CAN WE CONNECT SOME INTELLECTUAL DOTS?
Comments on Jane Gingrich, Memo on the Politics of Education, Equity and the Future of Prosperity

E

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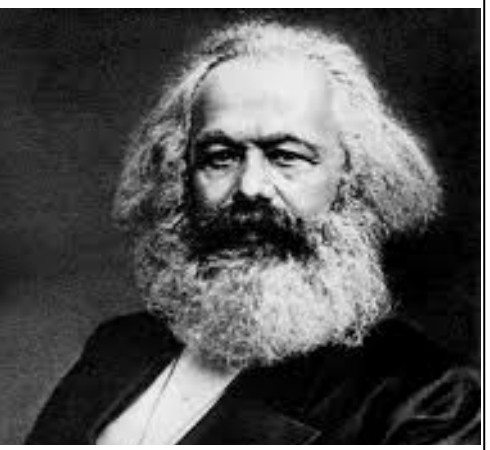
November 19, 2020

OYSTER:
Labor: a replaceable commodity or a productive asset?



Marx: Growth of the firm depends on profits that capitalists extract from commoditized labor, intensifying work effort for a given wage

Inaccurate depiction of employment in 19th century Britain: skilled workers shared in productivity gains derived from effort-saving technological change (Lazonick, *CJE*, 1979)

Penrose: Growth of the firm through collective and cumulative learning by white-collar workers who share in productivity gains through careers with one company (Lazonick, INET WP, 2020)

Analyzed the large US corporation in the 1950s, when it was delivering, for white males at least, relatively equitable and stable economic growth

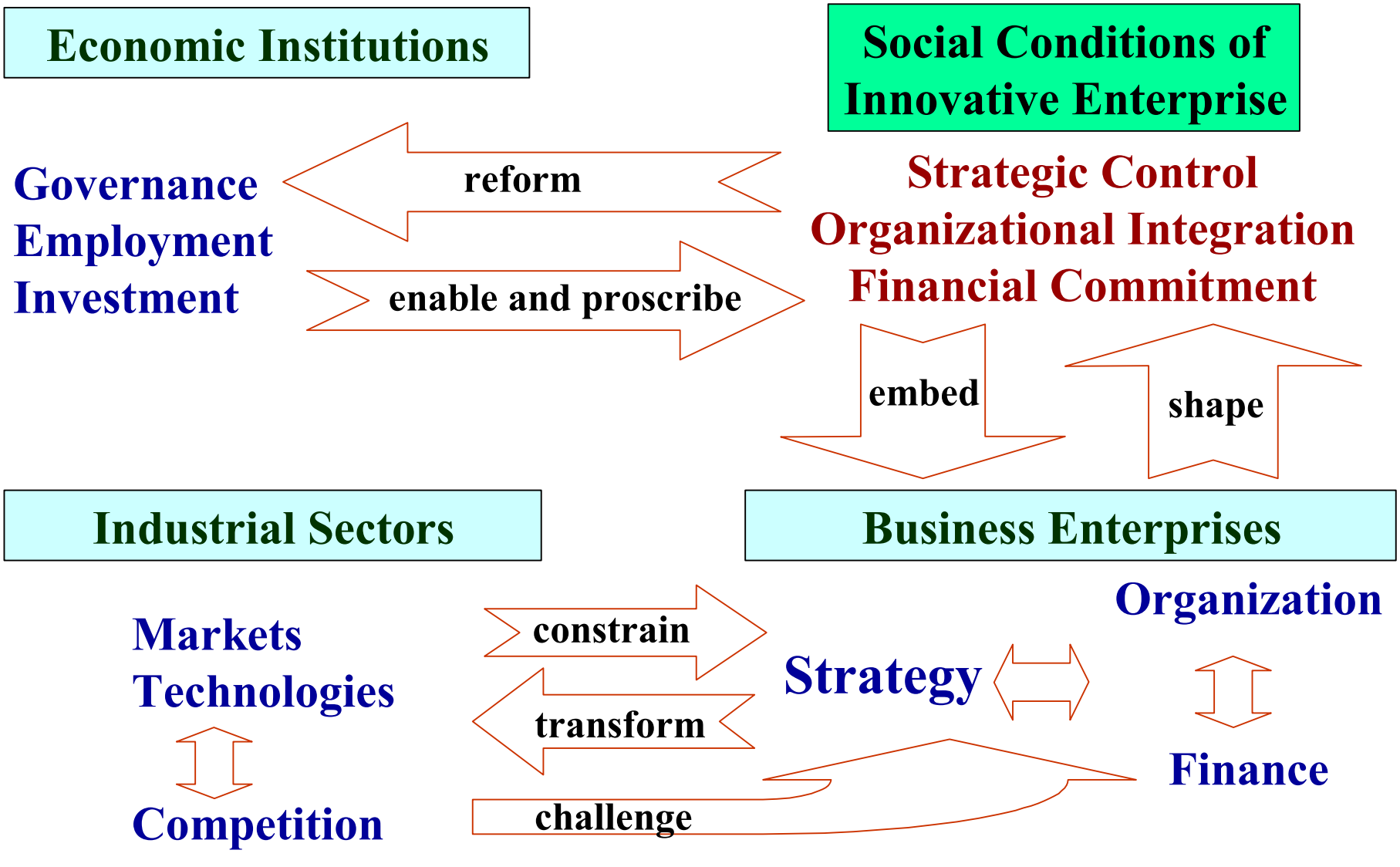
POUND: How does the Gingrich approach relate to "the investment triad"?

Stable and equitable economic growth depends on *investments in productive capabilities*

- **HOUSEHOLD UNITS** as "supportive families" invest in equipping future workers for productive lives
- **GOVERNMENT AGENCIES** as "developmental states" invest in infrastructure and knowledge
- **BUSINESS FIRMS** as "innovative enterprises" invest in value-creating processes & products, including investing in people

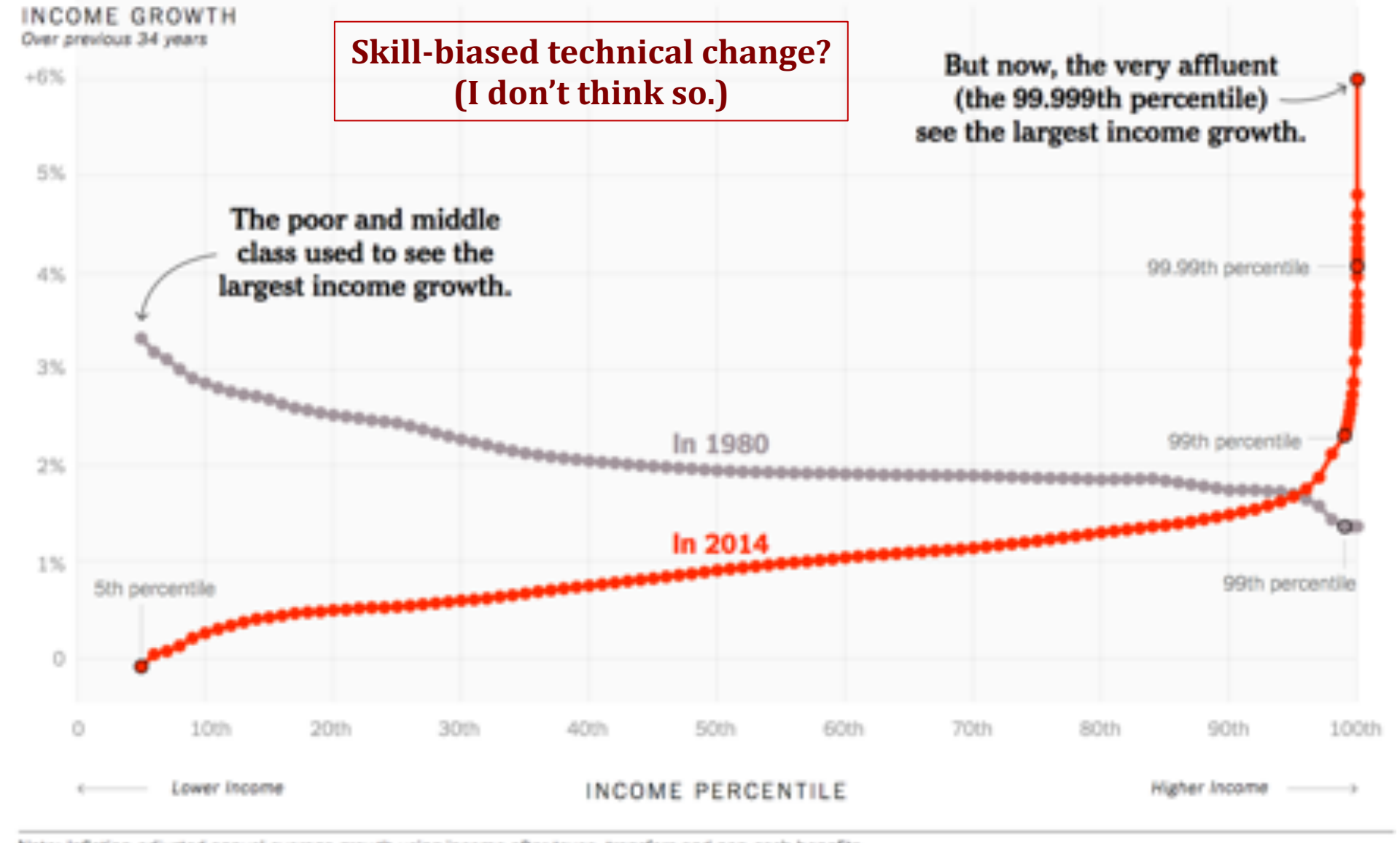
FROM THE TRIAD TO INNOVATION TO PRODUCTIVITY
The triadic interactions of these organizations
to develop and utilize productive capabilities
to generate high-quality, low-cost goods and services

PICASSO: Social conditions of innovative enterprise (please steal this framework)



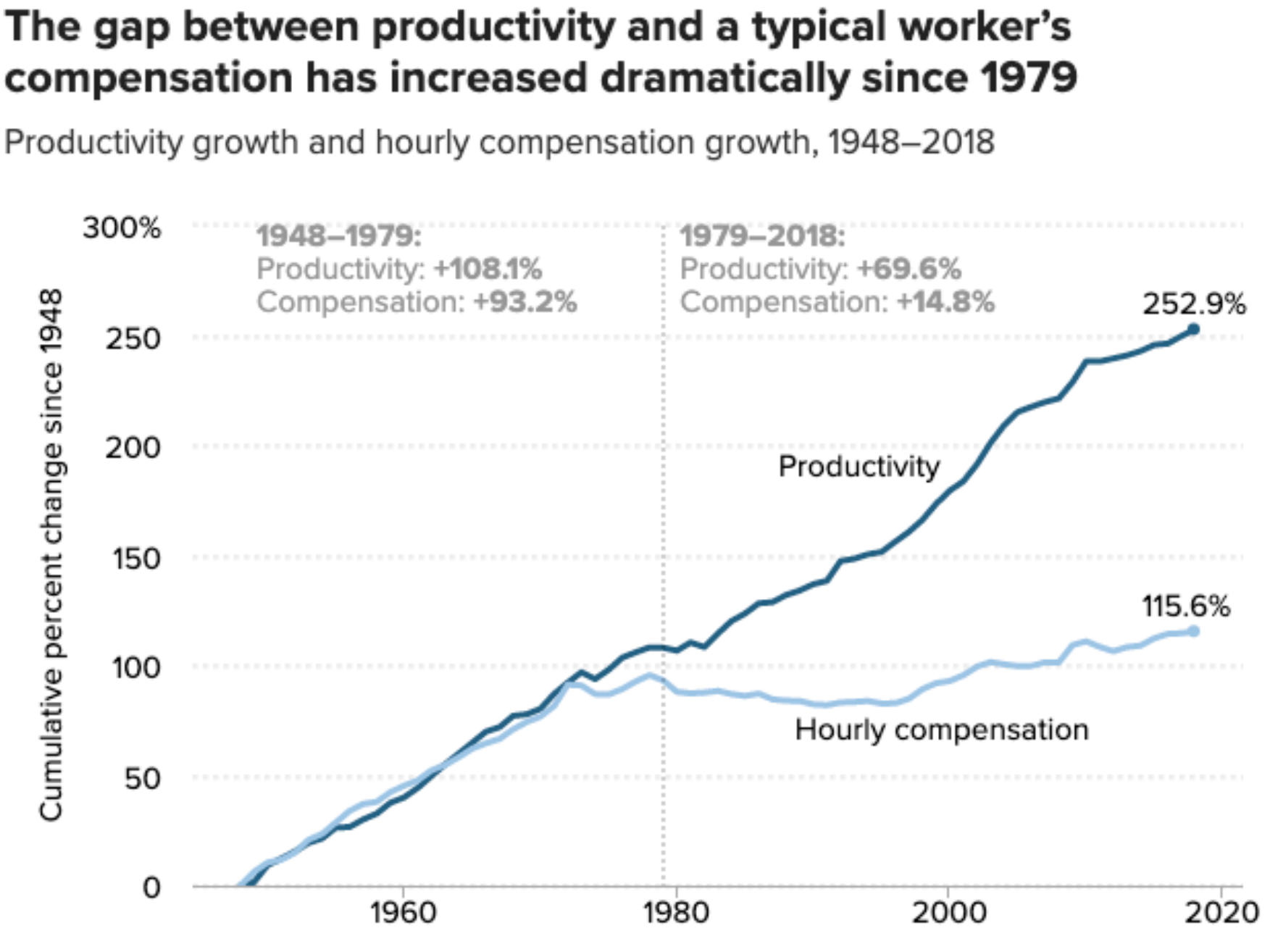
Extreme increase in US economic inequality since the late 1970s

Concentration of income at the top in the PVE era



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.

The growing productivity-pay gap

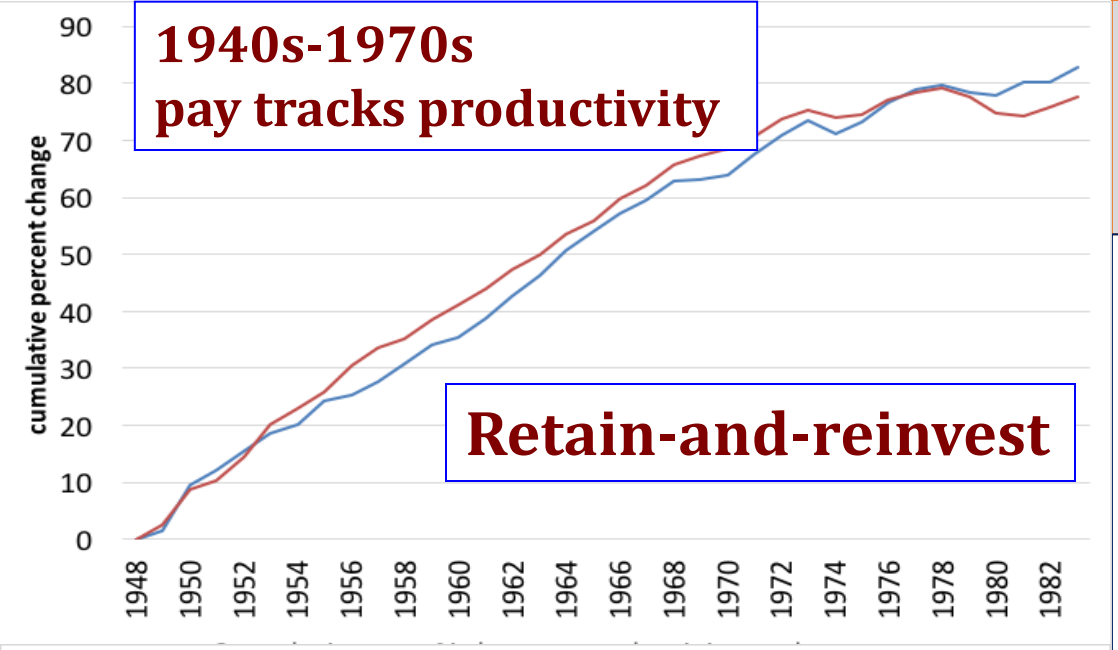


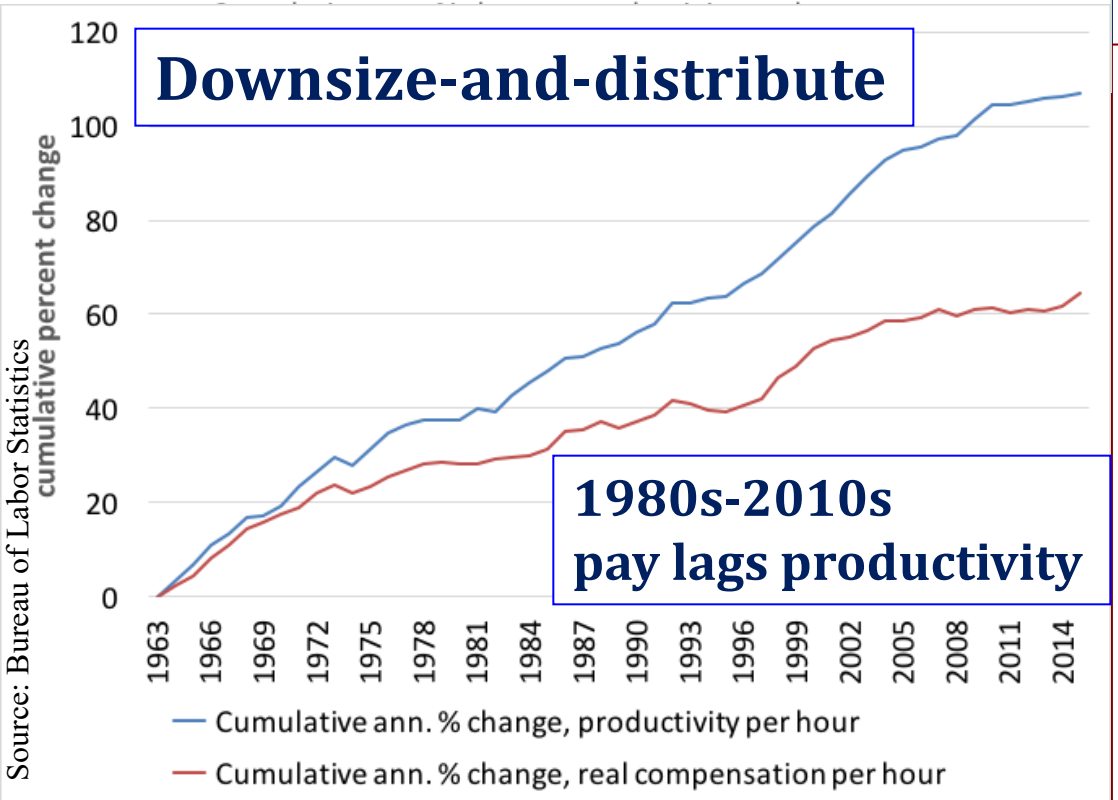
Source: Economic Policy Institute: https://www.epi.org/productivity-pay-gap/

Large corporations dominate the U.S. economy
Economic performance depends on resource allocation by organizations, with markets as outcomes

2017	Firms	Establish-ments	Paid employees	Annual payroll	Annual revenues	No. of firms	Ave. no. of employees
	No.	No.	No.	$ billions	$ billions		
All firms	5,996,900	7,860,674	128,591,812	6,725	37,414	5,996,900	21
Percent of all firms	%	%	%	%	%		
<5 employees	61.67	47.1	4.6	4.1	4.1	3,698,086	1.6
5-19 employees	27.38	21.5	11.8	8.8	7.5	1,641,832	9.2
20-99 employees	9.08	9.4	16.6	13.8	11.7	544,485	39
100-499 employees	1.54	4.9	14.1	13.6	12.2	92,358	196
500+ employees	0.34	17.1	52.9	59.7	64.4	20,139	3,378
5,000+ employees	0.04	11.5	35.0	40.0	*46.0*	2,156	20,859
10,000+ employees	0.02	9.8	29.3	33.2	na	1,100	34,308
20,000+ employees	0.01	7.7	23.0	25.1	na	514	57,428

- **U.S. productivity, income, and employment depend on resource allocation by large corporations. The foundation of human and physical capital formation is retained earnings, not stock markets. Think employment relations, not labor markets.**
- **Do the largest, most profitable, corporations Retain-and-Reinvest, Dominate-and-Distribute, or Downsize-and-Distribute?**





Source: Bureau of Labor Statistics

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, defined-benefit pensions, and health coverage

New Economy Business Model

Insecure jobs, globalized labor, defined-contribution pensions

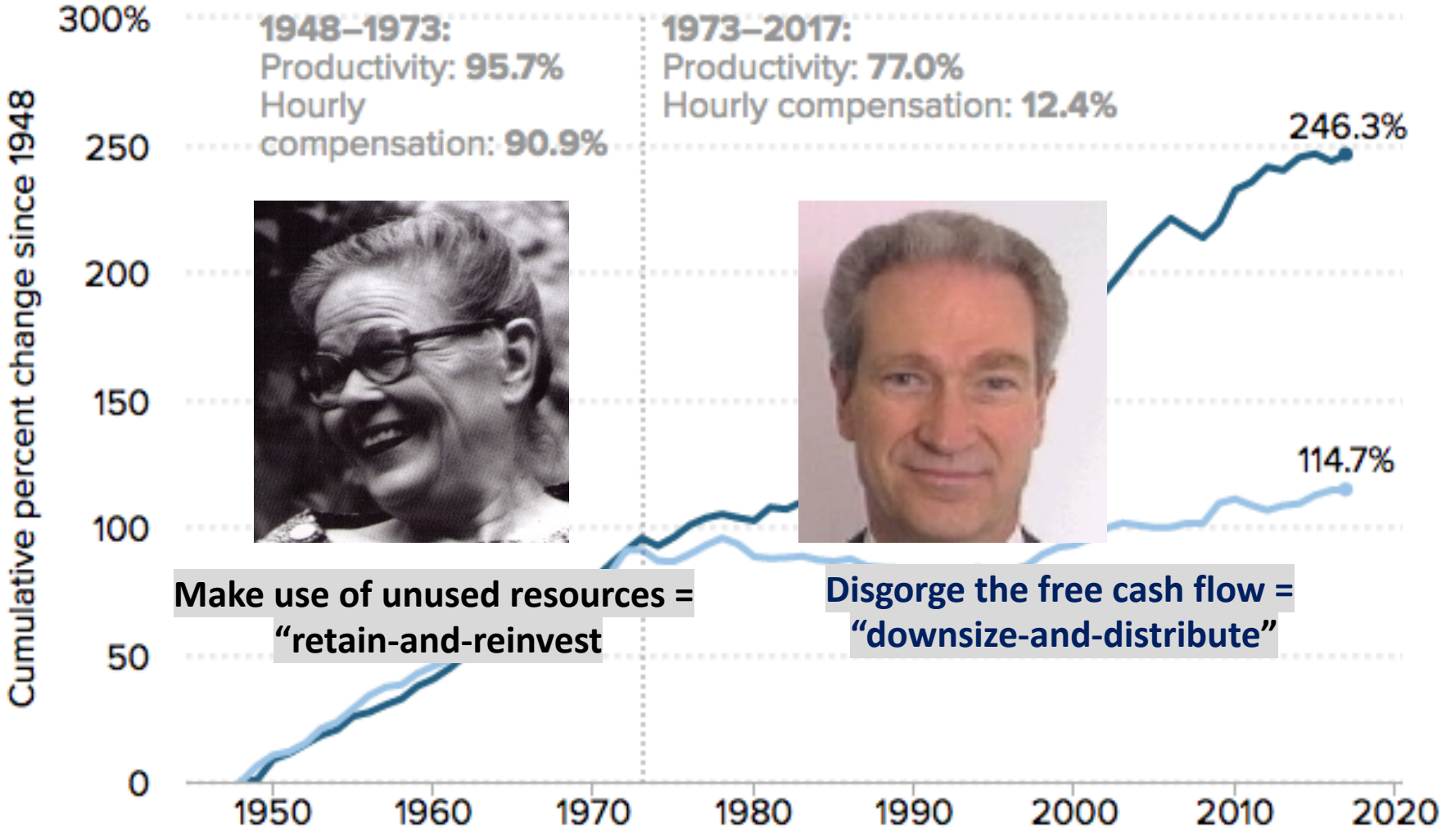
Massive stock buybacks, exploding top executive pay, billionaire hedge-fund activists

Disappearance of careers in companies means the erosion of middle-class employment opportunities

Putting economists' faces on the productivity-pay gap

The gap between productivity and a typical worker's compensation has increased dramatically since 1973

Productivity growth and hourly compensation growth, 1948–2017

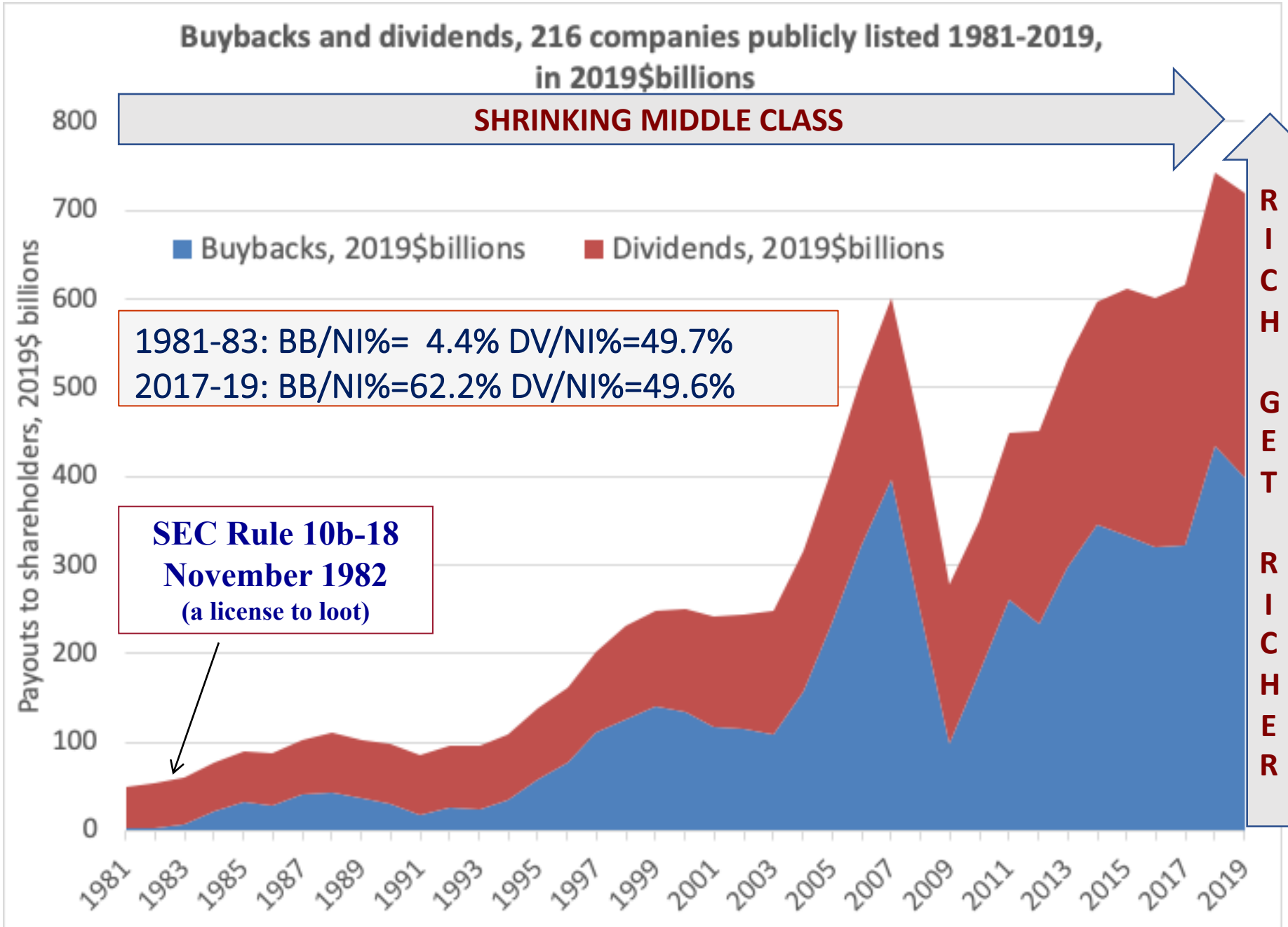


Make use of unused resources = "retain-and-reinvest

Disgorge the free cash flow = "downsize-and-distribute"

Source: Economic Policy Institute: https://www.epi.org/productivity-pay-gap/

PVE in the name of "maximizing shareholder value"



25 largest repurchasers 2010-2019

$2.0 trillion in buybacks (38% of all corporate buybacks)

Research agenda: how buybacks undermine equitable and stable growth in particular industries and companies within those industries

S&P 500 Index 2010-2019

$5.3 trillion in BBs

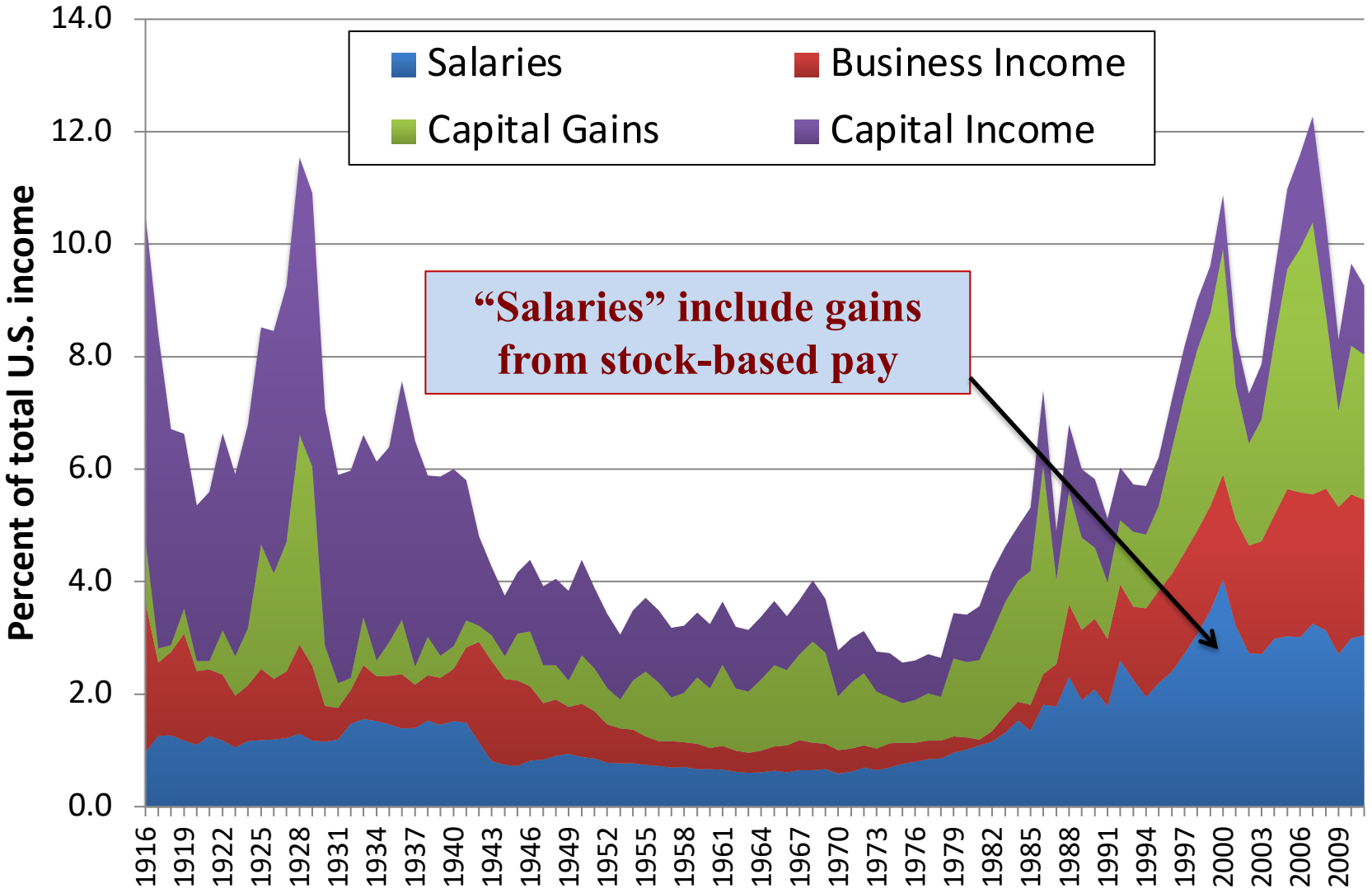
54% of NI

$3.8 trillion in DVs

39% of NI

RANK	COMPANY	BUYBACKs 2010-2019 $billions	BB/NI %	DV/NI %	(BB+DV)/NI %
1	APPLE	320	76	21	97
2	ORACLE	119	127	24	151
3	MICROSOFT	113	54	44	98
4	JPMORGAN CHASE	97	41	30	70
5	WELLS FARGO	93	46	34	81
6	EXXON MOBIL	92	35	45	80
7	IBM	89	72	37	108
8	CISCO SYSTEMS	86	106	44	150
9	PFIZER	77	60	55	116
10	BANK OF AMERICA	73	58	28	86
11	WALMART.	70	50	41	91
12	INTEL	68	52	36	88
13	HOME DEPOT	64	93	45	137
14	CITIGROUP	63	56	17	73
15	JOHNSON & JOHNSON	62	49	62	110
16	GOLDMAN SACHS	56	77	23	100
17	QUALCOMM	55	133	59	192
18	PROCTER & GAMBLE	55	52	64	117
19	ALPHABET	52	31	0	31
20	AMGEN	52	93	37	130
21	AIG	49	110	15	126
22	WALT DISNEY	48	61	24	85
23	VISA	47	77	19	96
24	MERCK	46	81	91	172
25	MCDONALD'S	46	87	58	145

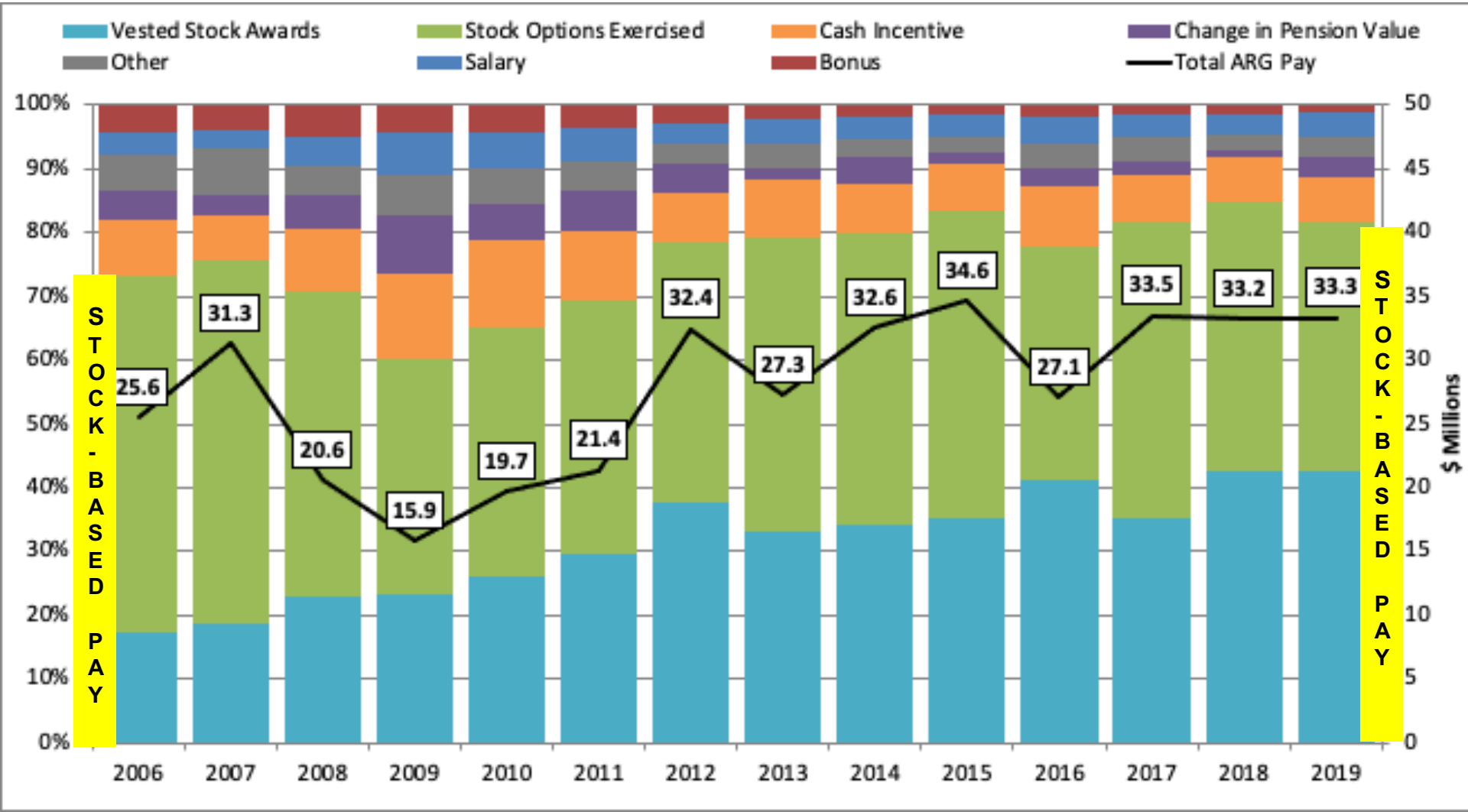
PVE and the "salaried" incomes of the top 0.1%, 1916-2011



http://topincomes.parisschoolofeconomics.eu/#Database: United States, Top 0.1% income composition.

Value-extracting insiders: Average total pay and % shares of pay components, 500 highest-paid US executives, 2006-2019

High executive pay comes from realized gains from exercising stock options and vesting of stock awards.



Value-extracting outsiders: Highest-paid hedge-fund managers 2016 (activists underlined)

Name	Hedge Fund	Take-Home Pay
James Simons	Renaissance Technologies	$1.5 bil
Michael Platt	BlueCrest Capital Management	
Raymond Dalio	Bridgewater Associates	
David Tepper	Appaloosa Manage	million
Kenneth Griffin	Citadel LLC	$500 million
Daniel Loeb	Thi	$40
Paul Singer		
David Shaw	w & Co.	
John Ove	Two Sigma Inves	illion
David Siege	Two Sig	$375 million
Michael Hintze		$325 million
Jeffrey Talpins	nagement	$300 million
Stanley Drucken	amily Office	$300 million
Brett Icahn	hn Capital Management	$280 million
David Schechter	Icahn Capital Management	$280 million

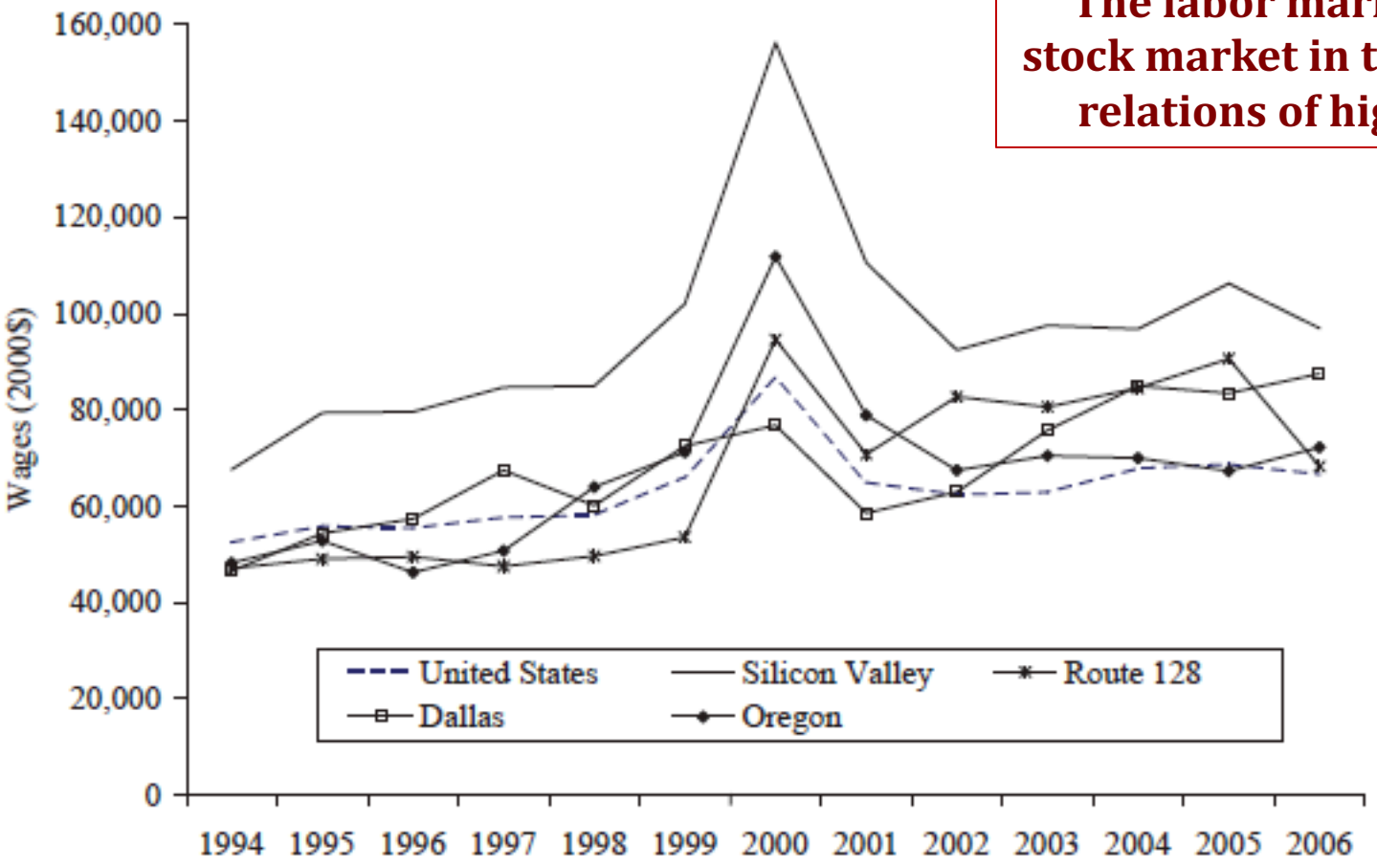
Take-home pay of the top 15 hedge-fund managers, USA, 2016 (top15 average=$606 million)

Top15 corporate executives in 2016 Average total pay=$120 million (93% stock-based) Range: $83 million to $220 million

s://www.forbes.com/pictures/58b7441c4bbe6f0e5587d2ae/1-michael-platt/#a0f0591477

Semiconductors: Realized gains from broad-based employee stock options

Figure 2.5 Real Wages (in 2000 dollars) in the Semiconductor Industry, United States, Silicon Valley, Route 128, Dallas, and Oregon, 1994–2006



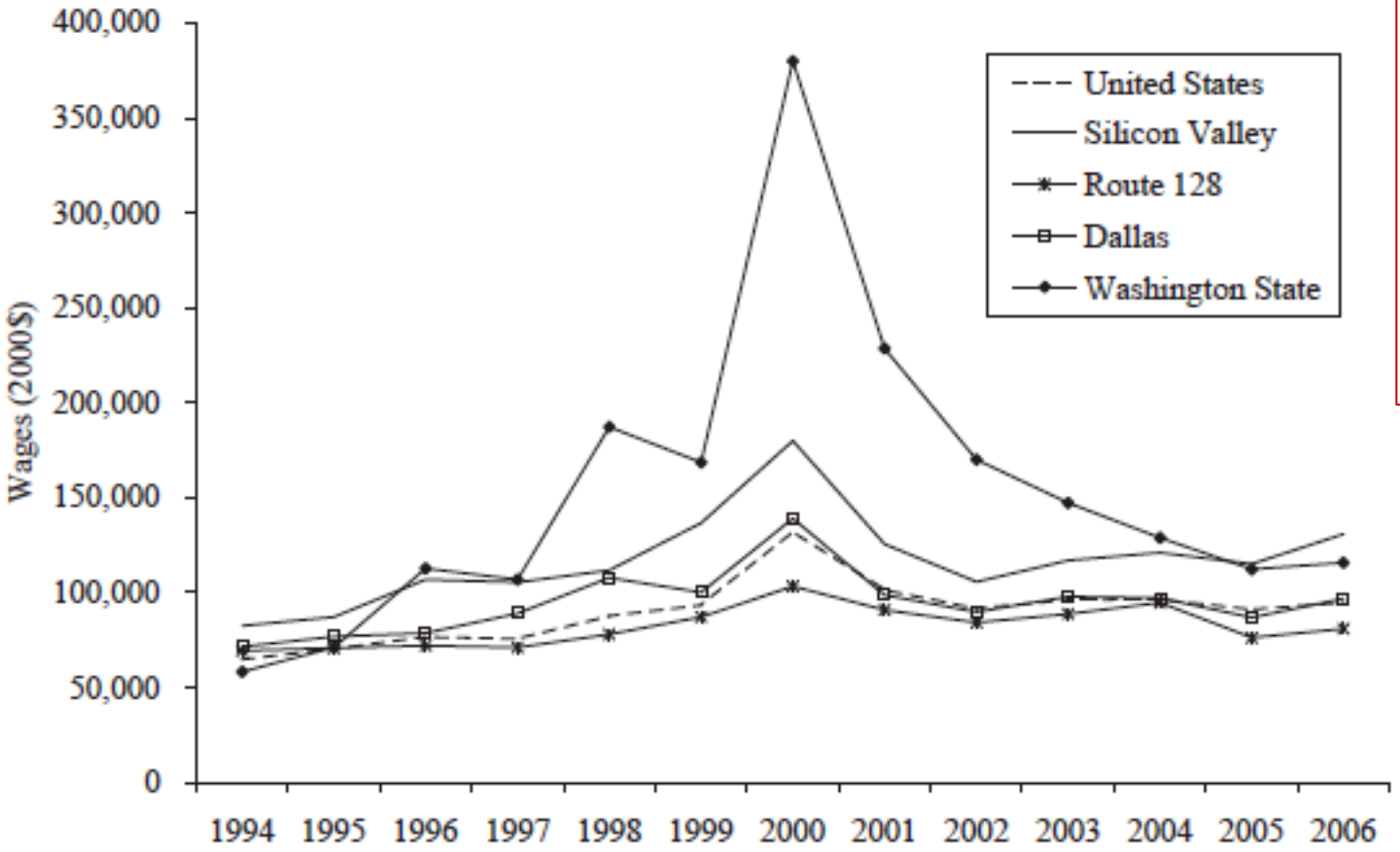
The labor market meets the stock market in the employment relations of high-tech firms

NOTE: SIC 3674 for 1994–1997; NAICS 334413 and 334611 for 1998–2006.
SOURCE: U.S. Census Bureau (2008a).

Source of graph: Lazonick, *Sustainable Prosperity in the New Economy?* Upjohn *Institute,* 2009

Software: Realized gains from broad-based employee stock options

Figure 2.6 Real Wages (in 2000 dollars) in Software Publishing, United States, Silicon Valley, Route 128, Dallas, and Washington State, 1994–2006



NOTE: SIC 7372 for 1994–1997; NAICS 511210 for 1998–2006.
SOURCE: U.S. Census Bureau (2008a).

The labor market meets the stock market in the employment relations of high-tech firms

Source of graph: Lazonick, *Sustainable Prosperity in the New Economy?* Upjohn *Institute,* 2009

Broad-based stock options as a source of US economic inequality

Table 2.3 Average Gains (in U.S. dollars) per Employee (excluding the top five) from the Exercise of Stock Options, Selected U.S. ICT Companies, 1995–2007

	AMD	CSCO	DELL	HPQ	INTC	IBM	LU	MSFT	MOT	ORCL	JAVA	TXN
1995	1,086	60,894	3,833	2,362	18,746	671		51,829	—	—	2,468	2,136
1996	1,490	93,399	7,194	2,213	16,010	1,823	—	79,022	471	7,367	7,992	892
1997	5,075	85,159	11,219	3,156	25,295	3,615	1,019	154,196	1,058	6,588	7,626	2,932
1998	1,435	92,947	40,547	2,676	75,890	4,066	5,449	238,377	361	5,019	10,799	4,473
1999	1,687	193,476	126,639	6,613	56,589	5,790	7,505	369,693	4,055	5,650	27,477	47,880
2000	20,113	290,870	84,818	17,987	112,018	4,200	23,281	449,142	3,218	37,214	60,431	22,881
2001	2,115	105,865	76,122	1,498	18,235	4,011	828	143,772	415	88,723	46,763	6,767
2002	537	13596	33167	838	10413	1195	955	95310	334	6950	4550	4,650
2003	1,163	8,917	10,739	936	10,406	1,553	11	80,283	42	6,193	1,182	4,803
2004	5,103	32,804	12,216	638	8,405	1,842	486	50,690	1,381	7,908	1,960	6,144
2005	12,786	24,432	11,297	1,739	8,347	1,256	615	14,500	8,688	6,926	1,187	12,512
2006	18,197	25,487	8,724	6,809	3,396	1,857	558	6,208	3,852	9,514	1,249	11,142
2007	1,149	73,004	221	9,982	6,915	3,524		14,991	4,395	14,927	2,740	19,209

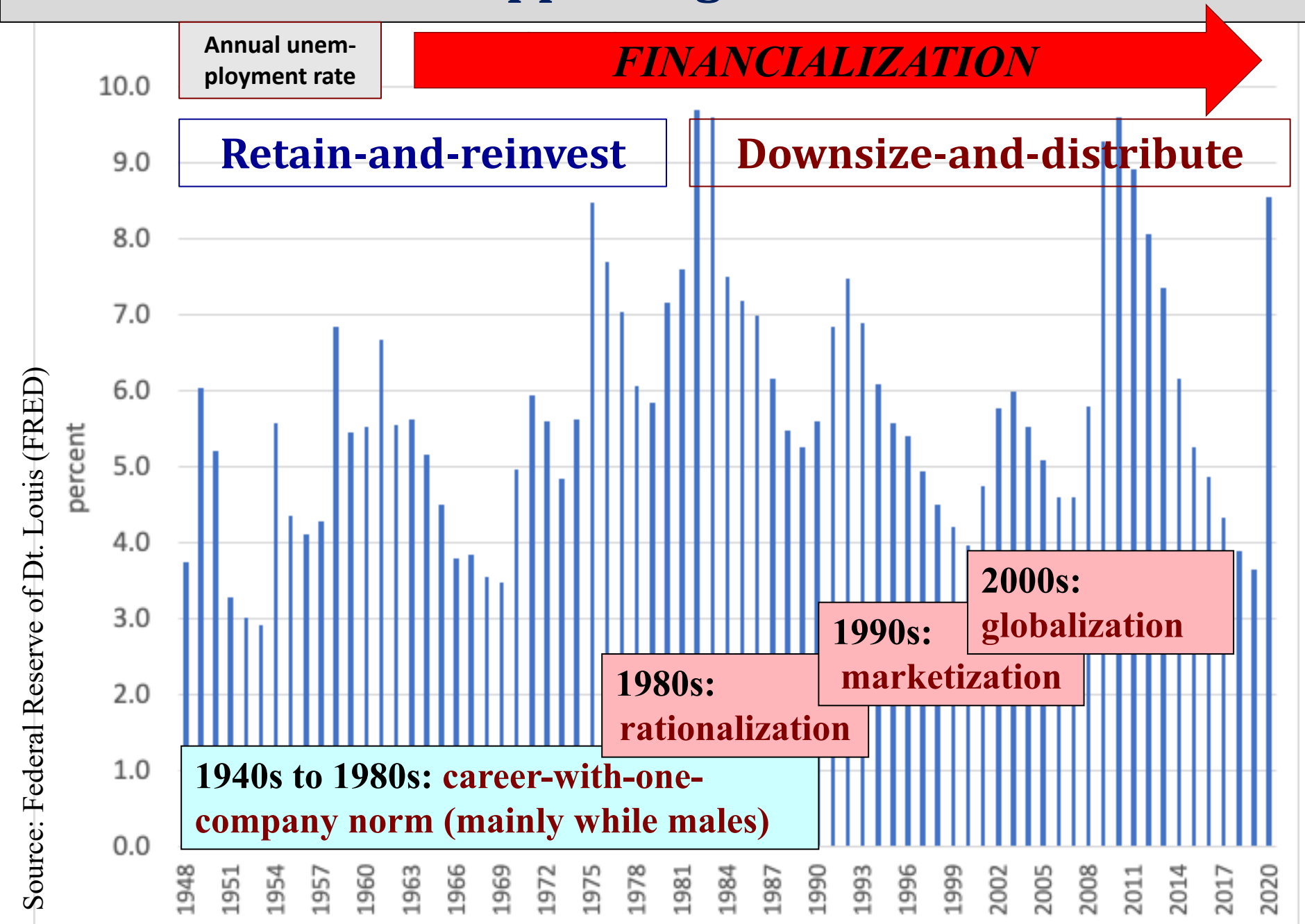
NOTE: See Table 2.2 for company ticker abbreviations. — = not available.
SOURCE: Company 10-K filings.

Employment in 2000

AMD	CSCO	DELL	HPQ	INTC	IBM	LU	MSFT	MOT	ORCL	JAVA	TXN
14,696	**34,000**	**36,500**	**88,500**	**86,100**	**316,309**	**126,000**	**39,100**	**147,000**	**41,320**	**38,900**	**42,481**

Source of table: Lazonick, *Sustainable Prosperity in the New Economy? Upjohn Institute,* 2009

The disappearing middle class



Source: Federal Reserve of Dt. Louis (FRED)

Rationalization of blue-collar work

1980s: Rationalization:
Plant closings & permanent layoffs of blue-collar workers

- Computer technology did not close down the plants; Japanese competition, including robotics, did in industries such as steel, machine tools, microelectronics, consumer electronics, and automobiles in which US corporations had been dominant
- The Achilles heel of US manufacturing: lack of collective and cumulative learning that extended to the shop floor
- It was the Japanese with their institution of permanent employment that became the world leaders in robotics

Marketization of white-collar work

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

- IBM exemplified the OEBM employment model, claiming in the late 1980s that it had not laid off anyone involuntarily since 1921
- In response to the new "open systems" environment in which more experienced employees were less valued, IBM reduced employment from 374,000 in 1990 to 220,000 in 1994
- By about 2000, almost all established companies had followed suit putting an end to the norm of a career with one company, manifested by the transition from defined-benefit to defined contribution pensions.

Globalization: U.S. blue-collar & white-collar workers more vulnerable in global competition

2000s: Globalization:

Acceleration in the numbers of educated, capable, lower-wage labor employed abroad, especially in Asia

- **From1960s,** offshoring of chip assembly and testing to Asian countries, where US companies employed indigenous (male) managers and engineers along with (female) operatives
- **Accumulation of qualified high-tech personnel** in Asia, through global and/or domestic employment career paths with MNCS and an increasing scale, indigenous companies
- **Immigration Act of 1990** favors entry to the U.S. of college-educated Asians, especially with engineering and science degrees as permanent residents and on H-1B and L-1 "temporary" visas (up to 7 years with a path to citizenship)

Financialization

- **1960s: conglomerate movement:** "a good manager can manage anything"; companies bought and sold for financial gain
- **1970s: transformation of Wall Street from investing to trading:** NASDAQ, 1971; junk bonds from decline of conglomerates; end of fixed commissions on NYSE; emergence of derivatives
- **1980s: the Deal Decade:** SEC Rule 10b-18 as a "license to loot", corporate raiders; junk-bond funded takeovers; emergence of MSV as an ideology of corporate governance
- **1990s: triumph of NEBM and Internet boom:** broad-based stock options; VC-backed startups; boom in DC pensions
- **2000s: search for higher yields:** quadrupling of S&P 500 buybacks, 2003-07; subprime lending and the financial crisis
- **2010s: rise of shareholder activism and the era of predatory value extraction:** financialization exploits the vulnerability of rationalization, marketization, globalization; TRUMP

Investment in education is a foundation of economic development

Post-secondary school completion rates and average years of schooling, 1960, 1980, 2000, and 2010, selected nations

Country	Completed post-secondary %				Average years of school			
pop., 25yrs.+	1960	1980	2000	2010	1960	1980	2000	2010
USA	9.4	18.1	30.6	31.6	8.9	11.9	13.0	13.3
Japan	3.0	8.9	19.0	23.9	7.2	8.9	10.7	11.5
Hong Kong	3.1	4.1	7.2	7.2	4.4	6.7	8.7	10.0
Singapore	0.9	2.1	7.8	12.3	2.8	3.7	7.6	8.8
South Korea	1.9	6.6	14.8	17.3	3.2	7.3	10.6	11.6
Taiwan	2.4	4.7	8.0	10.6	4.6	6.4	9.6	11.0
Indonesia	0.1	0.3	1.7	1.6	1.1	3.1	4.8	5.8
Malaysia	0.7	0.5	3.1	5.0	2.3	4.4	8.2	9.5
Philippines	4.5	9.8	19.8	22.4	3.7	6.1	8.0	8.7
Thailand	0.4	2.9	5.1	8.9	3.4	3.7	5.4	6.6
Brazil	1.1	3.7	5.3	5.2	1.8	2.6	5.6	7.2
Mexico	1.1	3.9	10.2	13.9	2.6	4.0	7.4	8.5
Chile	1.8	3.3	9.5	11.6	5.0	6.4	8.8	9.7
Costa Rica	2.1	5.2	12.9	13.2	3.7	5.4	8.0	8.4
China	0.4	0.6	2.8	4.0	1.4	3.7	6.6	7.5
India	0.4	1.5	3.2	3.7	0.9	1.9	3.6	4.4

Table source: Li and Lazonick 2020; data source: Barro and Lee website

U.S. Performance for International Assessment (PISA) mean scores, by race and ethnicity and compared with the OECD average, 2000-2015

Source: Lazonick, Moss & Weitz 2020

	2000		2003		2006		2009		2012		2015	
READING	*Mean*	*s.e*	*Mean*	*s.e*	*Not administered*		*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*
White	538	5.1	525	2.6			525	3.8	519	4.1	526	3.3
Black	445	8.2	430	5.6			441	7.2	443	8.3	443	5.4
Hispanic	449	7.6	453	5.9			466	4.3	478	4.5	478	5.7
Asian	546	15.8	513	9.2			541	9.4	550	8.1	527	13.3
Multiracial	na	na	515	7.3			502	6.4	517	7.6	498	7.1
U.S. Average	504	7.0	495	3.2			500	3.7	498	3.7	497	3.4
OECD Average	492	0.7	494	0.6			493	0.5	496	0.5	493	0.5
MATHEMATICS	*Not administered*		*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*
White			512	2.5	502	3.1	515	3.9	506	3.7	499	2.8
Black			417	5.1	404	8.9	423	6.6	421	6.2	419	4.7
Hispanic			443	5.1	436	4.5	453	3.8	455	4.8	446	5.2
Asian			506	9.8	494	8.7	524	9.6	549	9.0	498	10.1
Multiracial			502	6.4	482	7.6	487	6.4	492	7.4	475	7.0
U.S. Average			483	2.9	474	4.0	487	3.6	481	3.6	470	3.2
OECD Average			499	0.6	494	0.5	495	0.5	494	0.5	490	0.4
SCIENCE	*Not administered*		*Not administered*		*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*	*Mean*	*s.e*
White					523	3.0	532	4.0	528	3.7	531	2.8
Black					409	8.8	435	7.2	439	6.8	433	4.9
Hispanic					439	4.7	464	3.8	462	4.7	470	4.8
Asian					499	9.7	536	9.7	546	8.6	525	12.0
Multiracial					501	8.0	503	7.6	511	7.8	503	6.4
U.S. Average					489	4.2	502	3.6	497	3.8	496	3.2
OECD Average					498	0.5	501	0.5	501	0.5	493	0.4

Racial and ethnic divides in high-tech employment

Racial and ethnic composition of upper-level occupational categories in high-tech industries and all U.S. industries, 2014

	White, %	Black, %	Hispanic, %	Asian, %	Number of employees
High tech only					
Executives, senior officials and managers	83.31	1.92	3.11	10.55	139,575
First/mid officials and managers	76.53	4.12	4.91	12.98	761,380
Professionals	68.03	5.27	5.28	19.49	2,321,969
Technicians	68.58	9.01	10.23	9.68	452,359
All U.S. industries					
Executives, senior officials and managers	86.97	3.13	3.87	4.88	833,367
First/mid officials and managers	77.53	7.12	7.43	6.31	4,766,041
Professionals	72.89	7.64	5.79	11.74	10,534,689
Technicians	67.17	13.79	10.09	6.56	2,870,353

Source: U.S. Equal Opportunity Employment Commission, "Diversity in High Tech," p. 20.

Racial and ethnic composition of upper-level occupational categories in San Francisco Metropolitan Area and Santa Clara County, 2014

	White %	Black %	Hispanic %	Asian %	Other %
San Francisco Metropolitan Area					
Executives, senior officials and managers	76.41	1.16	2.79	17.86	1.78
First/mid officials and managers	62.43	2.31	4.69	28.25	2.32
Professionals	52.59	2.45	4.99	37.20	2.77
Technicians	40.08	6.59	12.38	36.54	4.41
Santa Clara County					
Executives, senior officials and managers	61.90	0.86	3.14	32.92	1.18
First/mid officials and managers	53.70	1.48	4.52	38.49	1.81
Professionals	39.32	1.52	3.97	51.15	4.04
Technicians	41.03	7.82	11.91	34.69	3.55

Source: U.S. Equal Opportunity Employment Commission, "Diversity in High Tech," p. 25.

Table source: Lazonick, Moss & Weitz 2020