Personal Financial Satisfaction Index (*PFSi*) Defined

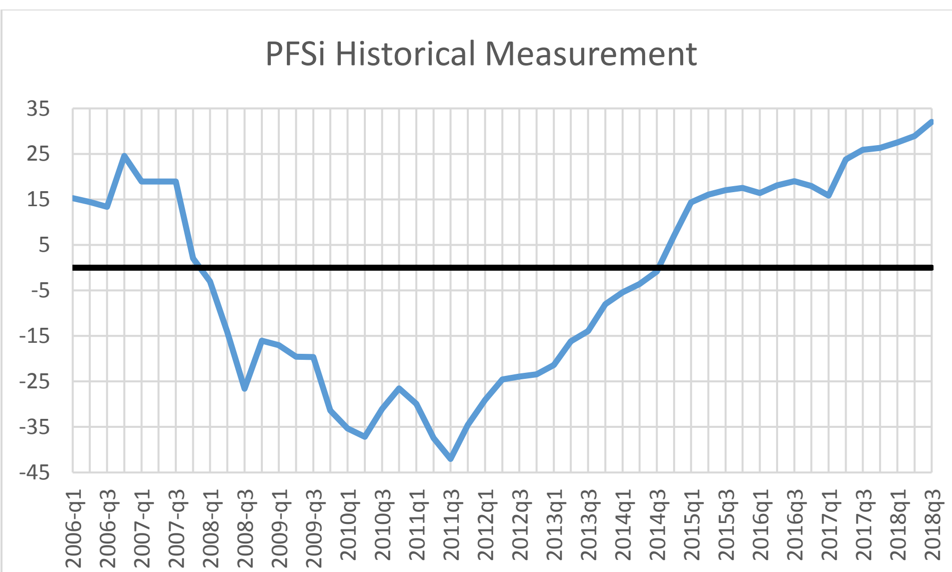
The Personal Financial Satisfaction Index (*PFSi*) is the result of two component sub-indexes. It is calculated as the difference between the Personal Financial Pleasure Index and the Personal Financial Pain Index. These are in turn composed of four equally weighted factors, each of which measure the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

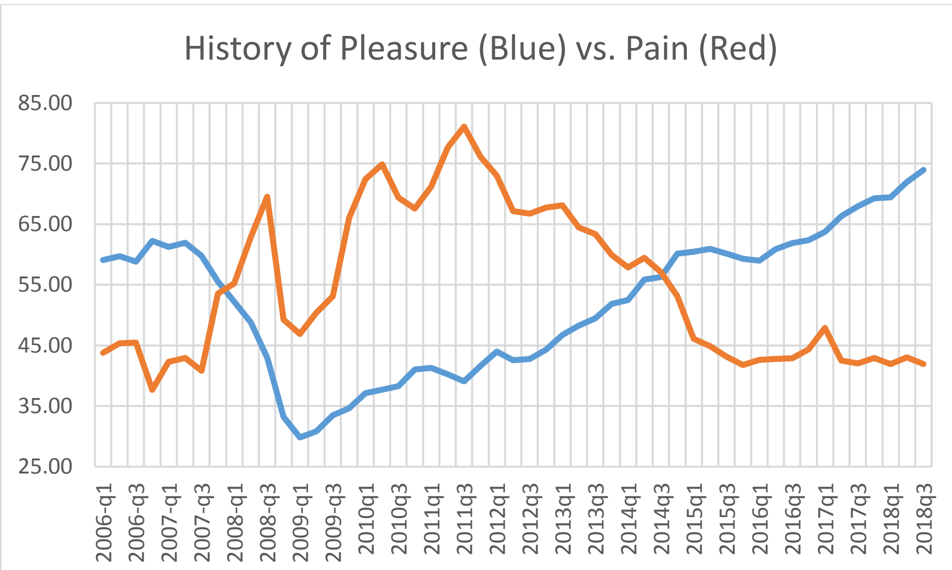
Third Quarter 2018 PFSi Summary

The *PFSi* measured 32.0 in the Third Quarter of 2018. This reflects a 6.1 point (23.7%) increase from one year ago, and a 3.1 point (10.7%) increase from the prior quarter. This is another PFSi record value, the fifth in a row.



The year over year advance of the index was driven by all the factors in the pleasure index and all but one factor in the pain index. The largest contributions were the 9.2 point (11.0%) increase in the PFS 750 Market Index, followed by the 8.7 point (12.3%) increase in home equity. In the pain index, a 16.0 point (43.7%) increase in inflation offset almost all of the declines in the other factors.

The improvement over the prior quarter level was 3.1 points (10.7%). The pleasure index increased only 2.0 points (2.7%) but it was helped by a 1.1 point (2.6%) decline in the pain index. The strongest contributor to the quarterly increase in the net index was the PFS 750 Market Index, up 5.3 points (6.0%), followed by the 2.7 point (7.2%) decline in loan delinquencies. Changes in the other factors were small.



<u>Third Quarter 2018 Personal Financial Pleasure Index Top-Line Summary</u>

The **Personal Financial Pleasure Index,** at 73.9, is 6.0 points (8.8%) higher than the prior year and 2.0 points (2.7%) up from the prior quarter.

The increase from the prior year was led by an 9.2 point (11.0%) in the PFS 750 Market Index and an 8.6 point (12.2%) gain in job openings. Home equity increased 4.2 points (6.5%) and the CPA Outlook index moved up 1.8 points (3.5%).

The advance from the previous quarter's level was led by a 5.3 point (6.0%) increase in the PFS 750 Market Index, followed by a 1.4 point (2.1%) gain in home equity. Job openings gained 1.1 points or 1.4%. The CPA outlook didn't change.

<u>Third Quarter 2018 Personal Financial Pleasure Index Detailed Summary</u>

PFS 750 Market Index: This is the factor which has the largest contribution to the Pleasure Index, currently accounting for more than 30% of its value. It is registering another all-time high.

> According to TD Ameritrade: "The market's price gain in Q3 was not propelled by a mere handful of high-flying tech stocks, but a wide swath of sectors and sub-industries. Even though the S&P 500 Growth Index (+8.2%) outpaced Value (+5.3%), nine of the 500's 11 sectors were up on the quarter, led by health care (13.2%), industrials (9.4%) and communication services (8.0%). Laggards included energy (0.1%), utilities (-0.9%) and real estate (-1.4%). Also, 71% of the S&P

500’s 125 sub-industries gained in price, with the drug retail, health care facilities and metal & glass containers groups up in excess of 20% each. Finally, four groups recorded declines of 18% or more: copper, gold, household appliances and housewares & specialties.”

Over the last 12 months, stock market prices have been strongly led by the information technology sector, up 36% (less dramatic leadership than in the first half of the year), followed by energy and consumer discretionary, which gained about 12% in the 12 month period. Healthcare and industrials turned in mid single digit gains. Consumer staples and real estate turned in double digit losses.

Real Home Equity per Capita: This factor’s current value, which is based on data issued for April, is 6.5% above the prior year and value and 2.1% ahead of the previous quarter level. It is still 11.6% 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 7% per annum. They have exceeded increases in mortgages outstanding, which have been advancing at about 2.7% per annum.

According to Zillow,

- “The median home value nationwide is 8.7 percent higher than it was at the height of the housing bubble.
- Twenty-one of the top 35 metros have more than recovered from the bust. San Jose and Denver lead the recovery with huge gains, while Las Vegas, Orlando and Chicago have been the slowest to recover.
- San Jose – the nation’s most expensive metro – leads the way with a current median home value of $1.29 million, 74 percent higher than the top of the bubble and more than double its post-crash low.
- Plenty of markets are still struggling to recover their lost value. Homes in Las Vegas, which have seen some of the steepest gains in the country over the past year, remain 16 percent below their pre-bust median value. Orlando and Chicago home values remain nearly 14 percent below.”

Also according to Zillow, as of August U.S. median home values registered $216,000. The S&P Case Shiller index reading is several thousand dollars lower.

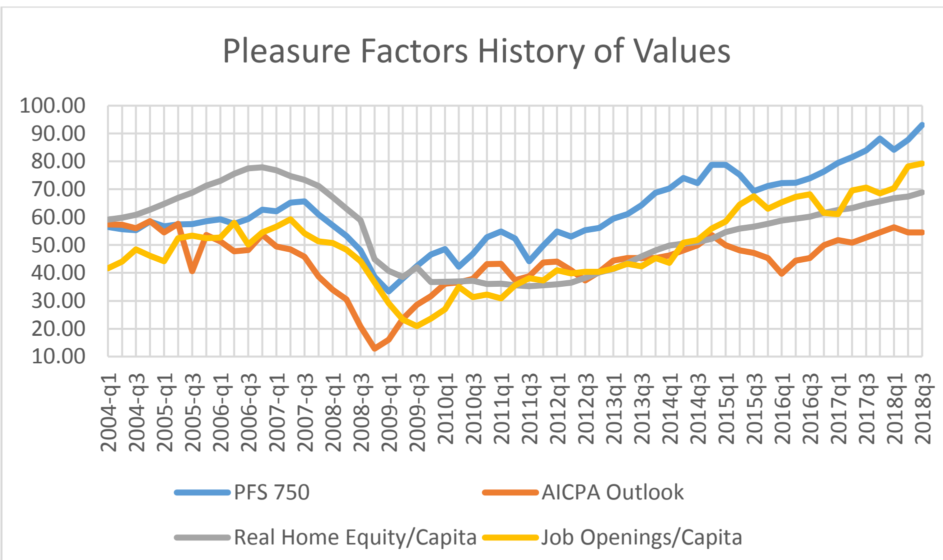
Job Openings per Capita: The current reading is 6.6% higher than the prior year reading, and 2.1% above the previous quarter level. The Third Quarter index is based on the July data.

Overall job openings have been setting records: January, March, April and July were all records, with July coming in at just over 6.9 million. For context, total nonfarm employment was almost 156 million in July, and about 2.5 million new jobs were added in 12 months. There were only 6.28 million unemployed Americans in July; openings thus exceed job seekers.

In comparison to year ago levels, the job openings level increased for both total private (+642,000 or 11.3%) and government (94,000 or 17.8%). The number of job openings increased in leisure and hospitality (+175,000, 21.1%), trade, transportation, warehousing, and utilities (+169,000, 14.9%), and several other industries. The increase in job openings was strongest (279,000, 19.8%) in the Midwest and the South (269,000, 12%), with growth in the West and Northeast each in single digits.

AICPA CPA Outlook Index: The current reading is 3.5% higher than the prior year level and flat with the previous quarter level. The survey was conducted from July 31 to August 22.

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 24% lower than its early 2000 peak.*
2. *Every factor contributed to the year over year increase, led by expansion plans and employment. Only two factors, US economic optimism and Training & Development, declined on the quarterly comparison, offset by increases in other factors.*
3. *The strongest factors in the level of the Q3 2018 index (as opposed to the increase) are Revenue, IT Spending and Organization Optimism.*
4. *By region, organization optimism was strongest in the Midwest, where it increased from the Q2 level. The next strongest readings were in the Northeast, which rebounded from an early decline and the South, which had al decline. The weakest measure, and with the largest decline, was in the West.*



<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.

- <u>AICPA Outlook Index</u> – 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.

Third Quarter 2018 Personal Financial Pain Index Top-Line Summary

Pain index at 41.9 is 0.2 points (0.4%) lower than the prior year and 1.1 points (2.6%) below the preceding quarter.

For the year ago comparison, inflation increased 16.0 points (43.7%). All other factors declined, led by underemployment (6.4 points or 16.3%). Loan delinquencies registered a 5.4 point (13.6%) decline and taxes decreased by 4.7 points (9.1%).

On the quarterly comparison there were no increases. Loan delinquencies fell 2.7 points (7.2%), followed by a 1.1 point (3.1%) decrease in underemployment and a 0.8 point (1.5%) decline in inflation. Taxes didn't change.

Third Quarter 2018 Personal Financial Pain Index Detailed Summary

Delinquencies on Loans: This factor's current level is 5.4% lower than in the prior year and 2.7% below the previous quarter's level. The improvements are somewhat more heavily weighted towards mortgages.

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 3.25% delinquencies on mortgages is still well above the 2.1% that was typical between 1994 through 2003.

Underemployment: This factor, registering 33, is 16.3% lower than the prior year level and 1.1% below the Q2 level. In comparison, its peak value was 84.3 corresponding to 17.1% in the fourth quarter of 2009 (versus the current 7.4%). It is now 12.6% 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 August and Alaska had the highest. In total, 25 states had unemployment rates lower than the U.S. figure, 21states had higher rates, and 4 states had rates at the average.

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

Leading recent job gains has been professional and business services. Other strong showings were manufacturing, healthcare, restaurants and construction.

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 production occupations and followed by construction.

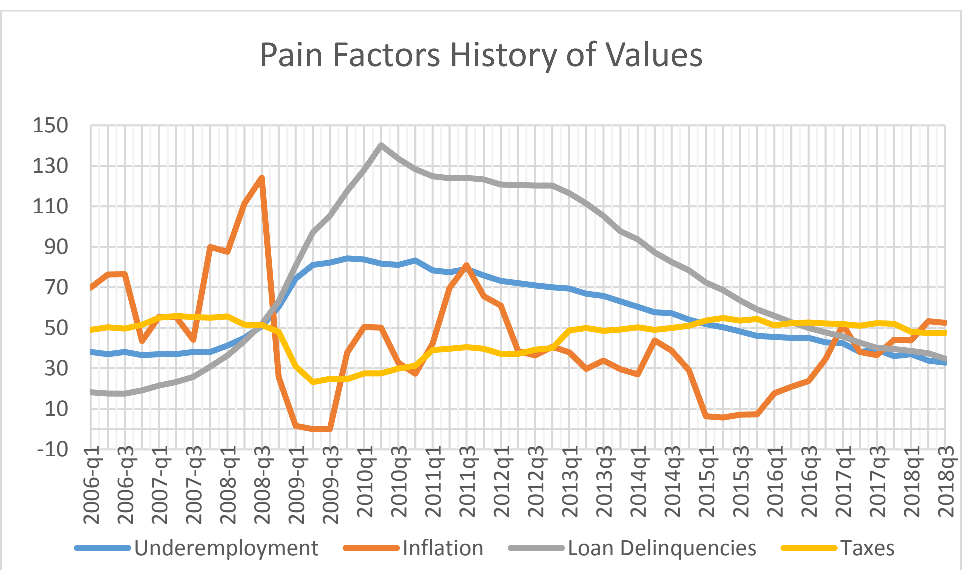
Occupations with unemployment most below the overall average relate to management and installation and repair; those most above the average were farming, fishing and forestry, followed by transportation and material moving.

Inflation: Our blended inflation measure is 2.2% for the Third Quarter, versus 1.5% a year ago but 2.3% 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 53, up 43.7% from the year ago level and down 1.5% (which gets lost in rounding) from the Q2 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 Q3 pain index relies on the August level.

Personal Taxes: The personal taxes index decreased 4.7 points (9.1%) from the year-ago and was approximately flat with 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	3Q17		2Q18		3Q18		Change vs.	
	Data	Index	Data	Index	Data	Index	Year	Quarter
Net Index		***25.9***		***28.9***		***32.0***	6.1	3.1
Pleasure		*68.0*		*72.0*		*73.9*	*6.0*	*2.0*
PFS 750 Market Index ($ trillion, index)	27.5	84	29.5	88	31.8	93	**9.2**	**5.3**
CPA Outlook (index)	77	53	79	55	79	55	**1.8**	**0.0**
Home Equity ($ trillion, index)	16.9	65	18.2	67	18.6	69	**4.2**	**1.4**
Job Openings (millions, index)	6.2	71	6.8	78	6.9	79	**8.6**	**1.1**
Pain (subtracted)		*42.1*		43.0		41.9	*(0.2)*	*(1.1)*
Underemployment (%, index)	8.6	39	7.6	34	7.4	33	**(6.4)**	**(1.1)**
Inflation (%, index)	1.5	37	2.3	53 53.3*	2.2	53 52.5*	**16.0**	**(0.8)**
Taxes (%, index)	12.1	52	11.7	48	11.7	48	**(4.7)**	**0.0**
Loan Delinquencies (%, index)	2.9	40	2.7	37	2.5	35	**(5.4)**	**(2.7)**