

GDP & Jobs Report

By; Chuck Vollmer, Jobenomics Founder & President 10 September 2018



Keywords: President Trump, Trump Administration, Obama
Administration, Bush Administration, 25 Million New Jobs, Gross Domestic
Product, GDP, GDP Growth, Jobenomics National Grassroots Movement,
Department of Labor, Bureau of Labor Statistics, Employment Situation
Summary, ADP National Employment Report, U.S. Labor Force, Employment,
Unemployment, Not in the Labor Force, Employment Report, Workforce
Development, Economic Development, Business Development, Private
Sector Jobs, Government Jobs, Federal Reserve, Consensus Bureau,
Kauffman Foundation

Short Caption: Monthly Jobenomics analysis of the U.S. economic and employment situation.

Caption: While U.S. GDP growth is improving rapidly, the latest employment reports indicate marginal labor force improvement. Consequently, the U.S. economy is not yet gaining enough momentum to achieve President Trump's goal of creating 25 million new jobs and sustained 4% GDP growth over the next ten years.

Executive Summary. The August 2018 employment report is nothing to celebrate. Jobenomics asserts that the media hoopla regarding 201,000 new U.S. jobs in August by the Bureau of Labor Statistics (BLS) is unwarranted since the **U.S. labor force suffered a net loss of 445,000 citizens** across the three reported BLS labor force categories: Employed, Unemployed and Not in the Labor Force. The voluntary workforce exodus of 692,000 people (as many people as there are in major cities like Pittsburgh and Cleveland combined) is a far more significant, and unreported, BLS statistic than the 201,000 who entered the labor force.

Net U.S. Labor Force Loss of 445,000 Citizens in August 2018

Source: U.S. Bureau Labor Statistics Employment Situation Report August 2018

U.S. Labor Force (Civilian Noninstitutional Population)

Employment Gain/Loss	Unemployment (U3) Gain/Loss	Not-in-Labor Force Gain/Loss
201,000	692,000	(46,000)

Net Gains-Losses (445,000)

The latest U.S. <u>Bureau of Labor Statistics</u>¹ and <u>ADP Research Institute</u>² employment reports for August 2018 indicate that the United States created 201,000 (204,000 private sector gains and 3,000 government losses) and 163,000 (private sector only) new jobs, respectively. Both figures are below the monthly 250,000 job threshold advocated by most economists. The number of unemployed (BLS U3 rate) edged down slightly by 46,000 citizens. The BLS Not-in-Labor-Force category (i.e., people

¹ U.S. Bureau of Labor Statistics, Employment Situation Summary, https://www.bls.gov/news.release/empsit.nr0.htm

² ADP Research Institute, National Employment Report, https://www.adpemploymentreport.com/



who can work but don't work) increased by a stunning rise of 692,000 voluntary workforce departures. The BLS reports that only 5,534,000 (5.8%) out of 96,157,000 people in the Not-in-Labor-Force cadre currently "want a job." The remaining 90,622,000 are seeking livelihoods by other means including living on retirement income, student loans, public/familial assistance or alternative lifestyles.

These less than stellar August 2018 employment reports do not diminish the impressive GDP and job performance of Trump Administration over the last 20-months. Job creation generally follows GDP growth that has recently reached 4.2% that is almost double the average rate of GDP growth this decade. As indicated by the stock markets, low unemployment rates and consumer confidence the U.S. economy is booming. However, as indicated by the continued exodus of work-capable citizens to the netherworld of the Not-in-Labor-Force, the economy is not booming for everyone. The gap between skilled and unskilled workers, large and small business, and the wealthy and poor are all continuing to increase.

Today, 96,290,000 sidelined citizens are counted by the BLS as "Not in the Labor Force," which is three-quarters of the size (126,939,000) of the number of workers employed by the entire U.S. private sector. Despite gains made by the recent economic boom, the U.S. labor force is weaker by almost 10 million people than it was in the year 2000—a disparity and private sector workforce burden made even worse if one includes population growth of 46 million additional Americans (282 million in 2000 versus 328 million today).

Net U.S. Labor Force Gains and Losses since the Year 2000

Source: U.S. Bureau Labor Statistics

As of 1 September 2018	New Jobs	Unemployed (U3) Gain/Loss	Not-in-Labor Force Gain/Loss	Net Gains-Losses
Since 2000	18,490,000	581,000	27,635,000	(9,726,000)
Bush II Era	2,115,000	5,652,000	9,892,000	(13,429,000)
Obama Era	10,595,000	(3,784,000)	14,626,000	(247,000)
Trump Era	3,842,000	(1,268,000)	1,284,000	3,826,000

As shown, the U.S. labor force is now weaker by 9,726,000 citizens than it was at the turn of the 21st Century. During the 8-year G.W. Bush Administration, which was plagued by two recessions and multiple disasters, the U.S. labor force sustained a net loss of 13,429,000 citizens. While the 8-year Obama Administration added a substantial number of new jobs and decreased the number of unemployed, almost 15 million disgruntled and discouraged citizens voluntarily departed the workforce, thereby negating the Obama Administration's positive job gains. Over the last 20-months, the Trump Administration is averaging a moderate level (192,000) of new jobs per month

³ U.S. Bureau of Labor Statistics, Table A-38, Persons not in the labor force by desire and availability for work, age, and sex, https://www.bls.gov/web/empsit/cpseea38.htm



while maintaining the number of unemployed at historic low levels. On the other hand, the Trump Administration has not stemmed the outflow of people voluntarily departing the labor force.

To stem this outflow, the Administration needs to increase its attention on small business and job creation at the base of the American socio-economic pyramid. Unfortunately, small and startup businesses are producing a half the rate of previous years. If the United States was creating new firms at the same rate as in the 1980s, more than 200,000 companies and 1.8 million jobs would be created each year. Jobenomics believes that the Administration is likely to increase emphasis on the small business sector once President Trump's policy and regulatory reforms, and big business progress in re-shoring jobs and recapitalization of facilities take root.

GDP & Jobs Report Table of Contents

Jobenomics Gross Domestic Product (GDP) Analysis	4
Jobenomics Employment Analysis Overview	9
Jobenomics Analysis of the BLS Employment Situation Summary Report	11
Jobenomics Analysis of the ADP National Employment Report	16
Jobenomics Analysis of the Small and Startup Business Situation	18
Concluding Thoughts.	22
About Jobenomics:	

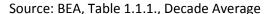


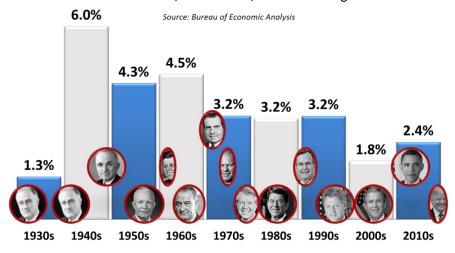
Jobenomics Gross Domestic Product (GDP) Analysis.

Bravo to the Trump Administration for achieving a 4.2% GDP growth rate in the second quarter (Q2) of 2018. If President Trump can achieve his goal of sustained 4% GDP growth over the next decade, the U.S. economy will boom and American workers should be euphoric since this rate of GDP growth indicates that the President's goal of creating 25 million new jobs is also achievable.

As reported on 29 August 2018 by the <u>Bureau of Economic Analysis</u> (BEA)⁴, U.S. **Q2 2018** GDP growth **reached 4.2%**. The last time that the United States breached 4% in a single quarter was in Q3 2014. Since the turn of the Century (the year 2000), out of a total of 74-quarters, only 11-quarters broke the 4% barrier. The highest rate of quarterly GDP growth was 7.5% in Q2 2000 and -8.4% was the lowest rate that occurred in Q4 2008 during the Great Recession. As of 3 August 2018, the Federal Reserve Bank of Atlanta's GDPNow⁵ estimate for **Q3 2018** is 4.4%. However, the Federal Reserve Bank of New York's Nowcast⁶ estimate for Q3 2018 is pessimistic 1.98%. If President Trump can achieve his goal of sustained 4% GDP growth over the next decade, the U.S. economy will boom and American workers should be euphoric since this rate of GDP growth indicates that the President's goal of creating 25 million new jobs is also achievable.

U.S. GDP History (1930 to Present)





Achieving 4% GDP growth per year will not be easy. To achieve this level of growth, one would have to turn the clock back to the 1940s, 1950s and 1960s that achieved 6.0% 4.2% and 4.5% GDP growth rates, respectively. The last time that the United States achieved 4% in ten consecutive years over the previous 5-decades was never (3.5% was the highest from 1976 to 1985). Notwithstanding, if the Trump Administration can tie the 3.5% record over the next decade, they will be worthy of much praise and his controversial policies largely vindicated.

⁴ BEA, National Data, GDP, Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product, https://www.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1921=survey&1903=1

⁵ Federal Reserve Bank of Atlanta, GDPNow, https://www.frbatlanta.org/cqer/research/gdpnow.aspx

⁶ Federal Reserve Bank of New York, Nowcasting Report, https://www.newyorkfed.org/research/policy/nowcast.html.



Real GDP Quarterly Percent Change This Decade

Source: BEA, Table 1.1.1., Percent Change from Preceding Quarter



On 29 August 2018, the Bureau of Economic Analysis (BEA) released its "second estimate" of 4.2% for Q2 2018. 4.2% is an excellent percentage and indicator of robust economic GDP growth. BEA's "third estimate" is scheduled for release on 27 September 2018, and its advance estimate for Q3 2018 is due on 26 October.

Per <u>BEA data</u>⁷, during the post-recession recovery period from Q1 2010 through Q2 2018, U.S. GDP averaged 2.4%. During the 32-quarters (8-years) of the Obama Administration, GDP averaged 1.9%. Subtracting the 4-quarters of the Great Recession year in 2009, the Obama Administration averaged 2.2%. During the first 6-quarters (Q1 2017 through Q2 2018), the Trump Administration averaged 2.7% GDP growth with a high-water mark of 4.2% in Q2 2018 (second estimate). For the first two quarters of 2018, the Trump Administration's average is 3.2% GDP growth.

The Federal Reserve (U.S. central bank in charge of U.S. monetary policy) banks of Atlanta and New York use BEA's GDP data to predict future GDP growth. The Federal Reserve Bank of Atlanta and Federal Reserve Bank of New York forecasting models are based on statistical filtering techniques that are common in big data analytics. Because these banks use different models, they can generate different forecasts of GDP growth.

Federal Reserve Bank of Atlanta:

• For Q2 2018, as of 5 September 2018, the Federal Reserve Bank of Atlanta's <u>GDPNow</u>⁸ model forecast was 4.4%, which is even better than the 4.2% BEA estimate. Unlike recent previous quarters that were downgraded significantly from initial projections, the Fed's Q2 2018 projections hovered above 4.1% (at one point as high as 5.0%) since its initial forecast on 31 July 2018.

⁷ BEA, National Data, GDP, Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product, https://www.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1921=survey&1903=1

Federal Reserve Bank of Atlanta, GDPNow, https://www.frbatlanta.org/cqer/research/gdpnow.aspx

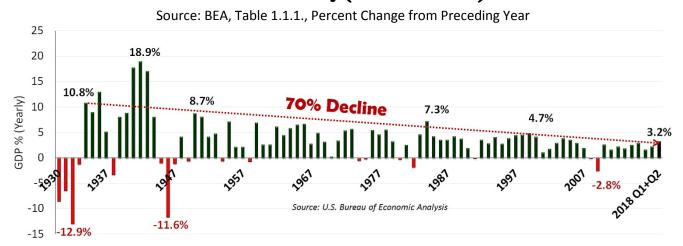


• For Q2 2018, as of 5 September 2018, the Federal Reserve Bank of Atlanta's "Blue Chip consensus" survey of leading business economists forecast that Q2 2018 growth would be 3.1% with a low estimate of 2.7% and a high estimate of 3.5%.

Federal Reserve Bank of New York:

- For Q2 2018, as of the week ending 27 July 2018 (their concluding estimate), the Federal Reserve Bank of New York's Nowcast forecast was 2.78%—a much less optimistic projection than the BEA's 4.2% advance estimate and GDPNow's current 4.4% estimate.
- For Q3 2018, as of 3 August 2018, the Federal Reserve Bank of New York's Nowcast estimate is currently a pessimistic 1.98%.

U.S. GDP History (1930 to Present)



This chart, derived from BEA data, indicates that the U.S. GDP history from 1930 to present has been on a long downward trend. Since the first positive GDP growth year after the end of the Great Depression, U.S. GDP growth declined 70% from 10.8% in 1934 to 3.2% today (average of the first two quarters in 2018).

Hopefully, the BEA's Q2 2018's 4.2% estimate signals the beginning of an upward trend as opposed to a temporary anomaly. Barring an international or domestic crisis, which is certainly a possibility, President Trump's aggressive economic restructuring (tax cuts and reform, reduced regulatory environment and balanced trade negotiations) should propel GDP growth on a decidedly upward track.

Gross domestic product is currently the best single metric to gauge economic health. As stated by the BEA, "GDP is the value of the goods and services produced by the nation's economy less the value of the goods and services used up in production. GDP is also equal to the sum of personal

⁹ Federal Reserve Bank of New York, Nowcasting Report, https://www.newyorkfed.org/research/policy/nowcast.html.



consumption expenditures, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment" ¹⁰ as shown below. ¹¹

Personal Consumption/Expenditures as a Percent of U.S. GDP

Source: BEA, NIPA Tables, Table 1.1.5. Gross Domestic Product

Major Components		2007		2017 Q4	
Major Components	\$ Trillion	%	\$ Trillion	%	
Personal consumption/expenditures	9.7	67%	13.3	68%	
Government consumption/expenditures	2.8	19%	3.4	17%	
Private domestic investments	2.6	18%	3.2	17%	
Net U.S. imports/exports	-0.7	-5%	-0.6	-3%	

Total U.S. Gross Domestic Product \$14.5

\$19.5

Personal consumption and expenditures (PCE) is overwhelmingly the primary component and driver of the U.S. economy. PCE is determined by how much of the income earned by households is spent on purchased goods and services. While PCE (highlighted in yellow) has grown from \$9.7 in 2007 to \$13.3 trillion in 2017, it remains stable at 67%-68% of GDP. PCE is also dependent on a growing labor force and the wages that the workers earn. If labor and wages stop growing, then GDP stops growing. The opposite is also true.

The \$600 billion trade deficit (U.S. imports/exports) is the only major component of U.S. GDP that is negative. If the Trump Administration could balance trade and make net U.S. imports/exports zero, our economy and labor force could benefit by adding as many as 6 million jobs at \$100,000 per job.

As a rule of thumb, over the past decade, a 1% point uptick in GDP translated to about 1.5 million additional jobs per year. Today's BEA advance estimate of 4.2% GDP growth is 1.8 percentage points higher than the average 2.4% growth over the last 34-previous quarters of this decade. If this rule of thumb holds true and if the United States maintains a growth rate at or above 4.2%, the Trump Administration should potentially double its current job creation rate of 192,000 jobs per month to 384,000 per month. This rate of job creation is high but achievable. In May 2010, the United States created 522,000 new jobs. In the first half year of 2018, the U.S. Bureau of Labor Statistics reports an average job creation rate of 207,000 new jobs per month with a high of 324,000 new jobs produced in February 2018. 12

Unfortunately, success often has negative consequences. The United States is currently generating more jobs than American companies can fill with skilled employees. At the height of the Great Recession, there were 6-unemployed people for every job. As of June 2018, the United States has

https://data.bls.gov/timeseries/CES000000001?output_view=net_1mth

¹⁰ U.S. Bureau of Economic Analysis, https://bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm

¹¹ U.S. Bureau of Economic Analysis, NIPA, Tables, Table 1.1.5, Gross Domestic Product, retrieved 20 April 2018, https://www.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1921=survey&1903=5

¹² U.S. Bureau of Labor Statistics, Employment, CES000000001,



6,635,000 unfilled jobs¹³, which exceeds the number (6,234,000) of unemployed Americans in August 2018 by 401,000 jobs.¹⁴ The reason for such a high number of job vacancies is due to the lack of skilled workers, qualified applicants and people who want to work.

Small businesses (the engine of the U.S. economy) and startup businesses (the seed corn of the economy) are still faltering. These businesses historically created the vast majority of new jobs and employed the vast majority of Americans. Moreover, small firms are the businesses that provide the gateway to work for new workforce entrants, the unemployed and the 95.6 million sidelined citizens who can work but don't. Low unemployment creates a tight labor market, which translates to too few people who want to work and too few qualified workers.

In times past, the United States welcomed skilled legal immigrants to fill the gap. Due to a lukewarm American welcome mat, the number of U.S. skilled immigrants is declining to pursue work in other countries. Many other countries have merit-based immigration systems (the United States currently employs a family-based system—to the President's dismay) that often offer long-term work visas and pathways to citizenship to obtain the best-of-the-best skilled workers.

According to Secretary of Commerce Wilbur Ross, increasing gross domestic product growth by one percentage point will amount to \$1 trillion added to GDP per year over the next decade. Per the International Monetary Fund, in the United States, for every 1% point increase in GDP, employment should increase by 0.6%. So if Secretary Ross and the IMF are indeed correct, a \$1 trillion yearly increase to our economy could increase the labor force by 3%. Currently, U.S. employment stands at approximately 150 million workers. A 3% increase could generate as much as 4.5 million jobs per year.

While 4.5 million may sound overly optimistic, the United States generated over 4.3 million new jobs (farm and nonfarm) in 1977. ¹⁷ This high rate of employment growth coincided with 4.6% yearly GDP growth. The United States posted employment gains between 3 to 4 million jobs in 1955, 1976, 1978, 1987, 1994, 2000 and 2006. During the first 8-months of 2018, the United States produced 1.94 million new jobs and is on track to reach over 3 million new jobs by the end of the year if U.S. GDP maintains its current rate of 4.2%.

Page 8

¹³ U.S. Bureau of Labor Statistics, Job Openings And Labor Turnover, May 2018,

https://www.bls.gov/news.release/pdf/jolts.pdf

¹⁴ U.S. Bureau of Labor Statistics, Table A-10. Selected unemployment indicators, seasonally adjusted, https://www.bls.gov/webapps/legacy/cpsatab10.htm

¹⁵ CNBC, Tax reform will boost the US economy by a full percentage point, says Wilbur Ross, 26 September 2017, https://www.cnbc.com/2017/09/26/tax-reform-wilbur-ross-sees-1-percent-gdp-jump.html

¹⁶ IMF, The Evidence that Growth Creates Jobs: A New Look at an Old Relationship, https://blogs.imf.org/2016/11/09/the-evidence-that-growth-creates-jobs-a-new-look-at-an-old-relationship/

¹⁷ U.S. Bureau of Labor Statistics, Labor Force Statistics (Current Population Survey), Household Data, Employed, Table A-1. Employment status of the civilian population by sex and age, https://www.bls.gov/webapps/legacy/cpsatab1.htm

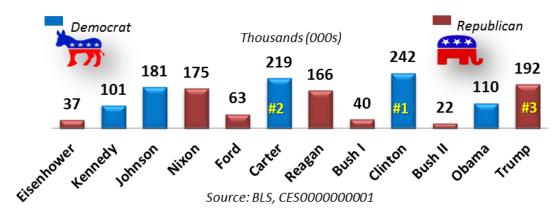


Jobenomics Employment Analysis Overview.

While GDP is accelerating, employment has not yet gained sufficient momentum to achieve the President's 25 million new jobs over the next decade. To meet this goal, the Administration needs to generate 211,580 jobs per month for the remaining 100 months. Since the President took office, the Trump Administration averaged 192,000 jobs per month over this 20-month period. Since the beginning of 2018, the Administration average is 215,000 for the first 7-months of this year. In today's highly-charged political environment, what people want to know is how today's president.

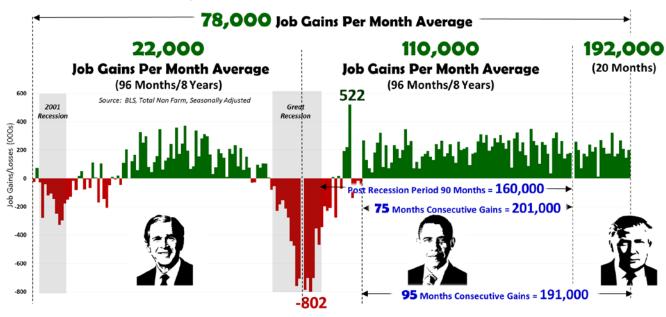
In today's highly-charged political environment, what people want to know is how today's president is performing against past presidents.

Monthly Job Creation Rate by President since WWII



As color-coded by political party, of the twelve presidents since WWII, President Trump's average monthly job creation rate is 192,000, which puts him in third-place following President's Clinton and Carter. Adjusted for population size (U.S. population during the Eisenhower Administration was almost half, 160 million, of today's population of 328 million), President Trump would be in sixth place following Carter, Clinton, Johnson, Nixon, and Reagan.

Job Creation Scoreboard Since 2001



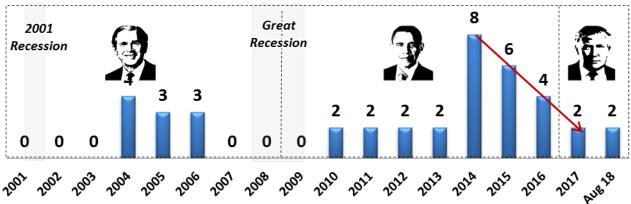


From January 2001 through May 2018, the United States averaged an abysmal 78,000 new jobs per month. During this period, the monthly job creation high water mark was 522,000 new jobs in May 2010, and the low water mark for job losses was 802,000 in March 2009 marking the depth of the Great Recession.

From an Administration standpoint,

- The Bush Administration (2001 to 2008) created an average of only 22,000 new jobs per month, due to the onslaught of two major recessions, the calamity of 9/11 and the United States' expensive mobilization for the global war on terrorism, and numerous natural disasters.
- The Obama Administration (2009 to 2016) created an average 110,000 job gains per month. Subtracting the six months of the Great Recession that Obama "inherited" from the previous administration, the average job creation rate during the 90-month post-recession period yielded an average of 160,000 new jobs per month. Perhaps, the most important legacy of the Obama Administration is 75-months of consecutive job gains averaging 201,000 jobs per month.
- The Trump Administration continued the positive job creation trend with 20 consecutive months of job gains and extended the continuous job creation run to 95-months—the longest span of labor force gains since the Bureau of Labor Statistics began record keeping in February 1939.

Mega (250K+) Monthly Employment Gains Since 2001



A 250,000 threshold is a reasonable job creation benchmark to robustly grow the economy and provide a hedge against future downturns. During the recent 95-month run of consecutive job gains, the United States exceeded the 250,000 job threshold 23-times, or slightly less than one out of every four months. Unfortunately, the number of mega (250K+) monthly employment gains is on the decline as shown.

The Trump Administration's tax cuts and regulatory reforms should motivate many more mega months. The Administration's four mega months were in February 2018 with 324,000 new jobs, followed by 271,000 in October 2017; 268,000 in May 2018; and 259,000 in January 2017. If current GDP trends continue above 4%, Jobenomics predicts that the remainder of 2018 will record more mega-employment gains. The recent uproar regarding the Administration's trade and tariff policies are likely to put a near-term dampener on job creation but should produce substantial long-term job gains (in the 5 million range as calculated by Jobenomics), assuming the President is successful.



Jobenomics Analysis of the BLS Employment Situation Summary Report.

The monthly U.S. Bureau of Labor Statistics (BLS) Employment Situation Summary is a monthly summary of all U.S. government and private sector employment. On 3 August 2018, the Bureau of Labor Statistics reported that the U.S. labor force added 157,000 new jobs (170,000 private sector and -13,000 government), and the unemployment rate edged down from 4.0% to 3.9%. ¹⁸

From a Jobenomics standpoint, these employment statistics are essential measures of economic growth, but **only** as a **prelude to net labor force gains and losses**.

Knowing how the BLS defines labor force and accounts for the different labor force categories is essential to understanding labor force statistics and interpreting fact from fiction. The basic concepts involving employment and unemployment are straightforward.

- People with jobs are Employed.
- People are **Unemployed** if they do not have a job, have <u>actively looked</u> for work in the prior four weeks, and are currently available for work.
- People who have no job and are <u>no longer looking</u> for a job are classified by the BLS as "not in the labor force" or **Not-in-Labor-Force**.

To be classified as unemployed, one must be <u>actively looking</u> for work. Frustrated or discouraged Americans who are capable of working but <u>quit looking</u> and voluntarily depart the workforce are accounted in a BLS Not-in-Labor-Force category that few people comprehend. Consequently, it is **theoretically possible for the United States to have a zero rate of unemployment** if every unemployed American quit looking for a job. An equally disturbing statistic reported by the BLS is that 94% of the (surveyed) 96 million people in the Not-in-Labor-Force "do not want a job now."

Not-In-Labor-Force's "Do not want a job now" Cadre

August 2018 Source: BLS Table A-38

Not-in-Labor-Force
Do not want a job now
% Do not want a job now

Age (Years Old)			Se	ex	
Total	16-24	25-54	55+	Male	Female
96,157,000	16,159,000	16,893,000	23,322,000	23,058,000	55,013,000
90,622,000	14,546,000	15,212,000	20,747,000	20,764,000	53,348,000
94%	90%	90%	89%	90%	97%

The U.S. labor force consists of approximately 250 million citizens (called the civilian noninstitutional population) enrolled in one of three Bureau of Labor Statistics categories: Employed, Unemployed and Not-in-Labor-Force. From a Jobenomics viewpoint, it is vitally important to evaluate the give-and-take between each of these categories as opposed to emphasizing each individually. For example, increasing the labor force by 25 million new jobs (Trump's plan) makes little economic sense if 25 million people voluntarily leave the workforce for welfare and alternative lifestyles as has happened in the recent past.

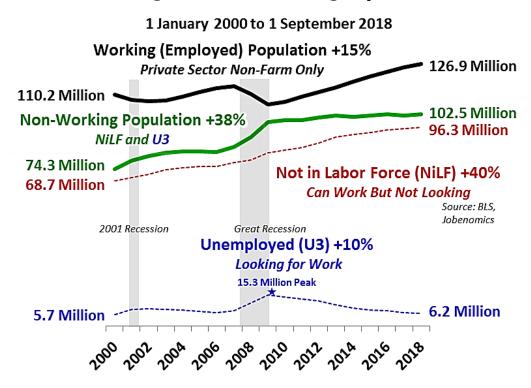
Page 11 Jobenomics GDP & Jobs Report 10 September 2018

¹⁸ U.S. Bureau of Labor Statistics, Employment Situation Summary, https://www.bls.gov/news.release/empsit.nr0.htm



Since the beginning of the 21st Century (1 January 2000), 18.5 million people entered the workforce as opposed to 27.6 million who voluntarily departed to the Not-in-Labor-Force. This disparity is made even worse if one includes population growth of 46 million additional Americans (282 million in 2000 versus 328 million today). If these trends continue, the U.S. economy will suffer due to the financial burden of the non-working population. Fortunately, current trends are positive, but a financial downturn could easily reverse our economic situation.

Working Versus Non-Working Populations



This graph presents a strategic perspective of the U.S. Private Sector Working Population (Employed) and the Non-Working Population (Unemployed and Not-in-Labor-Force) covering the period from 1 January 2000 to 1 September 2018.

The private sector produces the vast majority of goods and services that drive economic growth. From the year 2000, the private sector Working Population increased by 15% (126.9 million workers) compared to a Non-Working Population rise of 38% (102.5 million citizens). Within the Non-Working Population, the Not-in-Labor-Force rose by 40% (from 68.7 million in the year 2000 to 96.3 million citizens today), and the number of Unemployed increased 10% (from 5.7 million in the year 2000 to a peak of 15.3 million in 2009 to 6.2 million citizens today). During the Great Recession, the Non-Working Population almost matched the level of the Working Population in 2009. Fortunately, the spread between the Working Population and Non-Working Population is widening, which is a good sign for the economy and labor force.



U.S. Labor Force Gains and Losses Since 2000

as of 1 September 2018

Last Month (August 2018) Trump Era (Jan 2017-Present) Post Recession (Jan 2010-Present) Obama Era (2009-2016) Bush II Era (2001-2008) Since Year 2000

Working Population	
Employment Gain/Loss	
Gaill/ LOSS	
201,000	
3,842,000	
19,498,000	
10,595,000	
2,115,000	
18,490,000	
DIC CEC D	

BLS CES Report (CES0000000001) Table B-1 Seasonally Adjusted

Non-Working Population				
Not-in-Labor Force Gain/Loss	Unemployed (U3) Gain/Loss			
692,000	(46,000)			
1,284,000	(1,268,000)			
12,477,000	(8,864,000)			
14,626,000	(3,784,000)			
9,892,000	5,652,000			
27,635,000	581,000			

BLS Not-in-Labor-Force Report (LNS15000000) Seasonally Adjusted

BLS Unemployed Report (LNS13000000) Table A-10

Net Labor Force Gains- Losses
(445,000)
3,826,000
15,885,000
(247,000)
(13,429,000)
(9,726,000)

The BLS Employment Situation Summary reported that the U.S. economy generated 201,000 new jobs in August 2018—extending the longest run of consecutive labor gains to 95 months, the longest run since WWII when BLS record keeping began. The official unemployment rate (U3 rate) remained at 3.9% with a slight decline of 46,000 unemployed. Most important, and least reported by the media, is that the Not-in-Labor-Force cadre of sidelined citizens increased by 692,000. The reason that this reduction in sidelined citizens is significant is that most of these people are not looking for work, which the BLS reclassifies them as Unemployed as opposed to Not-in-Labor-Force. The combined effect of a moderate employment boost, a slight decrease in the number of unemployed and a huge increase of sidelined people in Not-in-Labor-Force yielded a labor force **net loss** of 445,000. A loss of 445,000 citizens in the Civilian Noninstitutional Population's workforce (the total of the BLS Employed, Unemployed and Not-in-Labor-Force categories) is a much more meaningful metric of economic and labor force health than the modest uptick of 201,000 in the Employed population.

During the 20-months of the **Trump Administration**, from 1 January 2017 to 1 September 2018, the U.S. labor force **net gain** amounted to 3,826,000 individuals. 3,841,000 new workers entered the labor force—an average of 192,100 jobs per month. 1,284,000 fewer workers were listed as officially unemployed, and the number of work-capable people in the Not-in-Labor-Force increased by 1,268,000 citizens. To a large extent, voluntary departures (people who quit looking for work) offset the reduction of the number of unemployed (people looking for work).

Now that unemployment is approaching historic lows, the number of unemployed is unlikely to decrease much lower. Reversing the size and growth of the Not-in-Labor-Force population should one of the Trump Administration's highest priorities since this group is overwhelmingly the largest pool of potential American workers. If the Administration cannot entice these sidelined citizens to enter the labor force, the number of unfilled U.S. jobs (currently 6,635,000) is likely to continue to grow. The only other likely course of action would be to greatly increase the influx of skilled foreign workers via a merit-based immigration system.



Since the **end of the Great Recession**, from 1 January 2010 to 1 September 2018, the U.S. labor force **net gain** was 15,885,000 citizens. 19,498,000 new workers entered the labor force. The number of in the Not-in-Labor-Force increased by 12,477,000 people, and 8,864,000 fewer workers were officially unemployed.

During the 8-years/96-months of the **Obama Era** (1 January 2009 through 31 December 2016), the U.S. labor force **net loss** was 247,000 jobs, with 10,595,000 entering the labor force, 14,626,000 voluntarily departing, and 3,784,000 fewer people recorded as officially unemployed. It is important to remember that the first 21-months of President Obama's first term in office, the Administration dealt with the Great Recession and post-recession recovery operations. Obama's next 75-months in office produced the longest run of consecutive labor gains since WWII when BLS record keeping began. This 75-month run exceeded the previous record of 48-months that occurred from July 1986 to June 1990.

During the 8-years/96-months of the **Bush II Era** (1 January 2001 through 31 December 2008), the U.S. labor force suffered a devastating **net loss** of 13,429,000 jobs (2,115,000 new jobs, 9,892,000 voluntary workforce departures, and 5,652,000 newly unemployed). To a large extent, President Bush endured the perfect storm of labor force calamities:

- 8-months of the 2001 Recession (March 2001 through November 2001),
- 13-months of Great Recession (December 2007 through December 2008),
- the aftermath of the 9/11 attacks and the ensuing global war on terrorism, and
- nine major Hurricanes (Katrina, Ike, Rita, Wilma, Ivan, Charley, Frances, Jeanne, and Allison) that collectively caused over \$275 billion in damage.

From the **beginning of the 21**st **Century** (1 January 2000 to 1 September 2018), the American labor force is **still weaker by a net 9,726,000 workers**. This weakness is exacerbated by a population growth of 46 million additional American citizens present today compared to 2000 (282 million versus 328 million) plus the impact of a rapid rise of contingent part-time workers with a commensurate decrease in traditional full-time workers.

To sum up, while recent trends are slowly reversing America's descent from an economic quagmire, the U.S. economy is not yet sustainable without the continued strengthening of the U.S. private sector labor force. Excluding an estimated 22 million private sector government workers and 10 million government contractors in the private sector, the <u>private sector workforce</u> consists of 123,542,000 workers, which represents 38% of today's total <u>U.S. population</u> of 328,481,000. The U.S. economy is not sustainable over the long-term with only 38% supporting an overhead of 62%.

¹⁹ U.S. Bureau of Labor Statistics, Table A-1, Employment status of the civilian population by sex and age, https://www.bls.gov/webapps/legacy/cesbtab1.htm

²⁰ U.S. Census Bureau, U.S. and World Population Clock, https://www.census.gov/popclock/



Maintaining a Large Overhead Destabilizes the U.S. Economy 329 Million Population



Out of a total population of 329 million Americans, 124 million non-government private sector workers support: 32 million government workers and government contractors, 96 million people who can work but chose not to work, 65 million who cannot work (children, elderly and institutionalized citizens), and 12 million unemployed, underemployed and marginalized citizens. Of the 124 million private sector workers, approximately 60% are standard full-time workers, and 40% are contingency workers (part-timers, freelancers, independent contractors, etc.) who make substantially lower wages, often with fewer or no benefits than their full-time counterparts.

Small business and job creation is the number one issue facing the United States regarding economic growth, sustainment, and prosperity. Jobs do not create jobs, businesses do, especially small businesses that currently employ around 77% of all Americans and created up to 73% of all new jobs since the end of the Great Recession. Therefore, policy-makers and decision-leaders must concentrate on small business creation and sustainment to achieve economic and labor force growth.



Jobenomics Analysis of the ADP National Employment Report.

The ADP National Employment Report is a monthly survey of workers in 400,000 U.S. private sector businesses by the ADP Research Institute in collaboration with Moody's Analytics.

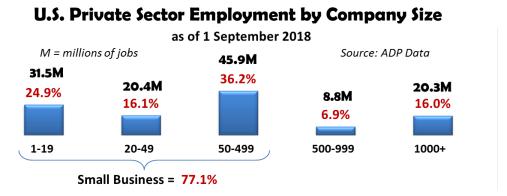
The August ADP National Employment Report, released on 6 September 2018, states that the U.S. <u>private sector</u> created 163,000 new private jobs, which is 41,000 less than the 204,000 new private sector jobs reported by the BLS Employment Situation Summary. Note: ADP does not report on government employment, unemployment or workforce departures as does the BLS. The BLS Employment Situation Summary reported that total nonfarm payroll employment rose by 201,000 in August, which consists of a gain of 204,000 private sector workers and a loss of 3,000 government workers.

Of the 163,000 new jobs reported by ADP, small businesses (1-49 employees) gained 21,000 jobs, medium businesses (50-499 employees) gained 111,000 new jobs, and large companies (500+ employees) gained 31,000 new jobs. Micro-businesses (1-19 employees) created 9,000 compared to 4,000 by very large businesses (1000+ employees), or 125% more.

Service-providing industries created 139,000 jobs and the goods-producing sector only 24,000 jobs—a small percentage given the current emphasis on the Manufacturing supersector that created 19,000 new jobs last month.

Of the ten private sector goods-producing and service-providing supersectors, Professional/Business Services generated the most new jobs (38,000), followed by Education/Health Services (31,000), Leisure & Hospitality (25,000), Trade/Transportation/Utilities (21,000), Manufacturing (19,000), Information (8,000), Other Services (8,000), Financial Activities (7,000) and Construction (5,000). The Natural Resources/Mining supersector was the only supersector that lost jobs (-1,000).

For the remainder of this report, Jobenomics classifies "small business" as having 1-499 employees (the definition supported by the U.S. Small Business Administration), medium-sized business as 500-999 employees and large businesses as 1000+ employees. Also, Jobenomics defines micro-businesses as having 1-19 employees, which includes self-employed individuals.



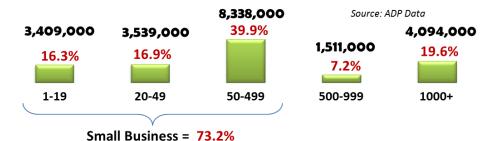
As reported by ADP, small businesses are undeniably the dominant employer in the United States. Small companies with less than 500 employees employ 77.1% of all private sector Americans with a



total of 97,811,000 employees—over 3.4-times the number of established enterprises with more than 500 employees that have 29,027,000 employees. Micro-businesses with 1-19 employees employ 1.6-times the number of giant corporations with over 1,000 employees (31,538,000 versus 20,265,000).

U.S. Private Sector Jobs Created This Decade by Company Size

1 January 2010 to 1 September 2018 (104 Months)



Since the beginning of this decade, small businesses created 73.2% of all new jobs in the United States. Small businesses with less than 500 employees created 2.7-times more jobs as large businesses with 500+ employees, or 15,266,000 versus 5,605,000 new jobs respectively. Micro and self-employed firms with 1-19 employees produced 83% as many jobs as large-scale corporations with over 1,000 employees (3,409,000 versus 4,094,000).

U.S. Private Sector Jobs Created Last Month by Company Size



Last month (August 2018), U.S. small business (1-499 employees) created 81.5% of all new jobs. This percentage is above average (69.0%) compared to the previous months of the Trump Administration. The monthly average of previous months were 73.2% in July 2018, 69.9% in June 2018, 71.7% in May 2018, 70.7% April 2018, 69.3% Marchv, 66.4% February 2018, 65.3% January 2018, 78.7% December 2017, 82.0% November 2017, 47.5% October 2017, 16.9% September 2017 (Low), 35.9% August 2017, 68.3% July 2017, 69.5% June 2017, 77.1% May 2017, 93.6% April 2017 (High), 93.5% March 2017, 75.3% February 2017, and 72.7% January 2017.

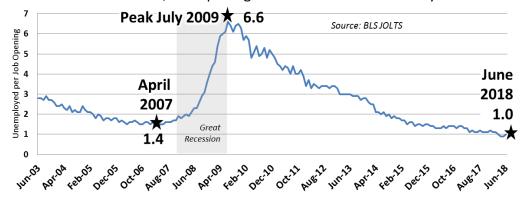


Jobenomics Analysis of the Small and Startup Business Situation.

While current small business statistics are impressive, the U.S. small business engine is faltering.

Number of Unemployed Persons per Job Opening

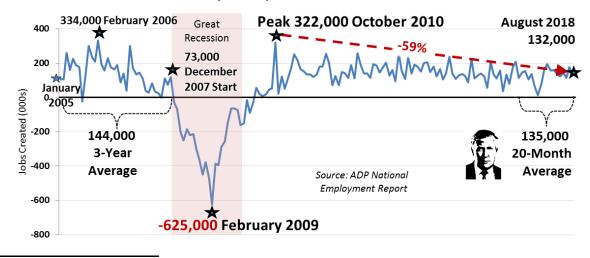
Source: BLS, Job Openings and Labor Turnover Survey



Before the Great Recession, the number of unemployed people per job opening reached a low of 1.4, which rapidly zoomed upward to a peak of 6.6 unemployed persons per open job. As of June 2018, the number of unemployed persons per job opening was 1.0—a near record low. ²¹

When spread between the number of unemployed and the number of open jobs is large, there is a lot of "slack" in the labor market. Now that the labor market has become "tight," businesses have difficulty in filling jobs. The business sector hardest hit in a tight labor market is the small business sector that does not have the wherewithal to "poach" qualified employees from other businesses like big businesses often do to fill job vacancies. Moreover, today's restrictive immigration policies are tightening the labor market even further as skilled immigrants feel unwelcome and are seeking employment in other countries that have merit-based immigration, benefit, and pathways to citizenship policies that make other nations more attractive than the United States.

U.S. Small Business (1-499) Job Creation Engine Is Faltering



²¹ BLS, Job Openings and Labor Turnover Survey, Number of unemployed persons per job opening, seasonally adjusted, https://www.bls.gov/charts/job-openings-and-labor-turnover/unemp-per-job-opening.htm



The three-year small business (1-499 employees) average before the Great Recession was 144,000 jobs per month. During the depth of the Great Recession in February 2009, small businesses laid off 625,000 people in a single month, which is indicative of the hazards of a stalled small business engine. Twenty months later, the small business engine was hitting on all cylinders and generated a peak of 322,000 jobs in October 2010. Since this post-recession peak to today, small business job creation dropped 59% to 132,000 in August 2018, a difference of 190,000 jobs per month. Consequently, over a 120-month period, a deficit of 190,000 monthly jobs equates to 22.8 million fewer jobs per decade. The Trump Administration could use these lost jobs to fulfill the President's vision of 25 million new jobs over the next decade. President Trump's small business average over the 20-month period he has been in office is a meager 135,000 jobs per month.

The rate of small business startups is also declining.

If the small business engine had a heart, it would be a micro-business. Most micro-businesses are self-employed firms (one-person incorporated or unincorporated), family businesses (mom-andpops) or partnerships. Micro-firms are essential to local communities. They are the type of enterprises that hire the unemployed and give part-time jobs to high schoolers and other entry-level workers. Continued deterioration and denigration of the micro-business community can only lead to economic stagnation.

118,000 February 2006 Twin Peaks 88,000 Great August 2018 April 2011 & February 2012 Recession 71,000 100 62,000 February December lobs Created (000s) 2005 2007 Start 0 36,000 46,000 Source: ADP National 0-Month 3-Year **Employment Report** -100 **Average** -105,000 February 2009 -150

U.S. Micro-Business (1-19) Job Creation Engine Is Also Faltering

Sadly, the U.S. micro-business heart is suffering from a form of atherosclerosis as indicated by a significant decline since the twin post-recession peaks. Since the post-recession peak month in February 2012, micro-businesses declined by 19% today, which is a good turnaround considering the precipitous fall in 2017. The average number of micro-business jobs created during the Trump Administration is 36,000 jobs per month, which is a meager number considering the relative strength of the U.S. economy. The 3-year average before the Great Recession was 46,000 new jobs per month. Fortunately, in 2018, small businesses are experiencing an upward trend with an average of 41,000 jobs per month compared to 26,000 jobs per month in 2017.

America needs to rejuvenate the small business entrepreneurial spirit and create a worldview that small and micro-businesses are a viable alternative to the decreasing number of high-paying full-time jobs. Women-owned and minority-owned businesses are deserving of far more attention than they



receive today. Additionally, digitally-savvy Screenagers (Generation Z) are suited for starting micro-businesses tailored to meet the needs of the emerging digital economy and contingent labor force. If the 29.6 million American small businesses created or hired only one net new employee over the next several years, Trump's 25 million new jobs goal could happen in a much shorter timeframe than he currently envisions.

The rate of small business startups is also falling. Business startups are the seed corn of the U.S. economy. Without the planting and fertilization of these seedlings, the fields of American commerce will be fallow.

Of the estimated three million startups over the last decade, tens of thousands of ultra-high growth businesses (called unicorns and gazelles) have generated millions of net new jobs for America. According to the Kauffman Foundation²², these fleet-footed startups account for 50% of all new jobs created. Uber, Lyft, Airbnb, SpaceX, WeWork, and Pinterest are recent examples of unicorns—a startup company that rapidly achieves a stock market valuation of \$1 billion or more. A gazelle is a high-growth company that increases revenues by over 20% per year for four-plus years. The top-10 U.S. gazelles include Natural Health Trends, Paycom Software, Lending Tree, ABIOMED, MiMedx Group, Facebook, NetEase, Ellie Mae, Amazon.com and Arista Networks, according to Fortune²³ magazine's 100 Fastest Growing Companies.

Regarding new starts (firms less than 1-year old), the Census Bureau's Business Dynamic Statistics indicate that the United States is now creating startup businesses at historically low rates, down from 16.5% of all firms to 8% in 2014. Based on a Wall Street Journal (WSJ) <u>analysis</u>²⁴ of this Census Bureau data, "If the U.S. were creating new firms at the same rate as in the 1980s...more than **200,000 companies and 1.8 million jobs a year**" would have been created.

During the heydays of the 1970s, Bill Gates and Steve Jobs started Microsoft and Apple, two of the world's most celebrated companies with a market capitalization (the value of the total number of shares multiplied by the present share price) of \$830 billion and \$1 trillion, respectively. Does one have to wonder if these companies would have started in our current austere startup environment?

According to a Census Bureau's Business Dynamic Statistics <u>Press Release</u>²⁵ on 20 September 2017, in 2015, 414,000 U.S. startup firms created 2.5 million new jobs, which is well below the pre-Great Recession average of 524,000 startup firms and 3.3 million new jobs per year for the period 2002-2006. In 2015, job creation minus job destruction equaled **net** job creation of 3.1 million, which supports the Jobenomics hypothesis that net job creation is a more critical statistic for policy-makers

_

²² Kauffman Foundation, Understanding the Economic Impact of High-Growth Firms, 6 June 2016, http://www.kauffman.org/newsroom/2016/06/understanding-the-economic

²³ Fortune, 100 Fastest Growing Companies, http://fortune.com/100-fastest-growing-companies/list/

Wall Street Journal, Sputtering Startups Weigh on U.S. Economic Growth, Decadeslong slowdown in entrepreneurship underscores transition in American labor market, 23 October 2016, http://www.wsj.com/articles/sputtering-startups-weigh-on-u-s-economic-growth-1477235874?mod=djem10point

²⁵ U.S. Census Bureau, Business Dynamic Statistics Press Release CB17-TPS.68, 20 September 2017, https://www.census.gov/newsroom/press-releases/2017/business-dynamics.html



than just focusing on only new jobs. Other tidbits of the 2017 Business Dynamic Statistics press release include:

- 5 million U.S. small businesses (1-499 employees) created 45% (1,400,711) of all net new jobs compared to 20 thousand large enterprises (500+ employees) that produced 55% (1,690,591) net new jobs.
- 4.5 million micro-businesses (1-19 employees) net job creation equated to 14% (434,203) of all net new jobs.
- Net job creation in urban areas was over twice the rate of rural communities, or 2.7% versus 1.2% respectively.

According to another <u>Kauffman Foundation</u>²⁶ analysis of the Census Bureau's Business Dynamic Statistics, most **city and state government policies that look to big business for job creation are doomed to failure** because they are based on unrealistic employment growth models. "It's not just net job creation that startups dominate. While older firms lose more jobs than they create, those gross flows decline as firms age. On average, one-year-old firms create nearly 1,000,000 jobs, while ten-year-old firms generate 300,000. The notion that firms bulk up as they age is, in the aggregate, not supported by data."

Jobenomics agrees with both the WSJ and Kauffman analyses. Moreover, the Jobenomics 20-part series, entitled President Trump's New Economy Challenge²⁷ provides a detailed analysis why the Trump Administration's bold economic (4% GDP) and job creation (25 million new jobs) vision is likely to fall short due to its concentration on big business rather than small business creation and sustainment. Small business is not only critical to net job creation; it is the primary determinant for GDP growth given the fact that big firms are increasingly looking at automation and outsourcing (to foreign workers or domestic contingency workers) to replace the conventional full-time labor force.

²⁶ Kauffman Foundation, The Importance of Startups in Job Creation and Job Destruction, 9 September 2010, http://www.kauffman.org/what-we-do/research/firm-formation-and-growth-series/the-importance-of-startups-in-job-creation-and-job-destruction

²⁷ Jobenomics, President Trump's New Economy Challenge, 6 February to 4 April 2017, https://jobenomicsblog.com/wp-content/uploads/2011/11/President-Trumps-New-Economy-Challenge-Series-6-February---4-April-2017.pdf



Concluding Thoughts.

President Trump's vision of a "dynamic and booming economy" is one that can produce a GDP growth rate of "4% over the next decade." This vision ultimately depends on mass-producing business, especially small business, in sufficient quantities to create 25 million net new jobs. Sclerotic (0% to 2%) or recessive (negative) GDP rates depreciate a government's legitimacy. Robust GDP growth of over 3% will have the opposite effect. 4% growth will truly "make America great again."

According to the nonpartisan Congressional Budget Office's 2017 to 2027 Budget and Economic Outlook report 28, "over the next five years, the monthly increase in nonfarm payroll employment, which is estimated to average 160,000 jobs in the first half of 2017, is projected to settle down to an average of 64,000 jobs." If this CBO forecast is correct, the next decade is likely to produce only 9 million American jobs, which is far short of President Trump's projection of 25 million new jobs.

U.S. Bureau of Labor Statistics also does not foresee robust labor force growth. The U.S. Bureau of Labor Statistics <u>Employment Projections</u>: <u>2016-26 Summary</u>²⁹ published on 24 October 2017—ten months into the Trump Administration—projects that the next decade will produce only 11.5 million new jobs. 11.5 million is a shortfall of 13.5 million jobs when measured against the Trump Administration goal of 25 million jobs. It is also below the gains experienced in the two prior ten year periods covering 1986-1996 (16.9 million) and 1996-2006 (14.4 million).

Persistent Job Creation Shortfall Trump Source: BLS, Trump Administration Private Sector Only 25.0 BLS 16.9 14.4 11.5 7.7 1986-1996 1996-2006 2006-2016 2016-2026 2017-2027 **Projected** Actual

The BLS Employment Projections Summary projects a loss of 219,000 jobs in the Goods-Producing Industries supersector group with gains of 864,700 jobs in Construction and 90,800 in Mining and Logging (including oil and gas extraction, and exploration and support services) supersectors, and a massive loss of 736,400 jobs in the Manufacturing supersector.

Per the BLS, the Service-Providing Industries supersector group is projected to gain 10,526,500 jobs with the most substantial growth in employment occurring in Health Care and Social Assistance (3,998,300), Professional and Business Services (2,159,700) and Leisure and Hospitality (1,319,000) supersectors. The vast majority of employment gains in the service-providing supersector will be lower wage jobs in the contingent workforce.

http://www.bls.gov/news.release/ecopro.toc.htm

²⁸ Congressional Budget Office, 2017 to 2027 Budget and Economic Outlook, https://www.cbo.gov/publication/52370 U.S. Bureau of Labor Statistics, Employment Projections 2016-26 Summary,



For Agriculture/forestry/fishing industries, the BLS Employment Projections Summary expects a net loss of 6,100 jobs. Small self-employed farmers will suffer a loss of 23,000 while larger corporate farms will increase by 17,000 wage earners. According to the <u>Department of Agriculture</u>³⁰, the number of American farms decreased by two-thirds (6.8 million to 2.1 million) since its peak in 1935, while the size of farms tripled (440 acres verse 155 acres). With the possible exception of indoor controlled agriculture (e.g., hydroponics, aquaponics, vertical farming, and cannabis), the era of small American farms is at its nadir.

The Federal government is expected to downsize by 55,800 while State and Local governments should increase by 788,700 workers, per the BLS Employment Projections 2016-26 Summary.

Jobenomics tends to agree with these rather gloomy CBO and BLS forecasts for the reasons discussed in the Jobenomics 20-part series entitled President Trumps New Economy Challenge. However, the Trump Plan can be amended to change CBO and BLS labor force projections from negative to positive.

With proper leadership, the Administration can lift tens of millions of Americans out of poverty by making the following four structural changes to President Trump's economic and job creation plan:

- Balancing the traditional standard industrial economy with the newly emerging nonstandard digital economy,
- Mitigating the mass-exodus of capable workers who are voluntarily departing the U.S. labor force for lives of dependency and alternative (often illicit) lifestyles,
- Addressing the challenge of the ever-growing contingency workforce that will soon be the dominant form of labor in the United States, and
- Mass-producing small and self-employed businesses—the engine of the U.S. economy—and the employer of the vast majority of Americans.

If the Trump Administration can achieve 4% GDP growth over the next decade, the U.S. economy will boom, and Americans will be euphoric. This feat will not be easy. The last time that the United States achieved 4% in ten consecutive years over the previous 5-decades was never (3.5% was the highest from 1976 to 1985). Notwithstanding, if the Trump Administration can tie the 3.5% record over the next decade, they will be vindicated and worthy of much praise.

About Jobenomics.

Jobenomics deals with the economics of business and job creation. The non-partisan Jobenomics National Grassroots Movement's goal is to facilitate an environment that will create 20 million net new middle-class U.S. jobs within a decade. The Movement has reached an estimated audience of 30 million people. The Jobenomics website contains numerous books and material on how to mass-produce small business and jobs as well as valuable content on economic and industry trends. For more information see <u>Jobenomics.com</u>.

Page 23

³⁰ U.S. Department of Agriculture, Farming and Farm Income, https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/farming-and-farm-income/