Personal Financial Satisfaction Index (*PFSi*) Defined

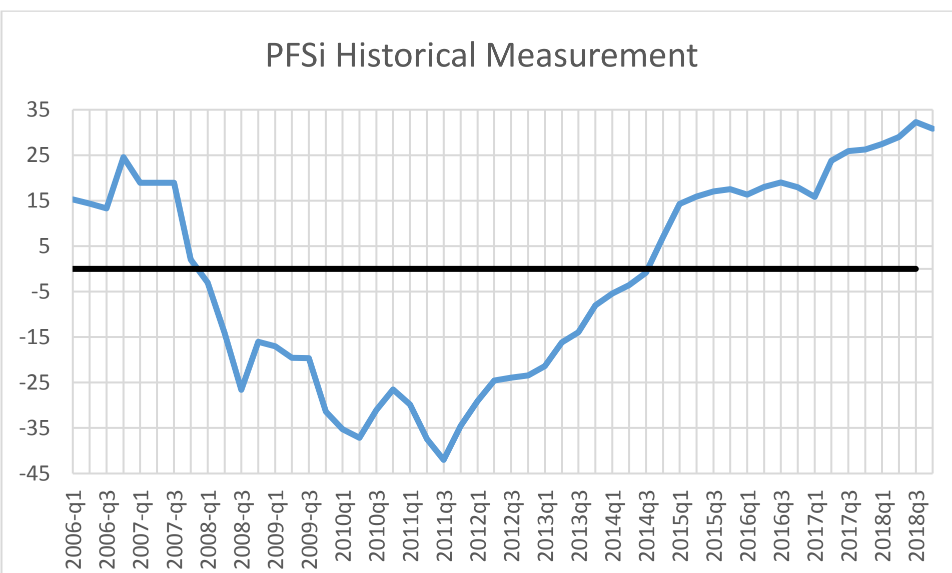
The Personal Financial Satisfaction Index (*PFSi*) is the result of two component sub-indexes. It is calculated as the difference between the Personal Financial Pleasure Index and the Personal Financial Pain Index. These are in turn composed of four equally weighted factors, each of which measure the growth of assets and opportunities, in the case of the Pleasure Index, and the erosion of assets and opportunities, in the case of the Pain Index.

Methodology

To construct the indices each component was first normalized by its own standard deviation prior to July 2013. The factors were then individually modified to an average value of 50 over the period up to July 2013. The financial pleasure index and the financial pain index each equally weight the individual component factors.

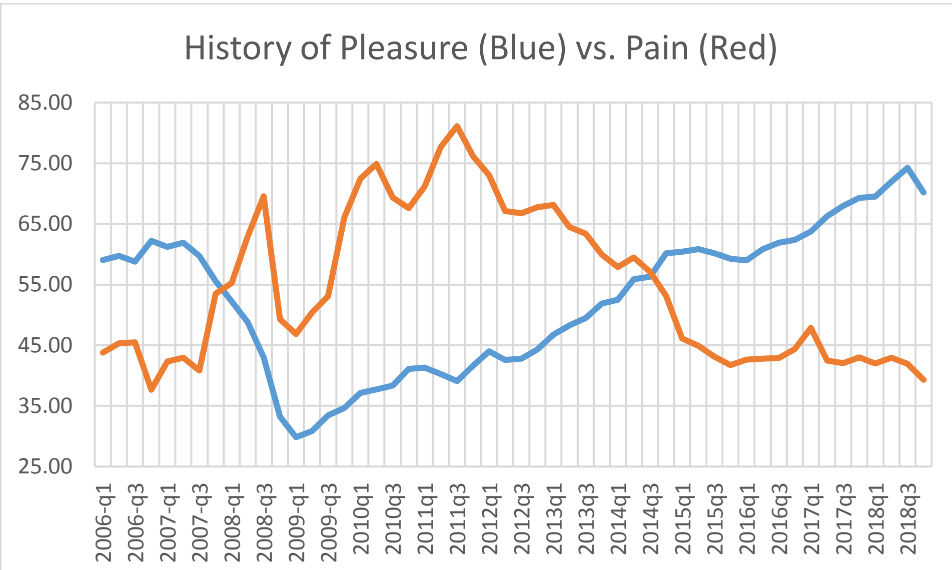
Fourth Quarter 2018 PFSi Summary

The *PFSi* measured 30.9 in the Fourth Quarter of 2018. This reflects a 4.6 point (17.4%) increase from one year ago, but a 1.4 point (4.4%) decrease from the prior quarter. This breaks the string of PFSi record values, and wipes out 24% of the index's gains in the three prior quarters of 2018. It is still very solidly in not only positive territory, but pretty close to the recent records.



The year over year advance of the index was driven by the 12.2 point (17.9%) increase in job openings per capita, followed by the 7.4 point (18.7%) decline in loan delinquencies. Additionally, all the other pain factors declined, led by the 4.5 point (8.7%) drop in taxes. However, the PFS 750 Market Index dropped 8.9 points (10.1%) and the decline in the CPA outlook (2.8 points, 5.1%) offset most of the gain (3.1 points, 4.6%) in home equity.

The modest decline from the prior quarter level was a mixed story. The biggest factor was the 13.4 point (14.5%) drop in the PFS 750 Market Index, somewhat offset by the 8.9 point (17%) drop in inflation. All but one of the pleasure factors (home equity) declined, and home equity's advance was small. All but one of the pain factors (underemployment) also declined, and underemployment's increase was also minor.



Fourth Quarter 2018 Personal Financial Pleasure Index Top-Line Summary

The **Personal Financial Pleasure Index,** at 70.2, is 0.9 points (1.3%) higher than the prior year but 4.1 points (5.5%) down from the prior quarter.

The increase from the prior year was led by a 12.2 point (17.9%) gain in in job openings. Home equity increased 3.1 points (4.6%). However, the PFS 750 Market Index dropped 8.9 points (10.1%) and the CPA Outlook index eased by 2.8 points (5.1%), offsetting most of the job openings and home equity gains.

The decline from the previous quarter's level was led by a 13.4 point (14.5%) drop in the PFS 750 Market Index, followed by a 2.8 point (5.1%) decline in the CPA outlook. Job openings also edged down 0.2 points or 0.3%. Home equity edged up 0.2 points (0.2%).

Fourth Quarter 2018 Personal Financial Pleasure Index Detailed Summary

PFSi Market 750 Market Index: This factor made the largest contribution to the Pleasure Index from 2009 q3 to 2018 q3, and as of q4 is the second largest.

Beginning in the fourth quarter 2018 turned into a bruising year, the worst since 2008; a bear market seemed all but inevitable. In late December the Nasdaq Composite Index and Russell 2000 Index were among stock indexes that tumbled into bear markets.

For the year the only major market segment to gain was Information Technology, up about 15%. It was led by software and communications equipment, followed by IT services. But in fact, within the IT sector, several subsectors lost ground. Technology hardware and peripherals, electronic instruments and components and semiconductors and equipment all fell in line with the overall market.

The sectors with the worst declines for the year were Energy, followed by Materials, Consumer Staples and then Communication Services. The smallest declines were in Utilities, and Health Care, followed by Consumer Discretionary. Within the Health Care segment the Life Sciences Tools and Services and Health Care Equipment and Supplies gained about 11% and 9%, respectively.

The story for the quarter is somewhat more straightforward: no segments turned in positive performances. The worst losses were in Energy, followed by Industrials, and then Communications Services, Materials, and Consumer Staples. Utilities had the most modest losses.

Real Home Equity per Capita: This factor's current value, which is based on data issued for July, is 4.6% above the prior year and value and 0.2% ahead of the previous quarter level. It is still 11.5% below its 2006 all-time high.

The changes in value have been due to increases in the market value of real estate, which for the most recent reading came in just over 6% per annum. They have exceeded increases in mortgages outstanding, which have been advancing at about 2.8% per annum.

According to Zillow,

- As of November the median home value nationwide was 11.5 percent higher than it was at the height of the housing bubble.
- As of October the year over year value gains of the bottom third of valuation registered 10.1%, compared with 7.7% for the middle third and 4.8% for the top third.
- The Zillow summary of the housing markets is that residential construction "hit the pause button" in 2018, not due to lack of demand but rather due to builders' difficulty delivering houses at the lower price points where demand is strongest.

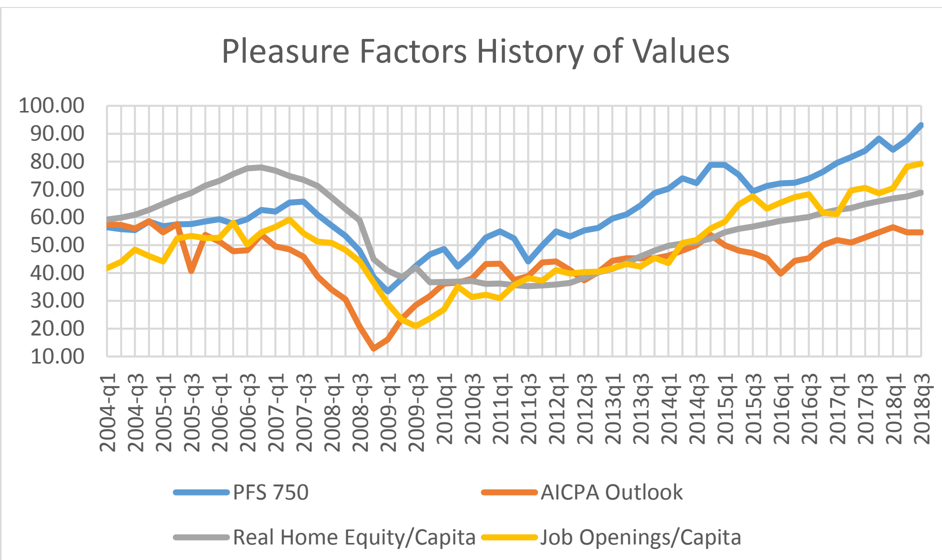
Job Openings per Capita: The current reading is 17.9% higher than the prior year reading, but (0.3%) below the previous quarter level. The Fourth Quarter index is based on the October data.

Total nonfarm employment was more than 158 million in October, and about 2.8 million new jobs were added in 12 months. There were almost 7.1 job openings, but only 6.1 million unemployed in October; openings thus exceed job seekers.

In comparison to year ago levels, the job openings level increased for both total private (+974,000 or 17.7%) and government (46,000 or 8.5%). The job openings accommodation and food service (200,000, up 26%), health care and social services (160,000, up 15.5%), retail trade (147,000, up 22.4%) and *professional and business services (143,000, up 13.2%) accounted for two thirds of the increase in private sector openings. The 17.7% overall increase in openings included gains in almost every sector. While the job openings added weren't the largest, both information and wholesale trade gains were more than 50%. The increase in job openings was strongest (450,000, 21.5%) in the South, but all regions grew job openings at least 12% to 15%..*

AICPA CPA Outlook Index: The current reading is 5.1% lower than both the prior year and the previous quarter levels. The survey was conducted from November 7 to 28. The index is still solidly in positive territory, although it did decline.

1. *The recent low point for this index occurred in Q1 2016. The all time high of the series was in early 2000. The index is 28% lower than its early 2000 peak.*
2. *All components show declines, led by US Economic Optimism.*
3. *The strongest factors in the level of the Q4 2018 index (as opposed to the increase) are Revenue, IT Spending and Organization Optimism. These were the strongest factors for Q3 also.*



<u>**Personal Financial Pleasure Index Components Defined**</u>

Measuring the positive factors impacting the economy, the *Personal Financial Pleasure* Index combines the following four economic factors.

- <u>PFS 750 Market Index</u> – This AICPA proprietary stock index is comprised of the 750 largest companies trading on the US Market excluding ADRs, mutual funds and ETFs, adjusted for inflation and per capita.

- AICPA Outlook Index – This broad-based composite index captures the expectations of CEOs, CFOs, Controllers, and other CPA executives for the economy, and their plans for a breadth of indicators of economic activity within their own organizations. The composite measures the following factors equally: US economy optimism, organization optimism, business expansion, revenues, profits, employment, IT spending, other capital spending, training and development and Plans for spending on employee training and development over the next 12 months.

- Real Home Equity per Capita – This factor is a calculation of the Market Value of Real Estate, Households and Nonprofit Organizations, less the Home Mortgage Liability. Both are published by the Board of Governors of the Federal Reserve System, deflated by the Personal Consumption Expenditures Price Index and divided by the Civilian Non-institutional Population.

- Job Openings per Capita – Factor is a calculation of total non-farm job openings, published by the Bureau of Labor Statistics, divided by the Civilian Non-institutional Population.

Fourth Quarter 2018 Personal Financial Pain Index Top-Line Summary

Pain index at 39.3 is 3.7 points (8.5%) lower than the prior year and 2.6 points (6.3%) below the preceding quarter.

For the year ago comparison, all factors declined, led by loan delinquencies (7.4 points, 18.7%, followed by taxes (4.5 point, 8.7%). Underemployment registered a 2.1 point (5.9%) decline, and inflation dropped by 0.6 point (1.4%).

On the quarterly comparison underemployment, which has been slowly declining with occasional ticks upward, registered a 1.1 point (3.2%) increase. All other factors fell: Inflation, the most volatile factor, declined 8.9 points (17%). Loan delinquencies fell 2.4 points (6.9%), followed by a 0.3 point (0.6%) reduction in taxes.

Fourth Quarter 2018 Personal Financial Pain Index Detailed Summary

Delinquencies on Loans: This factor's current level is 18.7% lower than in the prior year and 6.9% below the previous quarter's level. The improvements are somewhat more heavily weighted towards all loans on the annual comparison, but mostly related to mortgages for the quarterly comparison.

The peak delinquency rate for mortgages was 11.26% in the spring of 2010, and the peak for all loans was 7.5% at the end of 2009. The current reading of 3.01% delinquencies on mortgages is still well above the 2.1% that was typical between 1994 through 2003.

Underemployment: This factor, registering 34, is 5.9% lower than the prior year level but 3.2% above the Q3 level. In comparison, its peak value was 84.3 corresponding to 17.1% in the fourth quarter of 2009 (versus the current 7.6%). It is now 10% below its average value in the two years before the great recession.

Like most economic measures, unemployment is worse in some regions than in others. The PFSi uses the U6 measure. Iowa had the lowest unemployment rate in November and Puerto Rico had the highest. In *total, 20 states had unemployment rates higher than the U.S. figure, 27 states had lower rates, and 5 states had rates at the average.*

In November 42 states had unemployment rate decreases from the year ago level. The largest decline was in Puerto Rico, (declining from 10.3% to 7.6%), followed (but in the range of declines of 1.2% to 1.1%) by New Jersey, Oklahoma, Delaware and Connecticut.

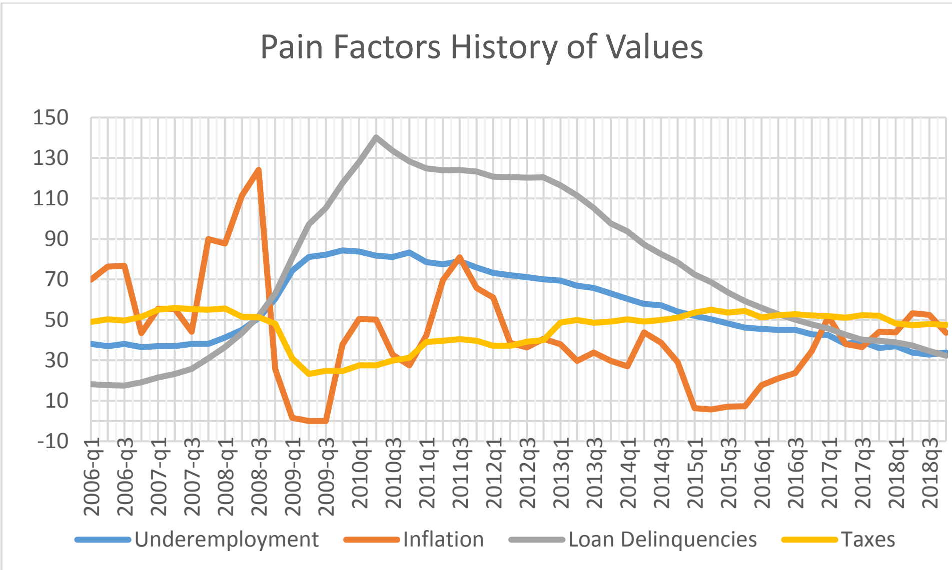
Unemployment decreased in almost all sectors over the last year. The major exception, registering an increase, was farming, fishing and forestry. It is also by far the sector with the highest unemployment rate, 2.8 times the average. The most striking decline in the unemployment rate was in transportation and material moving, followed by construction and extraction. Both of which still register above the average. Occupations with unemployment most below the overall average relate to management and professional occupations.

Inflation: Our blended inflation measure is 1.8% for the Fourth Quarter, versus 1.9% a year ago but 2.2% last quarter. Please note that the Federal Reserve's target for inflation is about 2%. In terms of the index, the current index value is 44, down 0.6% from the year ago level and down 17% from the Q3 level.

Inflation is the most volatile factor contributing to the PFSi, and with absolute levels so low, small changes result in large percent gains. The Q4 pain index relies on the November level.

Personal Taxes: The personal taxes index decreased 4.5 points (8.7%) from the year-ago and 0.3 points (0.6%) from the prior quarter levels.

Personal tax rates plunged more than 200 basis points to under 9.5% in mid-2009, and they have been increasing unevenly since then. The current level is 11.7%. Going back as far as 1994, the highest levels for personal taxes were 14% to 14.5% from late 1999 to mid-2001.



Personal Financial Pain Index Components Defined

The *Personal Financial Pain* index is a measurement of the following negative economic factors:

- Inflation – This factor is comprised of 95 percent annual change in the Personal Consumption Expenditures Price Index and 5 percent annual change in the Consumer Price Index for Fuel Oil and Other Fuels, as published by the BLS.

- Personal Taxes – This factor uses Bureau of Labor Statistics statistics on income tax, tax on realized net capital gains, taxes on personal property, payments for motor vehicle licenses, and several miscellaneous taxes, licenses, and fees. Social security and Medicare taxes are excluded, as are taxes on real property, sales taxes, and certain penalty taxes. Personal current taxes are measured on a payments basis (i.e., when paid) except for withheld taxes (largely on wages and salaries) which are measured on an accrual basis.

- Delinquencies on Loans – Taken from data published by the Board of Governors of the Federal Reserve System, this factor is calculated as 75 percent delinquency rate on single family residential mortgages and 25 percent the delinquency rate on all loans and all commercial banks, both

- Underemployment – This BLS-calculated factor is a combination of full title total unemployed numbers, all marginally attached workers, and total number of workers employed part-time for economic reasons.

Chart View of Above Information

Component	4Q17		3Q18		4Q18		Change vs.	
	Data	**Index**	**Data**	**Index**	**Data**	**Index**	**Year**	**Quarter**
Net Index		***26.3***		***32.3***		***30.9***	**4.6**	**(1.4)**
Pleasure		*69.3*		*74.2*		*70.2*	*0.9*	*(4.1)*
PFS 750 Market Index ($ trillion, index)	29.3	88	31.8	93	27.1	79	**(8.9)**	**(13.4)**
CPA Outlook (index)	79	55	79	55	76	52	**(2.8)**	**(2.8)**
Home Equity ($ trillion, index)	17.3	66	18.6	69	18.7	69	**3.1**	**0.2**
Job Openings (millions, index)	6.1	69	7.1	81	7.1	81	**12.2**	**(0.2)**
Pain (subtracted)		*43.0*		42.0		39.3	*(3.7)*	*(2.6)*
Underemployment (%, index)	8	36	7.4	33	7.6	34	**(2.1)**	**1.1**
Inflation (%, index)	1.9	44	2.2	53	1.8	44	**(0.6)**	**(8.9)**
Taxes (%, index)	12.1	52	11.7	48	11.7	48	**(4.5)**	**(0.3)**
Loan Delinquencies (%, index)	2.9	40	2.5	35	2.4	32	**(7.4)**	**(2.4)**