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

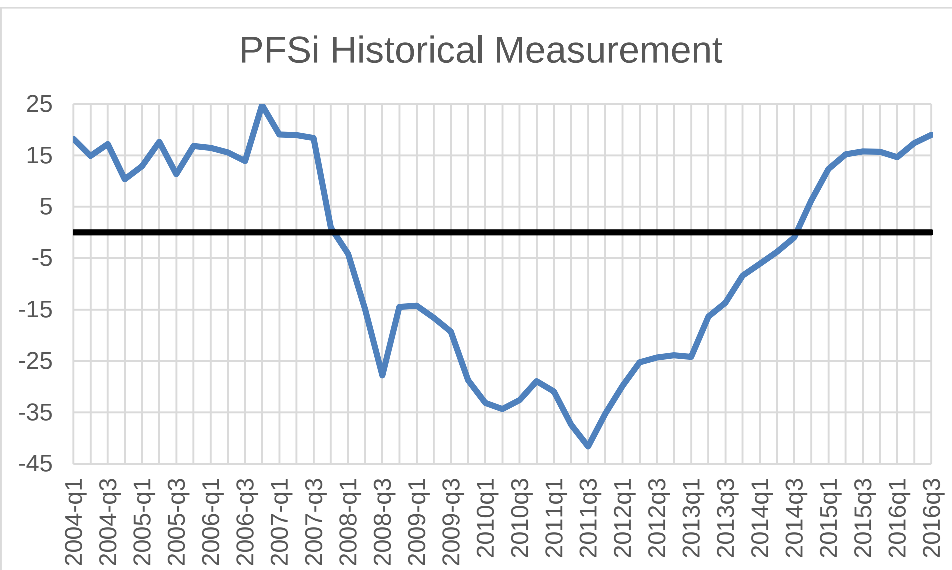
To construct the indices each component was first normalized by its own standard deviation prior to July 2013. The factors were then individually modified to an average value of 50 over the period up to July 2013. The financial pleasure index and the financial pain index each equally weight the individual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

Third Quarter 2016 PFSi Summary

The *PFSi* measured 19.0 in the third quarter of 2016. This reflects a 1.7 point increase from the prior quarter, and a 3.3 point increase from one year ago. It is the highest value of the index since the first quarter of 2007, and about 23% below the all time high for the PFSi.

The increase from the prior quarter was based on both an increase in the **Personal Financial Pleasure** index of 1.0 point, and a 0.6 point decrease in the **Personal Financial Pain** index.

The improvement from the third quarter of 2015 was due to a 2.0 point increase in the Pleasure index, coupled with a 1.3 point retreat in the Pain index.



Third Quarter 2016 Personal Financial Pleasure Index Top-Line Summary

The **Personal Financial Pleasure Index,** at 62.1, is 1.0 points (1.7%) higher than the prior quarter and 2.0 points (3.3%) up from the prior year.

The gain over the previous quarter's level was due to improvements in every factor, led by a 2 point increase in the PFSi 750 Market Index, followed by a 1.3 point increase in home equity and a 0.9 point increase in the CPA Economic Outlook. The job openings index increase was small enough to be lost in rounding.

The increase from the prior year was due to 5 point gains in the PFSi 750 Market Index and in home equity. Job openings were flat, and the CPA Economic Outlook declined by 2 points.

Third 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 4.5 points (5.8%) below that high, and for several years it has been the biggest contributor to the Pleasure Index.

> *Overall, the increase in the Index in the latest period comes despite persistent weakness in US exports and in multinationals, leading to weak earnings and projected earnings declines of about 2% for Q3. Low interest rates, and the expectation that they will persist, tends to support strong equity prices.*
>
> *To some degree it was a catch-up quarter. Most of the areas that were lagging through the end of June enjoyed a strong third quarter. Micro-caps, growth stocks, and low-quality companies—based on low or no earnings, profitability, and returns on invested capital—were the leaders for the quarter but were still behind year-to-date. Biotech companies and Information Technology have had the highest gains. Metals and Mining companies have also continued to rebound from considerable losses over the last 5 years. In the most recent period the worst performing sectors, showing losses, were utilities and consumer staples.*

Real Home Equity per Capita: This factor's current value is 7.8% above the prior year level, and 2.2% above the previous quarter level. It is still 21.6% 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 6.7% per annum. They have exceeded increases in mortgages outstanding, which have been advancing at about 1.5% per annum.

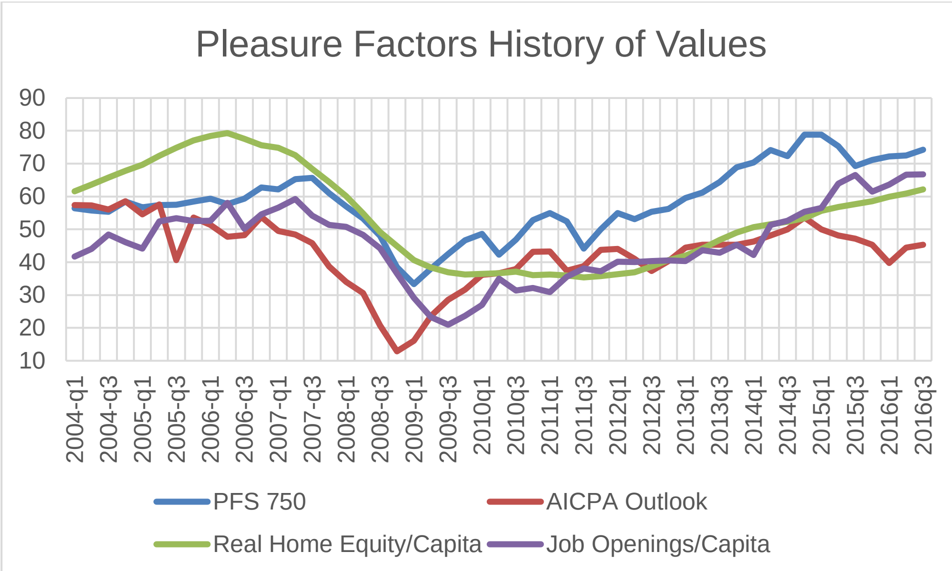
> *Real estate markets are local. The cities registering the highest year-over-year home price increases, ranging from about 9.5% to 12.3%, are Portland, Seattle and Denver.*

Job Openings per Capita: Since Q1 of 2015 job openings have been the second strongest contributor to the strength of the Pleasure Index. The current reading is 0.4% higher than the prior year reading, and 0.3% ahead of the previous quarter. These differences disappear in rounding for the table.

The number of job openings increased over the year for total private (2.1%) and decreased 7% for government. Job openings increased in professional and business services and durable goods manufacturing but decreased in health care and social assistance. Geographically, the cities with the strongest job growth tend to be those with growing populations, many of them bolstered by retirees relocating.

AICPA CPA Outlook Index: The current reading is 3.9% lower than the prior year level but 2.1% higher than the previous quarter.

1. *The US economic optimism index component of this series was the biggest contributor to the year over year decline, followed by a decline in organization optimism.*
2. *The only component of the index which showed any increase year over year is training & development, which had a small increase. The other factors were either flat or down slightly.*
3. *In contrast, the gain versus the prior quarter was led by profits,*
4. *Only two components of the index had small declines compared with Q2: US economic optimism and .IT spending. The other factors increased slightly except for organization optimism, which was flat.*



<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 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.

- <u>Real Home Equity per Capita</u> – 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.

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

<u>Third Quarter 2016 Personal Financial Pain Index Top-Line Summary</u>

Pain index at 43.1 is 0.6 points (1.4%) lower than the previous quarter and 1.3 points (2.9%) lower than the prior year's level. In aggregate, the decline of the pain index has been much slower over the last 5 quarters than the rates it displayed in the prior 2 years. This is largely because inflation has ticked up from its earlier extremely low values, and to a much lesser extent taxes have advance slightly.

Comparing the current index to the prior year, the decrease in overall value was due to a 14 point decrease in loan delinquencies offset by a 14 point increase in inflation, but bolstered by declines in underemployment and taxes of 4 and 2 points, respectively.

The decline from the preceding quarter level occurred because a 3.4 point decline in loan delinquencies, partially offset by a 0.6 point increase in taxes and a 0.2 point increase in inflation. Underemployment was flat.

Third Quarter 2016 Personal Financial Pain Index Detailed Summary

Delinquencies on Loans: This factor's current level is 6.3% lower than in the previous quarter and 21.4% 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 4.55%; the overall delinquency rate is 2.09%. 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 about three times stronger than the improvements in overall delinquencies (a decline of 29 basis points versus only 10 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.*

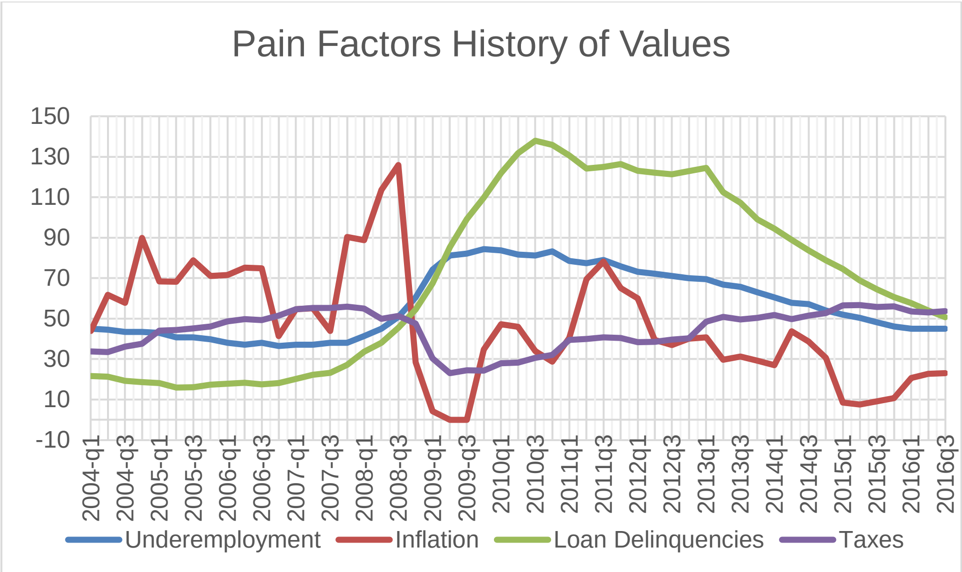
Underemployment: This factor, registering 45, is currently flat with the previous quarter level and 7.6% below the prior year. In comparison, its peak value was 84.3 (corresponding to 17.1%, versus the current 9.7%) in the fourth quarter of 2009. It is still about 20% above its average value before the great recession.

Inflation: This factor's current value is 1% higher than the prior quarter's level, but a stunning 150.6% higher than the year-ago level. Please note that the PFSi inflation measure throughout 2015 registered levels 83% lower than the average since 2004. These levels provide a really low base for percent comparisons; hence the really high percent increase.

> *Inflation is the most volatile factor contributing to the PFSi. The Q3 pain index relies on the August level, which is 1.0% by our measure. In comparison, the Federal Reserve's target for inflation is 2%.*

Personal Taxes: Personal taxes are 1.2% higher than the previous quarter's value. They are 3.7% 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 12.3%. 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 PCE 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 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.

- <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.

<u>**Chart View of Above Information**</u>

Component	3Q15		2Q16		3Q16		Change vs.	
	Data	Index	Data	Index	Data	Index	the prior year,	the prev. quarter
Net Index		***15.7***		**17.4**		**19.0**	**3.3**	**1.7**
Pleasure		***60.2***		***61.1***		***62.1***	**2.0**	**1.0**
PFS 750 Market Index ($ trillion, index)	**21.7**	**69**	**23.0**	**72**	**23.7**	**74**	**5**	**2.0**
CPA Outlook (index)	**71**	**47**	**68**	**44**	**69**	**45**	**(2)**	**0.9**
Home Equity ($ trillion, index)	**14.6**	**58**	**15.6**	**61**	**16.0**	**62**	**5**	**1.3**
Job Openings (millions, index)	**5.8**	**67**	**5.8**	**67**	**5.9**	**67**	**0**	**0.2**
Pain (subtracted)		**44.4**		**43.7**		**43.1**	**(1.3)**	**(0.6)**
Underemployment (%, index)	**10.3**	**49**	**9.7**	**45**	**9.7**	**45**	**(4)**	**(0.0)**
Inflation (%, index)	**0.4**	**9**	**1.0**	**23**	**1.0**	**23**	**14**	**0.2**
Taxes (%, index)	**12.5**	**56**	**12.2**	**53**	**12.3**	**54**	**(2)**	**0.6**
Loan Delinquencies (%, index)	**4.6**	**64**	**3.9**	**54**	**3.6**	**51**	**(14)**	**(3.4)**

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 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 increased 0.5 to 1.0 points and decreased 0.2 to 0.5 points. Revisions in the Home Equity component and the job openings have both impacted the results.

The Pain Index 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 Q3 2015 is 15.8, versus 16.2 originally posted. The Pleasure Index decreased 0.4 points due to a 2 point decrease in home equity offset by a 1 point increase in job openings, but the Pain Index was flat as changes in inflation and taxes offset each other.

Comparisons to the most recent quarter: The revised Net Index for Q2 2016 is 17.4, versus 17.1 originally posted. The Pleasure Index actually decreased 0.5 points due to a 3 point decrease in home equity partially offset by a 1 point increase in job openings. However, the Pain Index declined 0.8 points due to a 4 point decrease in taxes offset by a 1 point increase in inflation.

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