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

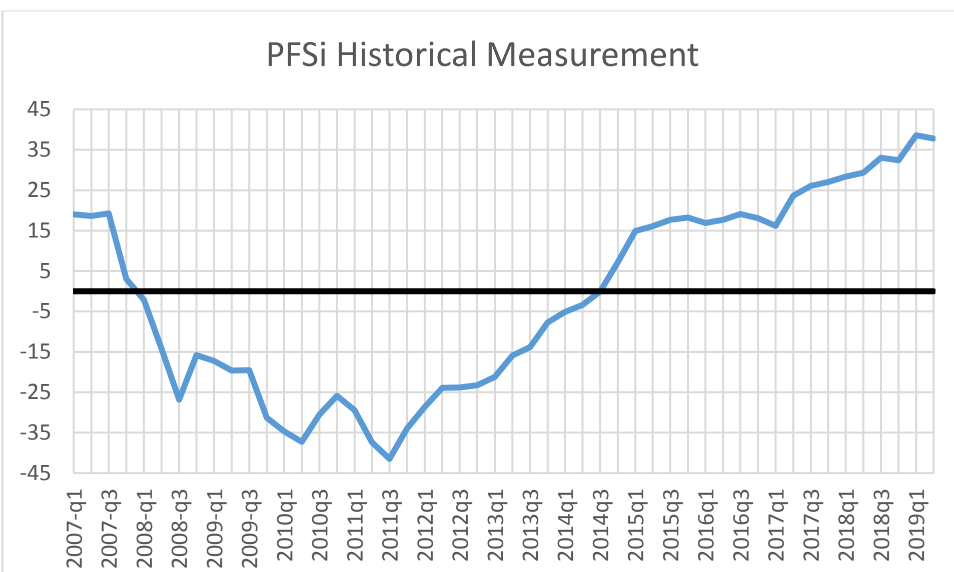
To construct the indices each component was first normalized by its own standard deviation prior to July 2013. The factors were then individually modified to an average value of 50 over the period up to July 2013. The financial pleasure index and the financial pain index each equally weight the individual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

Second Quarter 2019 PFSi Summary

The *PFSi* measured 37.8 in the Second Quarter of 2019. It reflects an 8.5 point (28.8%) increase from one year ago, and a 0.8 point (2.0%) decrease from the prior quarter.

To recap PFSi history, its low point was 2011 Q3; from there it gained about 3 points per quarter until the Fourth Quarter of 2015. In that period the biggest contribution to its gain was a reduction in loan delinquencies, followed by a reduction in inflation. The next two factors were a reduction in underemployment and an increase in job openings per capita. Next were gains in the PFSi Market 750 index.

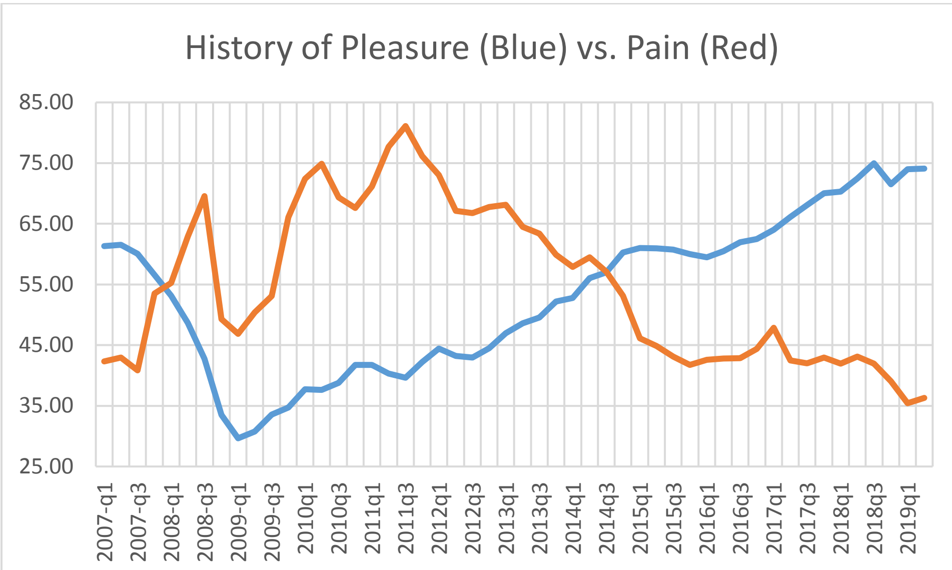
Between 2015 Q4 and 2017 Q2 the index bounced down and up. Since then it has gained about 2.4 points per quarter. The most important driver of these gains has been job openings, followed by reductions in loan delinquencies. After that reductions in inflation contributed slightly more than stock market gains and underemployment.



The current year over year advance of the index was driven by the 17.4 point (32.6%) decrease in inflation, followed by the 8.7 point (23.3%) decline in loan delinquencies. After that, the PFSi increased 4.1 points (4.7%), job openings increased 3.8 points (4.8%) and underemployment fell 3.2 points (9.3%) and a 2.4 point (3.5%)

increase in home equity. Two factors diminished the gain, a 3.7 point (6.8%) decline in the CPA Outlook and a 2.1 point (4.4%) increase in taxes.

Compared with the last quarter, pain factors increased 0.9 points (2.5%) while pleasure increased only 0.1 point (2.7%), leading to the 0.8 point (2.0%) decline in the PFSi. It was an accumulation of small changes. Inflation increased 4.8 points (15.5%) and taxes ticked up 1.5 points (3.1%), offset by a 1.7 point (5.5%) decline in loan delinquencies and a 1.1 point (3.3%) decline in underemployment.



Second Quarter 2019 Personal Financial Pleasure Index Top-Line Summary

The **Personal Financial Pleasure Index,** at 74.1, is 1.7 points (2.3%) higher than the prior year and 0.1 point (0.1%) increased from the prior quarter.

The increase from the prior year was led by a 4.1 point (4.7%) gain in the PFS 750 Market Index. Next, job openings increased 3.8 points (4.8%). Home equity added 2.4 points (3.5%). But the CPA Outlook index fell by 3.7 points (6.8%).

In comparison to the first quarter level, two factors gained: the PFS 750 Market Index by 2.5 points (2.7%) and home equity by 1.3 points (1.8%). However, the other two factors almost completely offset these gains. Job openings declined 2.4 points (2.8%) and the CPA Outlook index dropped 0.9 point (1.8%).

Second Quarter 2019 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 the present, with the exception of only 2 quarters, one of which was Q4 2018. It rose 4.1 points (4.7%) versus 2018 Q2 and 2.5 points (2.7%) from the last quarter.

Stocks finished their best June in decades, capping a strong first half of 2019 and a big rebound from May's market downer. But the good news is tempered by the fact that investors relied on five giant companies (Facebook, Apple, Amazon, Microsoft, Walt Disney) for a third of the gains over the past quarter, reflecting the digital economy's remarkable growth and its potential for fragility. These 5 account for about 14% of the value of the S&P 500. The S&P 500, the Dow Jones industrial average and the Nasdaq composite index were all close to all time highs at the end of June, and turned in very strong performances in June, following troubles in May due to uncertainty over US trade policies.

Real Home Equity per Capita: This factor's current value, which is based on data issued for January, is 3.5% above the prior year and value and 1.8% ahead of the previous quarter level. It is still 10% 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 about 4.5% per annum. This is, incidentally, the slowest rate of increase since 2015. However, it has been sufficient to exceed increases in mortgages outstanding, which have been advancing at about 2.6% per annum.

According to the Case-Shiller 20 city composite

- As of January, national home prices were 4.3% higher than the year-ago level.
- Since then the index (which has been released through April) has flattened out and the annual gains fell to 3.5%.
- In the January report Las Vegas, Phoenix and Minneapolis reported the highest year-over-year gains among the 20 cities. In January, Las Vegas led the way with a 10.5% year-over-year price increase, followed by Phoenix with a 7.5% increase and Minneapolis with a 5.1% increase,
- In the April report the same 3 cities led the increases, although with lower increases. Also, nine of the top 20 cities beat their March increases with the April results.

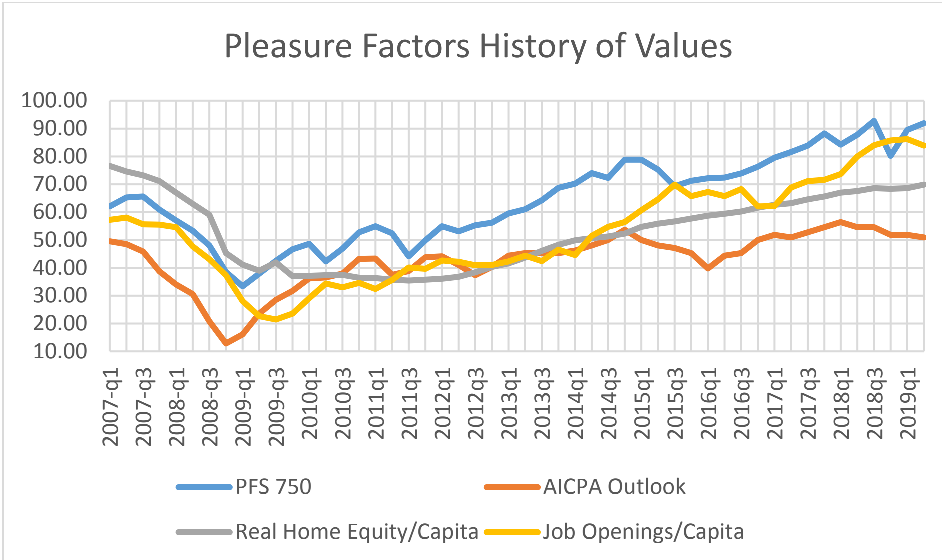
Job Openings per Capita: The current reading is 4.8% higher than the prior year reading, but 2.8% below the previous quarter level. The Second Quarter index is based on the April data.

Total nonfarm employment was more than 151 million in April, and about 2.3 million new jobs were added in 12 months. There were just over 7.4 million job openings, but only 5.8 million unemployed in April; openings thus exceed job seekers.

In comparison to year ago levels, the job openings level increased for both total private (+229,000 or 3.5%) and government (114,000 or 18.7%). The biggest gains in job openings were in construction (146,000 or 56.6%) and health care and social services (105,000 or 9.6%). There were substantial declines in job openings in retail trade (195,000 or 18.9%) and information (67,000 or 33.8%). Regionally, job openings advanced most in the South (229,000 or 8.9%) while falling 1.3% in the Northeast. The Midwest gained 4.4% and the West 3.3%.

AICPA CPA Outlook Index: The current reading is 6.8% lower than the prior year and down 1.8% from the previous quarter. The survey was conducted from May 5 to 27.

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 29.2% lower than its early 2000 peak.*
2. *Compared with the year ago index, all components show declines, strongly led by US Economic Optimism. (Its decline was almost 3 times that of any other factor.)*
3. *Compared with the prior quarter, all but 3 factors declined. They were employment, IT spending and other capital spending, and they were all flat.*
4. *The strongest factors in the level of the Q1 2018 index (as opposed to changes) are Revenue followed by IT Spending. These have been the strongest factors since Q3 2018.*



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 2019 Personal Financial Pain Index Top-Line Summary

Pain index at 36.3 is 6.8 points (15.8%) lower than the prior year but 0.9 point (2.5%) above the preceding quarter.

For the year ago comparison, all factors except taxes declined, led by inflation (17.4 points, 32.6%), followed by loan delinquencies (8.7 point, 23.3%). Underemployment registered a 3.2 point (9.3%) decline. Taxes bumped up 2.1 points (4.4%).

The quarterly marginal gain was led by inflation, up 4.8 points (15.5%) followed by taxes, 1.5 points (3.1%). However, loan delinquencies fell 1.7 points (5.5%), and underemployment dropped off 1.1 points (3.3%)

<u>Second Quarter 2019 Personal Financial Pain Index Detailed Summary</u>

Delinquencies on Loans: This factor's current level is 23.3% lower than in the prior year, and 5.5% lower than 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 2.67% delinquencies on mortgages is still above the 2.1% that was typical between 1994 through 2003.*

Underemployment: This factor, registering 31, is 9.3% lower than the prior year level and 3.3% down from the last quarter level. In comparison, its peak value was 84.3 corresponding to 17.1% in the fourth quarter of 2009 (versus the current 7.1%). It's lower now than it was right before the start of the 2007-2009 recession and it's at the lowest point since May 2001.

Like most economic measures, unemployment is worse in some regions than in others. In February:

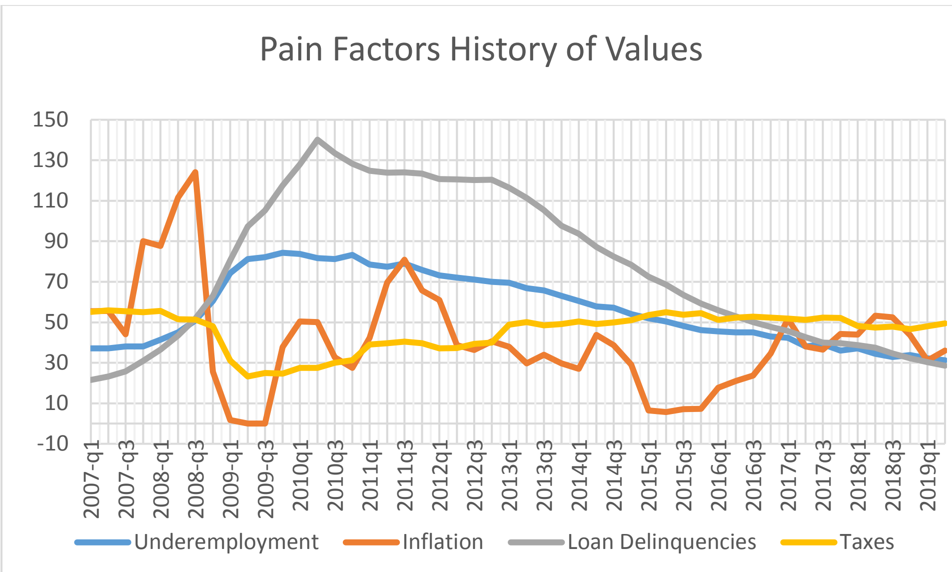
- *The states with the lowest unemployment rates were Vermont, North Dakota, Iowa, and New Hampshire.*
- *10 states, including Iowa and Vermont, but also Alabama, Arkansas, Kentucky, Pennsylvania, South Carolina, Tennessee, Texas and Wisconsin were setting all-time records for low unemployment.*
- *24 states had unemployment rates below the national average; 4 were at the average and 23 (including the District of Columbia) were above it.*
- *Unemployment was highest in Alaska, followed by the District of Columbia, New Mexico and Mississippi.*
- *The national unemployment rate fell 0.2 percentage points in May versus May. 2018. 15 states, led by Delaware, Louisiana, Nevada and Vermont, had bigger declines. 5 states performed at the average on this measure. In 15 states unemployment increased, with Hawaii showing the greatest increase.*
- *Unemployment was most severe in agriculture, followed by leisure and hospitality and lowest in finance.*
- Twenty-four states had over-the-year increases in nonfarm payroll employment in May. The largest job gains occurred in Texas (+286,300), California (+282,700), and Florida (+214,500). The largest percentage gain occurred in Nevada (+4.0 percent), followed by Utah and Washington (+2.8 percent each) **.**

Inflation: Our blended inflation measure is 1.5% for the Second Quarter, versus 2.3% a year ago and 1.3% last quarter. Please note that the Federal Reserve's target for core inflation (which eliminates the contributions of food and oil is 2%; core inflation is currently at 2%. In terms of the PFSi inflation index, the current index value is 36, down 32.6% from the year ago level and up 15.5% from the Q1 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 Q2 pain index relies on the May level.*

Personal Taxes: The personal taxes index increased 2.1 points (4.4%) from the year-ago and 1.5 points (3.1%) from the prior quarter.

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 11.85%. Going back as far as 1994, the highest levels for personal taxes were 14% to 14.5% from late 1999 to mid-2001.



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

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

- <u>Inflation</u> – 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.

- <u>Personal Taxes</u> – 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.

- <u>Delinquencies on Loans</u> – 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

- <u>Underemployment</u> – 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	2Q18		1Q19		2Q19		Change vs.	
	Data	Index	Data	Index	Data	Index	Year	Quarter
Net Index		***29.4***		***38.6***		***37.8***	8.5	(0.8)
Pleasure		*72.5*		*74.0*		*74.1*	*1.7*	*0.1*
PFS 750 Market Index ($ trillion, index)	29.5	88	30.5	89	32	92	4.1	2.5
CPA Outlook (index)	79	55	76	52	75	51	(3.7)	(0.9)
Home Equity ($ trillion, index)	18.2	68	18.8	69	19.2	70	2.4	1.3
Job Openings (millions, index)	7.1	80	7.6	86	7.4	84	3.8	(2.4)
Pain (subtracted)		43.1		*35.4*		*36.3*	*(6.8)*	*0.9*
Underemployment (%, index)	7.8	34	7.3	32	7.1	31	(3.2)	(1.1)
Inflation (%, index)	2.3	53	1.3	31	1.5	36	(17.4)	4.8
Taxes (%, index)	11.6	47	11.7	48.0	11.9	49	2.1	1.5
Loan Delinquencies (%, index)	2.7	37	2.2	30	2.1	29	(8.7)	(1.7)