

# WILLIAM BLAIR

# Post-Crisis Savings and Risk Premiums

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C20-15759 | 05/2020 | EXP 03/31/2021



Equity Research Economics

1 May 2020

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# Economics Weekly Post-Crisis Savings and Risk Premiums



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One of the likely outcomes of this crisis is that savings rates will increase, both for the nonfinancial corporate sector and for households. While higher levels of savings necessarily corollate with allowing the government sector to run budget deficits as the private sector retrenches, over the longer term, private sector savings are likely to remain relatively high—likely resulting in lower interest rates and slower economic growth. Similarly, equity risk premiums are likely to remain elevated, representing an opportunity for longer-term investors. In this *Economics Weekly*, we look at the household savings rates during past recessions and recoveries, as well as the equity risk premium and what the potential outcomes could be this time around.

### Savings Rates During and After Recessions

History shows that household savings rates tend to start rising through the start of a recession and continue to do so for the next 18 months or so, for what has on average been 11.1 months of recession since 1945 (chart 1). After that, the savings rates gradually decline as the expansion takes hold and employment and confidence increase. They eventually fall back not only to pre-crisis levels, but even slightly lower, given the postwar trend for a declining savings rate.

The increase is unsurprising and would seem to be the natural result of the large increase in financial and economic uncertainty. Consumers increase their precautionary savings in an effort to protect themselves against the increased likelihood of adverse events. As the recovery continues, financial markets recover, net worth increases, and confidence in its durability rises, consumers start to feel more comfortable with increasing consumption and allowing that flow to savings to ease up.



## What Happened After the Last Crisis?

What was strange, therefore, was the fact that this did not happen following the 2008-2009 global financial crisis (GFC). After this recession, the savings rate increased and has remained elevated throughout the recovery (chart 2). This was particularly odd in light of the sharp increase in net worth, as depicted in chart 3. In effect, this suggests that the traditional wealth effect generated from increases in net worth—which the Greenspan Fed had spent so much time dwelling on and had estimated it to equate to an extra 3 cents in expenditure for every 1 dollar increase in net worth—has been reduced to zero, i.e., no wealth effect.



Chart 3. Household Net Worth & Savings to Disposable Personal Income



We can attribute this increase in post-GFC savings to a number of factors, though most prominent one is the scarring associated with the severity of the crisis. Additional factors include: demographics (aging baby boomers), more stringent credit conditions, income inequality (rich tend to save more than the poor), and slower global growth.

Meanwhile, the outcome with regard to financial markets was seemingly a greater distrust in riskier financial assets, as evidenced by the sustained increase in the equity risk premium (or ERP, as depicted in chart 4). After all, savings rates themselves are effectively alternative measures of risk premiums—consumers are seeking higher precautionary savings to guard against unforeseen events.

Similar to the household savings rate, the ERP has continued to rise since the GFC, despite strong equity market gains over the years and plenty of talk of an equity bubble.



### What Does Economic Theory Tell Us?

For behavioral economists, this fits neatly into their worldview, in that they see individuals as being myopic and loss averse. That is to say, near-term events play a more significant role in their decision-making process than might be deemed rational, as well as being asymmetrically more influenced by financial losses than gains. For example, Daniel Kahneman and Amos Tversky, as well as Richard Thaler and Shlomo Benartzi, in their studies have shown that individuals are significantly more sensitive to a \$100 loss than they are to a \$200 gain.

For Thaler and Benartzi, such behavior helps to explain the "risk premium puzzle." The puzzle is around why the risk premium (or the difference between returns earned on a risky asset such as equities and those from a risk free asset, such as U.S. Treasurys) over the last 100 or more years has been around 7%, which seems excessively high when looking at the actual long-term returns for both equities and bonds. For example, \$1 invested in equities in 1926 against \$1 invested in Treasurys at the same time would today be worth \$24,126, compared with \$7,111 for bonds.

For them, the puzzle of the excess ERP can be solved by recognizing that investors are not necessarily rational, and that the idea of losses is significantly more painful than the idea of financial market gains is pleasurable.

Their studies have shown that investors who myopically checked the performance of their portfolios frequently were likely to see higher rates of volatility; fearing losses, they would thus tend to have higher savings rates and allocate a greater share of their assets toward safer Treasurys rather than equities. The opposite, however, was true for investors who resisted the temptation to check their portfolios as frequently. Both types of investors have loss aversion, but the latter were less inclined to stress about it and to act on that stress if they didn't see their returns or think about them. A second important factor determining savings rates is time preference. The economist Irving Fisher described interest rates as the price of time. In a similar way, liquidity preference theory views an interest rate as the rate that is needed to entice people to give up some of their liquidity today, in favor of it being returned tomorrow. Those with lower time preferences are willing to delay their gratification and consume less today (saving more and thus lowering interest rates); while those with higher time preferences seek more immediate gratification, and consume more today (lowering savings rates and raising interest rates).

The combination of time and risk preference is thus important when thinking about the behavior of the largest cohorts of society, such as the aging baby boomers—the cohort with the highest level of savings. The sustained increase in savings following the last financial crisis shows that many households were scarred by the crisis and were thus more prepared to give up some consumption today for the assurance of their savings tomorrow (helping to lower interest rates). In so doing, they also took on less financial market risk, raising the ERP.

Over the longer term, this behavior may be helpful given that increases in production are only possible through savings and capital formation, and a higher risk premium should give investors more cushion against losses.

**The degree of risk aversion and rate of savings is also important in economic forecasting,** as former Fed Chairman Alan Greenspan put it:

Perhaps the animal spirit most crucial to forecasting is risk aversion. The process of choosing which risk to take and which to avoid determines the relative pricing structure of markets, which in turn guides the flow of savings into investment, the critical function of finance. Risk taking is essential to living, but the question is whether more risk taking is better than less. If it were, the demand for lower-quality bonds would exceed the demand for "risk-free" bonds, such as U.S. Treasury securities, and high-quality bonds would yield more than lowquality bonds. It is not, and they do not, from which one can infer the obvious: risk taking is necessary, but it is not something the vast majority of people actively seek.<sup>1</sup>

## What Does This Say About the Future?

Yesterday's report on personal income and spending for March showed the "familiar" pattern of a jump in the personal savings rate to 13.1% from what was an already significant 7.9%. What might again be different to previous recessions, yet similar to the outcome of the last recession, is that the savings rate is likely to remain elevated.

For many investors—in particular the baby boomers—the current crisis may have resulted in further confirmation bias that the decision to increase savings and reduce risk may have been the right one, even though relative performance data might not show this. Looking forward, given the boomers' now more limited time preference, coupled with the already heightened sensitivity to losses, it makes sense that there will be even less desire to take on more risk, while maintaining higher savings.

For younger investors, however, who will have longer time horizons and should have higher risk appetites, economists like Thaler would advocate higher exposure to risk assets such as equities—in order to reap the rewards of the ERP. He would, however, also give them the advice of not giving in to the temptation of frequently checking their portfolio's performance; in fact, he suggests the optimal frequency is once per year (or specifically 13 months), which he believes if everyone followed would effectively eliminate the ERP puzzle.

## Conclusion

One of the likely outcomes of this economic crisis is a higher savings rate than might otherwise be predicted based on the pattern of most postwar economic recoveries. While this would be in contrast to previous recessions, it would be very much in line with the last Great Recession. The reason for the increased preference to save, as well as a higher ERP, is likely the result of what behavioral economists call myopic loss aversion. This is also evident in the elimination of any wealth effect on consumption. Today this is being further exacerbated by another major driver of savings behavior—time preference, particularly with regard to the influential baby boomer cohort. This is an important expected post-crisis outcome. As Alan Greenspan notes, "from the perspective of a forecaster, the issue is not whether behavior is rational but whether it is sufficiently repetitive and systematic to be numerically measured and predicted. ... No one is immune to the emotions of fear and euphoria, which are among the predominant drivers of speculative markets. But people respond to fear and euphoria in different ways, and those responses create specific, observable patterns of thought and behavior." For investors it suggests that interest rates are likely to remain lower than they otherwise might, the ERP higher, and with more moderate consumption/economic growth.

<sup>1. &</sup>quot;Never Saw It Coming: Why the Financial Crisis Took Economists by Surprise" Alan Greenspan, *Foreign Affairs*, Vol. 92, No. 6, November/ December 2013

### Highlights in the Week Ahead

Date	Time (EDT)	Indicator	Last	Consensus	WB Estimate	Actual
4 May	10:00 a.m.	Factory Orders (Mar)	0.0%	-8.7%	-9.7%	
5 May	8:30 a.m.	Trade Balance (Mar)	-\$39.9bn	-\$35.0bn	-\$34.3bn	
5 May	10:00 a.m.	ISM Non-manufacturing Index (Apr)	52.5	41.0	35.0	
7 May	8:30 a.m.	Nonfarm Productivity (Q1)	1.2%	-5.4%	-5.0%	
		Unit Labor Costs	0.9%	0.9%	0.5%	
7 May	8:30 a.m.	Initial Jobless Claims (May 2)	3,839	NA	3,100	
8 May	8:30 a.m.	Nonfarm Payrolls (Apr)	-701K	-22,000K	-23,000K	
		Unemployment Rate	4.4%	16.3%	18.0%	
		Average Hourly Earnings	0.4%	0.3%	0.1%	

Sources: Bloomberg, William Blair Equity Research

## Indicator of the Week: Employment Situation



# **Economic Scorecard**

Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20 May-20
Growth										•								
US Leading Indicators	4.9	4.0	3.4	2.9	2.7	2.4	2.4	1.7	1.5	1.0	0.3	0.2	0.2	0.3	0.7	0.4	-6.5	
US Coincident Indicators	2.2	2.2	2.4	2.2	2.2	1.8	1.8	1.7	1.5	1.5	1.6	1.4	1.5	1.2	1.1	1.4	0.3	
US Lagging Indicators	3.0	2.9	2.9	3.1	3.2	2.9	2.4	2.8	3.5	2.9	2.8	2.6	2.5	2.2	1.6	1.6	2.6	
Consumer									_				_					
Total Retail Sales	3.6	0.9	2.5	2	3.6	3.9	3	3.6	3.6	4.3	4	3.3	3.3	5.6	4.9	4.5	-5.8	
Personal Income	4.7	5	4.5	4.7	4.7	4.8	4.7	4.6	4.1	4.1	4.3	4.1	4.4	3.7	3.9	3.9	1.4	
Real Disposable Personal Income	3.7	4.2	3.2	3.4	3.3	3.1	3	2.9	2.5	2.6	3	2.6	2.9	1.8	2.1	2.1	0.1	
Real Personal Consumption	3	1.7	2.4	2.3	2.8	2.7	2.6	2.6	2.6	2.5	2.7	2.3	2.3	3.3	3	3.2	-5	
Personal Saving Rate (%)	126.4	126.6	8.3	8.8	8.4	120.2	121.2	124.2	125.9	124.2	126.2	126.1	1.1	129.2	120.4	122.6	13.1	96.0
Consumer Connuence (Connerence Board)	130.4	120.0	121.7	131.4	124.2	129.2	131.3	124.3	133.0	134.2	120.3	120.1	120.0	120.2	130.4	132.0	110.0	80.9
Employment	4.5	10	47				10	10	10	10		10				1.0	10	
Employment Growth	1.5	1.6	1.7	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.4	1.6	1.0	25.0
ASA Temporary Statting Index	1.1	-12.7	-0.6	-1.3	-1.9	-3.0	-2.4	-1.7	-4.0	-4.7	-5.1	-0.5	1.4	-6.9	-6.2	-0.8	-24.4	-35.9
ISM Employment Index Manufacturing"	57.8	56.2	55.2	53.2	57.1	52.4	53.1	54.3	51.3	47.0	40.5	47.9	46.8	45.2	40.0	46.9	43.8	
Linemployment Rete %	27	2.0	30.4	2.0	20	34.5	2.6	2.7	2.7	2.7	2.5	30.9	2.5	2.5	33.1	35.0	47	
Average Hourly Earnings	3.1	3.9	33	3.5	3.0	3.0	3.0	3.1	3.7	3.7	3.1	3.0	3.3	3.0	3.0	3.5	4.4	
Initial Johless Claims (ava. wkly. cha. '000s)	226	217	220	225	217	216	217	221	214	217	213	215	216	226	210	214	2667	5033
Jon Openings	21.0	17.1	13.2	7.2	7.3	4.3	3.9	-1.3	-12	-1.1	-3.2	1.0	-9.5	-10.3	-6.8	-24	-6.5	-5.5
Lavoff Announcements	51.5	35.3	18.7	117.2	0.4	10.9	85.9	12.8	43.2	39	-24.8	-33.5	-16	-25.2	27.8	-26.3	266.9	-0.0
Laurine Merket	01.0	00.0	10.1		0.1	10.0	00.0	12.0	10.2	00	21.0	00.0		20.2	27.0	20.0	200.0	
Housing Market	7.8	5.6	3.2	-10.0	9.6	0.2	5.1	4.5	17	7.5	24	10.7	14.0	40.2	25.4	36.1	1.4	
New Home Sales	-1.0	-5.0	-0.2	3.0	-3.0	4.3	-0.1	4.5	8.4	17.2	10.4	26.0	13.8	28.2	20.4	10.8	-9.5	
Existing Home Sales	-8.2	-10.1	-8.6	-2.5	-5.6	-3.7	-1 1	-2.0	0.4	2.5	3.2	4.2	3.1	10.4	8.8	7 1	-9.5	
Median House Price (Existing Homes)	-10.2	-4	-7.3	-2	-7.4	7.8	-1.3	0.4	-5.9	1.7	-3.8	-1.8	6.3	-0.1	7.7	2.9	3.5	
Existing Homes Inventory (Mths' supply)	4.1	4.3	4.3	3.9	3.9	4	4	4	3.9	3.8	3.9	3.9	3.9	3.6	3.5	3.2	3.6	
New Homes Inventory (Mths' supply)	6.5	7.4	6.5	6.1	5.8	6.1	6.7	5.4	6	5.5	5.3	5.4	5.5	5.4	5	5.2	6.4	
NAHB Homebuilder Sentiment*	60	56	58	62	62	63	66	64	65	67	68	71	71	76	75	74	72	30
Inflation																		
Consumer Price Index	22	19	16	15	19	2	18	16	18	17	17	18	21	23	2.5	23	1.5	
CPI Less-food & energy	2.2	2.2	2.2	2.1	2	2.1	2	2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.3	2.4	2.1	
Producer Price Index	2.6	2.6	1.9	1.9	2	2.4	2.1	1.6	1.6	1.9	1.5	1	1	1.3	2.1	1.3	0.7	
PPI Less-food & energy	2.7	2.9	2.6	2.5	2.3	2.5	2.4	2.2	2.2	2.3	2	1.6	1.2	1.1	1.7	1.4	1.4	
PCE Price Index	1.9	1.8	1.4	1.3	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.6	1.8	1.8	1.3	
PCE Prices Less-food & energy	2.0	2.0	1.8	1.6	1.5	1.6	1.5	1.6	1.6	1.8	1.7	1.6	1.5	1.6	1.7	1.8	1.7	
Business Activity - US																		
Industrial Production	4.1	3.8	3.6	2.7	2.3	0.7	1.7	1.0	0.4	0.3	-0.2	-0.8	-0.4	-0.9	-0.9	0.0	-5.5	
New Cap Gds Orders less-aircraft & parts	6.4	2.2	3.5	2.3	2.2	2.4	0.7	-0.5	0.7	-1.9	0.2	-0.5	-1.5	1.8	1.4	1.6	0	
Business Inventories	4.5	4.8	5.3	4.9	5	5.3	5.3	5.2	4.8	4.2	3.7	3	2.8	2.2	1.1	-0.1	0	
ISM Manufacturing PMI*	58.8	55	55.5	54.1	54.6	53.4	52.3	51.6	51.3	48.8	48.2	48.5	48.1	47.8	50.9	50.1	49.1	
Markit US Manufacturing PMI*	55.3	53.8	54.9	53	52.4	52.6	50.5	50.6	50.4	50.3	51.1	51.3	52.6	52.4	51.9	50.7	48.5	36.9
ISM Non-Manufacturing Index*	60.2	58	56	58.5	56.3	55.7	56.3	55.4	54.8	56	53.5	54.4	53.9	54.9	55.5	57.3	52.5	
Markit US Services PMI*	54.7	54.4	54.2	56	55.3	53	50.9	51.5	53	50.7	50.9	50.6	51.6	52.8	53.4	49.4	39.8	27
Business Activity - International																		
Germany Manufacturing PMI Markit/BME*	51.8	51.5	49.7	47.6	44.1	44.4	44.3	45	43.2	43.5	41.7	42.1	44.1	43.7	45.3	48	45.4	34.4
Japan Manufacturing PMI Jibun Bank*	52.2	52.6	50.3	48.9	49.2	50.2	49.8	49.3	49.4	49.3	48.9	48.4	48.9	48.4	48.8	47.8	44.8	41.9
Caixin China Manufacturing PMI*	50.2	49.7	48.3	49.9	50.8	50.2	50.2	49.4	49.9	50.4	51.4	51.7	51.8	51.5	51.1	40.3	50.1	49.4
China Manufacturing PMI*	50	49.4	49.5	49.2	50.5	50.1	49.4	49.4	49.7	49.5	49.8	49.3	50.2	50.2	50	35.7	52	50.8
UK Manufacturing PMI Markit/CIPS*	53.3	54.3	52.8	52.1	55.1	53.1	49.4	48	48	47.4	48.3	49.6	48.9	47.5	50	51.7	47.8	32.9
France Manufacturing PMI Markit*	50.8	49.7	51.2	51.5	49.7	50	50.6	51.9	49.7	51.1	50.1	50.7	51.7	50.4	51.1	49.8	43.2	31.5
Currencies***		_																
Euro (EUR/USD)	-4.9	-4.5	-7.8	-6.7	-9.0	-7.1	-4.5	-2.7	-5.3	-5.3	-6.1	-1.4	-2.6	-2.2	-3.1	-3.0	-1.7	-2.3
Renmimbi (USD/CNY)	5.3	5.7	6.5	5.7	7.0	6.4	7.7	3.7	0.9	4.8	4.1	0.9	1.0	1.2	3.2	4.5	5.5	4.9
Yen (USD/Yen)	0.9	-2.7	-0.3	4.4	4.3	1.9	-0.5	-2.6	-2.8	-4.3	-4.9	-4.3	-3.6	-1.0	-0.5	-3.1	-3.0	-3.8
Sterling (GBP/USD)	-5.7	-5.6	-7.6	-3.6	-7.0	-5.3	-5.0	-3.9	-7.4	-6.2	-5.7	1.4	1.4	3.9	0.7	-3.3	-4.7	-3.4
Canadian \$ (USD/CAD)	3.1	8.5	6.6	2.7	3.5	4.2	4.3	-0.3	1.4	2.1	2.6	0.1	-0.1	-4.7	0.9	1.8	5.3	4.2
Mexican Peso (USD/MXN)	9.3	0.0	2.7	2.4	6.9	1.2	-1.5	-3.4	2.7	5.1	5.4	-5.4	-4.1	-3.7	-1.4	1.9	21.8	27.6
US Equities																		
S&P 500	4.3	-6.2	-4.2	2.6	7.3	11.2	1.7	8.2	5.8	0.9	2.2	12.0	13.8	28.9	19.3	6.1	-8.8	-1.1
S&P 400 Midcap	-1.1	-12.5	-6.1	2.5	0.9	5.2	-7.0	-0.3	-0.9	-8.0	-4.2	7.1	7.0	24.1	9.4	-5.0	-23.9	-16.5
S&P 600 Smallcap	2.1	-9.8	-2.6	5.7	0.1	2.9	-11.8	-6.3	-8.1	-16.4	-10.8	1.6	3.2	20.9	4.9	-9.1	-27.1	-20.9
Russell 2000	-0.7	-12.2	-4.8	4.2	0.7	3.2	-10.3	-4.7	-5.8	-14.1	-10.2	3.4	6.0	23.7	7.6	-6.3	-25.1	-17.6
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\* Diffusion Index, \*\*1985=100, \*\*\*Currencies - green/red = strengthening/weakening foreign currency vs dollar Source: ISM, Federal Reserve, Census Bureau, Bureau of Labor Statistics, Conference Board, Bloomberg, William Blair

## **Other Economic Indicators**



**Financial Conditions Index\*** 













Fed Funds Rate, The FOMC's Expectations & Futures Market Expectations, %



## Central Bank Target Short Term Interest Rates

## S&P 500 Sector Performance

Global Industry Classification System	Current Weight*	Week Ago	Month Ago	Qtr-to-Date	Year-to-Date	
	30-Apr-20	23-Apr-20	31-Mar-20	31-Mar-20	31-Dec-19	
S&P 500 Indox	100.00	4.10	12.69	12.68	-0.85	
S&P400 MidCan Index	100.00	7.67	14.06	14.06	-20 20	
S&P600 SmallCan Index		8 99	12.60	12.60	-24 49	
Dow Iones Industrials		3 53	11.08	11.08	-14 69	
Nasdaq Composite		4.65	15.45	15.45	-0.93	
Communication Services	11.09	4.76	13.51	13.51	-6.04	
Advertising	0.07	12.36	4.22	4.22	-28.56	
Alternate Carriers	0.05	6.84	12.28	12.28	-19.60	
Broadcasting	0.14	7.87	15.44	15.44	-42.17	
Cable & Satellite	1.17	2.80	11.01	11.01	-11.89	
Integrated Telecommunication Services	1.81	1.43	5.75	5.75	-14.69	
Interactive Home Entertainment	0.38	-2.15	8.66	8.66	5.64	
Interactive Media & Services	5.46	7.48	18.39	18.39	0.14	
Movies & Entertainment	1.55	2.84	11.64	11.64	-6.62	
Publishing & Printing	0.02	14.63	11.20	11.20	-29.83	
Wireless Telecommunication Svcs	0.43	-2.81	4.65	4.65	11.97	
Consumer Discretionary	11.03	5.15	20.51	20.51	-3.09	
Apparel Retail	0.39	8.60	3.63	3.63	-21.84	
Apparel & Accessories & Luxury Goods	0.17	10.55	14.05	14.05	-44.77	
Auto Parts & Equipment	0.09	12.61	34.38	34.38	-28.76	
Automobile Manufacturers	0.21	5.70	0.49	0.49	-41.01	
Casinos & Caming	0.29	4.20	27.00	27.00	-14.90	
Computer & Flectronics Retail	0.22	10.02	20.33	20.33	-12.61	
Consumer Electronics	0.06	2 35	827	827	-16.81	
Department Stores	0.02	11.35	31.84	31.84	-59.24	
Distributors	0.08	15.63	21.56	21.56	-25.94	
Footwear	0.43	-0.19	5.37	5.37	-13.95	
General Merchandise Stores	0.47	3.29	15.69	15.69	-6.18	
Home Furnishings	0.04	17.25	22.31	22.31	-33.51	
Home Improvement Retail	1.25	9.08	18.72	18.72	-3.01	
Homebuilding	0.20	18.64	30.28	30.28	-15.24	
Hotels, Resorts & Cruise Lines	0.29	14.48	21.67	21.67	-49.96	
Household Appliances	0.03	9.28	30.23	30.23	-24.26	
Housewares & Specialties	0.02	10.21	4.52	4.52	-27.78	
Internet Retail	5.31	3.53	25.97	25.97	26.10	
Leisure Products	0.04	-0.76	0.93	0.93	-31.62	
Motorcycle Manufacturers	0.01	17.74	15.31	15.31	-41.30	
Restaurants	1.15	2.04	10.26	10.26	-8.91	
Specialized Consumer Services	0.01	10.83	18.26	18.26	-29.09	
specially stores	0.10	2.99	12.00	12.00	1.01	
Consumer Staples	8.10	0.33	6.64	6.64	-7.64	
Agricultural Products	0.08	3.92	5.57	5.57	-19.87	
Brewers	0.03	-2.05	5.13	5.13	-23.92	
Distillers & Vinthers	0.19	0.18	14.04 E 20	14.04 E 20	-11./5	
Food Distributors	0.13	-0.40	-3.30	-3.30	-20.30	
Food Retail	0.10	-3.86	494	494	9.04	
Household Products	1.75	-1.31	7.20	7.20	-2.63	
Hypermarkets & Supercentres	1.90	-3.46	6.67	6.67	2.63	
Packaged Foods & Meats	1.21	0.77	7.39	7.39	-6.38	
Personal Products	0.17	7.63	10.50	10.50	-17.09	
Soft Drinks	1.64	1.80	7.08	7.08	-10.10	
Tobacco	0.75	3.21	1.96	1.96	-16.06	
Energy	2.94	9.73	29.66	29.66	-36.54	
Integrated Oil & Gas	1.52	6.95	25.13	25.13	-31.17	
Oil & Gas Drilling	0.01	2.21	26.32	26.32	-56.49	
Oil & Gas Equipment & Services	0.20	5.55	31.60	31.60	-55.37	
Oil & Gas Exploration & Production	0.59	13.69	41.36	41.36	-39.80	
Ull & Gas Refining & Marketing & Transportation	0.33	21.92	37.14	37.14	-37.40	
UII & Gas Storage & Transportation	0.28	/.45	22.96	22.96	-35.30	

Financials	10.10	6.29	9.34	9.34	-26.02
Asset Management & Custo de Danles	0.01	0.04	12.24	12.24	1( 50
Asset Management & Custouy banks	0.01	9.04	15.24	15.24	-10.50
Consumer Finance	0.51	16.22	14.67	14.67	-34.97
Divorsified Banks	3.08	0.30	0.30	0.30	-25 62
Diversified ballks	5.00	9.30	0.30	0.50	-33.03
Financial Exchanges & Data	1.20	2.53	13.27	13.27	0.97
Insurance Brokers	0.50	2.21	6.53	6.53	-14.53
Investment Deplying & Deplyonage	0.76	E 20	15 27	15 27	20.00
nivesunent banking & biokerage	0.70	5.59	13.37	13.37	-20.99
Life & Health Insurance	0.45	13.53	16.33	16.33	-31.44
Multi-line Insurance	0.17	8 90	5 34	5 34	-4329
Multi Coston Heldinge	1.02	0.04	2.40	2.40	17.20
Multi-Sector Holdings	1.03	0.94	2.48	2.48	-17.28
Property & Casualty Insurance	0.72	-0.40	1.60	1.60	-19.71
Reinsurance	0.03	-2.24	-10.02	-10.02	-3746
	0.05	2.2.1	10.02	10.02	37.10
Regional Banks	0.82	9.29	17.48	17.48	-34.28
Health Care	14.08	0.80	12 50	12 50	-2.20
	14.70	0.07	12.30	12.50	-2.20
Biotechnology	2.32	0.96	10.31	10.31	6.65
Health Care Distributors	0.25	2.79	3.86	3.86	-1.46
Health Care Equipment	2 40	0.22	12 02	12.02	E 27
nearth Care Equipment	5.49	0.22	12.05	12.85	-5.57
Health Care Facilities	0.18	4.80	18.38	18.38	-25.81
Health Care Services	0.77	3.74	10.28	10.28	-9.25
Health Care Courseline	0.17	( OF	10.00	10.00	10 51
nearth care supplies	0.17	0.95	12.32	12.52	-19.51
Health Care Technology	0.08	-2.47	10.16	10.16	-5.45
Life Sciences Tools & Services	1 07	3 97	16.26	16.26	-2 97
	1.07	2.07	10.20	10.20	2.57
Managed Health Care	1.74	2.86	18.27	18.27	-0.52
Pharmaceuticals	4.90	-0.77	11.24	11.24	-1.26
Industrials	7.91	5.06	8.66	8.66	-21.12
Aerosnace & Defense	1 83	2 46	849	849	-28 39
As is here 0. From Marking	0.10	5.00	4.00	4.00	1(20
Agricultural & Farm Machinery	0.18	5.80	4.99	4.99	-16.28
Air Freight & Logistics	0.48	-1.37	3.18	3.18	-16.63
Airlines	0.21	11 20	7 2 2	7 2 2	E/ 10
	0.21	11.39	-7.52	-7.52	-54.10
Building Products	0.36	6.23	7.63	7.63	-22.99
Construction & Engineering	0.06	5.35	7.41	7.41	-8.78
Construction Machinery & Hearry Trucks	0.49	F 60	7 60	7 6 0	1702
construction machinery & neavy mucks	0.48	5.00	7.00	7.00	-17.92
Diversified Support Svcs	0.17	13.58	22.59	22.59	-15.01
Electrical Components & Equipment	0.43	8 80	16.08	16.08	-1631
	0.15	2.00	7.07	10.00	10.01
Environmental & Facilities Services	0.32	2.69	1.27	1.27	-10.08
Human Resource & Employment Services	0.02	7.97	25.22	25.22	-25.14
Industrial Conglomerates	1 1 2	5 50	2.81	2.81	-21 70
	1.12	5.50	2.01	2.01	-21.70
Industrial Machinery	0.79	7.54	13.28	13.28	-18.88
Railroads	0.86	6.31	13.90	13.90	-11.14
Passarch & Consulting Succ	0.40	F 00	12 56	12 56	6.07
Research & Consulting Svcs	0.40	3.00	12.30	12.50	-0.07
Trading Companies & Distributors	0.18	8.58	16.32	16.32	-12.46
Trucking	0.11	1.85	10.29	10.29	2.10
Information Technology	25.29	5.39	13.73	13.73	-0.16
Application Software	2.10	5.58	14.04	14.04	4.51
Communications Equipment	0.04	1.00	072	0 72	10.26
communications Equipment	0.94	1.09	0.72	0.72	-10.50
Data Processing & Outsourced Services	4.24	7.66	13.77	13.77	-5.59
Electronic Components	0.17	6.93	15 22	15.22	-20.89
Electronic Components	0.14	0.05	21.70	21.70	0.12
Electronic Equipment & Instruments	0.14	0.95	21.70	21.70	-9.13
Electronic Manufacturing Services	0.12	8.31	16.74	16.74	-21.61
Internet Software & Services	0.16	-2.85	12 11	12 11	10 53
	1.15	E.00	1470	1470	10.00
11 Consulting & Services	1.15	5.93	14.76	14.76	-10.48
Semiconductor Equipment	0.43	-1.50	9.01	9.01	-14.26
Semiconductors	3 89	3.62	13 79	13 79	-2.04
	5.05	5.02	13.7 5	10.77	-2.04
Systems Software	6.46	4.89	13.61	13.61	13.00
Technology Distributors	0.06	9.85	18.80	18.80	-22.43
Technology Hardware Storage & Derinherale	E 11	6.00	1110	11 10	2 21
recimology naruware, storage & recipiterals	0.71	0.90	17.70	11.10	-2.21
Materials	2.44	5.79	15.29	15.29	-15.37
Commodity Chomicals	0.10	14.20	22.25	22.25	25 10
commoulty chemicals	0.17	14.47	44.40	44.43	-35.10
Construction Materials	0.11	9.54	2.72	2.72	-26.53
Copper	0.05	13.06	30.81	30.81	-32.70
Diversified Chemicala	0.02	0.05	20.01	20.01	22.70
Diversified Chemicals	0.03	0.05	29.91	29.91	-23.66
Fertilizers & Agricultural Chemicals	0.17	2.98	9.62	9.62	-21.68
Gold	0 19	-474	31 36	31 36	36.89
	0.17	1.7 1	0.40	0.40	10 50
industrial Gases	0.58	3.20	8.49	8.49	-10.59
Metal & Glass Containers	0.08	1.06	1.44	1.44	1.42
Paper Packaging	0.23	9.06	11.01	11.01	-20 50
	0.23	9.00	11.01	11.01	-20.39
Specialty Chemicals	0.76	8.23	21.57	21.57	-15.30
Steel	0.05	9.20	14.36	14.36	-26.81

Real Estate	2.85	2.99	9.33	9.33	-12.36				
Health Care REITs	0.18	14.44	13.41	13.41	-36.20				
Hotel & Resort REITs	0.03	13.87	11.51	11.51	-33.64				
Industrial REITs	0.31	3.00	10.38	10.38	0.14				
Office REITs	0.19	9.63	13.18	13.18	-22.83				
Real Estate Service	0.06	7.35	13.84	13.84	-29.96				
Residential REITs	0.37	3.33	7.84	7.84	-20.10				
Retail REITs	0.23	19.60	14.97	14.97	-42.78				
Specialized REITs	1.47	-1.59	7.50	7.50	4.72				
Utilities	3.16	-1.26	3.17	3.17	-11.47				
Electric Utilities	2.12	-1.45	2.20	2.20	-10.81				
Gas Utilities	0.05	0.63	2.76	2.76	-8.84				
Independent Power Producers & Energy Traders	0.04	4.42	-2.58	-2.58	-33.59				
Water Utilities	0.09	-2.40	1.78	1.78	-0.95				
Multi-Utilities	1.01	-1.07	5.53	5.53	-12.23				
Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.									

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DOW JONES: 24345.70 S&P 500: 2912.43 NASDAQ: 8889.55

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