

***Sustainable Prosperity:
What It Is and How We Can Achieve It***

William Lazonick

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Stable and equitable economic growth

- **The goal of economic policy:** to promote stable and equitable economic growth, or what I call “sustainable prosperity”
- **Economic growth requires innovation:** defined in economic terms as the generation of higher quality, lower cost products, given prevailing factor prices
- **The promise of innovation:** under what conditions can it contribute to *stable and equitable* economic growth?

The promise of innovative enterprise

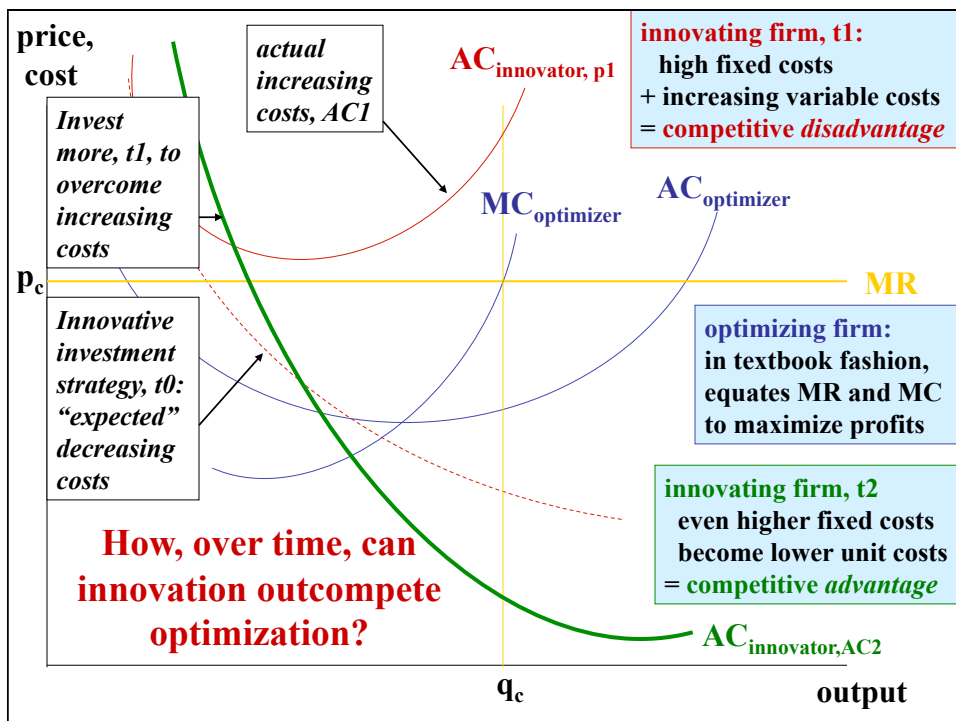
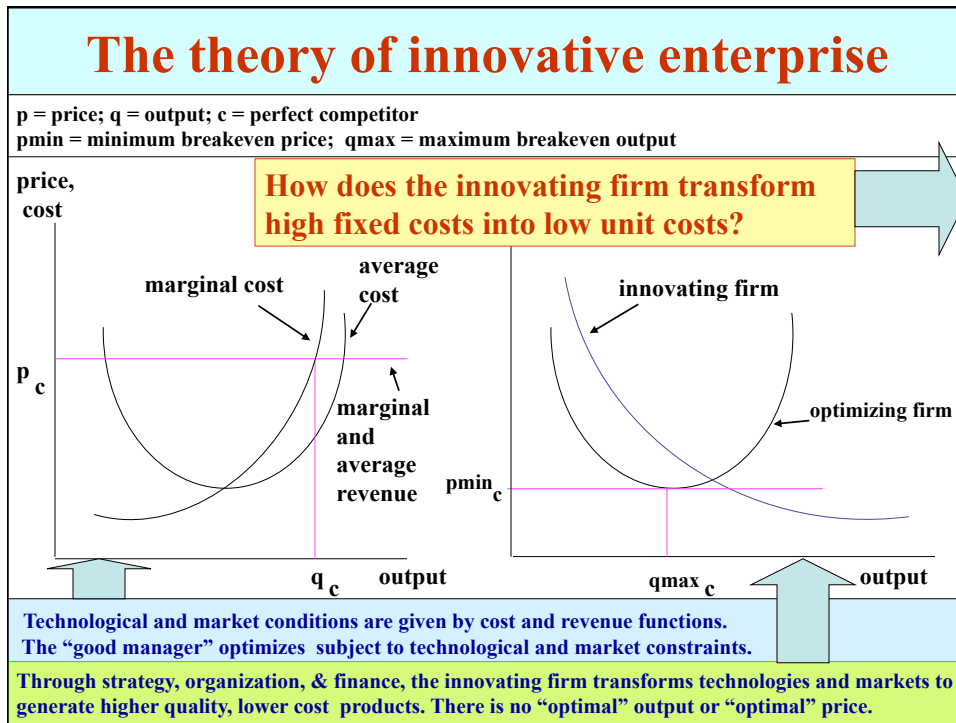
By creating new sources of value, embodied in higher quality, lower cost products, innovative enterprise makes it *possible, but by no means inevitable, for all participants in the economy to gain:*

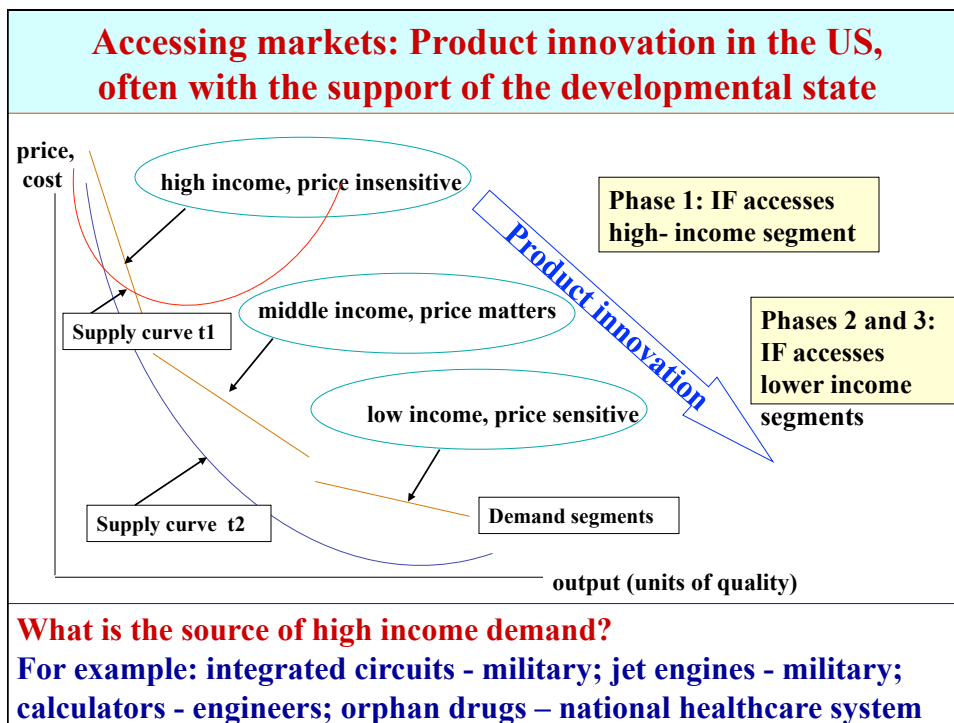
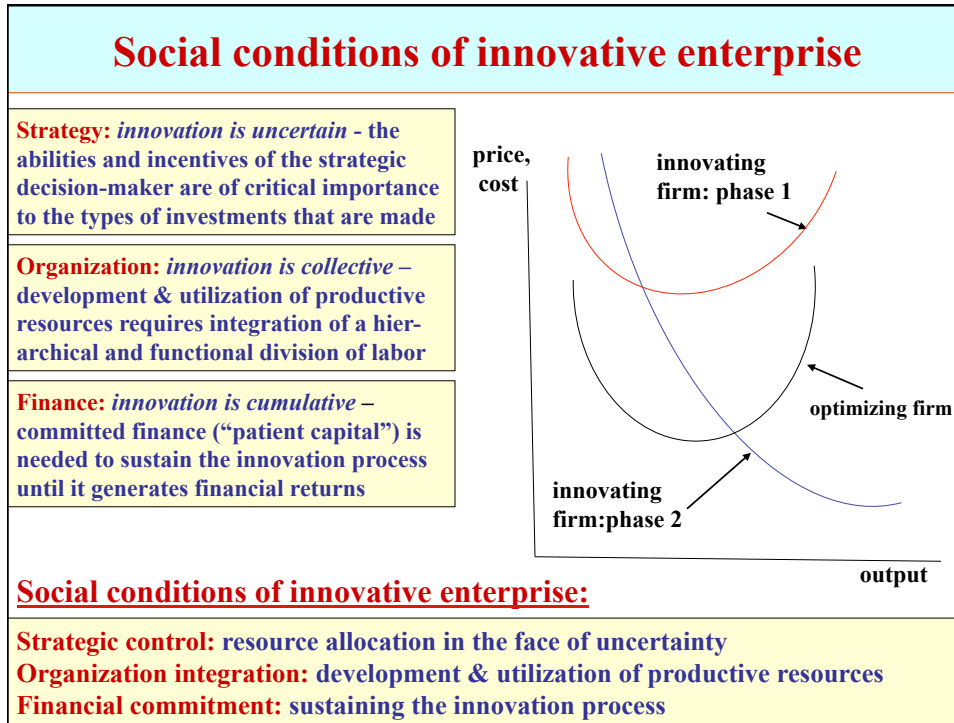
- **Employees:** Higher pay, better work conditions
- **Creditors:** More secure paper
- **Shareholders:** Higher dividends or share prices
- **Government:** More tax revenues
- **The Firm:** Stronger balance sheet
- **Consumers:** Higher quality, lower cost products

In the 2000s, however, the US experience is inequity and instability. Why is innovative enterprise failing to deliver on its promise?

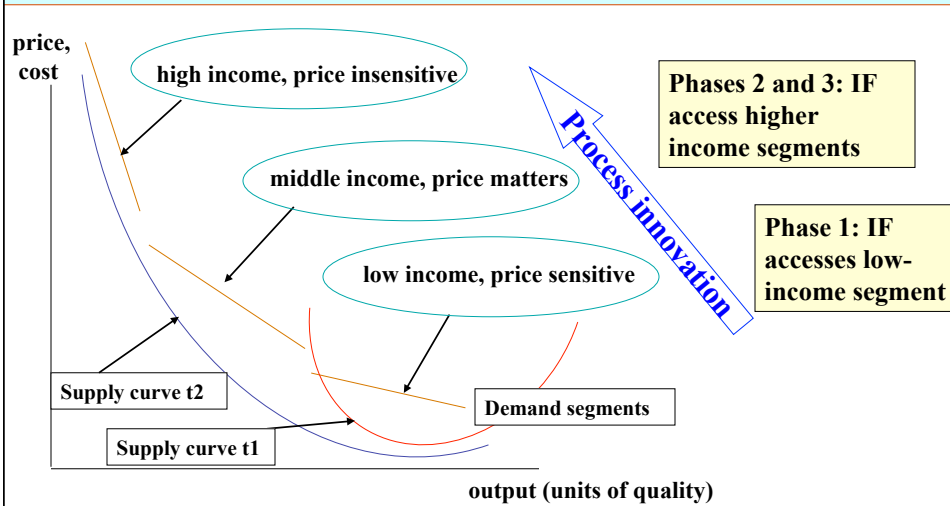
Innovative enterprise and “the theory of the firm”

- To understand the conditions for sustainable prosperity, we need a theory of innovative enterprise
- The innovative enterprise does not optimize subject to market and technological constraints as in the textbook theory of the firm
- Rather, through strategy, organization, and finance, the innovative enterprise transforms technologies and accesses new markets
- **We cannot analyze the fundamental strengths or weaknesses of a modern economy without a theory innovative enterprise**





Accessing markets: Process innovation in Asia, with tech transfer from the US



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

Government investment in innovation

➤ **The government** plays an important, and in some industries critical, role in investing in and subsidizing innovation

- ❖ Investment in physical infrastructure (the Interstate highway system, the Internet)
- ❖ Investment in the knowledge base (computer programming; life sciences research)
- ❖ Subsidies (the modern aircraft, orphan drugs, assistance to SMEs)
- ❖ Programs for retraining and upgrading the labor force

The US government is the most formidable “developmental state” in history (its investments underpinned Japanese development)

Business investment in innovation

- Whatever the role of the government, we rely on **business enterprises** to develop and utilize productive resources to generate innovation
- **Top 1,000 US corporations in 2008: worldwide sales \$12.1 trillion; worldwide employees, 30.9 million** (compare with United States in 2008: GDP=\$14.4 trillion; civilian labor force=154.4 million)
- A relevant analysis of the US economy must analyze how **corporations**, not markets, allocate resources (well-developed labor, capital, and products markets are **outcomes** of corporate resource allocation)

The US economy is a corporate economy, not a market economy

	THE FORTUNE 1000: USA			Per company, average		
	Revenues	Profits	Employees	Revenues	Profits	Employees
2008	\$b.	\$b.	no.	\$b.	\$b.	no.
top 50	4,968	158	9,876,792	99.4	3.2	197,536
top 100	6,584	239	13,716,319	65.8	2.4	137,163
top 200	8,342	219	18,369,532	41.7	1.1	91,848
top 500	10,688	99	25,612,023	21.4	0.2	51,224
top 1000	12,086	103	30,881,978	12.1	0.1	30,882
2007						
top 50	4,902	292	9,628,749	98.0	5.8	192,575
top 100	6,549	366	13,541,346	65.5	3.7	135,413
top 200	8,284	508	18,073,414	41.4	2.5	90,367
top 500	10,602	645	25,601,644	21.2	1.3	51,203
top 1000	11,975	724	30,845,377	12.0	0.7	30,845

Sources of unstable & inequitable economic growth

- Stable and equitable economic growth requires a **balance between value creation and value extraction**
- Inequity occurs when certain groups, e.g., top corporate executives, use their control over resource allocation to **extract more than they create**
- Instability occurs when **value extraction undermines innovation**, and hence economic growth; e.g., the influence of stock-based compensation on corporate resource allocation (see below); or the gambling casino known as Wall Street (see the crisis of 2008 – and more to come)

Forces for unstable & inequitable economic growth

In the United States in the 2000s, corporate resource allocation is generating inequity and instability

Marketization of labor
(end of “the organization man”)

+ **Globalization** of employment
(rise of China and India)

+ **Financialization** of corporate resource allocation
(buybacks: “weapons of value extraction”)

= **Employment insecurity**
(even for well-educated, highly experienced workers)

The New Economy business model as a source of unstable and inequitable economic growth

	OEBM	NEBM
Strategy, product	Growth by building on internal capabilities; business expansion into new product markets based on related technologies; geographic expansion to access national product markets.	New firm entry into specialized markets; sale of branded components to system integrators; accumulation of new capabilities by acquiring young technology firms.
Strategy, process	Corporate R&D labs; development and patenting of proprietary technologies; vertical integration to the value chain, at home and abroad.	Cross-licensing of technology based on open systems; vertical specialization of the value chain; outsourcing and offshoring.
Organization	Secure employment: career with one company; salaried and hourly employees; unions; defined-benefit pensions; employer-funded medical insurance in employment and retirement.	Insecure employment: interfirm mobility of labor; most salaried; broad-based stock options; non-union; defined-contribution pensions; employee bears greater burden of medical insurance.
Finance	Venture finance from personal savings, family, and business associates; NYSE listing; payment of steady dividends; growth finance from retentions leveraged with bond issues.	Organized venture capital; initial public offering on NASDAQ; low or no dividends; growth finance from retentions plus stock as acquisition currency; stock repurchases to support stock price.

The Old Economy Business Model

Old Economy Business Model (OEBM): a foundation for reasonably stable and somewhat equitable growth

- Career employment with one company
- Limited role of the stock market in the operation of the corporation: separation of ownership and control
- Creation of high quality jobs in the United States
- A progressive income tax structure
- Government investment in physical infrastructure and the knowledge base

Sources of instability and inequity under OEBM

- **Conglomerate movement of the 1960s:** whole companies could be bought and sold
- **The transformation of Wall Street in the 1970s:** from investing in companies to trading in securities
- **The oil crisis:** inflation erodes savings and sparks a search for higher yields on financial assets
- **The Japanese challenge:** a superior version of OEBM in the very industries that the US dominated
 - ❖ consumer electronics: quick decimation of US industry
 - ❖ machine tools: also succumbed quickly
 - ❖ automobiles: failed to improve OEBM, hung on for 3 decades
 - ❖ microelectronics: the US competitive response was NEBM

Marketization of labor

Old Economy Business Model (OEBM):
 career employment with one company the norm
 major ICT companies:
 IBM, HP, Motorola, Texas Instruments, Xerox

New Economy Business Model (NEBM):
 interfirm labor mobility the norm
 major ICT:
 Intel, Microsoft, Oracle, Sun, Cisco, Dell

- NEBM became viable in the 1980s
- The transition from OEBM to NEBM began in the 1990s
- NEBM now dominates US high-tech industry

The end of unions at NCR

- **1884:** founded as National Cash Register in Dayton, Ohio
- **1880s and 1890s:** pioneer in welfare capitalism
- **1901:** strike of 2,000 workers shut down NCR's model factory
- **From late 1930s:** NCR Employees Independent Union
- **1950s:** 20,000 union members, 60% of NCR's labor force
- **1968:** 14,863 union members at Dayton plant strike over wages
- **1971:** 17,000 union members represented by UAW
- **First half of 1970s:** NCR machines transformed from electro-mechanical to digital electronic, with new plants outside Dayton
- **1977:** only 850 factory workers at Dayton plant, on low wages
- **1980s:** NCR basically a non-union company
- **Early 1990s:** CWA fails to organize NCR when part of AT&T
- **2000:** 70 remaining UAW workers at NCR terminated when outsourced their low-wage work
- **2008:** NCR sales \$5.3b., 22,400 employees (Fortune rank: 446)

The end of "lifelong employment" at IBM

- IBM dominated computers in the Old Economy
- IBM led transition from OEBM to NEBM in early 1990s
- Employed over 405,000 people, in 1985 when it still offered the expectation of "lifelong employment"
- But did away with lifelong employment in the early 1990s – **cut employment from 374,000 in 1990 to 220,000 in 1994**
- **Demand for younger workers:** services and software for open systems replaced proprietary hardware+software+services
- Transformed pension plans to attract younger workers

The end of “The HP Way”

- Hewlett-Packard (est. 1939): the pioneering electronics engineering firm in what would become Silicon Valley
- “The HP Way” ensured that employees whose jobs had been restructured could remain with the company
- But from 1984 HP moved into printers, based on open standards -- less demand for career employees
- 1995: David Packard published The HP Way
- 1996: David Packard died
- 1999: Spun off Agilent, and began to do away with “The HP Way” – process complete with Compaq acquisition in 2002 – **HP now what Packard would have called a “hire-and-fire” company, known for employee “churn”**

Globalization of employment

New competition for high-tech labor in 2000s: emergence of a highly qualified labor force in China and India

Global high-tech labor is not new: Offshoring important for Asian development since 1960s

But the size – and quality -- of the Chinese and Indian labor supply is new

In 2000s offshoring creates employment insecurity even for well-educated and highly experienced US workers

In the context of NEBM, hardest hit are older (40+) high-tech workers: members of the US labor force who should be best-positioned for global competition

Globalization at IBM

IBM:

- increased employment from **219,839** in 1994 to over **398,455** in 2008
- but share of US employees in IBM's worldwide labor force down from **52.2%** in 1996 to **30.2%** in 2008
- net increase in IBM employees outside of US was **26,000** in 2006, **38,000** in 2007, **18,000** in 2008
- one-quarter of IBM's 2007 employees worldwide were in the BRIC countries, with **74,000**, or **19%** in India alone

IBM's *Project Match*

- IBM highly profitable in 2008 and first half of 2009
- yet laid off almost 10,000 workers in first half of 1998
- End of February announced *Project Match*: “to help you locate potential job opportunities in high-growth markets where your skills are in demand.”
- *Project Match* eligibility: “satisfactory performers who have been notified of separation from IBM US or Canada and are willing to work on local terms and conditions.”
The localities are places like India, China, and Brazil

Globalization at HP

Hewlett-Packard

- worldwide employment: **141,000** in 2002; **172,000** in 2007
- US employment: **67,350** in 2002; **53,519** in 2007
- share of US employees in HP's worldwide employment fell from **48%** in 2002 to **31%** in 2007
- 2008: acquired EDS, bringing employment to 320,000, but announced **24,600 integration layoffs** as part of the EDS acquisition

Worldwide Employees and US Employees, IBM, HP, and Intel

	IBM			HP			INTEL		
	WWE	USE	% USE	WWE	USE	% USE	WWE	USE	% USE
1996	240,615	125,618	52	112,000	na	na	48,500	na	na
1997	269,465	136,487	51	121,900	na	na	63,700	na	na
1998	291,067	147,491	51	124,600	na	na	64,500	na	na
1999	307,401	150,600	49	84,400	na	na	70,200	na	na
2000	316,303	153,587	49	88,500	na	na	86,100	na	na
2001	319,876	152,195	48	86,200	na	na	83,400	54,219	65
2002	315,889	145,705	46	141,000	67,350	48	78,700	50,036	64
2003	319,273	141,022	44	142,000	63,708	45	79,379	48,181	61
2004	329,001	139,899	43	151,000	64,038	42	84,629	48,655	58
2005	329,373	133,967	41	150,000	60,374	40	98,020	53,961	55
2006	355,766	133,973	38	156,000	54,085	35	92,573	50,348	54
2007	386,558	126,804	33	172,000	53,519	31	85,187	46,186	54
2008	398,445	120,227	30	321,000	na	na	83,580	44,755	54

Importance of US ATP trade with China				
Source: www.census.gov/foreign-trade/statistics	2007		2008	
Advanced Technology Products	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>
US ATP trade, \$b	273,444	326,929	275,818	331,372
China % of US total				
Biotechnology	0.83	0.74	0.96	0.96
Life Science	5.22	2.17	5.58	2.68
Opto-Electronics	6.01	23.28	5.13	25.89
Information & Communications	4.49	43.32	4.73	44.21
Electronics	13.00	8.85	13.06	7.97
Flexible Manufacturing	9.84	5.01	9.29	5.48
Advanced Materials	14.23	5.14	15.08	6.64
Aerospace	7.77	1.03	5.86	1.16
Weapons	0.09	12.86	0.07	14.00
Nuclear Technology	0.70	0.05	1.64	0.07
TOTAL	7.44	26.92	6.79	27.58

Distribution of US ATP trade with China				
Source: www.census.gov/foreign-trade/statistics	2007		2008	
Advanced Technology Products	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>
US ATP trade with China, \$b	20,349	88,006	18,733	91,393
% Distribution of US trade with China				
Biotechnology	0.31	0.06	0.49	0.06
Life Science	5.53	0.84	7.50	1.17
Opto-Electronics	1.62	6.05	1.38	7.24
Information & Communications	16.51	88.57	19.57	87.95
Electronics	32.30	3.21	35.40	2.24
Flexible Manufacturing	7.09	0.55	5.72	0.60
Advanced Materials	1.16	0.16	1.52	0.16
Aerospace	35.38	0.35	28.23	0.44
Weapons	0.01	0.14	0.01	0.13
Nuclear Technology	0.09	0.07	0.18	0.00
TOTAL	100.00	100.00	100.00	100.00

China central to globalization of US high-tech

US ATP Imports, 2000-2009: % shares by nation (top 10 in 2008)

	<u>2000</u>	<u>2002</u>	<u>2004</u>	<u>2006</u>	<u>2008</u>	<u>Jan.-Aug. 2008</u>	<u>Jan-Aug. 2009</u>
Total US ATP imports \$m.	195,660	196,100	238,478	290,848	313,137	233,044	186,656
China	5.5	10.2	19.2	25.0	27.6	27.0	28.5
Mexico	6.6	8.3	9.3	10.6	12.2	12.0	13.2
Japan	17.8	12.1	10.0	8.9	8.1	8.2	6.7
Malaysia	6.5	7.7	7.6	8.6	6.1	6.6	4.9
Ireland	3.4	6.7	5.6	4.9	5.3	5.2	5.5
Canada	10.4	7.0	5.8	5.1	5.0	5.1	5.1
S. Korea	7.0	7.1	7.5	4.7	4.9	4.9	5.6
Taiwan	7.6	6.8	5.4	4.8	4.2	4.2	3.9
France	4.8	4.9	3.7	3.4	3.6	3.7	3.7
Germany	4.5	4.1	4.0	3.9	3.5	3.4	3.5

China absorbs US high-tech exports

US ATP Exports, 2000-2009: % shares by nation (top 10 in 2008)

	<u>2000</u>	<u>2002</u>	<u>2004</u>	<u>2006</u>	<u>2008</u>	<u>Jan.-Aug. 2008</u>	<u>Jan-Aug. 2009</u>
Total US ATP exports \$m.	225,415	180,629	201,454	252,569	275,818	184,313	155,495
Canada	11.4	9.6	10.1	9.3	10.0	10.7	9.9
Mexico	6.7	7.0	8.2	7.4	7.1	6.8	8.2
Japan	9.8	9.3	9.0	7.7	6.8	6.7	5.9
China	2.4	4.6	4.7	7.0	6.8	6.8	6.7
Germany	5.5	5.2	4.6	5.1	6.2	6.2	6.9
UK	7.4	5.9	6.0	5.0	4.6	5.3	4.9
Singapore	3.9	4.5	5.0	4.8	4.5	4.5	3.3
Netherlands	4.2	4.0	4.5	4.0	4.4	4.4	3.9
Brazil	2.6	2.2	2.2	2.8	4.0	4.0	4.0
France	4.1	4.7	4.6	4.0	3.9	3.9	5.0

The impact of globalization

Clair Brown and Greg Linden, **“Is There a Shortage of Engineering Talent in the U.S.?”** University of California, Berkeley working paper February 2008

Based on intensive study of the global semiconductor industry:

“The labor market situation [in the United States] is especially difficult for older engineers, who face rapid skill obsolescence. In general, after a few years of working, experience becomes less valuable to employers than knowledge of new technology, and engineers face stagnant and even lower earnings as they age. We saw in our fieldwork that experienced engineers are often forced to work on mature technologies with stagnant earnings, rather than being allowed to learn and work on new technologies with rising earnings.”

Underutilized human capital

Brown and Linden, continued:

“This issue is complex because U.S. companies tend to want newly-minted graduate engineers, who have state-of-the-art knowledge, to work on projects for five to seven years. Then companies select and train engineers who have leadership potential to become program managers and higher level managers. This bifurcation creates a group of engineers who move into the managerial ranks and another group who see deteriorating job opportunities as they age. When companies claim they face a shortage of engineers, they usually mean that they face a shortage of young, relatively inexpensive engineers with the latest skills, even when they have a queue of experienced engineers who want retraining.”

Financialization: Demise of Lucent Technologies

Lucent Technologies (see Lazonick and March 2009)

- 1996: spun off from AT&T, including Bell Labs
- 1999: world's largest communications equipment company, \$38b. sales, \$3.5b. income, and 153,000 employees, including 48,616 union members, 40% of US labor force
- 2006: Lucent – \$8.8b. in sales, barely profitable, 29,800 employees, of which 2,800 union members – sold to French company, Alcatel

Why?: Top executives engaged in financial behavior at the height of the Internet boom that left the company vulnerable to the decline of the early 2000s – to stay afloat, Lucent cut workers and sold assets that would be needed to compete in the 2000s

Among the decimated Lucent manufacturing plants:

Columbus OH – 5,500 workers in 2000, of which 2,500 union; 870 workers in 2007, of which 0 union

North Andover MA – 5,600 workers in 2000, of which 3,000 union; 190 in 2007, of which 0 union

Weapons of value extraction

Stock buybacks in ICT: 2000-2008

Microsoft: \$94.3 billion	IBM: \$72.9 billion	Cisco: \$53.6 billion
Intel: \$48.8 billion	HP: \$43.3 billion	Dell: \$32.2 billion
Oracle: \$26.0 billion	TI: \$18.4 billion	Applied Materials: \$10.2 billion

And the beat goes on...

- **IBM:** While laying off as many as 10,000 workers in North America in the first half of 2009, IBM expended \$3.0b. on stock buybacks
- **HP:** While doing mass layoffs, HP did \$3.0b. in buybacks in the first ¾ of 2009
- **Intel:** Jan. 2009, 5,000-6,000 layoffs announced; July 2009 \$1.75b. convertible debt issue, of which \$1.5b. for buybacks
- **Microsoft:** May 2009, in 2nd round of layoffs, targeting 5,000, but did a \$3.75b. bond issue (its first long-term debt offering) to do buybacks
- **Oracle:** July 2009, 1,000 layoffs in Europe despite strong growth; \$4.0b. In buybacks for the year ending May 31, 2009
- **Unemployment rate in Silicon Valley currently almost 12%**

Academic cheerleaders for shareholder value “Disgorge the free cash flow”

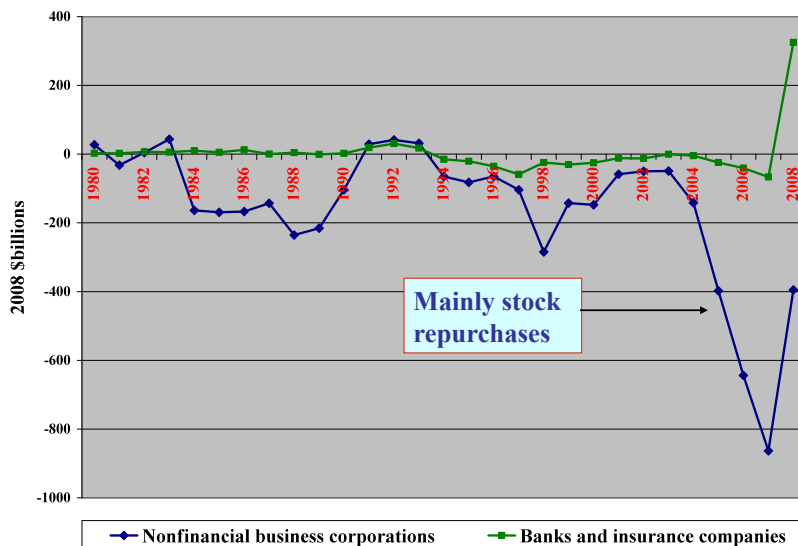
“Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital. Conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial 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 , AER, 1986, p. 323.

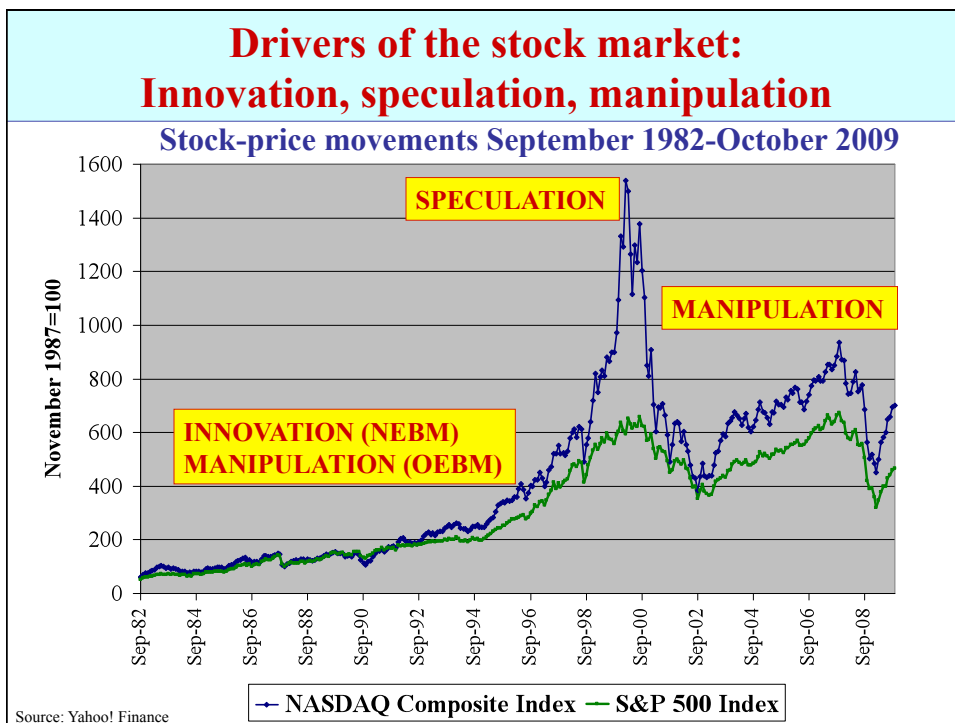
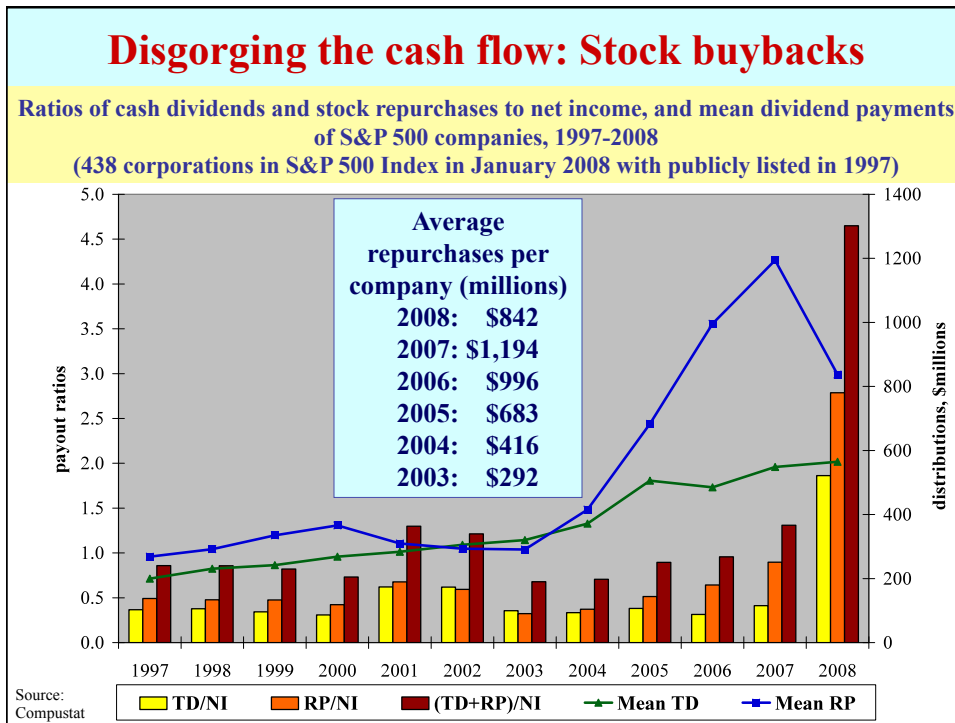


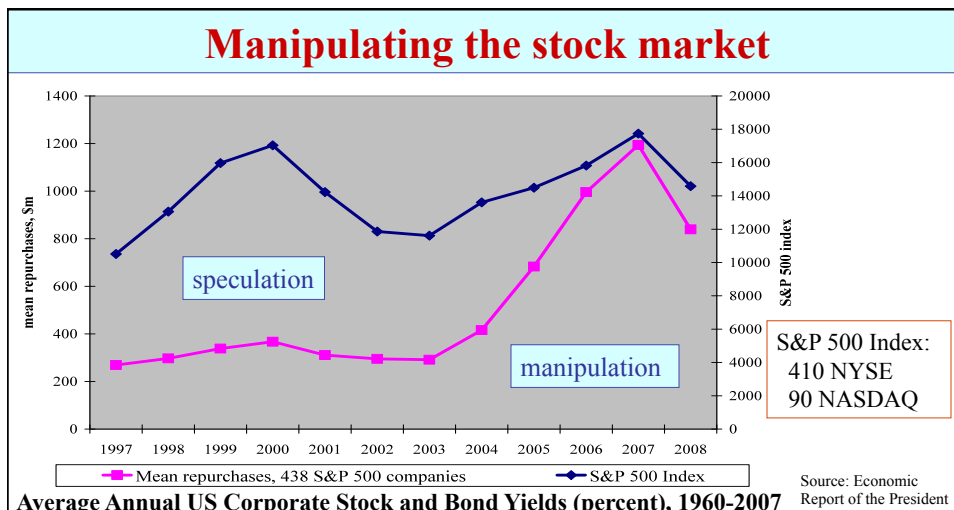
Disgorging the cash flow: net equity issues

Net corporate equity issues (billions of 2008 dollars) in the United States by non-financial corporate business and by selected financial sectors, 1980-2008



Source:
Federal
Reserve
Board





Average Annual US Corporate Stock and Bond Yields (percent), 1960-2007

	1960-1969	1970-1979	1980-1989	1990-1999	2000-2007
REAL STOCK YIELD	6.63	-1.66	11.67	15.01	0.96
PRICE YIELD	5.80	1.35	12.91	15.54	2.09
Dividend yield	3.19	4.08	4.32	2.47	1.64
Change in CPI	2.36	7.09	5.55	3.00	2.78
REAL BOND YIELD	2.65	1.14	5.79	4.72	3.34

RP Rank 2000-2008	Company	Fortune rank, 2008	RP (\$m) 2007	RP (\$m) 2008	RP (\$m) 2000-2008	Buyback leaders 2000-2008 1-20 Companies with HQ in Midwest highlighted in yellow
1	EXXON MOBIL	1	31,822	35,734	144,038	
2	MICROSOFT	35	27,575	12,533	94,280	
3	IBM	14	18,828	10,563	72,881	
4	BANK OF AMERICA	11	3,790	0	55,674	
5	CISCO SYSTEMS	57	7,681	10,441	53,570	
6	GENERAL ELECTRIC	5	14,913	3,222	51,771	
7	PFIZER	46	9,994	500	50,632	
8	INTEL	61	2,788	7,195	48,770	
9	PROCTER & GAMBLE	20	5,578	10,047	46,371	
10	HEWLETT-PACKARD	9	10,887	9,620	43,341	
11	CITIGROUP	12	663	7	37,148	
12	JOHNSON & JOHNSON	29	5,607	6,651	33,345	
13	GOLDMAN SACHS	40	8,956	2,034	32,220	
14	DELL	33	3,026	4,004	29,549	
15	AT&T	8	10,390	6,077	27,705	
16	WAL-MART STORES	2	1,718	7,691	27,324	
17	HOME DEPOT	25	6,684	10,815	27,203	
18	CHEVRON	3	7,036	8,011	26,868	
19	ORACLE	113	3,937	2,023	25,962	
20	TIME WARNER	48	6,231	332	25,497	

RP Rank 2000-2008	Company	Fortune rank, 2008	RP (\$m) 2007	RP (\$m) 2008	RP (\$m) 2000-2008	Buyback leaders 2000-2008 21-40
21	PEPSICO	52	4,312	4,726	25,430	
22	<i>WELLS FARGO</i>	41	7,418	1,623	24,866	
23	UNITEDHEALTH GROUP	21	6,599	2,684	23,362	
24	AMGEN	168	5,100	2,268	22,629	
25	WALT DISNEY	60	6,923	4,453	22,268	
26	<i>JPMORGAN CHASE</i>	16	8,178	0	21,248	
27	<i>MERRILL LYNCH</i>	150	5,272	0	21,028	
28	UPS	43	2,639	3,570	20,944	
29	<i>MORGAN STANLEY</i>	30	3,753	711	19,761	
30	ALTRIA GROUP	160	0	1,166	19,379	
31	MERCK	103	1,430	2,725	18,709	
32	TEXAS INSTRUMENTS	215	4,886	2,122	18,418	
33	CONOCOPHILLIPS	4	7,001	8,249	18,099	
34	<i>AMERICAN EXPRESS</i>	74	3,572	218	17,861	
35	MCDONALD'S	107	3,943	3,919	16,797	
36	CBS	186	3,351	46	16,565	
37	BOEING	34	2,775	2,937	15,813	
38	3M	95	3,239	1,631	15,152	
39	WELLPOINT	32	6,151	3,276	14,867	
40	<i>ALLSTATE</i>	81	3,606	1,323	13,657	

RP Rank 2000-2008	Company	Fortune rank, 2008	RP (\$m) 2007	RP (\$m) 2008	RP (\$m) 2000-2008	Buyback leaders 2000-2008 41-50
41	<i>PRUDENTIAL FINANCIAL</i>	84	3,000	2,161	13,050	
42	<i>U. S. BANCORP</i>	129	1,983	0	12,313	
43	COMCAST	68	3,102	2,800	12,289	
44	UNITED TECHNOLOGIES	37	2,001	3,160	11,902	
45	COCA-COLA	73	1,838	1,079	11,668	
46	KIMBERLY-CLARK	128	2,813	653	10,655	
47	CATERPILLAR	44	2,405	1,800	10,496	
48	CARDINAL HEALTH	18	3,662	1,182	10,315	
49	APPLIED MATERIALS	315	1,332	1,500	10,241	
50	VALERO ENERGY	10	5,788	955	9,991	

Among the top 50:

- 12 in financial services (*italics*)
- 11 in ICT (**bold**)
- 4 in pharmaceuticals
- 4 in petroleum refining
- 3 in health insurance

Sources: Compustat and company 10-K filings

The top 50 for 2000-2007 included Wachovia and Washington Mutual

Letter to the editor, *Business Week*, April 1, 1996

A warning...

Stock Investing Makes for More Inequality

In her commentary (“Confessions of a financial bungee-jumper” Mar. 11), Karen Pennar tells how she put 80% of her retirement savings into a stock fund. Her reasoning may be sound -- but my concern is not how long the boom lasts, but what it means when millions of households turn to increases in stock prices as the mainstay of their savings strategies. That creates a constituency of investors with an interest in stock repurchases and higher dividends, thus strengthening the demand for corporations to “create value for shareholders,” thus legitimizing the downsizing mentality of corporate management. The consequent loss of stable jobs helps ensure that fewer households will have adequate retirement savings and reinforces the trend toward income inequality.

William Lazonick Director, Center for Industrial Competitiveness University of Massachusetts Lowell

The Buyback Boondoggle, *BusinessWeek*, August 13, 2009

They didn't listen!...

As the unemployment rate hovers near 10%, the economic debate is focused on how the government should aid recovery. (More stimulus spending? Tax cuts?) But it's business' task to get the economy back on track—by investing in innovation and job creation. And if the recent past is any guide, corporations may stall the recovery by investing instead in something else: stock buybacks.

...

The amount of money spent on buybacks is staggering. From 1997 through last year, 438 companies in the Standard & Poor's 500-stock index spent \$2.4 trillion on them. In 2007, as profits soared, the average buyback bill for each was about \$1.2 billion—a record amount. And faced with a dramatic drop in their combined net income in 2008, these companies trimmed buyback spending, but not proportionately: The buyback-to-profit ratio, which was already unprecedented in 2007, more than tripled in 2008, from 0.90 to 2.80.

William Lazonick Director, CIC, UMass Lowell

What's Wrong With Buybacks

THE DISGORGED CASH FLOW IS NOT FREE

- **Wall Street banks** did buybacks even as they were betting the company (and the economy) on derivative speculation, and ended up going to foreigners and the US government to bail them out
Eight of the biggest bailed-out banks spent a total of \$182 billion on buybacks from 2000 to 2007
- **Leading ICT companies** do huge buybacks with the profits from offshoring even as they lay off US workers, and even as they demand that the government invest more in the high-tech knowledge base to make “America” competitive
- **Oil companies** do massive buybacks, while we pay high gas prices and lack adequate investment in alternative energy

The disgorged cash flow is not free

- **Leading pharmaceutical companies** do buybacks that sometimes exceed R&D expenditures even as they argue in Congress against the regulation of US drug prices because they ostensibly need as much profits as possible to pump back into drug research (see Lazonick and Tulum, “US biopharma finance...”, 2009)
- **Health care insurers** do huge buybacks even as the nation’s health care system is in crisis.
- **Wal-Mart** does huge buybacks even as it pays its close to 2 million “associates” wages that can hardly be called a standard of living
- If **General Motors** had banked the \$20.4b. distributed to shareholders as buybacks from 1986 through 2002 (with a 2.5% after-tax annual return) it would have had **\$35b.** of its own cash to help keep it afloat and respond to global competition when it went bankrupt

Intel and nanotechnology

ICT industry in general and Intel in particular have benefited from decades of government investment in the high-tech knowledge base

Intel and Semiconductor Industry Association (SIA) lobby Congress for more spending on the National Nanotechnology Initiative (NNI)

At SIA press conference in DC in March 2005, Intel CEO Craig Barrett warned: “U.S. leadership in the nanoelectronics era is not guaranteed. It will take a massive, coordinated U.S. research effort involving academia, industry, and state and federal governments to ensure that America continues to be the world leader in information technology.”

In 2005 annual NNI budget was \$1.2b., just 11% of \$10.6b. that Intel spent on buybacks in 2005

Indeed, Intel’s 2005 buybacks exceed the total of \$10.1b. spent on NNI since its inception in 2001 through 2009

Shouldn’t Intel and its industry be allocating substantial resources to national technology programs “to ensure that America continues to be the world leader in information technology”?

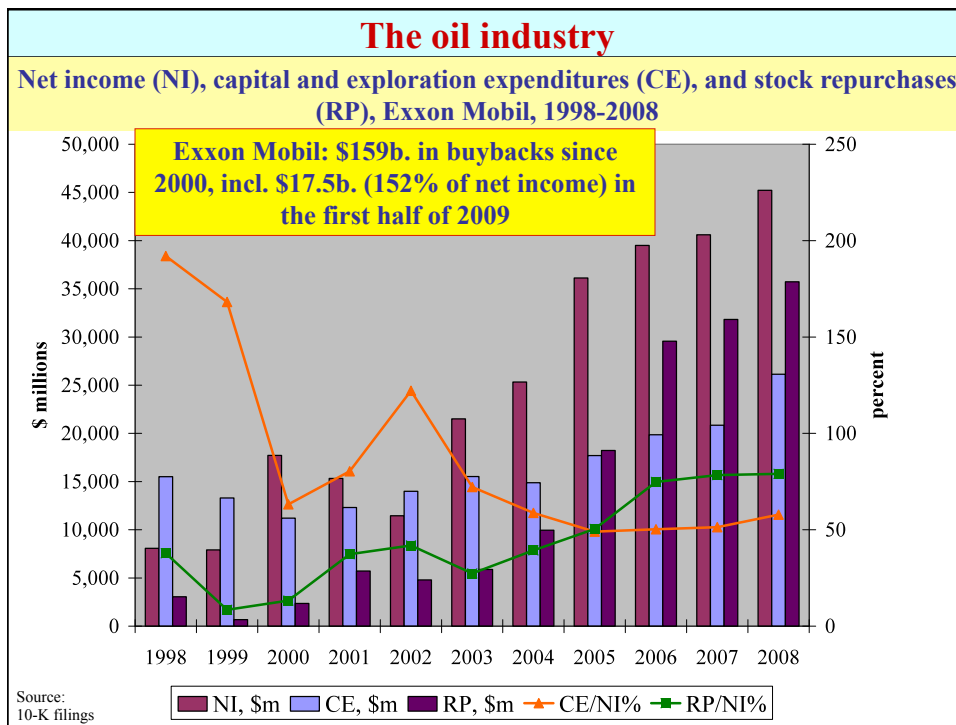
The oil industry: Christmas in July

Sen. Charles Schumer (D.-NY) in a Congressional press release, July 31, 2008

“Inside the boardrooms at the major oil companies, it’s Christmas in July. What’s shocking is that Big Oil is plowing these profits into stock buybacks instead of increasing production or investing in alternative energy. Why do they need more [public] land to drill on when all their money is going into buying up stock?”

And Schumer quoted in a news report (Hays and Ivanovich 2008):

“They tell us they want to do more domestic production. They tell us they need to drill offshore. They tell us that they can find oil on the mainland. And what do they do with their profits? They buy back stock, simply to increase their share price.”



Savings from health care reform? ban buybacks

	2008		2000-2008					
Source: Compustat	rev., \$b.	F500 rank	TD, \$b.	RP, \$b.	TD/NI %	RP/NI %	(TD+RP)/ NI %	SO gains. \$m.
UnitedHealth	81.2	21	0.2	23.4	1	104	105	636
Wellpoint	61.3	32	0.0	14.9	0	104	104	219
Aetna	31.0	77	0.3	9.7	4	137	141	242
Humana	28.9	85	0.0	0.4	0	12	12	88
Cigna	19.1	132	0.9	9.8	11	125	136	143
Health Net	15.4	165	0.0	1.3	0	79	79	67
Coventry	11.9	226	0.0	1.4	0	48	48	142

SO gains: gains from exercising stock options by top executives named in proxy statements

Among the leading health insurers, United Health, Wellpoint, Aetna, and Cigna spent more than 100 percent income in the 2000s on stock buybacks – to the immense benefit of their top executives

Exclude patients, raise premiums, do buybacks, get rich									
Source: Compustat	2000	2001	2002	2003	2004	2005	2006	2007	2008
Over \$5m. in red	compensation, highest paid executive, \$m.								
UnitedHealth	55.8	58.1	1.3	94.2	124.8	13.6	127.0	12.9	9.5
Wellpoint	2.5	15.7	6.9	46.2	18.9	8.5	31.8	105.1	3.8
Aetna	12.7	3.5	8.9	18.2	22.2	35.3	46.7	40.2	7.3
Humana	2.7	1.6	1.6	6.1	2.5	3.3	28.8	20.1	2.4
Cigna	24.7	17.2	10.6	14.9	13.3	28.8	26.9	28.9	9.4
Health Net	1.0	0.8	6.1	14.2	2.6	11.6	12.0	13.2	2.6
Coventry	2.2	4.9	20.3	20.0	25.4	19.5	14.2	20.8	9.0
Over 33% in red	% of total compensation from exercising stock options								
UnitedHealth	83	87	0	89	92	89	98	83	66
Wellpoint	0	0	0	0	58	0	30	97	0
Aetna	0	0	0	42	82	77	82	82	0
Humana	0	1	0	6	3	23	90	83	29
Cigna	80	39	36	0	13	57	54	34	17
Health Net	0	0	86	71	0	85	92	90	26
Coventry	0	0	56	50	49	67	57	77	14

Exclude patients, raise premiums, do buybacks, get rich									
Source: Compustat	2000	2001	2002	2003	2004	2005	2006	2007	2008
Over \$5m. in red	mean compensation, five highest paid executives (top5), \$m.								
UnitedHealth	14.8	17.8	6.2	32.2	42.1	6.4	27.2	6.5	4.4
Wellpoint	1.4	7.3	3.8	22.9	7.7	8.2	23.4	28.7	2.1
Aetna	5.8	1.9	4.9	9.8	6.6	18.8	21.6	15.6	3.2
Humana	2.0	1.2	1.0	3.6	1.6	2.4	10.3	9.2	1.2
Cigna	12.1	10.6	5.4	5.5	4.6	7.7	8.8	12.9	3.4
Health Net	0.8	0.6	2.3	3.2	1.2	18.6	7.8	6.0	1.2
Coventry	1.3	2.4	8.1	8.2	8.0	9.5	7.8	11.4	3.9
Over 33% in red	% of total comp. of top5 from exercising stock options								
UnitedHealth	77	83	51	88	91	38	91	59	35
Wellpoint	0	0	0	9	29	51	40	87	2
Aetna	0	0	4	36	69	78	63	75	0
Humana	0	0	3	10	2	39	84	80	22
Cigna	61	44	42	0	11	45	42	47	9
Health Net	0	0	47	62	0	64	62	59	12
Coventry	3	2	53	42	44	59	50	65	6

The biggest pharma repurchasers

Pharmaceutical companies argue to Congress that they need high drug prices in US to fund R&D

But some of them spend a large proportion of their profits on stock repurchases (RP) (NI=net income; TD=total dividends)

Source: Compustat	2008		1997-2008			
	Rev. \$b.	F500 rank	RP/NI	(TD+RP)/NI	RP/R&D	(TD+RP)/R&D
J&J	63.7	29	0.40	0.79	0.60	1.17
Pfizer	48.3	46	0.73	1.41	0.73	1.42
Abbott	29.5	80	0.18	0.71	0.27	1.04
Merck	23.9	103	0.41	0.93	0.72	1.63
Wyeth	22.8	110	0.15	0.67	0.16	0.71
BMS	20.6	120	0.23	0.91	0.26	1.03
Eli Lilly	20.4	122	0.29	1.03	0.22	0.77
Schering-Plough	18.5	138	0.13	0.75	0.08	0.45
Allergan	4.4	517	0.68	0.93	0.32	0.43

The biggest dedicated biopharma repurchasers

Some of the leading dedicated biopharmaceutical companies are big repurchasers of their own stock:

Source: Compustat	2008		1997-2008			
	Rev. \$b.	F500 rank	RP/NI	(TD+RP)/NI	RP/R&D	(TD+RP)/R&D
Amgen	15.0	168	1.15	1.15	0.97	0.97
Genentech	13.4	201*	0.72	0.72	0.63	0.63
Gilead Sciences	5.3	444	0.84	0.84	0.50	0.50
Genzyme	4.6	502	0.18	0.18	0.06	0.06
Biogen Idec	4.1	546	2.63	2.63	0.86	0.86

* Rank if Genentech had been included in the 2009 Fortune 500

Why do companies repurchase stock?

- Executives say that they are showing confidence in their company's future performance – but their companies only sell stock to the public when compelled to do when it in financial distress
- If the company were to sell its stock when its price was high, its executives would be announcing to the financial world that **they no longer have confidence in the company's stock!**
- At the same time, these very same executives have no problem selling **their own** stock (much of it acquired by exercising stock options) when the price is high

A powerful personal incentive to do buybacks

- **Top executives a powerful personal incentive to manage – i.e., manipulate – their company's stock price**
- Forbes annual CEO pay surveys : average remuneration (in 2005 dollars) of 100 highest paid CEOs rose from \$1.5m. in 1970 to \$4.0m. in 1979 to \$8.1m. in 1989 to \$47.7m. in 1999 (Saez 2007)
- In 1970, ratio of the average pay of a top100 CEO to the average annual wage/salary income in the United States was 39:1; in 1979 105:1; in 1989 199:1, and in 1999 1043:1
- Gains from exercising stock options as a proportion of top100 CEO pay rose from an annual average of 45% in the 1980s (a low of 16% in 1984) to 62% in the 1990s (a high of 79% in 1998)

Stock-market fueled executive pay: 500 highest paid US corporate executives, 1992-2008		Mean pay 2008\$m	% from options	NASDAQ Index	S&P 500 Index
	1992	9.2	59	604	417
	1993	9.0	51	720	453
	1994	8.0	45	754	461
	1995	9.6	48	935	547
	1996	13.7	54	1178	675
	1997	18.3	61	1470	876
	1998	26.9	65	1812	1088
	1999	27.5	71	2788	1331
	2000	40.4	80	3710	1420
	2001	23.7	66	2006	1186
	2002	16.8	49	1520	989
	2003	21.0	55	1659	968
	2004	24.6	62	1993	1134
	2005	28.2	63	2101	1208
	2006	29.0	58	2797	1318
2007	27.4	58	2588	1478	
2008	16.6	48	2149	1215	

Source: Compustat

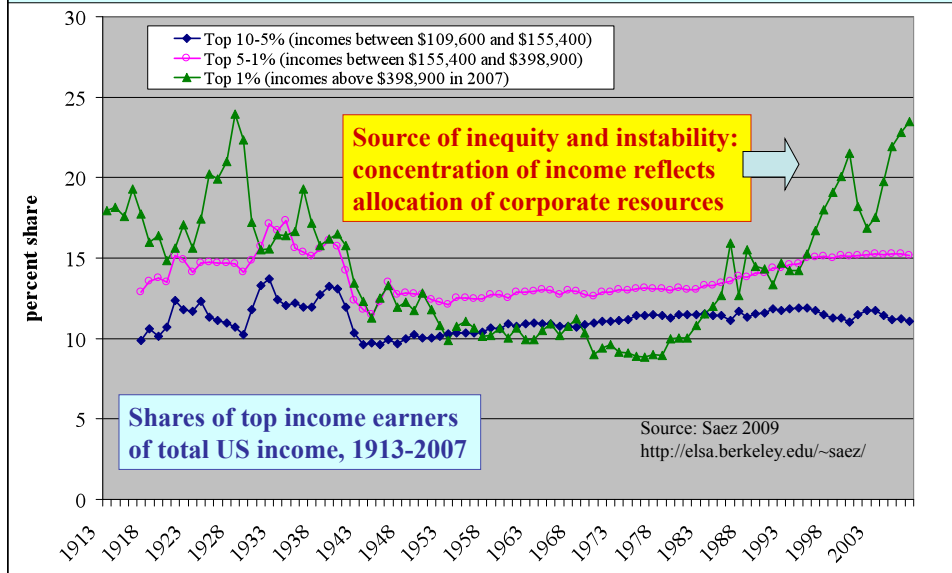
Gains from speculation, gains from manipulation

Source: Compustat

Highest paid executives, by group and stock exchange, 2000 and 2007

	2000				2007			
	Group of highest paid				Group of highest paid			
	100	500	1500	3000	100	500	1500	3000
No. of executives, NYSE	52	271	916	1,980	72	394	1,162	2,277
No. of executives, NASDAQ	42	200	504	865	25	95	307	667
No. of executives, OTC	6	27	61	101	1	5	14	34
Mean comp., NYSE, \$m	76.7	30.4	13.3	7.4	56.5	26.1	14.1	9.2
Mean comp., NASDAQ, \$m	90.9	34.7	17.6	11.2	51.0	26.4	13.5	8.2
Mean comp., OTC, \$m	87.1	36.0	19.6	12.7	62.8	26.8	13.9	7.9
% from options, NYSE	78	70	59	53	65	55	48	43
% from options, NASDAQ	97	85	90	88	82	68	60	54
% from options, OTC	87	82	80	76	64	56	44	33

Why inequality matters:
Forthcoming paper: “The explosion(s) in executive pay and the erosion of American prosperity”



Shareholder value ideology

- Foundations of the ideology: the neoclassical theory of the market economy, in the form of agency theory
- It is an ideology of top corporate executives

Maximizing Shareholder Value (MSV) is an ideology that is destructive of innovative enterprise

- **Strategic control:** MSV permits separation of the interests of top executives from the interests of the corporation; they use MSV to justify the allocation of resources for their own personal gain
- **Organizational integration:** undermines incentives and abilities of the labor force to engage in collective and cumulative learning
- **Financial commitment:** drains the company of financial resources that are needed to fund, and sustain, innovation

Local activist responses: marketization

Marketization of labor:

- Suitable jobs are needed to preserve human capital: many 40+ workers who have education and experience take jobs (if they can find them) that underutilize their skills – the result is an erosion of their skills over time, and a waste of human capital
- The local challenge is to find new types of employment for educated and experienced workers that utilizes and preserves their capabilities – government funding is needed if business will not provide these jobs – but if business will not provide these jobs, will there be political support for government funding?
- If valuable human capital is being wasted for lack of suitable jobs in the business sector, local activists should ask why.

Local activist responses: globalization

Globalization of employment:

- a world of global innovation creates a need for continuous upgrading of US labor – the US economy needs innovative enterprises that invest in higher value-added activities *at home*, thereby providing US labor with the accumulation of experience that is required for continuous innovation
- recipients of this experience in the US are often H-1B workers, who, lacking labor-market mobility in industries characterized by mobile labor markets, are vulnerable to exploitation – H-1B visas should be replaced by employment-based permanent resident visas, with the number of such visas being dependent on the extent of business creation of **new** high-quality US jobs
- more generally, local activists should demand that US-based global companies use the profits from globalization to invest in innovation in the United States

Local activist responses: financialization

Financialization of corporate resource allocation:

- There will be a paucity of high-quality jobs in the United States as long as major US corporations use their profits to “create value for shareholders” – it is a managerial ideology that is largely responsible for the polarization of the income distribution that we have seen over the past three decades
- What can be done at the local level; document the impacts of financialization – need databases on 1) the underemployment of educated and experienced workers, and 2) the financial behavior of the companies that have let them go – create an awareness in the labor movement of the “weapons of value extraction”: who gains from them and who loses from them
- Changes to this destructive financial behavior can only occur at the national level: we need a “New Deal” in the regulation of corporate resource allocation

Confronting financialization

- 1) Ban stock buybacks: force corporate executives to find productive uses for profits in the United States
- 2) Put strict performance criteria, independent of stock price, on exercising stock options – e.g., the creation of productive jobs (so who needs stock options?)
- 3) More generally, base executive pay on the contributions to stable and equitable growth of the companies that they control
- 4) Transform boards of directors to include social representatives who seek stable and equitable growth
- 5) Reject the ideology of “maximizing shareholder value,” and “the theory of the market economy” on which it is based The End