

CHARTWELL REVIEW

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THIRD QUARTER 2019

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got growth?



Some facts at quarter's end about the US stock market -

- Third quarter total returns were a very pedestrian 1.8%, or less, with elevated day-to-day volatility;
- YTD returns of 20.6% through 9/30/19 for the S&P 500 index were the best first nine months of any year in the past twenty years for large-cap stocks;
- Since January 20<u>18</u>, the S&P index is up only 2%. With dividends, that's only 4%. During that time, gold is up 7.7% and the 10-year T-bond yield has returned over 12%, as its yield dropped from 2.66% to 1.67%.
- During the past 3 years, US large-cap investors have enjoyed a 13.4% annualized return, which is 3.4% higher per annum than the 80-year average.

The market has produced a different outcome for any investor's timeframe during the past three years. Very short-term, *poor*, year-to-date, *spectacular*, short/intermediate, *quite weak*; and intermediate term, *nell above average*. You can back up any position you'd like to take with observable data, which means it's very hard to reason out the right next steps.

In an environment of record low US interest rates (1.5-2.0% across the yield curve) that are nonetheless the highest of the developed world, will risk asset values continue to climb as they have in 2019? Or, do they sputter and decline, re-tracing recent gains and leaving us in the midst of another correction (like during last year's 4^{th} quarter)?

The answer depends on near-term realized growth -

Global economic growth, is expected to slow to 3% this year, as rising trade barriers have stunted manufacturing, trade, and investment. As recently as 2017, global growth was 3.8%;

US economic growth, which fell to an annualized rate of 2.0% in the 2nd quarter, is expected to be only 1.8% in the third;

Corporate earnings grew 3% in Q2, and are forecast to decline 3% in Q3. The current forecast for 2020 is +6%.

Figure 1: Index Benchmarks

16 1 . 7 1		<u>Trai</u>	ling Retu	rns *	
<u>Market Index</u>	<u>30 19</u>	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u> 10 Yr</u>
S&P 500	1.7	4.3	13.4	10.8	13.2
U.S. Top-cap Stocks	1.8	4.1	14.2	11.2	13.3
U.S. Mid-cap Stocks	0.5	3.2	10.7	9.1	13.1
U.S. Small-cap Stocks	-2.4	-8.9	8.2	8.2	11.2
Non-US Stocks (EAFE)	-1.0	-0.8	7.0	3.8	5.4
Non-US Stocks (Emerg)	-4.1	-1.6	6.4	2.7	3.7
3 mo. T-Bills	0.6	2.6	1.8	1.2	0.8
U.S. Aggregate Bonds	2.3	10.3	2.9	3.4	3.8
High Yield Bonds	1.2	6.3	6.1	5.4	7.9
Global Aggregate Bonds	0.7	7.6	1.6	2.0	2.3
Consumer Prices, p.a.	1.0	1.7	2.1	1.5	1.8
Blmbrg Commodities	-1.8	-6.6	-1.5	-7.2	-4.3
MSCI World REITS	6.2	20.4	7.4	8.9	10.3
Chartwell 65/35 Global	0.8	3.6	7.7	6.4	7.8

Figure 2: Average Mutual Fund Returns

Eur d Catao ami	<u>Trailing Returns *</u>						
Fund Category	<u>3Q 19</u>	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u> 10 Yr</u>		
U.S. Large-cap	0.8	2.6	12.4	9.6	12.2		
U.S. Mid-cap	-0.5	0.6	10.8	8.6	12.0		
U.S. Small-cap	-1.8	-8.8	7.4	7.2	10.8		
International Lg. Cap	-1.4	-2.0	5.8	3.4	5.1		
International Sm. Cap	-2.2	-6.6	5.4	5.3	8.5		
Emerg. Mkt. Equity	-3.2	1.6	5.4	2.3	3.8		
Balanced/Hybrid	1.0	4.5	7.0	5.6	7.6		
General Bond	4.1	14.8	4.6	5.0	6.4		
High Yield Bond	1.2	5.4	5.2	4.4	6.9		
Hedge Funds, Equity	-1.1	-1.1	4.8	3.5	4.4		

^{*}Annualized trailing returns for periods ending 9/30/19

Economics, Prices, and Policy

	<u>9.30.19</u>	<u>9.30.18</u>
CPI - headline, y-o-y	1.7%	2.3%
CPI - core, y-o-y	2.4%	2.2%
Unemployment Rate	3.5%	3.7%
Labor Force (millions)	164.0	162.1
Employed (millions)	158.3	156.1
Employment/Population	61.0%	60.4%
Growth in Real GDP, (y-o-y)	2.3%	3.2%

Core CPI inflation rose slightly more during the last twelve months than the previous year, while declining average energy and food prices pushed headline inflation to well below 2%. The inflation rate "popped" in the first and second quarters, rising at annualized rates of 3-4%, but fell back to only 1% in the third. The unemployment rate has fallen during the past twelve months to 50-year lows, as over 2.0 million more people were employed than a year ago; the labor force also grew, as did the participation rate and the employment-population ratio.

Figure 3: Breaking Down 2nd Quarter* Real GDP

% Change from Preceding Period							
<u>Factor</u>	<u>2Q '19</u>	<u>1Q '19</u>	4Q '18	<u>3Q '18</u>			
Real GDP Growth	2.0%	3.1%	1.1%	2.9%			
Nominal GDP Growth	4.7	3.9	2.9	4.8			
Real Final Sales	3.0	1.8	1.3	2.8			
Personal Spending	4.6	1.1	1.4	3.5			
Private Investment	(6.3)	6.2	3.0	13.7			
- Fixed, Businesses	(1.0)	4.4	4.8	2.1			
- Fixed, Residential	(3.0)	(1.0)	(4.7)	(4.0)			
- Chg. In Inventories (\$bn)	\$69	\$116	\$93	\$87			
Export growth	(5.7)	4.1	1.5	(6.2)			
Import growth	0.0	(1.5)	3.5	8.6			
Government Spending	4.8	2.9	(0.4)	2.1			

^{*} BEA final estimate on 9.26.19

The low 2.0% annualized increase in real GDP during Q2 was paced by positive contributions from consumer spending growth and a robust increase in government spending, especially at the federal level. Declining growth compared to the 1st quarter primarily reflected downturns in inventory investment, exports, and fixed investment (residential and business). Federal non-defense spending jumped 16.1%.

Consensus forecasts of 3rd quarter GDP remain modestly positive. The Atlanta Fed's GDPNow forecast has recently decreased to 1.8% growth for the quarter, down from 2.2% in early August. Net trade, manufacturing and non-manufacturing output, and export mix account for much of the weakness. The *Blue Chip* consensus estimate is 1.8%.

Businesses continued to hire during the third quarter, but at a slightly reduced pace compared to the second. Payroll jobs rose by 470k. But, the household employment survey reported a huge increase in employment of 1.25mm persons during the quarter, accounting for the big drop in the unemployment rate. The index of average weekly payrolls is up 4.2% versus one year ago.

Inflation rates in Q3 rose compared to Q2, but at a much less elevated rate than the prior period.

- ⇒ "Headline" CPI rose just 0.25%, or an annualized rate of just 1%.
- ⇒ "Core" CPI (ex-food & energy) rose 2.1% annualized during the quarter, and 2.4% over the past year.
- ⇒ The Producer Price Index for final demand decreased 0.3% in September, rose 0.1% in August, and 0.2% in July. The final demand index advanced just 1.4% for the 12 months ended in September.

On the monetary policy front, the Federal Reserve lowered its target Fed Funds rate *twice* during the quarter, dropping it to the 1.75-2.00% range. On the money supply front, the M2 level is \$15.0 trillion. It rose a seasonally adjusted annualized rate of 7.9% in the quarter, 6.7% over the past six months and 5.4% over the past year. These stats indicate we are in the land of cheap and easy money of almost generational proportions. On that basis, a sub-2% GDP growth rate is of some concern.

The U.S. posted a \$214bn budget deficit in August, bringing the y-t-d deficit to \$1.07 trillion, compared with \$898bn billion in the same period last year. The government last saw this large a deficit in 2012, when the gap was \$1.1 trillion. The fiscal 2016 deficit was \$585bn.

The manufacturing index ended the quarter on a weak note, declining 0.5% in September, off 0.3% for the quarter, and down 1% since September 2018. However, total industrial production rose at an annual rate of 1.2% in the quarter, due to increased mining and utilities output.

On a forward-looking basis the Institute for Supply Management's manufacturing business survey reported the September PMI registered 47.8%, a sharp decrease from the August reading. The New Orders Index registered 47.3%, the Employment Index registered 46.3%, the Inventories Index registered 46.9%, and the New Export Orders Index registered only 41%. All numbers below 50% indicate expected future contraction, and all were lower than August figures. More concern.

Continued weaker economic data out of Europe, in particular weak German manufacturing data, weighed heavily on global growth sentiment throughout the quarter. Against this backdrop, the European Central Bank again lowered its deposit rate in September and announced a €20 billion open-ended quantitative easing program set to begin in November.

Bonds Trade Up, Again

The 3rd quarter was marked by slowing global growth and escalating trade tensions between the US and China, somewhat offset by further monetary accommodation from US and European central banks. US Treasury yields traded in a wide range over the quarter and multiple sections of the yield curve inverted; UST yields ultimately ended the quarter lower than they began. Performance for most spread sectors was fairly flat on the quarter and the US dollar appreciated strongly relative to other currencies.

The quarter began with a July announcement that annualized US GDP growth had slowed in the second quarter to 2.0% from 3.1% in the first quarter. Citing slower global growth and trade tensions, the Fed cut its FF rate target by 25 bps and ended its balance sheet reduction program two months ahead of schedule. August proved to be highly volatile to the downside for UST yields, as rising US-China trade tensions combined with weaker Chinese and European data roiled markets and caused credit spreads to widen and yields to plummet. Over the course of the month, the yield on the 10-year UST fell over 50 bps. Markets regained some of their footing in early September as yields retraced some of their previous plunge. The Fed again cut its target Fed Funds rate by another 25 bps in September, to 1.75-2.00%.

Overseas, the Brexit saga continued with Parliament passing legislation forcing the UK to ask for an extension to negotiations if it can't reach an agreement with the EU by the October deadline.

Broad market bond portfolios, in aggregate, outperformed their benchmarks in the quarter. The following positions aided fixed income portfolio returns –

- Longer portfolio duration than benchmarks, as central banks remained highly accommodative and growth and inflation remained subdued;
- Overweights to the back-end and front-end of the yield curve, as a broad swath of the yield curve flattened;
- Overweight credit bonds and bank loans, particularly in financials and energy sectors, and both investment grade and high yield, as credit spreads tightened;
- In global bond portfolios, emphasizing USDdenominated positions or hedged local currency positions back to USD. The US\$ again strengthened versus the euro, yen and a number of major emerging market currencies.

Due to the Dollar's strength, hard currency or *hedged* non-US bonds outpaced their unhedged or local currency peers for the quarter in both developed and emerging markets.

The past year's plunge in bond yields (see Figures 5 & 6) has generated robust returns, with many sectors up 10-20%, including high yield, US\$ emerging markets, and virtually all long duration sectors, credit or otherwise.

Figure 4: Primary Bond Sector Returns (%)

Index	3Q '19	1 Yr	3 Yrs	5 Yrs
US Aggregate Bond index	2.3	10.3	2.9	3.4
US Gov't/Credit: (1-3yrs)	0.7	4.6	1.8	1.6
US Treasury: Long	<mark>7.9</mark>	24.8	4.1	<mark>6.8</mark>
US TIPS (1-10yrs)	0.6	5.8	1.9	2.0
Mortgage-Backed (MBS)	1.4	7.8	2.3	2.8
Commercial MBS	1.9	10.4	3.3	3.8
Asset-Backed (ABS)	0.9	5.4	2.2	2.3
Inv. Grade US Credit	3.0	12.6	4.3	4.5
Leveraged Loans	1.4	4.0	4.7	4.5
US High Yield Credit	1.2	6.3	6.1	5.4
Municipal Bonds, broad	1.6	8.6	3.2	3.7
Global Agg., (\$ hdgd)	2.6	10.7	3.7	4.1
Global Credit, (\$ hdgd)	2.8	11.6	4.5	4.6
Emerg. Mkts Bonds (US\$)	1.5	11.6	4.6	5.7

Figure 5: Fixed Income Yields - 3rd Quarter 2019

(YTM, % p.a.)	Sep-19	Jun-19	Dec-18	Sep-18	1-Year Change
US Treasuries					
3-month	1.83	2.12	2.45	2.21	(0.38)
2-year	1.62	1.74	2.5	2.81	(1.19)
5-year	1.55	1.76	2.51	2.95	(1.40)
10-year	1.67	2.00	2.69	3.05	(1.38)
30-year	2.12	2.53	3.02	3.20	(1.08)
BarCap Aggregate	2.27	2.49	3.28	3.46	(1.19)
BBB Credit	3.31	3.53	4.65	4.39	(1.08)
AA Credit	2.33	2.54	3.37	3.49	(1.16)
Agency MBS	2.45	2.7	3.39	3.59	(1.14)
Emerging Mkts (\$)	5.15	5.54	5.95	6.40	(1.25)
US High Yield	5.87	6.06	7.95	6.34	(0.47)
UST 10yr - 3Mo	(0.16)	(0.12)	0.24	0.84	(1.00)

Figure 6: Sovereign Bond Yields, selected countries

10-year yields (%)	Sep-19	Jun-19	Dec-18	Sep-18	1-Year Change
Switzerland	(0.80)	(0.50)	(0.15)	0.13	(0.93)
Japan	(0.23)	(0.20)	0.02	0.10	(0.33)
Germany	(0.59)	(0.30)	0.16	0.51	(1.10)
Britain	0.61	0.90	1.34	1.59	(0.98)
Spain	0.12	0.30	1.41	1.36	(1.24)
Australia	0.91	1.30	2.29	2.75	(1.84)
Italy	0.87	2.10	2.70	2.91	(2.04)
United States	1.67	2.00	2.69	3.05	(1.38)
Poland	2.02	2.40	2.75	3.24	(1.22)
China (5 year)	2.95	3.10	2.97	3.49	(0.54)
Greece (new bonds)	1.35	2.50	4.40	4.04	(2.69)
Brazil	4.92	6.00	7.22	9.45	(4.53)
India	6.69	6.90	7.35	8.07	(1.38)
Russia	7.15	7.50	8.81	8.77	(1.62)

US Stocks Trade up, a little

US Equity markets were very choppy in the 3rd quarter, with little definitive direction. The large/mid-cap sector started the quarter in a continuation of the rather furious rally which started on June 3rd. This took the index to a new record of 3025 on July 26th; up 10% in less than two months. It was actually even better than that, although no less volatile. The rally started on December 26th, from a correction low of 2351, for a seven month index gain of almost 29% (plus 1% in dividends).

And that was it. The S&P quickly toppled 6% in less than a week, rose back to 3000 by mid-September, ended the quarter at 2977, and then dropped 3% in the first two days of October. Choppy, indeed, although the S&P 500 index' modest 1.7% third quarter gain resulted in its best first nine months to start a year since 1997, up almost 21%.

Figure 7: U.S. Equity Market - Size/Style Returns

		Trailing				
	<u>3Q '19</u>	1-year	<u>3-yrs</u>	<u>5-yrs</u>	<u>10-yrs</u>	
Growth						
Large Cap	2.1	3.2	17.7	14.2	15.3	
Mid Cap	(0.7)	5.2	14.5	11.1	14.1	
Small Cap	(4.2)	(9.6)	9.8	9.1	12.3	
<u>Value</u>						
Large Cap	1.4	5.2	10.2	8.0	11.1	
Mid Cap	1.2	1.6	7.8	7.6	12.3	
Small Cap	(0.6)	(8.2)	6.5	7.2	10.1	

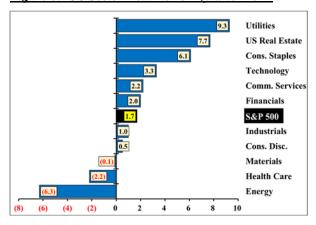
In terms of the size premium, it was completely not evident for the quarter. Quite the contrary, once again, as small cap stocks provided negative total returns while substantially underperforming large/mid-cap stocks. The small-cap growth's shortfall for the quarter was greater than value's. This has persisted during the past twelve months, with a 13% lag by small-cap versus large-cap. Market strategists generally conclude that small cap stocks have weakened so sharply over the past year on broad economic growth concerns. The old adage is, "when the economy catches a cold, small-cap stocks catch the flu."

In terms of style only, the third quarter was a risk-off market favoring value stocks, with accommodative central bank policies helping to offset concerns that an escalating trade war with China and the continuing yield curve inversion could lead to a recession.

Sector return differences in the quarter were quite broad, with a nearly 16% spread between "first and worst." The utilities, real estate and consumer staples sectors had the strongest gains, while energy and health care stocks lagged. The energy sector had the steepest declines. The bombing of two Saudi Arabian facilities in mid-September temporarily suspended half of the nation's oil production and caused global oil prices to temporarily spike.

Health care stocks retreated as discussions around drug price transparency and pricing reform by U.S. presidential candidates continued to weigh on the sector. Big pharma Pfizer and Alexion each declined by double digits, as did health care providers United Health and Anthem. In the consumer discretionary sector, Netflix had one of the lowest quarterly returns, plunging 27% after reporting slower new subscriber growth.

Figure 8: US Sector Returns -3rd Quarter 2019



Stock gains were widely disbursed. Alphabet shares soared 13%, rebounding after the company's earnings report eased concerns over slowing advertising growth. Apple shares also notched double-digit gains, boosted by record revenues from its services and wearables divisions. Consumer goods conglomerate Procter & Gamble shares climbed after reporting its highest quarterly sales gains in more than a decade.

Drilling down into style/sector valuations, small-caps finished the quarter at a "next-twelve-months" (NTM) P/E ratio of 21.7x, above their 10-year average of 20.5x but below peak P/E of 25.7x reached in September 2017. Large-growth is valued at a 21.4x NTM P/E, just off its ten-year high of 22.0x reached this past July. Large-value stocks are very cheap by comparison, with an NTM P/E of just 14.1x. This is above their ten-year average of 13.5x, but well below the 16.6x high reached in early 2017.

In earnings terms, expected 1-year earnings growth is 5.5% for large-growth stocks, -1.7% for large-value (dragged down by the energy and materials sectors), and -1.8% for small-caps. S&P financial services and health care sectors reflect the highest expected EPS growth rates next year, at 7% and 6%, respectively. Yet, they are both trading below the S&P's current 16.8x NTM P/E.

The expected near-term earnings growth leader globally, and by a large margin, is the MSCI World ex-USA <u>Small Caps</u> index (+11%). Despite this, the index trades at just a 15.2x NTM P/E, which is right on its 10-year average. (buying opportunity?)

<u>International Markets - Scarce Growth</u>

In a volatile quarter, global equity markets posted weak results. Macro-economic events pressured markets, led by the worsening US-China trade dispute and slowing global economic growth. In a bid to counter the damaging effects of increasing tariffs and declining manufacturing activity, many central banks cut interest rates. Developed (-1.1%) and emerging markets (-4.3%) both posted negative returns. Canadian markets advanced a modest 0.5%, and are up 21.6% year to date. All global equity markets are up double-digits year to date through September 30th, with the exception of emerging markets (+6.2%). Per Figure 9, the quarter's and past year's returns in US\$ terms were significantly impacted by the Dollar's strength.

Figure 9: International Equity Markets - Returns

	U.S. Dollar Returns (%)		Local Currency Returns (%)	
thru 9/30/19	<u>3Q '19</u>	<u>1-Yr</u>	<u>3Q '19</u>	<u>1-Yr</u>
World ex-USA	(0.9)	(1.0)	1.8	1.9
- MSCI Growth	(0.5)	2.4	2.2	5.2
- MSCI Value	(1.4)	(4.3)	1.2	(1.4)
- Europe	(1.8)	(0.8)	2.0	5.1
- Pacific, ex-Japan	(5.2)	3.0	(2.6)	7.5
- Japan	3.1	(4.7)	3.5	(9.3)
- United Kingdom	(2.5)	(2.9)	0.7	2.8
Int'l Small Caps	(0.3)	(5.6)	2.3	(3.3)
Emerging Mkts	(4.3)	(2.0)	(2.1)	(0.2)
- EM Asia	(3.4)	(3.9)	(2.3)	(2.9)
- EM Europe	(2.6)	10.1	0.5	11.3
- EM Lat Amer	(5.6)	6.7	0.9	12.9
- EM BRIC	(4.6)	2.8	(2.5)	3.0

Local gains in European markets (+2%) were erased by a 4% decline in the Euro versus the US\$. In Europe, the ECB's interest rate cut and relaunch of its bond-buying program moved Europe further into negative interest rate territory. Germany (-4%) teetered on the verge of recession during the quarter as its auto industry was hit hard by global trade disputes. UK stocks (-2.5%) lagged as the Brexit turmoil continued;

Defensive stocks outpaced cyclicals, led by utilities, real estate, health care and consumer staples. Energy and materials suffered the largest losses as investors remain concerned about the health of the global economy.

Within developed markets, Japan rose over 3% in the quarter, the only positive return in the Pacific region, but is off nearly 5% for the past year. Japan's economy remained weak ahead of October's tax hike, with 2nd quarter GDP growth revised down to 1.3%; raising concerns that the consumption tax hike could usher in a recession, as the last one did in 2014. Exports fell 8.2% in August and industrial production fell 1.2%.

The US and Japan reached a limited trade deal which spared the auto sector from additional tariffs. Japanese consumers have also helped mitigate weaknesses; retail sales rose 2% and household spending increased. The Bank of Japan held short-term rates steady in September, even as the US Federal Reserve and the ECB eased.

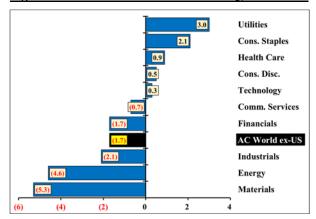
The weakest area in the Pacific was Hong Kong (-12%), as political unrest and trade disputes hit the economy hard. GDP contracted by 0.4% and exports fell 5.6%. Singapore fell -5.8%, as GDP contracted 3% in Q2. Australia (-1.4%) and New Zealand (-3%) were the least negative performing countries in the Pacific region.

Emerging markets (-4.3%) retreated on concerns over a strong US dollar, uncertainty regarding the US-China trade dispute and a weakening global economy. Chinese stocks (-4.7%) declined for the second consecutive quarter. Statemanaged banks and technology companies (Tencent, Baidu, Ctrip) led the decline. The country's slowing economy prompted the government to take steps to ease liquidity. The US and China announced further trade tariffs on each other's exports, but implementation has been delayed as a "phase one" deal might be in the making.

In contrast, Taiwan (+5.2%) was the top performing market in the region, as technology stocks (Taiwan Semiconductor, MediaTek, Largan Precision) advanced on strong demand for semiconductors and chips for 5G smartphones. Indian stocks (-5.2%) fell as the country has struggled with a liquidity crunch among non-bank lenders, which has hurt consumer spending. In an attempt to reignite growth and revive corporate spending, the government cut corporate tax rates from 30% to 22%.

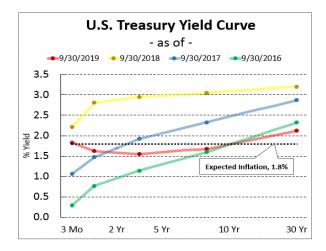
Latin America (-5.6%) was the weakest emerging market region. Brazil fell on weak commodity prices and lackluster growth. Argentine markets plunged after opposition candidate Alberto Fernandez defeated market-friendly President Mauricio Macri in primary elections. Stocks plummeted 45% and the peso fell 26%.

Figure 10: Ex-USA Sector Returns – 3rd Quarter 2019



Back Page Perspectives

What is a yield curve, and why are stock investors interested in its shape? A yield curve gives a snapshot of how yields vary across bonds of similar credit quality, but different maturities, at a specific point in time. For example, the US Treasury yield curve indicates the yields of US Treasury bonds across a range of maturities. Bond yields change as markets digest news and events around the world, which also causes yield curves to move and change shape over time. Historically, yield curves have mostly been upwardly sloping (short-term rates lower than long-term rates), but there have also been several periods when the yield curve has either been flat or inverted.



The above graph includes snapshots of the US Treasury yield curve on the last trading day of September for the past four years. Rates across the entire curve generally moved higher from 2016 through 2018, with short-term rates moving at a faster pace than long-term rates, leading to a "flattening" of the slope of the yield curve. This year, rates across the entire maturity spectrum collapsed, resulting in a rare inverted curve.

The key question for investors is whether inverted yield curves predict a future stock market decline. While the handful of instances of curve inversions in the US may concern investors, the small number of examples (only 5 since June 1976) makes it difficult to determine a strong connection, and evidence from around the world suggests investors should not extrapolate from the US experience.

The other important aspect of interest rates is the concept of *real yields*. While the nominal interest rate is the interest rate actually paid on a loan or investment, the real interest rate is a reflection of the change in <u>purchasing power</u> derived from an investment or given up by the borrower. Adjusting nominal rates to compensate for the effects of expected inflation helps to identify the shift in purchasing power of a given level of capital over time. According to the <u>time-preference theory of interest</u>, the real interest rate reflects the degree to which an individual prefers current goods over future goods.

A solid proxy for expected annual inflation is its rolling 10-year average. This has been remarkably constant at 1.8% during the past five years. Accordingly, the other big "rates" story this year is the collapse of real yields to below zero out to the 10-year maturity. Very high quality borrowers, like the Federal government, can borrow out to ten years in order to boost current consumption, without a real impact on future consumption. First time ever.

The small number of US yield curve inversions over the last 40 years makes it challenging to draw strong conclusions about the effect on stock market performance. Eugene Fama and Ken French, two Nobel laureates, expanded their analysis of this issue by looking at historical results in 5 developed countries, including the US, since 1985.

In 10 out of 14 cases of yield curve inversion, local investors would have had positive returns investing in their home markets after 36 months. That's 71% of the time. To compare, they measured 3-year local stock returns following *every* month-end between January 1985 and December 2018 in each of the five markets based on the local currency MSCI indices. The average chance of a three-year positive return in those five markets was 77%.

According to Fama and French, "these results show that it is difficult to predict the timing and direction of equity market moves following a yield curve inversion. Though the data set is limited, an analysis of yield curve inversions in five major developed countries shows that an inversion may not be a reliable indicator of stock market downturns. So, what can investors do if they are concerned about potential equity weakness? By developing and sticking to a long-term plan that is in line with their risk tolerance, investors may be better able to look past short-term noise and focus on investing in a systematic way that will help meet long-term goals." (couldn't say it better ourselves)

That said, an equity markets correction remains a real prospect. This would be quite negative for investors with ongoing distribution requirements, as forced selling into a declining market crystallizes portfolio losses. Thus, we recommend a continued strategic allocation to high quality core bonds large enough to fund required distributions "come hell or high water" during the next 3-5 years.

"Don't gamble. Take all your savings and buy some good stock and hold it till it goes up. And then sell it. If it don't go up, don't buy it."

(Will Rogers, a long time ago)

Sell high, buy low. See you next quarter!

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