



Personal Financial Satisfaction Index (PFSi) Defined

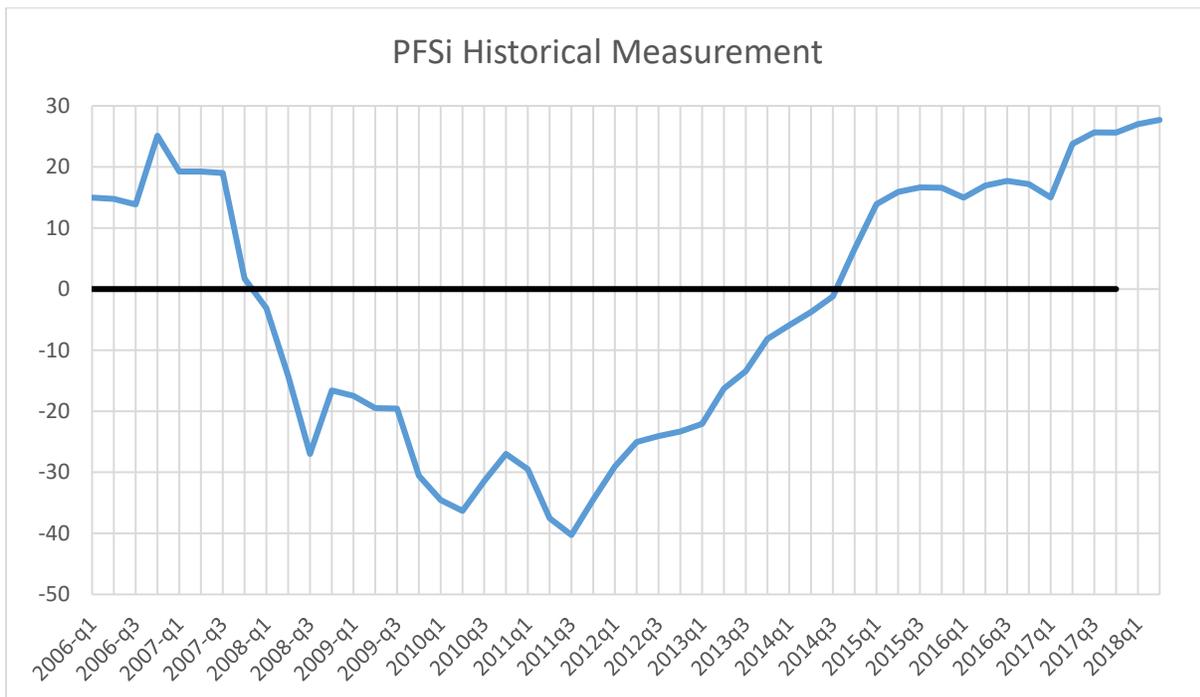
The Personal Financial Satisfaction Index (*PFSi*) is the result of two component sub-indexes. It is calculated as the difference between the Personal Financial Pleasure Index and the Personal Financial Pain Index. These are in turn composed of four equally weighted factors, each of which measure the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

Second Quarter 2018 PFSi Summary

The *PFSi* measured 27.7 in the second quarter of 2018. This reflects a 3.9 point (16.5%) increase from one year ago, and a 0.7 point (2.6%) increase from the prior quarter. This small increase establishes a new *PFSi* record value.



The year over year advance of the index was driven by all the factors in the pleasure index, which overcame an increase the pain index. The largest contributions were the 8.6 point (12.4%) increase in job openings, followed by the 7.0 (8.5%) increase in the PFS 750 Market index. In the pain index, a 17.6 point (48.8%) increase in inflation was partially offset by declines in all the other factors.

The improvement over the prior quarter level was small, only 0.7 point (2.6%). The pleasure index increased only 2.8 point (4.0%) and the pain index, driven by an uptick in inflation, increased almost as much as the pleasure index. The strongest contributor to the quarterly increase in the pleasure index was job openings, up 7.7 points (11.0%), followed by the PFS 750 market index, up 4.3 points (5.2%). Home equity barely advanced (0.8 points or 1.2%) and the CPA Outlook index retreated 1.8 points (3.3%). The quarterly movement of the pain index was dominated by the 13.8 point (34.5%) increase in inflation, offset by a 3.2 point (8.6%) decline in underemployment and 2.5% declines in both taxes and loan delinquencies.

Second Quarter 2018 Personal Financial Pleasure Index Top-Line Summary

The **Personal Financial Pleasure Index**, at 72.2, is 5.9 points (8.9%) higher than the prior year and 2.8 points (4.0%) up from the prior quarter.

The increase from the prior year was led by an 8.6 point (12.4%) in job openings and a 7 point (8.5%) gain in the PFSi Market Index. Home equity increased 4.2 points (6.6%) and the CPA Outlook index moved up 3.7 points (7.3%).

The advance from the previous quarter's level was led by a 7.7 point (11.0%) increase in job openings, followed by a 4.3 point (5.2%) gain in the PFSi Market index. Home equity was almost flat (a 0.8 point or 1.2% gain). The CPA outlook declined 1.8 points (3.3%)

Second Quarter 2018 Personal Financial Pleasure Index Detailed Summary

PFS 750 Market Index: This is the factor which has the largest contribution to the Pleasure Index. Its decline in Q1 2018 was its first since Q3 2015, and it rebounded in Q2 to a new all time high.

According to Fidelity Investments: "The sturdy domestic economy bolstered US stocks in Q2, especially small caps and REITs, which are less exposed to global trends and trade risk. After underperforming international stocks during most of 2017, US equities have taken the lead as of June 30. ... A sharp rise in oil prices in Q2 spurred energy stocks to big gains, and consumer discretionary stocks jumped into the lead year to date amid a strong consumer backdrop."

Over the last 12 months, stock market prices have been strongly led by the information technology sector, up more than 50%, followed by energy, consumer discretionary and materials, which gained from low to mid teens in the 12 month period. Consumer staples, telecom and real estate turned in losses.

During the quarter, information technology, up about 25%, again led performance, followed by consumer discretionary and health care. Real estate and telecom delivered losses.

Real Home Equity per Capita: This factor's current value, which is based on data issued for January, is 6.6% above the prior year and value and 1.2% ahead of the previous quarter level. It is still 13.2% 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 at 7% per annum. They have exceeded increases in mortgages outstanding, which have been advancing at about 2.8% per annum.

According to Zillow,

“• U.S. home values are growing at a steady pace, and have surpassed pre-recession highs nationally and in a number of large markets. Driven largely by limited inventory and high demand, home values are growing fastest at the bottom end of the market.

• Regionally, markets in the Pacific Northwest, Texas, Florida and parts of the Southwest continue to outperform slower-moving markets in the Midwest and Mid-Atlantic.”

Also according to Zillow, as of January U.S. median home values registered \$210,000, compared with the prior peak of \$196,600 reached in April 2007. (And as of May they had reached \$230,000.) Prices are now up 45% to 47% from the trough during the recession (depending on which data set we consult). According to both Zillow and Case Shiller, nationwide median prices registered more than 8% above the prior peak as of March.

Wide differences in individual markets persist. For example, the strongest gains year over year were in Las Vegas (16.9%), Seattle (14.8%) and Tampa (11.9%), while the weakest of the major markets were Washington DC (5.2%), Austin (5.2%) and Houston (5.4%)

Job Openings per Capita: The current reading is 12.4% higher than the prior year reading, and 11.0% above the previous quarter level. The second quarter index is based on the April data.

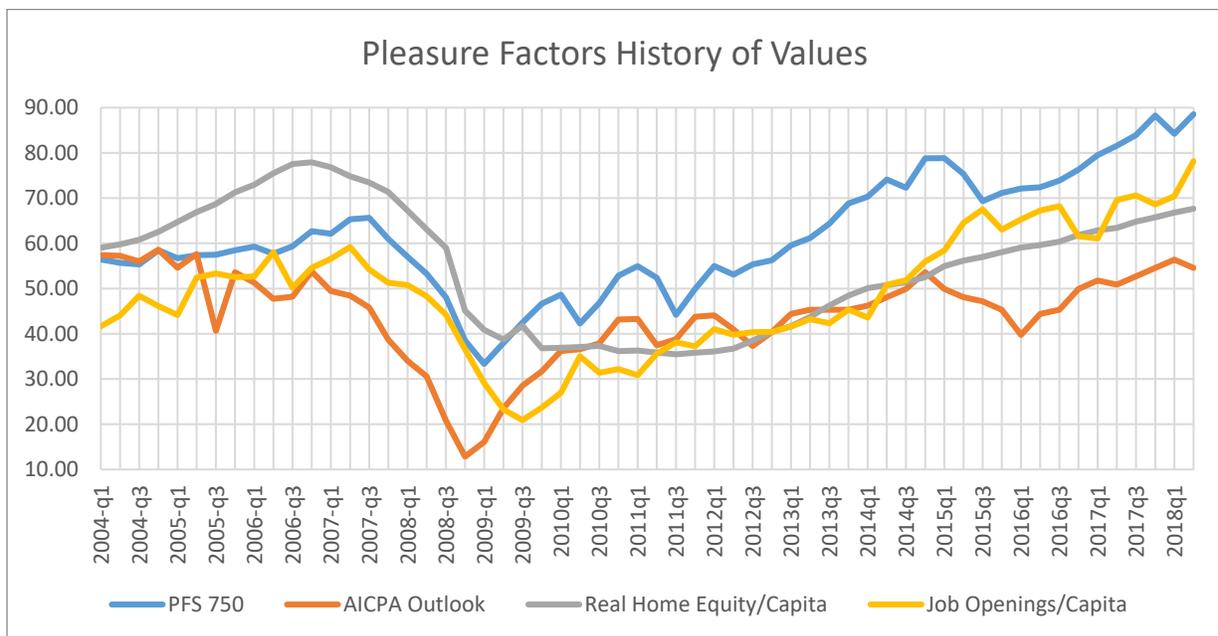
Overall job openings have been setting records: January, March and April were all records, with April coming in at almost 6.7 million. For context, total nonfarm employment was about 148.5 million in April, and about 2.2 million new jobs were added in 12 months.

In comparison to year ago levels, the job openings level increased for total private (+553,000 or 9.9%) and edged up for government (37,000 or 6.8%). The number of job openings increased in professional and business services (+234,000, 22.9%), trade, transportation, warehousing, and utilities (+217,000, 21%), and several other industries. The increase in job openings was strongest (258,000, 19.5%) in the West and the Midwest (215,000, 15%), with growth in the South and Northeast each in the low single digits.

Updating, in May the most American workers in 17 years quit their jobs, which is an indicator of the strength of the job markets.

AICPA CPA Outlook Index: The current reading is 7.3% higher than the prior year level but 3.3% below the previous quarter level. The survey was conducted from May 8 to May 23.

1. The recent low point for this index occurred in Q1 2016. Before that, the prior high of the series was in Q4 2014. While the index declined from Q1, it's still 1.3% higher than its prior peak.
2. Every factor contributed to the year over year increase, led by US economic optimism and the outlook for capital spending other than IT. All but two (Employment, which ticked up 1.3% and Training & Development which was flat) contributed to the quarterly decline.
3. The strongest factors in the level of the Q2 2018 index (as opposed to the increase) are US Economic Outlook and Revenue, followed closely by IT Spending.
4. By region, organization optimism was strongest in the South, where it increased from the Q1 level. This measure decreased everywhere else. The next strongest reading was in the Midwest, which had just a small decline. The weakest measure, and with the largest decline, was in the Northeast.



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 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.

Second Quarter 2018 Personal Financial Pain Index Top-Line Summary

Pain index at 44.5 is 1.9 points (4.6%) higher than the prior year and 2.1 points (4.9%) above the preceding quarter.

For the year ago comparison, inflation increased 17.6 points (48.8%). All other factors declined, led by loan delinquencies (5.1 points or 1.9%). Underemployment also registered a 4.2 point (11.1%) decline and taxes decreased by 0.5 points (0.9%).

On the quarterly comparison, the 13.8 point (34.5%) increase in inflation overwhelmed declines in all the other factors. Underemployment fell 3.2 points (8.6%), loan delinquencies fell 0.8 points (1.9%) and taxes fell 0.5 points (0.9%).

Second Quarter 2018 Personal Financial Pain Index Detailed Summary

Delinquencies on Loans: This factor's current level is 11.9% lower than in the prior year and 2.5% below the previous quarter's level. The improvements from a year ago are more heavily weighted towards mortgages, while those from the prior quarter are more weighted towards overall bank loans.

In 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 3.49% delinquencies on mortgages is still well above the 2.12% that was typical between 1994 through 2003.

Underemployment: This factor, registering 34, is 11.1% lower than the prior year level and 8.6% below the Q1 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 10.7% 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. Hawaii had the lowest unemployment rate in May and Alaska had the highest. In total, 13 states had unemployment rates lower than the U.S. figure, 17 states and the

District of Columbia had higher rates, and 20 states had rates that were not appreciably different from that of the nation.

In May, eleven states had unemployment rate decreases from the year ago level. The largest decline was in New Mexico, closely followed by Kentucky.

Unemployment decreased in almost all industrial sectors over the last year. The major exception, registering an increase, was farming, fishing and forestry. The most striking decline in the unemployment rate was in service occupations and followed by natural resources, construction and maintenance.

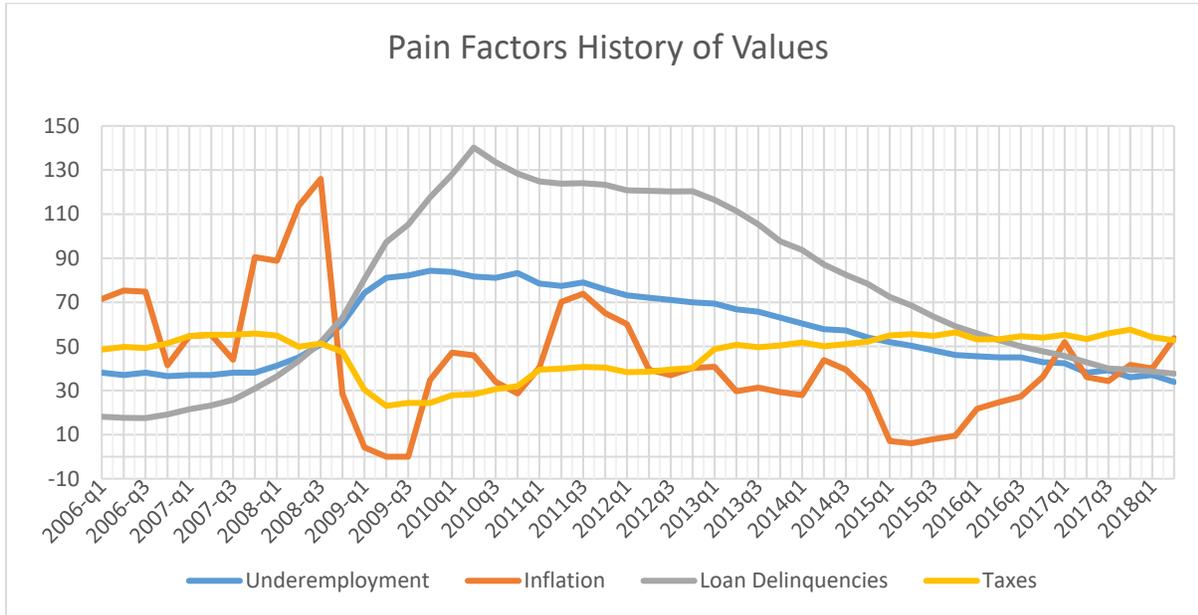
Occupations with unemployment most below the overall average all relate to management, and those most above the average were farming, fishing and forestry, followed by construction.

Inflation: Our blended inflation measure is 2.3% for the Second Quarter, versus 1.5% a year ago but 1.7% 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 54, up 34.5% from Q1 and 48.8% from last year's level of 36.

Inflation is the most volatile factor contributing to the PFSi, and with absolute levels so low, small changes result in large percent gains. The Q2 pain index relies on the May level.

Personal Taxes: The personal taxes index decreased 0.5 points (0.9%) from the year-ago and decreased 1.3 points (2.5%) 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 12.2%. 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	2Q17		1Q18		2Q18		Change vs.	
	Data	Index	Data	Index	Data	Index	Year	Quarter
<i>Net Index</i>		23.8		27.0		27.7	3.5	0.2
<i>Pleasure</i>		66.4		69.5		72.2	5.4	2.3
PFS 750 Market Index (\$ trillion, index)	25.7	82	28.1	84	29.5	89	7.0	4.3
CPA Outlook (index)	75	51	81	56	79	55	3.7	(1.8)
Home Equity (\$ trillion, index)	17.0	63	17.8	67	18.2	68	4.2	0.8
Job Openings (millions, index)	6.0	70	6.2	70	6.7	76	6.8	5.9
<i>Pain (subtracted)</i>		42.6		42.5		44.5	1.9	2.1
Underemployment (% , index)	8.4	38	8.2	37	7.6	34	(4.2)	(3.2)
Inflation (% , index)	1.5	36	1.7	40	2.3	54	17.6	13.8
Taxes (% , index)	12.1	53	12.3	54	12.2	53	(0.5)	(1.3)
Loan Delinquencies (% , index)	3.1	43	2.8	39	2.7	38	(5.1)	(1.0)