

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

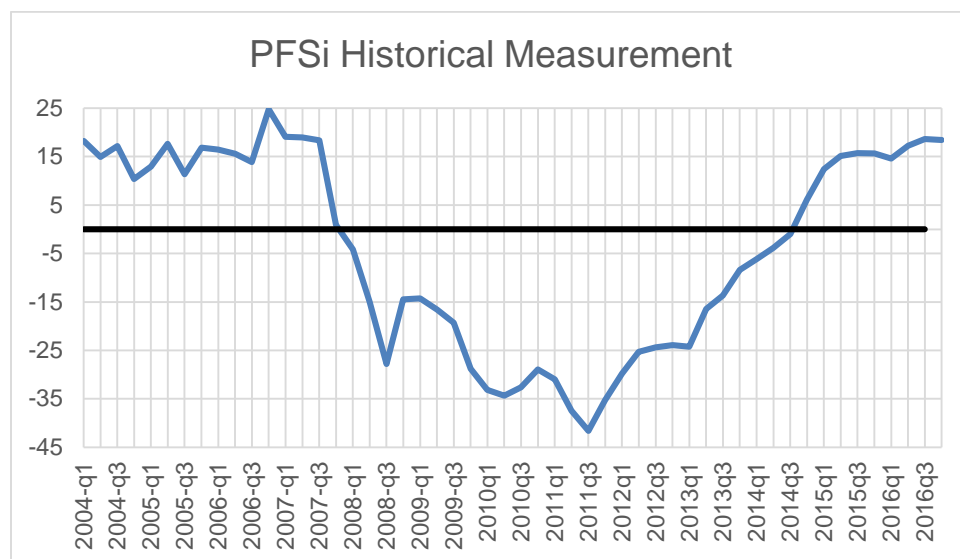
To construct the indices each component was first normalized by its own standard deviation prior to July 2013. The factors were then individually modified to an average value of 50 over the period up to July 2013. The financial pleasure index and the financial pain index each equally weight the individual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

Fourth Quarter 2016 PFSi Summary

The *PFSi* measured 18.5 in the fourth quarter of 2016. This reflects a 2.8 point increase from one year ago, but a 0.2 decline from the prior quarter.

The 1% decline from the prior quarter was based on the small increase in the **Personal Financial Pleasure** index (1.2 point) being outweighed by a 1.3 point increase in the **Personal Financial Pain** index.

The improvement from the fourth quarter of 2015 was due to a 3.9 point increase in the Pleasure index, which was larger than a 1.1 point increase in the Pain index.



Fourth Quarter 2016 Personal Financial Pleasure Index Top-Line Summary

The **Personal Financial Pleasure Index**, at 63.0, is 1.2 points (1.9%) higher than the prior quarter and 3.9 points (6.6%) up from the prior year.

The gain over the previous quarter's level was due to improvements in three of the four factors, led by a 4.6 point increase in the CPA Economic Outlook, followed by a 2.6 point increase in the PFSi 750 Market Index. Home equity increased by 1.5 points, but the job openings index declined 4.1 points.

The increase from the prior year was due to gains in all the factors, led by a 5.4 point gain in the PFSi 750 Market Index. Home equity and the CPA Economic Outlook increased by 4.9 points and 4.6 points, respectively. Job openings improved by a more modest 0.7 points.

Fourth Quarter 2016 Personal Financial Pleasure Index Detailed Summary

PFS 750 Market Index: This reached an all-time high in Q4 2014 and maintained it in Q1 2015. Its current value is 2.3 points (3%) below that high, and for several years it has been the biggest contributor to the Pleasure Index.

Most market commentators agree that we are witnessing a Trump rally, fueled by expectations of reduced taxes and regulations, at least until we see how the latest earnings reports look. Share prices began an uptrend immediately after the election, and trading volumes increased dramatically in December. Most experts comment that valuations are extended, but optimism reigns. The strongest gains in the 3 month period were financials, up more than 20%. Industrials and materials each gained 9% to 11% in the quarter. Within industrials, construction & engineering, machinery and road & rail gained 11% to 15%. Within materials, construction materials and metals & mining gained more than 20%. The only segment to show losses for the quarter was consumer staples, down 0.9%.

Year over year, the energy sector, which wasn't among the top performers in the quarter, was actually the leader, gaining about 33%. Equipment gained about 41% and fuel about 32%. This was largely tied to the increase in oil prices.

Real Home Equity per Capita: This factor's current value is 8.4% above the prior year level, and 2.5% above the previous quarter level. It is still 20.1% below its early 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 at 5.4% per annum. They have exceeded increases in mortgages outstanding, which have been advancing at about 1.6% per annum.

Real estate markets are local. As of November (later than the data used in the PFSi) the states registering the highest year-over-year home price increases, ranging from 10.3% to 12.8% are (in order from largest down), Oregon, Washington, South Carolina, Florida and Colorado. Ten-X is an organization which is facilitating online real estate transactions. It has recently published a Top Single Family Housing Report, which ranks markets by potential (as judged by Ten-X). Its top 10 consisted (in order) of four Florida metros—Orlando, Palm Beach County, Fort Lauderdale and Tampa—followed by Dallas, Nashville, Portland, Florida's Jacksonville metro area, Las Vegas, and Columbus, Ohio. While most of the cities at the top of the list share common traits like job growth, population growth and economic expansion, many of the cities showing the greatest potential were among those hardest hit during the Great Recession.

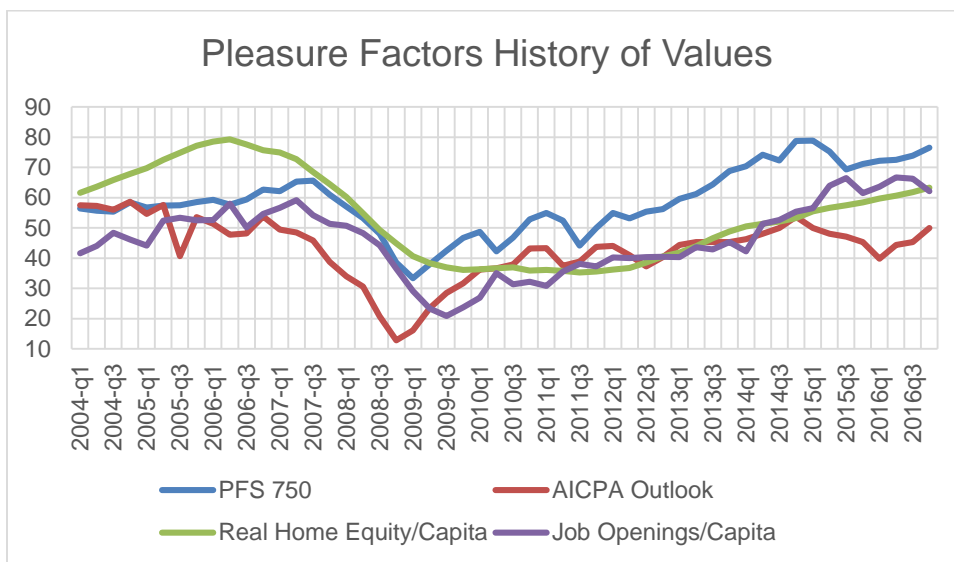
Job Openings per Capita: From Q1 of 2015 through Q3 2016 job openings were the second strongest contributor to the strength of the Pleasure Index. The current reading is 1.1% higher than the prior year reading, but 6.2% weaker than the previous quarter, and as of Q4 job openings are making a marginally smaller contribution than that of home equity.

The number of job openings increased over the year for total private (2.1%) and decreased 7% for government. Overall growth was close to the 2.1% achieved in the private sector (since government jobs are only about 15% of the total) compared with population growth of about 1.1%. Job growth was strongest in health care and social assistance, followed by education and

health services. Government jobs, with their losses, were among the weakest. Geographically, the South lost jobs year over year, and the West displayed the best growth.

AICPA CPA Outlook Index: The current reading is 10.2% higher than both the prior year level and the previous quarter level. The survey was conducted in November, beginning the day after the election.

1. The US economic optimism index component of this series was the biggest contributor to both the year over year improvement and the advance of the reading versus the prior quarter. Although the readings in the PFSi for the quarter over quarter change was the same as the year over year, this factor was half again as large for the quarter over quarter as the year over year, with the difference being made up by other factors.
2. Optimism for respondent's own organization at 61% is higher than any period since 1Q 2015, and is the number 2 contributor to the improvement in the outlook quarter to quarter, closely followed by profits.
3. Profits is the number 2 contributor to the improvement in the outlook year over year.



Personal Financial Pleasure Index Components Defined

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

- PFS 750 Market Index – 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 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 PCE 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 2016 Personal Financial Pain Index Top-Line Summary

Pain index at 44.5 is 1.3 points (3.1%) higher than the previous quarter and 1.1 points (2.5%) higher than the prior year's level.

Comparing the current index to the prior year, the increase in overall value was entirely due to a 22 point increase in inflation, offset by smaller declines in the other three components: loan delinquencies down by 12.9 points, and underemployment and taxes down by 3.2 and 1.6 points, respectively.

The increase from the preceding quarter level occurred because a 9.7 point increase in inflation and a 0.6 point increase in taxes together overwhelmed declines of 2.9 points and 2.1 points in loan delinquencies and underemployment, respectively.

Fourth Quarter 2016 Personal Financial Pain Index Detailed Summary

Delinquencies on Loans: This factor's current level is 5.6% lower than in the previous quarter and 21.2% below the prior year's level. Improvements are due to both delinquencies on mortgages and delinquencies on all loans.

The current mortgage loan delinquency rate is 4.3%; the overall delinquency rate is 2.05%. Improvements in both the year over year level of the index and in the quarter to quarter comparison are due to improvements in both measures. The improvement in the mortgage rate is more than five times stronger than the improvements in overall delinquencies (a decline of more than 100 basis points annually versus only 22 basis points).

In comparison, the peak delinquency rate for mortgages was 11.26% in the spring of 2010, and the overall peak was 7.5% at the end of 2009.

Underemployment: This factor, registering 43, is currently 4.7% below the previous quarter level and 6.9% below the prior year. In comparison, its peak value was 84.3 (corresponding to 17.1%, versus the current 9.3%) in the fourth quarter of 2009. It is still just over 14% above its average value before the great recession.

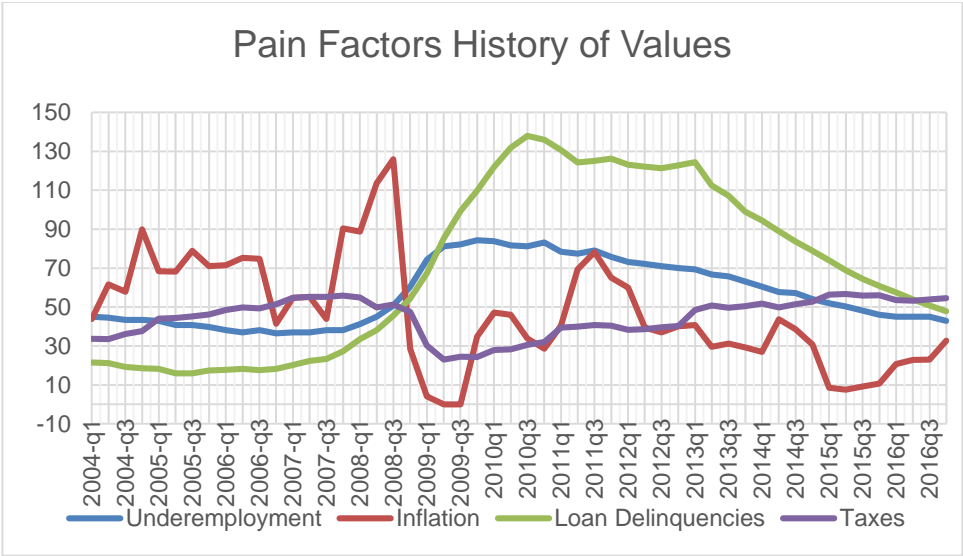
Like most economic measures, unemployment is worse in some regions than in others. In the recent year the states with overall unemployment (on all of the government's 6 different measures) notably above the national average are California, Illinois and Nevada. South Dakota had the lowest overall rate of unemployment. On the specific measure used in the PFSi (U6), Alaska, Connecticut, Mississippi and West Virginia are also particularly high.

Inflation: Our blended inflation measure is 1.4% for the fourth quarter. This factor's current value is a hefty 42.3% higher than the prior quarter's level, and a stunning 204.7% higher than the year-ago level. Please note that the year-ago blended level was just 0.5%, and that the Federal Reserve's target for inflation is about 2%. The really high percent increase is due to the extremely low base value.

Inflation is the most volatile factor contributing to the PFSi. The Q4 pain index relies on the November level. It is the largest contributor to the Q4 index of any individual factor, either for pain or for pleasure.

Personal Taxes: Personal taxes are 1.1% higher than the previous quarter's value. They are 2.8% lower than they measured in the prior year.

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 12.4%. 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 PCE 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 BLS statistics on income including 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	4Q15		3Q16		4Q16		Change vs. the prior year, the prev quarter	
	Data	Index	Data	Index	Data	Index		
<i>Net Index</i>		15.7		18.7		18.5	2.8	(0.2)
<i>Pleasure</i>		59.1		61.8		63.0	3.9	1.2
PFS 750 Market Index (\$ trillion, index)	22.4	71	23.7	74	24.6	76	5.4	2.6
CPA Outlook (index)	69	45	69	45	74	50	4.6	4.6
Home Equity (\$ trillion, index)	14.8	58	15.9	62	16.4	63	4.9	1.5
Job Openings (millions, index)	5.4	61	5.8	66	5.5	62	0.7	(4.1)
<i>Pain (subtracted)</i>		43.4		43.2		44.5	1.1	1.3
Underemployment (% , index)	9.9	46	9.7	45	9.3	43	(3.2)	(2.1)
Inflation (% , index)	0.5	11	1.0	23	1.4	33	22.0	9.7
Taxes (% , index)	12.5	56	12.3	54	12.4	55	(1.6)	0.6
Loan Delinquencies (% , index)	4.4	61	3.6	51	3.4	48	(12.9)	(2.9)

Data Revisions

Two of the factors in the Pleasure Index, the PFS 750 market index and the AICPA CPA Outlook Index, are based on original AICPA research. The other factors are based on data created by several federal government economics bureaus. (Actually, the PFS 750 market index is deflated, and can be affected by updates in the deflator; such revisions have been very small.) When these data series are revised we incorporate the revisions in order to preserve period to period comparability of the PFSi. This can lead to changes in the historic values of the series. We will comment in footnotes what impact data revisions have had on the comparisons of the current period to historic period.

Over the past 2 years the Net Index, which has had an average value of about 16, has been impacted by data revisions by as much as 1.7 points in a period (both positive and negative adjustments). Both the Pleasure and Pain components have been impacted by data revisions.

The Pleasure Index, which has averaged about 61, increased 0.3 to 1.0 points and decreased 0.2 to 0.6 points. Revisions in the Home Equity component and the job openings have both impacted the results.

The Pain Index, which has averaged about 45, has increased as much as 1.3 points and decreased as much as 1.9 points once. Both inflation and taxes have been revised.

Year ago comparisons: The revised Net Index for Q4 2015 is 15.7, versus 15.9 originally posted. The Pleasure Index decreased 0.4 points due to a 3 point decrease in home equity, and the Pain Index decreased 0.1 point as an increase in inflation was partially offset by a decrease in taxes.

Comparisons to the most recent quarter: The revised Net Index for Q3 2016 is 18.7, versus 19.0 originally posted. The Pleasure Index decreased 0.3 points due to a 1 point decrease in job openings and other minor rounding adjustments. However, the Pain Index increased 0.1 point, which is entirely attributable to minor rounding adjustments.

Note: see the accompanying table detailing the history of revisions.