

Toward a New American Century

University of California, Santa Barbara
March 6, 2011

Michael Milken
Chairman, The Milken Institute

13.7 billion years
of history ...

... in 2 minutes

Bang!

Universe expands

Galaxies form

Planets

Earth

Single-cell life

DNA evolves

Multi-cellular life

Land-based plants

Dinosaurs

Mammals

Humanoids

Fire domesticated

Abstract thought

Language

Weapons

Homo sapiens

Tool creation

Art

Agriculture

Cities

Writing

Moses

Moses
Christ

Moses
Christ
Confucius

Moses
Christ
Confucius
Mohammed

Moses
Christ
Confucius
Mohammed
Buddha

Abacus

Philosophy

Athenian democracy

Magna Carta

Printing

Luther

Copernican
revolution

Age of
Enlightenment

“I think, therefore,
I am.”

The Rule of Law

First calculating
machine

Newton's 3 laws

Multiplying
computer

“We hold
these truths ...”

Mission
Santa Barbara

Automated
production

Steam engine

Telegraph

Photography

Darwin

Telephone

Light bulb

Stock ticker

Adding machine

Electron discovered

Radio waves

Sound recording

Freud

Airplane

$e=mc^2$

Santa Barbara
earthquake

Quantum
mechanics

Television

Electron microscope

Penicillin

Radio telescope

Electronic computer

Stored programs

UCSB established

Atomic bomb

ENIAC

Transistor

DNA deciphered

Copying machine

Polio vaccine

Sputnik

Laser

The Pill

Civil rights

Industrial robots

Lori Milken attends
UCSB

Moon landing

Earth Day

Neural networks

Moore's law

Pocket calculator

Bar codes

Genetic engineering

Microprocessor

Heart transplants

Personal computer

Fiber optics

Compact disks

MRIs

Cell phones

Email

W W W

Life expectancy
doubles in
100 years

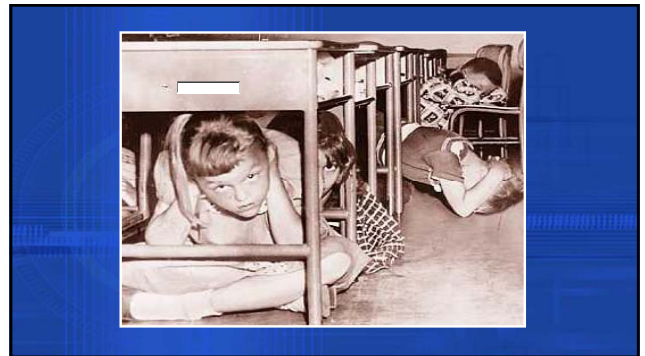
UCSB Arts & Lectures
March 6, 2011

Toward a New American Century

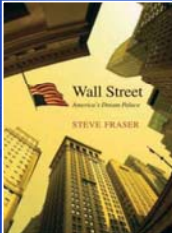
- Perception vs. Reality
- Democratization of Capital
- Building Human Capital
- Toward a New American Century

“For America to bounce back from the blow, it has to overcome wounded national pride. In Washington, there’s more concern than the city has known since Pearl Harbor ...

“People are scared and many have panic reactions. They are searching for someone or something to blame. There is a sudden crisis of confidence, forcing the United States to change its priorities.”



The Financial Crisis



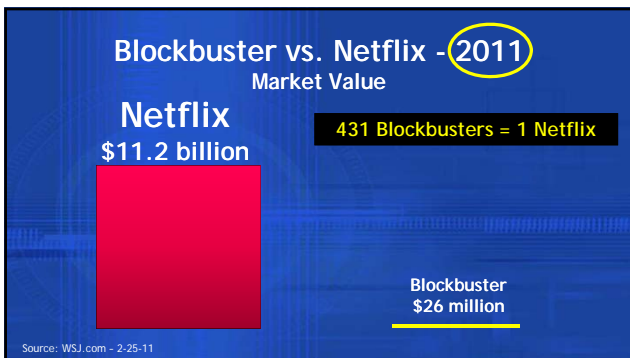
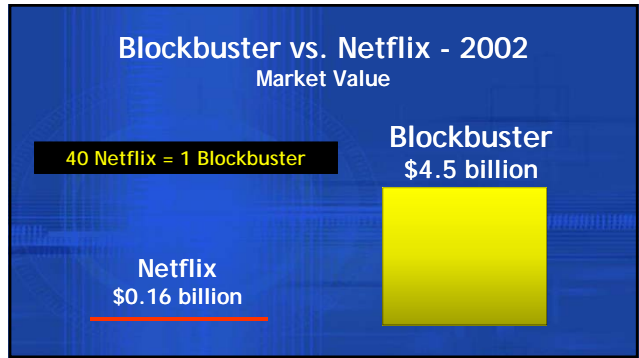
"Real estate prices collapsed, credit dried up, house building stopped ...
in 1792."

- The stock market dropped 50 percent.
 - Banks curtailed lending.
 - Commentators predicted widespread industrial bankruptcies.
 - Unemployment rose quickly.
 - Interest rates were volatile.
- ...in 1974.

- ### What is the most valuable real estate in the world?
1. New York City
 2. Moscow
 3. London
 4. Dubai
 5. Beverly Hills
 6. Tokyo

What is the most valuable real estate in the world?





The World's Top 10 Economies

(Percent of World GDP)

Today	2050	1820
U.S. (23.6%)	China (18.5%)	China (28.7%)
China (8.7%)	U.S. (16.5%)	India (16.0%)
Japan (8.6%)	India (12.0%)	France (5.4%)
Germany (5.2%)	Brazil (4.8%)	England (5.2%)
France (4.4%)	Indonesia (3.5%)	Prussia (4.9%)
U.K. (3.6%)	Japan (3.1%)	Japan (3.1%)
Italy (3.4%)	Mexico (3.0%)	Austria (1.9%)
Brazil (3.1%)	Russia (2.7%)	Spain (1.9%)
Canada (2.6%)	U.K. (2.3%)	U.S. (1.8%)
Russia (2.4%)	Germany (2.3%)	Russia (1.7%)

Sources: World Bank/Angus Maddison, "The World Economy: Historical Statistics" (OECD)/PricewaterhouseCoopers/Milliken Institute/Goldman Sachs (9/09)

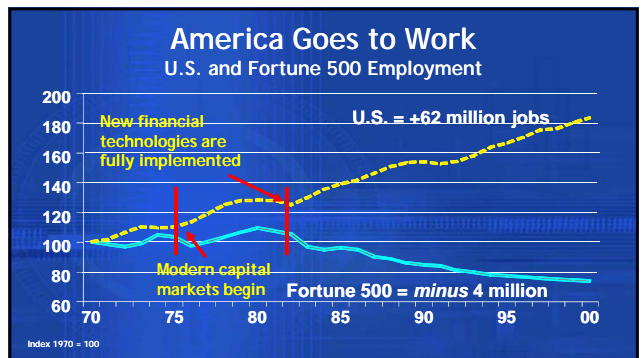
- ### Toward a New American Century
- Perception vs. Reality
 - Democratization of Capital
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 - Toward a New American Century





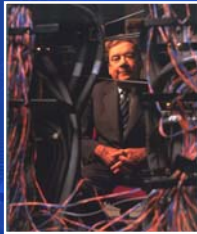
$$P = \sum Ft_i * (\sum HC_i + \sum SC_i + \sum RA_i)$$

P = Prosperity
 Ft = Financial Technology
 HC = Human Capital
 SC = Social Capital
 RA = Real Assets



- The American Dream
 - Pioneers
 - Building
 - Rebuilding
 - A Changing Society
 - Interdependence
 - Partners
 - Community
-



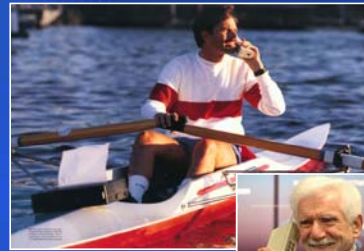


MCI

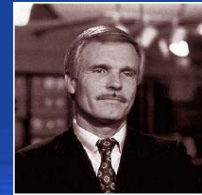
"Our biggest obstacle was not the opposition of the government or the monopoly position of AT&T. It was the availability of capital. Those days are over now."

Bill McGowan, 1986

Craig McCaw



Craig and Ambassador Susan McCaw and family



Ted Turner

Courageous
Winner
1977 America's Cup



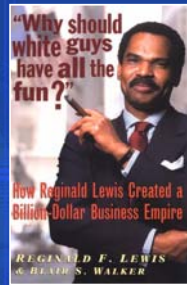
Ted Turner

- Nuclear Proliferation
- Global Climate Change
- Population Pressures
- Other Environmental Issues





TLC Beatrice
Reg Lewis



First Economist to Win the Nobel Peace Prize
Muhammad Yunus



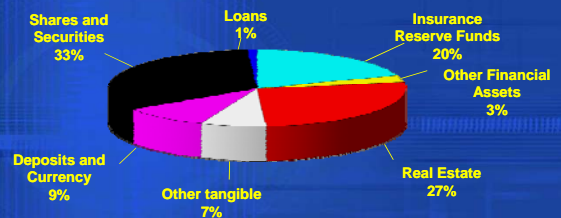
In 1974, began providing access to capital for working women in Bangladesh through micro loans. Won Nobel Peace Prize in 2006.

Toward a New American Century

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2010 U.S. Household Balance Sheet

\$69 Trillion Total



Source: Federal Reserve Flow of Funds, Q3 2010

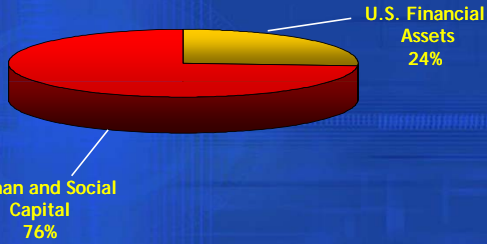


Gary Becker
1992 Nobel Prize in Economics
(at the Milken Institute Global Conference)

*Human capital
is the largest asset class.*



Q3 2010 Human Capital in the U.S.
\$295 Trillion Total



Source: Derived from Kevin Murphy and Federal Reserve, Flow of Funds Q3, 2010

The 21st Century will see a worldwide competition for human capital.

One Person Can Make a Difference
A Tale of Two Teams

World Series Appearances
1914-1919



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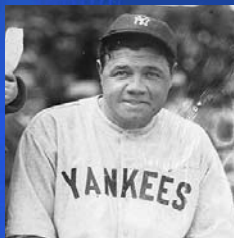
One Person Can Make a Difference
A Tale of Two Teams



Hitting
49 home runs
.309 average

Pitching
87 wins
2.16 ERA
WS ERA 0.87

One Person Can Make a Difference
A Tale of Two Teams



One Person Can Make a Difference
A Tale of Two Teams

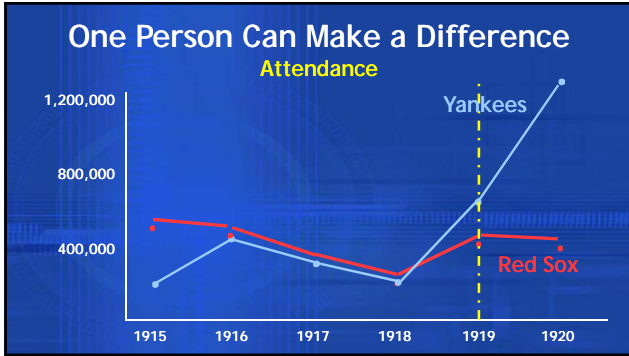
World Series Appearances
1920 - 1934



7

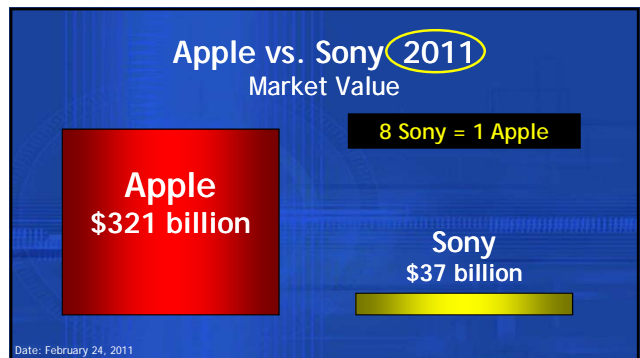
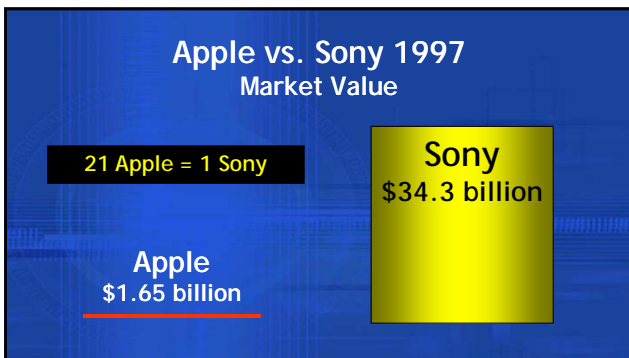


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"Innovation has nothing to do with how many R&D dollars you have. When Apple came up with the Mac, IBM was spending at least 100 times more on R&D. It's about the people you have [and] how you're led."

-Steve Jobs



UCSB Champions

Barry Zito
2002 Cy Young Award
2010 World Series

Brian Shaw
3-Time NBA Champion
Lakers Assistant Coach

Jason Lezak
7-Time Olympic Medalist

Per Capita GDP

	1960	2010
Singapore	\$2,229	\$40,336
Jamaica	\$2,213	\$4,825

Source: IFS, WEO, IMF, in 2008 USD

Addressing the Issues (Non-Profit Organizations)

Milken Family Foundation (1982)

- Education reform/teacher recognition/medical research

The Milken Institute (1991)

- Economics/public-policy research and conferences

Prostate Cancer Foundation (1993)

- World's leading philanthropic source of support for research

FasterCures (2003)

- Removing barriers to progress on all life-threatening diseases

Melanoma Research Alliance (2007)

- Advancing research on the most-deadly skin cancer



More than 2,500 educators nationwide



The System for Teacher and Student Advancement
A NEW DIRECTION FOR SUCCESS



- Multiple career paths
- Ongoing applied professional growth
- Instructionally focused accountability
- Performance-based compensation

Funded more than 50 Young Investigators.



- 273 Scholars since program began in 1989
- 79 born outside the United States
- 34 countries of origin
- 197 Scholars have one or more parents born outside the U.S.
- 94 colleges attended
- 52 are married
- 41 children of Milken Scholars



- *Improve the lives and economic conditions of diverse populations in the U.S. and around the world.*
- *Help business and public policy leaders identify and implement innovative ideas for creating broad-based prosperity.*



May 1-4
Los Angeles

www.milkeninstitute.org

- Finance
- Philanthropy
- Education
- Health
- Climate/Energy
- Government
- Regions
- Industries

Toward a New American Century

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“Ask not what your country can do for you, but what you can do for your country.”

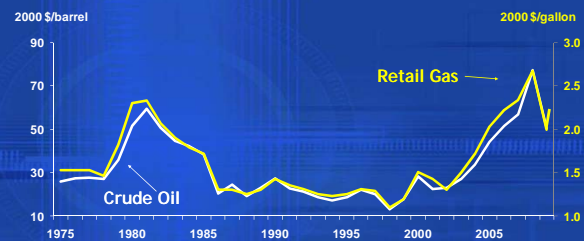
John F. Kennedy
1961 Inaugural

Toward a New American Century

- Energy
- Housing
- Entitlements
- Education
- Immigration
- Health / Medical Research



Price Volatility Increases Alternative-Fuel Investment Risk



Source: Richard Newell, Resources for the Future

What we pay vs. the true cost

The Cost to Fill Up		
Regular	3.15 ^g	13.98 [¢]
Plus	3.25 ^g	14.00 [¢]
Premium	3.35 ^g	14.18 [¢]

President Jimmy Carter on the energy crisis and proposed energy legislation

"This difficult effort will be the 'moral equivalent of war' -- except that we will be uniting our efforts to build and not destroy."



Percentage of Oil from Foreign Sources

Nixon	36.1%
Ford	37.1%
Carter	40.5%
Reagan	43.6%
Bush	47.2%
Clinton	49.8%
Bush	65.5%
Obama	66.2%



- Center for Global Capital Markets
- California Center
- Israel Center
- Center for Financial Innovations
- Center for Regional Economics
- Center for Health Economics
- **Center for a Sustainable Energy Future**
- FasterCures



7 Solutions

- Upgrade the energy infrastructure.
- Scale up research and development of alternatives.
- Convert fleet vehicles to natural gas.
- Promote conservation.
- Implement market-based solutions.
- Support prices to encourage investment.
- Use consistent regulatory and fiscal policy.

Toward a New American Century

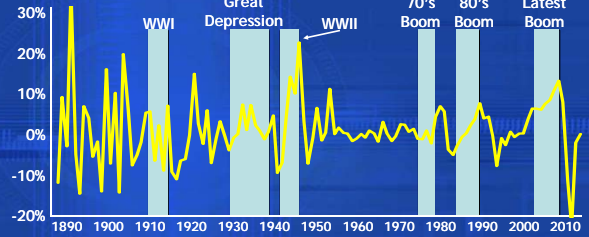
- Energy
- **Housing**
- Entitlements
- Education
- Immigration
- Health / Medical Research

Fallacy:
 "Any loan to real estate is a good loan ... "



Home prices don't go up forever

Change in home prices in 100-plus years



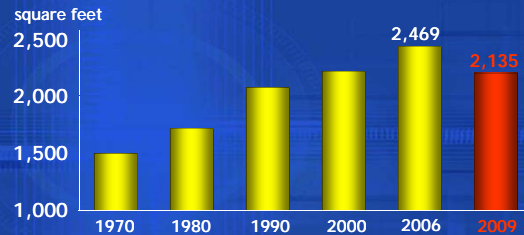
Sources: Robert Shiller, Milken Institute.

When Lenders Make Non-Recourse Loans Heads they lose -- Tails they lose

- If prices rise, the borrower keeps the gain
- If prices fall, the borrower can walk, sticking the lender with a long-term depreciating asset
- If interest rates rise, the value of the loan depreciates as the "real" average life of the asset is extended
- If interest rates fall, the borrower prepays



Average Size of American Houses



Source: National Association of Home Builders / U.S. Census Bureau

Consumer Spending

U.S.		Asia	
Housing	32.7%	Food	23%
Transportation	18.0%	Education	15%
Food	12.8%	Housing	10%
Insurance/pensions	11.2%	Clothing	8%
Healthcare	5.7%	Other	8%
Entertainment	5.1%	Transportation	6%
Apparel and services	4.1%	Healthcare	5%
Cash contributions	3.6%	Communication	5%
Education	2.0%		
Personal care products	1.2%		

Source: U.S. Bureau of Labor Statistics/CLSA

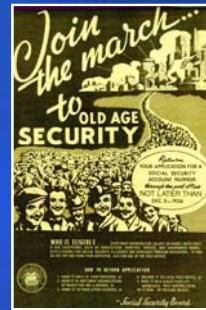
Toward a New American Century

- Energy
- Housing
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- Health / Medical Research

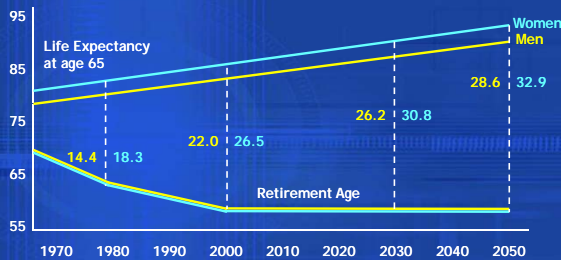
When Social Security was introduced in 1935, the average life span in the U.S. was 61.7 years.

In 2009, life expectancy in the U.S. reached 78.1 years.

Sources: National Center for Health Statistics, *National Vital Statistics Reports*, vol. 54, no. 19, June 29, 2006.
U.S. Census Bureau, *International Database*.



Longer Life Expectancy; Longer Retirements France



Source: OECD Ageing and Employment Policies, France 2005

Toward a New American Century

- Energy
- Housing
- Entitlements
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- Health / Medical Research

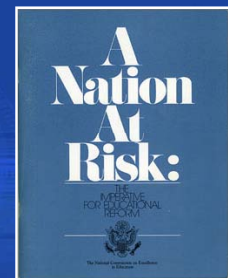
Between 1870 and 1950, Americans added almost **one year of education each decade**.

By 1960, the highest average grade level in the U.S. **exceeded every other nation by two years**.

Since 1960, we have made no progress and several **other nations have surpassed us**.

"If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might have viewed it as an act of war."

- 1983



How 15-Year-Olds Score in School

Science

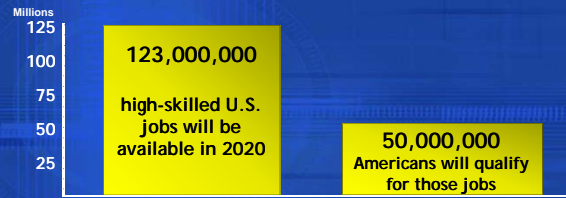
• Hong Kong	542
• Canada	534
• Japan	531
• Estonia	522
• South Korea	515
• United Kingdom	515
• Germany	513
• OECD average	500
• Poland	498
• United States	489
• Russian Federation	479

Math

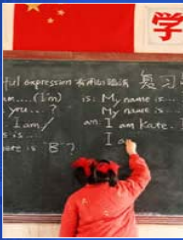
• Hong Kong	547
• South Korea	547
• Canada	527
• Japan	523
• Estonia	515
• Germany	504
• OECD average	498
• Poland	495
• United Kingdom	495
• Russian Federation	476
• United States	474

Source: OECD Programme for International Student Assessment, 2006

The Jobs Problem (It Isn't Jobs - It's Trained Workers)



Source: Edward Gordon. "Winning the Global Talent Showdown"



Five times more people are learning English in China than there are people in England."

- HSBC Bank



India...

- Extracurricular activities consisted of academic coaching in 95% of the households.
- 43% of parents want their children to get a Master's degree; 29% want them to get a PhD.



South Korea

- Spend more on education (22%) than housing (13%)
- 70% of Korean parents expect their children to work overseas, of which more than half expect their children to work in the US.

Knowledge Universe Early Childhood Education



Knowledge Universe Primary and Secondary Education



*We must not be afraid of
competition.*

*We must be ready to
compete.*

Eddie "The Eagle" Edwards

- 1988 Calgary Olympics
- Britain's first (and last!) ski jumper
- Last place finish with a jump of 253 feet



Matti Nykanen of Finland wins the gold with a jump of 412 feet.

Eddie "The Eagle" Edwards

- 1988 Calgary Olympics
- Britain's first (and last!) ski jumper
- Last place finish with a jump of 253 feet



Eddie "The Eagle" Rule:

Olympic qualifiers must compete in international events and place in the Top 30 percent or Top 50 competitors.

Toward a New American Century

- Energy
- Housing
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- Health / Medical Research

Highly skilled, entrepreneurial
and educated immigrants are
crucial to the United States'
prosperity.

Doctorates Awarded in the U.S.

- 1/3 of all doctoral students in the U.S. are foreign born, up from one in ten 30 years ago.
- 84% of their doctorates are in engineering and the sciences.

Source: National Science Foundation/Dir of Science Resource Statistics

“When you graduate from a leading university with an advanced degree in the sciences or engineering, we then make you go home. We should be stapling a green card to your diploma.”

- John Doerr
Venture Capitalist

Building Human Capital at UCSB



Finn E. Kydland
Norway
Nobel Prize
Economics
2004



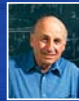
Henry T. Yang
China
Chancellor



Shirley Geok-lin Lim
Malaysia
Author, Poet



Herbert Kroemer
Germany
Nobel Prize
Physics
2000



Walter Kohn
Austria
Nobel Prize
Chemistry
1998

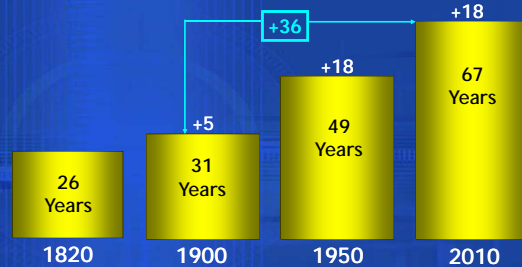
Toward a New American Century

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Some Great Achievements in History

- Invention of the wheel
- Development of agriculture
- The printing press
- Copernican revolution
- Industrial and technology revolutions
- Extension of life expectancy

Worldwide Life Expectancy Growth



Source: United Nations Development Program

Half of all economic growth in the last two centuries can be traced to medical research advances.

Company Value Comparison

	Est. P/E Ratio
Average: Consumer (P&G, Estée Lauder, Coca Cola, Pepsi, Kraft)	20.8
Average: Pharma (Pfizer, J&J, Roche, Novartis, Merck, GSK, SanofiAventis, Medtronic, Abbott Labs, AstraZeneca, Teva, Amgen, BMS and Eli Lilly, UnitedHealth)	12.8

Source: Bloomberg 3/4/2011

Top Causes of Death

1907	2010
1. Pneumonia/flu	1. Heart disease
2. Tuberculosis	2. Cancer
3. Heart disease	3. Stroke
4. Diarrhea	4. Respiratory disease
5. Stroke	5. Accidents

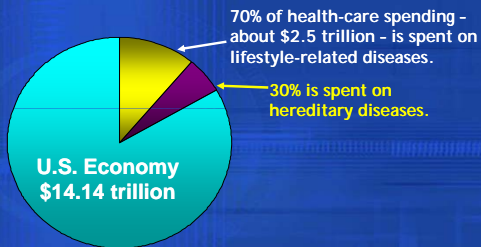
Since 1900, childhood death rates from pneumonia and influenza have fallen 93 percent.

Source: AARP Bulletin / June 2007

Three Solutions to Healthcare Challenges

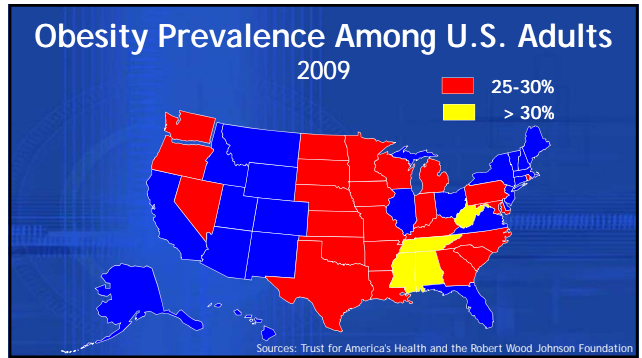
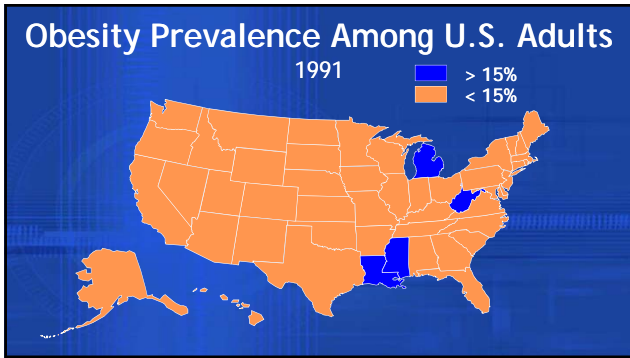
- Prevention
- Cost reduction
- Research leading to cures

Lifestyle Makes a Difference



Sources: CIA Handbook / Centers for Medicare and Medicaid Services (2009)

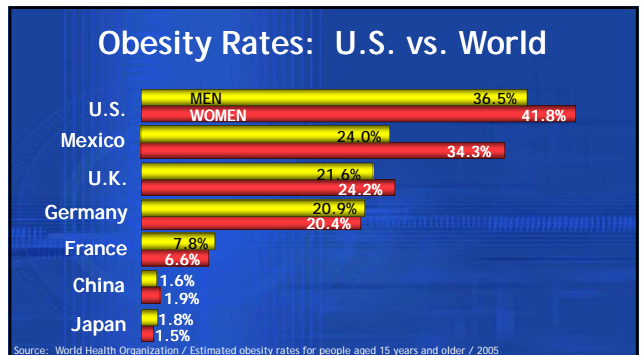




Quiz:

Nearly 40% of Americans are considered "obese." What percentage of Japanese citizens are obese?

- a. 1.8%
- b. 5.2%
- c. 13.6%
- d. 20.0%
- e. 38.9%



Japan's Effort to Reduce Obesity



- **Goal:** Reduce overweight population by 10 percent over four years; 25 percent over seven years
- **Strategy:** Measure the waistlines of every person between the ages of 40 and 74; provide dietary guidance as needed.
- **Noncompliance:** Impose financial penalties on companies and local governments that fail to meet specific targets.

Source: New York Times / 6-13-08

The Supersize Investment

For only 67 cents you can step up to a larger order of French fries and a 32-ounce soda ...



Source: Journal of the American College of Nutrition

The Supersize Investment A Negative Return

For only 67 cents you can step up to a larger order of French fries and a 32-ounce soda ...

Yet, every time you supersize, it costs you \$8 in extra lifetime spending on food, gas and medical care to sustain a heavier body.



Source: Journal of the American College of Nutrition



There is a "staggering cost for failing to contain the containable."



MILKEN INSTITUTE

Chronic Disease Study

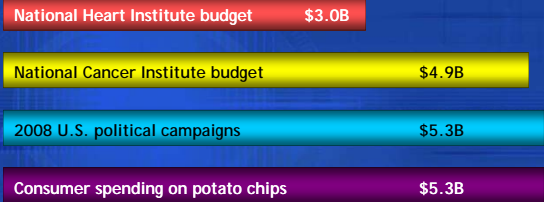
Failure to address chronic diseases adequately costs the U.S. economy more than \$1 trillion annually.

Economic Value of Eliminating Deaths

Heart Disease	\$60.5T
Cancer	\$58.1T
Stroke	\$9.5T
AIDS	\$9.3T
U.S. Balance Sheet 2009	\$67T

Source: Estimates base on 1999 studies by Kevin Murphy and Robert Topel/University of Chicago

Major Spending Initiatives in the U.S.



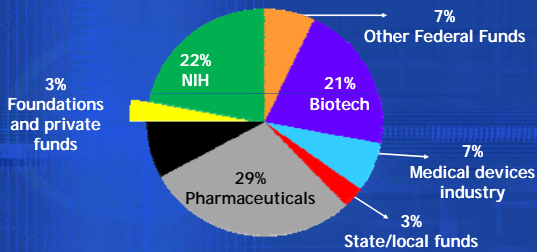
Source: Center for Responsive Politics

FasterCures
The Center for Accelerating Medical Solutions

An organization dedicated to shortening the time to find cures and better treatments for all life-threatening diseases

Medical Philanthropy

U.S. Health Research Expenditures (2008)



Sources: FasterCures / 2008 Investment in U.S. Health Research (Research America)

"Never doubt that a small group of thoughtful, committed citizens can change the world: indeed, it's the only thing that does."



-Margaret Mead

Create a legacy that relegates cancer and other life-threatening diseases to our children's history books.



Toward a New American Century

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Michael Milken
Chairman, The Milken Institute