

What the Modern Age knew

1991-

Piero Scaruffi

Copyright 2018

<http://www.scaruffi.com/know>

Europe will never be like America. Europe is a product of history. America is a product of philosophy.

(Margaret Thatcher)

What the Modern Age knew

New York, September 2001



Afghanistan, November 2001

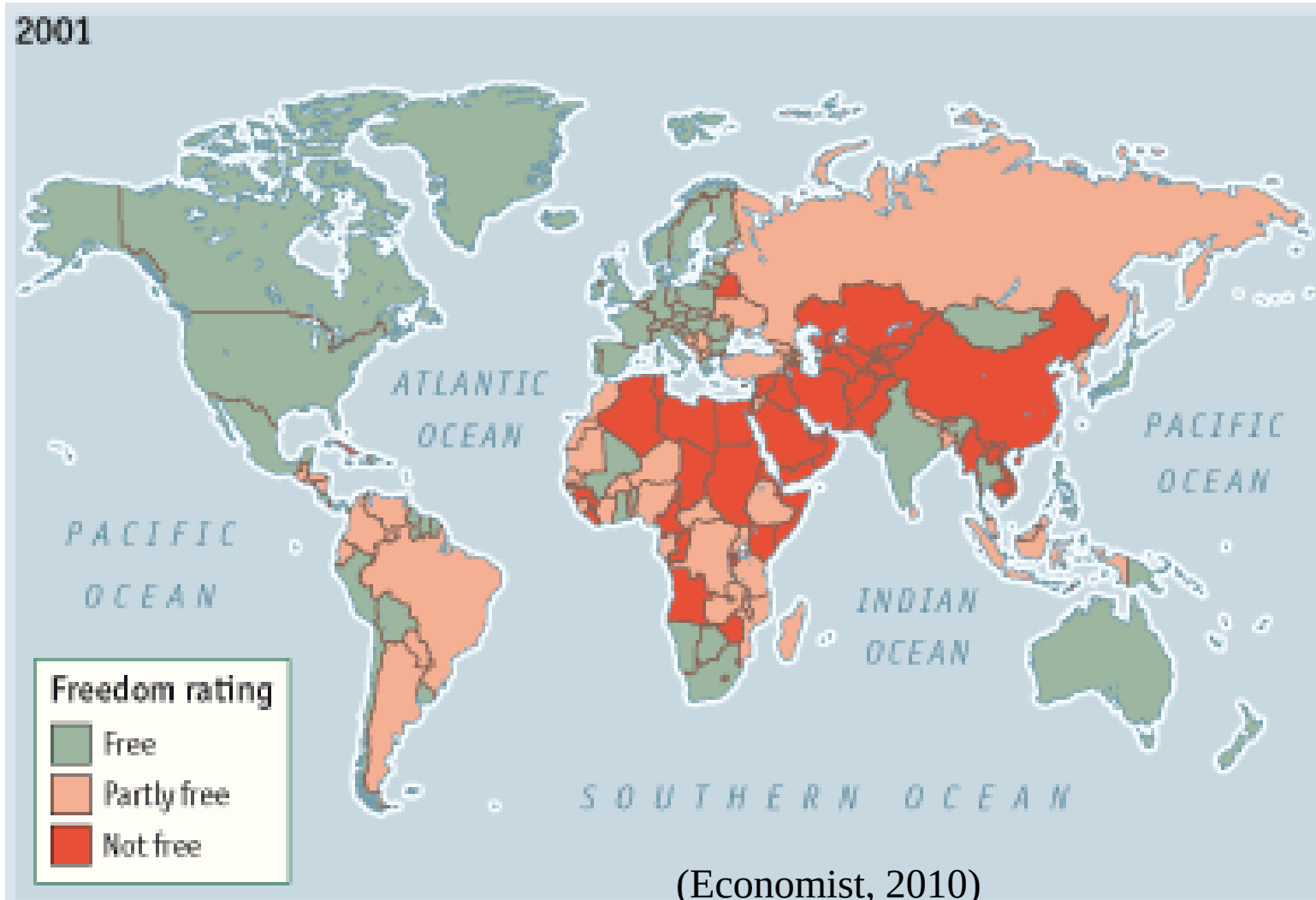


Iraq, December 2003



What the Modern World knew

- Spread of democracy



What the Modern World knew

- **The world powers**
 - **Before WWI: Austria, Ottomans, Holland, Germany, France, Britain, Russia, USA**
 - **After WWI: Holland, Germany, France, Britain, Soviet Union, USA**
 - **After WWII: USA, Soviet Union**
 - **After Cold War: USA**

What the Modern World knew

- USA Economy of the 2000s**

Leading exporters in the world
merchandise trade 2002

Position	Country	%
1	USA	10,7
2	Germany	9,5
3	Japan	6,5
4	France	5,1
5	China	5,0
6	United Kingdom	4,3
7	Canada	3,9
8	Italy	3,9
9	Netherlands	3,8
10	Belgium	3,3
21	Sweden	1,3
	Others	42,7
	World	100

Source:WTO, International Trade Statistics 2003

Leading importers in the world
merchandise trade 2002

Position	Country	%
1	USA	18,0
2	Germany	7,4
3	United Kingdom	5,2
4	Japan	5,0
5	France	4,9
6	China	4,4
7	Italy	3,6
8	Canada	3,4
9	Netherlands	3,3
10	Hongkong, China	3,1
21	Sweden	1,0
	Others	40,7
	World	100

Source:WTO, International Trade Statistics 2003

What the Modern World knew

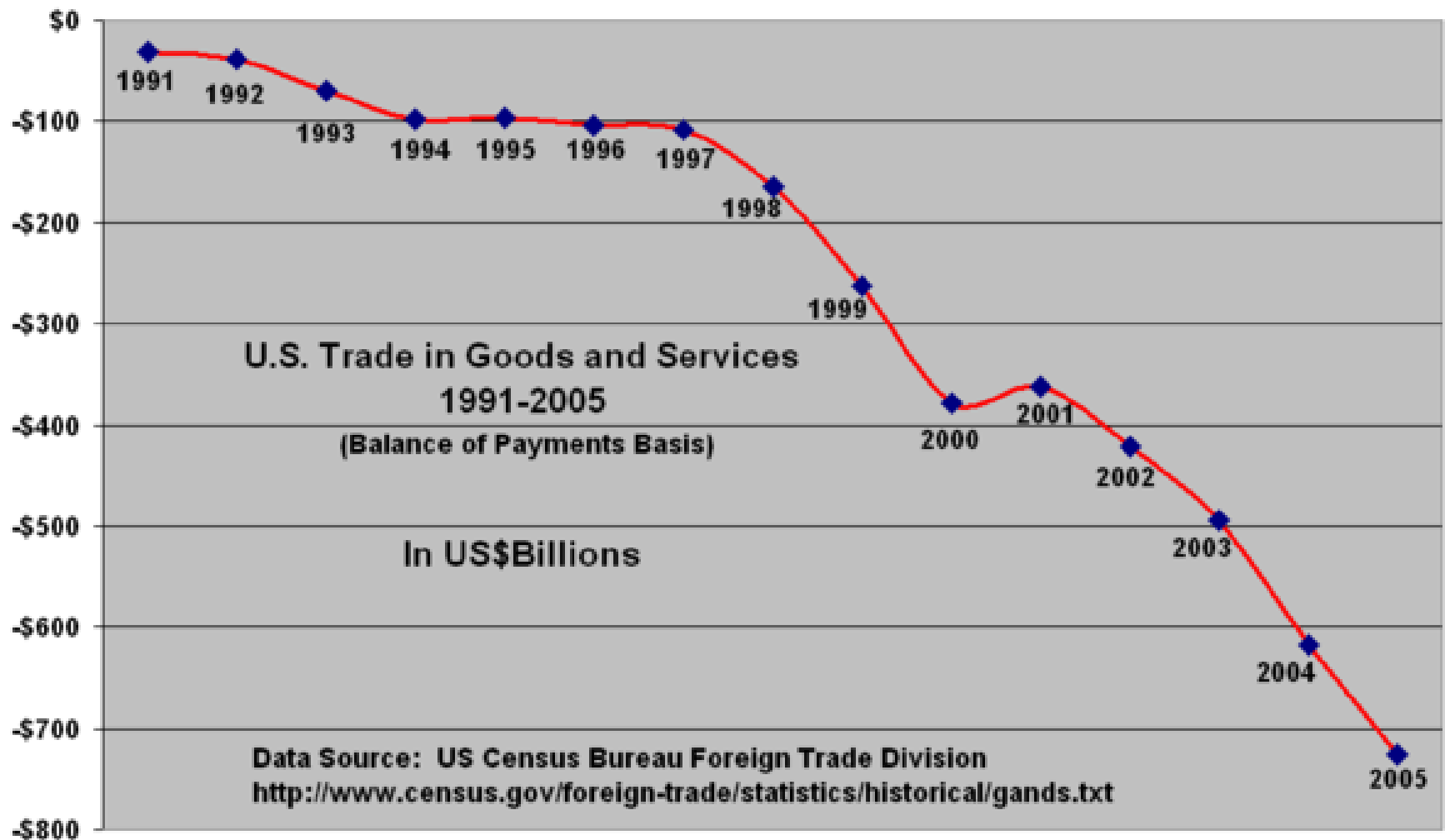
- **USA Economy of the 2000s**
 - **1948-68: The incomes of both the 10% richest people and the rest increase by 80% (“Bretton Woods age”, average GDP growth 4%)**
 - **1969-82: Income stagnation (4% real income decline across the board, 2.5% GDP growth and 6.8% inflation)**
 - **1983-99: Rapidly widening income inequality with the 10% getting 106% richer and the rest stagnating at 17% richer (Ronald Reagan’s tax cuts + Paul Volcker’s high interest rates, 3.67% average GDP growth)**

What the Modern World knew

- **USA Economy of the 2000s**
 - **2000-12: Income stagnation (Alan Greenspan's stock market bubble and housing bubble, 1.6% average GDP growth, gold prices rising dramatically from Bretton Woods' \$35/oz to \$1600/oz)**
 - **The income gains of the 10% richest between 1948 and 2012 outpace those of the rest by 205% to 72%**

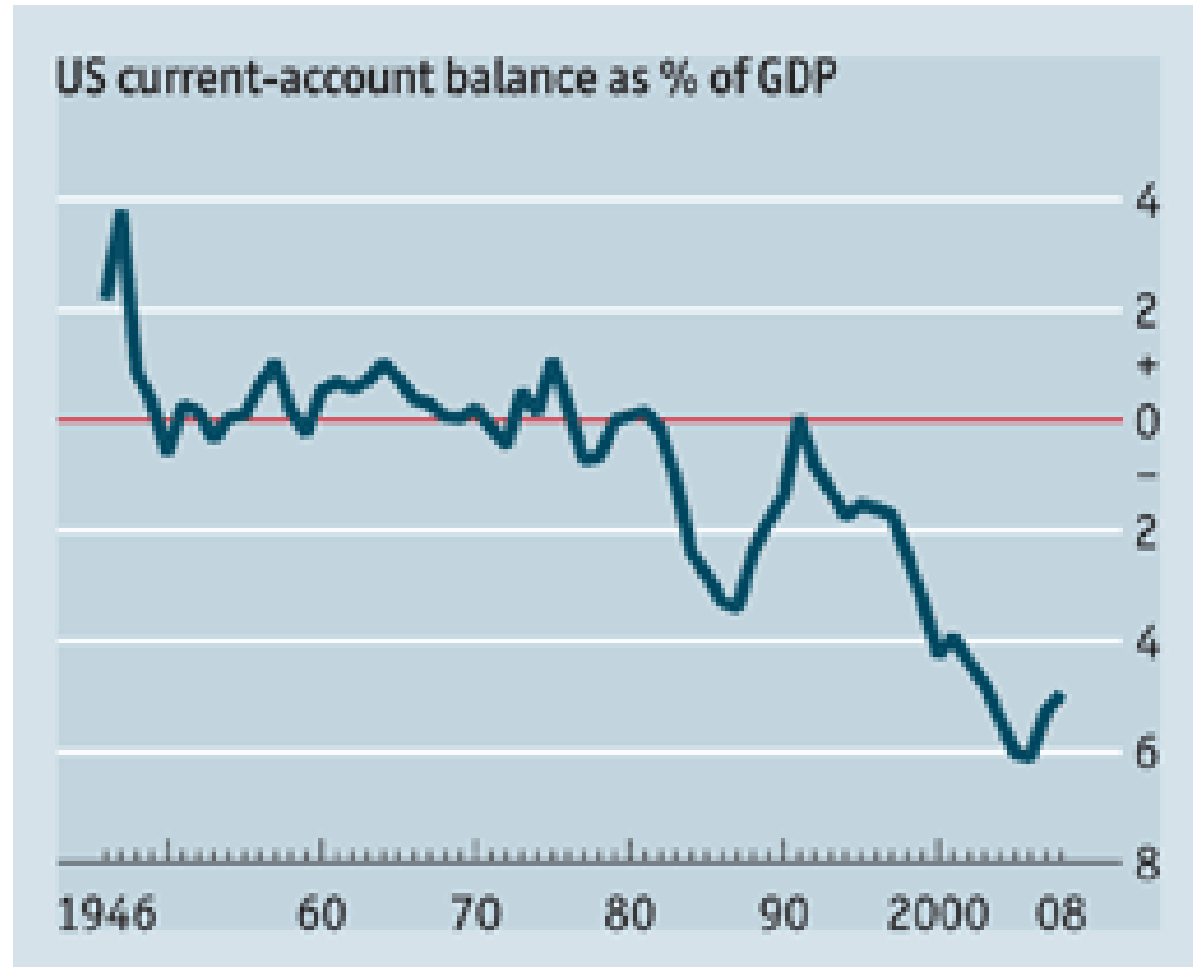
What the Modern World knew

- **USA Economy of the 2000s**



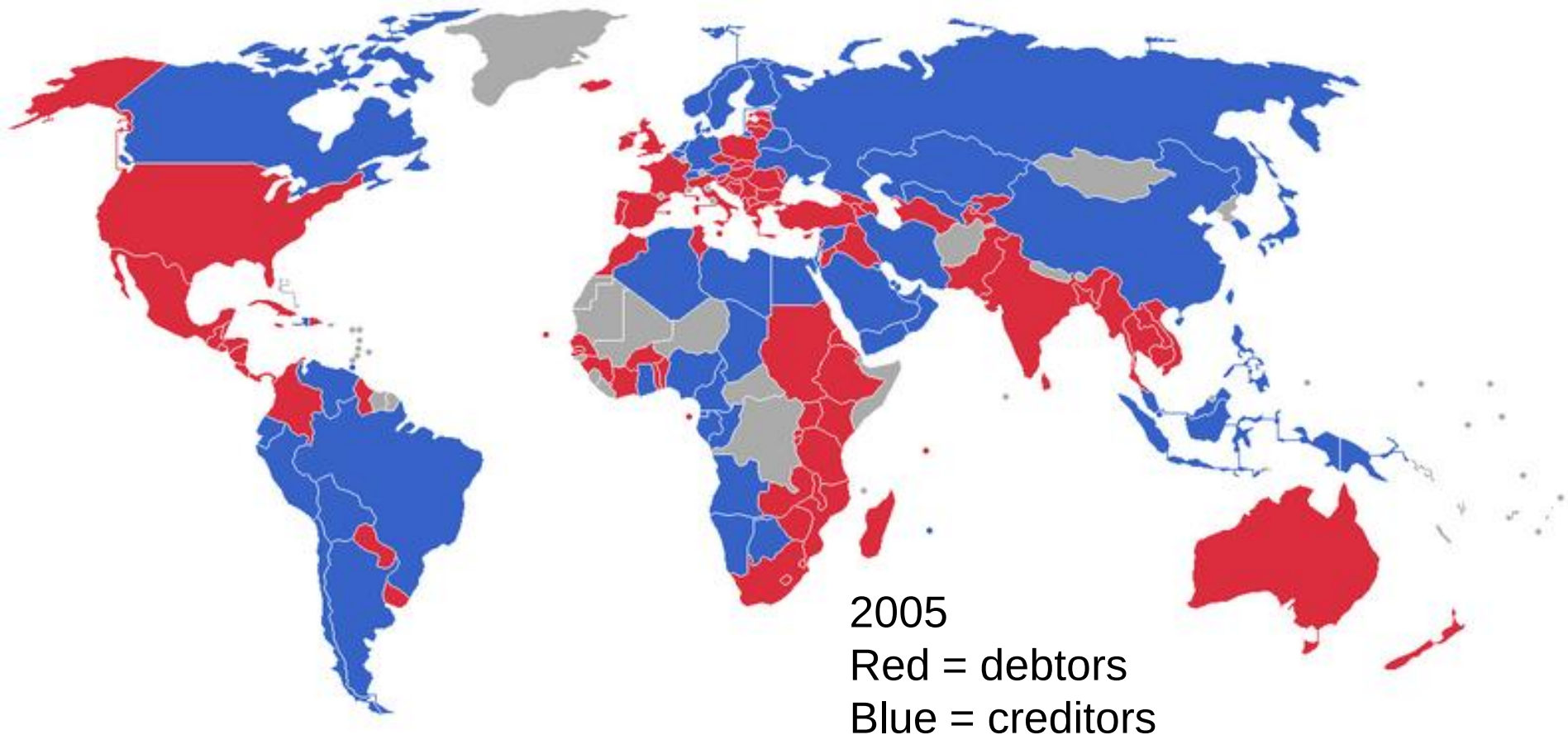
What the Modern World knew

- **USA Economy of the 2000s**



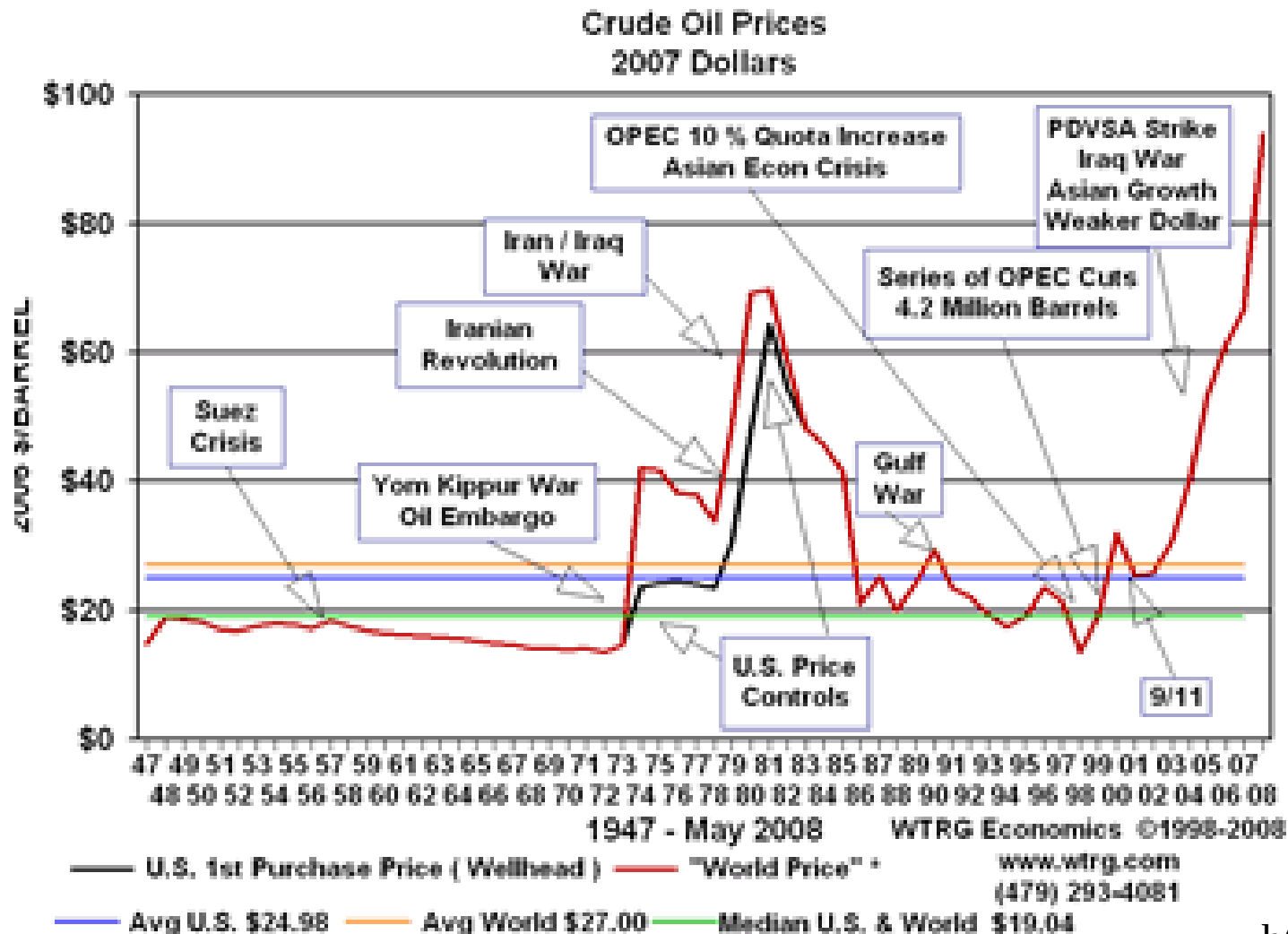
What the Modern World knew

- **USA Economy of the 2000s**

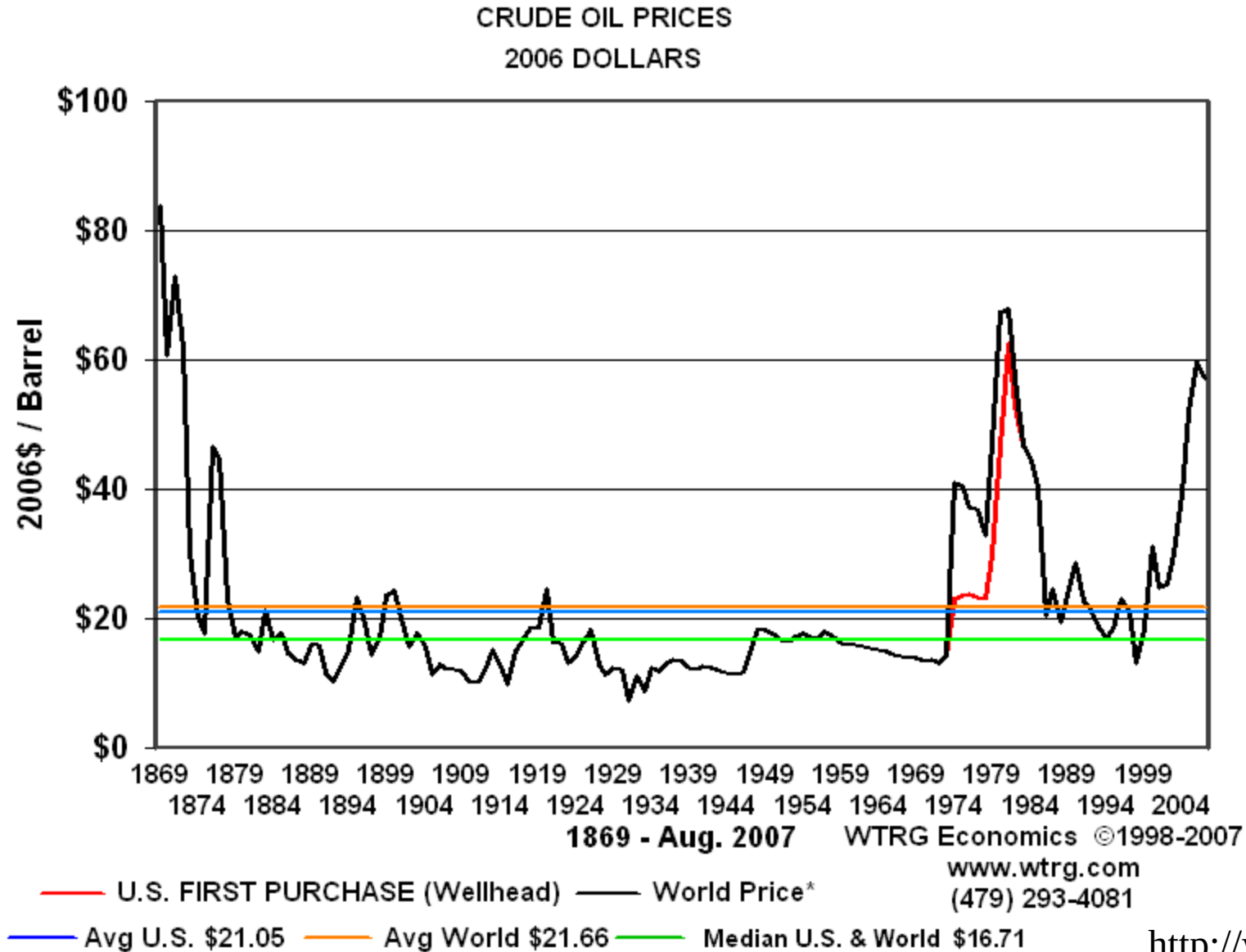


What the Modern World knew

- USA Economy of the 2000s



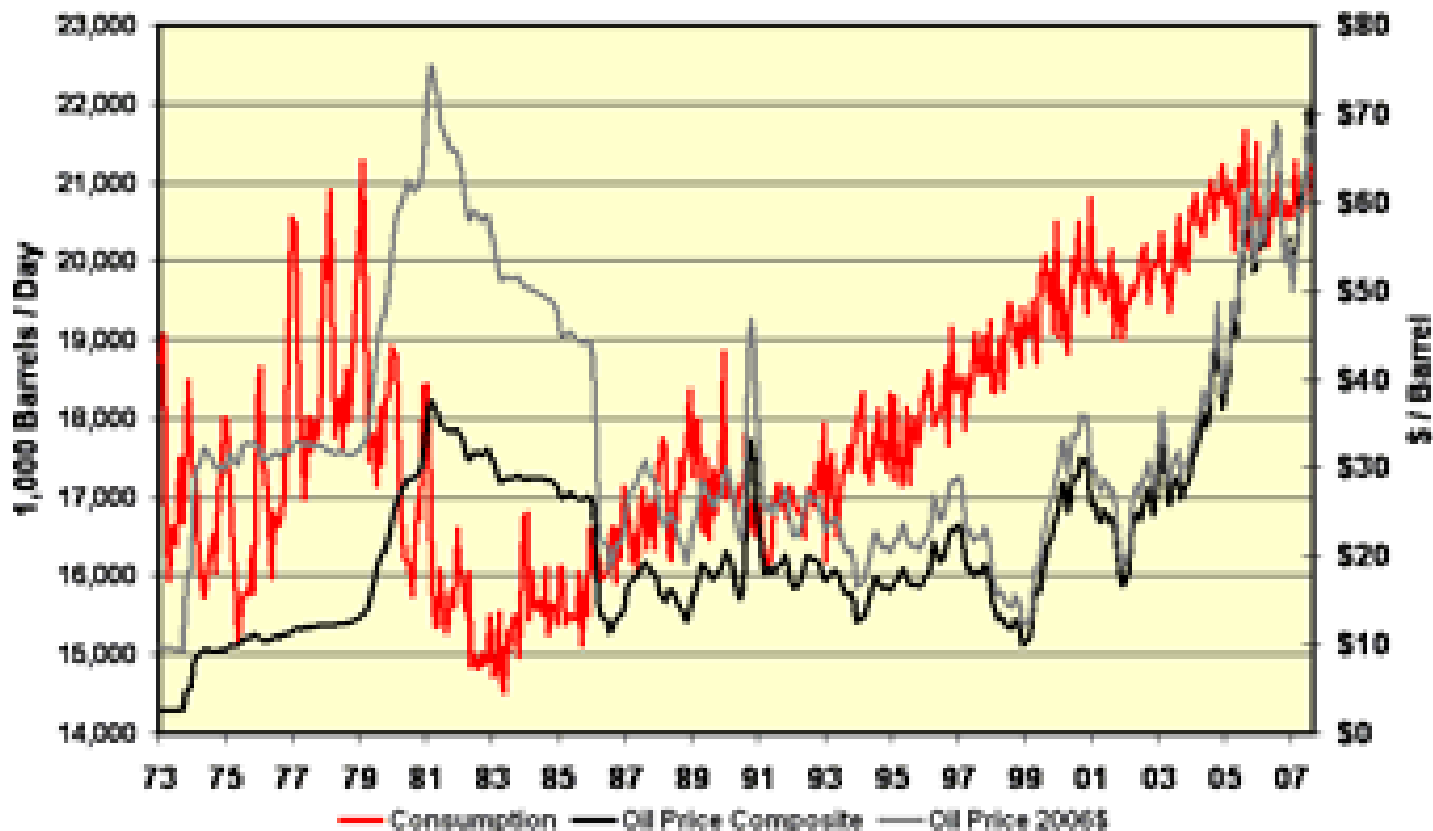
What the Modern World knew



What the Modern World knew

- **USA Economy of the 2000s**
 - Oil consumption

Petroleum Consumption and Price



What the Modern World knew

- **USA Economy of the 2000s**
 - **Gas prices adjusted for inflation (1999 dollars)**
 - **1950 \$0.37/gallon**
 - **1955 \$0.53**
 - **1960 \$0.63**
 - **1965 \$0.76**
 - **1970 \$0.65**
 - **1975 \$1.05**
 - **1980 \$3.21**
 - **1985 \$3.72**
 - **1990 \$1.98**
 - **1995 \$1.50**

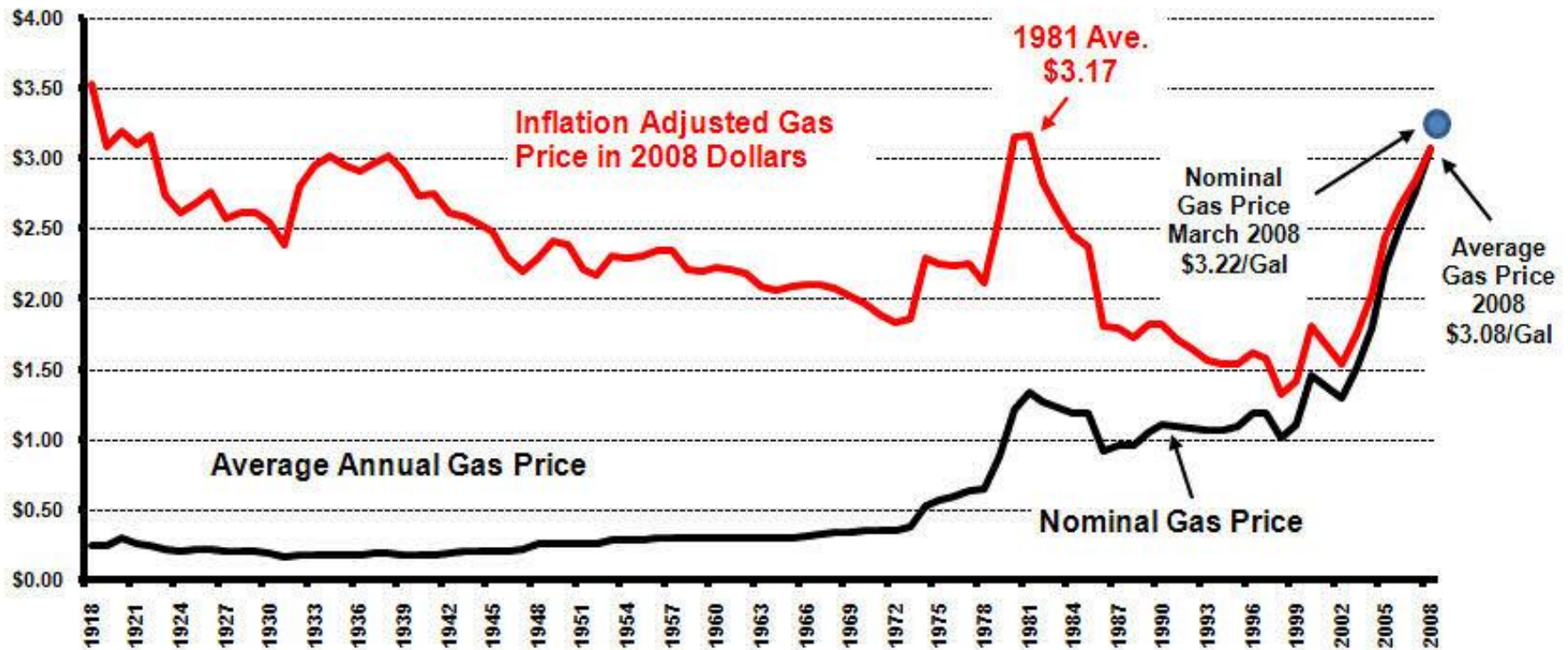
Gasoline Prices 1918-2008 Adjusted for Inflation

© 2008 *Financial Trend Forecaster*

www.InflationData.com

Prepared By Timothy McMahon

Updated 4/16/08



Note: Prices are Average Annual prices not Peak Prices
so peaks are smoothed out considerably

Source of Data: US Energy Information Administration
CPI-U Inflation index- www.bls.gov

What the Modern World knew

- **USA Economy of the 2000s**
 - **Deflationary pressures**
 - **Information Technology leading to ever higher productivity**
 - **ERP, SCM, CRM, eCommerce**
 - **Soaring energy prices**
 - **Worldwide distribution of labor ("offshoring")**
 - **Concentration of wealth at the top**
 - **Downward pressure on wages**

What the Modern World knew

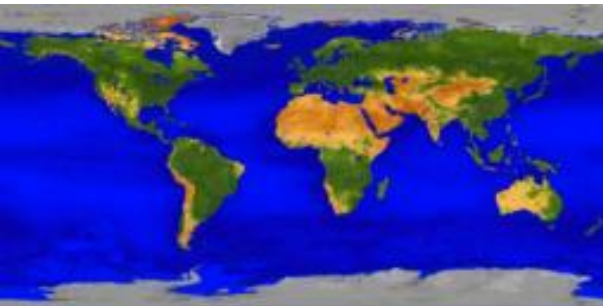
- **USA Economy of the 2000s**
 - **Mechanization of agriculture yielded cheap agricultural products that ordinary folks could afford**
 - **Globalization of manufacturing yields cheap manufacturing goods that ordinary folks can afford**
 - **Emphasis on the ordinary person: mechanization and globalization are steps in the continuing process of making goods affordable for the ordinary person**

What the Modern World knew

- **USA Economy of the 2000s**
 - **USA population increased by 250% in the 20th century (Britain's rose by less than 60%)**
 - **USA population grows faster than in China**

What the Modern World knew

- **Post Cold-War World**



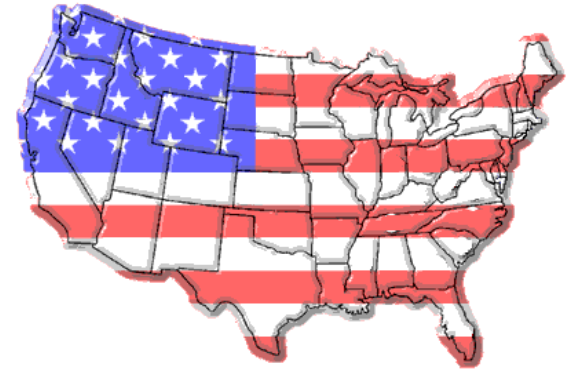
Materials and goods

\$\$\$

Capitals

Military protection

Huge trade deficit
Collapsing currency
Decline standards of living



Trade surplus
Rising standards of living
Increasing stability

What the Modern World knew

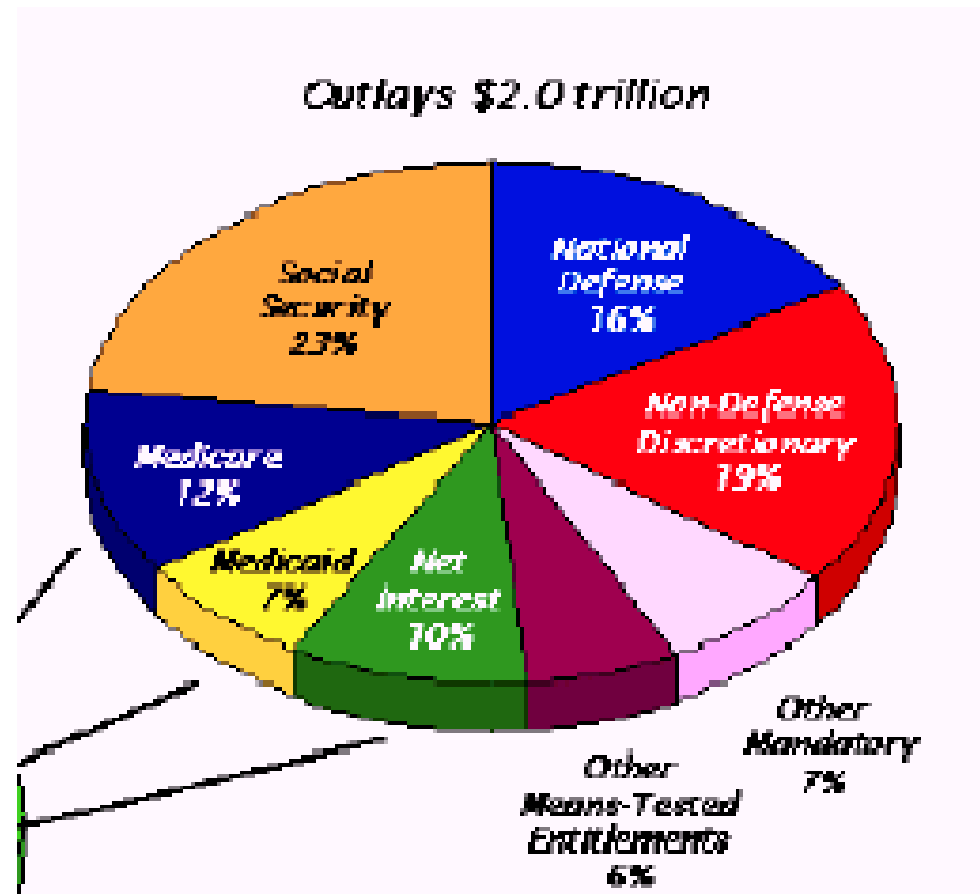
Persons on Payroll: 1980 to 2002

Reynolds Tobacco	-90.2%
Exxon + Mobil*	-72.2%
General Motors	-53.1%
Chevron + Texaco*	-50.5%
Kodak	-46.0%
Xerox	-44.3%
Bristol-Myers + Squibb*	-43.9%
CSX Railroad	-43.0%
DuPont	-41.9%
Goodyear	-36.3%
Campbell Soups	-34.2%
Sears	-25.9%
Boeing	+55.3%
Procter & Gamble	+67.2%
Pfizer	+137.9%
American Airlines	+144.2%
Hewlett-Packard	+147.4%
United Parcel Service	+224.3%
McDonald's	+253.0%
Intel	+395.0%
Federal Express	+2,620.6%
Wal-Mart	+4,714.8%

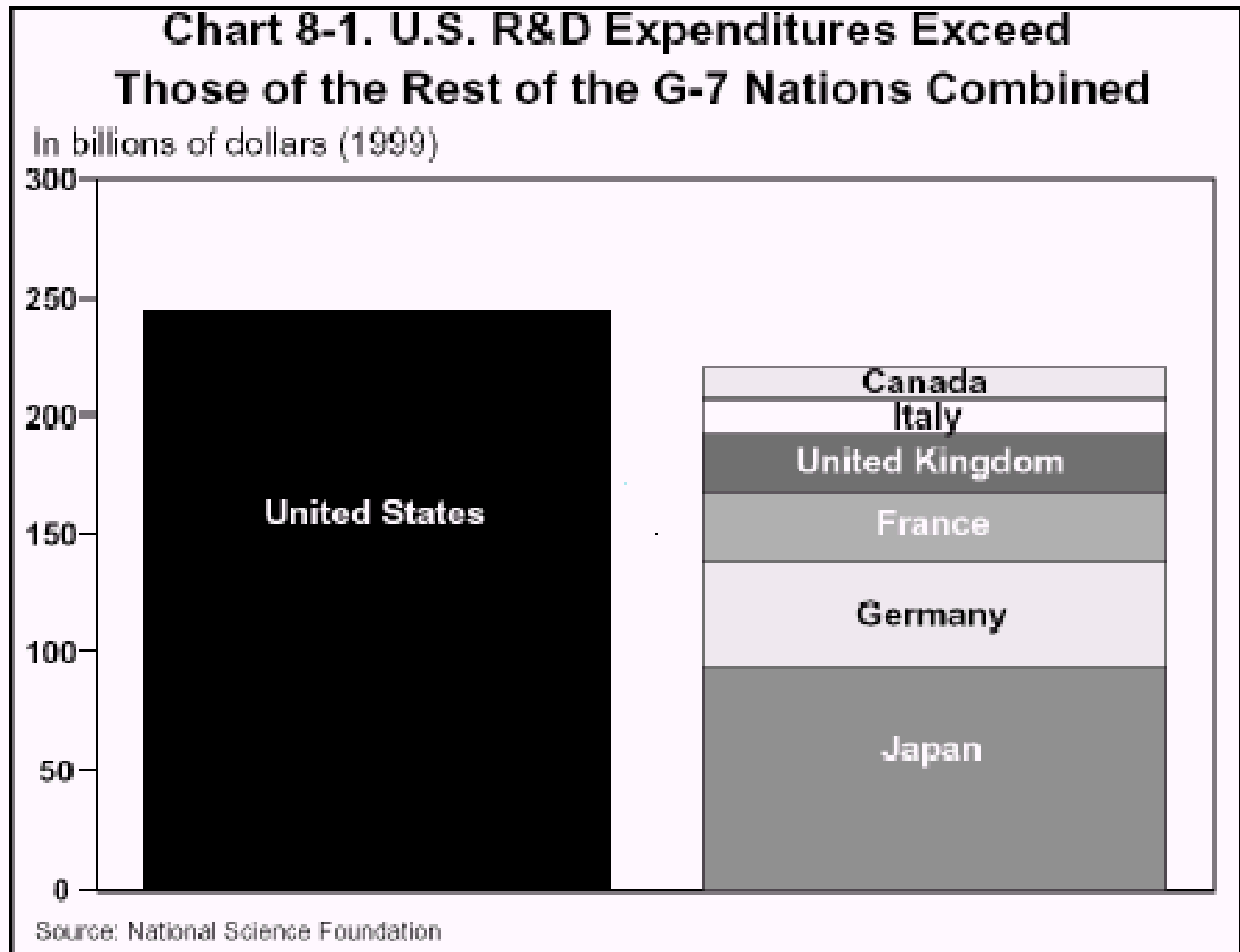
Source: *Fortune* magazine (1981 and 2003)

What the Modern World knew

- USA Federal budget 2003



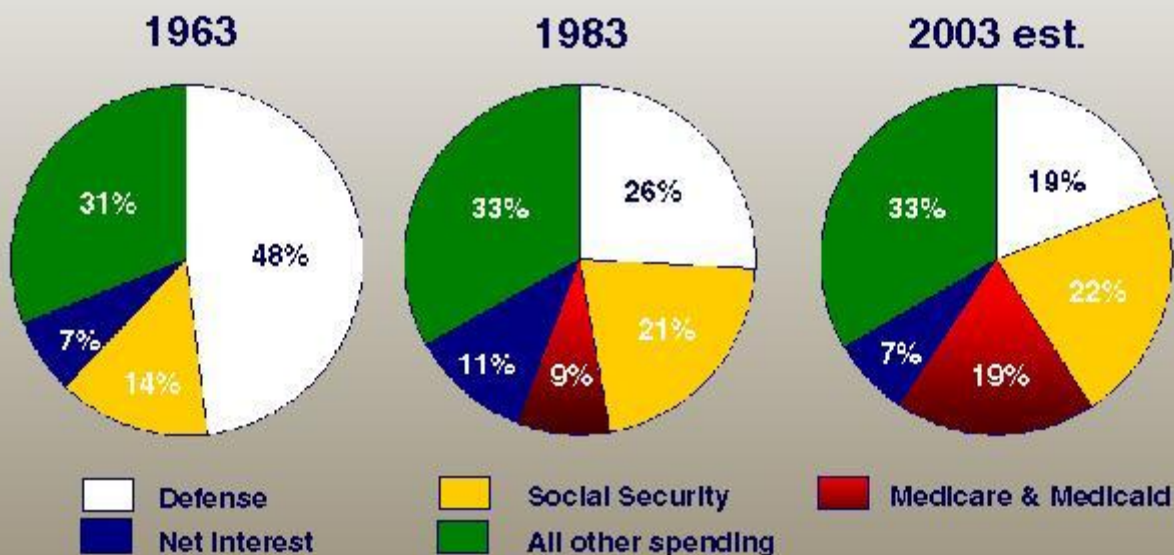
What the Modern World knew



What the Modern World knew

- USA debt (2003): \$6.8 debt
- Debt per person: \$24,000

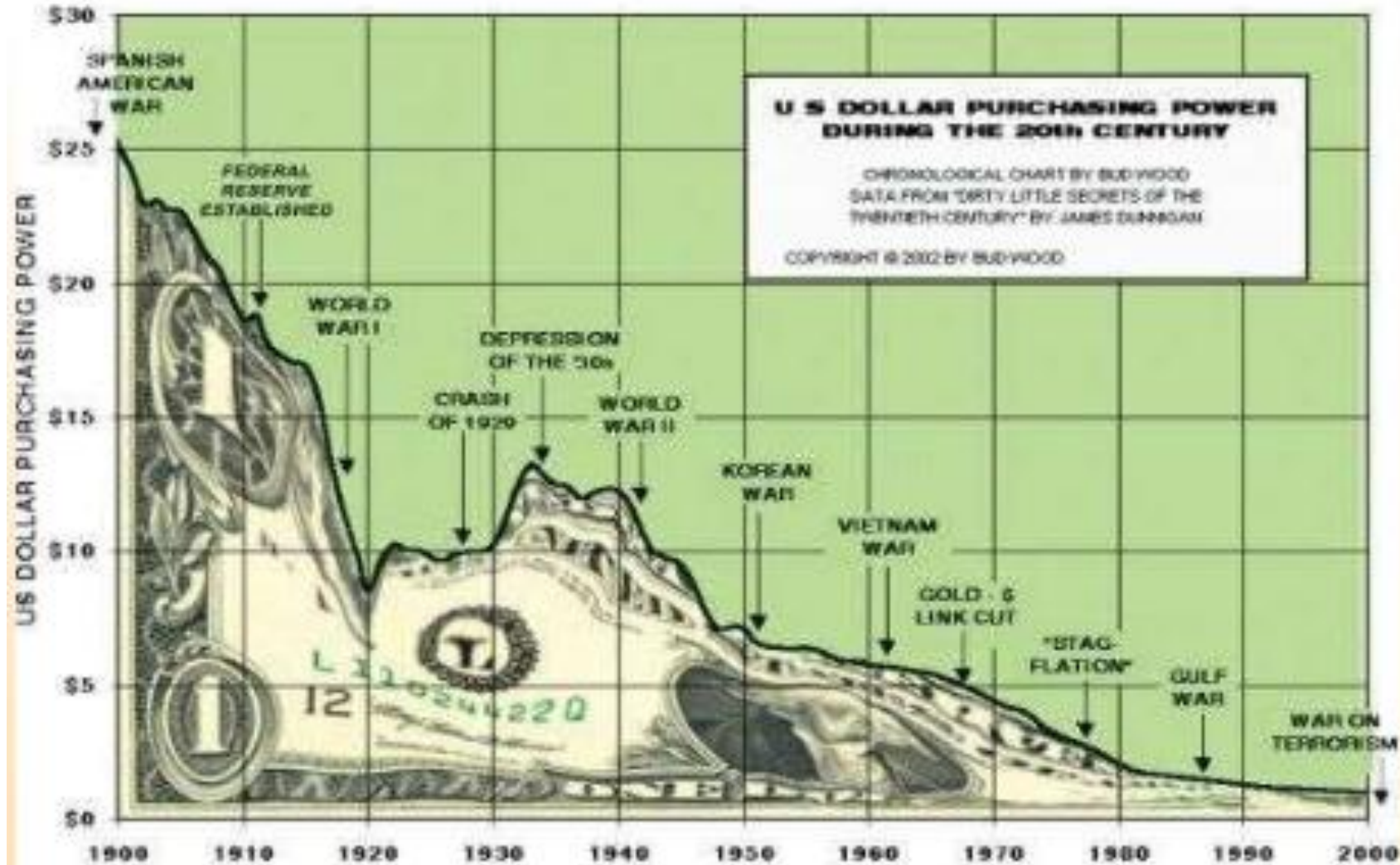
Composition of Federal Spending



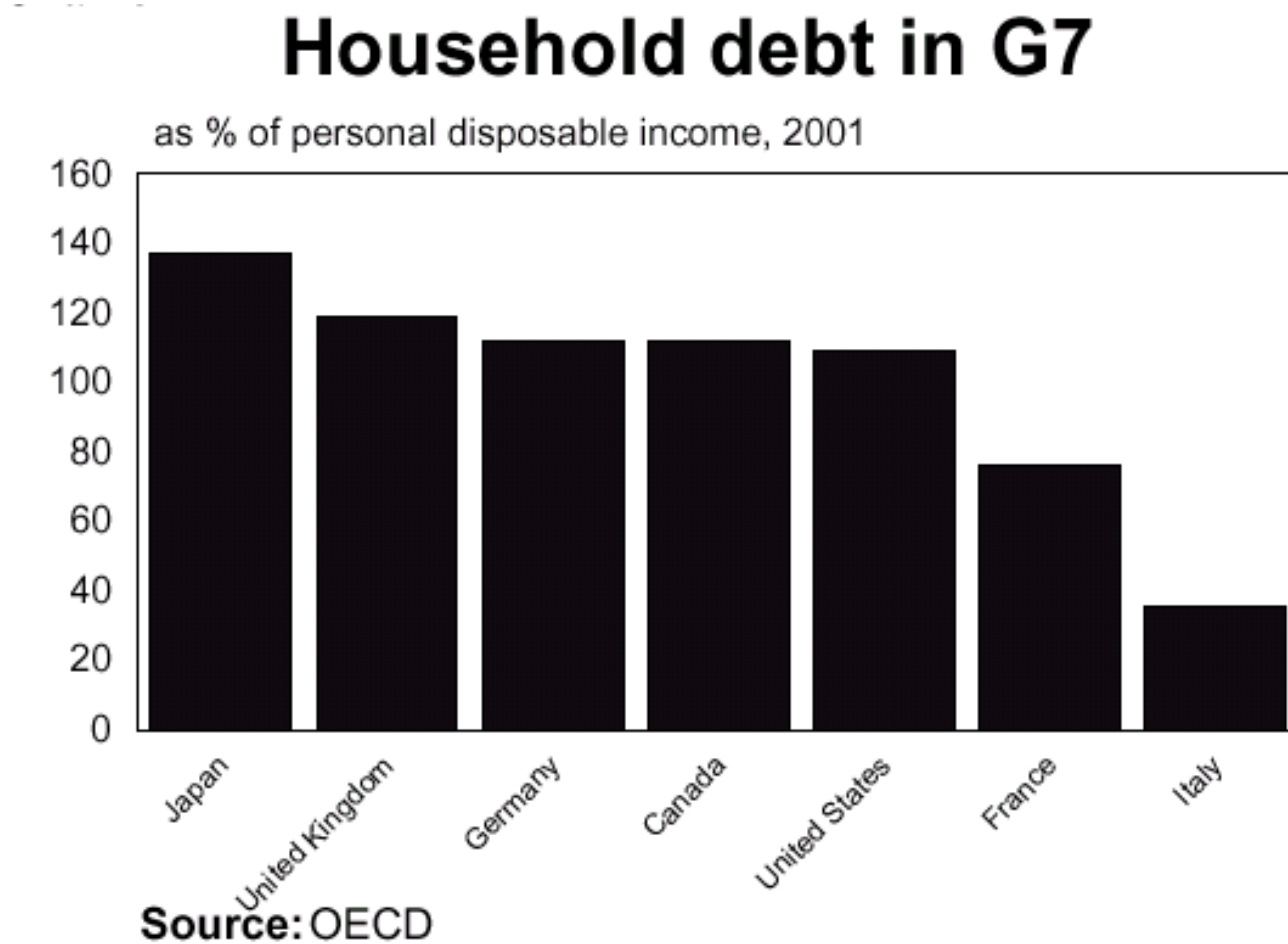
Source: Budget of the United States Government, FY2004, and FY2004 MidSession Review, Office of Management and Budget.

What the Modern World knew

- USA dollar



What the Modern World knew



What the Modern World knew

- USA in 2004: the world's undisputed military and economic superpower
 - Global presence: maintains 700 military installations abroad
 - Military superpower: spends as much on defense as the next 20 nations combined
 - (but this is only 4% of its gross domestic product)
 - USA share of total world product is 30%, up from 20% in the 1980s
 - The American stock markets account for 36% of global market value
 - Power of Knowledge: 75% of all Nobel laureates in the sciences, economics, and medicine do research in the USA

What the Modern World knew

- USA - military spending



What the Modern World knew

- Great Recession (2008-10)
 - Low interest rates
 - The “dot-com” crash (2000): ~70% drop in the NASDAQ
 - The Federal Reserve lowers interest rates to 1%
 - The speculative frenzy shifts from the stock market to real estate

What the Modern World knew

- Great Recession (2008-10)
 - Affordable housing
 - The Community Reinvestment Act (1977) encourages banks to lend money to the poor
 - The Housing and Community Development Act (1992) requires government agencies Fannie Mae and Freddie Mac to provide affordable housing loans
 - Fannie Mae makes a “trillion-dollar commitment” (1993) to increase financing for affordable housing

What the Modern World knew

- Great Recession (2008-10)
 - Affordable housing
 - Loans to higher-risk borrowers
 - Subprime mortgages grow from 5% of total originations in 1994 to 20% (\$600 billion) in 2006
 - Subprime lending in minority neighborhoods
 - 2007: The value of US subprime mortgages hits \$1.3 trillion

What the Modern World knew

- Great Recession (2008-10)
 - Household debt
 - Housing bubble of the 2000s: housing prices nearly double between 2000 and 2006
 - However, between 2000 to 2007 the median household income stays flat
 - U.S. households become increasingly indebted: the ratio of debt to disposable personal income rises from 77% in 1990 to 127% at the end of 2007

What the Modern World knew

- Great Recession (2008-10)
 - Financial deregulation
 - Anti-regulatory crusader Phil Gramm's banking deregulation bill (1995) removes Depression-era barriers between commercial banks, investment banks, insurance companies, and securities firms
 - Phil Gramm's "Commodity Futures Modernization Act" (2000) deregulates "credit default swaps" (CDS)
 - Total investment by financial institutions in CDS by 2008: \$65 trillion
 - Wall Street's financial innovations: mortgage-backed security (MBS) and collateralized debt obligation (CDO)

What the Modern World knew

- Great Recession (2008-10)
 - Crash and bailout
 - Sep 2008: Stock market crash and bank failures due to the vulnerability of CDS to troubled mortgages
 - Oct 2008: Lehman Brothers liquidated
 - Dec 2008: Treasury secretary Henry Paulson's "Emergency Economic Stabilization Act" rescues his former Wall Street colleagues

What the Modern World knew

- Great Recession (2008-10)
 - Crash and bailout
 - 2009-11: More than one million families lose their foreclosed homes (8% of all homes in the USA) and millions of people lose their jobs
 - 2006-12: US households lose over \$7 trillion in home equity
 - 2005-09: Median wealth falls by 66% among Hispanic households, 53% among Black households, 16% among White households
 - 2009: Unemployment peaks at 10%

What the Modern World knew

Top companies by market capitalization in 2001

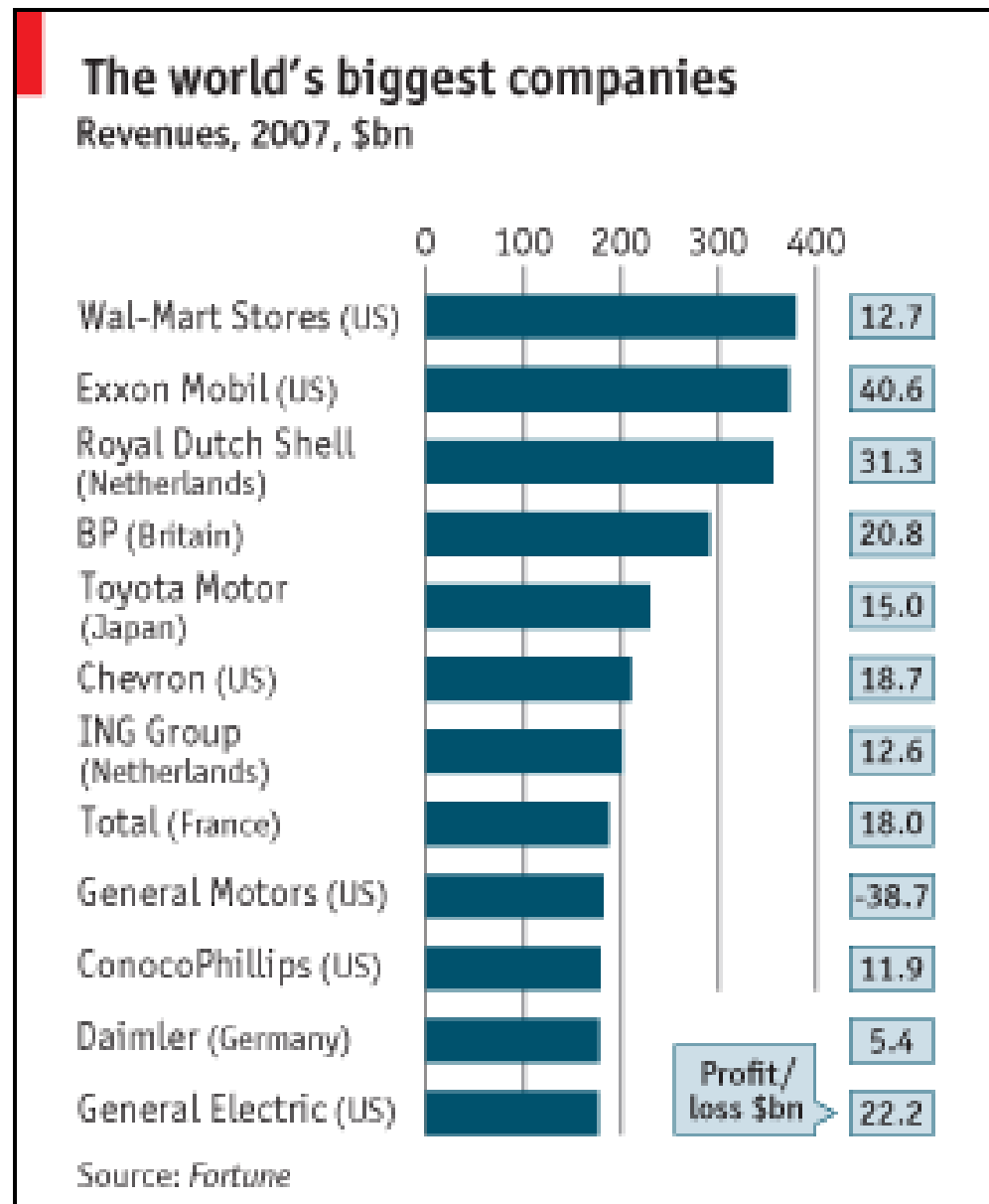
1	General Electric (USA)	455
2	Microsoft (USA)	316
3	Exxon Mobil (USA)	298
4	Pfizer (USA)	265
5	Citigroup (USA)	255
6	Wal-Mart Stores (USA)	231
7	Intel (USA)	224
8	BP Amoco (Britain)	198
9	American International Group (USA)	194
10	AOL Time Warner (USA)	190
11	IBM (USA)	187
12	Vodafone Group (Britain)	180
19	Royal Dutch Petroleum (Holland)	130
20	Coca-Cola (USA)	128
21	Toyota (Japan)	127
23	Nokia Oyj (Finland)	118
25	Philip Morris Companies (USA)	113

What the Modern World knew

- The largest companies of 2003 by revenues
 - Walmart \$260b
 - British Petroleum \$230b
 - Exxon Mobil \$220b
 - Royal Dutch Shell \$200b
 - General Motors \$190b
 - Ford \$160b
 - Daimler Chrysler \$150b
 - Toyota \$150b
 - General Electric \$130b

What the Modern World knew

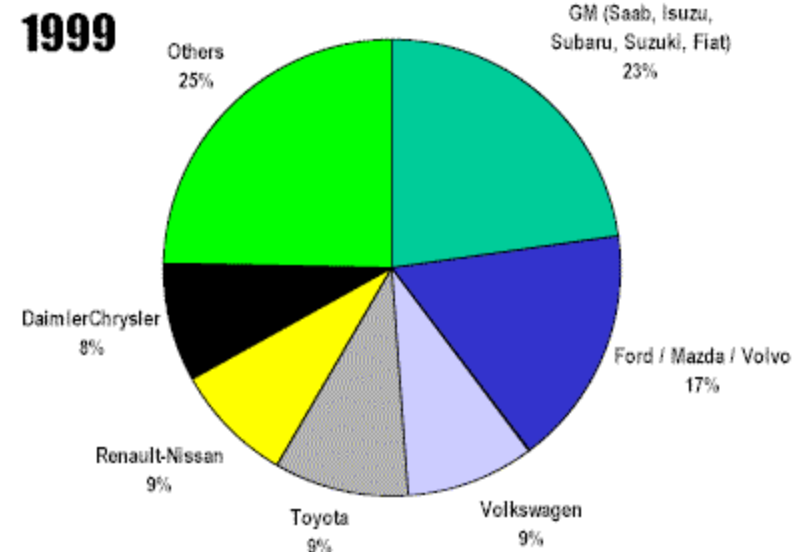
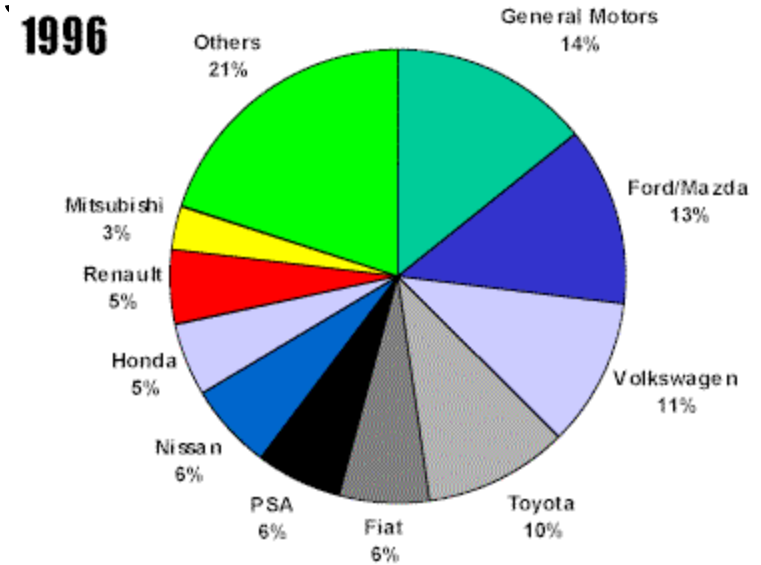
- The largest companies of 2007 by revenues



What the Modern World knew

- The World's top car manufacturers in 2003

- General Motors: 8.59 million
- Toyota: 6.78 million
- Ford: 6.54
- Volkswagen: 5.02
- Daimler-Chrysler: 4.36
- PSA/Peugeot/Citroen: 3.29
- Hyundai: 3.05
- Nissan: 2.97
- Honda: 2.91
- Renault: 2.39

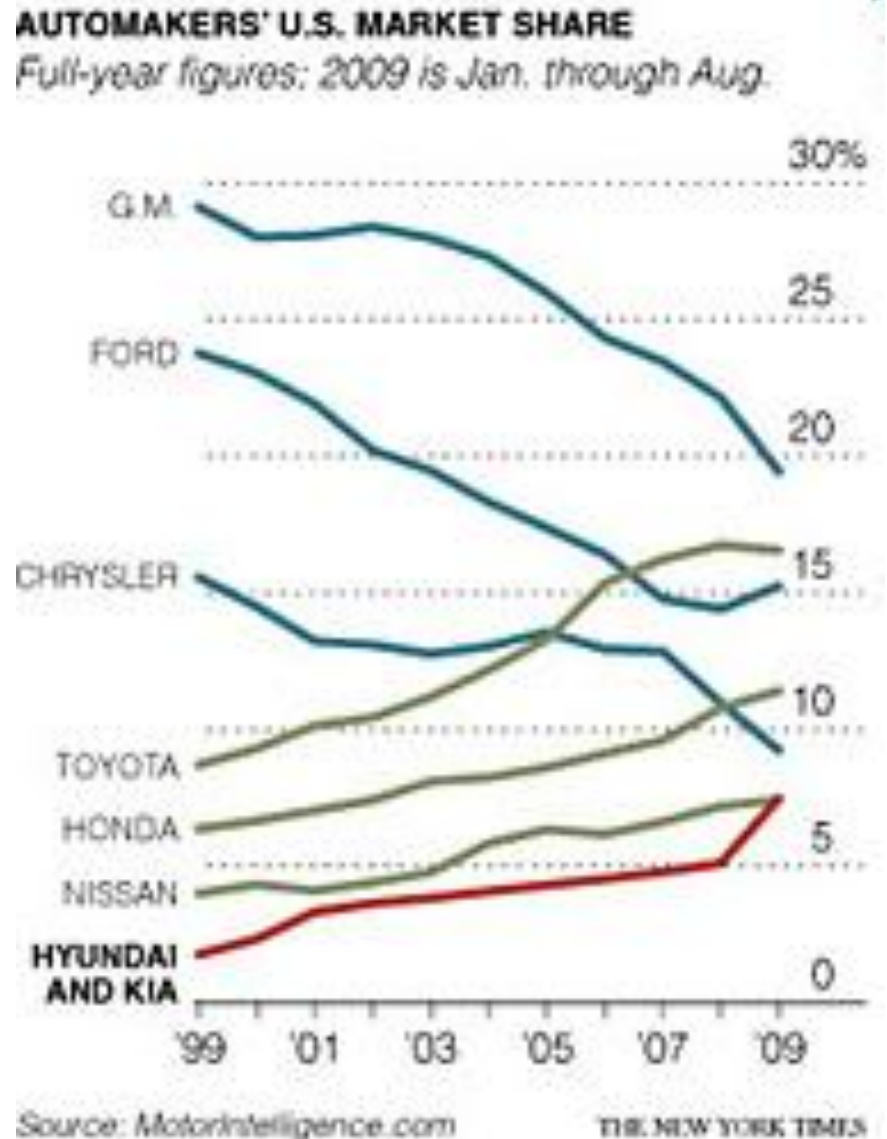


What the Modern World knew

- **The World's top car manufacturers in 2008**
 - **Toyota (Japan)**
 - **General Motors (USA)**
 - **Volkswagen (Germany)**
 - **Hyundai (Korea)**
 - **Ford**
 - **Honda**

What the Modern World knew

- USA auto market (2008)

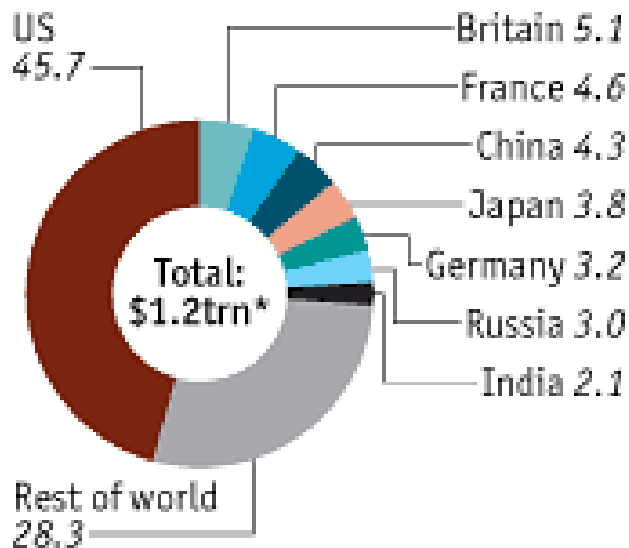


What the Modern World knew

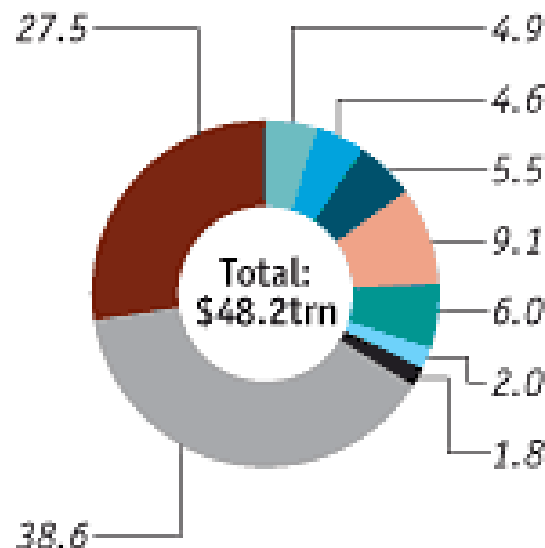
2

Unequal shares

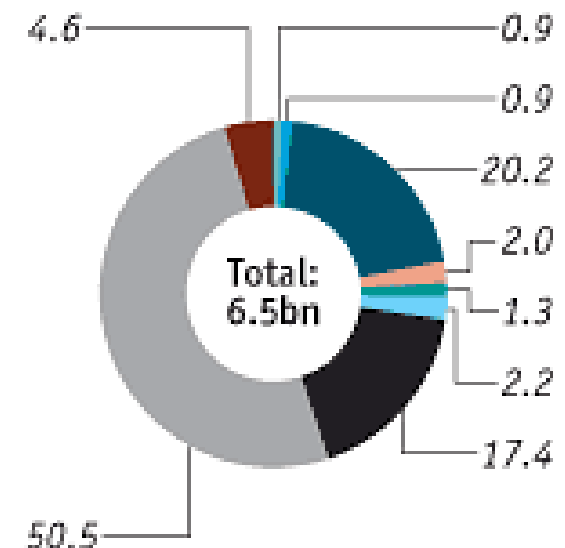
World defence spending
% of total, 2006



World GDP
% of total, 2006



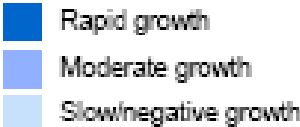
World population
% of total, 2005



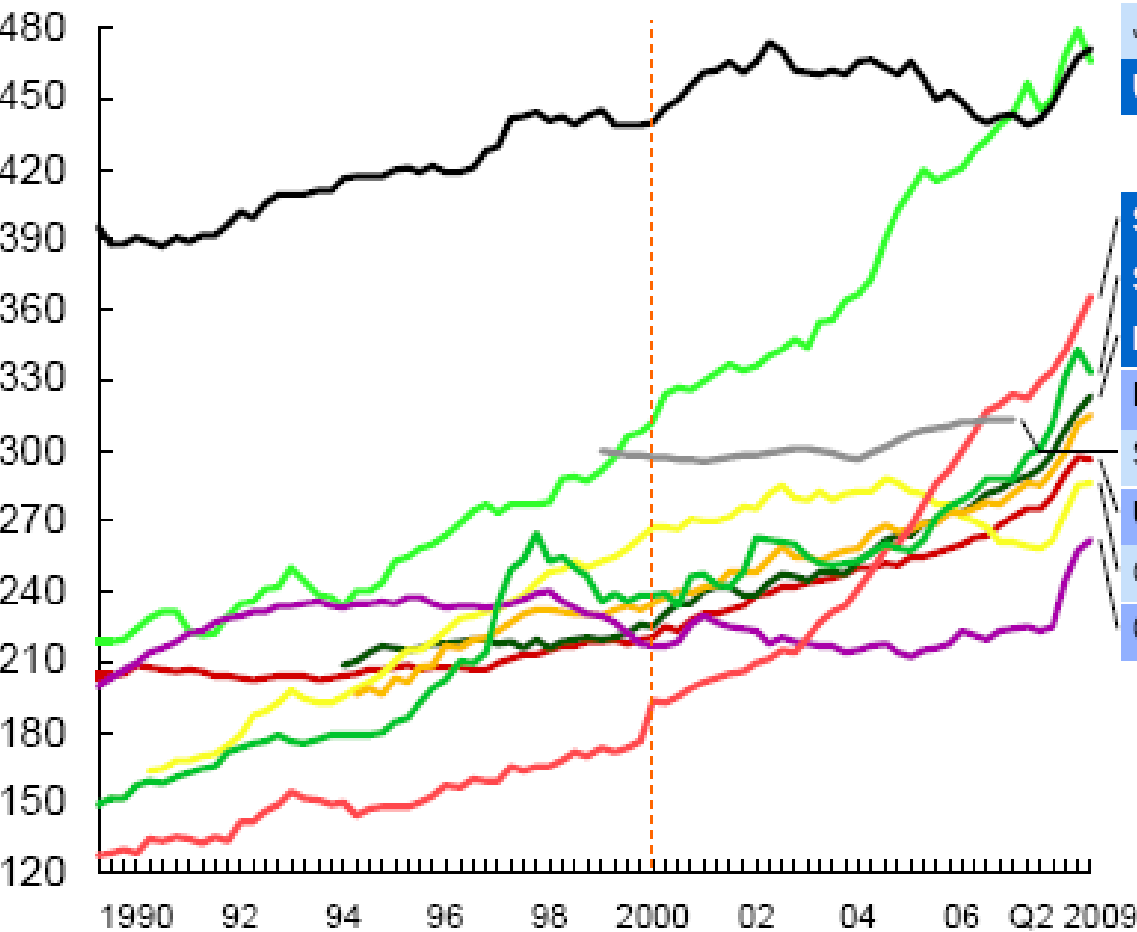
Sources: SIPRI; IMF WEO; UN World Population Prospects

*2005 prices

Debt grew in most mature economies



Domestic private and public sector debt¹ by country
% of GDP



	CAGR ² , %		Change, p.p. 2000-08
	1990-00	2000-08	
Japan	1.2	0.5	19
UK ³	3.3	5.2	157
Spain	4.1	7.4	150
S. Korea	4.3	4.2	93
France	1.2	3.9	83
Italy	2.9	3.1	64
Switzerland	N/A	0.8	17
US	0.6	3.5	70
Germany	5.6	0.3	7
Canada	0.3	1.5	28

1 "Debt" is defined as all credit market borrowing including loans and fixed-income securities.
2 Compound annual growth rate. Where data are unavailable, the longest possible period is used.
3 Even after removing foreign lending by UK banks, UK debt/GDP remains higher than every country except Japan.

What the Modern Age knew

- **Flattening of the world**
 - **The fall of the European empires after World War II creates dozens of independent countries**
 - **The new countries experiment with fascism and communism, the two systems promoted by the two superpowers USA and Soviet Union, both fearful of democracy during the Cold War**
 - **Both systems create a lot of poverty around the world**
 - **The fall of communism (1989) turns most poor countries into democratic capitalist countries**

What the Modern Age knew

- Flattening of the world
 - Because they are poor, these countries offer a very cheap labor force
 - Because labor is cheaper there, Western multinationals offsource jobs to the developing world
 - Progress in computers (personal computers) and telecommunications (the Internet) speeds up this process
 - Fundamentally, communism was a blessing to capitalism because it created so much poverty worldwide for capitalists to exploit

What the Modern Age knew

- Flattening of the world
 - Collapse of communism turns the whole world into one giant capitalist economy
 - Lower cost of computers and of telecommunications turn every household into a consumer and producer of digital content
 - Internet and World-wide Web vastly increase the ability to communicate digital information
 - Low wages in the developing world foster outsourcing of Western jobs
 - It is not only capitalism that spreads worldwide but also high-tech and lifestyle

What the Modern Age knew

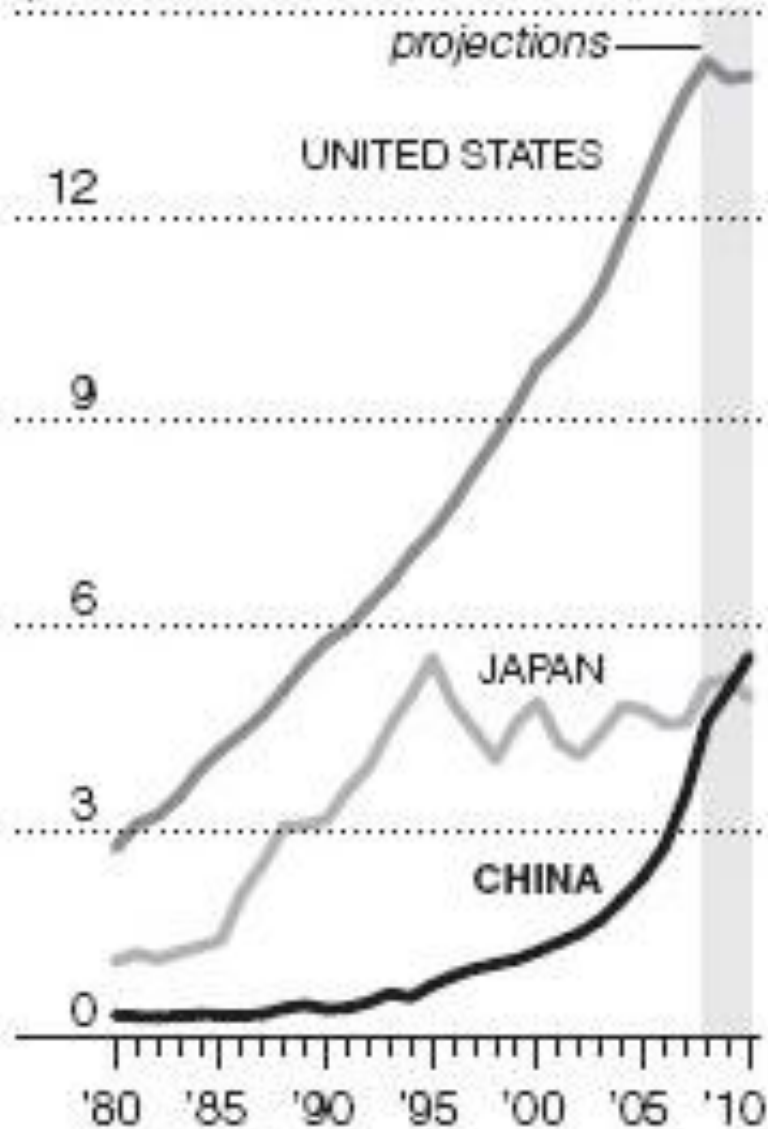
- The Asian century
 - 1945: A former European colony (USA) wins the world war
 - The old order (Europe ruling the world) makes no more sense
 - Asian and African colonies gain independence from Europe
 - Japan, Taiwan, Korea, former European colonies and eventually China abandon the European model and adopt the USA model
 - The new Asian nations begin to outperform Europe

What the Modern Age knew

- **The Asian century**
 - **1970: Japan overtakes all European countries and becomes the third economic power after USA and USSR**
 - **2007: China overtakes all European countries and becomes the third economic power after USA and Japan**

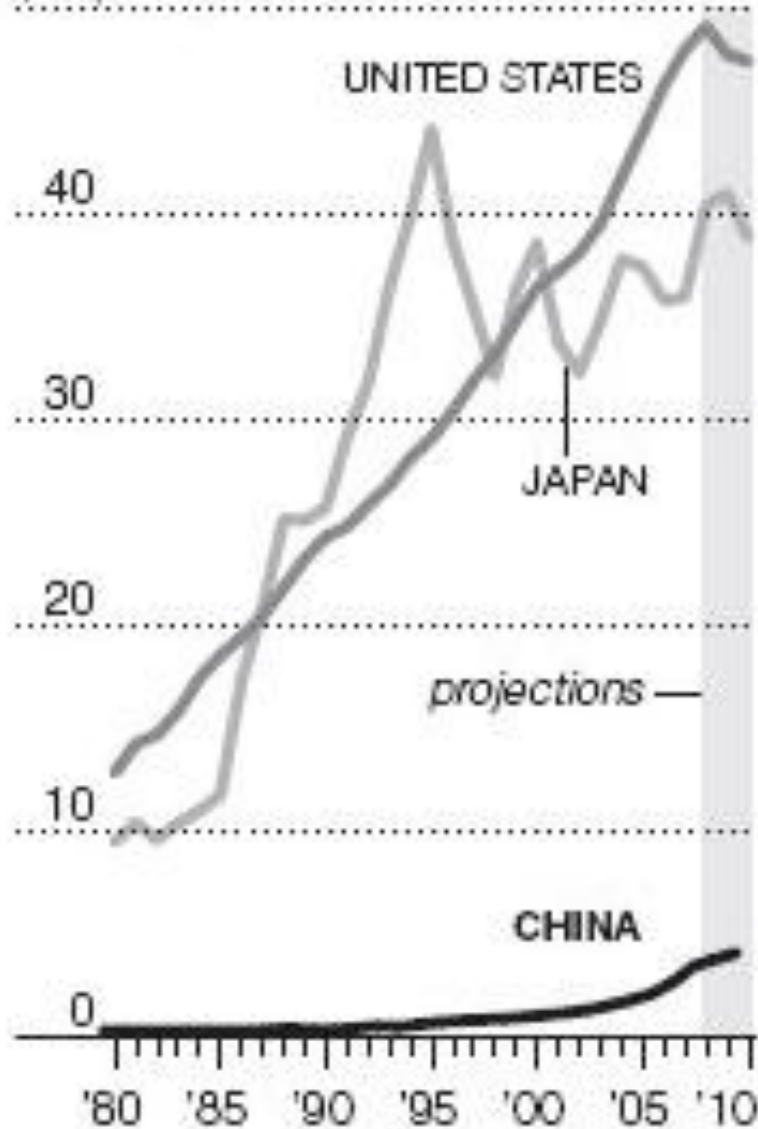
ANNUAL G.D.P.

\$15 trillion



ANNUAL PER CAPITA G.D.P.

\$50,000

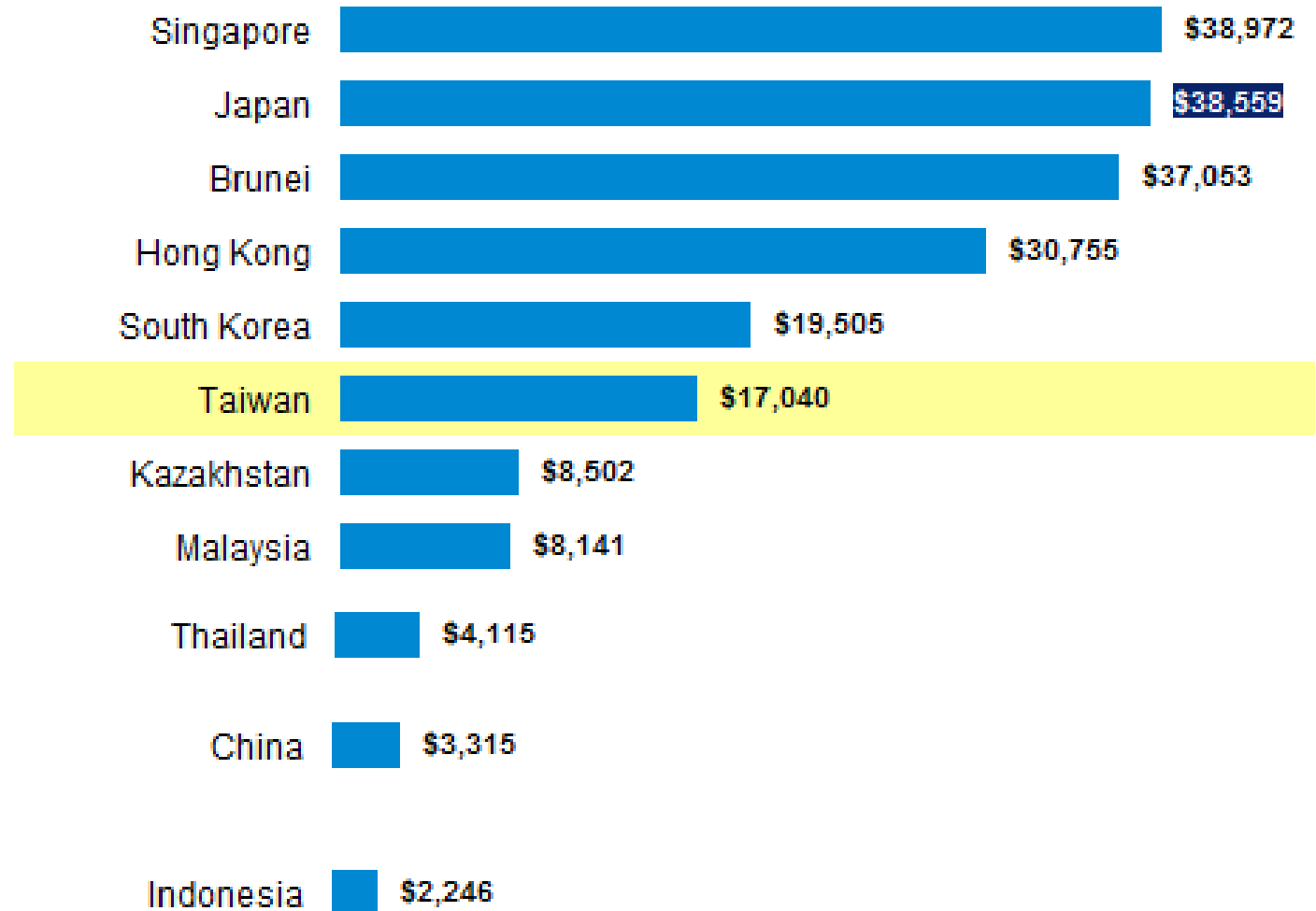


Source: International Monetary Fund

THE NEW YORK TIMES

What the Modern Age knew

- GDP per capite

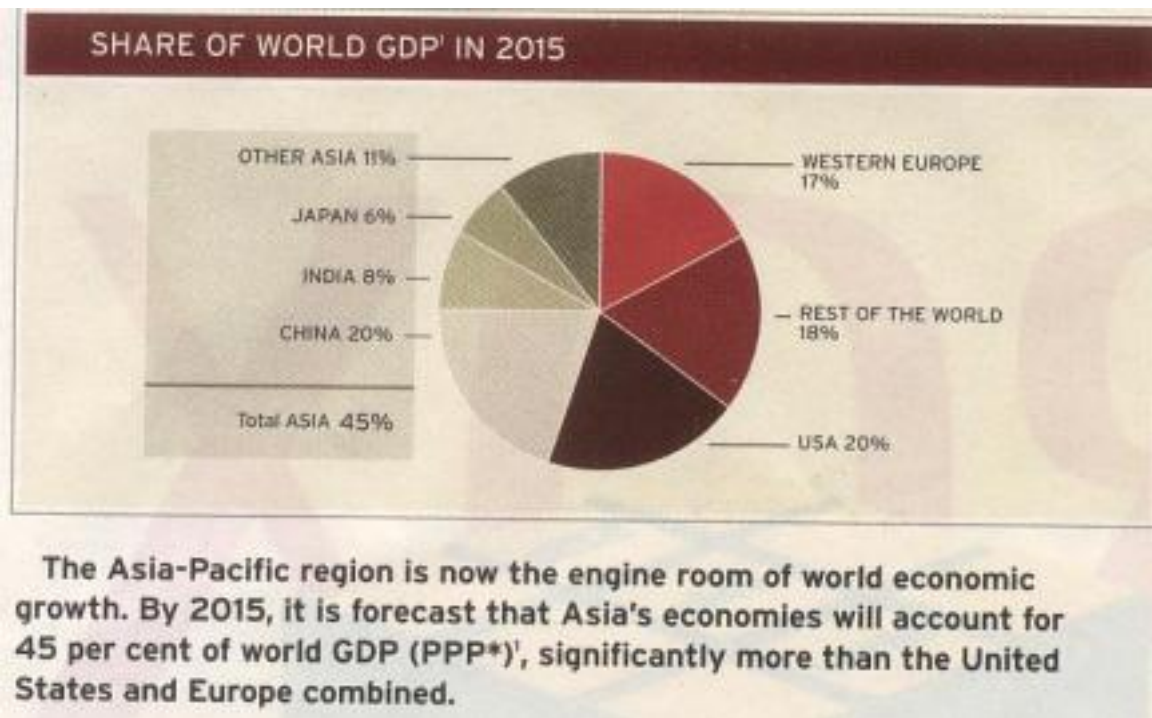


What the Modern Age knew

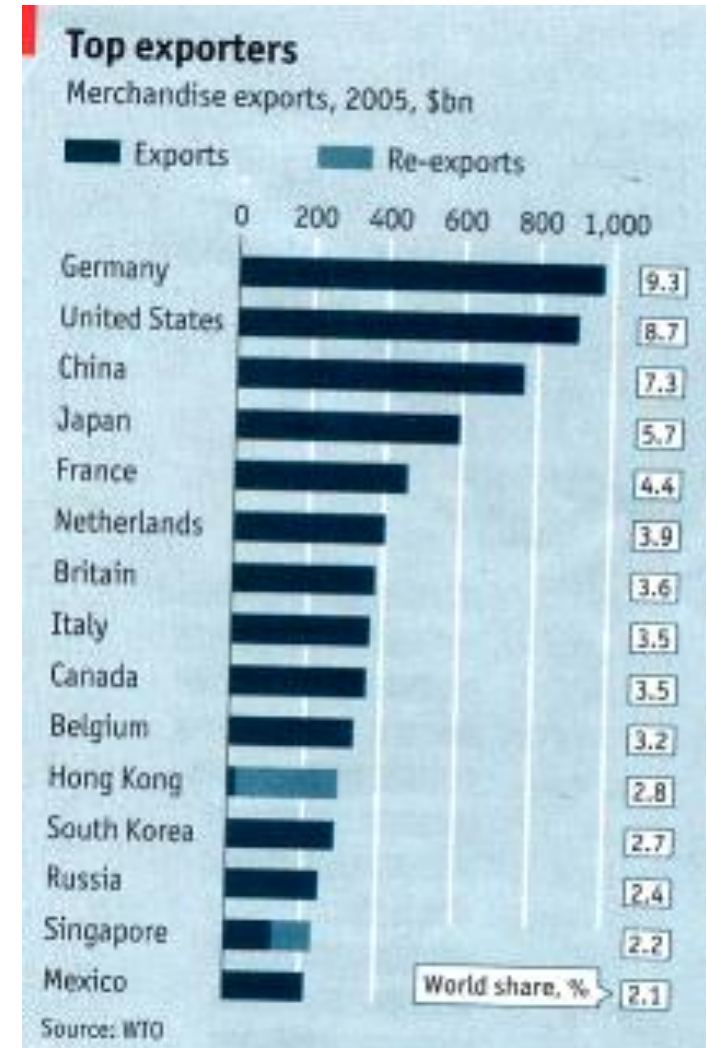
- The Asian century
 - The Age of the Pacific
 - Japan, China, Asean, Australia, India
 - The combined gross product of Asian-Pacific countries increases from 7.8% of world GDP in 1960 to 16.4% in 1982 and to over 20% in 2000
 - USA trade shifts from Europe to Asian-Pacific

What the Modern Age knew

- The Asian century
 - The Age of the Pacific

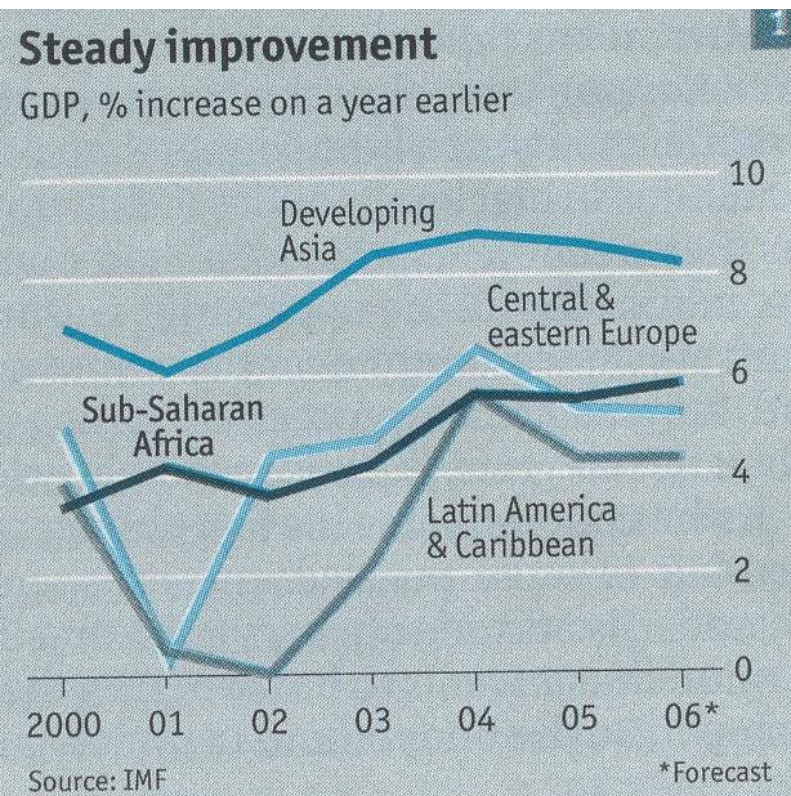


(Economist, May 2006)

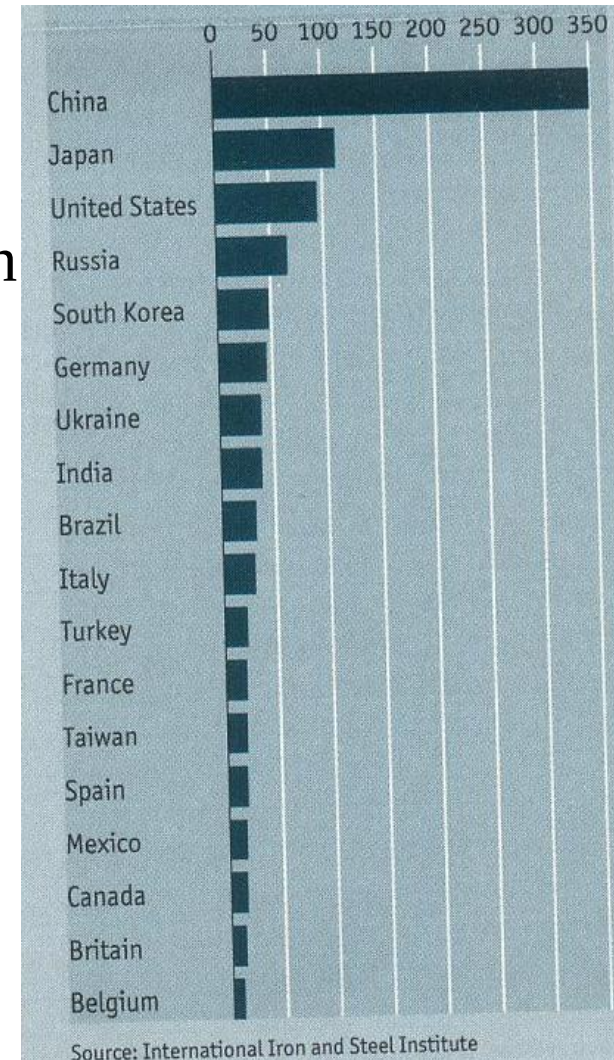


What the Modern Age knew

- **The Asian century**
 - **The Age of the Pacific**

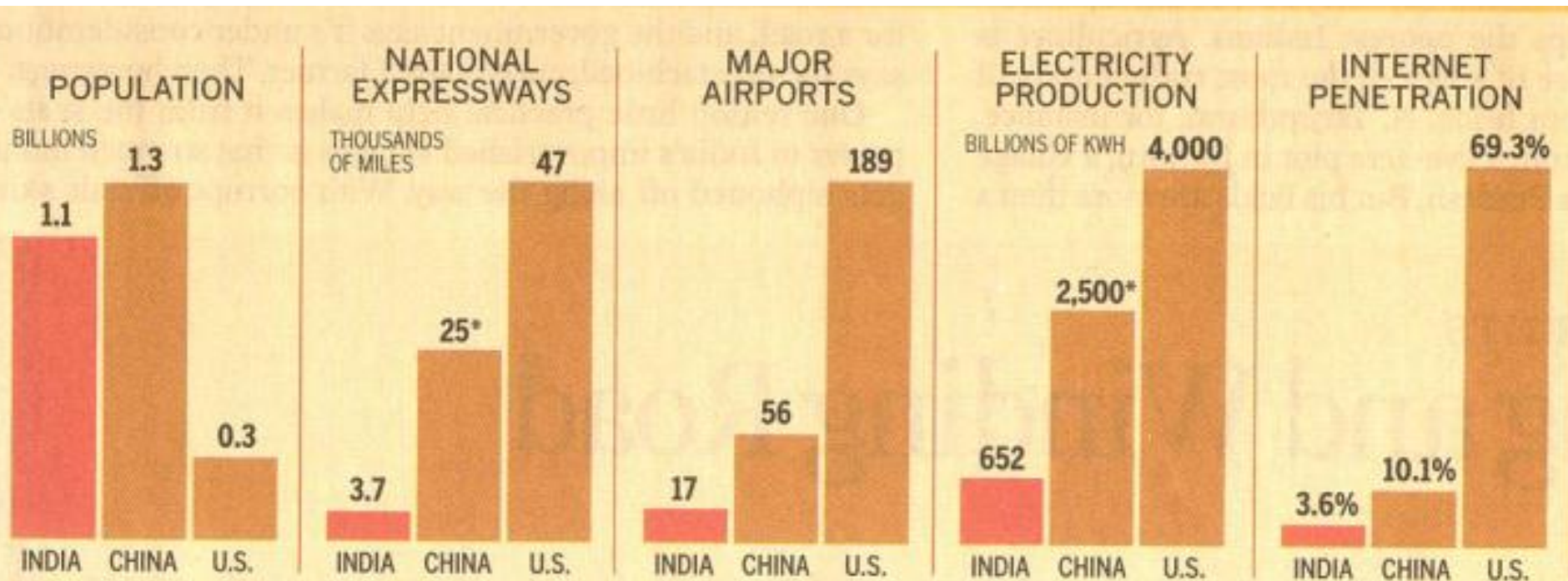


Steel production
(tonnes 2005)



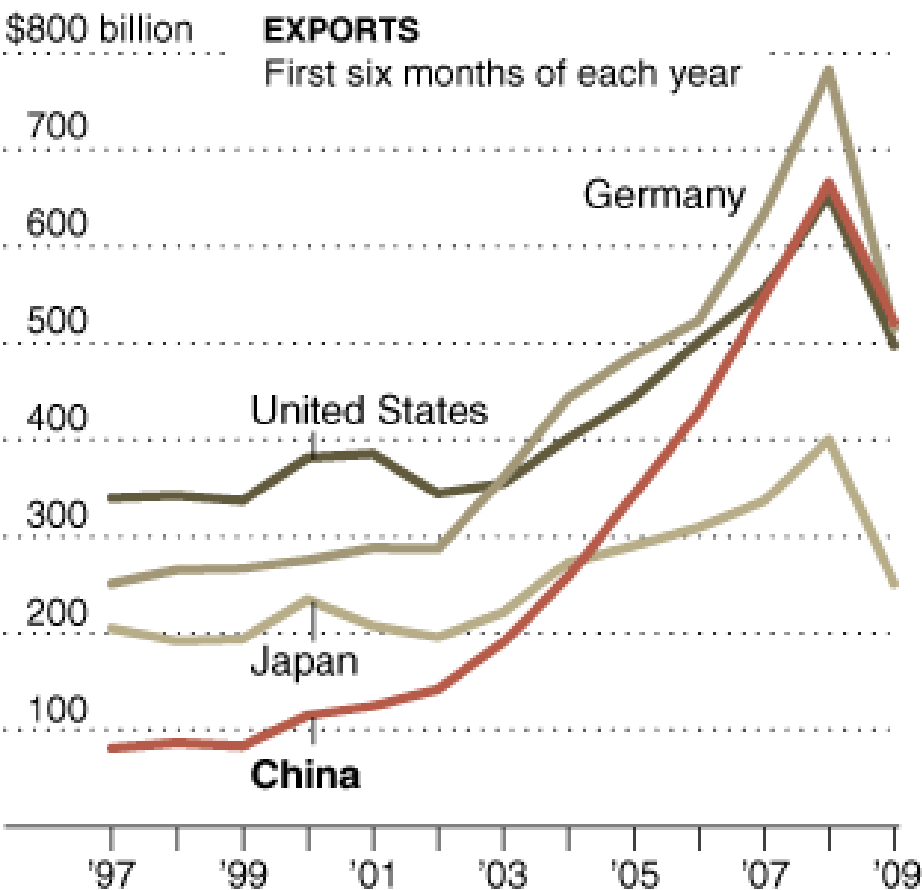
What the Modern Age knew

- The Asian century
 - The Age of the Pacific
 - USA, China, India in 2007



What the Modern Age knew

- **The Asian century**



Source: Global Trade Atlas

	EXPORTS Through 6/09	CHANGE 2009 vs. 2008	
China	\$521.8 bil.	-21.7%	
Germany	515.9	-34.1	
United States	498.2	-23.8	
Japan	250.9	-37.3	
Netherlands	229.3	-31.5	
France	223.2	-31.9	
Italy	189.1	-34.1	
Belgium	172.6	-32.8	
South Korea	165.4	-22.7	
Britain	160.8	-34.2	

THE NEW YORK TIMES

What the Modern Age knew

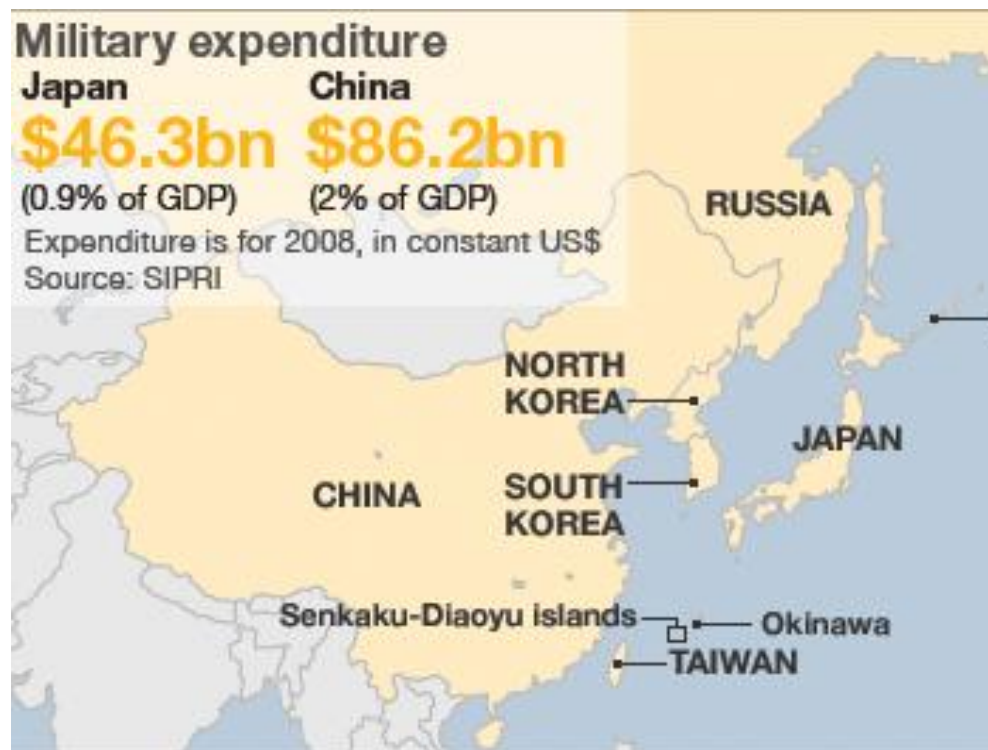
- **The Asian century**
 - **China:**
 - **Socialist market economy: free-market economic reforms are overseen by the communist one-party state**
 - **11% yearly GDP growth rate in the 2000s**

- **The Asian century**
 - **China: the largest dictatorship in the world is providing its citizens with the best education in the world.**

SCIENCE	PISA SCORE	READING	PISA SCORE	MATH	PISA SCORE
Shanghai, China*	575	Shanghai, China	556	Shanghai, China	600
Finland	554	Korea	539	Singapore	562
Hong Kong, China	549	Finland	536	Hong Kong, China	555
Singapore	542	Hong Kong, China	533	Korea	546
Japan	539	Singapore	526	Taiwan	543
Korea	538	Canada	524	Finland	541
New Zealand	532	New Zealand	521	Liechtenstein	536
Canada	529	Japan	520	Switzerland	534
Estonia	528	Australia	515	Japan	529
Australia	527	Netherlands	508	Canada	527
Netherlands	522	Belgium	506	Netherlands	526
Taiwan	520	Norway	503	Macao, China	525
Germany	520	Estonia	501	New Zealand	519
Liechtenstein	520	Switzerland	501	Belgium	515
Switzerland	517	Poland	500	Australia	514
Britain	514	Iceland	500	Germany	513
Slovenia	512	United States	500	Estonia	512
Macao, China	511	Liechtenstein	499	Iceland	507
Poland	508	Sweden	497	Denmark	503
Ireland	508	Germany	497	Slovenia	501
Belgium	507	Ireland	496	Norway	498
Hungary	503	France	496	France	497
United States	502	Taiwan	495	Slovakia	497
AVERAGE SCORE	501	Denmark	495	AVERAGE SCORE	497
Czech Republic	500	Britain	494	Austria	496
Norway	500	Hungary	494	Poland	495
Denmark	499	AVERAGE SCORE	494	Sweden	494
France	498	Portugal	489	Czech Republic	493
Iceland	496	Macao, China	487	Britain	492
Sweden	495	Italy	486	Hungary	490
Austria	494	Latvia	484	Luxembourg	489
Latvia	494	Slovenia	483	United States	487

What the Modern Age knew

- The Asian century
 - China vs Japan



Armed forces	Japan	China
Submarines 	18	9
Destroyers 	41	27
Fighters 	310	1,320
Battle tanks 	876	9,840
Active personnel 	237,000	2,255,000

Source: IHS Jane's

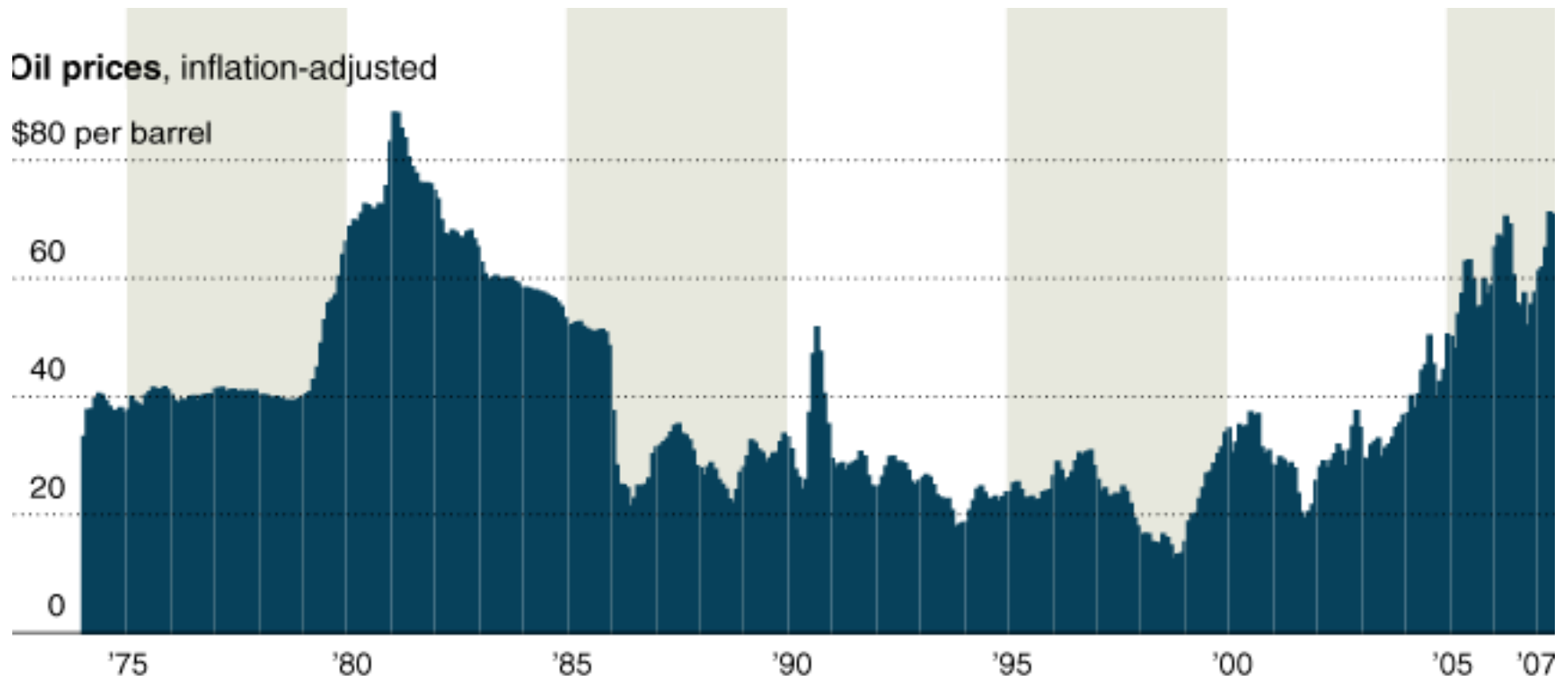
What the Modern Age knew

- **The Asian century**



What the Modern Age knew

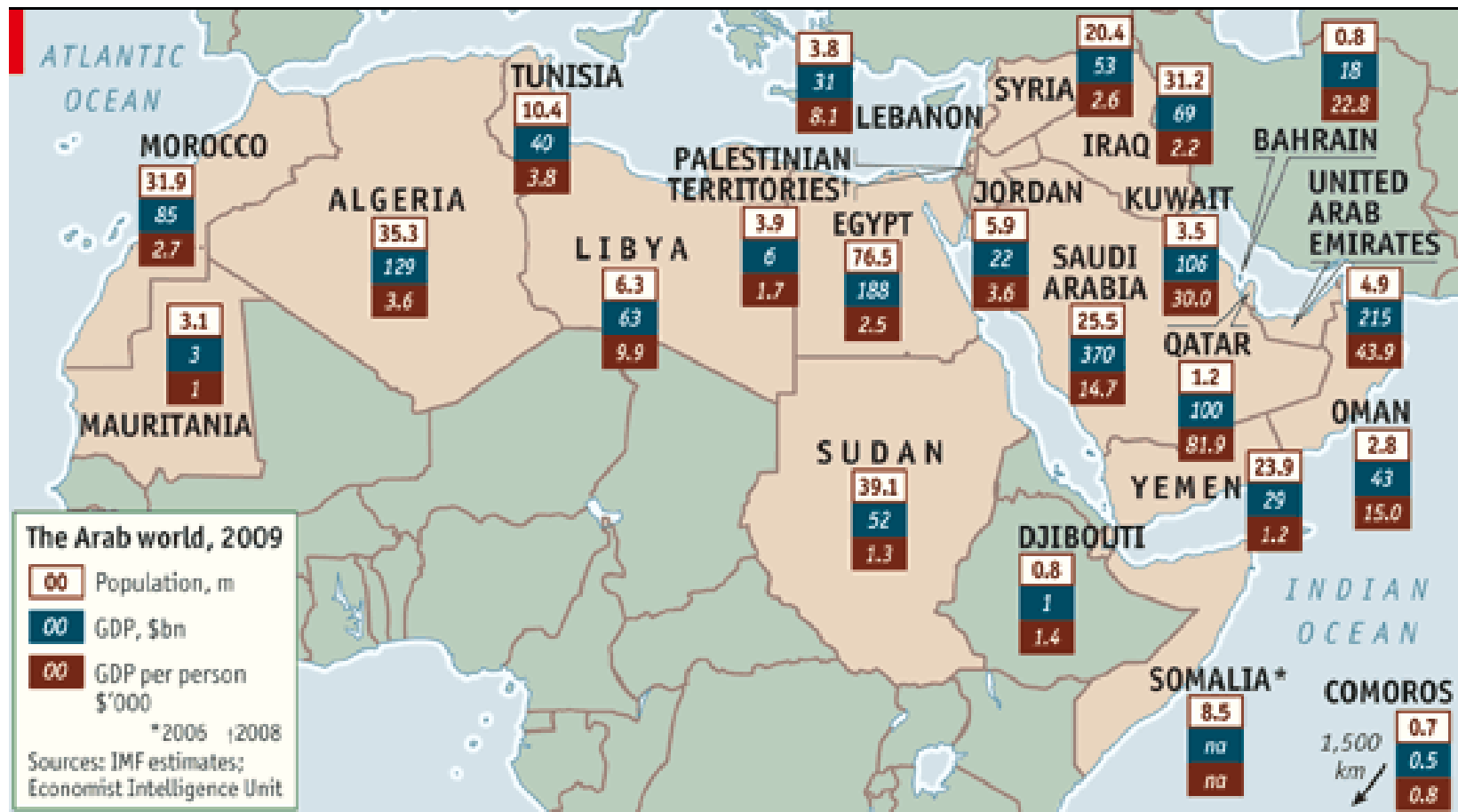
- The Asian century
 - Middle East



Sources: Energy Information Administration; Bureau of Economic Analysis; Haver Analytics

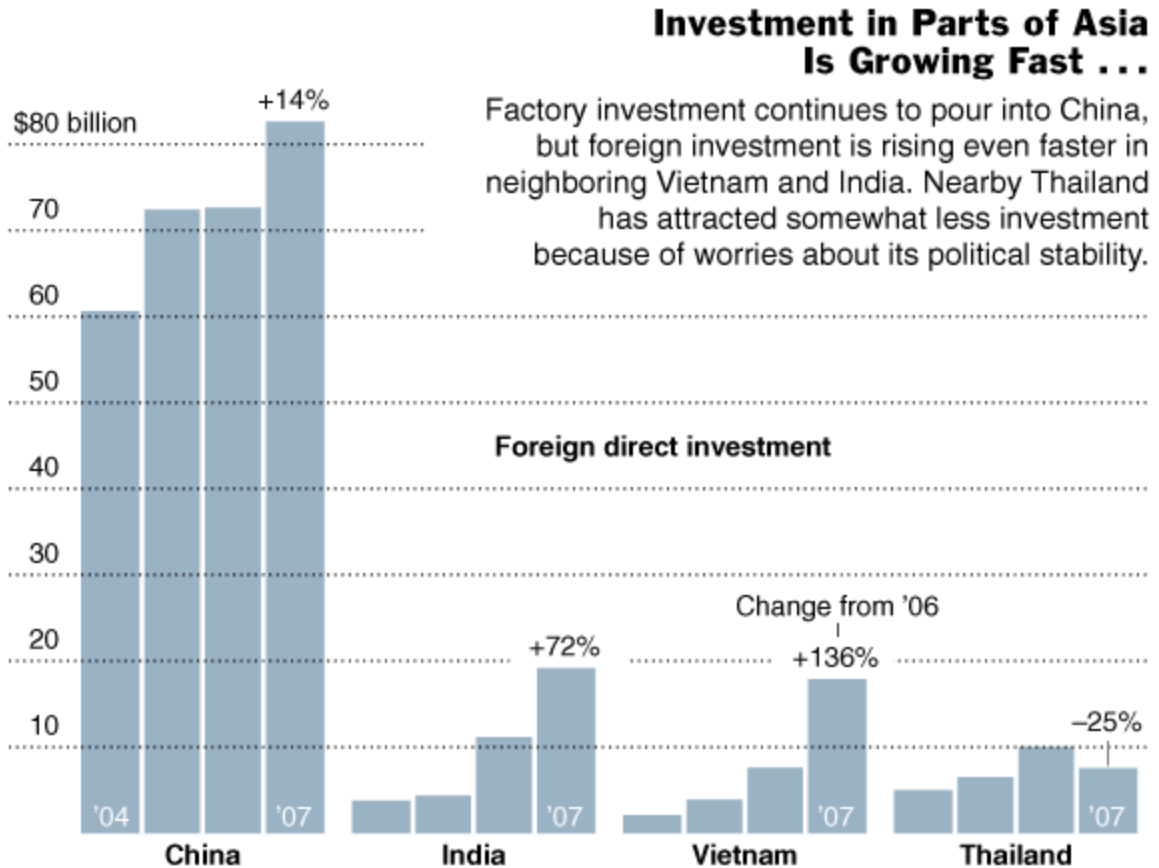
What the Modern Age knew

- The Asian century
 - Middle East



What the Modern Age knew

- The Asian century



Note: Data is for mainly manufacturing investments and seldom includes investments to buy securities, real estate or service sector businesses.

Sources: China Ministry of Commerce; India Secretariat for Industrial Assistance; Vietnam General

What the Modern Age knew

- **The Asian century**
 - **Revival of the city-state: Singapore, Dubai**
 - **Revival of the multi-ethnic state: USA, Western Europe, Russia, China, India (exceptions: Islamic world, Japan, South Korea, Latin America)**

What the Modern Age knew

- **Exporting the American dream/ Part3**
 - **2002: Japan and South Korea combined deliver 75% of the world's shipbuilding**
 - **2002: South Korea's Samsung is the second semiconductor manufacturer in the world after Intel and Japan's Toshiba is third, passing Texas Instruments**
 - **2004: "Taipei 101" in Taiwan becomes the tallest building in the world**
 - **2005: The Ambani brothers of India split their business empire**
 - **2005: China's Lenovo acquires IBM's personal computer business**
 - **2006: Lakshmi Mittal's Luxembourg-based ArcelorMittal is world's largest steel-maker**

What the Modern Age knew

- **Exporting the American dream/ Part3**
 - **2007: The world's largest vendors of personal computers are HP, Dell, Taiwan's Acer, China's Lenovo and Japan's Toshiba**
 - **2008: India's Tata acquires Jaguar**
 - **2009: Anil Ambani and Mukesh Ambani of India are the 6th and 7th richest persons in the world, having built Reliance into a business conglomerate**
 - **2009: India's Infosys sets up the largest corporate university in the world at Mysore**
 - **2009: Japan's Toyota overtakes General Motors to become the largest car maker in the world**
 - **Nov 2009: Mainland China is the largest auto market in the world**

What the Modern Age knew

- Exporting the American dream/ Part 3
 - 2010: South Korea's Hyundai-Kia passes Ford to become the fourth automaker in the world after Toyota, General Motors and Volkswagen
 - 2010: India's Bharti Airtel is the 5th largest telecom operator in the world
 - 2010: Lakshmi Mittal is the richest person in Europe
 - 2010: Taiwan's Quanta Computer is the largest manufacturer of notebook computers in the world
 - 2011: India's exports of goods are double the exports of services (textiles and agricultural products account for less than 20%)

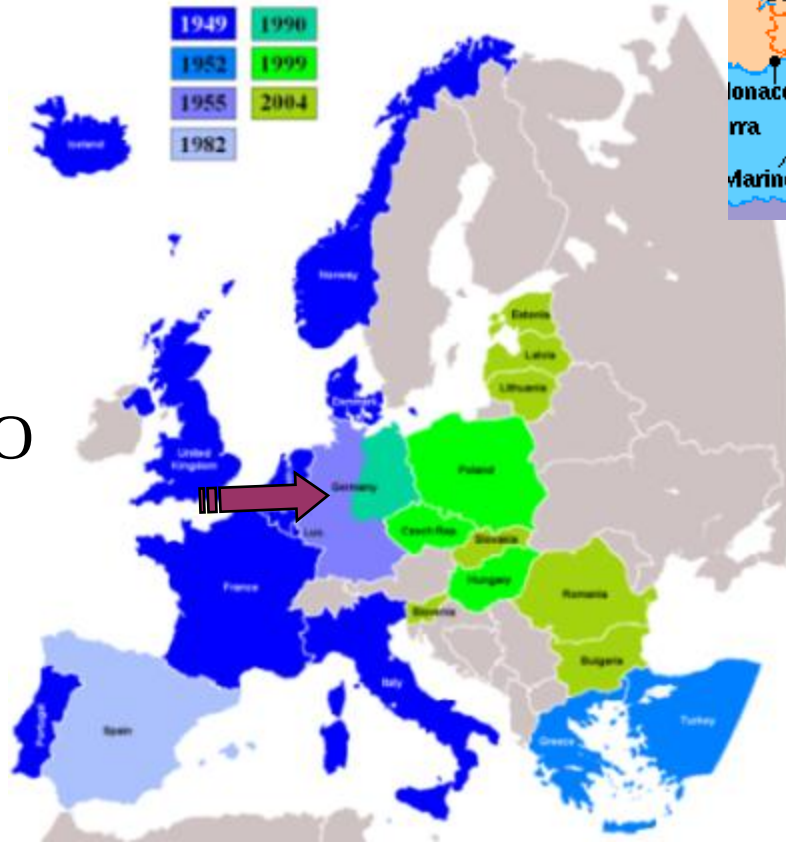
What the Modern Age knew

- **Russia**



What the Modern Age knew

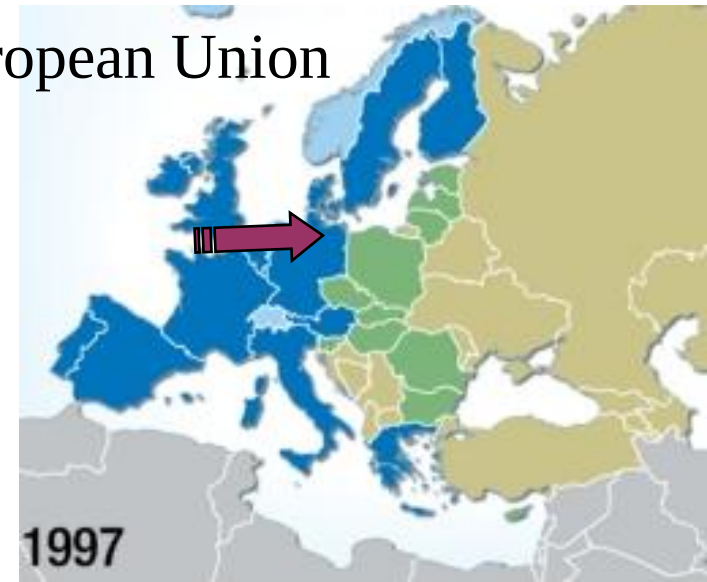
- Russia
 - Loss of member states
 - Loss of allies
 - NATO and EU expansions



NATO



European Union



1997

What the Modern Age knew

- **NATO**



What the Modern Age knew

- Russia
 - Chechnya
 - Georgia (South Ossetia and Abkhazia)
 - Moldova (Transdnestr)
 - Ukraine (Crimea and Donbass)



What the Modern Age knew

- **Russia**
 - Former sphere of influence



What the Modern World knows

- **Economic boom of the Third World**

GDP
per-capita
2006



GDP growth 2006

China	+10.2
Hong Kong	+ 7.6
India	+ 7.6
Indonesia	+ 4.9
Malaysia	+ 5.2
Pakistan	+ 8.4
Philippines	+ 6.1
Singapore	+ 9.1
South Korea	+ 5.3
Taiwan	+ 6.4
Thailand	+ 4.7
Argentina	+ 9.1
Brazil	+ 1.4
Chile	+ 5.8
Colombia	+ 3.7
Mexico	+ 2.7
Peru	+ 4.9
Venezuela	+10.2
Egypt	+ 5.2
Israel	+ 4.8
Saudi Arabia	+ 6.5
South Africa	+ 4.5
Czech Republic	+ 6.9
Hungary	+ 4.3
Poland	+ 4.2
Russia	+ 7.0
Turkey	+ 9.5
Australia	+ 2.7
United States	+ 3.2
Euro area	+ 1.7
Japan	+ 4.0

What the Modern World knew

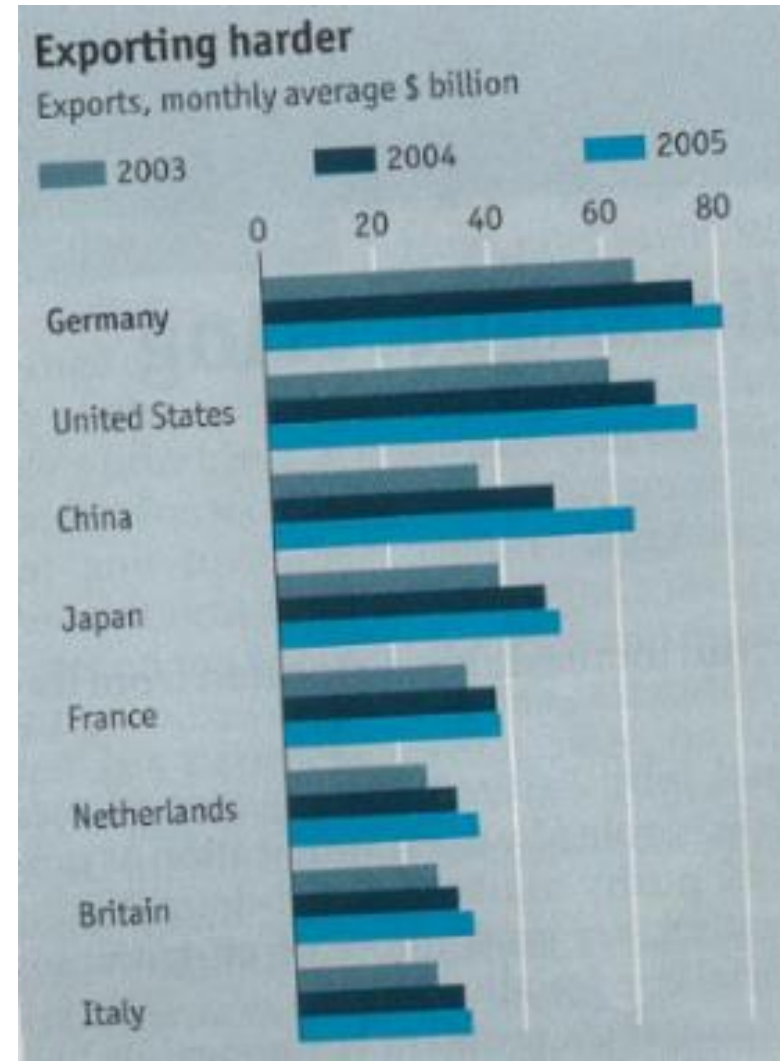
- Economic boom of the Third World
 - For centuries, western European economies had been able to realize bigger profits than the economies of Asia, Africa, Latin America
 - During the Cold War, the regimes of developing countries were pawns in the war, more interested in power than in economics
 - With the end of the Cold War, the more democratic new regimes of developing countries focused on the economy and profit
 - At the same time, western Europe focused less on economics and more on social welfare

What the Modern World knew

- **Economic boom of the Third World**
 - The profits of developing countries started rising faster than the profits of western Europe
 - For the first time in centuries, the economies of developing countries grew faster than the western European economies
 - Exception: Latin America

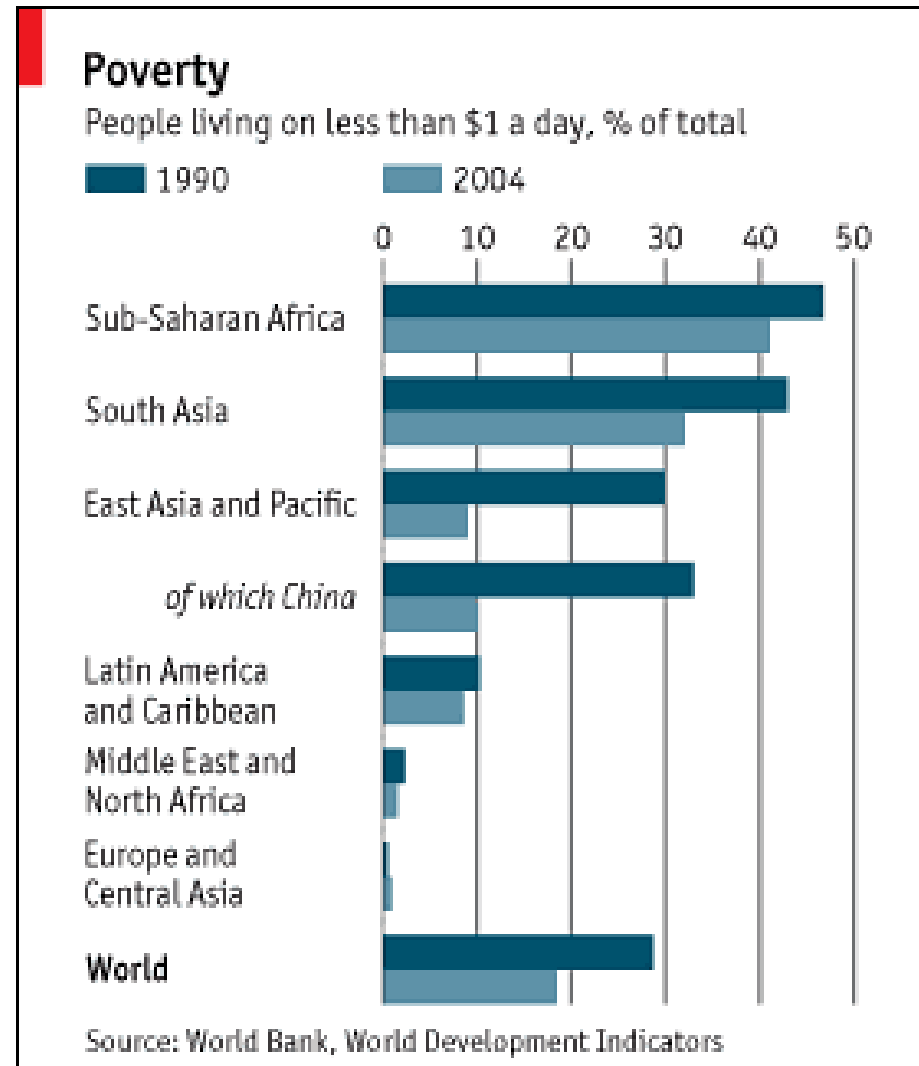
What the Modern World knew

- **Economic boom of the Third World**
 - **Exports**



What the Modern World knew

- **Economic boom of the Third World**
 - **Poverty**



What the Modern World knew

- **Latin America**
 - **Spared the two world wars and the Islamic war**
 - **but a casualty of the Cold War**
 - **Fragile democracies and frequent military coups**
 - **The army as the ethical protector of the state**
 - **Anti-American sentiment (Mexico, Argentina)**
 - **Constantly flirting with communism (Cardenas, Castro, Allende, Chavez)**

What the Modern World knew

- Latin America: Free-trade treaties



The Modern Age

- Latin America
 - 2000: Latin America's population is 513 million, Brazil's is 170 million, Mexico's 100 million
 - 2004: Latin America posts the biggest economic growth since the 1980s thanks to exports of raw materials to China
 - 2009: Latin America is the only region in the world where murder rates increased in the first decade of the 21st century
 - 2012: Latin America suffers 134,519 homicides, about 31% of the world's total
 - 2010: Latin American economies recover from the Great Recession and grow faster than any region except China
 - 2015: China passes the USA to become South America's main trading partner
 - 2017: Latin America has the highest murder rate of any continent, accounting for 38% of all criminal killings

The Modern Age

- Latin America
 - 2020: Covid kills 180,000 Brazilians, 123,000 Mexicans, 41,000 Argentinians, 39,000 Colombians and 37,000 Peruvians, almost half a million people in the whole of Latin America (Peru has the highest death rate in the world)

The Modern Age

- Latin America
 - Mexico:
 - 2006: Felipe Calderon becomes president of Mexico after narrowly winning elections and orders a military assault on drug cartels
 - 2006: More than 2,000 Mexicans die in drug-related gangland-style killings
 - 2008: More than 6,000 people die in violence related to organized crime in Mexico (a 48% jump over the previous year)
 - 2009: More than 7,000 people die in Mexico of drug-related violence in just one year
 - 2011: The Mexican Zetas drug cartel sets fire on a Monterrey casino killing 52 people and carries out mass executions in Durango killing at least 249 people

The Modern Age

- Latin America
 - Mexico:
 - 2011: Carlos Slim is the world's richest man
 - 2012: The USA calls Mexico's Joaquin "El Chapo" Guzman the world's most powerful drug trafficker
 - 2013: Mexico is the world's fourth exporter of cars after Germany, South Korea and Japan
 - 2014: Mexico arrests the world's most wanted drug lord, Joaquin "Shorty" Guzman
 - 2017: More than 23,000 murders are committed in Mexico in 2017, the all-time record
 - 2018: The leftist Andres Manuel Lopez Obrador is elected president of Mexico after more than 130 candidates and activists have been killed during the campaign

The Modern Age

- Latin America
 - Mexico:
 - 2018: Mexico records 33,241 murders nationwide in 2018, a 30% increase on the previous year
 - 2021: Almost 100,000 people have disappeared in Mexico, mostly victims of the drug cartels

The Modern Age

- Latin America
 - Cuba
 - 2006: An ailing Fidel Castro is succeeded by his brother Raul as the helm of Cuba
 - Haiti
 - 2004: Following widespread riots, Aristide flees Haiti
 - 2021: Haiti's president Jovenel Moise is assassinated leading to chaos
 - 2022: Hundreds are killed in gang warfare
 - 2022: Violent anti-government protests against the government

The Modern Age

- Latin America
 - Guatemala
 - 2008: The socialist Alvaro Colom wins elections and becomes the first left-wing president ever
 - 2015: Former television comedian Jimmy Morales wins presidential elections
 - 2013: Former Guatemala's dictator Efraín Ríos Montt is convicted of genocide
 - 2019: Morales expels the CICIG that was investigating corruption
 - 2020: Right-wing candidate Alejandro Giammattei, who spent time in prison for his connection with the death squad Riveristas, wins presidential elections after the front-runner candidate, anti-corruption jurist Thelma Aldana, is disqualified by the Constitutional Court

The Modern Age

- Latin America
 - Nicaragua
 - 2007: Former Sandinista leader Daniel Ortega becomes president of Nicaragua after winning election

The Modern Age

- Latin America
 - Colombia:
 - 2006: 22,000 people have been kidnapped in Colombia in a decade
 - 2015: Colombia's economy grows for the 15th consecutive year
 - 2016: Colombia and FARC reach a peace agreement after a 50-year war that has killed more than 200,000 people
 - 2022: Gustavo Petro, a former M19 rebel, wins election, becoming Colombia's first leftist president

The Modern Age

- Latin America
 - Venezuela
 - 1999: Hugo Chavez 's semi-dictatorship
 - 2002: Millions of Venezuelans go on strike for months, demanding Chavez's resignations
 - 2007: Chavez de facto nationalizes all foreign oil projects
 - 2009: Inflation hits 27%, the highest in Latin America
 - 2011: 19,000 murders, the highest murder rate in South America and four times that of Mexico
 - 2013: Chavez dies and is succeeded by Nicolas Maduro
 - 2016: Venezuela's bolivar falls 71% against the dollar
 - 2019: Anti-Maduro protests erupt in Venezuela, opposition leader Juan Guaido declares himself interim president and is recognized by most European and American nations
 - 2022: 7 million people have left Venezuela since 2015

The Modern Age

- Latin America
 - Ecuador
 - 1997: president Abdala Bucaram is ousted by Congress for corruption, beginning a period of political instability (six presidents in 8 years)
 - 2007: Leftist candidate Rafael Correa wins elections
 - 2022: State of emergency in two provinces after a series of attacks by drug cartels
 - Bolivia
 - 2005: President Carlos Mesa resigns after mass protests
 - 2006: Leftist candidate Evo Morales wins elections and becomes the first indigenous president of a South American nation, and the 5th Bolivian president in 4 years
 - 2019: Following mass protests, Evo Morales resigns

The Modern Age

- Latin America
 - Brazil
 - 1995-2002: Fernando Henrique Cardoso of the centrist Partido da Social Democracia Brasileira (PSDB) stabilizes the economy and inflation
 - 2003: Luiz Inacio Lula of the leftist Partido dos Trabalhadores with a program of income distribution
 - 2005: Brazil's is the fifth most populous country in the world with 188 million people
 - 2009: The first BRIC meeting (Brazil, Russia, India and China)
 - 1980-2010 Brazil has registered more than one million homicides in 30 years
 - 2010: Dilma Rousseff is elected to become Brazil's first woman president

The Modern Age

- Latin America
 - Brazil
 - 2010: Brazil posts its fastest growth in 24 years and becomes the seventh largest economy in the world
 - 2011: China becomes Brazil's main trading partner
 - 2012: 50108 people are murdered in Brazil
 - 2014: Corruption scandal tied to Brazil's company Odebrecht, spreads to Ecuador, Peru, Argentina
 - 2015: 42,000 people are killed in Brazil, a 35-year record
 - 2016: Brazil's economy shrinks by 3.6% (its worst-ever recession), and 10% in three years
 - 2016: President impeached
 - 2017: Gang violence and prison riots (63,880 people murdered)

The Modern Age

- Latin America
 - Brazil
 - 2018: Lula arrested, Rousseff impeached, and right-wing populist Jair Bolsonaro elected president
 - 2022: Lula returned to power

The Modern Age

- Latin America
 - Uruguay
 - 2005: The socialist candidate Tabare Vazquez becomes president, the fifth socialist leader to be elected in a few years in Latin America (after Chile, Argentina, Brazil, Venezuela)
 - 2009: Former guerrilla Jose Mujica is elected president
 - Paraguay
 - 2008: Leftist former priest Fernando Lugo wins presidential elections in Paraguay and ends the rule of the Partido Colorado that lasted since 1947

The Modern Age

- Latin America
 - Peru
 - 2003-2011: The economy grows an average of 7% yearly
 - 2009: Peru's former president Alberto Fujimori is sentenced to 25 years in prison for political homicides committed during his presidency
 - 2011: Leftist candidate Ollanta Humala wins presidential elections in Peru
 - 2019: Congress, dominated by Keiko Fujimori's right-wing party Fuerza Popular, impeaches president Martin Vizcarra
 - 2022: Dina Boluarte becomes the first female president of Peru after Congress removes another president
 - 2011-22: Eight presidents in 11 years, 4 of them tried for corruption

The Modern Age

- Latin America
 - Argentina
 - 2000: The Argentinian economy collapses
 - 2001: Riots due to economic crisis lead to the resignation of president La Rua and two years of political chaos
 - 2003: The socialist candidate Nestor Kirchner is elected president of Argentina, the sixth in 18 months
 - 2007: Cristina Fernandez, the wife of outgoing president Nestor Kirchner, becomes president
 - 2014: Argentina defaults on its debt for the second time in 13 years
 - 2022: Argentina's inflation peaks at 94.8%

The Modern Age

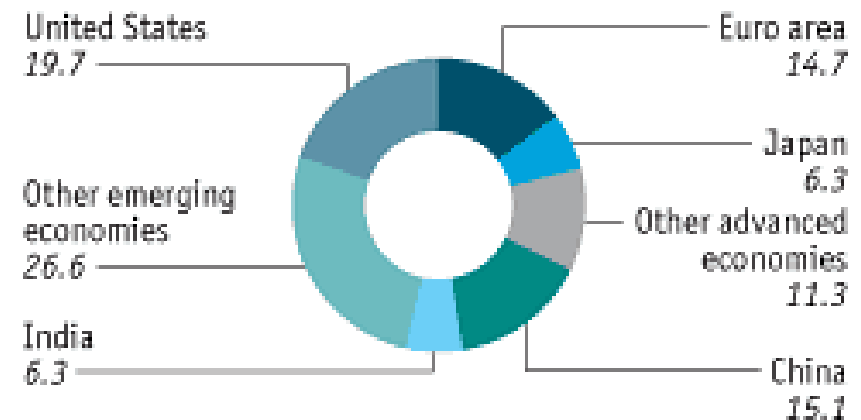
- Latin America
 - Chile
 - 2006: Michelle Bachelet becomes Chile's first woman president
 - 2010: Sebastian Pinera is elected president, the first time since 1958 that a right-wing politician wins a democratic election
 - 2021: Leftist candidate Gabriel Boric, a former student protest leader, is elected president, the youngest ever

What the Modern World knew

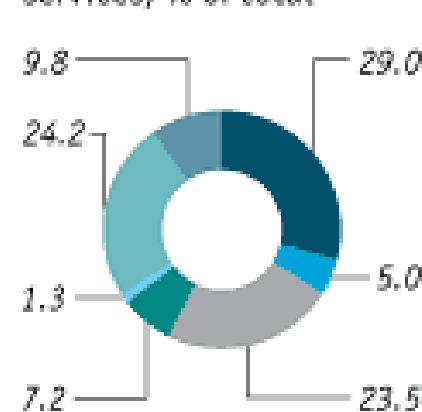
- World GDP

Output, trade and population

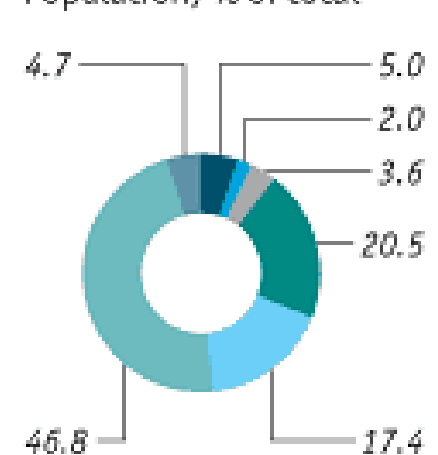
World GDP*, % world total, 2006



Exports of goods and services, % of total



Population, % of total

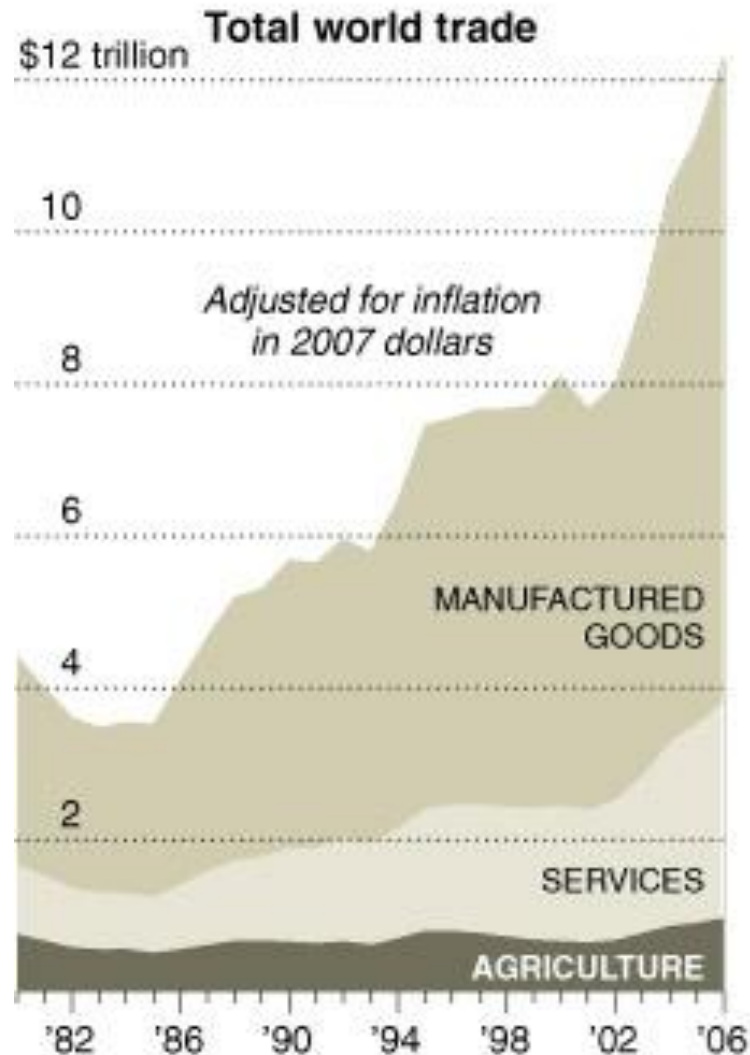


*Based on purchasing-power-parity values of country GDPs

Source: IMF

What the Modern World knew

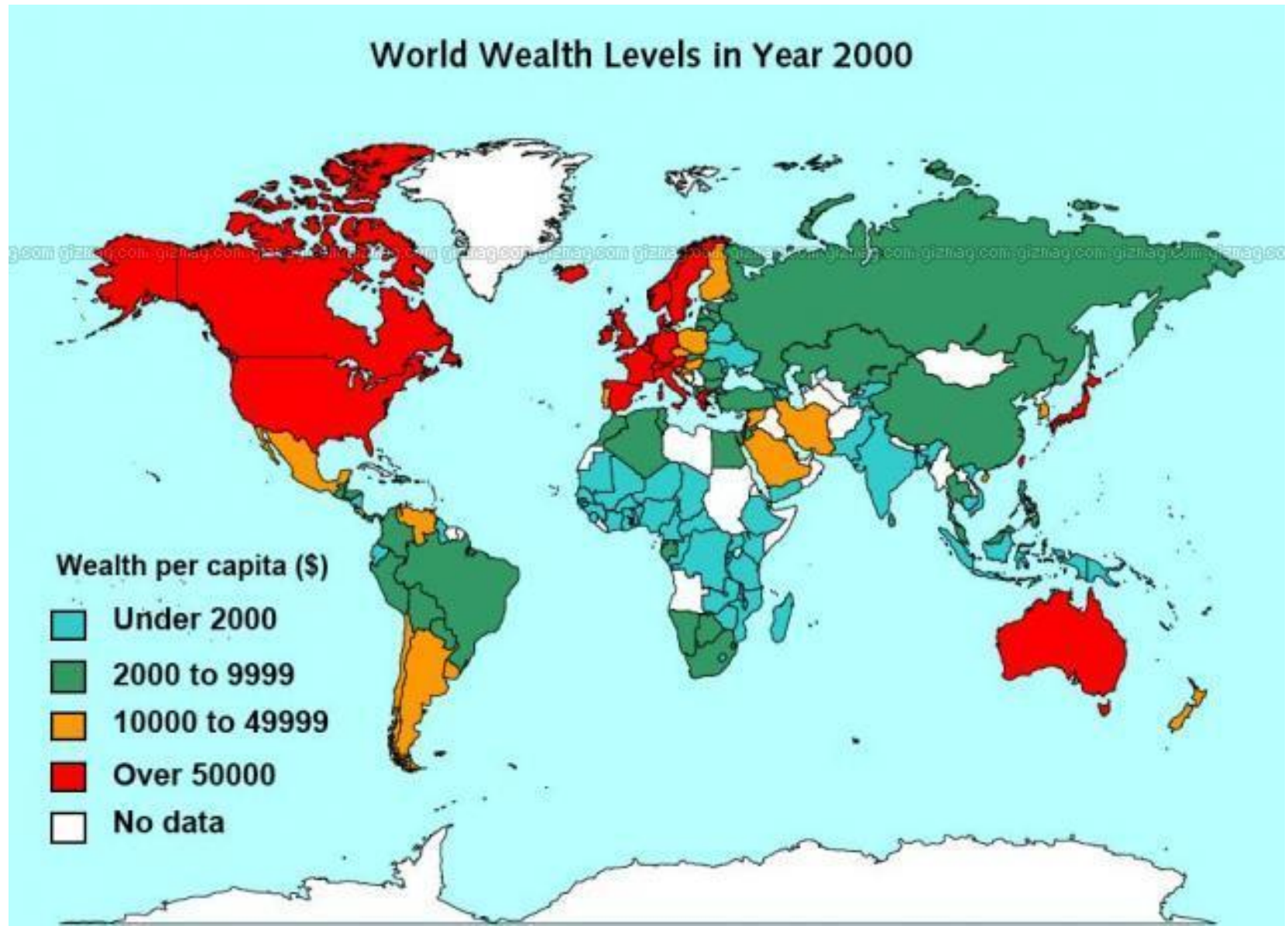
- **World trade**



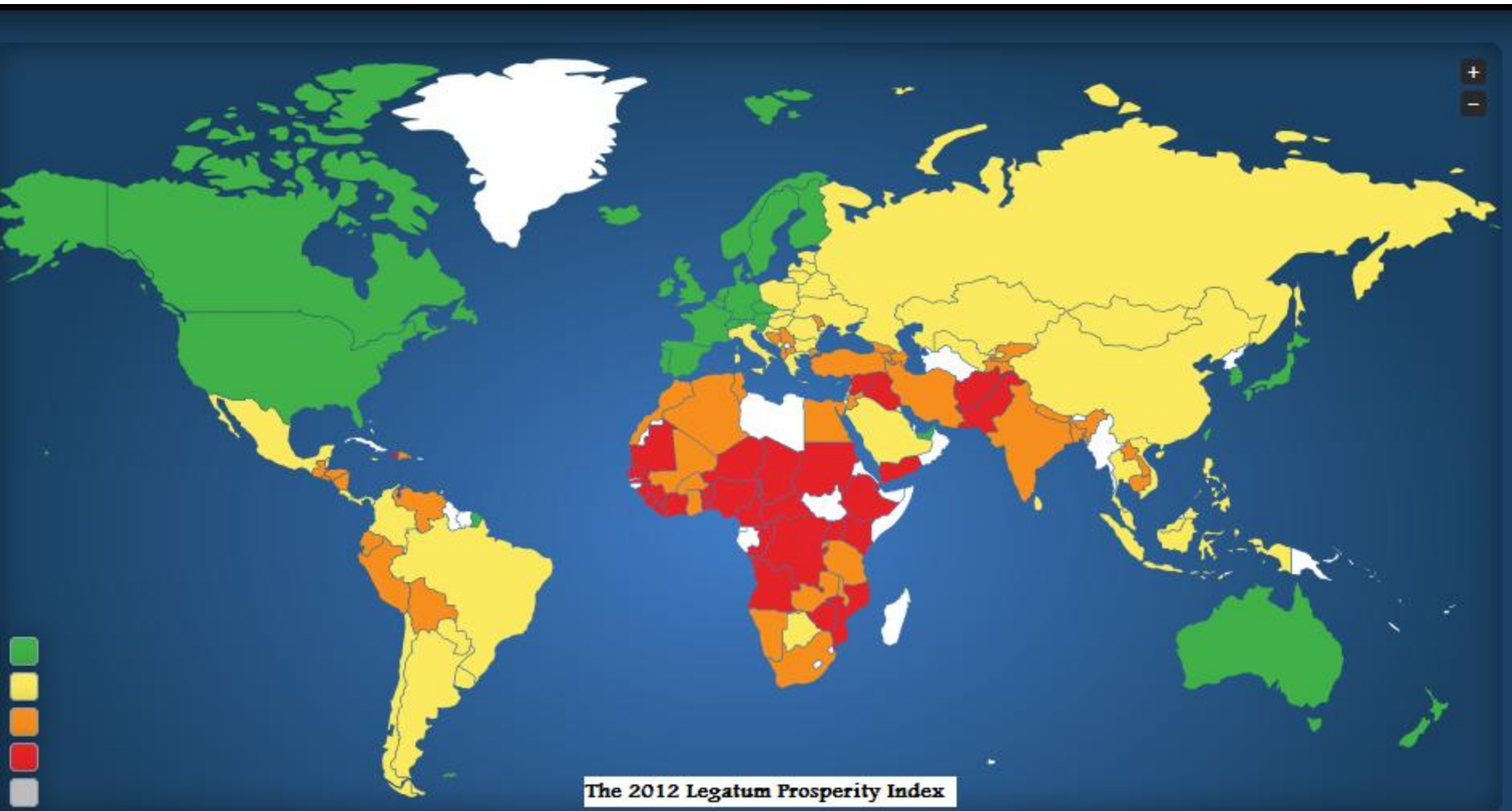
Sources: World Trade Organization; World Bank

What the Modern World knew

-



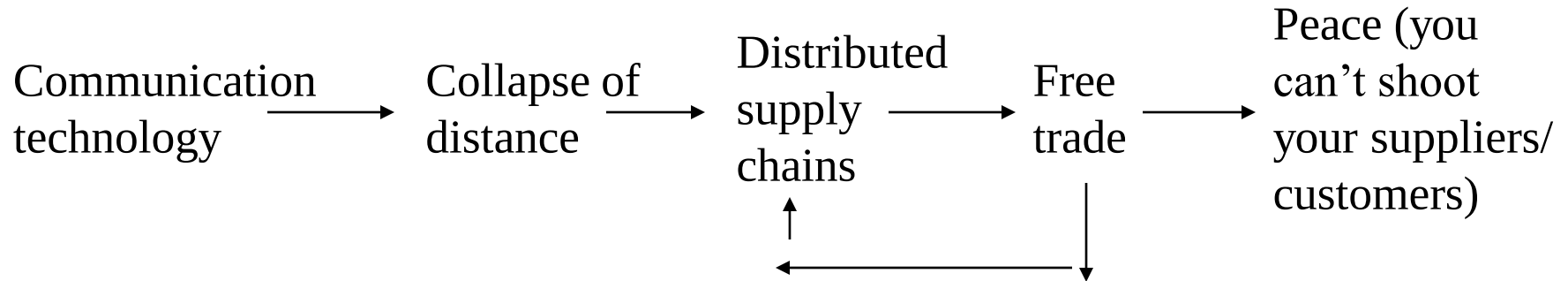
What the Modern World knew



The 2012 Legatum Prosperity Index

What the Modern World knew

- **From communication technology to world peace**



What the Modern World knew

- **World's population in 2000 (official census):**
 - **China** **1,261,832,482**
 - **India** **1,014,003,817**
 - **United States** **275,562,673**
 - **Indonesia** **224,784,210**
 - **Brazil** **172,860,370**
 - **Russia** **146,001,176**
 - **Pakistan** **141,553,775**
 - **Bangladesh** **129,194,224**
 - **Japan** **126,549,976**
 - **Nigeria** **123,337,822**

What the Modern World knew

- **World's population in 2000:**
 - 1. China 1,286,975,468
 - 2. India 1,049,700,118
 - 3. USA 290,342,554
 - 4. Indonesia 234,893,453
 - 5. Brazil 182,032,604
 - 6. Pakistan 150,694,740
 - 7. Russia 144,526,278
 - 8. Bangladesh 138,448,210
 - 9. Nigeria 133,881,703
 - 10. Japan 127,214,499
 - 11. Mexico 104,907,991
 - 12. Philippines 84,619,974
 - 13. Germany 82,398,326
 - 14. Vietnam 81,624,716
 - 15. Egypt 74,718,797
 - 16. Iran 68,278,826
 - 17. Turkey 68,109,469
 - 18. Ethiopia 66,557,553
 - 19. Thailand 64,265,276
 - 20. France 60,180,529
 - 21. Britain 60,094,648
 - 22. Italy 57,998,353
 - 23. Congo 56,625,039

What the Modern World knew

- **World's population**

– 1950	2,555,982,611	Growth rate: 1.47%
– 1960	3,039,433,944	
– 1970	3,706,601,448	Growth rate: 2%
– 1980	4,453,863,820	
– 1990	5,277,725,410	
– 2000	6,081,002,937	
– 2050	9,309,051,539	Growth rate: 0.5%

What the Modern World knew

- **World's population**

- 1 India 1,807,878,574
- 2 China 1,424,161,948
- 3 USA 420,080,587
- 4 Nigeria 356,523,597
- 5 Indonesia 313,020,847
- 6 Bangladesh 279,955,405
- 7 Pakistan 277,554,980
- 8 Brazil 228,426,737
- 9 Congo 203,039,557
- 10 Mexico 147,907,650
- 11 Philippines 147,630,852
- 12 Ethiopia 144,716,331
- 13 Uganda 128,007,514
- 14 Egypt 127,563,256
- **15 Russia 109,187,353**

- 16 Vietnam 107,772,641
- 17 Japan 93,673,826
- 18 Sudan 88,227,761
- 19 Turkey 86,473,786
- 20 Afghanistan 81,933,479
- 21 Iran 81,490,039
- 22 Germany 73,607,121**
- 23 Yemen 71,278,172
- 24 France 69,809,351**
- 25 Thailand 69,268,817
- 26 Tanzania 66,843,312
- 27 Kenya 65,175,864
- 28 Colombia 64,977,344
- 29 Britain 63,977,435**
- 30 Madagascar 56,513,827
- 31 Iraq 56,360,779
- 32 Burma 54,430,334
- 33 Nepal 53,293,874
- 34 Morocco 50,871,553
- 35 Italy 50,389,841**
- 36 Saudi Arabia 49,706,851

What the Modern World knew

- **World's population**
 - **The Christian world**
 - **Russia -35 million**
 - **Germany -9 million**
 - **France +9 million but mostly ethnic**
 - **Britain +3 million but mostly ethnic**
 - **Italy -7 million**
 - **...**
 - **USA +130 million**

What the Modern World knew

- **World's population**
 - **At current GDP and population growth or decrease the Christian world will have a very high GDP per capite, the African and Middle Eastern countries will have a very low GDP per capite and in many cases not enough resources to feed their population**
 - **Pressure on emigration towards Europe from Africa and the Middle East**
 - **Bangladesh and Pakistan will have more people than the whole of Europe including Russia**

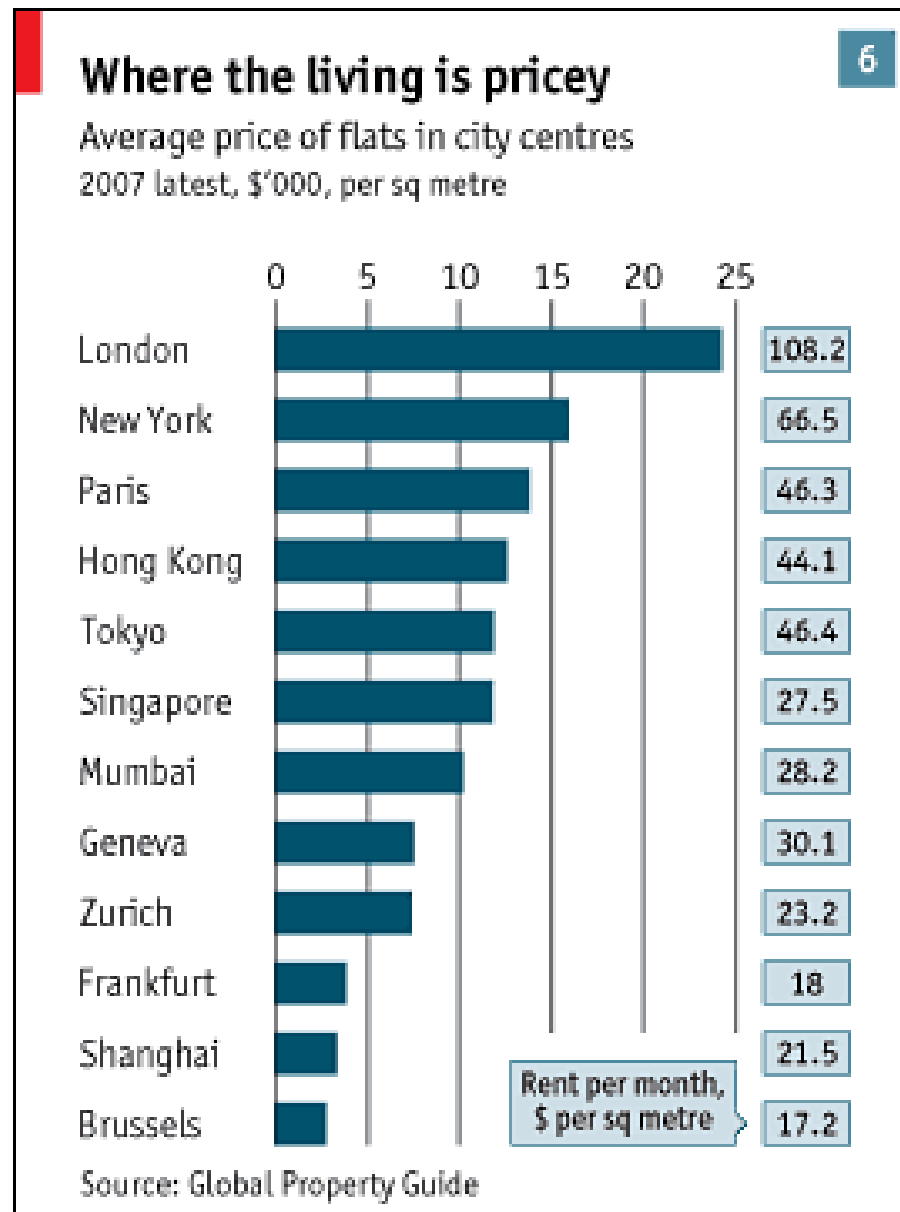
What the Modern World knew

Tôkyô	31 240.1
New York-Philadelphia	30 441.9
México	21 503.7
Seoul	20 156.8
São Paulo	19 194.1
Jakarta	18 206.7
Ôsaka-Kôbe-Kyôto	17 648.9
Dilli	17 367.3
Mumbai	17 340.9
Los Angeles	16 895.9
al-Qahira	16 244.7
Kolkata	14 362.5
Manila	14 083.3
Buenos Aires	13 238.6
Moskva	12 622.4
Shanghai	12 190.0
Rio de Janeiro	11 629.6
Tehrân	11 475.1
Paris	11 367.2
Rhein-Ruhr	11 291.1
London	11 229.2
Chicago-Milwaukee	11 098.6

Metropolitan areas
(in thousands)
2003

<http://www.gazetteer.de/st/statn.htm>

What the Modern World knew

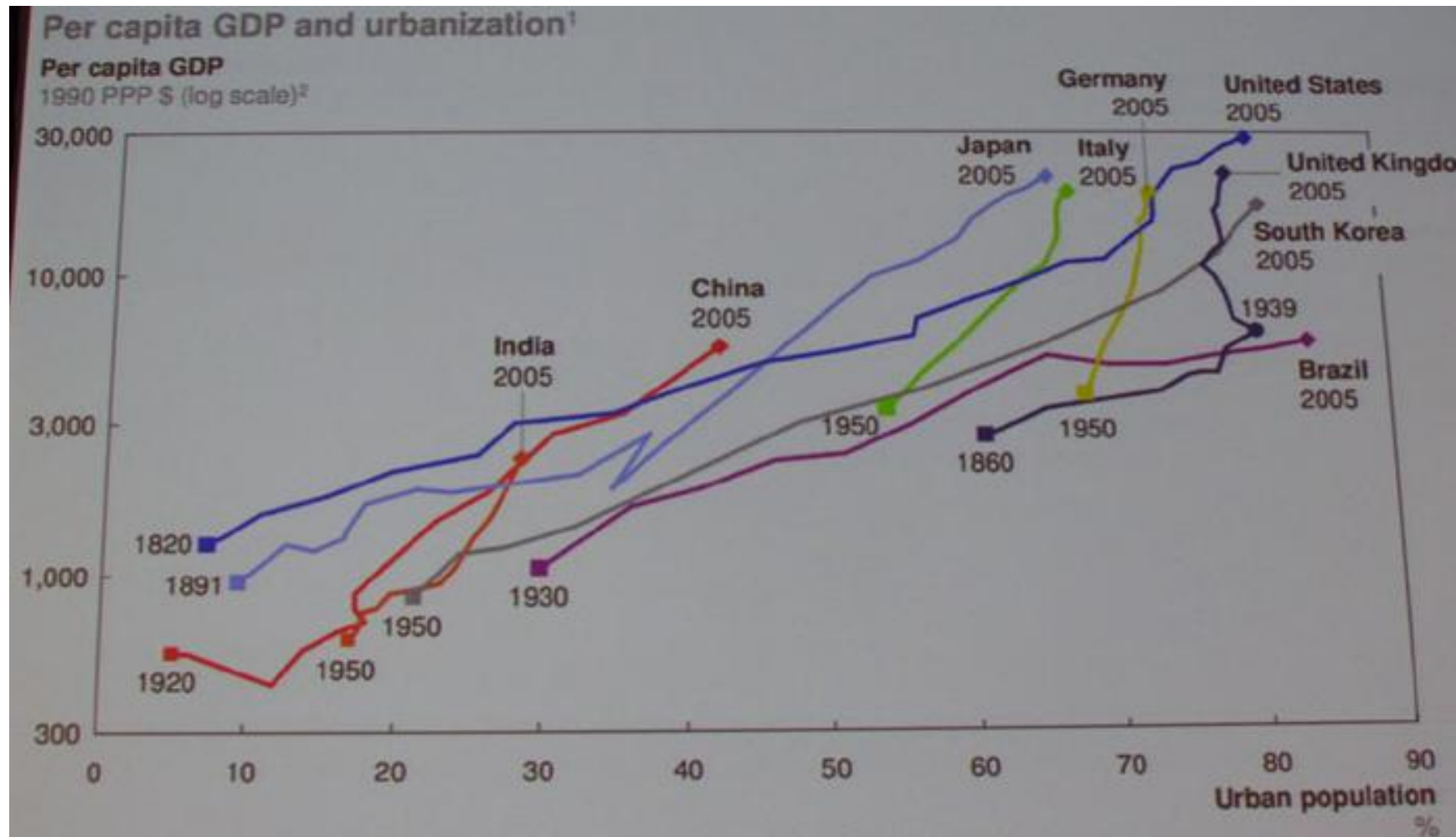


What the Modern Age knew

- **Urbanization**
 - **2007: Worldwide urban population passes 50%. The human race has become an urban race.**

What the Modern Age knew

- Urbanization and wealth



Definition of urbanization varies by country; pre-1950 figures for the United Kingdom are estimated.
Historical per capita GDP series expressed in 1990 Geary-Khamis dollars, which reflect PPP.

SOURCE: Population Division of the United Nations; Angus Maddison via Timetrics; Global Insight; Census reports of

What the Modern Age knew

- **Supranationalism**
 - **European Union**
 - **ASEAN**
 - **Arab League**
 - **African Union**
 - **NAFTA**
- **Foreign aid by Western countries to non-Western countries (that share no linguistic, ethnic or religious bonds with the donors)**

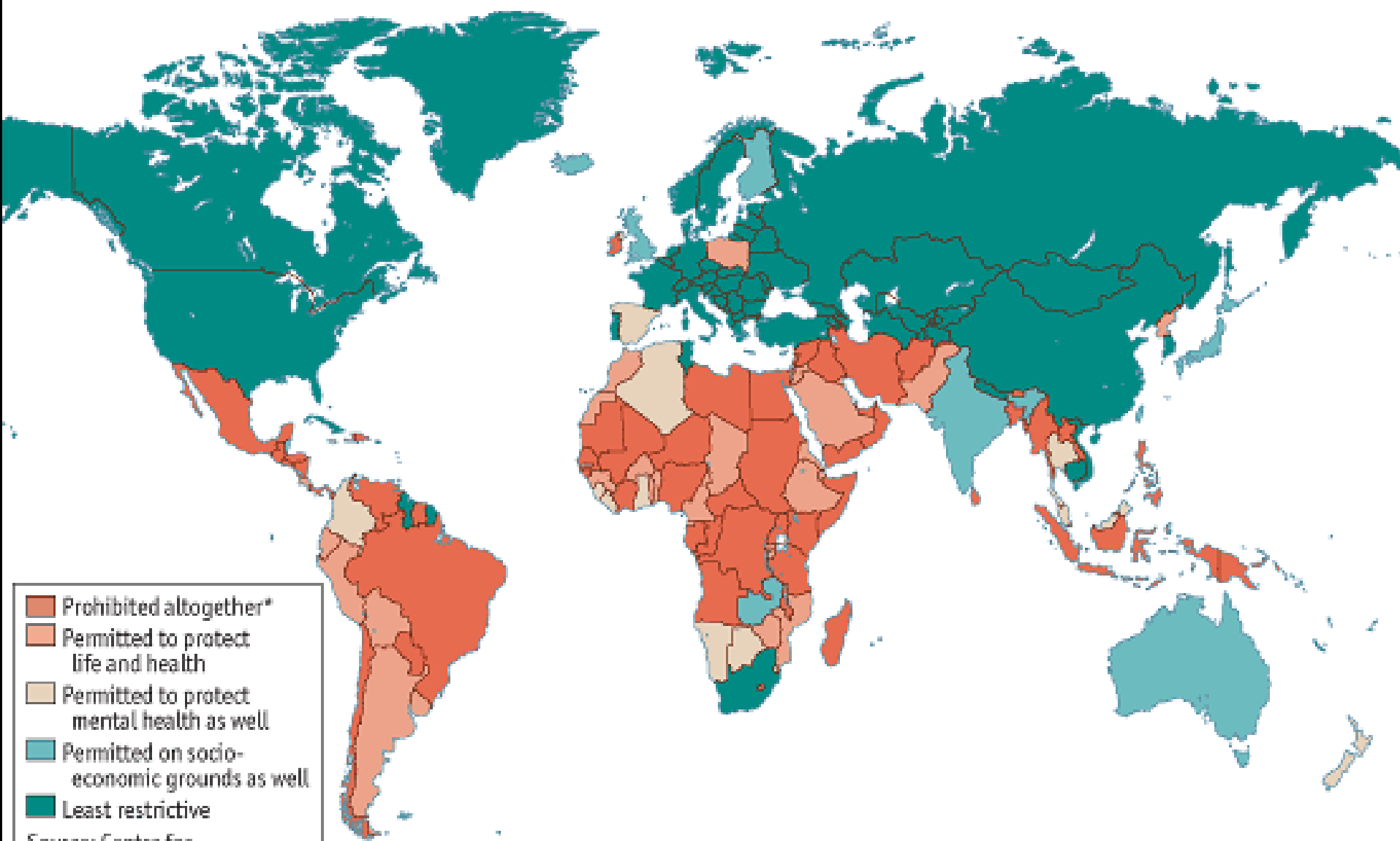
What the Modern Age knew

- Age of tourism
 - 2006: Tourism is the biggest industry in the world (11% of GDP, almost 9% of employment)

What the Modern Age knew

- **Decline of religion**
 - **Europe: Reformation**
 - leads to economic and military boom
 - **Russia: Communism**
 - leads to military boom and then (after the fall of communism) to economic boom
 - **China: Communism**
 - leads to military boom and then (after the fall of communism) to economic boom
 - **India: 2000s**
 - **Islamic world: ?**

The world's abortion laws



Source: Centre for Reproductive Rights

Note: for more detailed information about additional grounds for abortion, by country, visit reproductiverights.org

*Some countries make exception to save the woman's life

What the Modern Age knew

- Condoleeza Rice's transformational diplomacy
 - Crash-program to democratize the world
 - Focus on the Arab world (least democratized region of the world)
 - Stop the spread of weapons of mass destruction
 - Alliance with other powers (EU, Russia, China) to disarm smaller countries (Arabs, Iran, North Korea)
 - Preemptive strike
 - Irrelevance of the United Nations

What the Modern Age knew

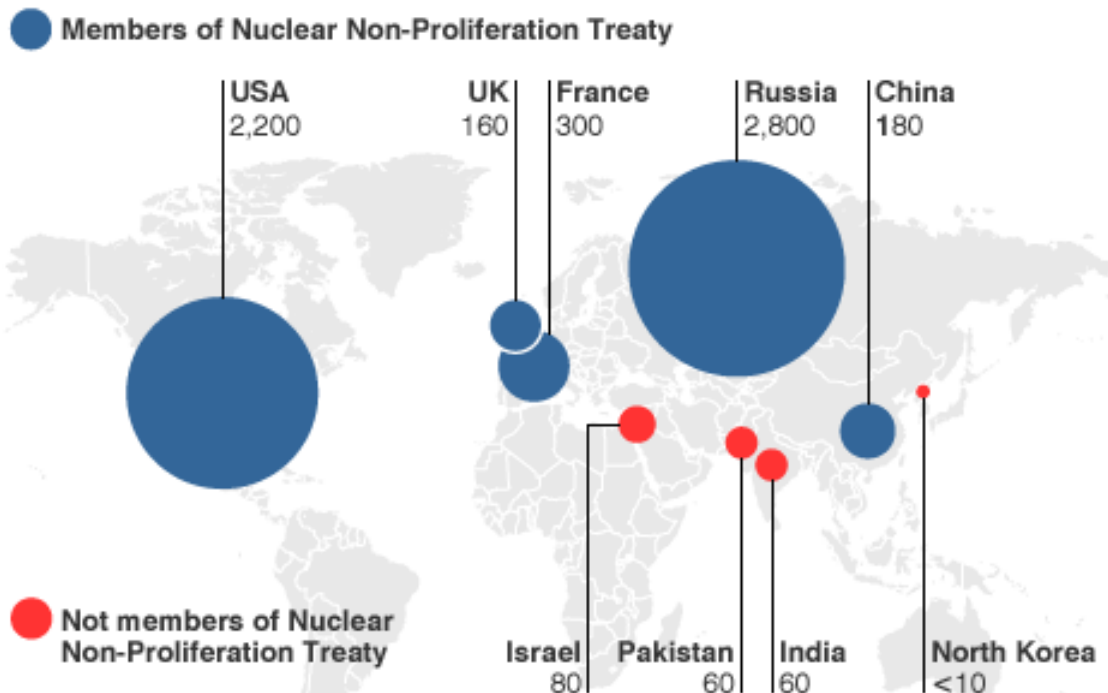
- A new world ideology: Anti-Americanism
 - Demonstrations in Europe against US foreign policy
 - Resentment in third-world countries against perceived US/ Western imperial behavior
 - Resentment by emerging powers like China
 - Resentment against Western power but at the same time aspiration to become like the West
 - Anti-American demonstrations at the same time that there are long lines at the US embassy to emigrate to the USA

What the Modern Age knew

- **Nuclear powers of the 2000s**

Strategic nuclear warheads around the world

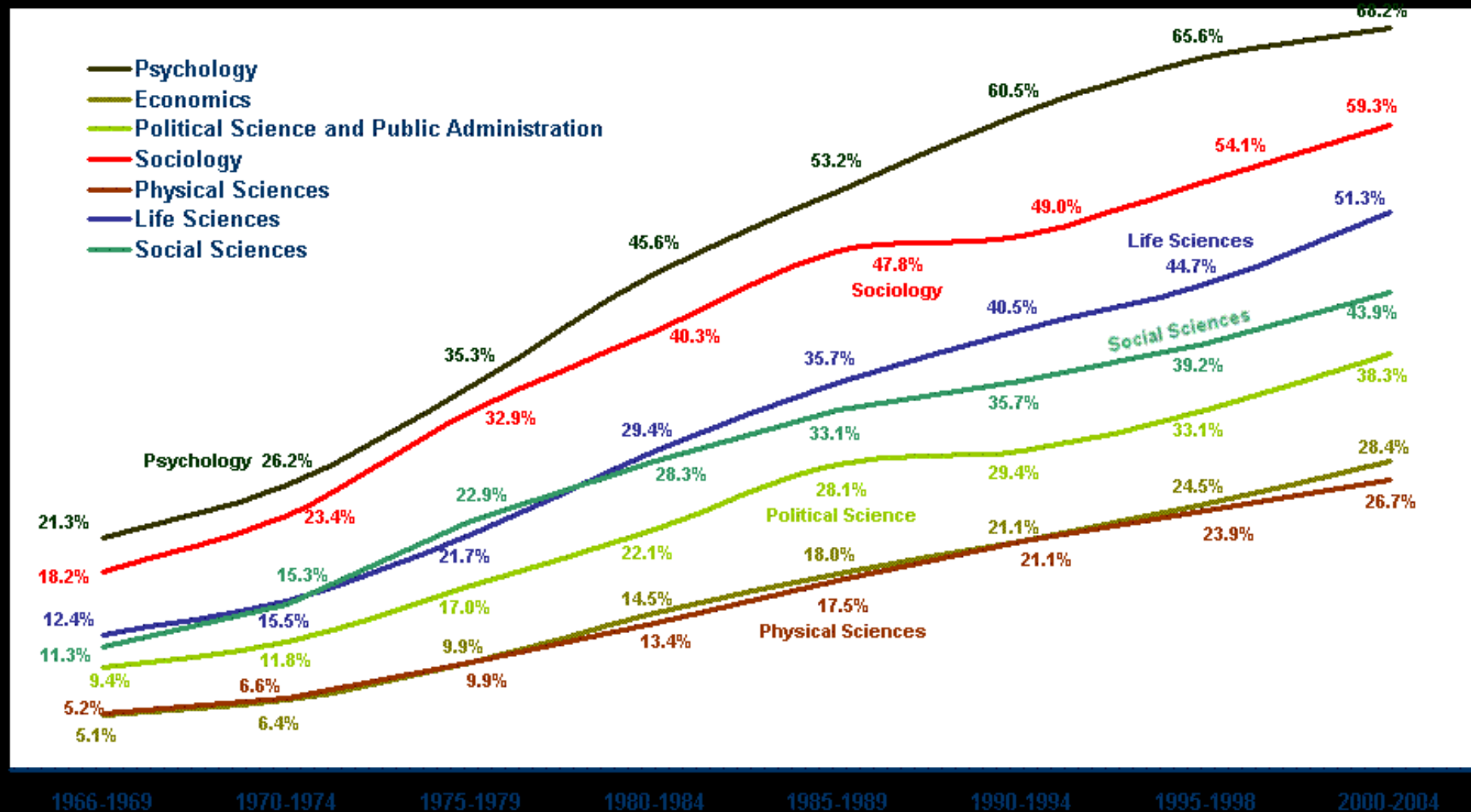
Size of circle proportional to number of warheads



SOURCE: Federation of American Scientists; Nuclear Threat Initiative

The Century of Women

Doctorate Degrees Awarded to Women in Selected Disciplines, 1966-2004
(Percentage of All Doctorate Degrees Awarded)



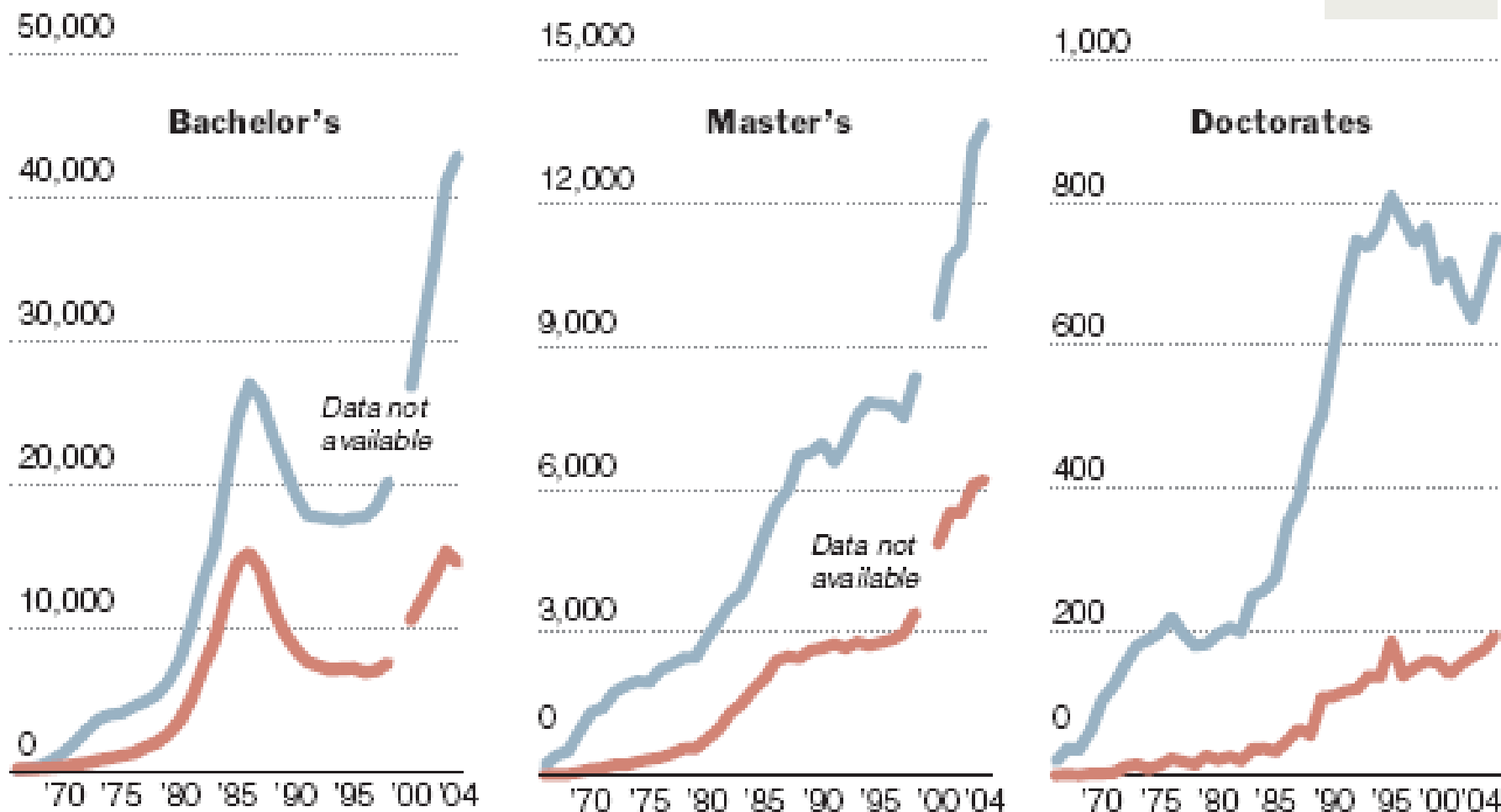
Gender Gap

More and more men are getting degrees in computer science. The number of women is rising less sharply.

KEY

Men

Women



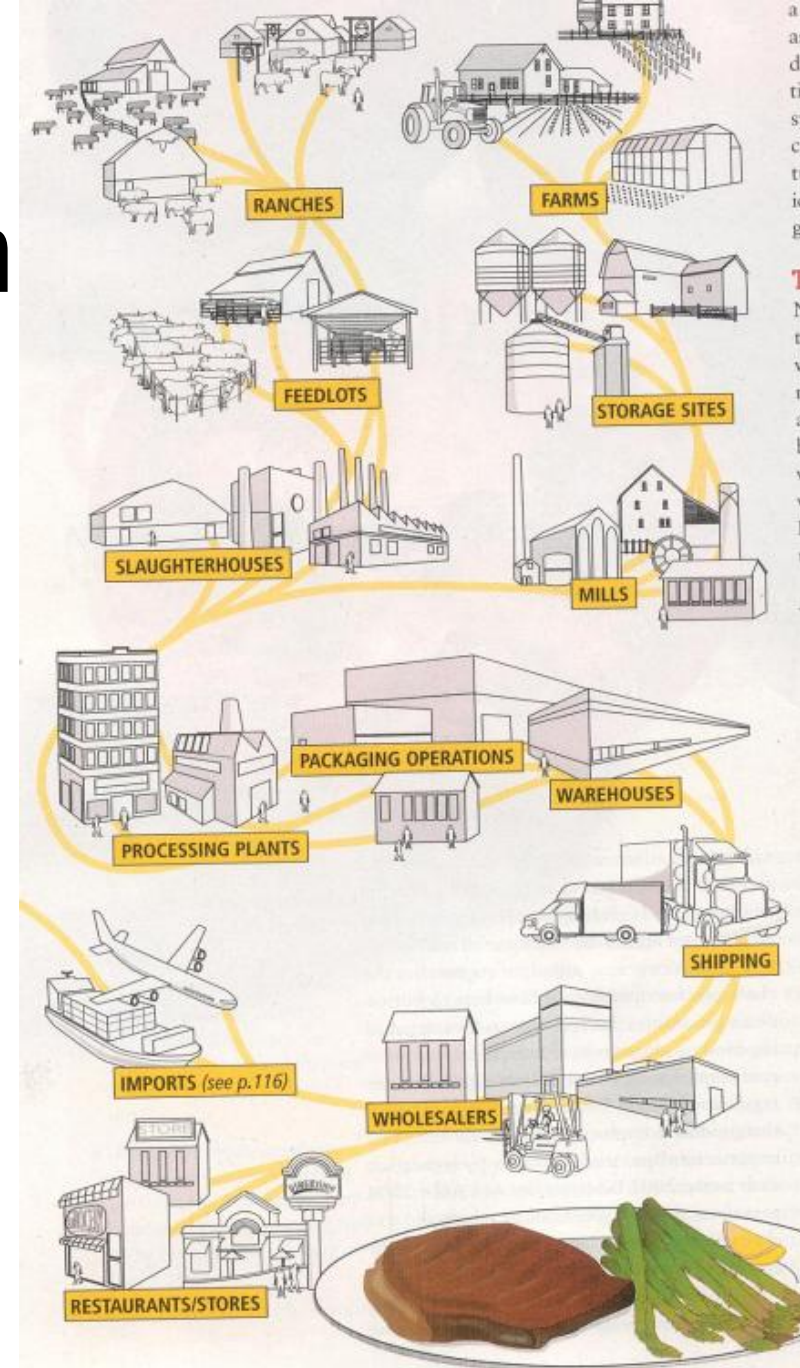
Source: National Science Foundation

What the Modern Age knew

- The agricultural revolution spawned a food revolution
 - Overabundance of food
 - Prepared food
 - Genetically-modified crops
 - Obesity
 - Cardiovascular diseases
 - Diets
 - Gymns

What the Modern

- The food chain



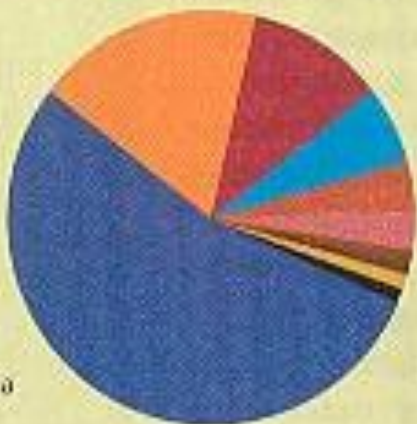
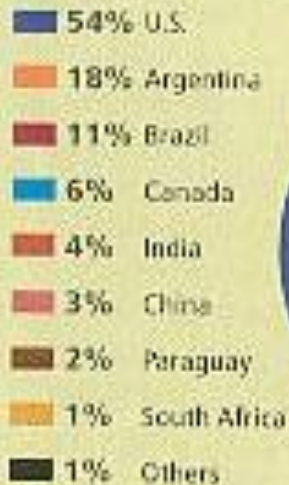
What the Modern Age knew

- **Biotech food**

Most transgenic crop plantings are in the U.S. (below left), but since 2000, plantings have increased faster in developing nations than in industrial ones (below middle). A small number of crops and kinds of modification account for almost all the production (right).

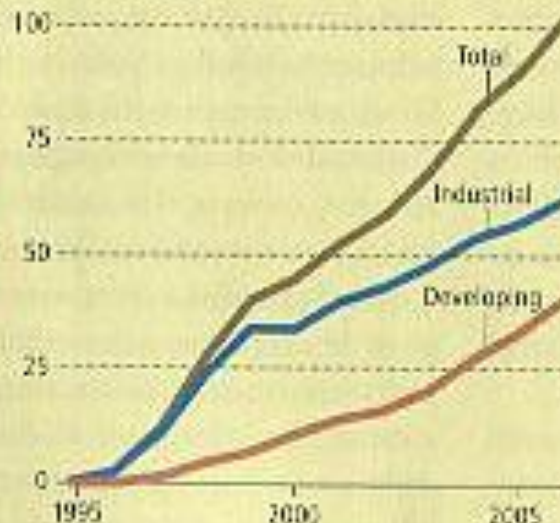
THE BIG GROWERS

Transgenic crop area by country (2005)



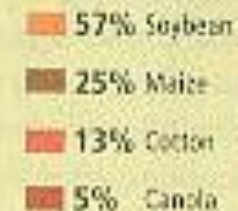
RAPID INCREASES IN TRANSGENICS

Millions of hectares planted



KINDS OF PLANTINGS (2005)

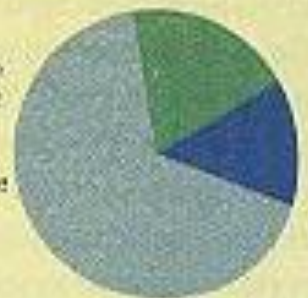
Crops



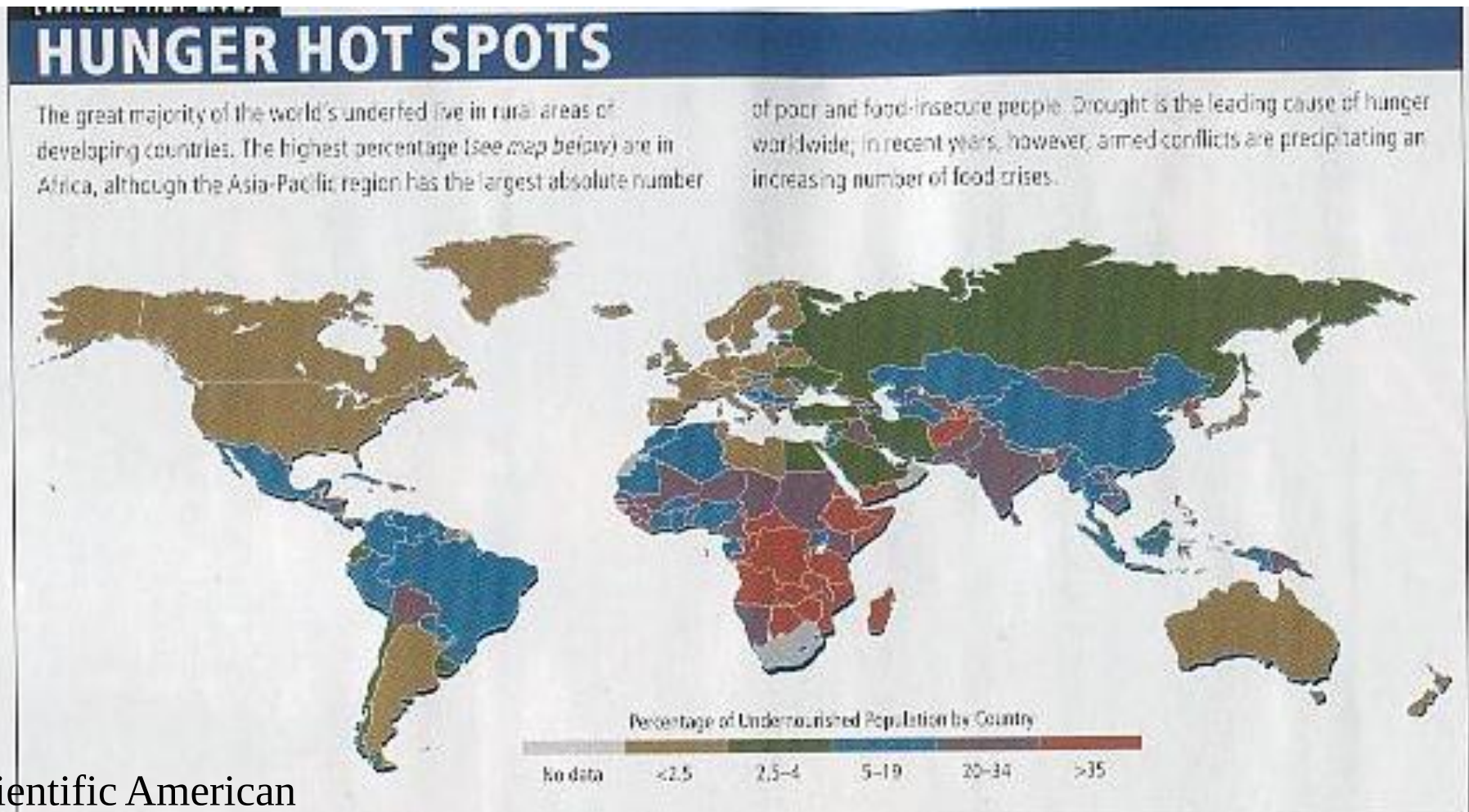
Other biotech crops:

rice, squash, papaya and alfalfa (less than 1%)

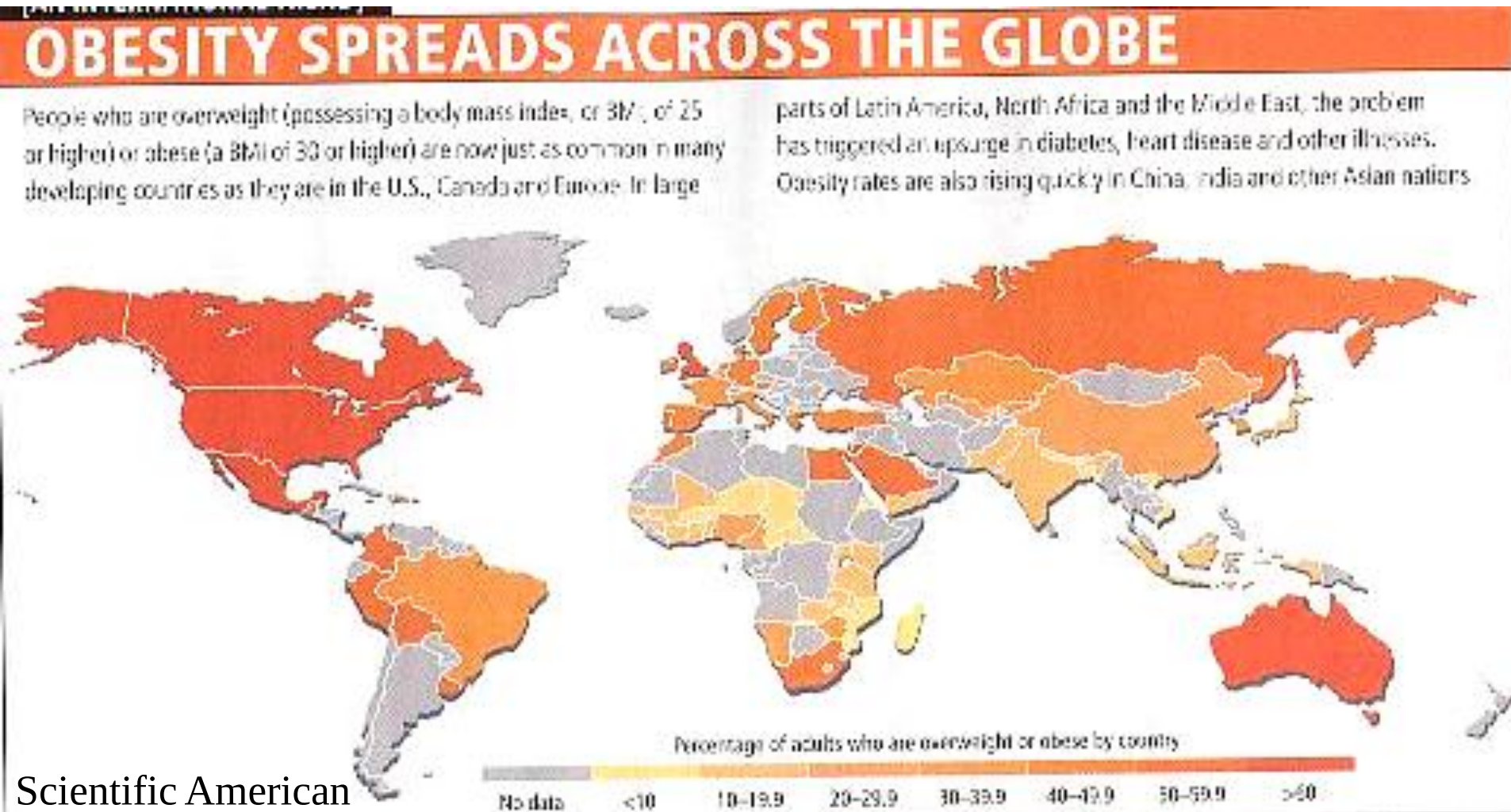
Traits



What the Modern Age knew



What the Modern Age knew



What the Modern Age knew

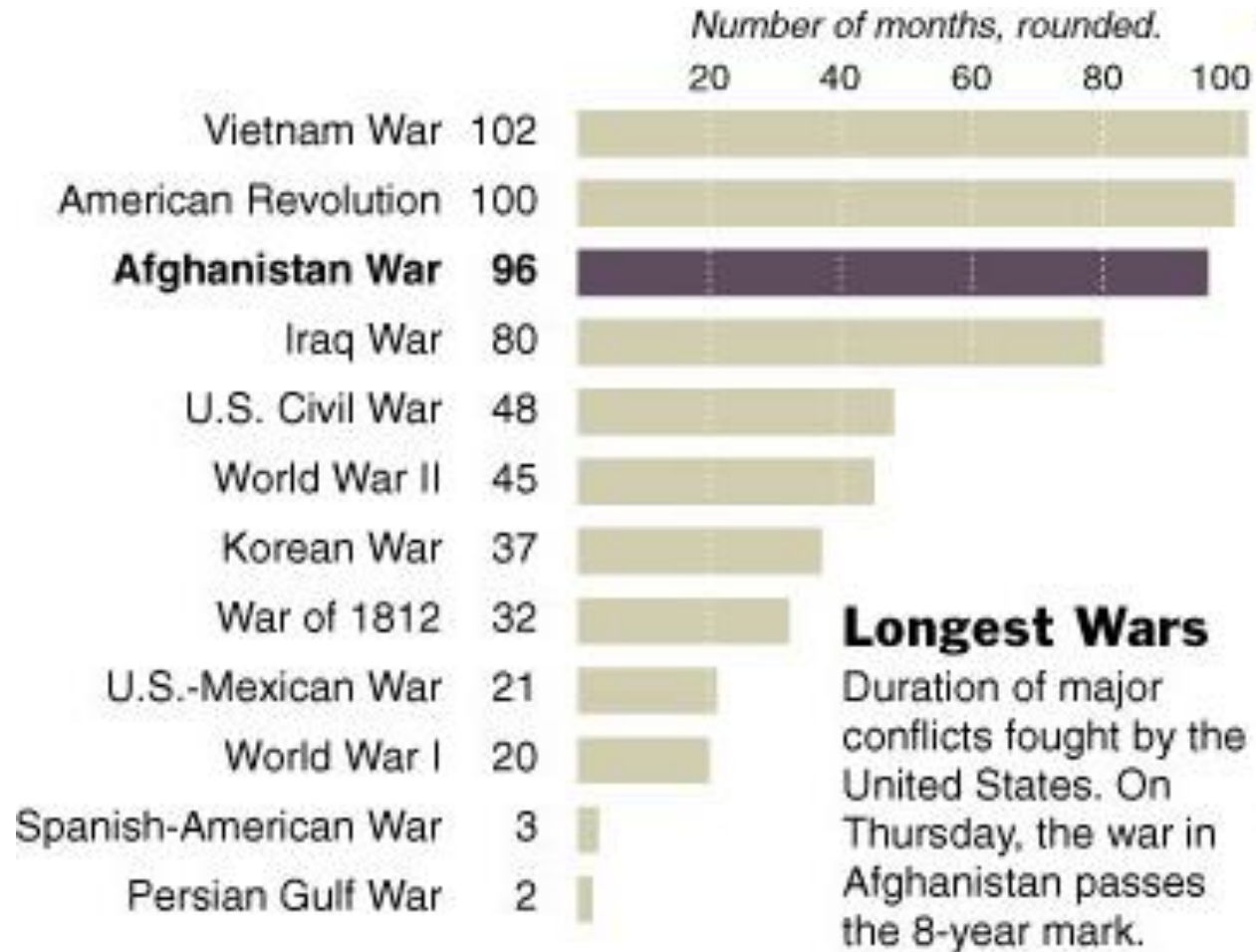
- **Ethics of greed**
 - **61% of USA Christians believe that God wants people to be wealthy (Time poll, 2006)**
 - **Prosperity Theology (mostly Pentecostal churches)**
 - **Megachurches for baby boomers**
 - **Joel Osteen's Lakewood in Houston**
 - **T.D. Jakes' Potter's House in south Dallas**
 - **Creflo Dollar's World Changers in Atlanta**
 - **Scientology**

What the Modern Age knew

- **USA crises of the 2000s**
 - **Afghanistan (Taliban)**
 - **Iraq (Saddam Hussein)**
 - **North Korea (nuclear program)**
 - **Iran (nuclear program)**
 - **Venezuela (leftist regime supporting other leftist regimes in Latin America)**

What the Modern Age knew

- **USA crises of the 2000s (as of august 2009)**



What the Modern Age knew

- **Islamic terrorism**
 - **Afghanistan (1980s, after Soviet Union invasion)**
 - **Chechnya (1990s, after Russian crackdown on separatists)**
 - **Pakistan (2002, after being expelled from Afghanistan)**
 - **Iraq (2003, after USA invasion)**
 - **Somalia (2007, after Ethiopian invasion)**
 - **Yemen (2009, after being expelled from Pakistan)**

What the Modern Age knew

- Islamic terrorism



What the Modern Age knew

- **Islamic terrorism**
 - **Moscow (Sep 1999)**
 - **New York & Washington (Sep 2001)**
 - **Bali (Oct 2002)**
 - **Russia (2002-04)**
 - **Casablanca (May 2003)**
 - **Riyah (May 2003)**
 - **Istanbul (Nov 2003)**
 - **Madrid (Mar 2004)**
 - **Iraq (2004-09)**
 - **London (Jul 2005)**
 - **Sharm el-Sheik (Jul 2005)**
 - **Amman (Nov 2005)**
 - **Afghanistan (2006-09)**
 - **Mumbai (Nov 2008)**
 - **Pakistan (2008-09)**



Mars, January 2004



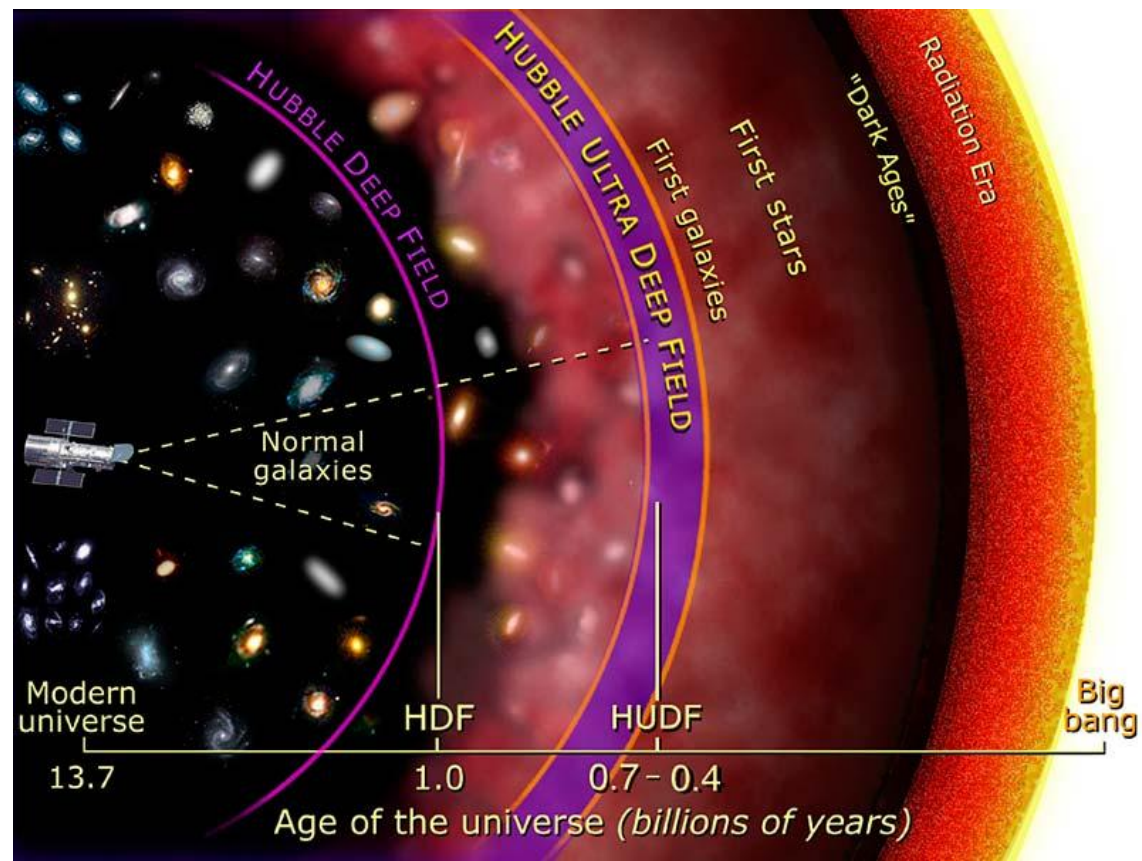
Husband Hill, Mars, September 2005





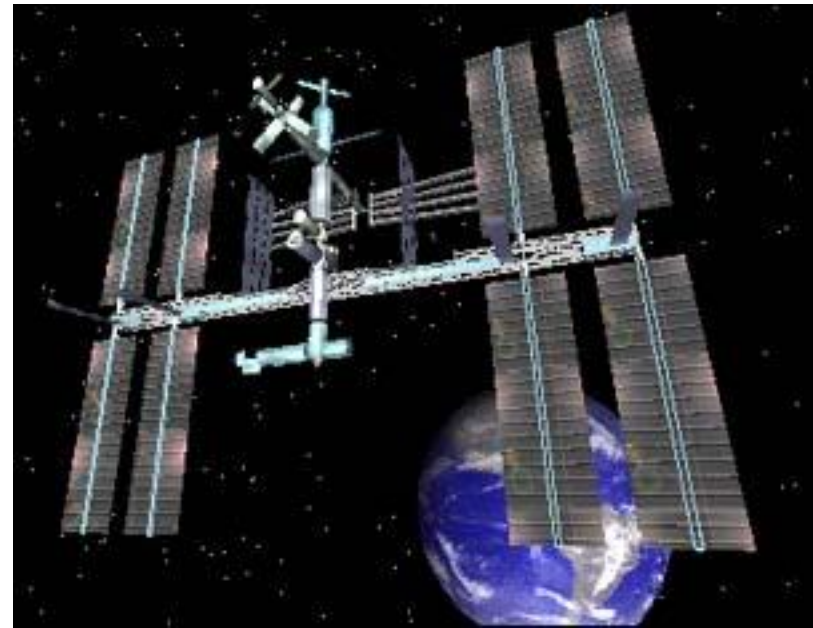
The first galaxies that developed after the Big Bang
(Hubble Telescope, 2004)

What the Hubble telescope sees

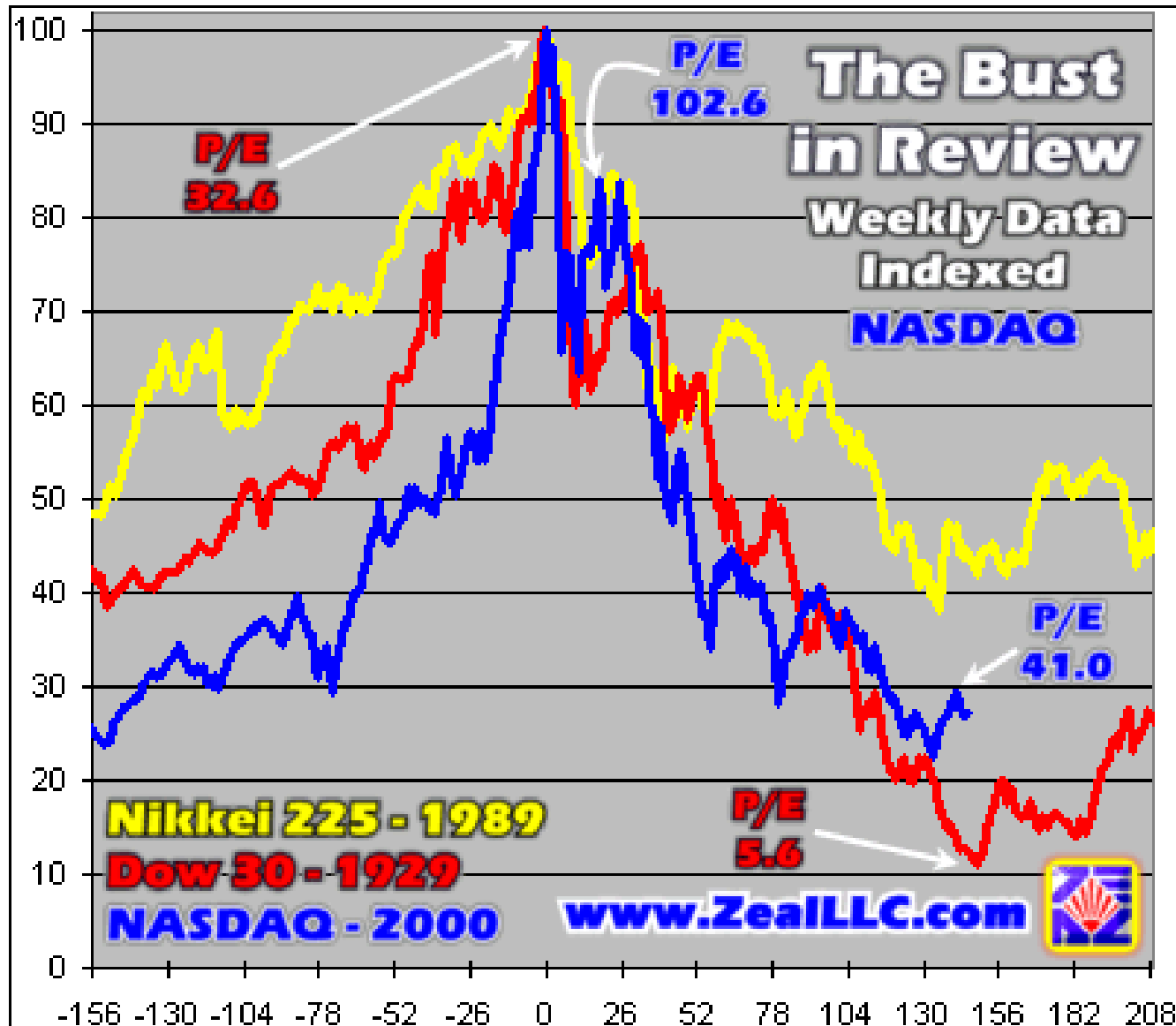


What the Modern Age knew

- **Space Exploration**
 - **2000: First mission to the International Space Station**
 - **2001: the Voyager leaves the solar system**
 - **2003: several unmanned space-crafts land on Mars**



What the Modern World knew



What the Modern World Knew

- **Net Economy**
 - Amazon
 - Priceline
 - Ebay
 - Yahoo, Google
 - Evite
 - Craigslist
 - Skype
 - Snapfish
 - Travelocity, Priceline
 - Netflix
 - MySpace, Facebook, Twitter

What the Modern World Knew

- **Net Economy**
 - **Death of the salesman**

What the Modern World Knew

- **Net Economy**
 - **Losers**
 - **Bookstores**
 - **Record stores**
 - **Travel agencies**
 - **Newspapers**
 - **TV News**

What the Modern World Knew

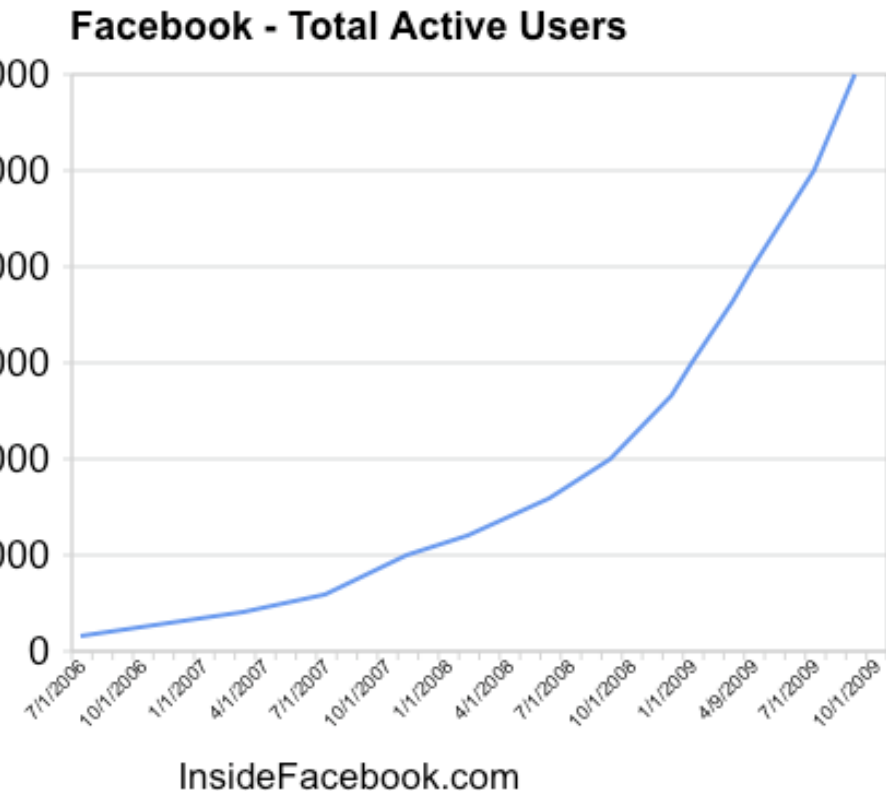
- **Net Society**
 - **E-commerce: decline of the brick-and-mortar store**
 - **E-mail: first innovation in written personal communication since the invention of mail**
 - **World-wide web: largest knowledge base in history**
 - **News websites: first major innovation in newscasting since tv news**

What the Modern World Knew

- **Net Society**
 - **Ultimate product of the USA's concept of society**
 - **Little centralized state control**
 - **Individual creativity and enterprising spirit**
 - **Self-organizing Darwinian system**
 - **The state adapts to technological innovation, not viceversa**

What the Modern World Knew

- **Net Society**
 - **Social networking**

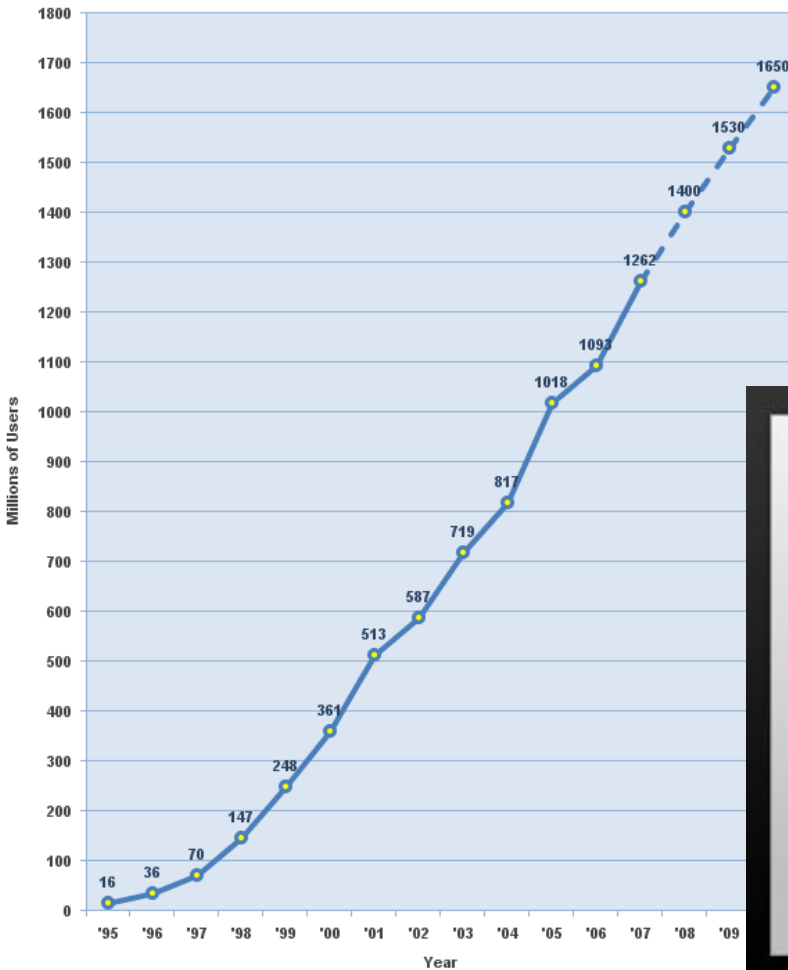




Facebook in 2010, when it passed 500 million users

What the Modern World Knew

Internet Users in the World
Growth 1995 - 2010



Number of websites (1990 - 2008)



What the Modern World Knew

- **New appliances**
 - **Ipod**
 - **Cellular phone**
 - **Blackberry**
 - **Play Station**



What the Modern World Knew

- New appliances



What the Modern World Knew

- **New appliances/ Age of the selfie**

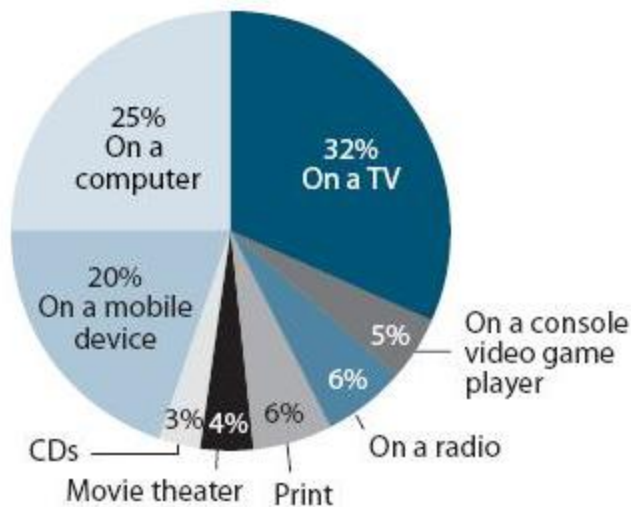


What the Modern World Knew

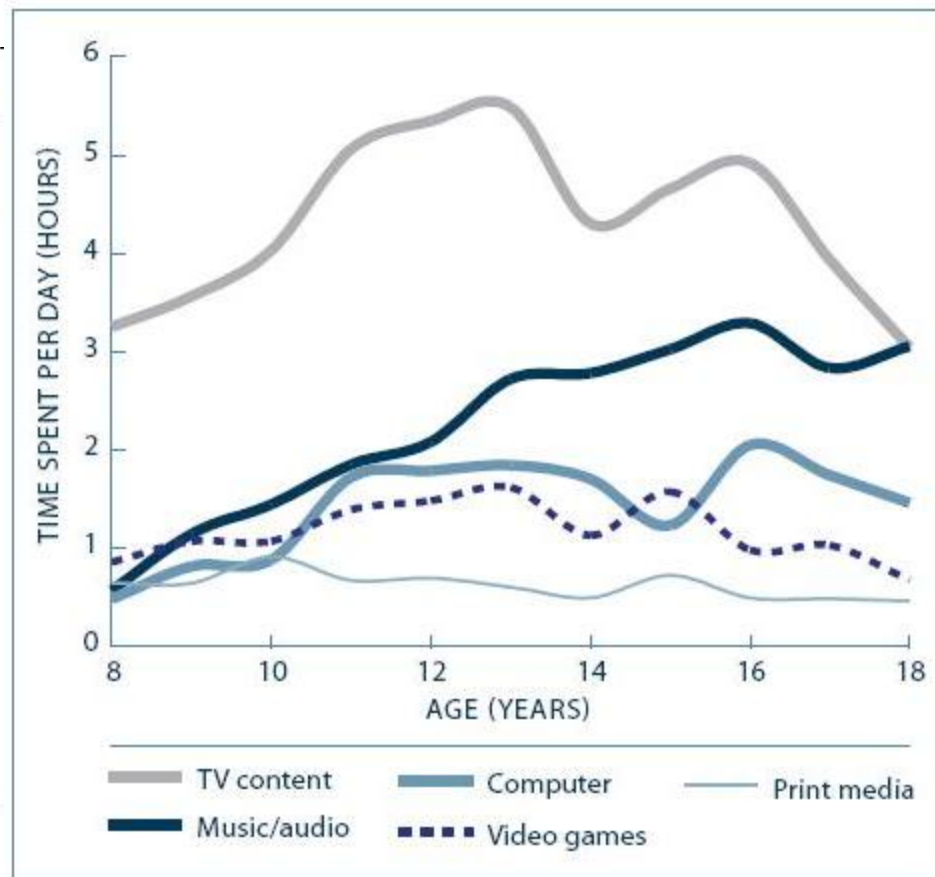
- How teenagers spend their time in the USA (2010)

Media Hardware

Among all 8- to 18-year-olds, total media time consumed on each platform:



Time Spent with Each Medium by Age



What the Modern World Knew

- **Computing**
 - **Computing spread from the mainframe (IBM world, 1960-70s) to the PC (Microsoft world, 1980-90s) to the Internet (Google world, 2000s), to the wireless mobile devices (? world)**

What the Modern Age knew

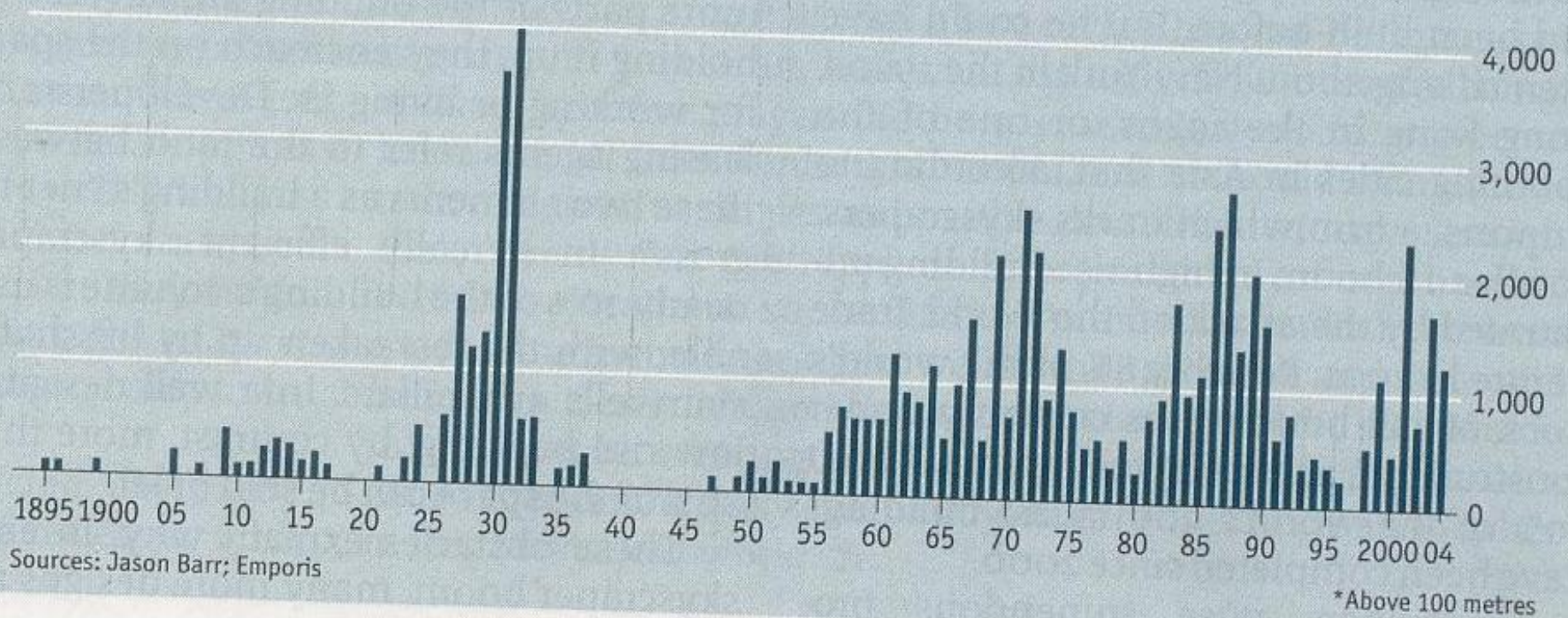
- **Skyscrapers**
 - **Taipei 101 Taipei 509m 2003**
 - **World Financial Center Shanghai 460m 2005**
 - **Petronas Towers Kuala Lumpur 452m 1998**
 - **Asia Plaza Kaoshiung Taipei 431m 2008**
 - **Jin Mao Tower Shanghai 421m 1998**
 - **CITIC Plaza Guangzhou 391m 1997**
 - **Shun Hing Square Shenzhen 384m 1996**
 - **Central Plaza Hong Kong 374m 1992**
 - **Bank of China Tower Hong Kong 369m 1989**
 - **Emirates Office Tower Dubai 355m 2000**
 - **The Centre Hong Kong 350m 1998**
 - **Tuntex & Chien-Tai Tower Kaohsiung 348m 1997**

What the Modern Age knew

- Skyscrapers

Creative construction

Total height of newly-built skyscrapers* in New York City, metres





Malmö
Yokohama



Chicago



Taipei
Kuala Lumpur



Dubai



Hong Kong



Beijing



London
Shanghai WFC



Skyscrapers

Dubai: www.scaruffi.com/monument/arabia/dubai.html

Hong Kong

New York

Shanghai

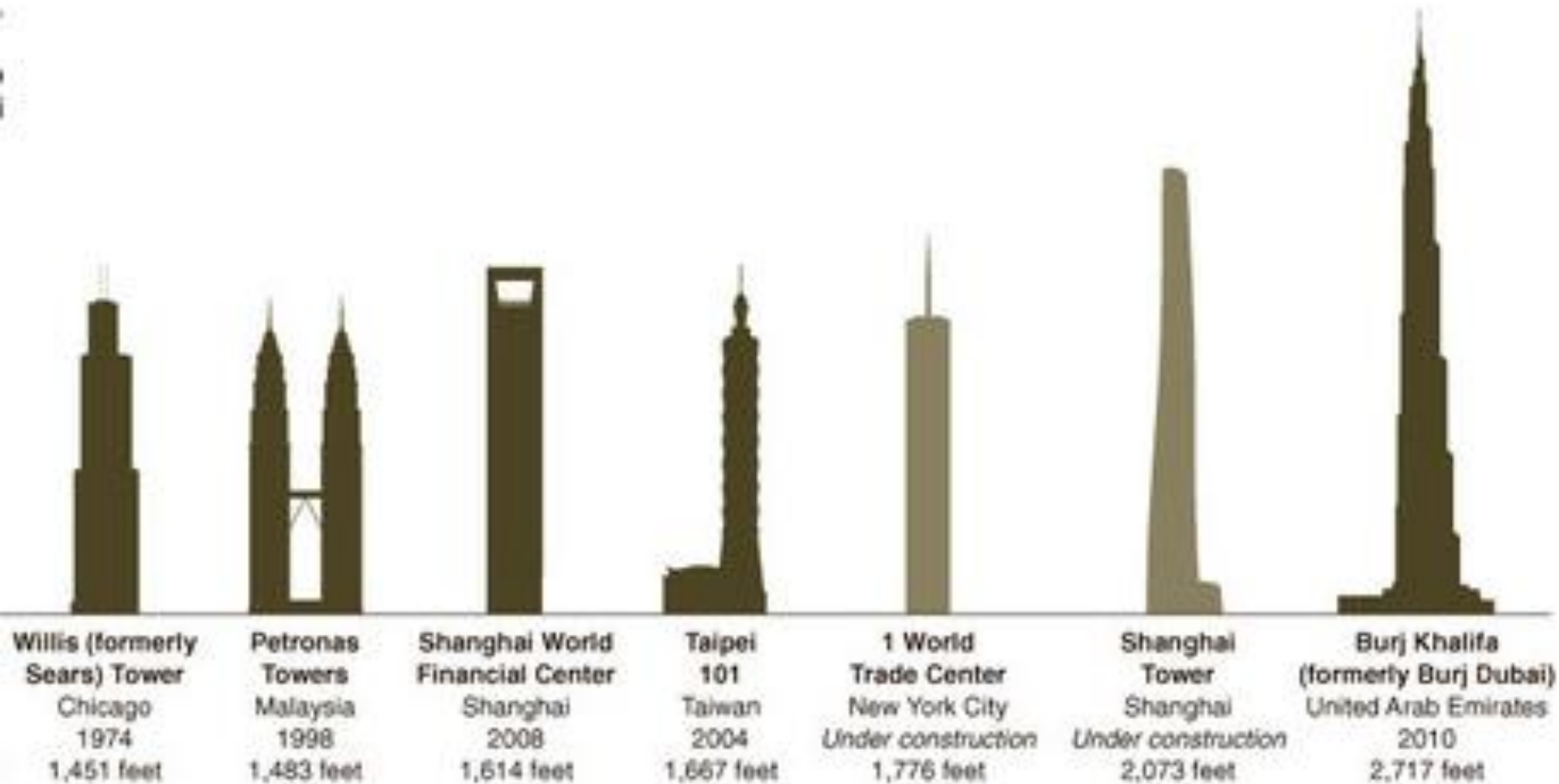
What the Modern Age knew



Taipei 101
Petronas Towers
Jongno Tower, Seoul



What the Modern Age knew



What the Modern Age knew

- **Norman Foster's Millau bridge in southern France (2004)**



What the Modern Age knew

- **David Fisher's rotating skyscraper in Dubai**



What the Modern Age knew

- **AIDS: 39.4 million people have AIDS in the world (UNAIDS, 2003)**
 - North America 1
 - Latin America 2.1
 - Western Europe 0.6
 - Eastern Europe 1.4
 - East Asia 1.1
 - South Asia 7.1
 - North Africa/Middle East 0.5
 - Black Africa 25.4

What the Modern Age knew

- **Leftists seize power in South America**



What the Modern Age knew

- **Anti-Americanism**
 - **Demagogues**
 - **Fidel Castro of Cuba**
 - **Hugo Chavez of Venezuela**
 - **Mahmoud Ahmadinejad of Iran**
 - **Vladimir Putin of Russia**
 - **Osama Bin Laden of Al Qaeda**

What the Modern Age knew

- Anti-Americanism
 - Axis of evil and affiliates
 - Kim Jong Il of North Korea
 - Sadr of Syria
 - Sudan
 - Burma
 - Belarus

What the Modern Age knew

- Zeitgeist
 - General pessimism about the human mission, despite rising standards of living, spreading democracy, fewer wars
 - Concerns about this planet (climate change, bad government, employment, pollution) prevail over dreams of other planets

Influenza

Prone to mutate, influenza viruses continually appear in different forms, requiring the production of a new vaccine each flu season. In some years the symptoms are mild; in others they can be lethal. Three episodes were especially virulent: the influenza pandemic in 1918-19, the Asian flu in 1957-58, and the Hong Kong flu in 1968-69.

Outbreaks

- Widespread
- Regional
- Local
- Sporadic
- Negligible or no surveillance

NO MAPS



HIV / AIDS

Passed on through bodily fluids, human immunodeficiency virus, or HIV, almost invariably leaves the body defenseless against the infections that define full-blown acquired immunodeficiency syndrome, or AIDS. Sub-Saharan Africa, with one-tenth of the world's population, has more than 70 percent of all HIV cases.

Mortality

- High
- Moderate
- None or low



Diarrheal Diseases

Waterborne bacteria, viruses, and parasites produce about four billion cases of diarrhea a year. Those at highest risk include the 1.1 billion people lacking access to safe drinking water and the 2.4 billion without adequate sanitation facilities. Cholera, an acute diarrheal disease, claims more than 5,000 lives a year.

Cholera Cases

- More than 1,500
- 1,001-1,500
- 501-1,000
- 1-500
- Negligible or no surveillance



Tuberculosis

Propelled by a cough or sneeze from an infected person, tuberculosis bacteria can begin to grow in the lungs and throat of anyone who breathes them in. Drugs discovered in the 1940s beat back the disease, but the bacteria have recently begun to develop resistance, and tuberculosis has reappeared with a vengeance.

Mortality

- High
- Moderate
- None or low



Malaria

Caused by microscopic parasites transmitted by the bites of infected mosquitoes, malaria attacks red blood cells. Global warming has expanded the range of malaria-carrying mosquitoes, putting more than 40 percent of the world's population at risk. In addition, warmer weather makes mosquitoes breed faster and bite more often.

Risk

- Significant
- Low
- None



Measles

A highly contagious viral disease that can lead to pneumonia or encephalitis, measles was an inevitable rite of childhood until an effective vaccine became available in 1963. Still striking more than 30 million a year and killing some 900,000, it is the world's leading cause of vaccine-preventable death in children.

Number of cases per 100,000

- More than 100
- 11-100
- 1-10
- 0
- No surveillance



2002 Diseases

2004 Tsunamis



What the Modern Age knew

- 2005 Elections in Iraq



Interim prime minister Iyad Allawi
congratulating elected prime
minister Ibrahim al-Jaafari



What the Modern Age knew

- 2005 Death of Pope Giovanni Paolo II

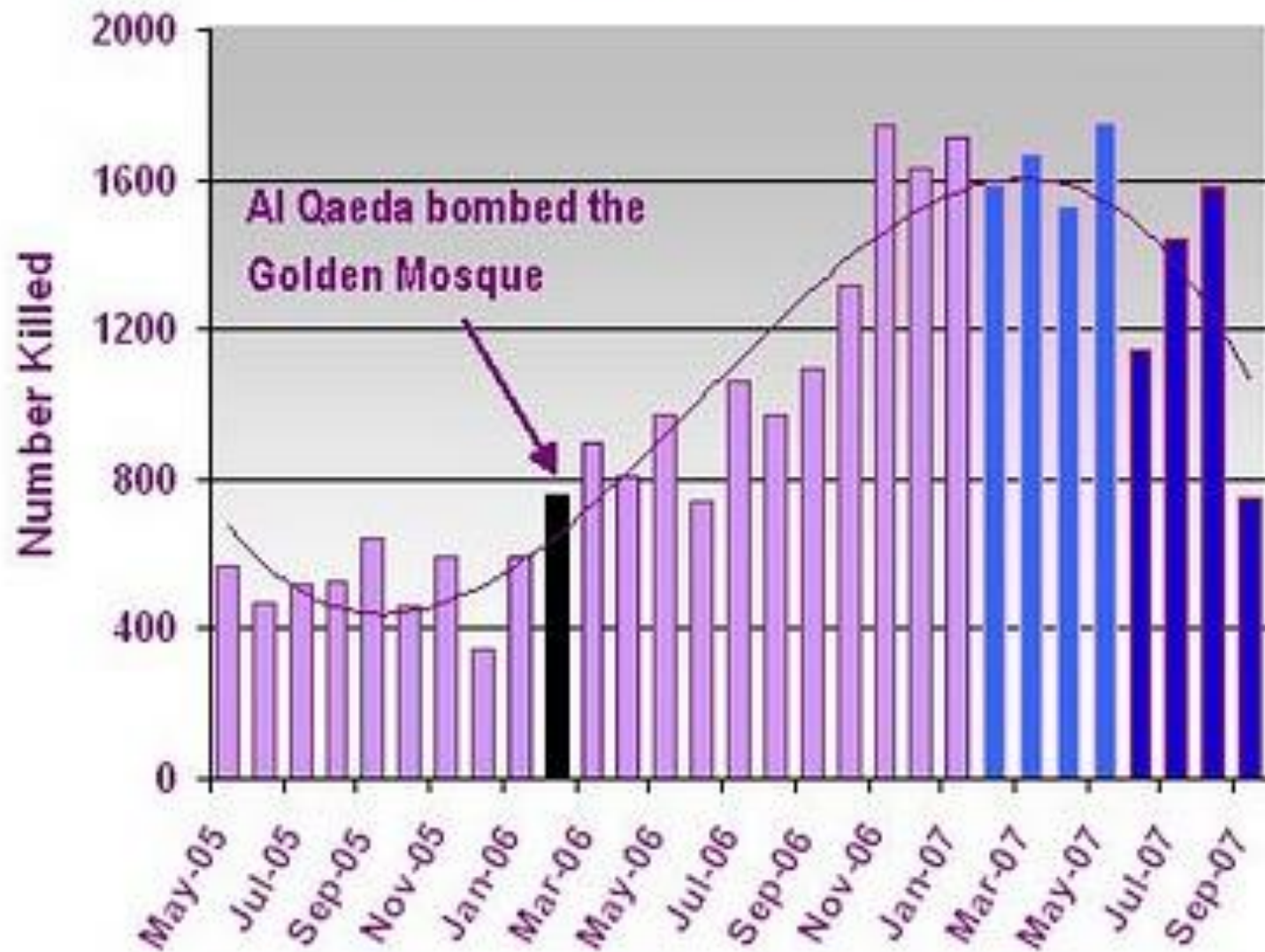


What the Modern Age knew

- Car bombings in Iraq

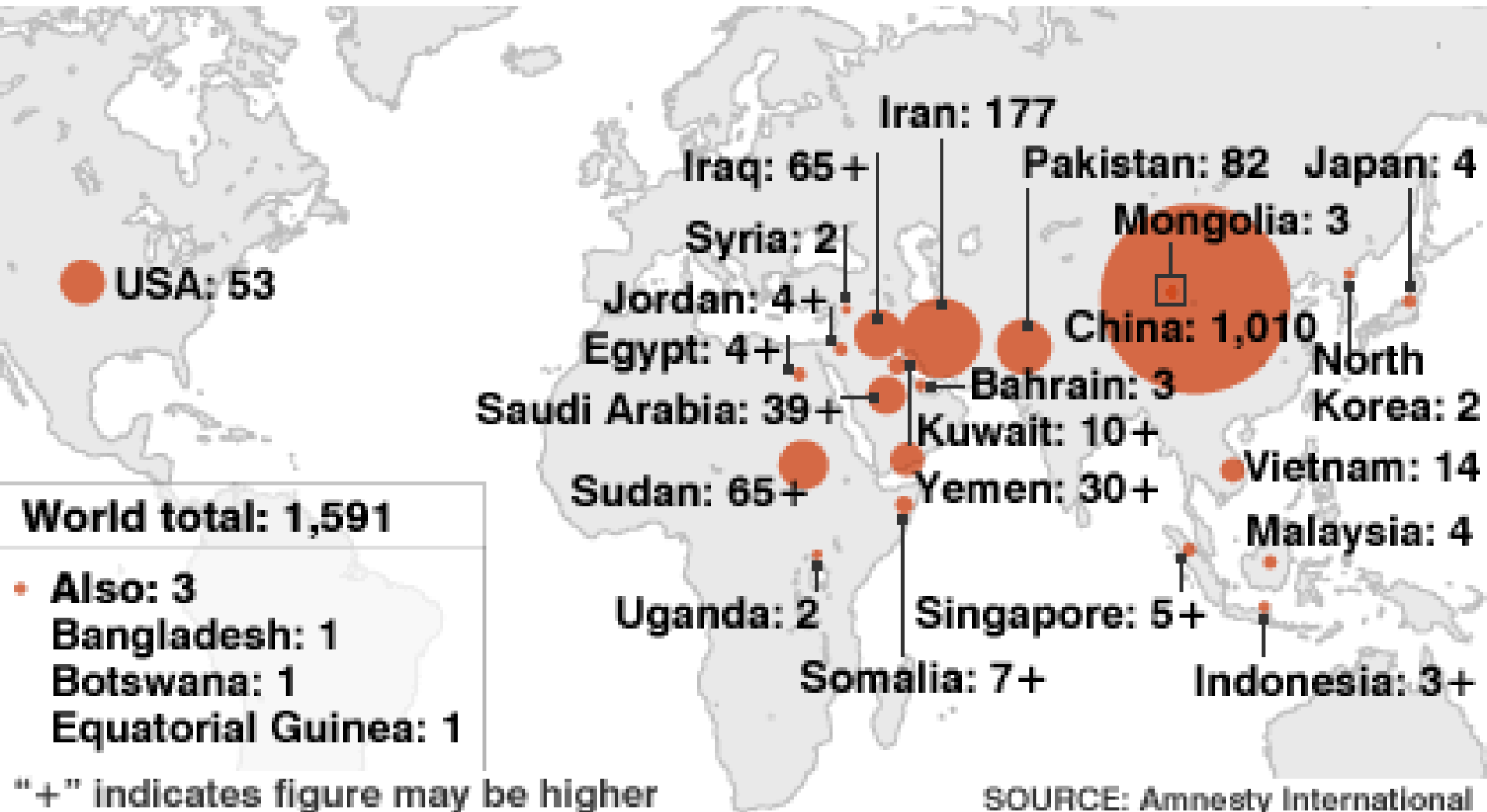


Civilian Casualties in Iraq



What the Modern Age knew

EXECUTIONS AROUND THE WORLD 2006



What the Modern Age knew

- **Location of the Cygnus X-1 black hole**



(NASA 2004)

What the Modern Age knew

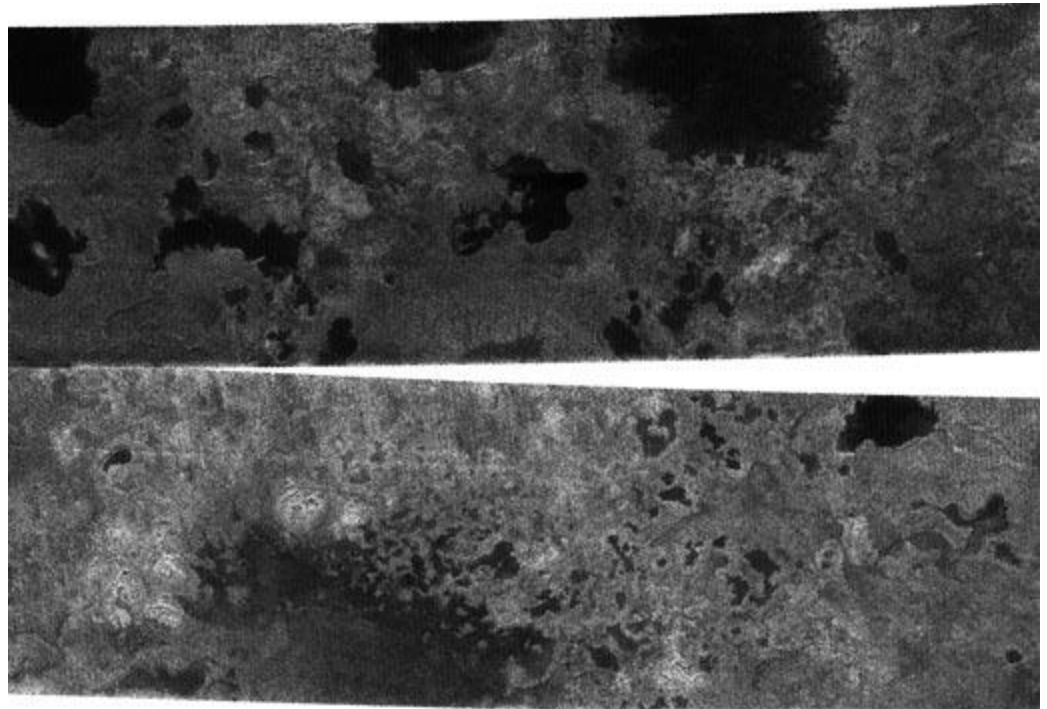
- First photography of a non-solar planet



(NASA 2005)

What the Modern Age knew

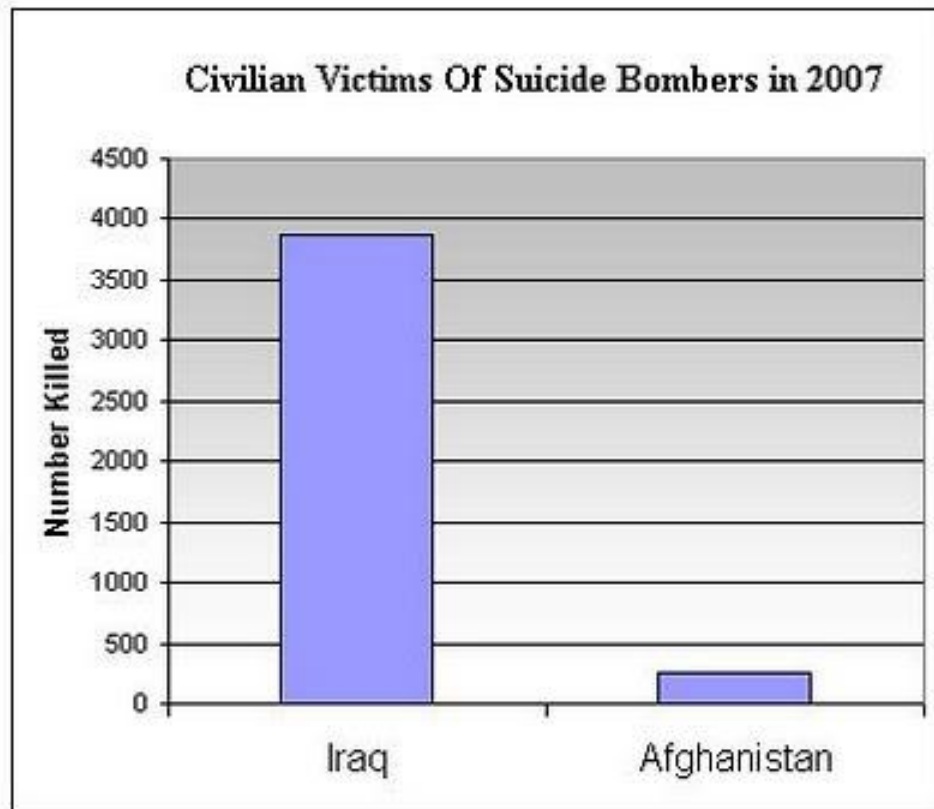
- Water on Titan



(NASA 2006)

What the Modern

- Suicide bombings

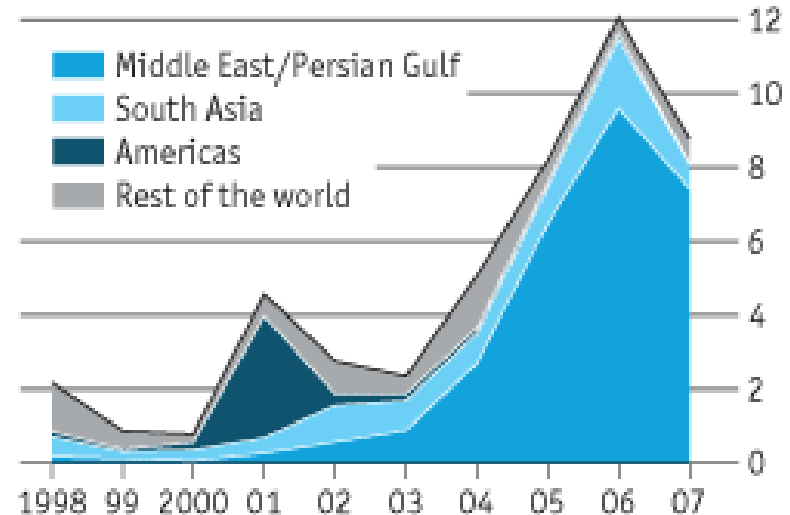


(Economist 2008)

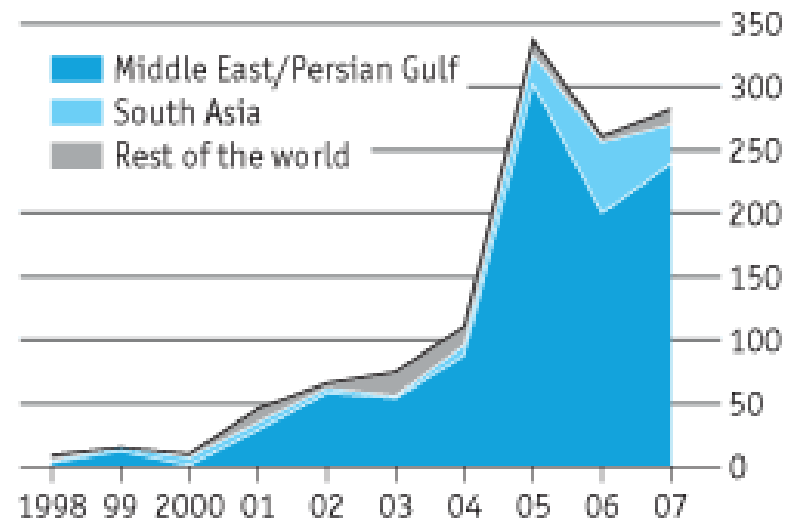
Reign of terror

1

Deaths due to terrorism, '000



Number of suicide-bombings



Source: Global Terrorism Database, University of Maryland

What the Modern Age knew

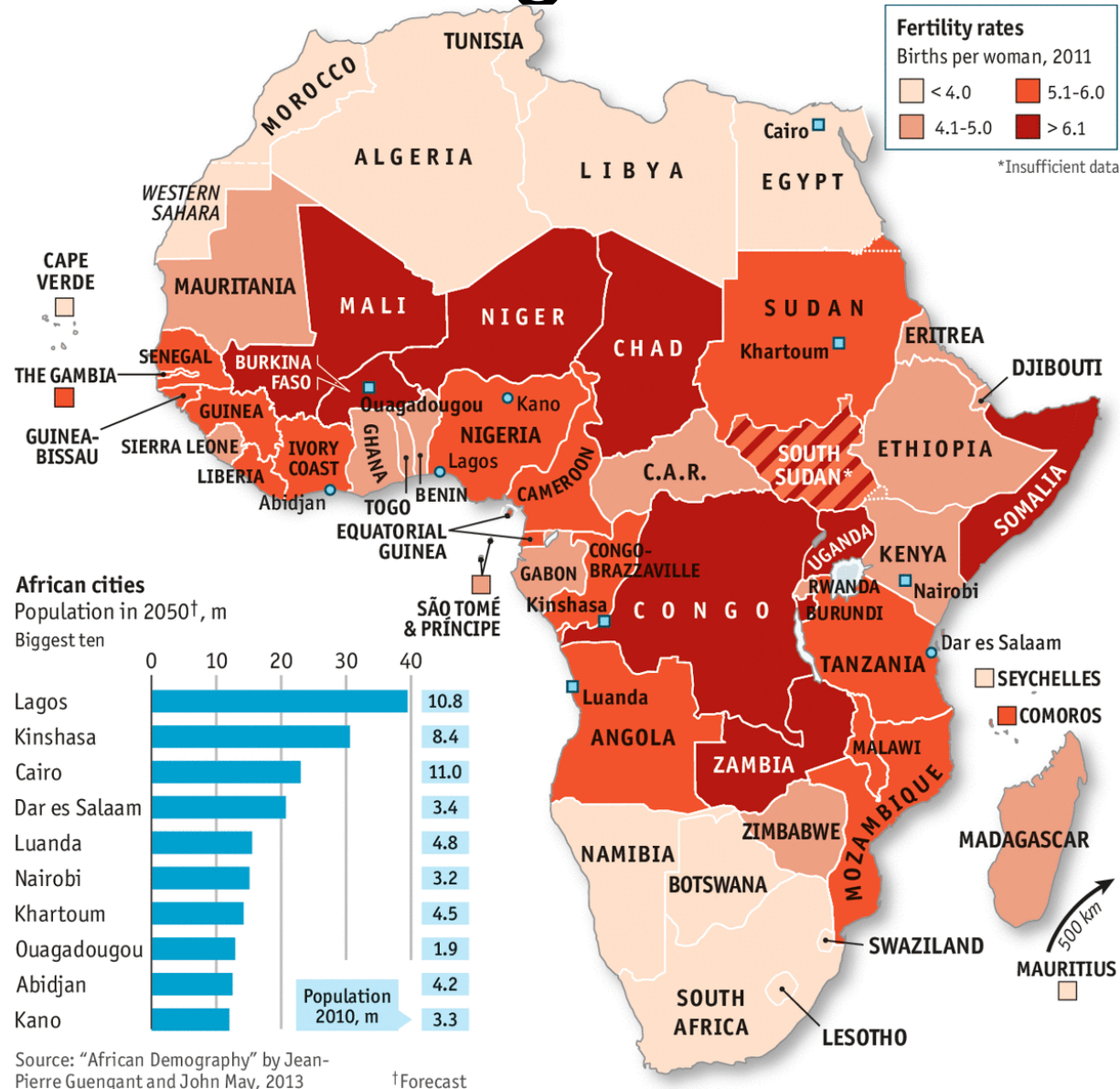
- African democracy



(Economist 2008)

What the Modern Age knew

- Fertility rates

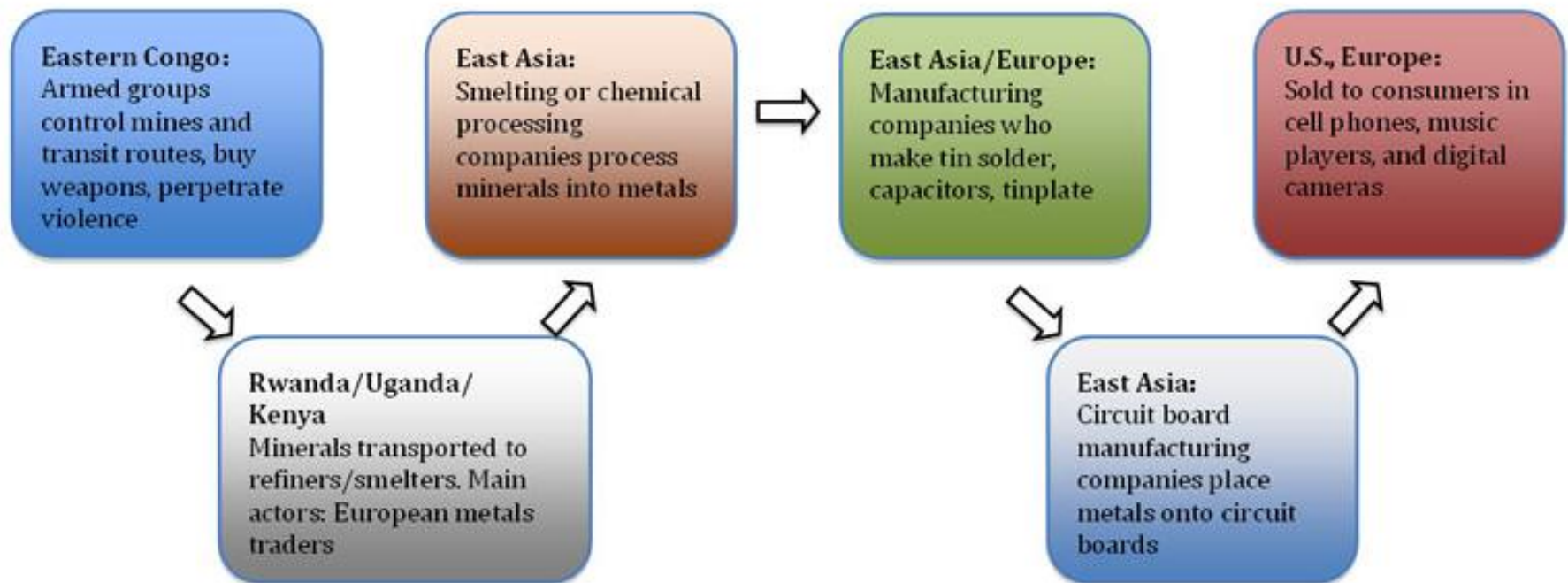


(Economist 2014)

What the Modern Age knew

- **Africa/ Congo**

Congo's Conflict Minerals Supply Chain



What the Modern Age knew

- **Frank Gehry's design for Los Angeles 2009**



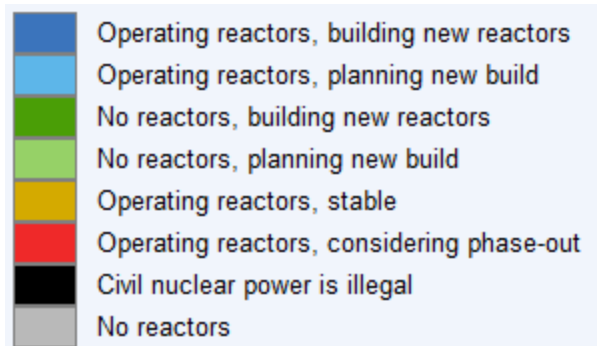
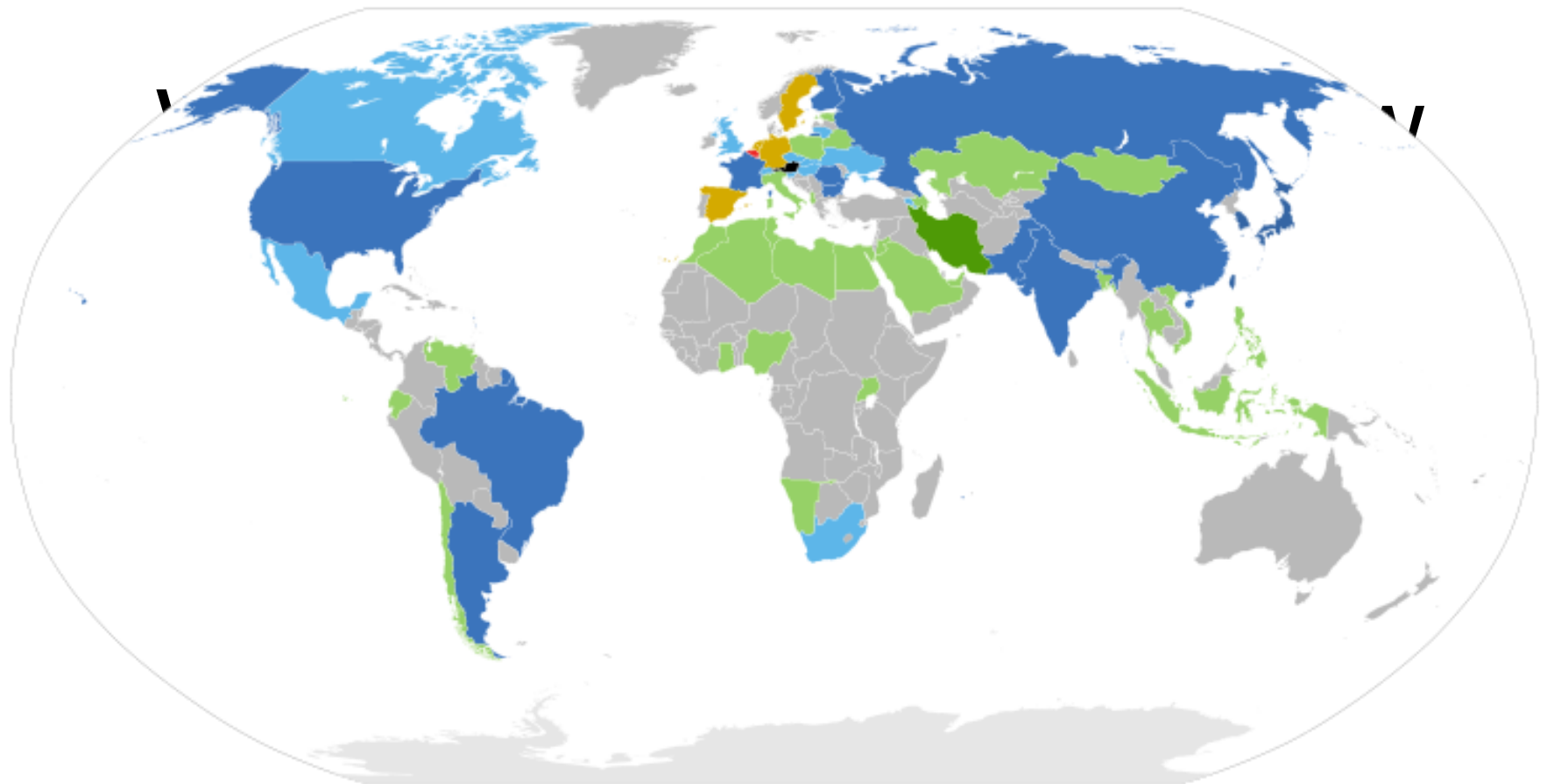
What the Modern Age knew

- **Abu Dhabi's Saadiyat Cultural Center**
- **www.scaruffi.com/monument/arabia/saadiyat.htm**
I

• Global warming and the Arctic Sea

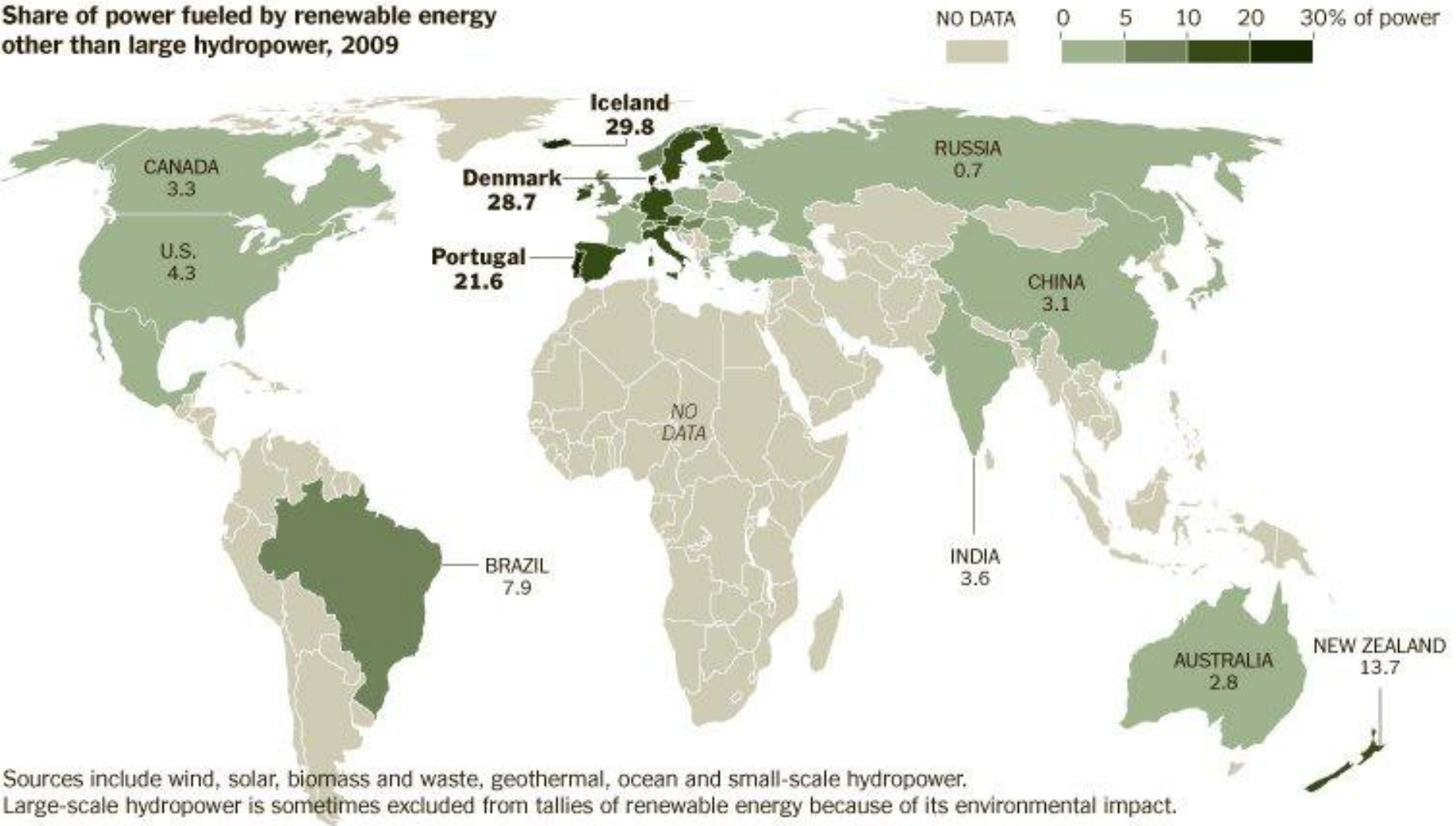


- **Nuclear Energy**



• Renewable Energy

Share of power fueled by renewable energy
other than large hydropower, 2009



What the Modern Age knew

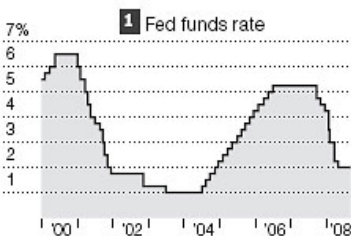
- Financial crisis of October 2008

A Primer on the Financial Crisis

The boom

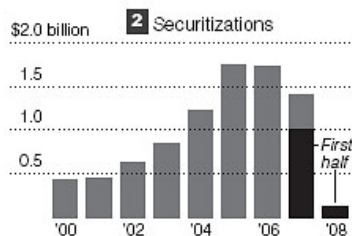
1 INTEREST RATES FALL

In the aftermath of the bursting of the technology bubble in 2001, the Federal Reserve lowers its benchmark interest rate to 1 percent, from 6.5 percent, over two years. Strong foreign demand for American securities pushes down long-term interest rates.



2 SECURITIZATION

At the same time, Wall Street packages more mortgages and other consumer debt into securities for investors like pension funds, foreign central banks and hedge funds. Bankers assert that these instruments — mortgage-backed securities and collateralized debt obligations — will help reduce and disperse risks.



RISKY LOANS

Encouraged by low rates and securitization, banks and mortgage companies take bigger risks in home lending by allowing homeowners to borrow more, put little or no money down and not provide proof of their financial condition.

3 HOME PRICES RISE

Lower borrowing costs and advent of more risky loans helps drive up home prices, which nearly double from 2000 to 2006. The run-up is greatest in California, Florida, Arizona and Nevada.



LEVERAGE

Across the financial system, banks, securities firms and hedge funds increase their use of borrowed money to make investments. They borrow at low rates and make investments that yield a much higher return, putting very little of their own money at risk.

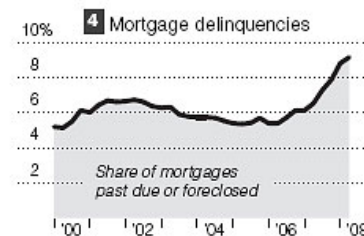
The bust

PRICES FALL

With interest rates rising and homeownership at record levels, prices start to dip in the second half of 2006. The declines start in places like San Diego, where prices jumped the most during the boom.

4 DEFAULTS INCREASE

As more homeowners are unable to refinance or sell their depreciating homes, defaults on mortgages climb. The first signs of trouble emerge among subprime loans but they quickly move to supposedly better-quality loans.



CREDIT CRISIS

With defaults rising and real estate prices falling, the value of mortgage securities falls rapidly and investors leave the market. Banks take more than \$500 billion in write downs and the International Monetary Fund estimates losses could top \$1 trillion.

5 TROUBLES SPIRAL

As losses rise, firms like Lehman Brothers have more difficulty raising capital and investors lose confidence. Banks tighten lending standards, squeezing the economy and the financial system in a self-perpetuating cycle.



Sources: Federal Reserve Board; Thomson Reuters; Standard & Poor's; Mortgage Bankers Association; Bloomberg

THE NEW YORK TIMES

What the Modern Age knew

- Financial crisis of october 2008

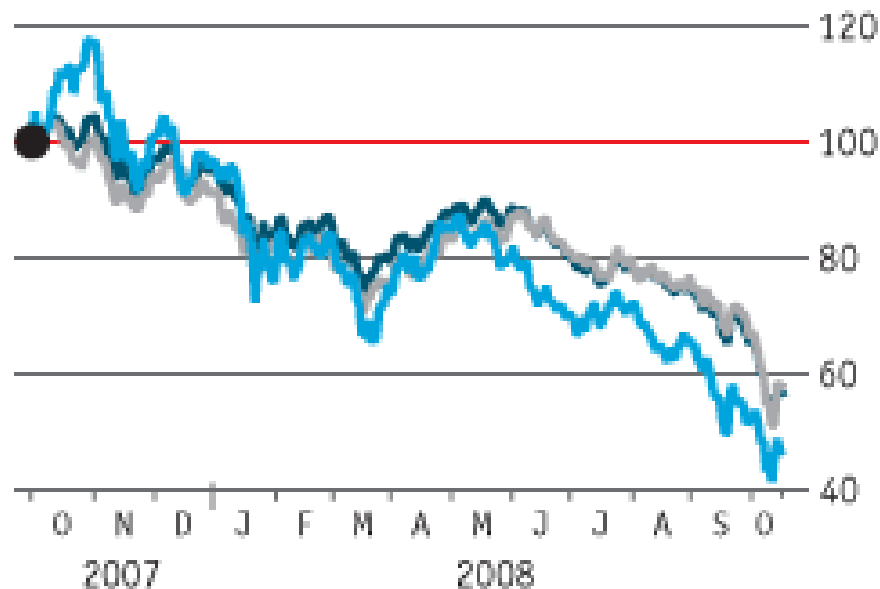
Key Indexes	At close 10/10/2008	Change	% change	1 month	1 year
FTSE 100 BRITAIN	3,932.06	-381.74	-8.85%	-26.73%	-41.53%
DAX GERMANY	4,544.31	-342.69	-7.01%	-26.83%	-43.43%
CAC 40 FRANCE	3,176.49	-266.21	-7.73%	-25.85%	-45.82%
Micex RUSSIA	700.37	0.00	0.00%	-37.17%	-62.12%
Nikkei 225 JAPAN	8,276.43	-881.06	-9.62%	-32.97%	-52.59%
Hang Seng HONG KONG	14,796.87	-1,146.37	-7.19%	-26.01%	-49.21%
Shanghai Composite CHINA	2,000.57	-74.01	-3.57%	-6.98%	-66.17%
Bovespa BRAZIL	35,609.54	-1,470.76	-3.97%	-28.25%	-42.98%
Dow Jones				-25%	

What the Modern Age knew

- Financial crisis of October 2008

That sinking feeling

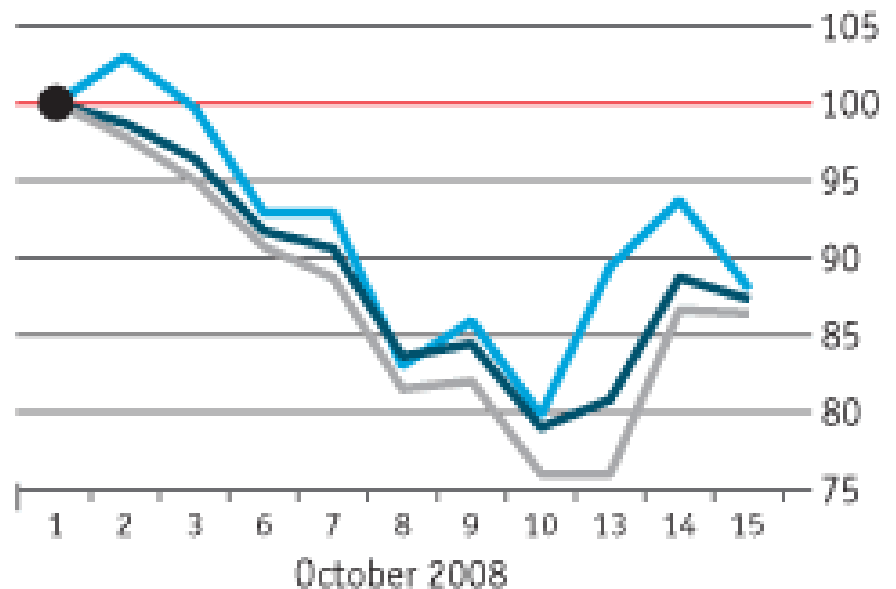
Stockmarkets, October 1st 2007=100



Source: Thomson Datastream

MSCI indices: China Asia Japan

Stockmarkets, October 1st 2008=100



(Economist, October 2008)

What the Modern Age knew

- **Financial crisis of october 2008**

3-MONTH CHANGE AGAINST THE U.S. DOLLAR

BEST PERFORMERS

Hong Kong dollar	+0.58%
Chinese yuan	-0.08
Thai baht	-3.36
Argentine peso	-6.98
Indonesian rupiah	-8.06
Peruvian new sol	-8.51
Taiwanese dollar	-8.84
Singaporean dollar	-9.12
Malaysian ringgit	-9.34

WORST PERFORMERS

Colombian peso	-25.10%
Mexican peso	-25.41
Turkish new lira	-27.27
South Korean won	-28.03
Brazilian real	-29.95
Hungarian forint	-30.63
Polish zloty	-30.77
South African rand	-31.38
Icelandic krona	-31.78

Source: Bloomberg

THE NEW YORK TIMES
104

(24 October 2008)

What the Modern Age knew



(Dow Jones)

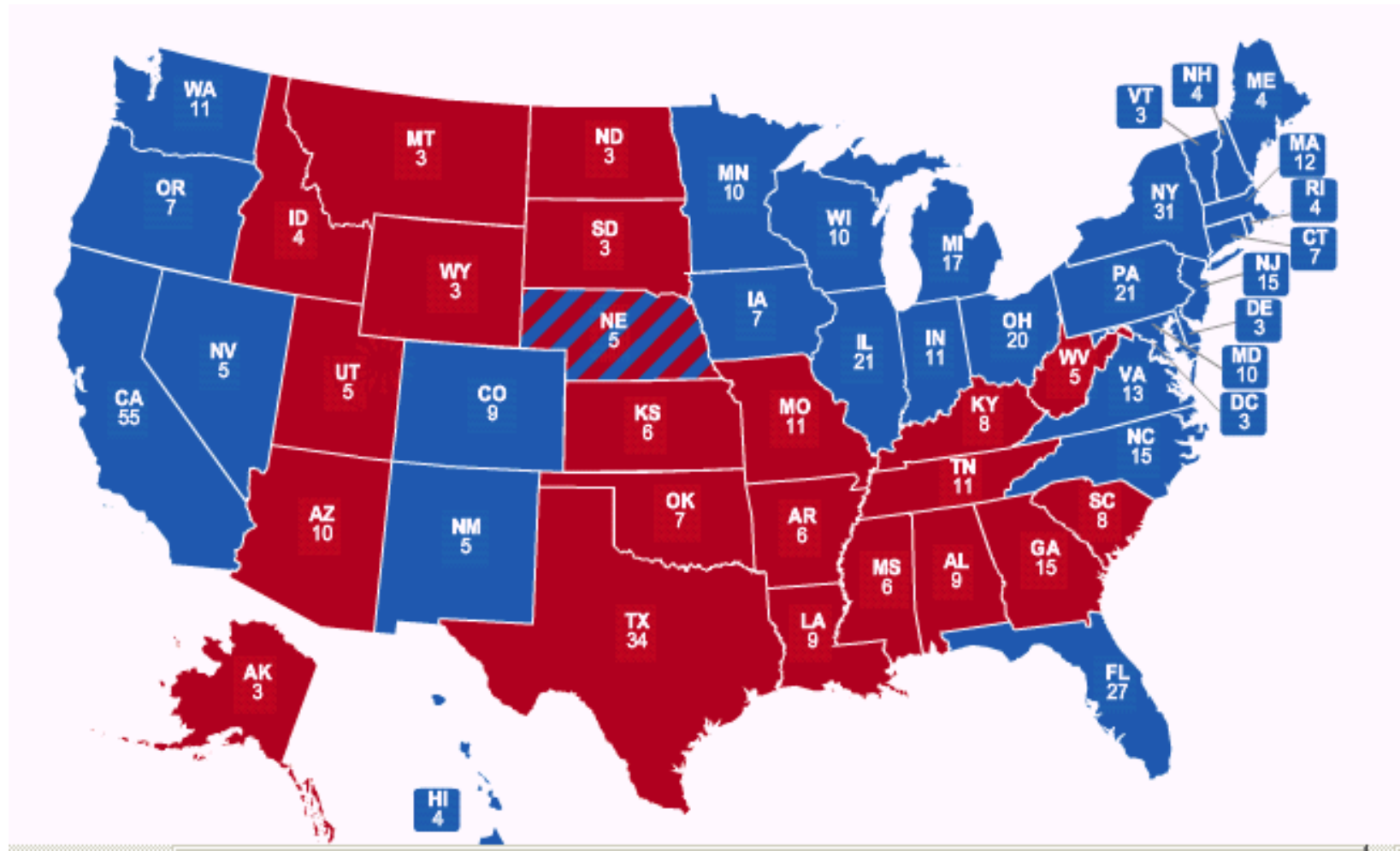
What the Modern Age knew

- **USA elections of november 2008**

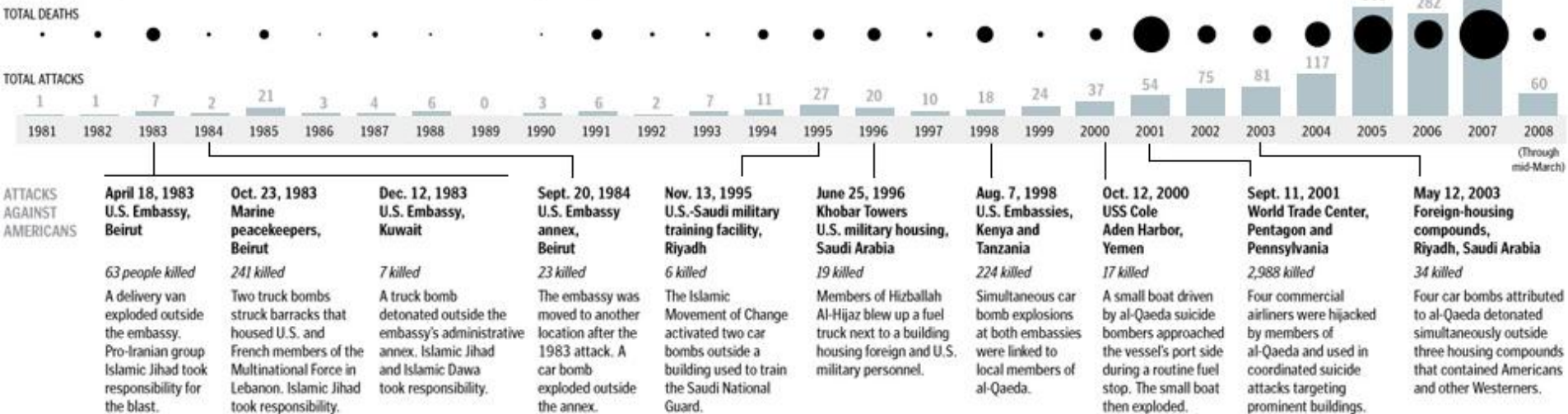


What the Modern Age knew

- USA elections of november 2008



Breakdown of 1,840 suicide attacks worldwide, December 1981 through mid-March 2008



What the Modern Age knew

- USA 2009



What the Modern Age knew

- **Burj Dubai (2010)**



What the Modern Age knew

- Knowledge

What the Modern Age knew

- **Geoffrey Miller (2000)**
 - Sexual selection caused the human brain to grow very rapidly
 - Art, literature and music are by-products of sexual selection (not useful for survival but for reproduction purposes)

What the Modern Age knew

- **Peter Gardenfors (2003)**
 - **How self-conscious beings came to be: first sensations, then attention, then emotions, then memory, then internal representations, then planning, then the self, then free will and finally language**
 - **Perceptions (the interpretation of sensations, which are representations directly related to the world) vs "detached" representations (representations about something that is present here and now)**
 - **Detached representations allow a being to "become increasingly detached from the immediate vicinity"**

What the Modern Age knew

- **Peter Gardenfors (2003)**
 - The self presupposes a you
 - The "I" emerges from a network of inter-related cognitive functions
 - Language came last: human language is very much about the "I" and the "you"
 - Language is an emergent property of cognitive systems (it is a natural evolution of cognitive skills that preexisted it)

What the Modern Age knew

- **James Surowiecki (2004)**
 - **A crowd of random individuals is likely to make certain predictions and judgment better than the most expert individuals**

What the Modern Age knew

- **Thomas Friedman (2005)**
 - **Globalization has leveled the competitive playing fields between industrial and emerging countries**

What the Modern Age knew

- **Thomas Friedman (2005)**
 - **Triple convergence**
 - **Around the year 2000 all of the flatteners converged with one another**
 - **Businesses began collaborating horizontally**
 - **Communist countries adopted capitalism**

What the Modern Age knew

- John Hagel (2009)
 - The world is shifting from an economy in which the strategic advantage was in protecting and extracting value from knowledge into an economy in which the focus of value creation is effective participation in knowledge flows which are constantly being renewed
 - Knowledge is depreciating at an accelerating pace
 - Social media allow to build richer knowledge networks that connect with partners and customers

What the Modern Age knew

- Ballet
 - Electronic Dance Theatre (Julie Wilson & Mark Bokowiec): "Cyborg Dreaming" (2000)
 - Paulo Henrique (Portugal): "Contract with the Skin" (2000)
 - Troika Ranch (Mark Coniglio and Dawn Stoppiello, USA): "The Chemical Wedding of Christian Rosenkreutz" (2000)
 - Igloo (Bruno Martelli and Ruth Gibson, Britain): "Winter Space" (2001)
 - Random Dance Company (Wayne McGregor, Britain): "Nemesis" (2002)
 - Half/Angel (Jools Gilson-Ellis & Richard Povall, Britain): "Spinstren" (2002)
 - Palindrome (Robert Wechsler, Germany): "Touching" (2003)

What the Modern Age knew

- Ballet
 - Pam Tanowitz "Four Quartets" (2018)
 - Will Rawls (1978): "Cursor" (2018)

What the Modern Age knew

- “No one has any questions because we all have too many questions” (Jennifer Dean, former student of this class)

What the Modern Age knew

Piero Scaruffi

Copyright 2018

<http://www.scaruffi.com/know>