Lowering corporate taxes and its real impact on the Economic Growth

Oct. 22, 2017

Prepared by Peter Wedlund for Bluegrass Indivisible

History of Corporate Taxes

Our Congressional Representatives are all talking about lowering taxes on businesses. Barr recently described his tax plan to cut corporate taxes as a way to "light the economy on fire", in apparent reference to the low rate of Gross Domestic Product (GDP) growth. He also wants to "broaden the tax base", in apparent reference to placing more taxes on goods and services people use while lowering the top tax rate on the wealthiest tax payers and eliminating both the Alternative Minimum Tax and the Estate Tax (both paid by the wealthiest Americans).

It seems only appropriate to ask, just how badly are corporations in America doing these days? Is the problem that corporations are being overtaxed and is that why GDP is not growing faster, or is it possible there is another explanation? Below is a plot of corporate taxes as both a percent of Federal Revenues and as a percent of GDP. With respect to both metrics, taxes on corporations are near record lows relative to historic highs. Moreover, the low GDP growth over the last decade can hardly be attributed to high corporate tax rates which were similar to the rates in the 1990's when GDP growth was significantly higher.

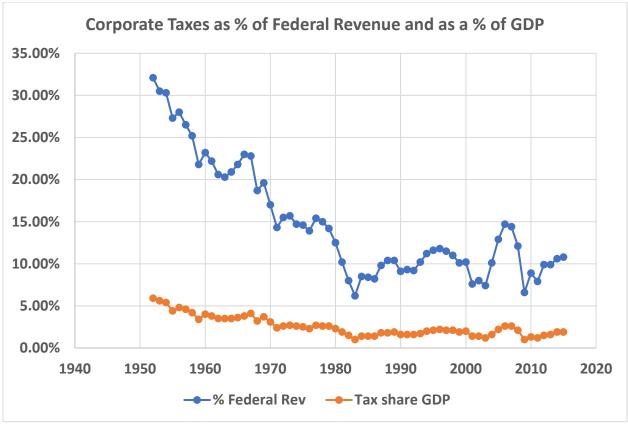


Figure 1. Corporate taxes as a percent of GDP and as a percent of Federal Revenue since the 1950's.

Historical picture of corporate profits

Perhaps, the taxes corporations pay misses the bigger picture, corporate profits. After all, it is profits which provide the resources to drive business investments in equipment and research, hiring and wage growth. If corporate profits are very low or shrinking, perhaps this would explain why GDP has been so anemic in the US over the last decade. We are all certainly aware of the decline in the retail sector, the loss of coal jobs, the decline in oil prices and the struggles we are informed of by businesses attempting to turn a profit. However, none of that seems to have significantly harmed corporate profits or CEO salaries over the last 3 decades. Interestingly, median worker wages and minimum wages grew at comparable rates, while corporate profits and CEO salaries grew at a far more accelerated rate.



Figure 2. the percent change in CEO salaries, S&P 500 total profits, Median worker wages and minimum wage growth since 1990. Percent change in CEO salaries for the top 350 major S&P 500 companies is shown in yellow. Percent change in total S&P 500 Corporate profits are shown in blue. Percent change in average worker wages is shown in orange, and percent change in the minimum wage is shown in gray.

While Congress has whittled away at corporate taxes and taxes paid by the wealthiest Americans, their profits and incomes have grown steadily over the last 25 years. In fact, the growth in wages at the top and in corporate profits are 8-9 times larger than the growth in the median worker's wages or the minimum wage, which have pretty much increased at about the same low rate.

Why isn't economic growth increasing with the growth in corporate profits?

This raises a key question, "if corporate profits have been doing very well and if the taxes corporations pay is only a small portion of federal revenue, why isn't the economy itself growing faster?" Surely businesses have more money to invest. They have more money to hire workers and pay them higher wages, right? There are really two main factors that increase the US Gross Domestic Product: (1) *increased growth in the labor force, currently about 1%/yr*; and (2) *increased productivity of workers,*

also about 1%/yr. In the absence of improvements in these two major factors, efforts to increase economic growth by cutting corporate taxes, or eliminating business regulations do nothing to enhance real growth in the economy. The argument that increasing corporate profits will somehow improve worker's wages is easily dispelled by figure 2. Corporate profits are up over the last 41 years by more than 800%, while worker's wages have grown substantially less during that same time. More important, real purchasing power from those modest increased wages have been completely erased by inflation.

Consumer demand drives businesses to expand production, hire more workers and make investments that improve innovation and efficiency. If consumer demand is weak, business growth and GDP will be as well. In that environment, businesses can still increase profits, but do so not by increasing production, but by lowering their costs (lower production costs, taxes and regulatory compliance). Most of the increase in corporate profits today have little to do with increased consumer demand and productivity (which typically increase GDP), and far more to do with decreased production costs and lower corporate taxes. Decreasing business regulations is just another way for businesses to increase their profits further. Fewer regulations means eliminating the cost to business of complying with social protections that prevent business abuses and excesses. It shifts the cost of compliance with social protections from businesses, directly onto to the public. Fewer business regulations do not increase GDP, they merely alter who benefits/profits from the lack of regulations (business) and who pays (public) for their absence.

What about the trillions in business profits trapped offshore? First, that money is not trapped. Businesses have made a conscious decision not to bring that money back to the US because they don't need to in order to use it. A huge fallacy is, if we just allow business to repatriate their profits back to the US, instead of keeping them in off shore they "could use that money to make investments here in the US, increase jobs, production and help grow the US economy". Well, that was the storyline in 2004 when a similar argument was made for lowering the taxes on off shore corporate profits to 5.25% to encourage corporations to bring those profits back to the US and invest in jobs and business growth. Congress lowered for one year the tax on offshore corporate profits to 5.25% and corporations tripled the money they repatriated to the US. However, it did not stimulate job growth (many of the companies with the largest amounts repatriated, decreased their work force in 2005). The vast majority of the repatriated dollars went to increase stock buybacks, dividends to shareholders and of course to increase CEO salaries. None of that helped to improve US economic growth.

The American Dream and economic growth

The American dream is that we will be better off than our parents and our children will be better off that we were. However, that dream is only realized when economic growth facilitates improvements in the lives of average workers. As the Gross Domestic Product (GDP) increases, the economy gets larger and that larger economy increases the size of the pie everyone in society shares. When businesses are innovators, creating new methods of doing old things, becoming more competitive by improving processes that enhance worker productivity and lower costs through increased efficiency -- production and the cost/product decline. Worker wages can then buy more and our quality of life improves. For example, laptops and large screen TV's today are far cheaper and better than they were just 10-15 years ago. Improvements in the cost and quality of what we can buy with the same amount or less money helps us at least feel our lives are getting better. Improvements that lower costs, increase efficiency and enhance productivity of employees benefit all of society. They increase market size, increase competitiveness and enhance our GDP. Unfortunately, business growth has not been associated with much increase in efficiency or enhanced productivity of US workers over the last twenty years and what improvement there has been is not reflected by much improvement in the quality of life for most

working families. The US economy has grown, but its growth has not translated to improvements for the average American worker.

Isn't a growing US economy supposed to benefit everyone? That is only true if the rules dictating how the benefits of economic growth are distributed don't change. If the rules on how taxes and social rewards are altered relative to 40-50 years ago, then the benefits each member of society receives by working and living in the US will also change. Taxes and social responsibilities have been altered radically during the last 40-50 years, in ways that have consistently favored the wealthiest Americans over poorer and middle-class Americans. Consequently, the wealthiest American's have continued to reap greater and greater rewards during the last 40 years as the US economy has grown. Meanwhile, those in the lower and middle class have been saddled with more of the tax liability, responsibilities and obligation. Even now, some GOP members would like to "broaden the tax base further" as they cut the taxes and responsibilities on the wealthiest Americans more. The economic pie is now divided in such a lopsided manner, even if US economic activity grows substantially, it is unlikely those in the middle or bottom will see much of a benefit from it (see figure 3).

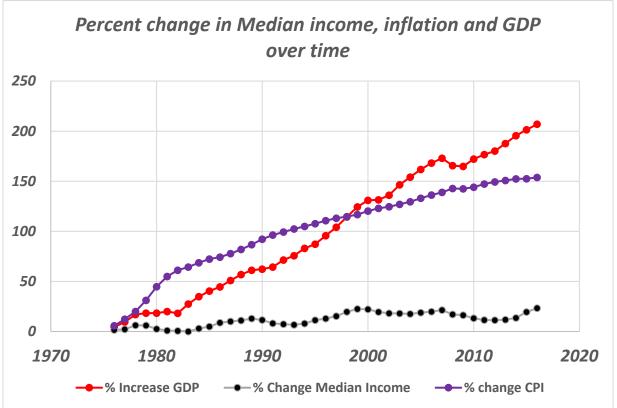


Figure 3. Comparison of the percent change in median family income, inflation as % change in consumer price index and percent change in GDP.

The US economy grew significantly over the last 41 years (% increase in GDP is over 200%). But, the % change in the median family income increased only 23%, and when corrected for inflation (purple line) has actually fallen in terms of real purchasing power. In Kentucky, the median family income over the last 32 years has increased only 16.5%. Had no changes been made in how taxes were apportioned relative to business and individual income, median family income would have mirrored the growth in GDP far better. Efforts by Congress to cut taxes on businesses and the wealthiest Americans is responsible for those meager rewards at the bottom and middle of America even as US GDP grows.

What is the US Gross Domestic Product (GDP) and what is the best way to increase it?

The GDP is a measure of the total US economy. It measures personal consumption, business investment, exports minus imports plus government spending. As consumer demand grows (both foreign and domestic), businesses make and sell more products. The growth in consumer demand drives up production, creating jobs and increasing incomes. When GDP falls, you have a recession marked by fewer jobs, less demand, lower productivity and more idle capacity coupled with a decrease in business investment. For example, the recession of 2007-2009 resulted a lower GDP and a loss of millions of US jobs. The steady increase in the GDP from 2009 to the present has resulted mostly from the slow addition of more people from those who were unemployed (~1%/yr) into the labor force coupled with some increase in worker productivity. In a market in which labor is tight (as it is currently in the US), attempting to grow the economy by increasing the workforce size, without improving worker productivity (fewer workers needed to produce the same amount of goods or services) only leads to inflation, not to an increased GDP.

US GDP has been growing at about 2%/yr (after correcting for inflation) on average over the last several years. About half that increase (1%/yr) is accounted for by an increase in the size of the workforce and about half (1%/yr) is accounted for by an increase in worker productivity. Increasing either of these factors further would drive up the GDP more. Inflation is always a concern because inflation decreases the purchasing power of people. However, a small amount of inflation (1-2%) to account for increases in worker wages is not a bad thing.

GDP increases as the size of the work force grows and as the productivity of workers increases. Once full employment is reached the US workforce will only grow at a more meager 0.6%/year as younger workers enter the workforce and older workers leave it. Decreasing immigration may hurt that growth further since young immigrants add to the US workforce. This does not bode well for increasing US GDP if we are depending upon the presence of more working people to help increase our GDP.

In the absence of more workers entering the US economy, it becomes more important to use the workers who are here more productively. For example, in the 1860's-1870's the vast majority of US workers were engaged in farming. Investments in research, improved methods of farming, while advances in machinery and technology reduced the number of farmers needed to supply all the food needs of the US. The US became a net exporter of farm goods by the 1880's and has maintained its net export of farm goods ever since that time. Today, less than 2% of the US population farms and yet the US produces all the food it needs with sufficient excess farm products to sell to world markets. Had the US not become more efficient in farming, there would not have been sufficient workers to supply US industrial needs and manufacturing that began to occur in the early 1900's, resulting in the US industrial revolution. Similarly, it used to require thousands of longshoremen to unload and load ships in US ports. The development of large container shipping used today reduced the number of longshoremen needed to a fraction of that number, freeing up that labor for jobs in other industries. Another example is increased efficiency in coal mining due to advances in mining equipment that resulted in a requirement for fewer men to mine more coal. These examples of greatly enhancing worker productivity, results in more workers being free to contribute their time to the growth of other businesses in different parts of the economy. A larger, more diversified economy, is more resistant to volatile disruptions, provides more ways in which people can work and earn a living and increases its GDP.

Generally, a good rate of GDP growth for the US economy is 2.5-3.5%/yr coupled with a low rate of inflation. In recent years, US GDP has grown at a more anemic 2.0%, and without greater improvement

is likely to decline more. We are now very close to full employment, and the workforce has little chance of continuing to increase by 1%/yr, leaving only increased worker productivity as the primary means of enhancing GDP growth. What is the best way to stimulate economic activity if our effective GDP is driven primarily by the size of the work force and the efficiency in worker productivity? Moreover, what type of stimulation would be most effective to increase GDP?

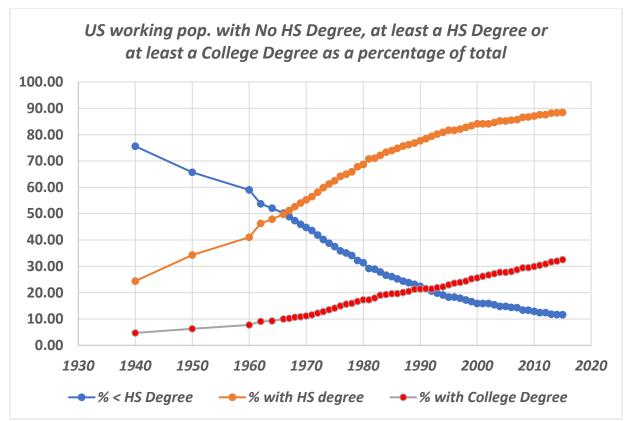
Increasing worker productivity and efficiency to drive higher GDP growth

Some suggest, the best way to increase GDP is to cut taxes and eliminate business regulations so it spurs business investment and growth. However, businesses do not invest in expansion, innovate or hire more workers if there is no significant increase in demand for their products. Need is the mother of invention, not wishful thinking. There isn't a need for business expansion and innovation if there isn't significant increase in consumer demand. Cutting taxes and/or business regulations may sound like a great idea, but all that does is increase business profits that lead to higher shareholder returns, not GDP growth.

Innovation is a key part of increasing worker productivity, and most innovation comes from new businesses, not old ones. Between 2010-2015 there was a 21% increase in new businesses, suggesting business growth has been good, not in decline. However, It has also been suggested that the major innovations that provided for large improvements in worker productivity (machines, interstate highways, internet, etc) have already been discovered and impacted worker productivity. Further innovations will likely have far less impact on worker productivity and not substantially increase it for the core of the US workforce.

Is the US workforce as productive, innovative and creative as it could be with respect to new business ideas and opportunities? One area in which some improvement could be realized in productivity would be by improving worker education and training. Presently, only 88% of the US workforce 25 years of age and older has a High School Degree and only 33% of those 25 and older in the US workforce have a college degree (figure 4, below). In Kentucky, the statistics are worse, where only 84% of the working population 25 and older has a High School Degree and just 22% have earned a College degree. These percentages are similar to the overall US Black population where 87% of Blacks have a High School degree, but only 22% of Blacks aged 25 years of age or older have a College degree. Although the percentages are improving among the working US population aged 25-29 years old (92% have graduated High School; 36% have a College degree and 9% have a Master's degree or higher) there is significant room and need to improve these percentages.

It is not necessary to have a college degree to start a business, discover a new innovative process or create a better system that is more efficient, effective or productive than what proceeds it. However, a college degree certainly doesn't hurt one's chances you could. Over 90% of US patents come from just 100 metropolitan areas of the US with one or more universities, and the majority of patent inventions are by people with a College degree. Fifty-four percent of all business owners have at least some college experience, and even those successful businessmen without a College degree typically hire college graduates, not those with high school diplomas. Making it more costly and difficult for the next generation to obtain a College degree if the goal is to increase US productivity of its future workers makes little sense. It is worth noting between 1975 and 2015, US GDP grew 200%. Concurrent with that growth was also a doubling in the percent of workers with a College degree. In the technologically driven US economy, a failure to prepare the workers of tomorrow for the future needs of business harms not just their earning potential, but the economic well-being of the entire country.



Business Tax Cuts and Whether It Really Improves US Economic Growth

Figure 4. The gradual decline in the number of workforce eligible individuals 25 years of age and older without a High School Degree, and the slow but steady increase in working age adults with a High School or College Degree over the entire US population.

Business innovation is also increased by opportunities created by government investments. While some in the GOP party complain about government just taxing and spending, imagine a US in which government did not make investments and left everything to be worked out by business. Would a transcontinental railroad have ever been built linking the Eastern and Western half of the nation over 150 years ago? If people were still forced to travel by wagons across the US for many more decades, how guickly would the West have really been settled? Imagine there was no investment in the Interstate highway system, and two-lane state roads and highways, some paved some not, were the primary means of travel. Would the US trucking industry exceed \$700 billion today? If the government did not build any seaports, would US seaports support over \$4.6 trillion in economic activity they do today? If the government did not invest in medical research, would the US Pharmaceutical revenue approach the \$0.5 trillion in marketplace value of today? Would the average US lifespan be 78 years? Would the biotechnology or the genomic technology revolutions have ever taken place? If the US government never invested in space exploration, would GPS, satellite communications and detailed mapping of the earth's surface and even commercial space efforts have ever been possible? If the US government never created land grant universities in each state starting in 1865 and supported them with resource dollars, would the researchers who discovered, created new ideas and opportunities, trained young minds to think objectively and forge new inroads in engineering, computer science, medical research and aeronautical studies ever achieved any of that? Government investment in infrastructure, research and education are "critical" to creating future opportunities for new businesses, investment and growth that drive up US GDP, and help to diversify the US economy.

Cheaper goods and the appearance of normalcy

It is possible to decrease the price of goods without enhancing efficiency or productivity, simply by lowering the cost of labor, either by use of non-union labor or more commonly by outsourcing production to foreign countries. This effect will benefit consumers who can buy the same products or even better products at a lower price. However, it comes at the expense of workers losing their jobs or working for less. Cheaper goods are a benefit to consumers, but do nothing to improve real growth in our GDP. This is because the decrease in costs have nothing to do with improved efficiency or productivity per worker or new business investments in the US. Shifting company production from inside to outside of the US is simply robbing Peter to pay Paul. Peter loses his job or is replaced by a lower wage earner, so Paul can buy his TV or cell phone much cheaper. We have witnessed this for many prior manufacturing jobs in the US that have been moved to lower wage foreign countries where workers earn a small fraction of what US workers made. This has left whole regions of the US depressed in areas where communities use to make steel, cars, clothes, shoes and other products. Those affected are worse off, even if the broader public may find many of the products they buy cheaper, or at least not increasing in cost with time.

The real beneficiary is not the general public or the country as a whole. It is the companies who have lowered their cost of production. They can now make a larger profit off the same item even while selling it more cheaply. Yet this profit gain has come without achieving it by any improvement in efficiency or productivity per worker, or even new investments in higher rates of US production.

The shift to foreign production is facilitated by free trade agreements that allow US companies to make the same products in foreign countries more cheaply, and then ship those products back to the US with no import cost. The US currently has free trade agreements with 20 countries around the world, including our nearest neighbors and two of our largest trading partners, Canada and Mexico. Our largest trade deficit, however, is with China. China accounts for about 2/3rd of total US foreign trade deficit. This reflects the far, far higher availability of a cheap, but educated labor force in China engaged in production. Thus, even in the absence of a free trade agreement, producing and importing goods from China remains much cheaper than making the same products here in the US.

Global Trade and the US GDP

Although increased trade with other countries could increase US GDP, this is true only if exports exceed imports. Unfortunately, the US trade with foreign countries turned negative in the 1970's and currently runs a net negative balance of about \$-500 billion/yr, leading to a net decrease in US GDP. Total US foreign trade has increased from about \$250 billion/yr in 1975 to nearly \$5 trillion/yr in 2016, so many businesses certainly benefit from more open foreign trade and fewer trade barriers. However, the US economic growth overall as measured by GDP is decreased about 3% each year by our negative foreign trade balance. The primary benefit of free trade is "lower cost goods" that help oppose an increase in inflation.

Government Spending and GDP

Government spending is also a part of the total GDP. During recessions, it is common for the US government to increase spending to compensate for a decline in the economy, and to stimulate economic activity. Because recessions are marked by a decline in jobs and business activity, tax revenue typically declines during recessions just as government spending increases, increasing federal deficits.

This was commented on during the last recession of 2008-2009 as "blowing up the deficit problem". However, increased government spending also occurs during time of war as economic activity shifts from a peacetime to a war time economy, making bombs, bullets, guns, aircraft and ships that are not bought by consumers, but by government. Thus, recessions and wars both increase deficit spending.

As the economy recovers from a recession (and revenues increase) or shifts from a wartime to peacetime economy (and government spending decreases) deficit spending should decrease. If taxes are raised during economic growth periods, increased tax revenue will help reduce deficit spending further and the total deficit in general. The idea of cutting taxes to "stimulate" the economy during relatively good times makes little sense for two reasons. First, tax revenue in the US has historically been about 18.3% of GDP, so any cut in taxes by even 1% requires the GDP to increase 5.8% just to compensate for the lost tax revenue. That kind of increase in GDP growth is unrealistic as proven by past tax cuts in the 1980's and 2001. Second, federal deficits are a result of having revenue that falls short of paying for the true cost of government. Cutting revenue in the hope of solving a deficit problem is a little like buying a new Ferrari because you are broke. Just because it makes you feel better, doesn't mean you are.

How can company profits and growth increase faster than the GDP?

Looking at the growth in the Standard and Poor's 500 against growth in the GDP indicates it has not just been company profits that have grown faster than the GDP, but company value themselves (see figure 5 below). Normally one expects US companies to grow at about the same rate as the US GDP does, as US businesses overall still make and sell the largest portion of their products in the US. In the past, that was true. The S&P 500 and the GDP did track each other reasonably well and as GDP went up, so did the S&P 500 stock index. However, that stopped being true in the mid-1990's, and in the last 7 years, the growth in the S&P 500 has far outstripped growth in the US GDP. Why?

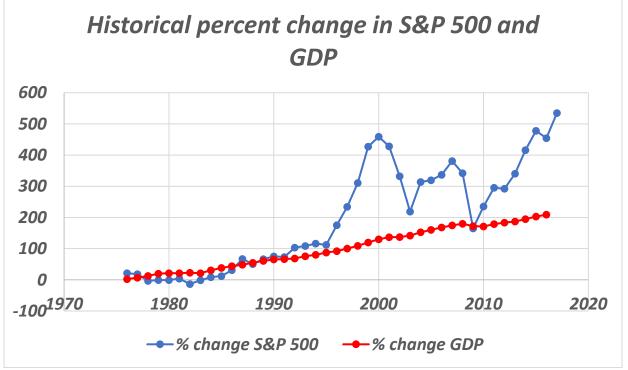


Figure 5. Historical percent change in S&P 500 and GDP. Notice the divergence in the mid-1990's and thereafter in how corporate values have increased far faster than the GDP.

There are a number of reason for why US businesses are doing better today than they have historically. Profits of S&P 500 companies also started to increase markedly in the mid-1990's relative to the US GDP (see figure 2 above) and profits increase company net worth. Inflation decreased during this time, making money cheaper to borrow and invest in new businesses. Low interest rates are generally good for business and the economy. Starting in 1994, NAFTA (North American Free Trade Agreement) made it easier to shift corporate production to Mexico, and that lowered the cost of production and increased profits for many companies while doing nothing to improve the US GDP. There is also a tax provision from the Internal Revenue Act of 1962, called subpart F that has been modified many times that states, companies need not pay tax on foreign earnings until those earnings are repatriated to the US. Company use of this provision has increased dramatically in recent years to shift corporate profits to offshore tax havens where those profits accumulate tax free just like in a personal Roth or IRA account. Taking advantage of this provision, companies have managed to cut their tax bills further and raise company profits. None of these efforts to raise company profits and company values have directly benefitted American workers or the US GDP.

Wages, import taxes and the real issues facing American workers

It might seem the best way to improve the lot in life of US workers would be to increase the minimum wage and drive up worker wages. That would force companies to reward workers better with higher wages instead of just shareholders with greater dividends and stock values. Because most workers spend the largest portion of their income on essential needs, higher pay means enhanced consumption and higher consumption results in greater production. These outcomes would increase the US GDP. However, some argue merely increasing the minimum wage will raise inflation, result in fewer jobs as businesses who cannot afford the cost will close hurting the most vulnerable. They also complain that improved wages will just end up increasing the cost of goods leading to a higher rate of inflation, because minimum wage increases are unrelated to improved efficiency or productivity of workers.

If an increase in GDP was driven solely by higher wages increasing the inflation rate, and the two factors (more purchasing power but higher costs) cancelled each other out, no benefit would result from a higher minimum wage. Between 1976 and 1981, the minimum wage in the US increased 59% and was almost perfectly matched by a 55% increase in the consumer price index during that same time period. However, the minimum wage increased over 40% between 2007 and 2010 with only a minimal change (5.8%) in the consumer price index. Using either of these as examples to oppose or justify increasing the minimum wage is inappropriate without considering the presence of other economic factors. Between 1976-1981 the Federal interest rate (Fed rate) was also increasing, from 5.4 to a high of 20.6% to counter inflationary pressures from higher oil costs. However, between 2007-2010 Federal interest rates (Fed. rate) was far lower (moving from 5.3 to 0.7%) to help stimulate economic growth.

The minimum wage has been increased more than 20 times since it was originally introduced by Congress in 1938, and during that time there is no concrete evidence increasing the minimum wage has been primarily responsible for higher rates of inflation. In fact, changes in the minimum wage seem less associated with inflation than other factors that affect the economy more directly. Because minimum wage workers typically spend nearly all their wages to live, increasing the minimum wage increases consumption spending and tax revenues, which both add positively to the US GDP. Meanwhile, higher business costs cut into corporate profits and rewards to shareholders. However, these outcomes have far less to do with GDP growth than consumption by workers which has a direct bearing on the US GDP.

One could propose placing high import taxes on foreign goods to make them less of a threat to US manufacturing. However, that is a short-sighted solution that merely makes the US less competitive as a global player. When the US attempts to place high import taxes on some products, it typically results in the foreign countries affected placing high import taxes on totally different US products that we produce competitively in their markets. For example, placing high imports on steel, resulted in high taxes on farm goods or airplanes produced more cheaply or with better quality than foreign competitors. That drove what should have been good US export sales downward instead of upward. Trade wars, like other wars, only produce losers, not winners. Engaging in this tit for tat protectionism serves no useful goal other than to hurt US foreign trade.

Likewise, blaming businesses for moving production to foreign countries is also a pointless effort. Business exists to be competitive and to make money. It is only successful so long as it remains competitive and makes money. If it does not, it goes out of business. If costs of production in the US are exorbitant, foreign companies will simply displace production by US companies, resulting in mass firings of US workers and loss of the US corporations that paid them. The US will lose both jobs and businesses as a result. This has in fact been the problem in the steel, paper and textile industries in the US. It just doesn't pay to manufacture certain goods in the US when a foreign company can manufacture the same product and export it to the US at less total cost than US companies can make that same product here at home. Thus, as US wages increase it will become more and more problematic for US businesses to use US workers "when they do not provide a unique skill set" over cheaper foreign labor capable of doing the same work.

If the US is to survive in a world marketplace, it must compete with all other nations in that marketplace on an equal footing, regardless of differences in wages and fringe benefits of its workers. We can support what are called "harmonization rules" in which all manufactures, regardless of country must play by similar standards of conduct regarding environmental stewardship, child labor prohibition and worker rights and safety. However, if we expect equal pay for equal work throughout every country in the world, we are going to be wasting our breath. The US advantage in the world markets must reside with its unique abilities, talents, creativity and innovation, not by attempting to impose unique conditions on trade designed to benefit only US workers.

A great historical example of the importance of remaining competitive in a world market is the Swiss watch industry. For many years the Swiss prided themselves on their fine watch making skills, the excellent precision and jeweled movements of their leading brands. The handcrafted, labor intensive nature of their products. Switzerland could have maintained a dominance in the watchmaking marketplace had they realized battery based LED watches tremendously lowered the cost to produce a watch while increasing the rate of efficiency by which they could be made. Shortly after battery based LED watches hit the market, their price dropped to about \$10/watch. Within less than a 10 year time frame, companies like Seiko, Casio, Timex and Hamilton had completely displaced the Swiss watchmaking industry, leading to massive layoffs in one of Switzerland's dominate industries. No companies are immune to competition, and in a world marketplace business survival depends in innovation, creativity and enhancing efficiency. Companies that fail to embrace change and effectively adapt to it, are destined to go out of business. That has certainly been the case with such once massively successful companies like Sears, JC Penny, Eastman Kodak and others.

The US must also realize, the availability of a far cheaper labor force elsewhere in the world will make competition difficult if not impossible when US workers compete head to head with that cheaper labor force. If US labor is primarily driven by a work force with little more than a high school diploma,

competing against developing and 3rd world countries with similarly educated work forces, businesses will seek out the cheapest workers to make their products. The only way a US manufacture can justify the disadvantages of the wage differential between US workers and cheaper workers in less developed countries is if US workers provide a value-added benefit to manufacturing or services. For example, the US has taken early leads in farming, movies, internet, computers, biotechnology and nanotechnology and created massively profitable companies and good paying jobs because of our leading-edge abilities in each. Those successes did not result because of tax breaks for industry or eliminating regulations and protections of the public. They were the result of government investments in research and education.

Economic growth, innovation and increased productivity

We often celebrate the genius of those who have created new mega companies out of their garages by seeing a potential and opportunity where others do not. That potential does not exist in isolation of others. Indeed, it is enhanced by their presence. Would Michael Bloomberg have created his "Bloomberg empire" had he never received a degree in Engineering and noticed the need for improving access to financial information by working on Wall Street? Would Mark Zuckerberg have created Facebook had he attended a local college instead of Harvard? Would Steve Jobs have created Apple or Bill Gates created Microsoft if neither had every learned about computer programing and seen a potential for something bigger? Greatness thrives in the interaction between ability, insight, interaction and opportunity. Bringing these elements together is what truly helps to grow the US economy in ways that enhance its GDP, increases good paying jobs and using human capital more effectively. It is only under those conditions a growing GDP will really improve the lives of Americans by raising wages, increasing productivity and truly providing access to more goods and services.

Conclusions:

Shifting corporate production to foreign countries, cutting corporate taxes, reducing business regulations and moving corporate profits to offshore tax havens all increase the bottom line for corporations. However, none of this does one thing to help workers or US economic growth. What helps US workers are investments that create new opportunities, abilities and insights that enhance the growth and likelihood of better paying jobs in the US.

Investments that enhance the efficiency and productivity of workers and exploit their unique capabilities are what improves US workers value and competitiveness in a world labor market with lots of cheap labor. For example, huge earth movers, long wall mining equipment, container shipping and prefabrication all improved the productivity and efficiency of workers in various industries. Today and into the future it will be through increasing automation, robotics and artificial intelligence that worker productivity and output will be magnified. New industries, like clean energy for the future, electric cars, miniaturization and genomic medicine all promise to provide better paying jobs that will increase consumer spending, investments and economic growth. A workforce with lots of unskilled, poorly educated workers in low-level service sector jobs, will do little for that economic growth or US competitiveness.

The average American worker is worse off today than 40 years ago, and corporations are doing far better. None of this is a result of US workers somehow becoming less productive or lazy, while US corporations became more innovative and creative. Corporate profits have been a result of lowering costs by shifting to cheaper labor sources, tax breaks and now a decline in business regulations. Meanwhile, all that has been done for US workers is to kick them to the curb, offer then low paying

service sector jobs and say, "what can we do?" Let's cut social services to reduce the deficit and tell workers, get out there and work harder if they want to get ahead.

We exist in a more global economy than we did 40 years ago, and we are not going backwards to the way things were. US workers will always cost more to employ than foreign labor in developing or 3rd world countries, and that must be accepted as a reality of life. To justify the labor cost differential, US workers must provide unique abilities and talents, serve a more diversified business environment and be inherently more valuable than employees in countries with cheap labor. A key component to that rests with their education, training and development of their unique talents. It doesn't take much ability to learn how to flip a switch or a burger. It takes far more ability to critically analyze and solve problems, provide solutions to difficult questions and resolve complex issues related to manufacturing and/or maintenance of complex equipment. The more ability US workers have beyond a High School education, the more potential value they will have to provide new businesses the skills they need.

The only constant US workers can be assured in the future will be a lack of constancy, and the need to remain competitive in a global economy. The days of being hired and working for a single company one's whole life are over. That may happen if you are lucky, but future workers should not think they can depend upon it. Businesses care about profits first and have little or no loyalty to employees. When workers start to treat businesses similarly, seeking the best paying job in place of a career with a single business, competition for US worker talent will dominate the labor market, instead of a scramble by business to hire the cheapest employees.

The Bureau of Labor Statistics estimates the US workforce will only grow at about 0.6%/yr over the next 50 years. Hardly an adequate increase in size to drive a significant bump in US GDP. That leaves innovation, efficiency, productivity and creativity as the primary drivers for increasing US economic growth. Enhancing productivity requires understanding key bottlenecks in production methods and finding creative ways to overcome them. Diversifying the economy through new businesses requires the discovery of new opportunities that result in new products, approaches or systems to address new issues. Ultimately, for innovation and discovery to drive a technologically based economy and GDP upwards requires increasing investments in education, infrastructure and basic research. It will involve greater efforts to expand markets for US made products and to protect the intellectual rights of US companies producing them.

Addressing weakness within the US economy that hinders new business growth and development of new opportunities can only be addressed at a national level. It requires strategic investments that focus resources on evolving new avenues for growth that improve opportunities for change. The concept that competition will solves all social ills and that government is the problem, not the solution, is naïve to the point of being ridiculous. There is a place in society for business and there is a need of society for government. The two are not mutually exclusive, but intimately intertwined to deal with very different social issues and concerns.