



# America in the Global Economy: Rebalancing and Innovating

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The US in worst shape it has been in for generations:

- 25 years living beyond means have finally caught up
- Economically, out of balance publically and privately
- Some core industries in deep trouble (banking, automobiles, construction, retail) while others face serious funding issues (healthcare, education, military...)

Not credit crisis but over-consumption/living beyond means crisis:  
credit symptom not cause

Two propositions:

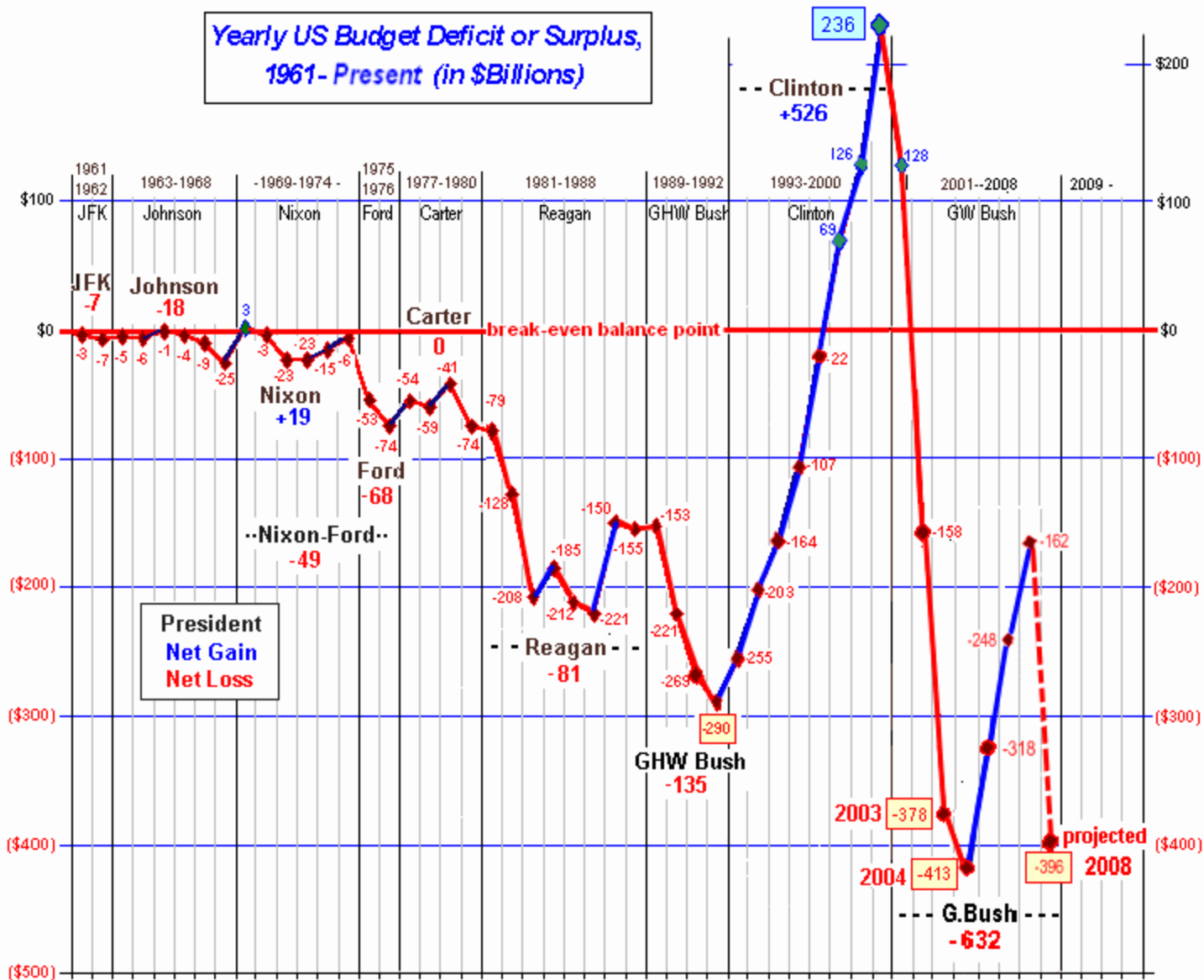
- Americans could cut consumption by 20% and probably wouldn't notice: 20% smaller houses, 20% smaller cars; 20% less food; 20% less clothing etc.
- In face of global imbalances and global competition/scramble for resources, 2006/7 American consumption levels unsustainable



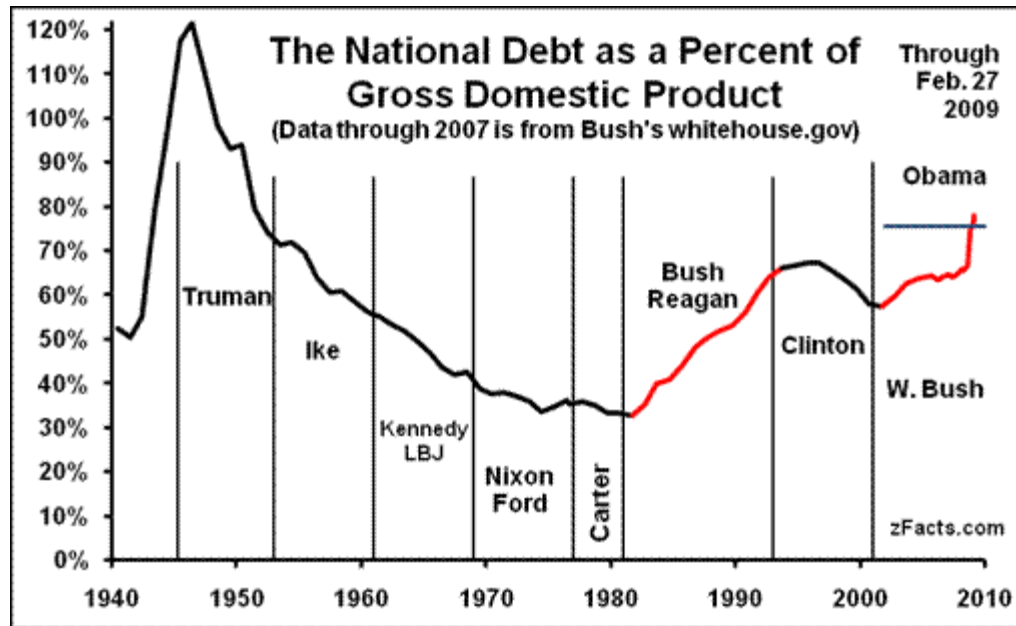
# US Political Economy Imbalances



**Yearly US Budget Deficit or Surplus,  
1961- Present (in \$Billions)**



# US Federal Gross Debt as % of GDP: 1940-2009



Source: zFacts.com



## Even before the Credit Crisis:

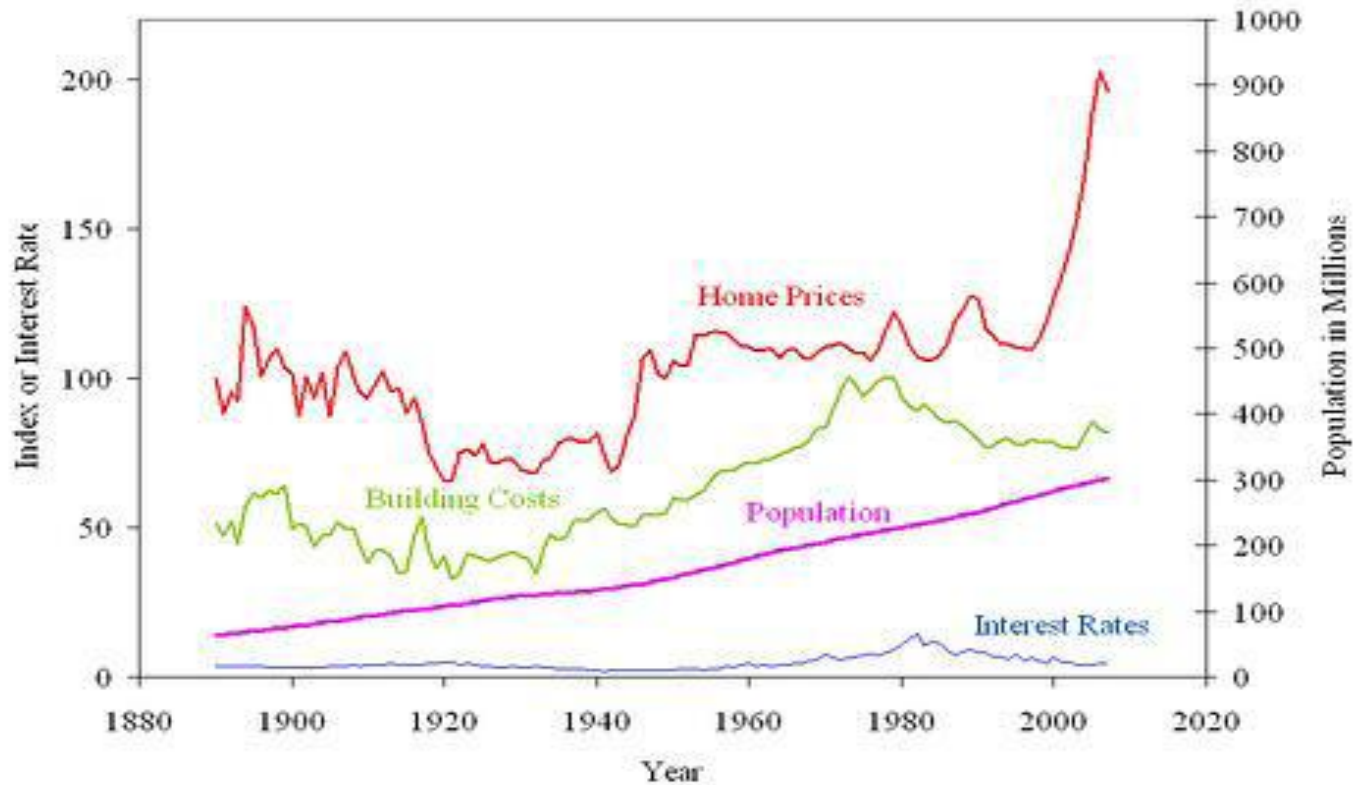
- Social Security/Medicaid surpluses being raided to balance federal budget
- Federal government borrowing to meet expenditures; foreign savers meeting some of need...Japan, China, Saudi Arabia



# US Private Sector Imbalances



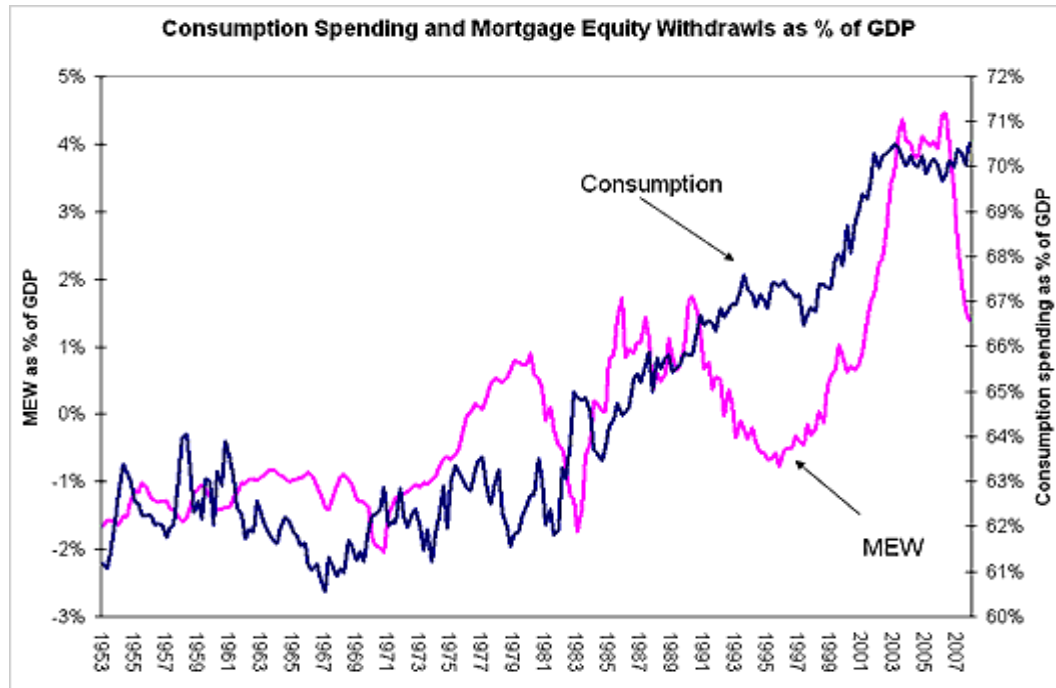
# US Macroeconomic data: Home prices, building costs, interest rates, population



Source: <http://www.econ.yale.edu/~shiller>



# US Macroeconomic data: Consumption and Mortgage Equity Withdrawals



Graph constructed by Professor Christian Lundblad, Kenan-Flagler Business School, University of North Carolina at Chapel Hill.

Consumption and GDP data from the Bureau of Economic Analysis (BEA). Mortgage equity withdrawals are measured as the year-over-year change in mortgage debt (from the Federal Reserve Flow of Funds) minus 70 percent of residential investment spending (from the BEA). (Source: L. Josh Bivens, Economic Policy Institute)



## Private sector imbalances:

- Private consumption expenditure sustained by freely available low cost capital, tax cuts, real estate asset bubble/boom, credit card debt
- World's largest ponzi scheme ever operating between US consumers and PRC
- US private savings rate also very low/even negative over past decade



## Some important scary numbers

- 70%; and 20% (% of US C/GDP; US % of consumption globally)
  - 15% (% of construction in overall US economy)
  - US\$ 2.6tn in 1996; US\$ 6.9tn of US\$27tn in 2007 (mortgage backed securities issued in 96 vs. 07; ratio to US bond market)
    - 4% 1996; 22% 2006 (Sub-prime % of mortgage market)
  - US\$13.7tn, US\$10.7tn and US\$ 500bn (US GDP, US national debt, interest cost p.a. Feb 2009; note interest servicing 4<sup>th</sup> largest after Medicare/Medicaid, Social Security, Defense)



# Structural Effects of Crisis: Globally

## Geo Politically

- Age of American driven global economy ending; 300 million cannot drive 6.7 billion: new global consumer(s) of last resort needed, but consumption patterns will differ (emerging consumers  $\neq$  rich uncle)
- America moves from last super power left standing to first among equals, emerging countries (BRICs) power  $>$  as economies strengthen

## Macro-economically

- Re-regulation of financial markets likely
- Consumer growth mostly in emerging economies



# Global Warming/Climate Change



The scientific evidence is now overwhelming: climate change is a serious global threat, and it demands an urgent global response.

## The Stern Review



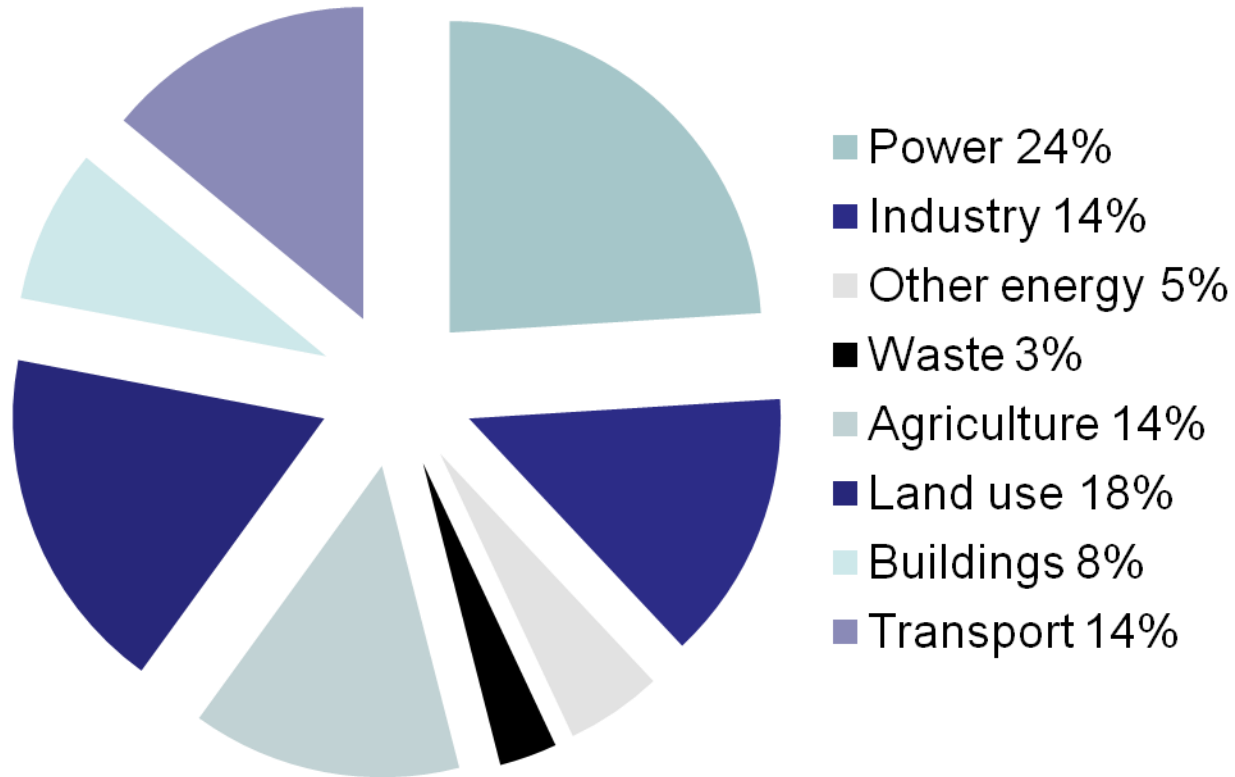
## Stern Review conclusion:

- Inaction means climate change could cause < 5% of global GDP each year, now and forever - could > to 20% p.a.
  - Costs of action/reducing emissions to avoid worst impacts can be limited to 1% of global GDP p.a.
- Investment over next 20 years will profoundly effect climate in latter half of 21<sup>st</sup> Century, well into 22<sup>nd</sup>
- Inaction over coming decades could create risks of major economic/social disruption, on scale of great wars/economic depression in 20th century

And difficult or impossible to reverse such changes



# Greenhouse-gas emissions in 2000, by source



## Some potential policy responses

- Carbon emissions capping and/or trading
- R&D cooperation to encourage clean technology development
- Reduce/control global deforestation
- Corporate initiatives
- Citizen initiatives
- Adaptation



## The Big Questions:

- How urgent is situation?  
*Very urgent, action needed ASAP*
- Will massive market failure be remedied by market alone if incentives are correct?  
*Probably not*
- Will regulation be required?  
*Yes*
- Where (global, regional, national, developed vs. developing etc.)?  
*Across all locations*
- How widespread (corporate, individual, government etc.)?  
*Across all levels*



Action on climate change will also create significant business opportunities, as new markets are created in low-carbon energy technologies and other low-carbon goods and services. These markets could grow to be worth hundreds of billions of dollars each year, and employment in these sectors will expand accordingly.

The world does not need to choose between averting climate change and promoting growth and development. Changes in energy technologies and in the structure of economies have created opportunities to decouple growth from greenhouse gas emissions. Indeed, ignoring climate change will eventually damage economic growth. Tackling climate change is the pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth of rich or poor countries.

## **The Stern Review**



Dealing with Global Warming/Climate Change is major adjustment now facing all:

- Industrial model over past 300 years based on cheap fossil fuel (oil, coal, natural gas)
- Costs must be adjusted to account for negative externalities of fossil fuels
- Oil prices/carbon producers could be taxed, proceeds used to search for clean energy (gas and electricity prices ↑, big time...)



Developing/finding clean energy now biggest factor determining sustainability of human struggle for productivity

Is US ready to pay more for energy so clean energy sources emerge here?



Future Scenarios:

Party On, Dude

To

Tighten Belts



## Party On, Dude

- Bailouts continue/budget deficits grow, pandering rather than pain: no pay as you go imposed
- Government borrowing increases, private investment/GDFI crowded out, welfare grows - corporate and consumer
- Protectionist impulses lead to closing of American economy to buffer against foreign competition/protect US jobs
- World eventually becomes nervous of US\$/Economy, dumps US\$, status of world reserve currency lost to Euro or Rmb
- US descends into second class status, paying off today's debt through inflation, debasing currency into Mickey Mouse money
- This is worst case scenario, unlikely but possible



## Tighten Belts: Take the Pain, Adjust, Emerge..

- After stabilization, tightening occurs: interest rates rise to encourage savings/counter inflation, budget deficit stabilizes, federal govt. > discipline
- Short to near term economic growth declines/moderates, jobs lost, Americans reduce consumption, increase savings to de-lever balance sheets, increase savings/cushions
- After initial adjustment US economy resumes growth based on ongoing productivity gains, clean tech/high tech/innovation, local and export led growth
- China, Brazil, India, others become locomotives of global growth, lasting well into the 21<sup>st</sup> Century, consumption model evolves
- US evolves from last Superpower to First Among Equals



## Situational check

- New Administration/Congress trying to stem bleeding/stop meltdown; closer to party on, dude than to tightening belts, but mostly necessary triage
- Deficit for 2009 federal budget forecast to exceed US\$1.6 trillion, 3x greater than 2008; possibly >US\$1 trillion next year too; easier to increase debt than to impose discipline/pay as you go
- Choice between stimulating investment vs. consumption vs. permitting correction; borrowing should be for investment, not consumption
- Pres. Obama's talk of fiscal responsibility encouraging...walking tight rope



Either way Americans must reduce consumption/living standards to match productivity/income; and prepare for the additional overhead of healthcare, baby boomer retirement costs, and for clean energy development costs

We probably cannot borrow or grow our way out of the current mess

More than likely, future entitlement expenditure will have to be curtailed



## What can individuals do:

- Prepare for age of careful consumption; live within means
- Recognize who you are not determined by stuff you have
- Petition your congressman to live within his/her means too
- Regardless of stimulus etc. next few years will be painful; chickens home to roost, free lunch over



## What can corporations do:

- Look for sustainable demand rate in careful age; adjust to this level
- Continue search for productivity enhancements, and for growth through innovation
- Over longer term consider market seeking in high growth emerging economies....go where money is!!



## Likely macro trends over the next two generations:

- Curbing Climate Change/Global Warming > energy, transport costs; boom in clean energy, production techniques, products and services
- Consumption models change in face of > commodity prices, > energy costs, > transport costs, need for cleaner, more re-cyclable products
- US consumption levels < relatively as emerging markets >; US becomes global market seeker, not supply seeker
- Global inequality diminishes, but does not disappear; but in 2050 US PPP per capita still exceeds those of most residents in emerging world, and remember, not a zero sum game!!!



## Growth Paths for the Developed World

- Innovation (in products, services, solutions, and productive systems/processes)
- High tech: biotech, nanotech, advanced IT/networking, personalized medicine, others
- Clean technology, low carbon fuel/alternative energy sources, less polluting production processes
- And remember, around 90 percent of jobs are local
- Follow the demographic trends: graying and browning of America



## What must educators do?

- Prepare American human capital for knowledge intensive, creative work, so we can innovate at a rate faster than others can replicate; high level math and science skills are table stakes
- Deferred gratification must be instilled in students so they make the educational investment and learn how to THINK, problem solve, research, imagine, create, connect dots etc.
- My contract with my children...
- Universities and Community Colleges must develop curricula that prepare workers for 21<sup>st</sup> Century, high value creative work, or for work with smart machines delivering smart goods, services, or solutions



For the sake of our children/grand children we must deal with our current economic imbalances (short term), as well as with Global Warming/Climate Change (long term), and we must also find new avenues for economic growth (innovation)

We are currently mortgaging their futures, both economically and environmentally...

# BIG TIME

