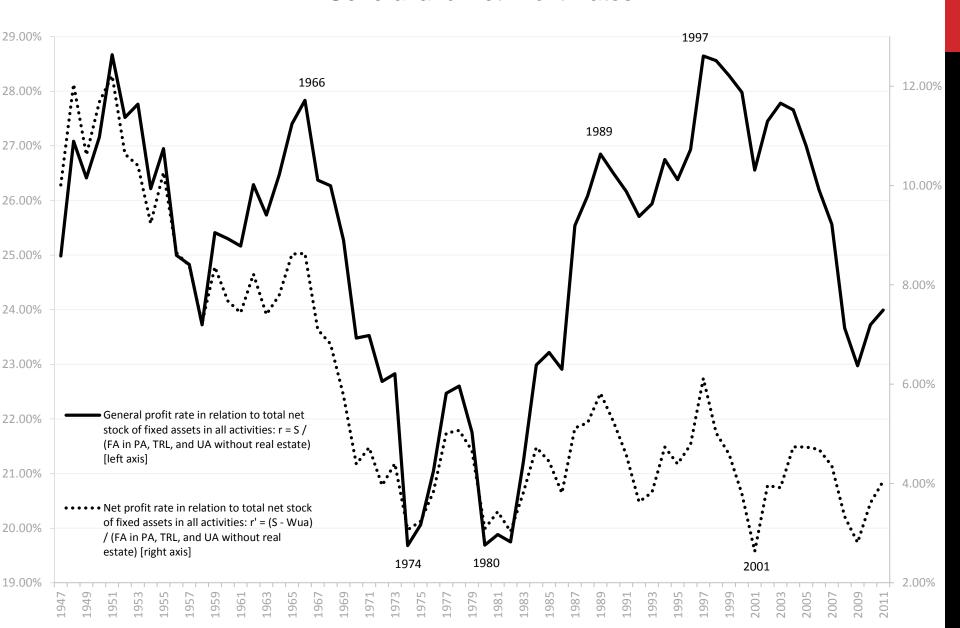
General and Net Profit Rates

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

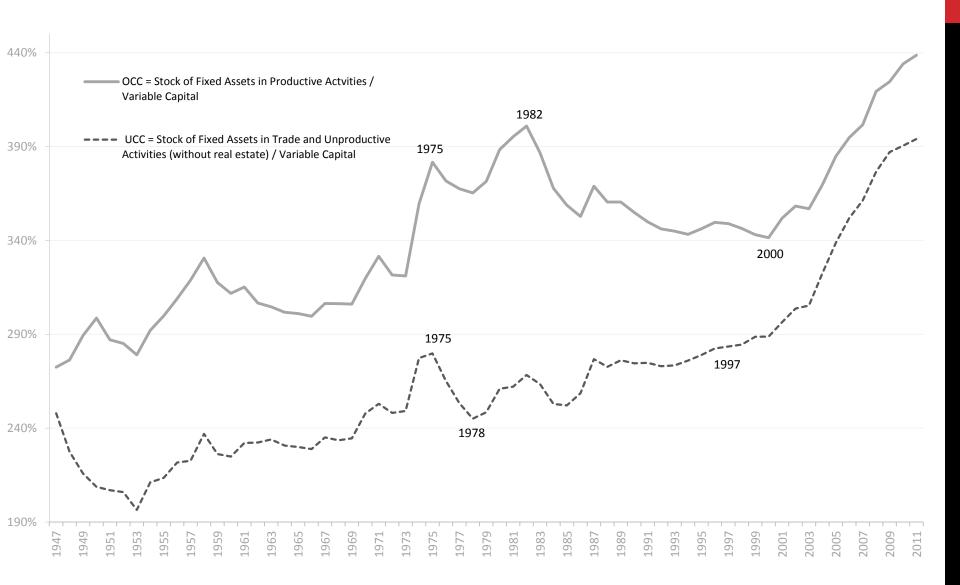
net profit rate:

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

General and Net Profit Rates



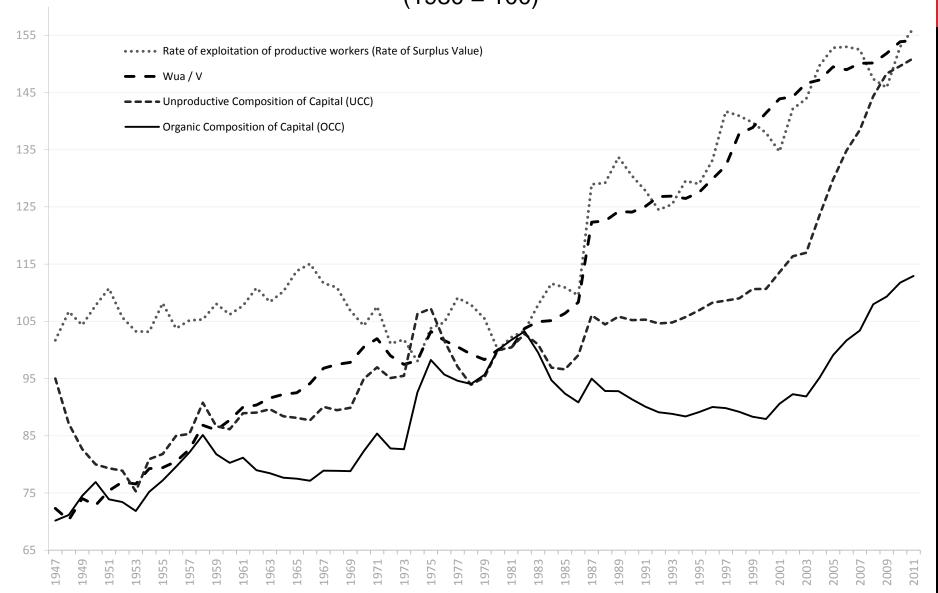
$$\mathbf{OCC} = \frac{K_{PA}}{v} \quad \text{ and } \quad \mathbf{UCC} = \frac{K_{UA}}{v}$$



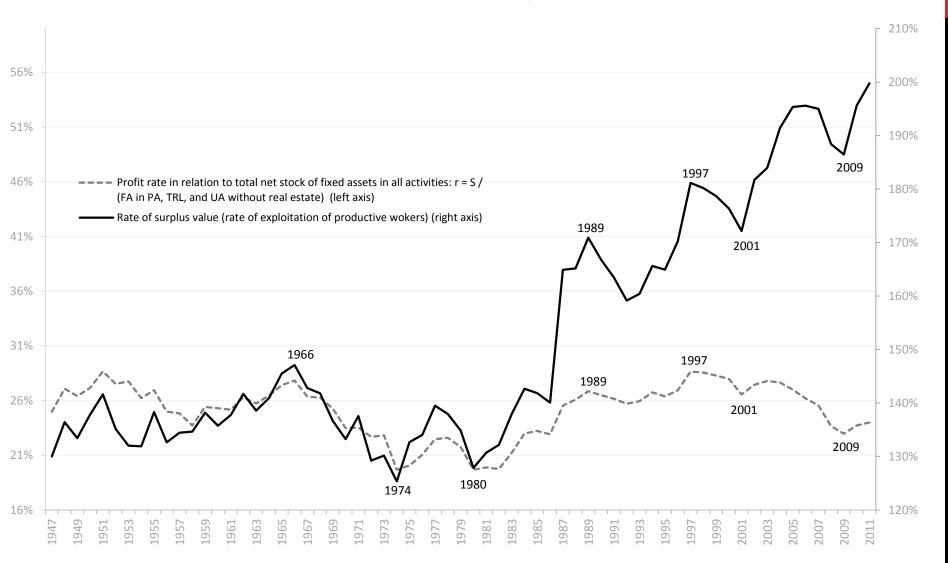
$$\frac{UCC}{OCC} = \frac{K_{UA}}{K_{PA}}$$



OCC, UCC, and Exploitation (1980 = 100)



Exploitation and Profitability



Decomposition of the Net Income of UA

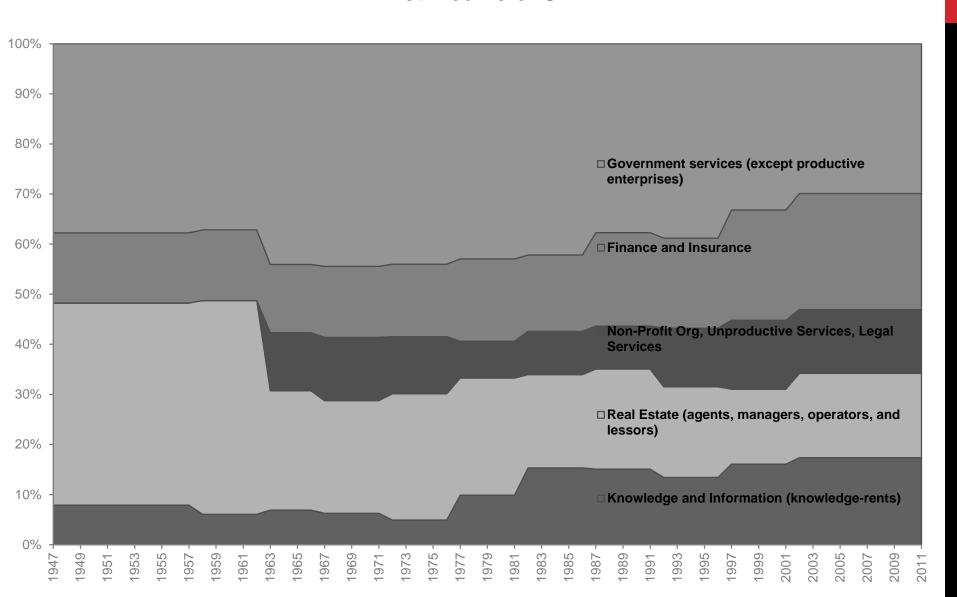


Table 2: Average Real Growth Rates (1948-2011)

	Whole period (1948-2011)	Regulated period (1948- 1979)	Neoliberal period (1980-2011)
Productive Activity (PA)			
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%
Unproductive Activity (UA)			
Gross Income of UA	4.73%	4.61%	4.84%
Net Income of UA	4.90%	5.62%	4.19%
Surplus Income of UA	10.31%	9.41%	11.21%
Capital Stock of UA (nonresidential only)	3.29%	3.47%	3.12%

Sources: 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.

TIME SERIES ECONOMETRICS

EARLY DEBATE

DAVID RICARDO

UA claims a share of the surplus

Less surplus is left to be reinvested in PA

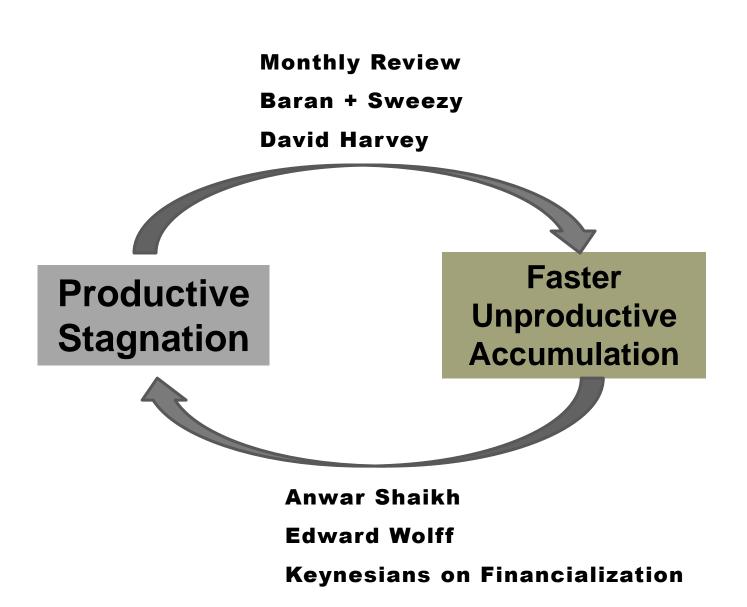
UA causes productive stagnation

THOMAS MALTHUS

UA provides aggregate demand for PA

UA can boost productive accumulation

CURRENT DEBATE



LONG RUN RESULTS

Productive and unproductive forms of accumulation share no common long-run trend

No stable long-run equilibrium relationship

No self-correcting mechanism that would align UA with PA

SHORT RUN RESULTS

(level)
$$K_{UA} \xrightarrow{+} TV_{PA}$$
 (level)
$$\frac{K_{UA}}{K_{PA}} \xrightarrow{-} TV_{PA}$$
 (level)

CONCLUSIONS

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

Close relation between:

- Faster unproductive accumulation
- Productive stagnation
- Rising exploitation of workers
- Rising inequality

CONCLUSIONS

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

Even though unproductive accumulation occurs together with rising levels of exploitation of productive workers, capitalism in the United States is an economic system that generates unproductive incomes that gradually obscure the source of new wealth in the exploitation of labor.