# War, Taxes, Recessions, Trickle-Down Economics and National Debt

## 1. Terms:

**Gross Domestic Product (GDP)** This is the sum of all consumer spending, government spending, the value of all new investments, and the net value of US exports (exports minus imports). It doesn't keep track of black market activity or transactions not reported to the government (like cash exchanges and off-shore hidden accounts)

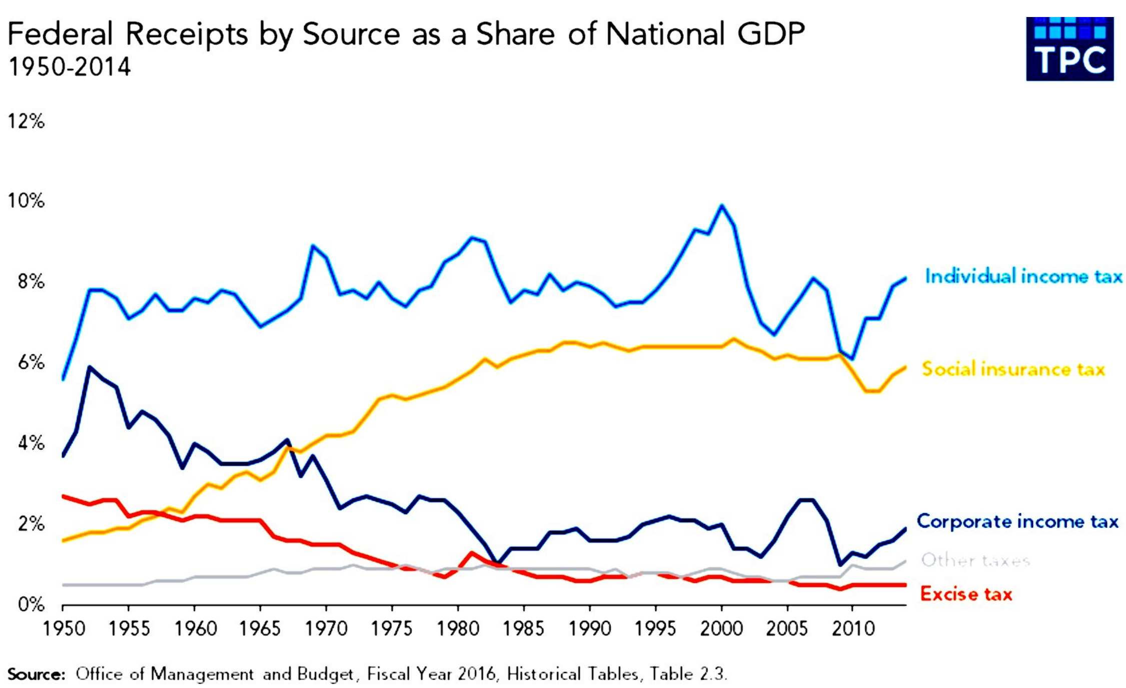
http://www.investopedia.com/terms/g/gdp.asp

**Federal Income** Money the government gets in taxes. In 2014, the US Government got percentages of its income in the following forms

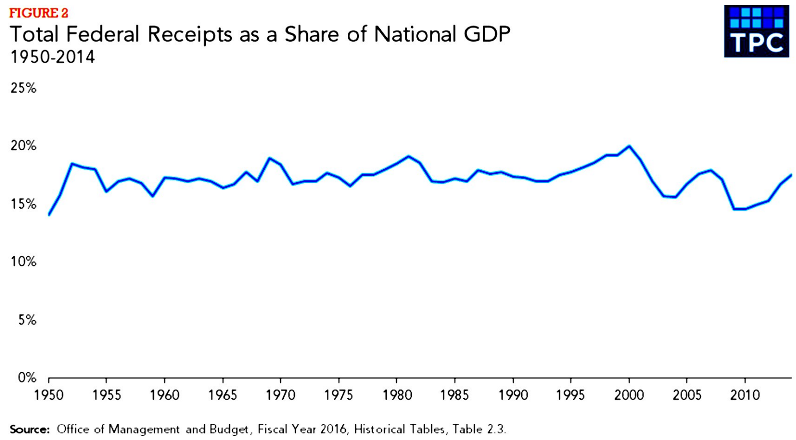
| Revenue Source | Individual Income Tax | Social Security (payroll) Tax | Corporate Income Tax | Other |
|---|---|---|---|---|
| % of Total Income | 46.2 | 33.9 | 10.6 | 3.1 |

**Since 1950, what has happened to the % of federal income that each type of tax contributes, as a % of GDP (see graph below)?**

- Individual Tax contribution has fluctuated between 6% and 10%
- Social Security tax contribution has more than tripled
- Corporate Tax contribution has halved
- Excise Tax contributes one-quarter of what it did
- Other taxes' contributions have doubled.



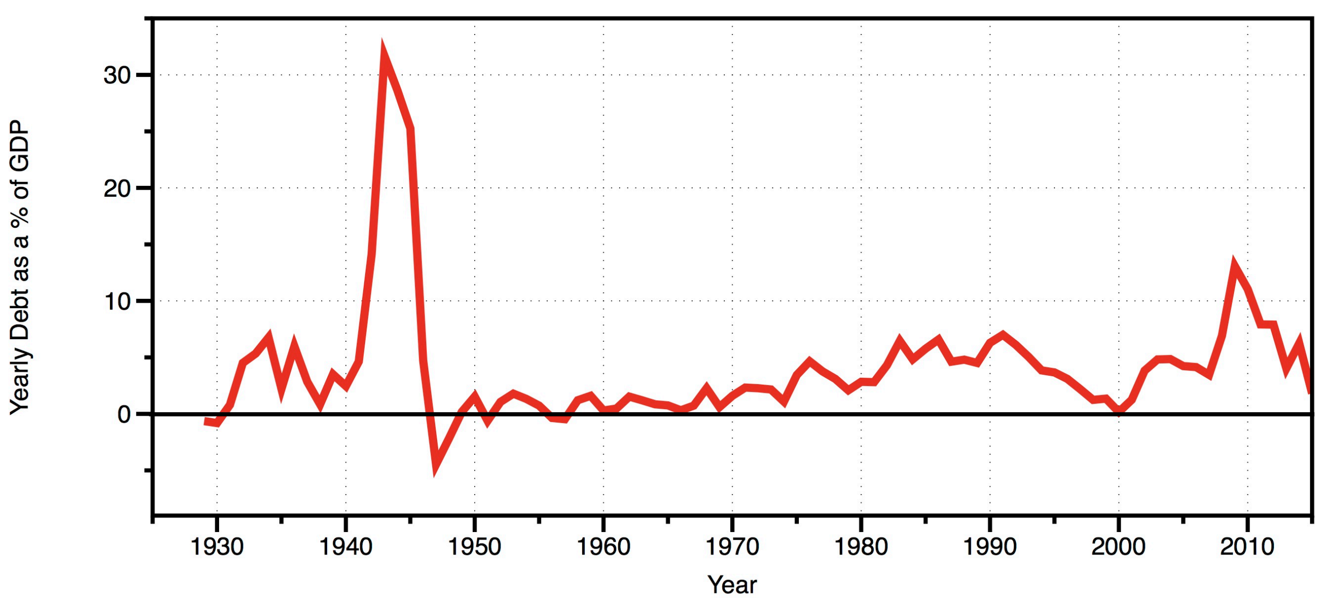
**Meanwhile, the total income of the US Government as a % of GDP has remained fairly steady, between about 15 - 20% of GDP (next page), but generally decreasing after 2000.**




**http://www.taxpolicycenter.org/briefing-book/what-are-sources-revenue-federal-government-0US**

**Government Expenditures** **The money the US government spends on the military, government agencies, branches of government, salaries, infrastructure, debt interest, etc**

**National Debt is the value of government expenditures that aren't covered by its income. US National debt has increased and decreased over the years. As a % of GNP, the amount of debt we have added each year looks like this:**

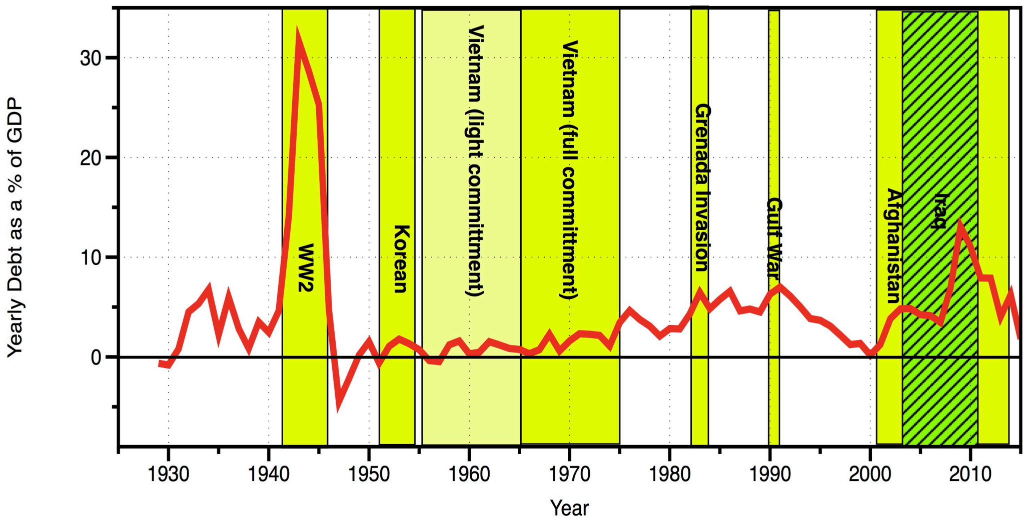



**Obviously, adding to the debt means the US is spending more than it gets in revenue. In the coming pages, I'll explore the influences on debt.**

**https://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt.htm**
**https://bea.gov/national/index.htm**

2. **<u>Wars</u>**

**Wars, although sometimes anticipated, require sudden, large, sustained spending. Funding for war is viewed as imperative, because survival may be at stake, and so deficit-spending seems justified. The same debt vs GDP graph shown earlier is now shown indicating years when the US was at war**



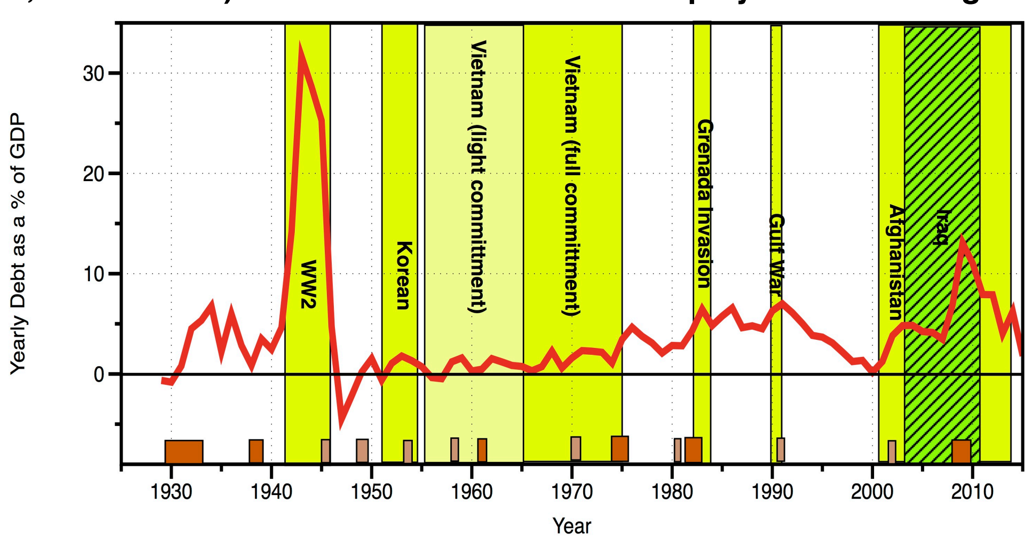

https://en.wikipedia.org/wiki/List_of_wars_involving_the_United_States

**Notice the debt increased radically during WW2 and in the Afghanistan and Iraq wars. Debt increases during and shortly after wars.**

3. **<u>Recessions</u>**

**Recessions and depressions occur periodically in the US economy. The worst ones were from 1929 to 1933, and from 2007 to 2009. On the <u>next page</u> is a <u>chart</u> of all US recessions along with indicators of their severity. In <u>orange</u> are recessions or depressions which were the worst because of extra-long duration, unemployment rate, GDP decline, or combinations of these.**

**The <u>graph</u> below shows the previous graph, but now with periods of severe recession added in red, and less-severe in light red. The longest recessions (1929 - 1933, 1973 - 1975, 1981-1982, 2007 - 2009) correlate with the most unemployment and the greatest debt increase.**



US Recessions 1929 - 2015

| Began | Ended | Duration (months) | Unemployment rate (%) | GDP Decline (%) |
|---|---|---|---|---|
| 8/1929 | 3/1933 | 43 | 24.9 | -26.7 |
| 5/1937 | 6/1938 | 13 | 19.0 | -18.2 |
| 2/1945 | 10/1945 | 8 | 5.2 | -12.7 |
| 11/1948 | 10/1949 | 11 | 7.9 | -1.7 |
| 7/1953 | 5/1954 | 10 | 6.1 | -2.6 |
| 8/1957 | 4/1958 | 8 | 7.5 | -3.7 |
| 4/1960 | 2/1961 | 10 | 7.1 | -1.6 |
| 12/1969 | 11/1970 | 11 | 6.1 | -0.6 |
| 11/1973 | 3/1975 | 16 | 9.0 | -3.2 |
| 1/1980 | 7/1980 | 7 | 7.8 | -2.2 |
| 7/1981 | 11/1982 | 16 | 10.8 | -2.7 |
| 7/1990 | 3/1991 | 8 | 7.8 | -1.4 |
| 3/2001 | 11/2001 | 8 | 6.3 | -0.3 |
| 11/2007 | 6/2009 | 18 | 10.0 | -5.1 |

https://en.wikipedia.org/wiki/List_of_recessions_in_the_United_States

**Why would debt increase in a recession?**

1. **More people are out of work, so they pay fewer income taxes, reducing government income**

2. **More people can't buy things or even pay their bills, which causes businesses to make less and/or to write off losses, which reduces business tax income for the government.**

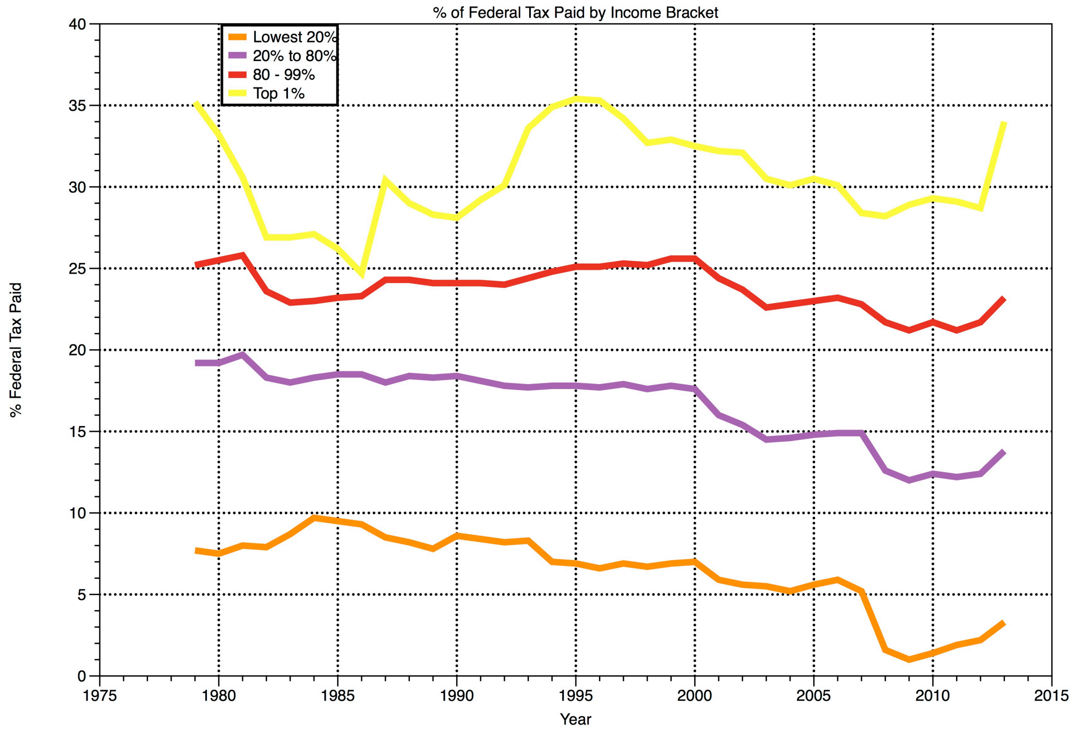
2. **Unemployed people depend more heavily on government benefit programs, like unemployment, welfare, medicaid, food stamps, etc, increasing government expenditures**

**So, recessions can also cause the US government to go into debt**

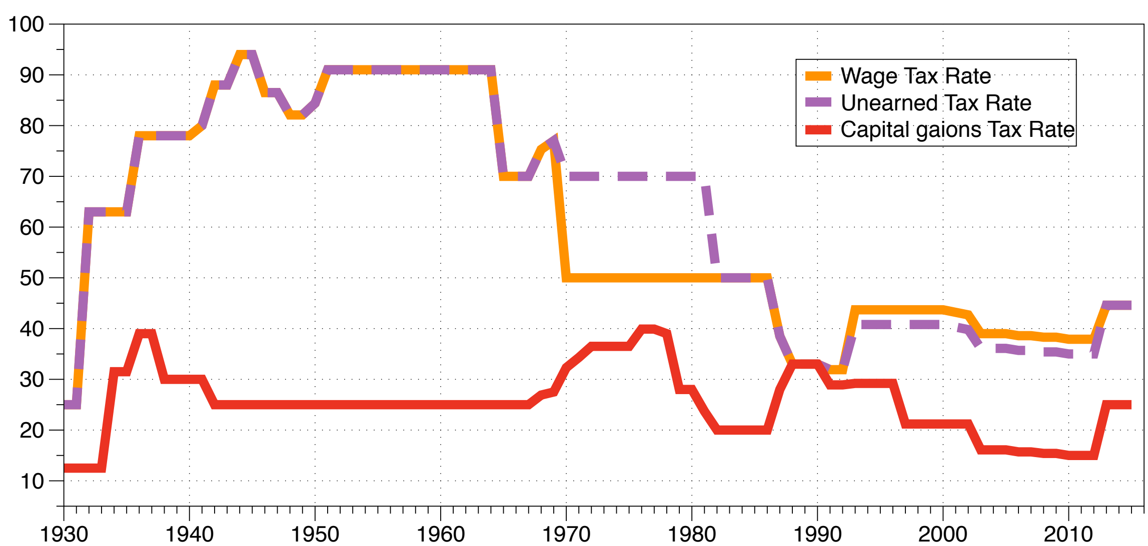
## 4. Tax Rates and Debt

**There are many types of federal taxes: income, unearned, capital gains, excise, etc. As seen in the Federal Income section, most US revenue comes from income tax of some kind, where almost 60% of that comes from the top 20% of earners. The graph on the next page shows the percent of total federal tax paid by each income bracket since 1979.**

https://www.cbo.gov/publication/51361




**So the taxes of the top earners can greatly affect US government revenue. What has happened to the maximum income tax rates for the top 2% of American earners over the years from 1965 to 2005? <u>They have all gone down</u> by about half (see graph below).**




**[http://www.ctj.org/pdf/regcg.pdf](http://www.ctj.org/pdf/regcg.pdf)**

**This is a nice, logical theory, but is there actually any <u>evidence</u> that the tax rate for the top 20% affects US debt? Using debt data (from the National Debt section earlier) from 1979 to 2015, and pairing it with the percent of US income coming from taxes on the top 20% of earners (from the Tax Rate section) during those same years, we get the graph on the next page.**

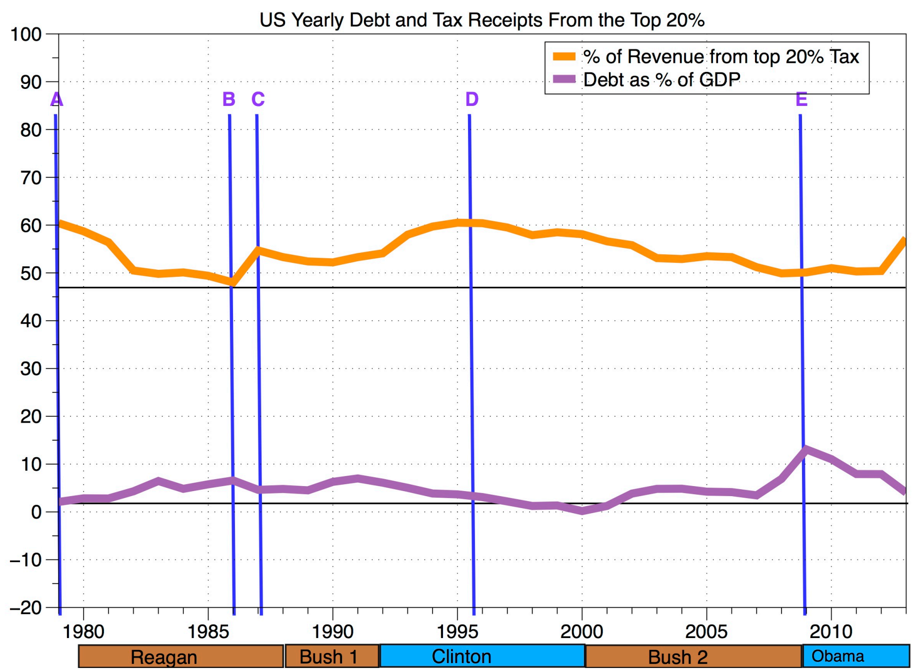
**In <u>orange</u> is the plot showing the % of US Federal Income coming from federal taxes on the top 20%. In <u>blue</u> is the plot of the yearly debt incurred by the US government as a % of GDP.**

- **A horizontal line has been drawn to show the % of GDP the US government debt represented in 1979 (about 2% of GDP)**

- **A horizontal line has been drawn at the level of smallest tax contribution by the top 20% (about 47% in 1986). This makes it easier to see when it is increasing or decreasing**

- **If there is any link between these two plots, the debt should change a year or so <u>after</u> the % tax rate, because taxes are collected the year after the rate is set.**

- **For context, I've shown the presidential administration at the time**




**At Point A (1979), Top 20% tax rates begin to decrease and then debt rises**

**At Point B (1986) debt has risen to 6% of GDP. Tax rates have reached a minimum.**

**From Point B to Point D, tax rates rise to a peak and incremental debt decreases.**

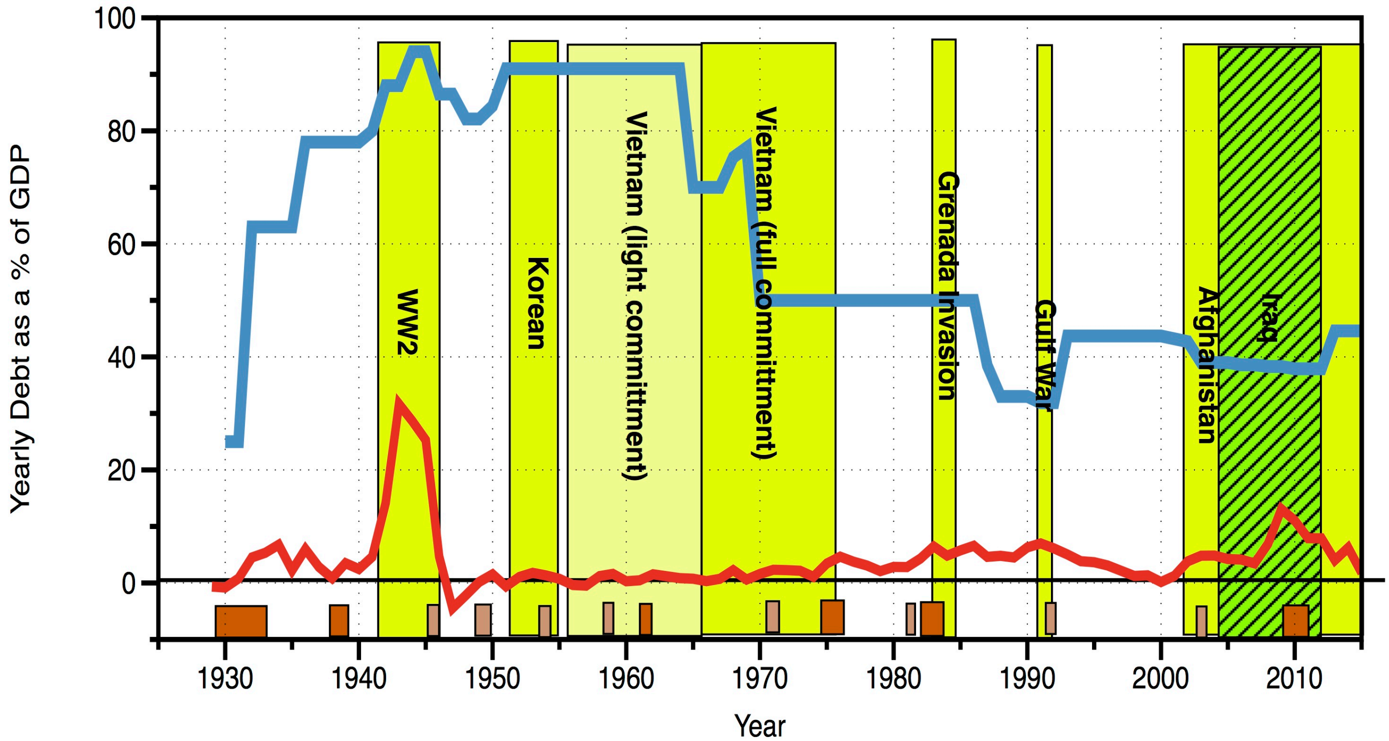
**From Point D to Point E, top 20% tax contributions decrease. After bottoming out in 2000, incremental debt rises to a peak in 2008 (recession onset).**

**After Point E, tax rates rise slightly, and then abruptly in 2013, Yearly debt begins decreasing.**

**Over this time span, Republican presidents increase debt, while debt decreases during Democratic administrations.**

**Lowering Tax rates on the top 20% correlates well with increasing US debt.**

**Now, showing all influences on debt, including recession (red boxes), wars (yellow boxes), and highest % income tax for the top 20% in blue:**




## 5. Trickle-Down Economics

**Will Rogers coined the term "Trickle-Down Economics" during Herbert Hoover's administration from 1929 - 1933. He was referring to Hoover's policies of tax cuts for the wealthy and industry, which assumes they are the "job-creators", and that their prosperity would spur employment and wealth for everyone else. It's also called supply-side economics.**

**This idea was used again during the Reagan administration from 1981 - 1989, when it was called Reaganomics. Reaganomics involved widespread tax cuts, reduced social spending, increased military spending and deregulation.**

**In 2009, Jencks, Andrews and Leigh, from Harvard University, published a study they made of 12 industrialized countries from 1905 to 2000. The study was designed to find any benefit to the lowest 90% of citizens, when the top 10% was given 1% more money. Jencks et al., found it would take 13 years for the lower 90% to see a total gain of 1% in their income, and 40 years (a lifetime of work) to see a 5% increase. It was concluded that benefits given only to the rich would not help anyone else significantly get ahead. GDP, income growth, wage growth and job creation are largely unaffected by tax cuts for the wealthy.**

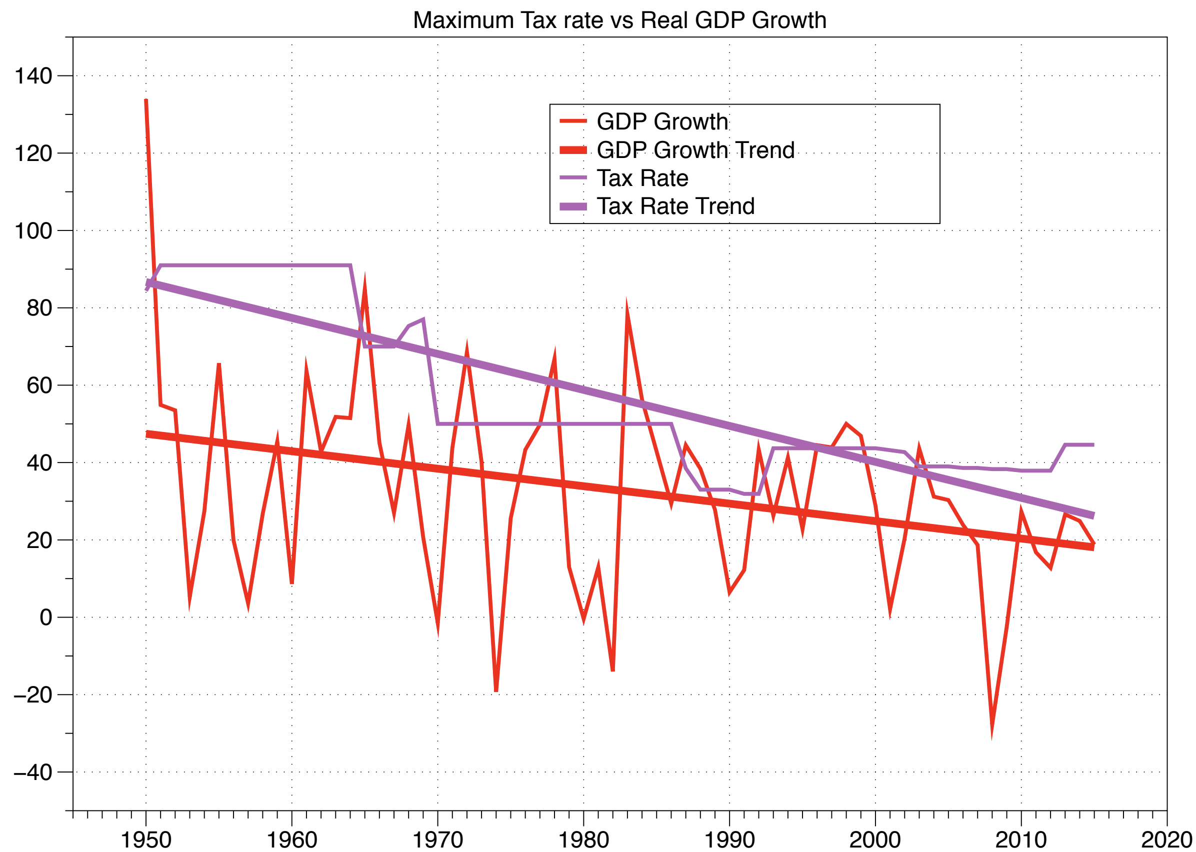
https://www.hks.harvard.edu/news-events/publications/impact-newsletter/archives/autumn-2009/trickle-down-economics-revisited

**Some evidence:**

- **Under Reagan and Bush 2, tax cuts for the wealthy saw the median real US wage plateau, and even fall.**

- **On the graph below, the <u>thin blue plot</u> shows the top 20% tax rate from 1950 to 2015. The <u>thick blue</u> line shows the <u>trend</u> of the tax rate plot.**

  **The <u>thin red</u> plot shows the <u>real</u> (after inflation) % GDP growth each year, multiplied by 10. The t<u>hick red</u> line shows the <u>trend</u> of % GDP growth Rate**




  http://www.multpl.com/us-real-gdp-growth-rate/table/by-year

  **As you can see, as the tax rate for the top 20% of earners decreases, so does the yearly % GDP growth**

- **During the years of highest tax rate for the top 20% (1946 - 1981), the US saw its economy grow faster than it has since 1981.**

- **Cutting government cuts government jobs, and contracts for private workers. In 2011, cutting $61 billion from the government was calculated to eliminate 700,000 jobs  (1 job for every $87,000 cut)**

  **http://robertreich.org/post/11329289033**

**There are good reasons why cutting taxes for wealthy people won't get the economy going.**

1. **The economy gets better and people prosper, when the whole population spends more money buyings goods and services.**

2. <u>The Multiplier Effect</u> If you get a raise, and buy a new car locally with your new cash, others benefit too. The car dealer makes more money and buys new things from others, who then make more money and buy new things. Etcetera. This is called the multiplier effect, and it can range from less than 1 to 4 or more, within a year after the first money is spent. If the multiplier is 4, it means for every dollar you spend, $4 are circulated in the local economy.

https://www.imf.org/external/pubs/ft/tnm/2014/tnm1404.pdf

There is a negative multiplier effect as well, which we saw in action in 2009. Someone loses their job and stops buying things they have bought before. The people he buys from lose money and stop buying things. Etcetera. Whole communities suffer together.

3. If you are poor, raising the minimum wage or getting a tax cut means you can now afford things <u>others</u> call necessities. The poor person will spend <u>all</u> of their extra money on buying goods and services, putting it in circulation, which helps the economy.

4. If you are a multi-millionaire, you are likely to have the necessities, and much more. How many cars or houses do you need? Will you buy more food, TVs or cleaning services? Its possible you will invest in stocks or bonds, which indirectly and slowly helps the economy by funding new projects. But for a multimillionaire, a high fraction of new money from a tax cut will go into capital conservation of some sort. On- or off-shore bank accounts. These basically keep the money out of circulation.

So if you give away 5 billion dollars, giving an extra 100 dollars directly to each of 50 million people in the middle and lower classes, you will bring a better economy than giving it all to Howard Buffett.

6. <u>Summary</u>:

A. Wars cause debt, and saddle a society with costly after-effects like injured and mentally-disturbed soldiers and their families.

B. Recessions cause debt by decreasing government income and increasing the need for government services.

C. Lower tax rates for the top 20% correlate with increased national debt and lower GDP. All tax rates for this group have been cut nearly in half over the last 50 years. As you have seen in the previous “Money” essay, the top 10% is the only group that has seen any increase in buying power over those 50 years.

D. Trickle-down economics doesn’t work. It’s another major contributor to income inequality. The economy will grow much more when direct benefits are given to people in the middle and lower classes, rather than to give it to the wealthy and corporations