

Innovative Enterprise and Sustainable Prosperity

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15th Globelics Conference

Athens

October 11, 2017

The economic development challenge

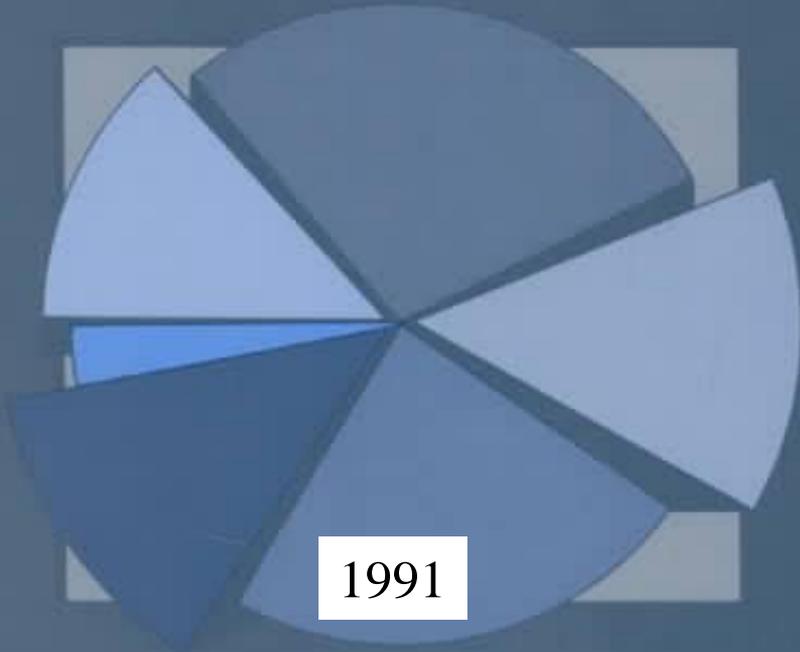
**Stable and equitable economic growth =
“sustainable prosperity”**

- **Growth:** real per capita productivity gains that can raise standards of living
- **that is Stable:** employment and income that are not subject to boom and bust, over a working life of some four decades, with retirement income for two decades
- **that is equitable:** gains from growth shared fairly among those who contribute to it, at a point in time and over time (including equitable use of the planet's resources)

What happened to sustainable prosperity?

- **The post-World War II decades offered the promise of sustainable prosperity in the advanced economies of Western Europe and North America.**
- **By the 1960s economists thought that the poor nations could emulate the rich, but the 1970s stagflation raised the question: “Emulate what?”**
- **Meanwhile, in the 1980s and 1990s, the East Asian economic “miracle” came to fruition, a transformation inexplicable to most economists.**
- **By the 2000s, moreover, communist China had become the “capitalist” juggernaut, while the former Soviet Union, once a Super Power, proved to be a paper tiger.**
- **And in the 21st century sustainable prosperity has become elusive in the advanced economies themselves.**

BUSINESS ORGANIZATION



1991

and the MYTH of the MARKET ECONOMY

William Lazonick

- ❑ Well-developed markets in land, labor, finance, and products are **outcomes**, not causes, of the wealth of nations.
- ❑ Organizations **develop the productive capabilities** that are the essence of the wealth of nations.
- ❑ These organizations include household families government agencies, and business enterprises: **“the investment triad”**
- ❑ Unregulated markets will undermine organizational investments in productive capabilities.

Foundations of “Organizational Success”

Organizations, not markets, invest in innovation

THE INVESTMENT TRIAD

- **Governments invest in physical infrastructure and the knowledge base (education, science & technology):
the developmental state based on taxation**
- **Households invest in the development of the labor force:
the supportive family based on employment income**
- **Businesses invest in productive capabilities that can generate higher quality, lower cost products:
the innovative enterprise based on equity capital for a new venture and retained earnings for a going concern**

Economics needs a theory of innovative enterprise

By creating new sources of value (embodied in higher quality, lower cost products), the innovative enterprise makes it possible (but by no means inevitable) that, simultaneously, *all participants in the economy can gain*:

- **Employees:** Higher pay, better work conditions
- **Creditors:** More secure paper
- **Shareholders:** Higher dividends or share prices
- **Government:** Higher taxes
- **The Firm:** Stronger balance sheet

AND

- **Consumers:** Higher quality, lower cost products

What is a “firm” and what does it do?

“the firm”: transforms productive resources into goods and services that can be sold to generate revenues

To transform productive resources into goods and services, a firm engages in three generic *activities*:

- ***strategy***: allocates resources to investments in human and physical resources (who?)
- ***organization***: develops the productive capabilities of these resources (what?)
- ***finance***: seeks to generate returns on the resources that it has developed through sale of goods and services (how?)

What is an *innovating* firm?

Definition of “the innovating firm”:

given prevailing factor prices, the innovating firm transforms the productive resources under its control into *higher quality, lower cost* goods and services than had previously been available

- thus defined, the innovating firm is an *outcome of a process* that is
 - a) *uncertain* (cannot be done optimally)
 - b) *collective* (cannot be done alone)
 - c) *cumulative* (cannot be done all at once)

Theory and history

The theoretical challenge:

What are the characteristics of the business enterprise that enable strategy to confront uncertainty, organization to mobilize the collective process, and finance to sustain the cumulative process that can result in innovation?

The historical challenge:

Constructing relevant theory from the comparative-historical analysis of the role of innovative enterprise in the economic development of regions and nations

Integration of theory and history:

At any point, theory serves as both a distillation of what we know and a guide to discovering what we need to know

Reject the neoclassical obsession with free entry and market equilibrium

Price,
Cost

movements
toward
equilibrium



Supply

P_e

Why is the industry
supply curve upward
sloping?

A productive economy needs a
downward sloping supply curve*

Supply?

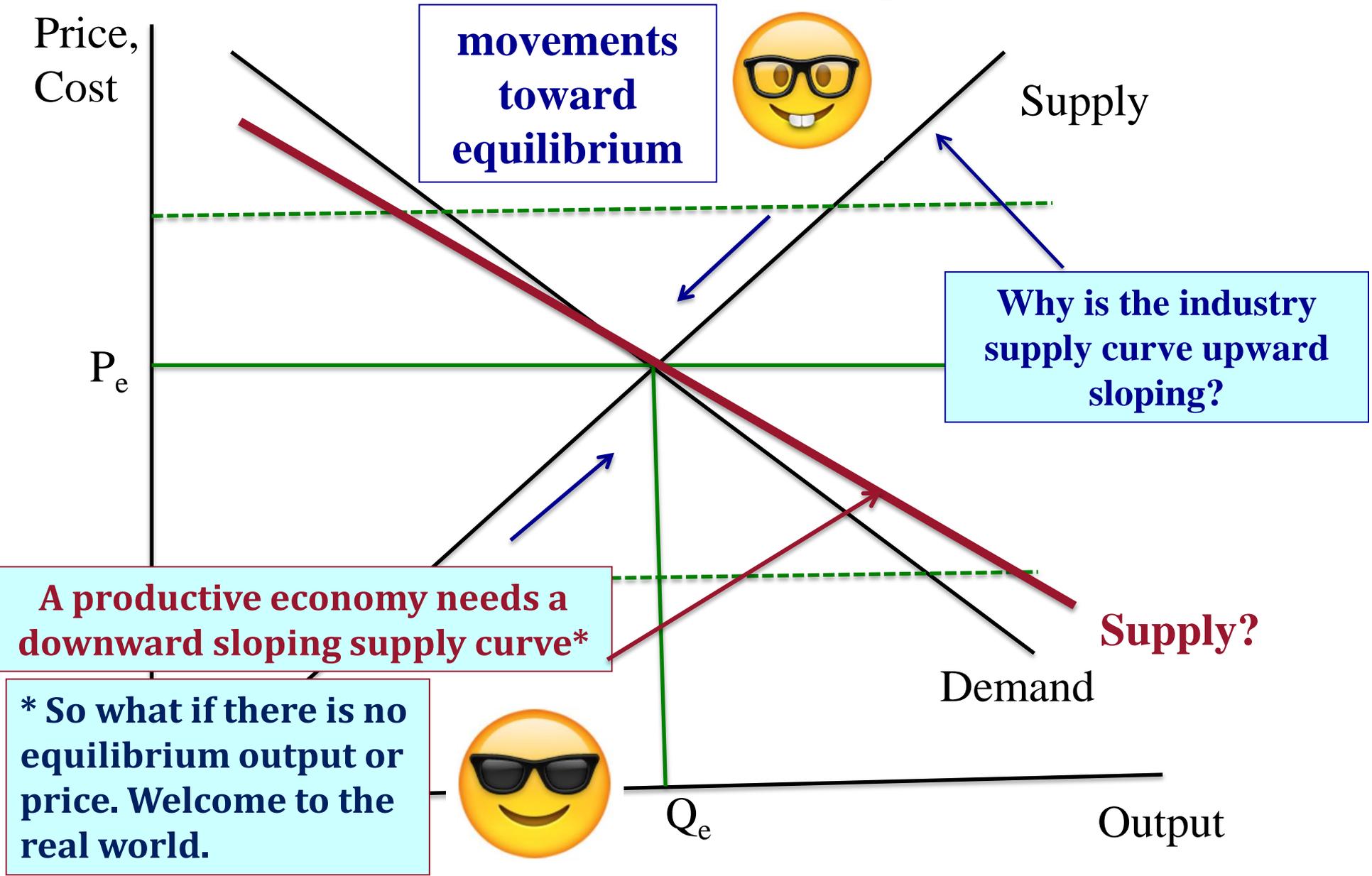
Demand

* So what if there is no
equilibrium output or
price. Welcome to the
real world.



Q_e

Output



Back to basics

Starting point for constructing a theory of innovative enterprise: textbook theory of the optimizing -- or “un-innovative” -- firm: Why un-innovative?

a) “Strategy”: all firms in an industry incur same fixed costs of entry, given by exogenous industrial conditions (technology and markets)

b) “Organization”: firm does not develop technology, markets instantly absorb all that the firm wants to produce -- *but problem with addition of variable factors*

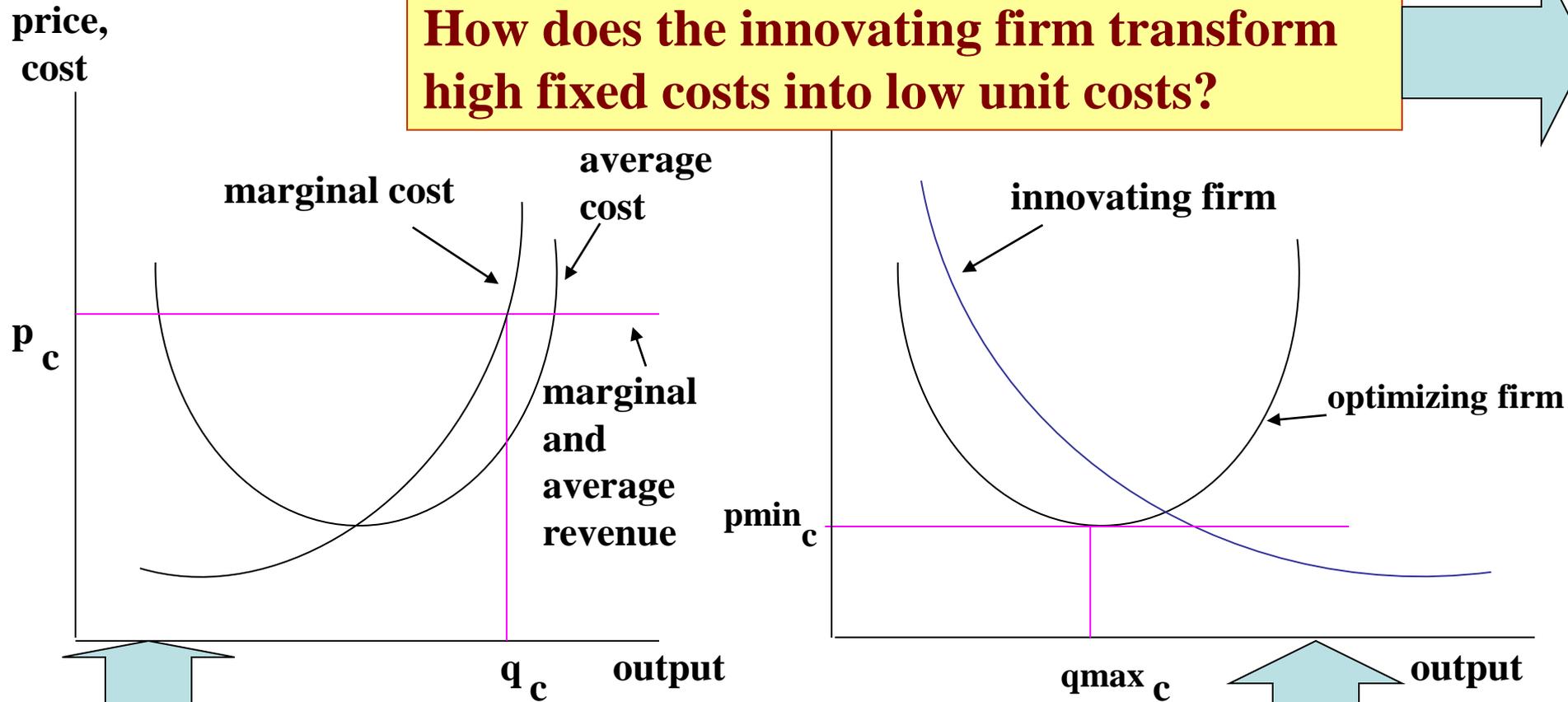
c) “Finance”: implicitly assumes fixed costs can be funded through capital markets – if product prices do not cover variable costs, some firms quit the industry

Comparing optimizing and innovating firms

p = price; q = output; c = perfect competitor

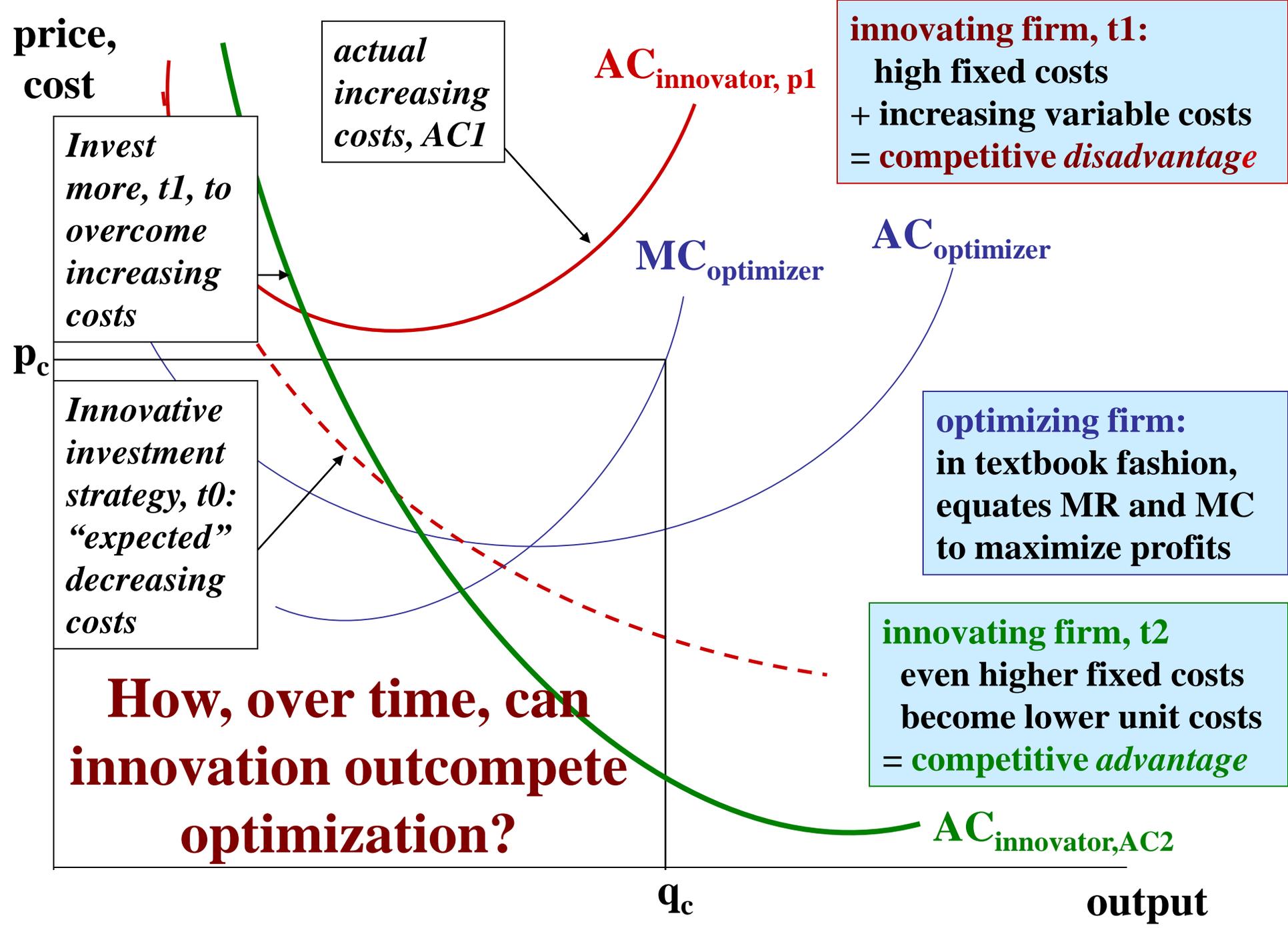
$p_{\min c}$ = minimum breakeven price; $q_{\max c}$ = maximum breakeven output

How does the innovating firm transform high fixed costs into low unit costs?



Technological and market conditions are given by cost and revenue functions.
The “good manager” optimizes subject to technological and market constraints.

Through strategy, organization, & finance, innovating firm transforms technologies and markets to generate higher quality, lower cost products. There is no “optimal” output or “optimal” price.



From high fixed costs to low unit costs

Transforming the theory of the optimizing firm into a theory of the innovating firm...

Strategy: innovating firm makes *high-fixed-cost* investments that *differentiate* it from other firms

Organization: a) innovating firm must develop the capabilities of its investments, creating a *problem of high fixed costs*; b) rise in unit costs resulting from “control loss” NOT final outcome, but *challenge to learn solutions*

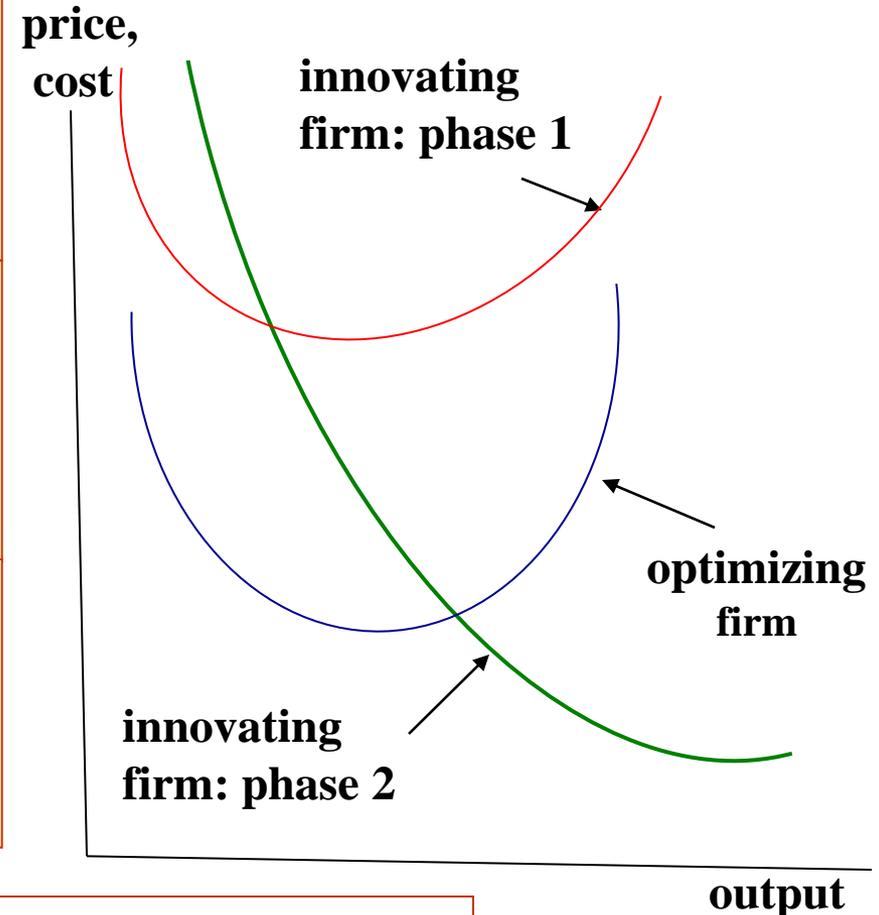
Finance: source of finance matters because returns are uncertain : it takes time to develop productive resources and gain access to markets – *need “patient capital”* so that the firm does not have to drop out of the industry when unit cost exceeds product price

Strategy, organization and finance in the theory of the innovating firm

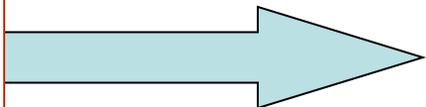
Strategy: *innovation is uncertain* – abilities and incentives of strategic decision-makers are of critical importance to the types of investments that are made

Organization: *innovation is collective* – development & utilization of productive resources requires integration of labor into collective learning processes

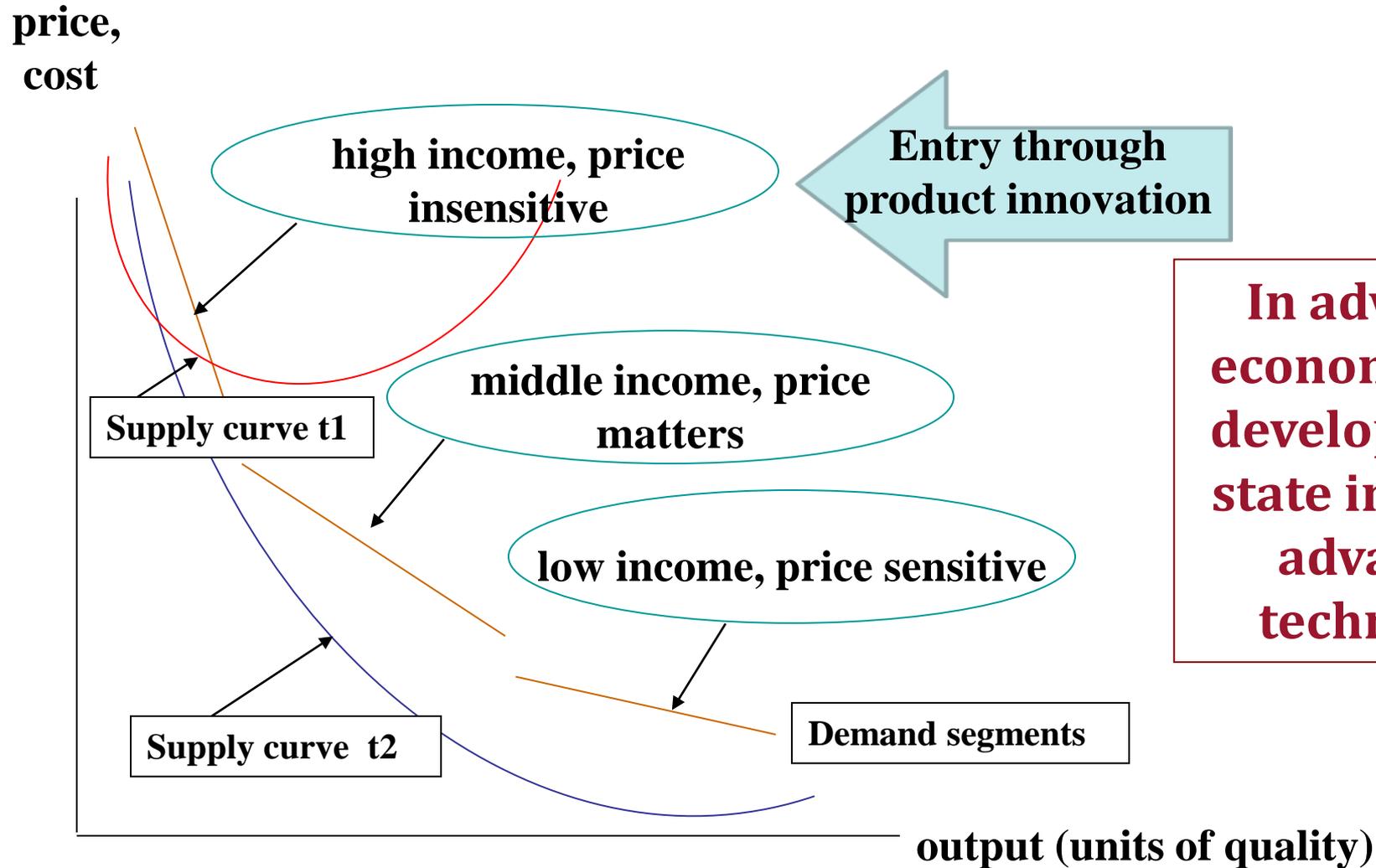
Finance: *innovation is cumulative* – committed finance (“patient capital”) is needed to sustain the innovation process until it generates financial returns



Innovative strategy results in low units costs only if products can be sold: bring product market demand into the analysis



Accessing market segments: product innovation

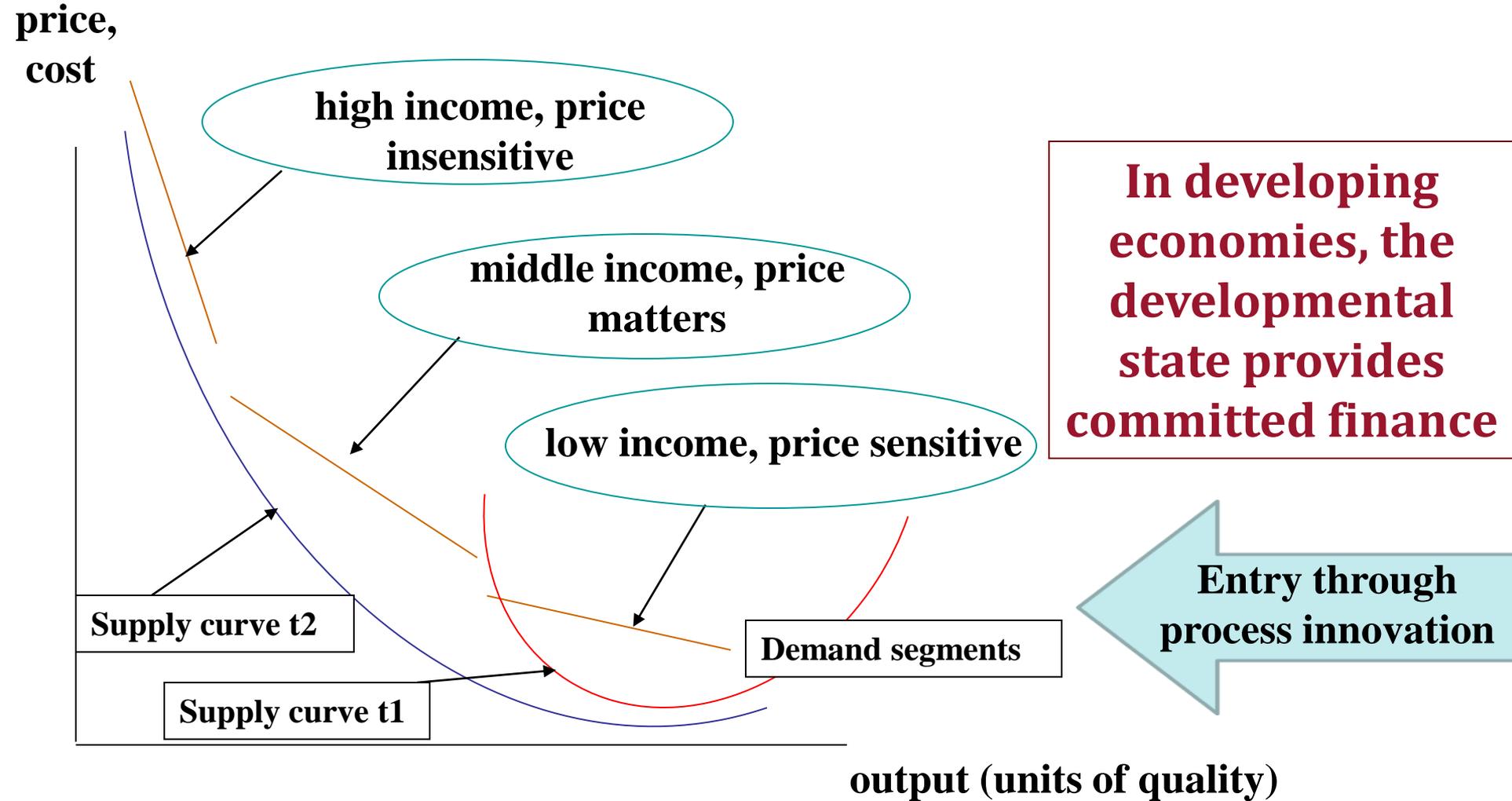


In advanced economies, the developmental state invests in advanced technology

What is the source of high income demand?

For example: integrated circuits - military; jet engines - military; orphan drugs – national healthcare system; calculators - engineers

Accessing market segments: process innovation

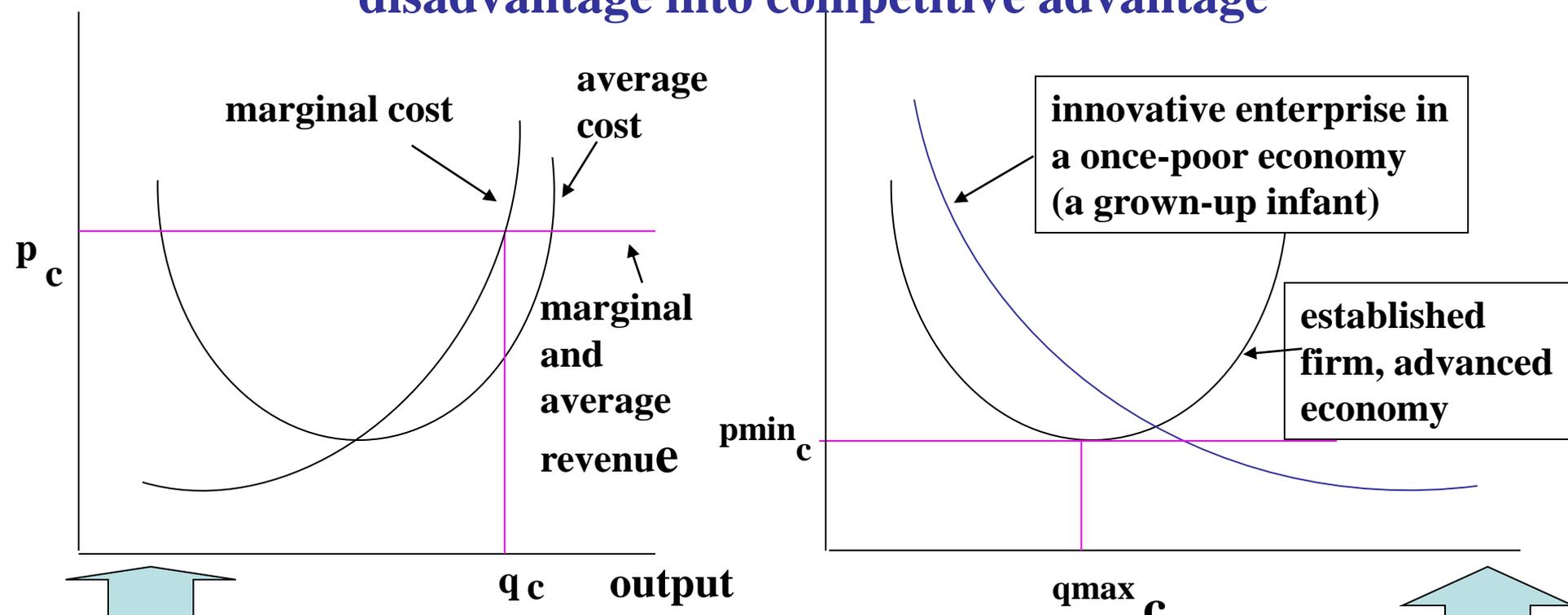


Key to indigenous innovation strategies of developing nations: e.g., Japan from 1950s, Korea from 1980s, China from 1990s

Theory of innovative enterprise and the infant industry argument

Like the theory of innovative enterprise, the infant industry argument depends on the transformation of competitive disadvantage into competitive advantage

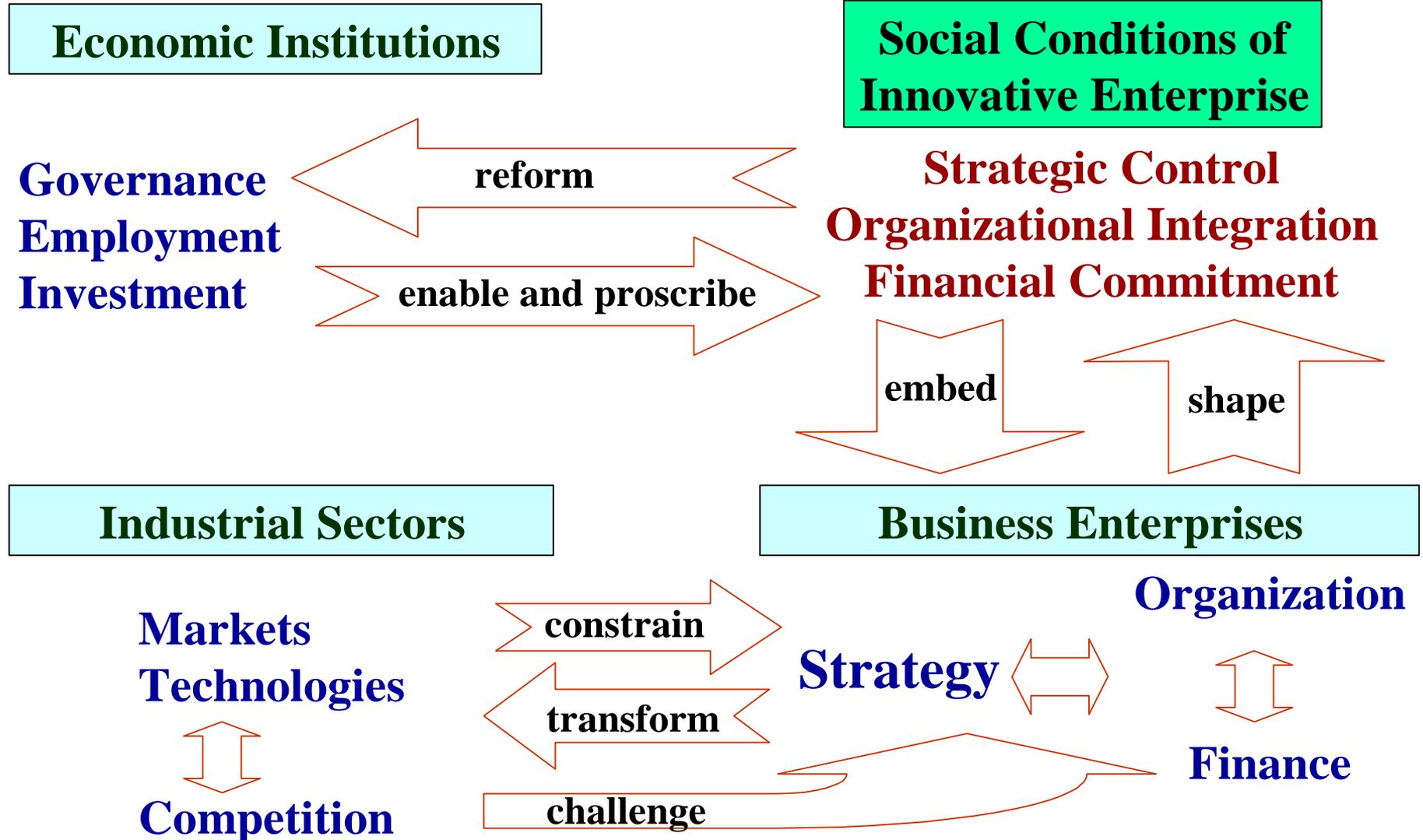
price,
cost



Technological and market conditions given by cost and revenue functions. Theory says that poor nation should compete in industries in which it has *comparative* advantage.

Innovative enterprise can transform technologies and markets to generate higher quality, lower cost products. Protection that supports innovation can enable poor nation to gain competitive advantage.

Economics needs a theory of innovative enterprise based on social conditions of innovative enterprise



Foundations of economic analysis

Social conditions of innovative enterprise

- **Strategic control:** a set of relations that gives **decision-makers the power** to allocate the firm's resources to confront uncertainty by transforming technologies and markets to generate higher quality, lower cost products
- **Organizational integration:** a set of relations that create incentives for people to apply their skills and efforts to engage in **collective learning**
- **Financial commitment:** a set of relations that secure the allocation of money to sustain the **cumulative innovation process** until it generates financial returns

Characteristics of the innovation process

Innovation is uncertain, collective, and cumulative

- **Uncertain:** if we knew how to generate high-quality, low-cost (i.e., competitive) products, the process would not be innovation – hence the need for **strategy**
- **Collective:** The essence of innovation is learning by large numbers of people in a hierarchical and functional division of labor – hence the need for **organization**
- **Cumulative:** If we cannot innovate all alone, we also cannot innovate all at once; what we can learn today depends on what we learned yesterday – hence the need for **finance**

**Collective and cumulative learning
is the essence of the innovation process**

Fixed costs of technology **and** organization

- **Plant & equipment (P&E): a fixed-cost investment**
- **But P&E is not the only fixed-cost investment -- there also the costs of investment in organization to engage in collective and cumulative learning**
- **Accountants do not treat the cost of organization as a fixed cost – buried in general and administrative expenses and with investments aimed specifically at generating new products and processes labeled R&D – investments in human capital can be called training & retaining (T&R)**
- **To some extent advertising (especially branding) is a fixed cost**

Why more R&D does not necessarily result in more innovation – or any innovation

- R&D is an investment that **may or may not yield a higher quality product**
- The success of R&D depends on **collective and cumulative learning** – which requires the management of the employment relation – highly mobile labor can undermine the learning process
- See Matt Hopkins and William Lazonick, “Who Invests in the High-Tech Knowledge Base,” INET Working Paper, Oct. 2014 (revised Dec. 2014)

Patenting is not necessarily innovation

- A surge of patenting activity in 1980s with the rise of the “New Economy business model” was a result of **the flow of individuals out of collective-and-cumulative careers (CCCs) at Old Economy companies, often taking valuable IP with them.**
- In response, many ICT firms used patenting to combat the flow of IP out of their companies. **But with CCCs eroded by the hypermobility of high-tech personnel across firms, the increased patenting did not result in increased innovation.**
- This perspective on a clash between value-extraction through the assertion of IP rights and value-creation through CCCs is consistent with the “patent paradox” that e.g., Bronwyn Hall and Rosemarie Ziedonis found in their study of patenting in the US semiconductor industry from 1979 to 1995.

Patient capital is a virtue

- Those who make investments in productive capabilities have to be willing to wait long periods of time before demanding financial returns from them
- Why? Because the innovation process is collective and cumulative: **You cannot do it all alone and you cannot do it all at once**
- It is uncertain: **no a guarantee of financial returns**
- **In some industries the amount of patient capital needed is so great and the duration of time over which that capital must be patient so long that only the government is virtuous enough to make such investments**

Here is what economists should be teaching...

- **Along with investment in P&E, investment in T&R which may include R&D as a fixed cost**
- **To generate a competitive product from these investments in productive capabilities, the firm must**
 - **Transform technologies to generate a high-quality product**
 - **Access markets to transform the high-fixed costs of developing a product into low unit costs**
- **Understanding this process requires a theory of the innovating firm to replace the conventional economic theory of the optimizing firm**

Large corporations dominate the US economy

Economic performance depends on corporate resource allocation

| 2012 | | | Percent of US business total | | | |
|-------------------------|-------------|-------------------|------------------------------|-----------|---------|---------|
| | | | Firms | Employees | Payroll | Revenue |
| <u>No. of employees</u> | No of firms | Average employees | % | % | % | % |
| All sizes | 5,726,120 | 20 | 100.00 | 100 | 100.0 | 100.0 |
| 500 + | 18,219 | 3,286 | 0.32 | 52 | 58 | 64 |
| 5,000+ | 1,909 | 20,366 | 0.03 | 34 | 38 | 44 |
| 10,000+ | 964 | 33,542 | 0.02 | 27 | 31 | 36 |

- ❖ Less than 1,000 firms with 10,000+ employees have a huge influence on US economic performance.
- ❖ How senior executives decide to allocate corporate resources affects employment, productivity and pay.

Schumpeter on “perfect” competition

“What we have got to accept is that [the large-scale enterprise] has come to be the most powerful engine of [economic] progress and in particular of the long-run expansion of total output not only in spite of, but to a considerable extent through, the strategy that looks so restrictive when viewed in the individual case and from the individual point in time. In this respect, **perfect competition is not only impossible but inferior, and has no title to being set up as a model of ideal efficiency.**”

Joseph A. Schumpeter, Capitalism, Socialism, and Democracy, 1942, p. 106.

What was the neoclassical response to the Schumpeterian critique? **Paul Samuelson’s 1948 textbook**



Paul Samuelson (1915-2009)

His grand neoclassical synthesis tacked on Keynesian fiscal policy to the theory of the unproductive firm

Foundations of Economic Analysis

(1947): the “foundations” are 1) mathematics without social context and 2) constrained optimization as the supreme tool of economic analysis

Economics (1948) – created the structure for the “modern” economics textbook – now in its 19th edition, with co-authors since 1985

Virtually no empirical data in his 388 scientific papers

The liberal mythologizer of the market economy

Once upon a time...

I gained my first insights into the poverty of economics with my first course in economics, taught from the 5th edition of Samuelson, *Economics*, in the fall of 1964.

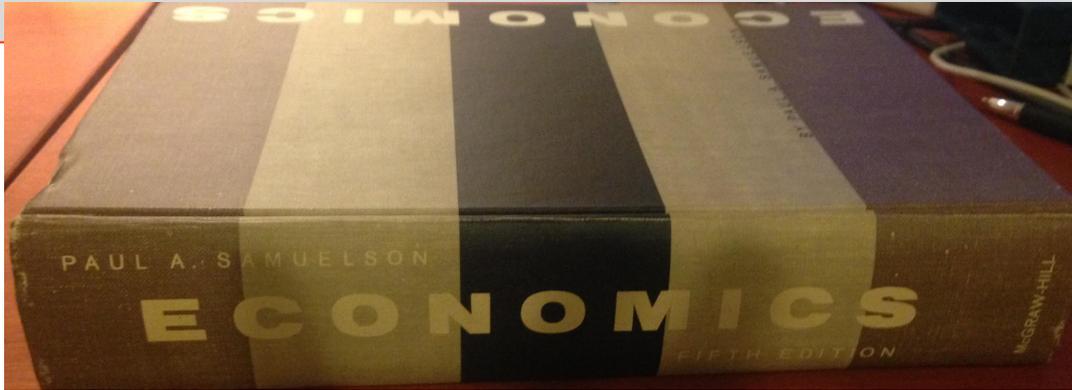
Do we really want an economy where every decision is based on weighing marginal costs and marginal revenues?



Here is what I learned in Chapter 2:



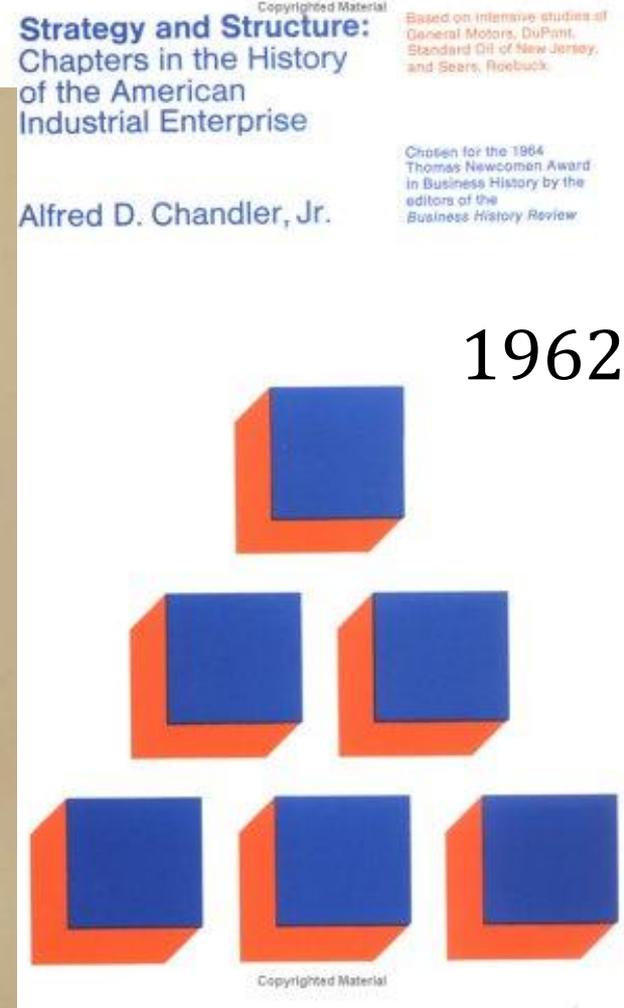
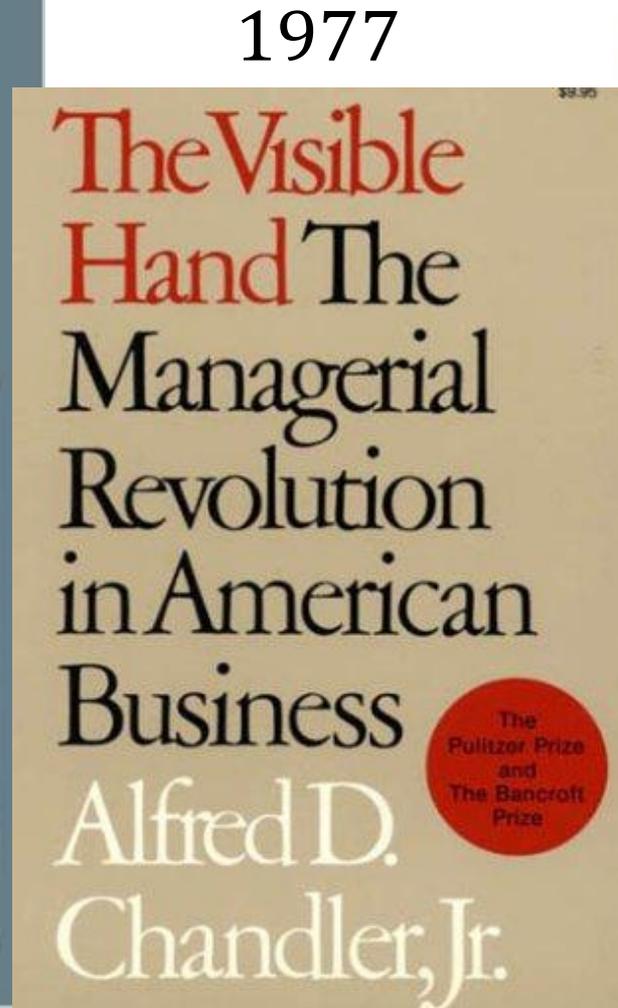
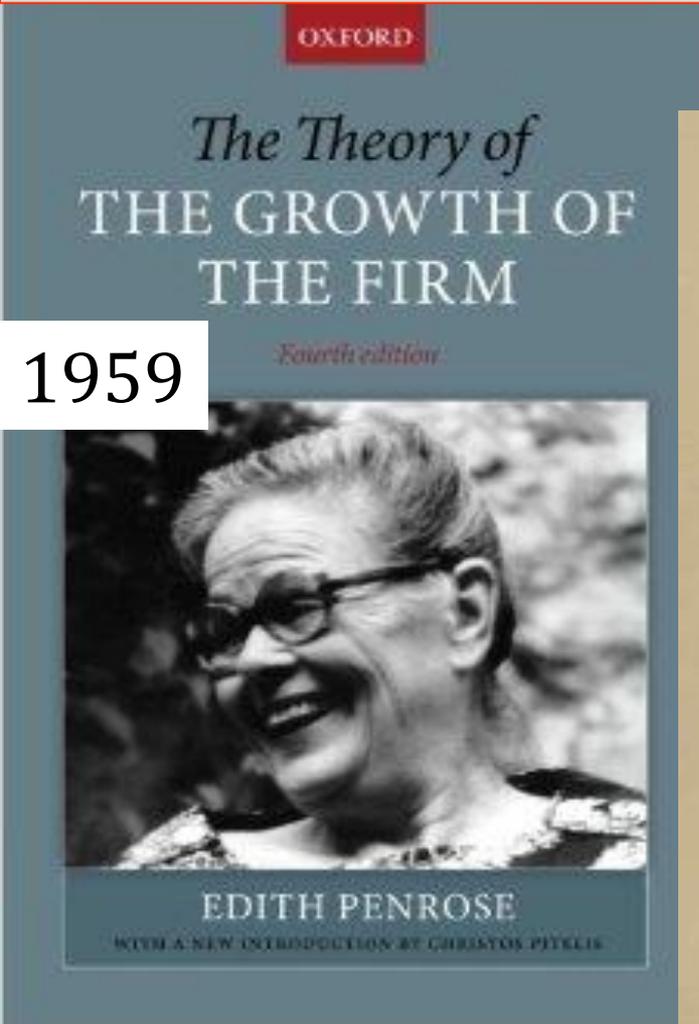
Paul Samuelson and the “sweatshop” as the economic ideal



Samuelson, *Economics*, 5th edition, 1961

- ❑ p. 24 “THE FAMOUS LAW OF DIMINISHING RETURNS”
- ❑ p. 25: “Diminishing returns is a fundamental law of economics and technology” (table heading)
- ❑ p. 26: **“ECONOMIES OF SCALE AND MASS PRODUCTION: A DIGRESSION”**
- ❑ p. 27: “Economies of scale are very important in explaining why so many of the goods we buy are produced by large companies...They raise questions to which we shall return again and again in later chapters.”

“Digressions”



Neither Penrose nor Chandler merit a mention in any of the 19 editions of Samuelson, *Economics*.

Professor Samuelson on the unproductive firm as the model of ideal efficiency

Paul Samuelson, *Economics*, 5th edition, p. 524.

“After the overhead has been spread thin over many units, it can no longer have much influence on Average Cost. Variable items become important, and **as Average Variable Cost begins to rise because of limitations of plant space and management difficulties, Average Cost finally begins to turn up....** Thus, the average curve is U-shaped: falling at first because of spreading the overhead and economies of mass production, but ultimately rising because of some kind of diminishing returns.”

On page 525, there is a graph of AFC, AVC, and a U-shaped AC, with the caption “The Average Cost curve is generally U-shaped”

And note that Prof. Samuelson gives away his bias when he writes “Average Cost finally begins to turn up.

WARNING: NEOCLASSICAL ECONOMICS IS HAZARDOUS TO YOUR INTELLECTUAL HEALTH

The sweatshop: foundation of neoclassical economics

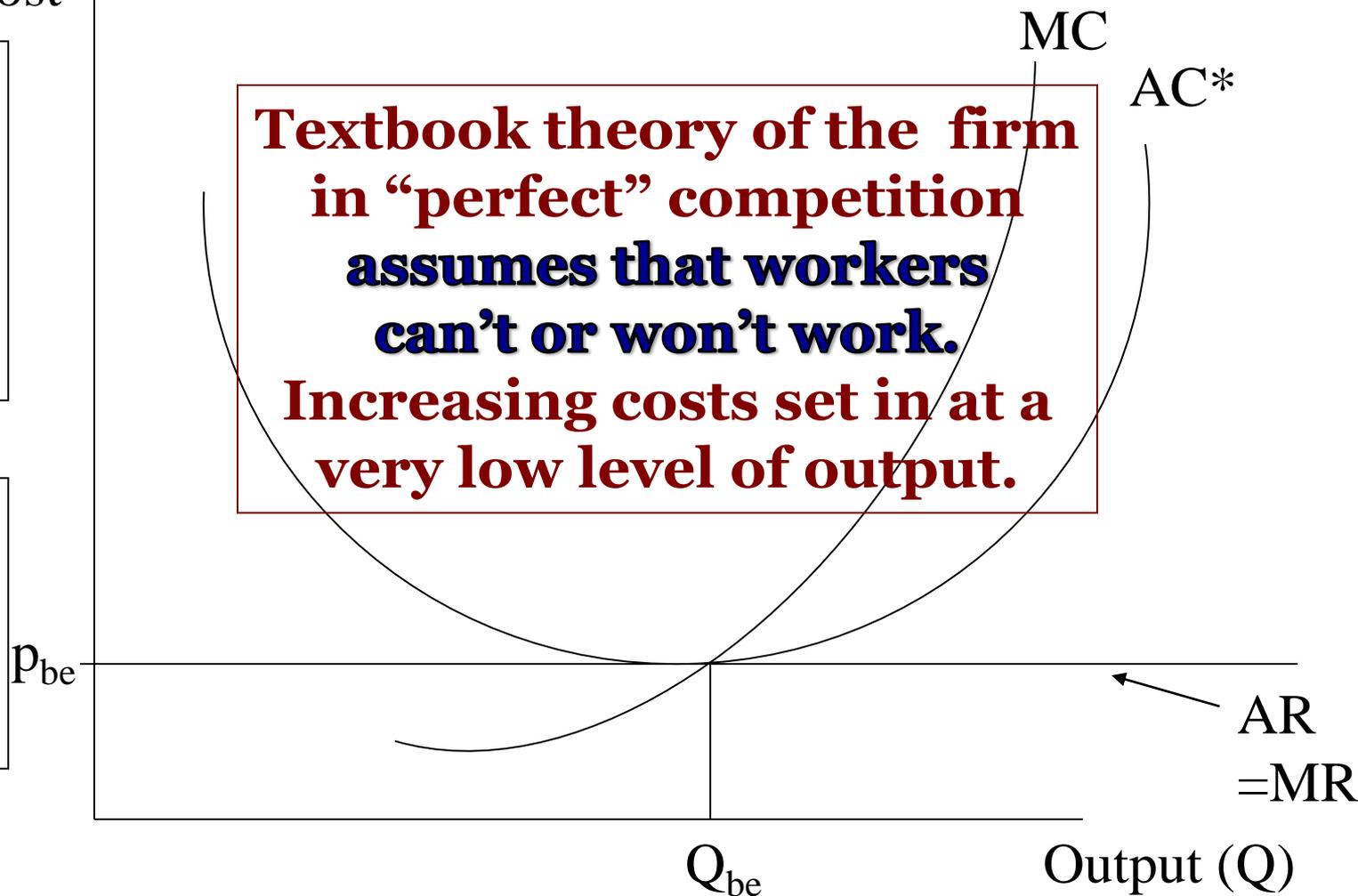
- The economic theory of “perfect competition” is based on firms that are very small relative to the size of their industry so that each one can produce as much as it wants as if it faces a perfectly elastic demand curve
- “Perfect competition” is then put forth as the ideal of economic efficiency compared with states of “imperfect competition”
- **This absurd theory dominates the thinking of “well-trained” economists and the textbooks from which they teach millions of students every year**

Neoclassical economists posit “perfect” competition as the best of all possible worlds

Price (P), cost

The firm is very small relative to the size of the market.

Free entry competes away profits.



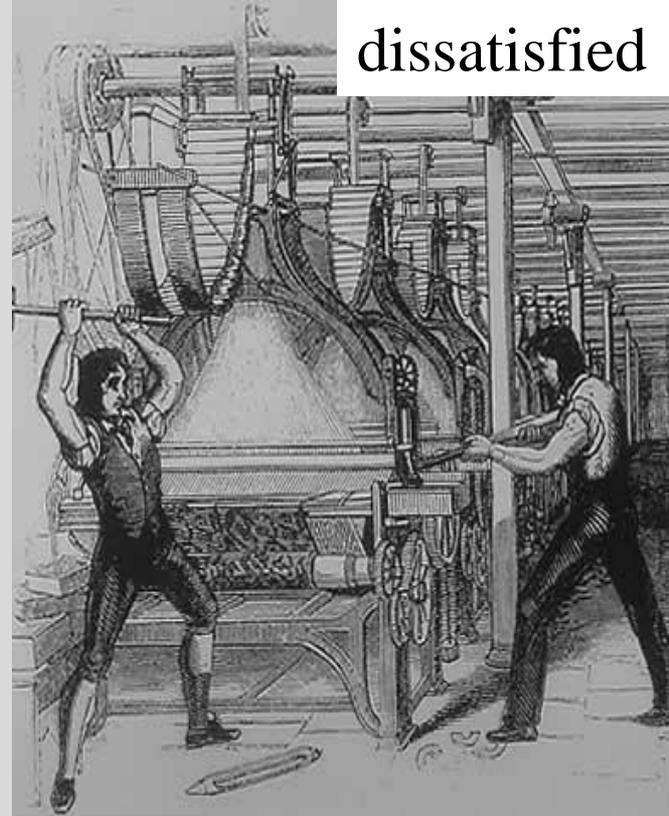
* AC = average total cost = average fixed cost + average variable cost

overcrowded

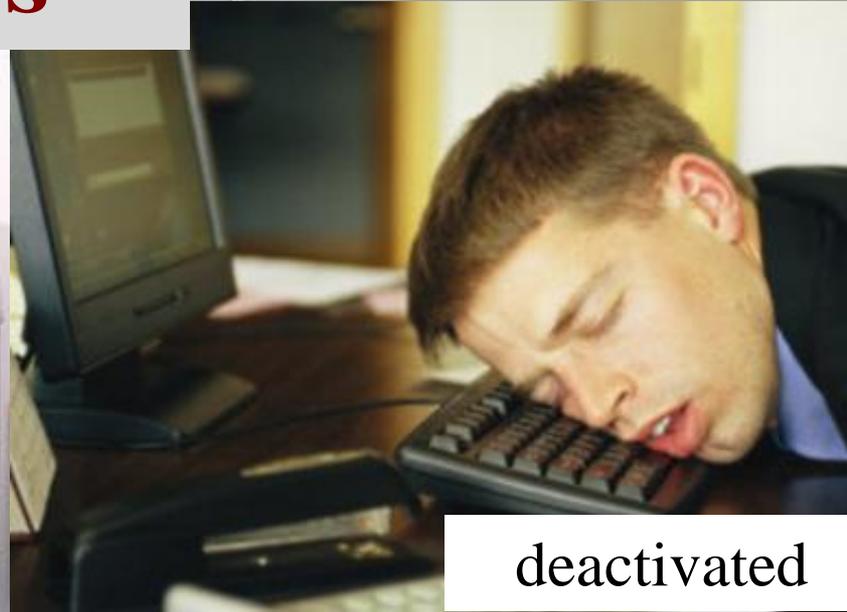


**Foundations of
“perfect”
competition,
and hence
neoclassical
economics =
Low or no
productivity
workers**

dissatisfied



unsupervised



deactivated

The absurdity of “perfect competition”

The firm in “perfect competition” is the sweatshop!

To create the theory of “perfect” competition, post-Marshallians assumed that increasing costs set in at a very low level of output because *the “entrepreneur”*

- 1) invests in a factory that is too small so that workers crowd one another (no risk-taking)*
- 2) loses control of labor productivity as he hires more workers (poor management)*



You won't find this “sweatshop” explanation for the U-shaped cost curve in the current textbooks

Here are two textbooks that publishers sent to me recently:

N. Gregory Mankiw, *Principles of Microeconomics* (Cengage Learning 8th ed., n.d.), simply states that the cost curve is U-shaped (“cost curves for a typical firm”, p. 259) using a made-up coffee shop (coffee cups per hour): AVC rises from \$0.30 for one cup to \$12.00 for 10 cups, with rising AVC surpassing declining AFC after 6 cups (p. 254).

Paul Krugman and Robin Wells, *Essentials of Economics* (Worth Publishers, 4th ed., 2017) argue that a “realistic marginal cost curve has a ‘swoosh’ shape” (p. 189) and give the example of a salsa maker whose AVC rises from \$12.00 for one case of salsa to \$120.00 for 10 cases, with with rising AVC surpassing declining AFC after 3 cases (p. 185).

In both cases, the “explanation” for the U-shaped cost curve is simply the made-up numerical example!

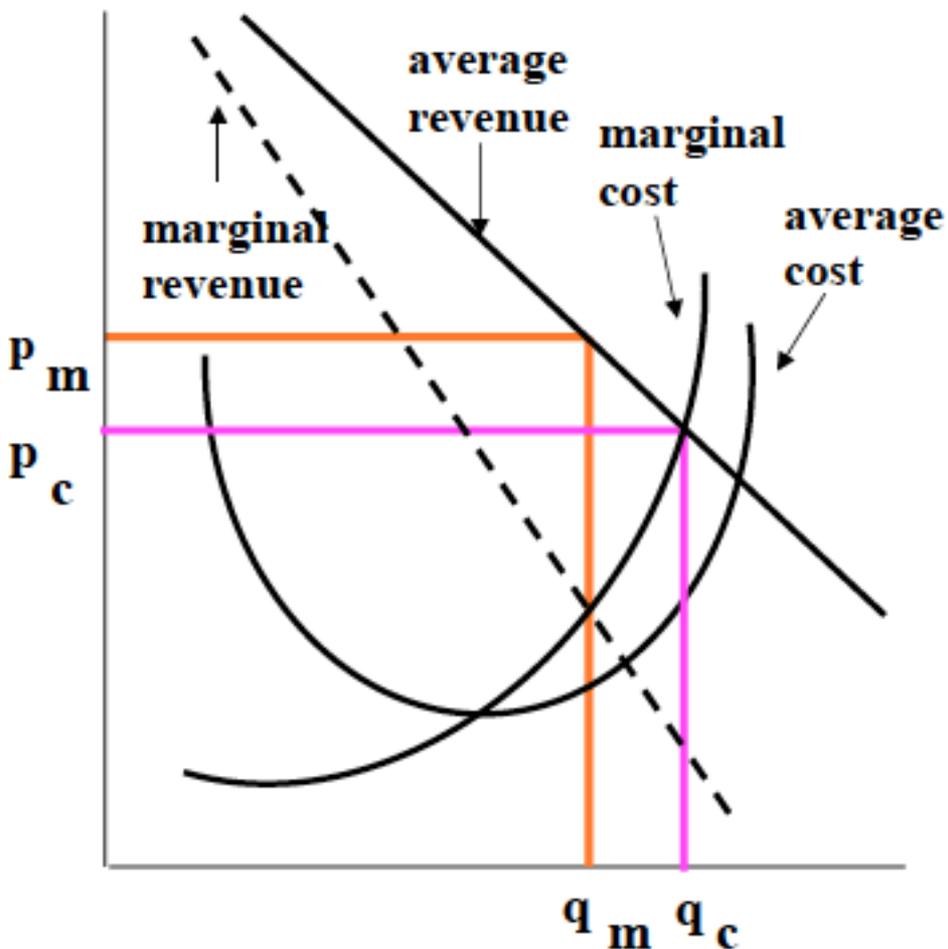
So what happened to Samuelson's "sweatshop" explanation of the firm in "perfect" competition?

- ❑ Samuelson excised the explanation from the 6th (1964) edition! He now had no explanation for the U-shaped cost curve.
- ❑ Maybe he recognized the absurdity of his explanation of the firm in perfect competition.
- ❑ Given that he had not, as promised, come back "again and again" to the questions raised by "economies of scale and mass production," Prof. S. just ignored the issue—as have all his followers.

BUT WAIT A MINUTE!! WHAT ABOUT THE PROOF OF THE SUPERIORITY OF PERFECT COMPETITION?

Proof that “perfect competition” is superior?

p = price; q = output
 m = monopolist; c = perfect competitor

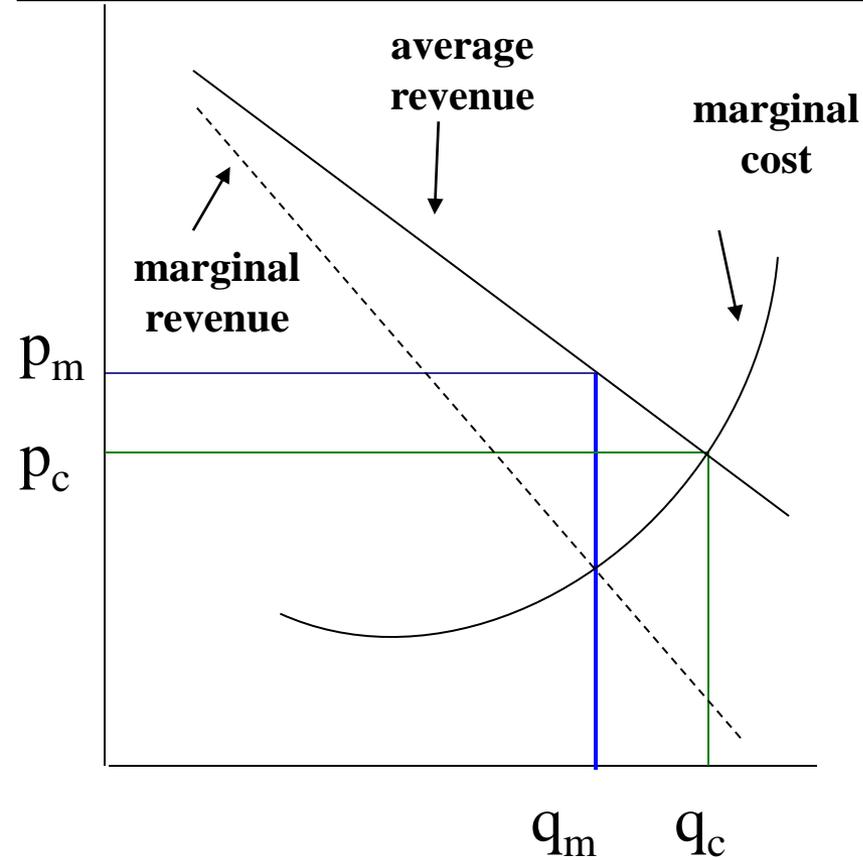


The theory of monopoly supposedly proves the superiority of “perfect” competition by showing that monopoly results in higher prices and lower output than perfect competition.

But how did the monopolist gain a dominant market position? It is **ILLOGICAL** to assume that the cost structures of firms in “perfect” competition are the same as that of a firm that dominates the industry.

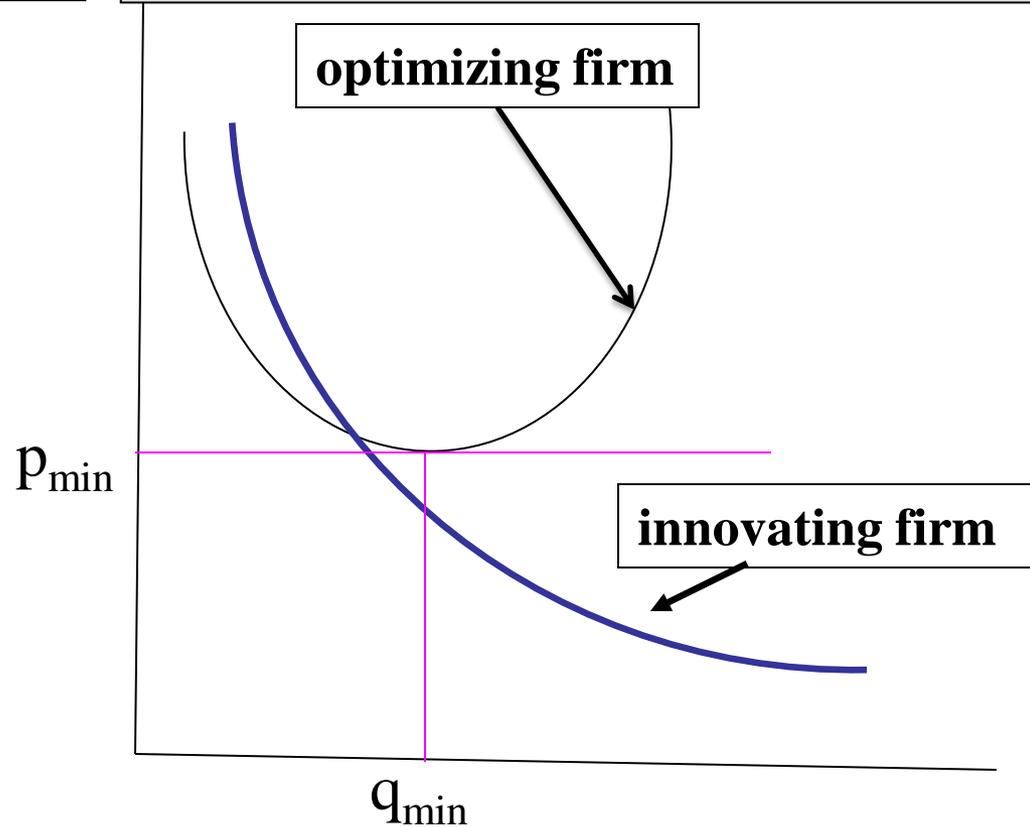
The innovating firm transforms technological and market conditions that the optimizing firm accepts as “given” technological and market constraints.

Monopoly and competition: ILLOGICAL COMPARISON



p_m = monopoly price; q_m = monopoly output
 P_c = competitive price; q_c = competitive output

Innovating and optimizing firms LOGICAL COMPARISON



p_{min} = lowest breakeven price, optimizing firm
 q_{min} = lowest breakeven output, optimizing firm

Nine assumptions of “perfect” competition

1. Assume that the growth of the firm is constrained because of overcrowding of the workplace and loss of control over labor effort as more units of labor are added as a variable cost as the firm seeks to expand output.
2. Assume that the increase in AVC outweighs the decrease in AFC, causing the ATC curve to turn up, yielding a U-shaped curve and hence a rising marginal cost (i.e., supply) curve.
3. Assume that the “entrepreneur” simply optimizes subject to these productivity (cost) constraints. He does not make investments to deal with overcrowding and control loss.
4. Assume that ALL FIRMS in the industry are equally constrained by an unwillingness to take risk or manage labor, and no firm in the industry tries to do anything about it, or at least no “entrepreneur” can do anything about it.

Nine assumptions of “perfect” competition

5. Assume that the level of output at which rising AVC outweighs declining AFC is SO SMALL relative to industry output that the firm can sell its profit-maximizing output without affecting the product price (i.e., “perfect” competition). ☐ *who cares?*
6. Assume as the proof of “perfect competition” as the ideal of efficiency that a monopolist maximizes profits at an output that is lower and a price that is higher than the industry output and price under “perfect competition.” But, if perfect competition is possible, how did the monopolist become a monopolist?
7. Assume from the illogical monopoly model that a state of “imperfect” competition represents a deviation from “perfect” competition that reduces economic efficiency.
8. Assume that the large-scale industrial enterprise is a massive “market imperfection.”

THE ALL-IMPORTANT NINTH ASSUMPTION

**ASSSUME THAT YOU ARE A
WELL-TRAINED ECONOMIST**



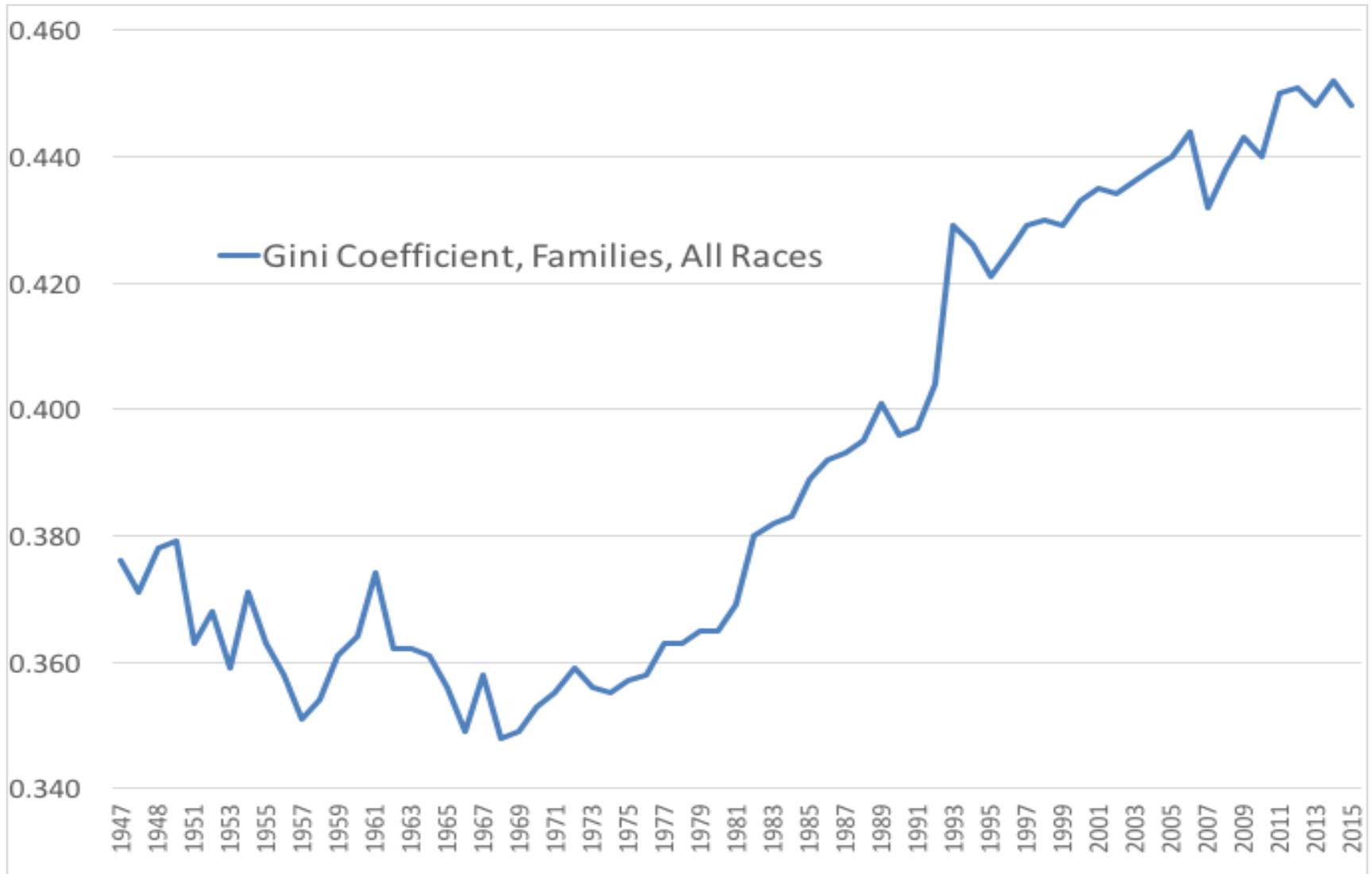
Why it matters

Every year tens of thousands of PhD economists

Policies

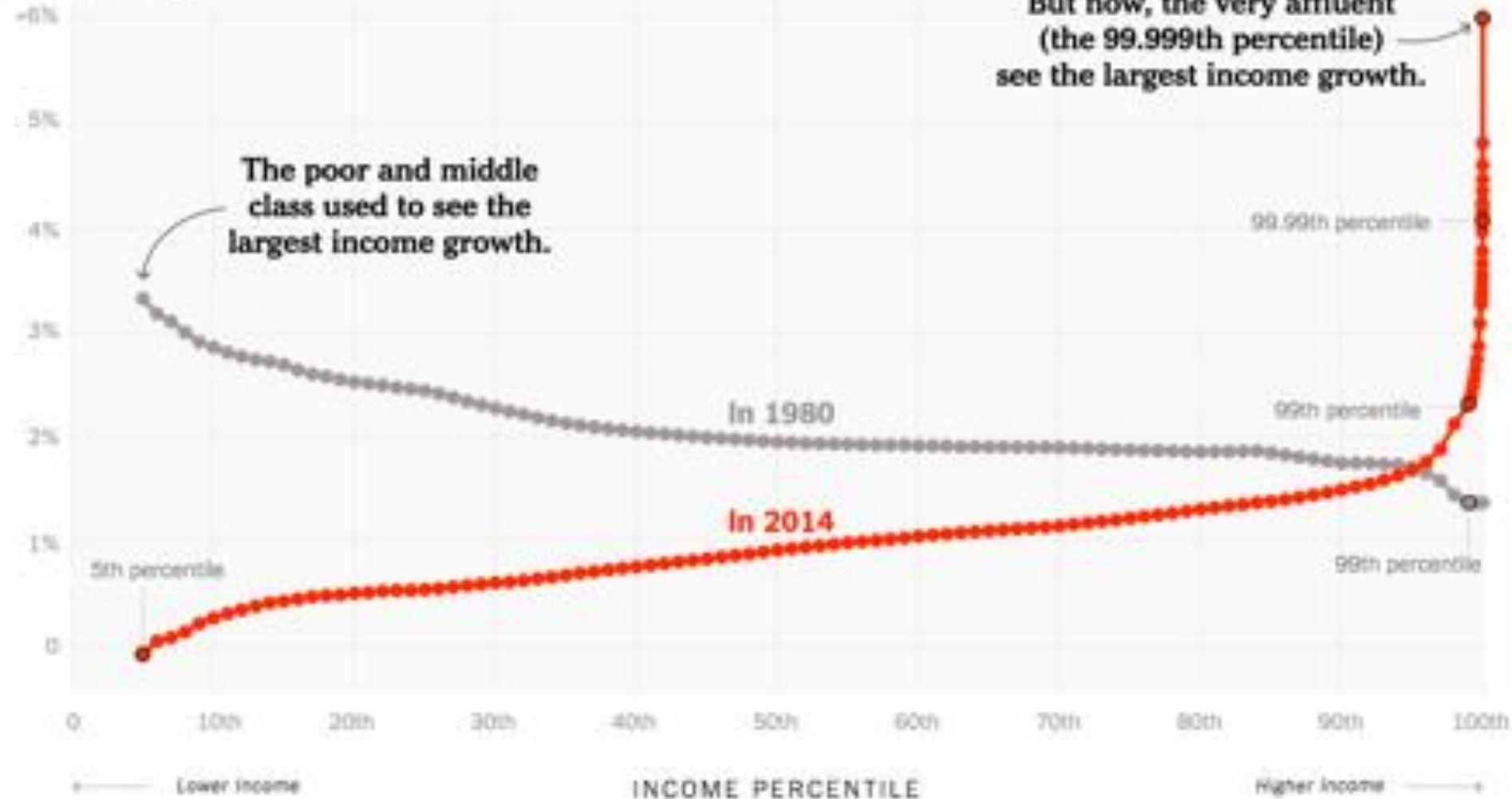
Underlines agency theory and the ideology that companies should be run to maximize shareholder value

Gini Coefficient for all families of all races in the United States, 1948-2015



Two different era of income growth

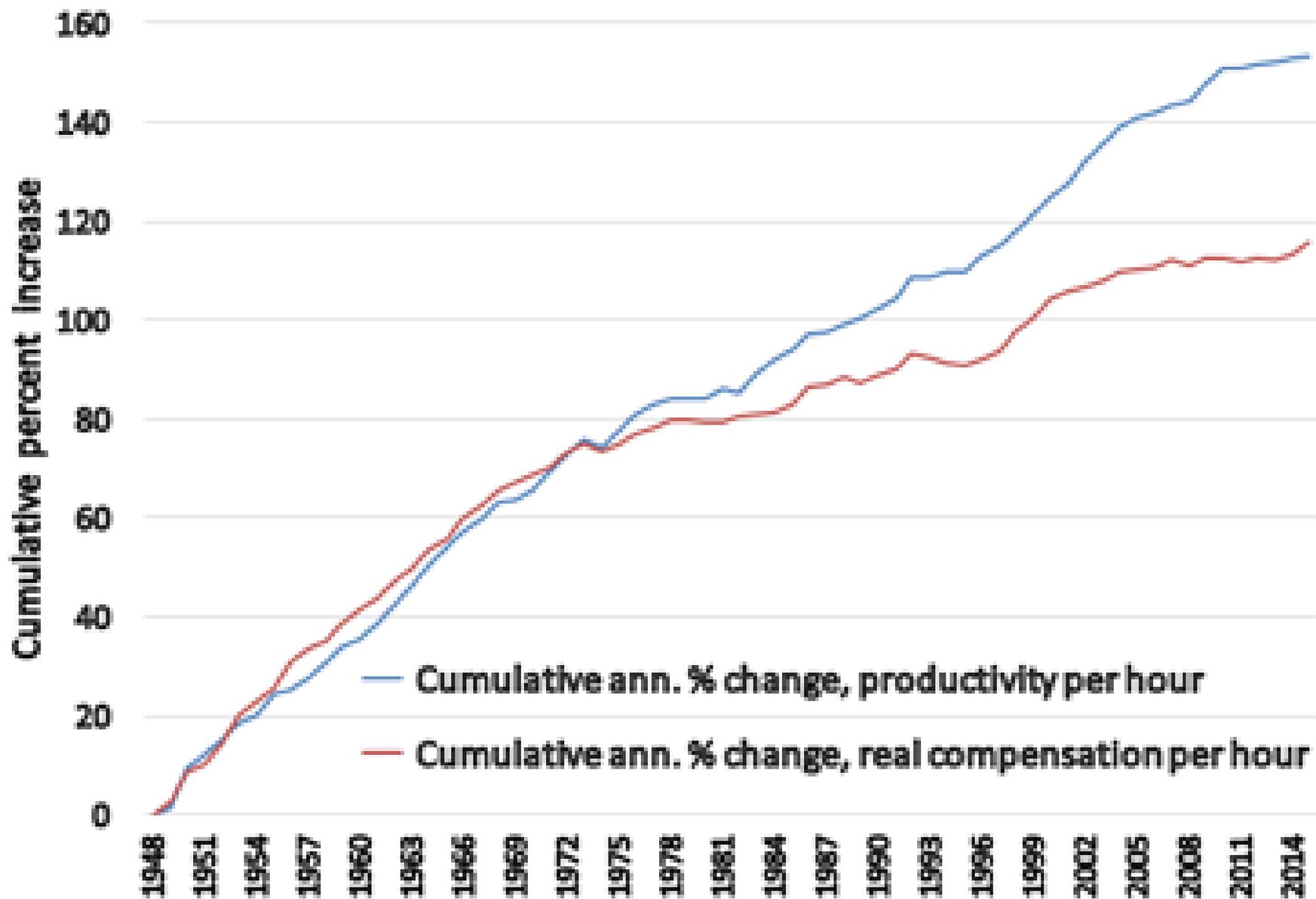
INCOME GROWTH
Over previous 34 years



Note: Inflation-adjusted annual average growth using income after taxes, transfers and non-cash benefits.

Source: David Leonhardt, "Our broken economy, in one simple chart," New York Times, August 7, 2017, at <https://www.nytimes.com/interactive/2017/08/07/opinion/leonhardt-income-inequality.html>.

Cumulative annual percent changes in productivity per hour and real wages per hour, 1948-2015



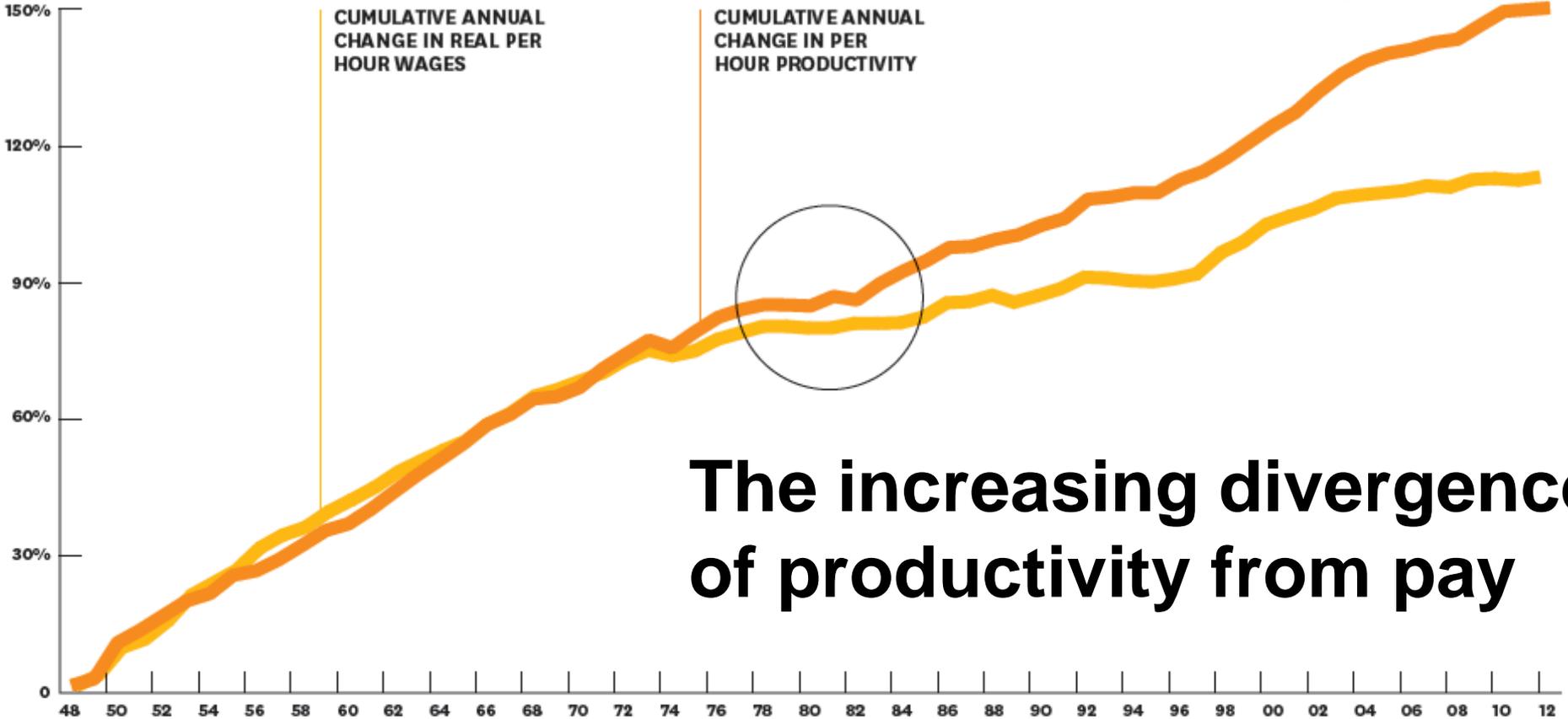
profits without prosperity

STOCK BUYBACKS
MANIPULATE THE
MARKET AND LEAVE
MOST AMERICANS
WORSE OFF.

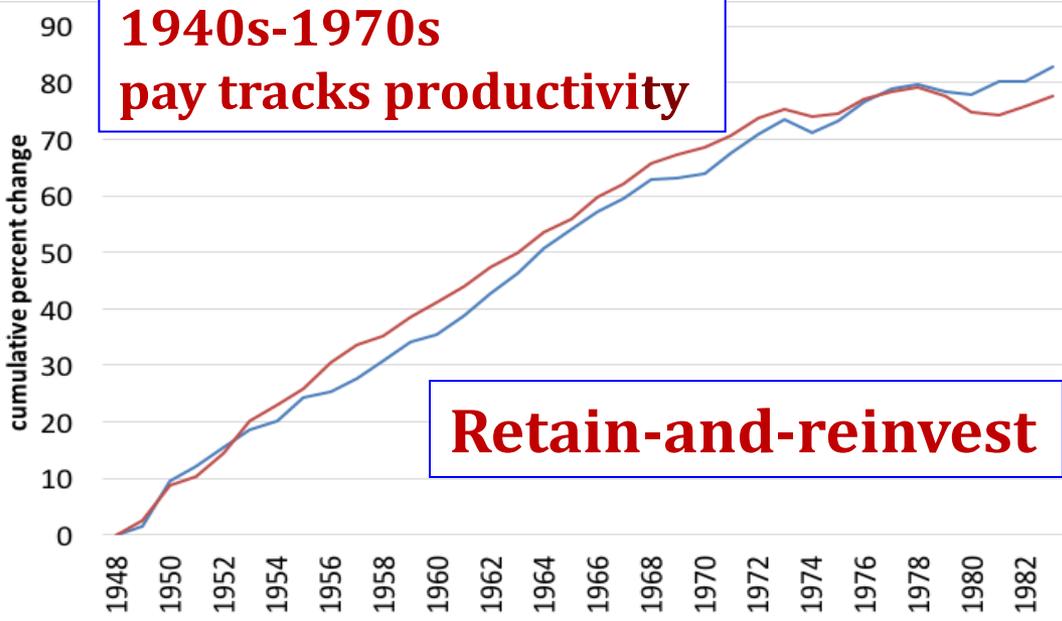
WHEN PRODUCTIVITY AND WAGES PARTED WAYS

From 1948 to the mid-1970s, increases in productivity and wages went hand in hand. Then a gap opened between the two.

Harvard Business
Review, Sept. 2014



The increasing divergence
of productivity from pay

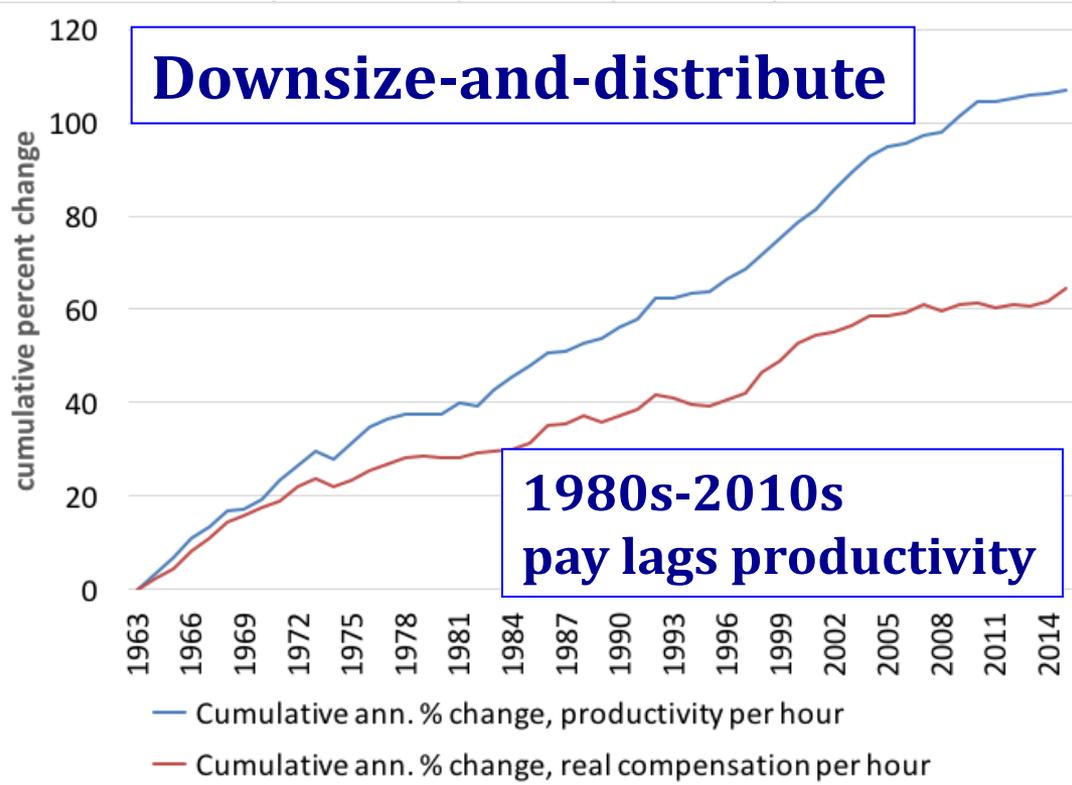


**Career employment:
Key driver of the
productivity-pay relation**

Old Economy Business Model

**Career-with-one-company
norm: employees share in
profits through job security, pay
raises, and defined-benefit
pensions**

Source: Bureau of Labor Statistics



New Economy Business Model

**Insecure jobs, globalized labor,
defined-contribution pensions**

**Massive stock buybacks and
exploding top executive pay**

**Erosion of middle-class
employment opportunities as
careers in companies
disappear**

Stock buybacks and the transformation of U.S. corporate resource allocation

BROOKINGS

Paper | April 17, 2015

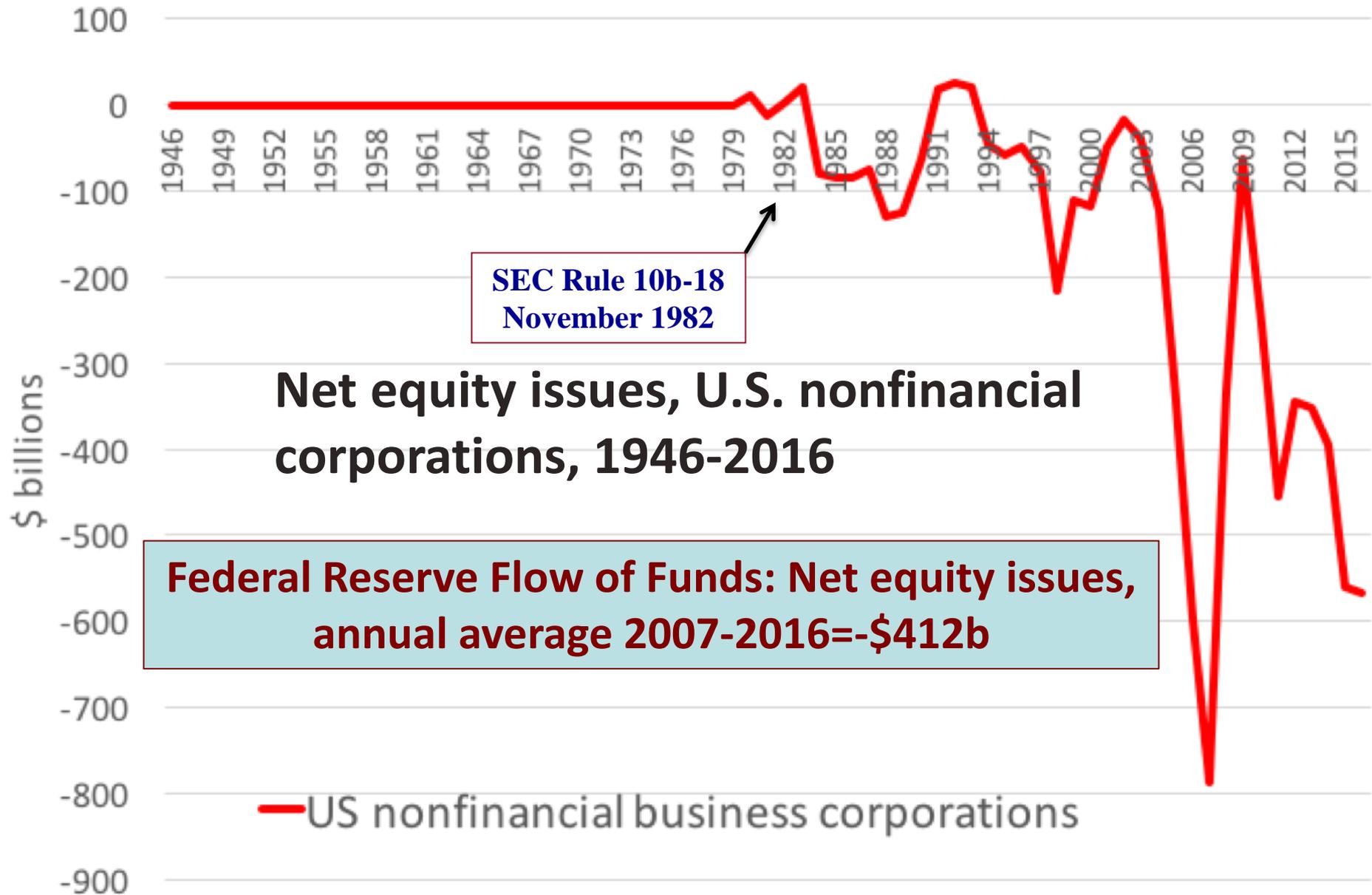
Stock buybacks: From retain-and-reinvest to downsize-and-distribute

By: William Lazonick



Stock buybacks are an important explanation for both the concentration of income among the richest households and the disappearance of middle-class employment opportunities in the United States over the past three decades. Over this period, corporate resource-allocation at many, if not most, major U.S. business corporations has transitioned from “retain-and-reinvest” to “downsize-and-distribute,” says William Lazonick in a new paper.

The looting of the US industrial corporation

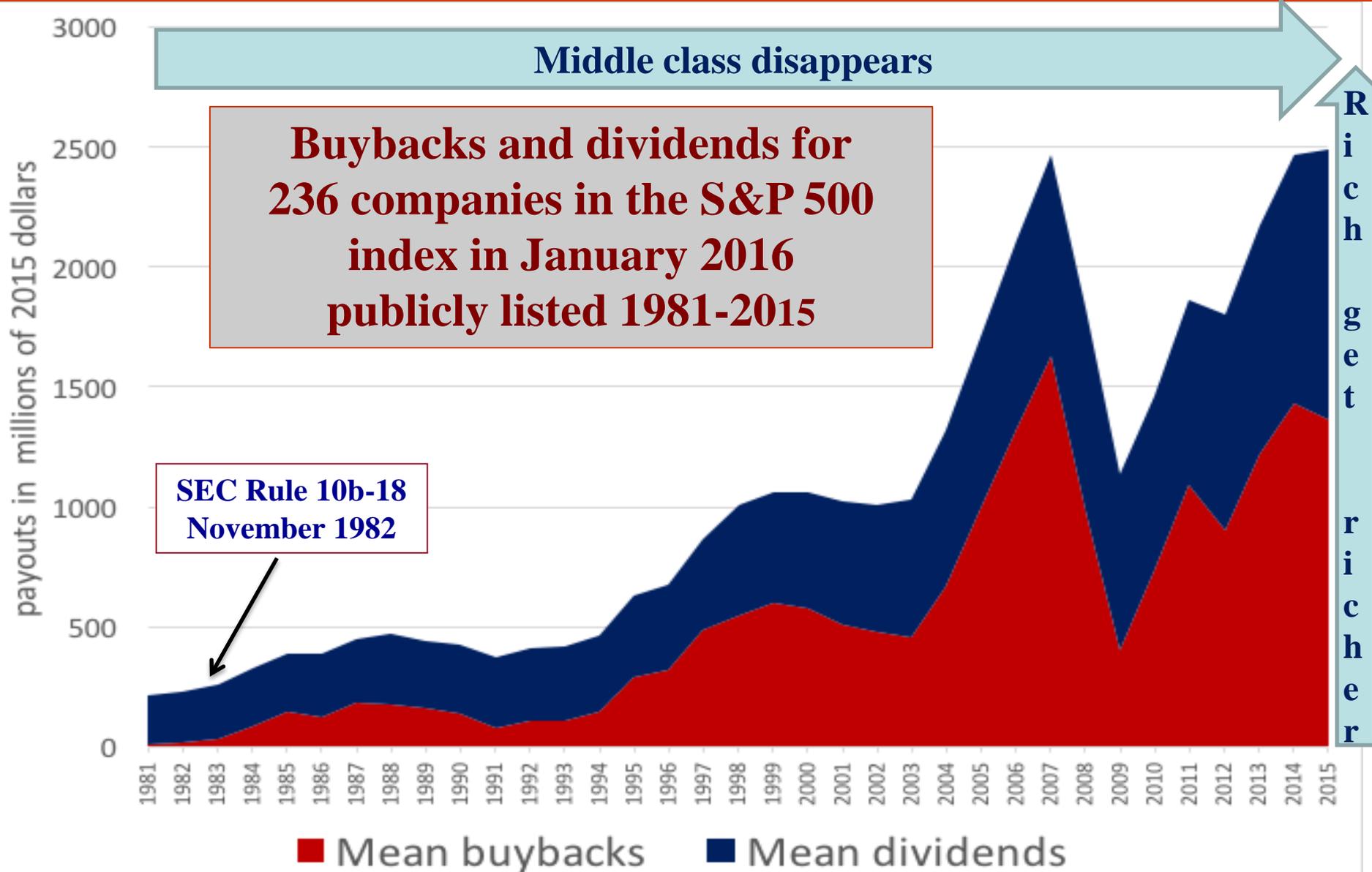


The era of downsize-and-distribute: The U.S. corporate economy is a “buyback economy”

| | Net equity issues, U.S. non-financial corporations 2015\$ billions | Net equity issues as % of GDP |
|------------------|---|--|
| 1946-1955 | 143.2 | 0.56 |
| 1956-1965 | 110.9 | 0.30 |
| 1966-1975 | 316.0 | 0.58 |
| 1976-1985 | -290.9 | -0.40 |
| 1986-1995 | -1,002.5 | -1.00 |
| 1996-2005 | -1,524.4 | -1.09 |
| 2006-2015 | -4,466.6 | -2.65 |

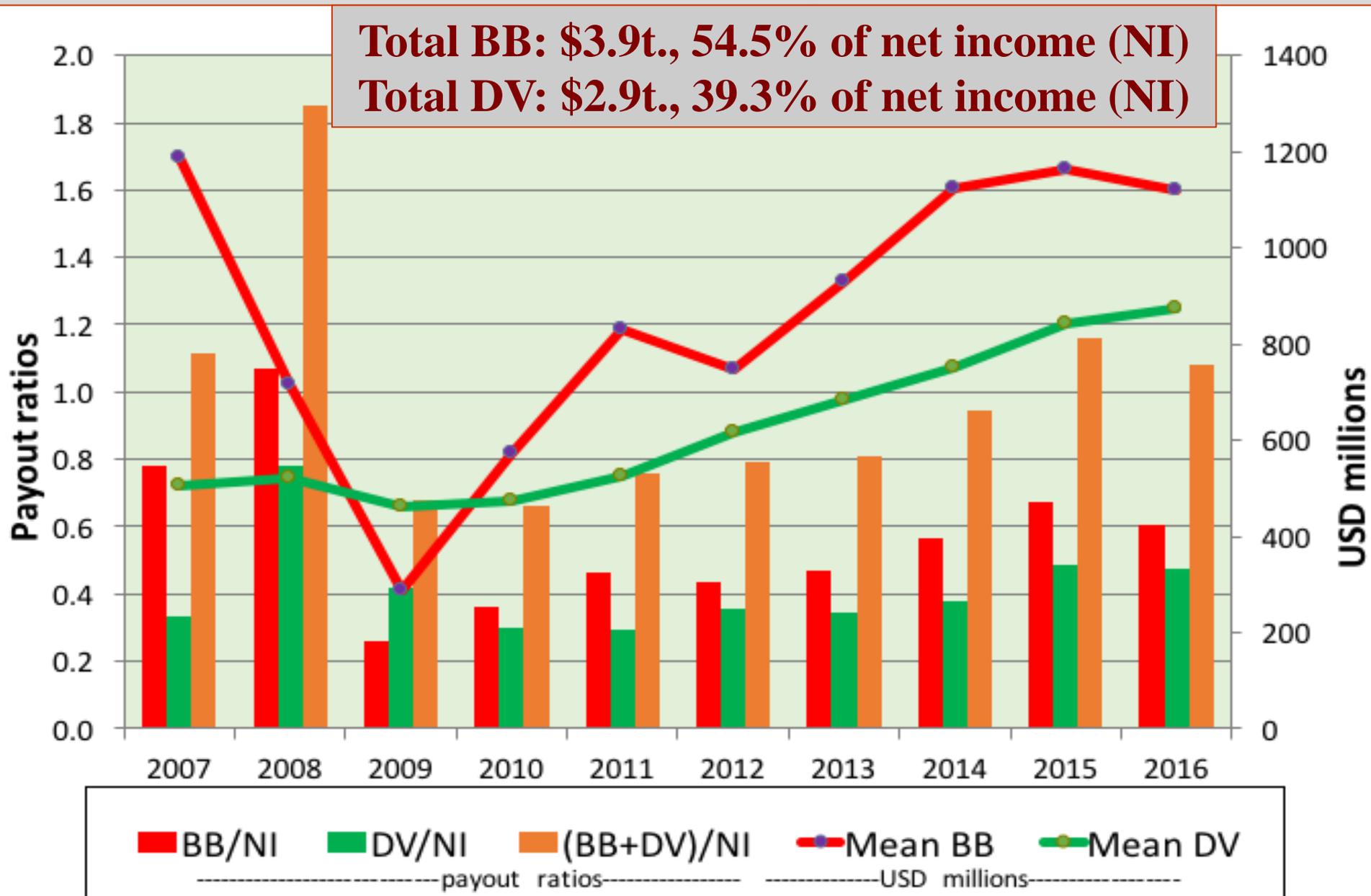
Net equity issues, industrial corps. 2016=-\$568b.

Since the mid-1980s, senior executives have been allocating substantial resources to buybacks in addition to dividends



Buybacks (BB) and dividends (DV) by 461 companies in the S&P 500 Index in January 2017 that were publicly listed 2007-2016

Total BB: \$3.9t., 54.5% of net income (NI)
Total DV: \$2.9t., 39.3% of net income (NI)



| RANK | Company | Ticker | NI,\$b | BB,\$b | DV,\$b | BB/NI | DV/NI | (BB+DV)/ |
|------|-------------------|--------|--------|--------|--------|-------|-------|----------|
| | Name | Symbol | | | | % | % | NI% |
| 1 | EXXONMOBIL | XOM | 311 | 178 | 98 | 57 | 32 | 89 |
| 2 | APPLE | AAPL | 271 | 133 | 47 | 49 | 17 | 66 |
| 3 | MICROSOFT | MSFT | 178 | 120 | 66 | 68 | 37 | 104 |
| 4 | IBM | IBM | 137 | 115 | 36 | 84 | 27 | 111 |
| 5 | WAL-MART | WMT | 150 | 67 | 51 | 45 | 34 | 79 |
| 6 | CISCO SYSTEMS | CSCO | 81 | 63 | 18 | 78 | 22 | 100 |
| 7 | GENERAL ELECTRIC | GE | 128 | 62 | 86 | 48 | 67 | 116 |
| 8 | PFIZER | PFE | 86 | 61 | 68 | 71 | 79 | 150 |
| 9 | PROCTER & GAMBLE | PG | 108 | 60 | 59 | 55 | 55 | 111 |
| 10 | ORACLE | ORCL | 86 | 57 | 15 | 67 | 17 | 84 |
| 11 | HEWLETT-PACKARD | HPQ | 44 | 57 | 9 | 130 | 22 | 151 |
| 12 | INTEL | INTC | 95 | 52 | 39 | 54 | 41 | 96 |
| 13 | HOME DEPOT | HD | 48 | 51 | 21 | 106 | 44 | 150 |
| 14 | AIG | AIG | -54 | 48 | 7 | -88 | -13 | -101 |
| 15 | GOLDMAN SACHS | GS | 78 | 48 | 15 | 62 | 20 | 81 |
| 16 | WELLS FARGO | WFC | 162 | 47 | 53 | 29 | 33 | 62 |
| 17 | DISNEY | DIS | 58 | 46 | 13 | 80 | 22 | 101 |
| 18 | JPMORGAN CHASE | JPM | 177 | 46 | 54 | 26 | 31 | 57 |
| 19 | AT&T | T | 119 | 45 | 99 | 37 | 83 | 121 |
| 20 | JOHNSON & JOHNSON | JNJ | 131 | 45 | 65 | 34 | 50 | 84 |
| 21 | MCDONALD'S | MCD | 47 | 42 | 26 | 89 | 56 | 146 |
| 22 | GILEAD SCIENCES | GILD | 61 | 37 | 4 | 61 | 7 | 68 |
| 23 | PEPSICO | PEP | 61 | 36 | 32 | 59 | 53 | 112 |
| 24 | CONOCOPHILLIPS | COP | 40 | 35 | 30 | 88 | 75 | 163 |
| 25 | CHEVRON | CVX | 173 | 35 | 65 | 20 | 38 | 58 |

The damage that buybacks do: Undermining the foundation of corporate finance

Retained earnings are the foundation for investment in the productive capabilities of the firm.

Companies invest in

- Plant and Equipment (P&E)**
- Research and Development (R&D)**
- Training and Retaining (T&R)**

Until the 1980s, executives and economists worried that dividend payouts might be too high to sustain the growth of the firm. Since the mid-1980s, in the name of “maximizing shareholder value,” that concern has (literally) “gone by the board.”

**The damage that buybacks do:
Concentrate income at the top while failing to
invest in the middle class**

Institute for
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WORKING PAPER

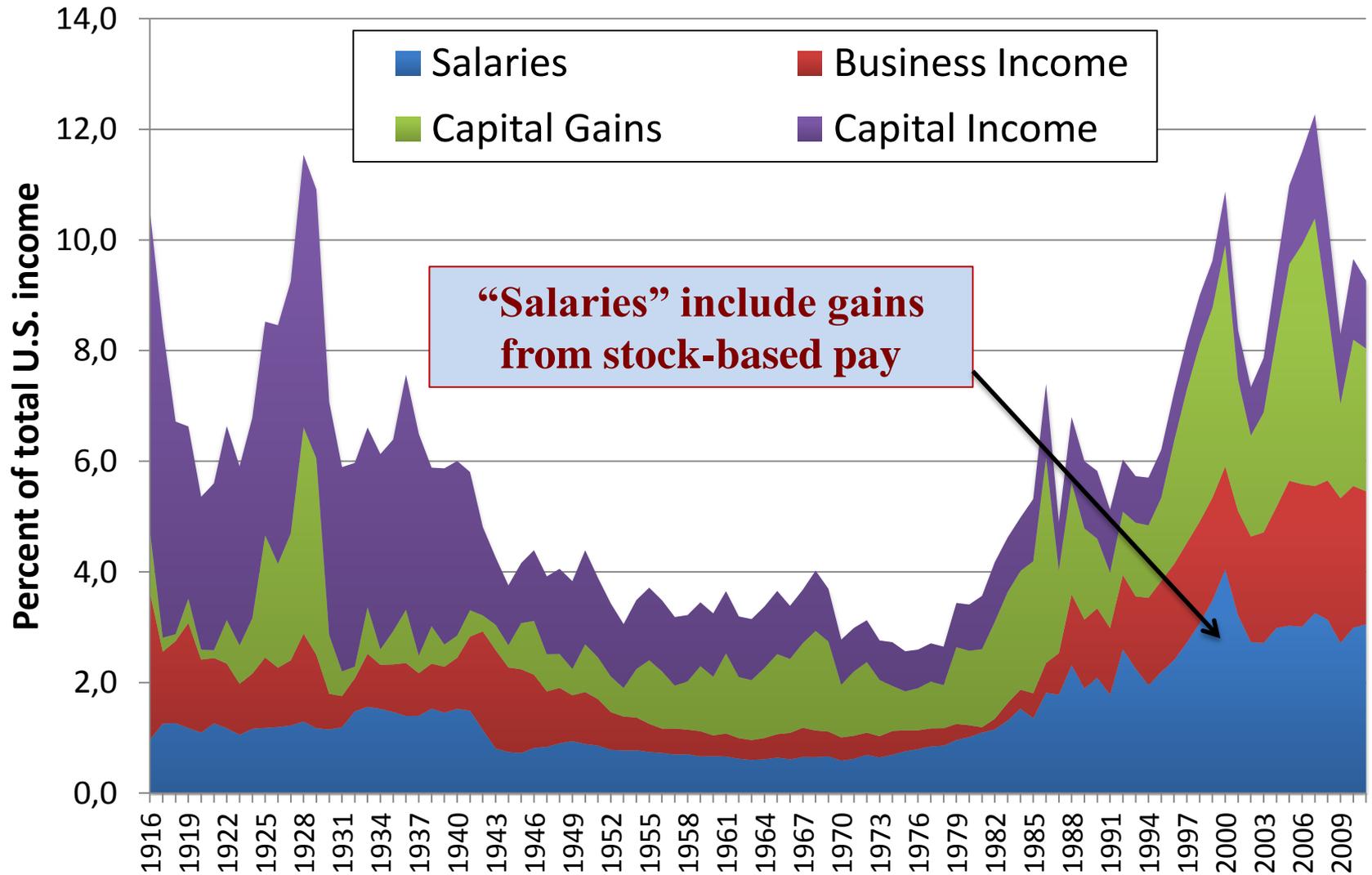
William Lazonick

JAN 2015

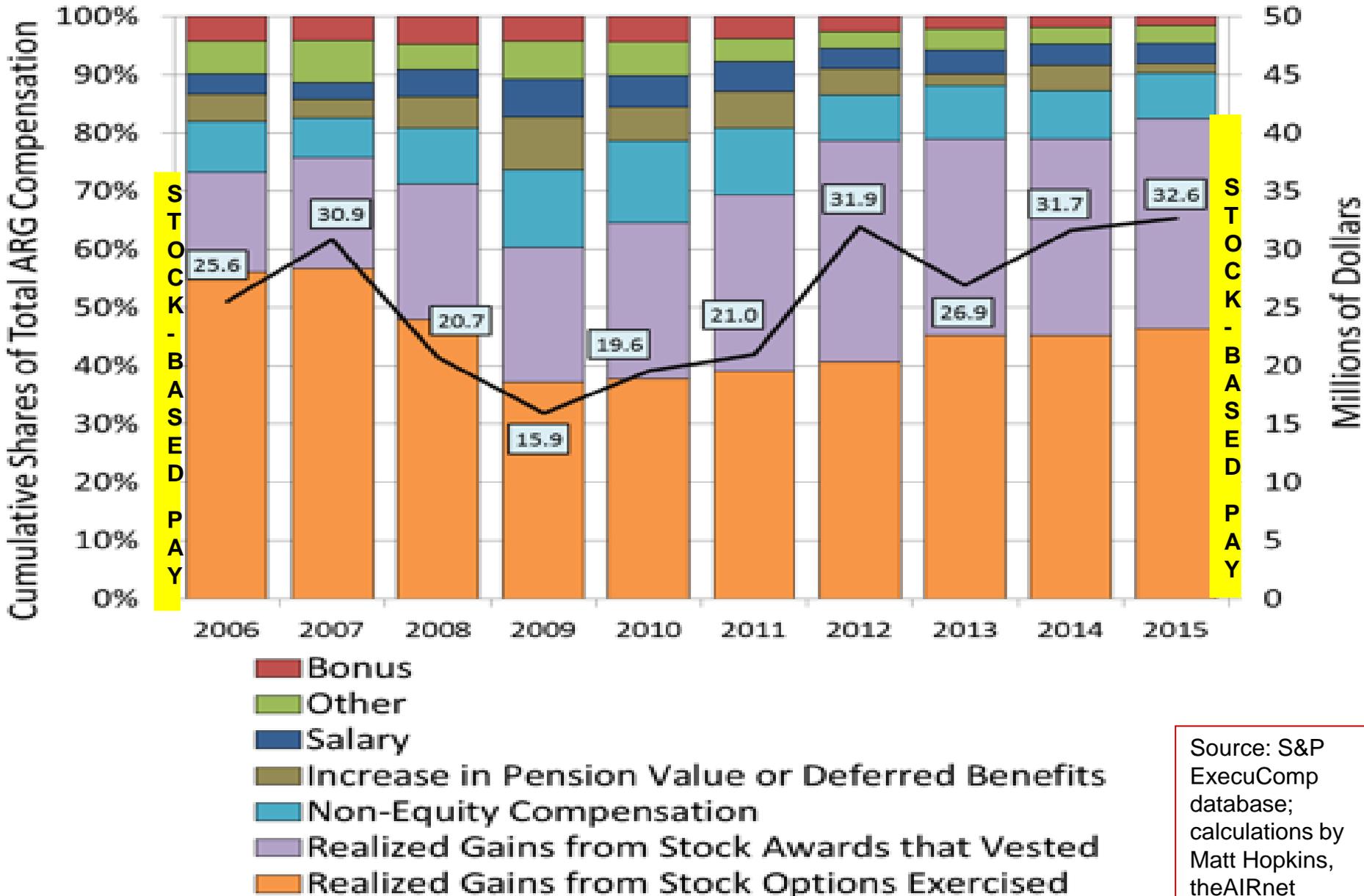
Labor in the Twenty-First Century: The Top 0.1% and the Disappearing Middle-Class

The ongoing explosion of the incomes of the richest households and the erosion of middle-class employment opportunities for most of the rest have become integrally related in the now-normal operation of the U.S. economy.

“Salaried” incomes of the top 0.1%, 1916-2011



Average total pay by ACTUAL REALIZED GAINS and % shares of pay components, 500 highest paid US executives in each year, 2006-2015



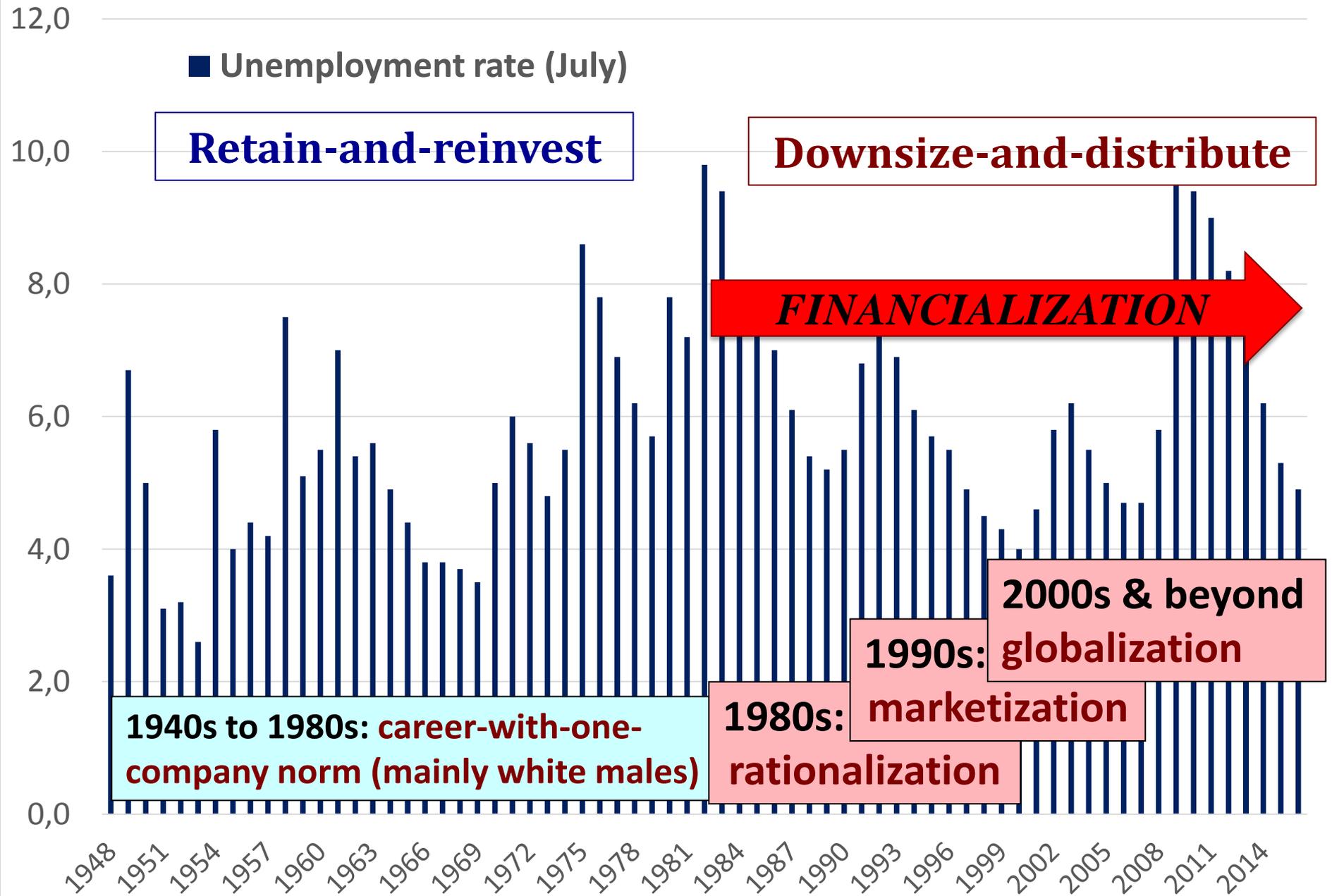
And the top hedge-fund managers make even more: Comparative remuneration, corp. execs. and HFMs, 2014

| | Corporate Executives | Pay | Hedge Fund Managers | Pay |
|----|---|----------------|--|----------------|
| 1 | David A. Ebersman Facebook | \$388 M | Kenneth Griffin Citadel | \$1.3 B |
| 2 | Leslie Moonves, II CBS Corp | \$259 M | James Simons Renaissance Technologies | \$1.2 B |
| 3 | Sumner M. Redstone CBS Corp | \$225 M | Raymond Dalio Bridgewater Associates | \$1.1 B |
| 4 | Leonard Bell, M.D. Alexion Pharmaceuticals | \$196 M | William Ackman Pershing Square Capital Management | \$950 M |
| 5 | John C. Martin, Ph.D. Gilead Sciences | \$193 M | Israel (Izzy) Englander Millennium Management | \$900 M |
| 6 | Timothy D. Cook Apple | \$154 M | Michael Platt BlueCrest Capital Management | \$800 M |
| 7 | Sumner M. Redstone Viacom | \$120 M | Larry Robbins Glenview Capital Management | \$570 M |
| 8 | David M. Zaslav Discovery Comm | \$118 M | David Shaw D.E. Shaw Group | \$530 M |
| 9 | Martin Ellis Franklin Jarden Corp | \$118 M | O. Andreas Halvorsen Viking Global Investors | \$450 M |
| 10 | Reed Hastings Netflix | \$117 M | Charles (Chase) Coleman III Tiger Global Management | \$425 M |
| | Average | \$189 M | Average | \$822 M |

Remuneration of the top 15 hedge-fund managers, USA, 2016 (top15 average=\$606 million)

| Name | Hedge Fund | Take-Home Pay |
|-----------------------|------------------------------|----------------------|
| James Simons | Renaissance Technologies | \$1.5 billion |
| Michael Platt | BlueCrest Capital Management | \$1.5 billion |
| Raymond Dalio | Bridgewater Associates | \$1.4 billion |
| David Tepper | Appaloosa Management | \$750 million |
| Kenneth Griffin | Citadel LLC | \$500 million |
| Daniel Loeb | Third Point | \$400 million |
| Paul Singer | Elliott Management | \$400 million |
| David Shaw | D. E. Shaw & Co. | \$400 million |
| John Overdeck | Two Sigma Investments | \$375 million |
| David Siegel | Two Sigma Investments | \$375 million |
| Michael Hintze | CQS LLP | \$325 million |
| Jeffrey Talpins | Element Capital Management | \$300 million |
| Stanley Druckenmiller | Duquesne Family Office | \$300 million |
| Brett Icahn | Icahn Capital Management | \$280 million |
| David Schechter | Icahn Capital Management | \$280 million |

The disappearing middle class



Three sources of structural change in US corporate employment relations since the 1980s

1980s: Rationalization: permanent layoffs of blue-collar workers

1990s: Marketization: end of the career-with-one company norm

2000s: Globalization: international flows of jobs to labor and labor to jobs

- All three transformations in employment resulted in the erosion of “middle-class” jobs in the United States
- But the corporations that had employed these people did not disappear, and many remained or became highly profitable

Q. Why didn't US corporations invest the gains from rationalization, marketization, and globalization in the next generation of higher quality jobs?

A. Financialization of corporate resource allocation (i.e., buybacks)

Share ownership and managerial control

In the growth of the U.S. economy the key function of the stock market was *control*. Specifically, the stock market enabled the separation of managerial control over the allocation of corporate resources from the ownership of the company's shares.

Yet, assuming that the key function of the stock market is *cash*, economists known as agency theorists see this **separation of control from ownership as the “original sin” of American capitalism**, and argue that the evils of managerial control can be overcome by compelling corporate managers as “agents” to maximize the value of corporate shareholders as “principals.”

“Agency theorists” view the business enterprise as a “market imperfection”, in need of the MSV solution

- **MSV:** rooted in the theory of the market economy in which the **business enterprise is a massive market imperfection with “inefficient” capital markets**
- **Critical assumption of agency theory: all economic participants receive guaranteed market returns except for *shareholders who bear risk by making investments without guaranteed returns***
- **It is then assumed that this risk-bearing function results in a more efficient economy**
- **It follows that those who bear risk should control the allocation of the economy’s resources**

Jensen: “Disgorge” the “free” cash flow

Solution to the agency problem:

To make markets efficient, “disgorge free cash flow”:

“Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital. Conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial free cash flow. The problem is how to motivate managers to disgorge the cash rather than investing it at below cost or wasting it on organization inefficiencies.”

Michael C. Jensen, *American Economic Review*, 1986.

What it means to “disgorge” the “free” cash flow

DISGORGE: Implication that the cash that is under corporate control is ill-gotten – but agency theory lacks a theory of the productive (i.e., innovative) enterprise

Whose cash is it that is being disgorged?

FREE CASH FLOW: Lay off 5.000 employees who generated the firm’s revenue-generating products – and increase the cash flow that is “free”

Or find ways to avoid corporate taxes to make more cash flow “free”

Integral to disgorging corporate cash is the alignment of the interests of managers as agents with shareholders as principals by *giving managers stock-based pay.*

Economic critique of MSV

- **Fundamental problem with MSV:** erroneous assumption that shareholders are the only actors who invest without a guaranteed return
- **NOT SO:** *Taxpayers* through government agencies and *workers* through business employers regularly make risky investments in productive capabilities. From this perspective, both the state and labor have economic claims on profits if and when they occur.
- **Irony of MSV:** public shareholders typically never invest in the company's value-creating capabilities. They invest in outstanding shares, hoping for a rise in price. Following MSV, executives fuel this hope by “disgorging” cash as dividends and buybacks.

MSV is a theory of value extraction, not value creation

- Economic activity and performance depend on resource allocation decisions
- We rely on corporate executives to make resource allocation decisions
- **Stock-based compensation** enriches top corporate executives in the name of MSV, and gives them incentives to encourage speculation in and engage in **manipulation** of the price of their company's stock
- **Stock buybacks: The prime mode of corporate resource allocation for the purpose of manipulating stock prices**

How did agency theorists get it so wrong?

They are “well-trained” neoclassical economists: they posit that the most unproductive business firm is the foundation for the most efficient economy

- **It’s an absurdity taught by PhD economists to millions of student around the world, year in and year out – it’s called “perfect competition”**
- **The large-scale business enterprise is a massive “market imperfection”; *not* a value-creating social organization that must distribute gains to value creators and defend itself from value extractors**
- **With their adherence to “the myth of the market economy, even progressive economists have been blind to the looting of the US industrial corporation**

Milton Friedman (1912-2006)



“The methodology of positive economics” (1953), and “The Chicago School”: history doesn’t matter, economics is a context-free social science

A Monetary History of the United States (1963), with Anna Schwartz – it’s the money supply, stupid!

Capitalism and Freedom (1962) - the title says it all (if you know what Milton thinks capitalism is)

Free to Choose (1980) co-authored with Rose Friedman: highly influential in the era of Reaganomics and Thatcherism

The conservative mythologizer of the market economy

Milton Friedman's clarion call for MSV

In a free-enterprise, private-property system, a corporate executive is an employee of the owners of the business. He has direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom.

Friedman concludes the article by quoting himself from his 1962 book *Capitalism and Freedom*: “There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”

A Friedman doctrine—
**The Social
Responsibility
Of Business Is to
Increase Its Profits**

By **MILTON FRIEDMAN**

TAMING G.M.—Chairman James Roche of General Motors (right) replies to members of Campaign G.M. (below, wearing "Tame G.M." buttons) at the corporation's stockholders' meeting in May. Representatives of the campaign demanded that G.M. name three new directors to represent "the public interest" and set up a committee to study the company's performance in such areas of public concern as safety and pollution. The stockholders defeated the proposals overwhelmingly, but management, apparently in response to the second demand, recently named five directors to a "public-policy committee." The author calls such drives for social responsibility in business "pure and unadulterated socialism," adding: "Businessmen who talk this way are unwitting puppets of the intellectual forces that have been undermining the basis of a free society."



Demands for GM to address car safety and environmental pollution

In the photo, Roche was replying to members of Campaign G.M. an organization that

“demanded that G.M. name three new directors to represent ‘the public interest’ and set up a committee to study the company’s performance in such areas of public concern as safety and pollution. The stockholders defeated the proposals overwhelmingly, but management, apparently in response to the second demand, recently named five directors to a “public-policy committee.” The author [Milton Friedman] calls such drives for social responsibility in business “pure and unadulterated socialism,” adding: “Businessmen who talk this way are unwitting puppets of the intellectual forces that have been undermining the basis of free society.”

Milton Friedman tells US corporations how NOT to be innovative in global competition

The photo of Roche and the editorializing on it, points out that, in historical retrospect, the demands of Campaign G.M. for safer and less polluting cars were in effect demands for G.M. to engage in automobile innovation. In the 1970s and beyond, the world leaders in producing these “socially responsible” cars would be Japanese and European companies, leaving the “profit-maximizing” General Motors lagging further and further behind. **What Friedman (and, quoting him, the *New York Times* editor) called “pure and unadulterated socialism” proved to be the future of the automobile industry!**

Why conventional fiscal policy has limited impact

Keynes' inadequate notion of "animal spirits" as determining the propensity to invest: when business confidence wanes, the state should pay people to dig ditches and fill them up again, or put one million pounds sterling in an unnamed abandoned coal mine and have a treasure hunt, schemes consistent with the notion that **government's role is merely a temporary stimulus: pump-priming to get the wells of prosperity flowing again**

But in a theory of innovative enterprise, **businesses need the state to invest in physical infrastructure and human capital on a sustained**: Keynes did not contemplate a) the need for sustained government spending to support innovative enterprise ("animal spirits" is not a theory of innovative enterprise), and b) the deliberate decision of "capitalists" (actually senior executives as corporate employees) **not to invest** as is the case in the U.S.

buyback economy

Why conventional monetary policy has limited impact

The silly Keynesian notion of liquidity preference as the cause of a failure to channel savings into investment (Has keeping money under the mattress waiting for interest rates to rise ever caused a big problem for the capitalist economy?)

Low interest rates provide “capitalists” with an added incentive to run down the economy by doing buybacks? Even as the tax code encourages them to keep billions of dollars offshore?

Personal Finance | Wed Jun 24, 2015 7:06pm EDT

Related: MONEY

Investor Jeremy Grantham warns stock buybacks slowing growth

CHICAGO | BY ROSS KERBER



Buyback defenders say low interest rates leave few better ways that executives might spend the money.

Grantham said that argument shows the impact of the Federal Reserve's low interest rate policy. "They've made it desperately appealing to borrow cheap debt to buy your own stock back," he said.

What can academics do?

- **Debunk** the absurd body of “knowless” called neoclassical economics – e.g., show that its foundation is a theory of the firm as the sweatshop
- **Attack** the ideology, built on the neoclassical theory of the market economy, that companies should be run to “maximize shareholder value”
- **Build** an alternative perspective of the economy based on the economics of innovative enterprise: one that recognizes the interaction of the “investment triad”: **supportive households, innovative enterprises, developmental states**
- **Train** academics in a methodology that **integrates theory and history**

Most of my recent writing on innovative enterprise and sustainable prosperity can be found on the website of the Institute for New Economic Thinking:

<https://www.ineteconomics.org/research/experts/wlazonick>