THE
Retirement Report
Retirement Transition Planning

508.481.2299 www.polarisadv.com First Quarter 2019

The Most Important Financial News Of 2018

The most important financial news of 2018 was that Modern Portfolio Theory (MPT), the strategic underpinning of prudent investing, worked. Yet you just don't see front-page headlines saying conventional wisdom worked. Why? Because when what's expected to happen actually occurs, it's not news. Nonetheless, the fact that modern portfolio theory worked, just as academia has expected it would, was the most important financial news of 2018.

In January 2019, the Jubilee year of the modern era of investing, the wisdom of MPT was confirmed: A broadly diversified portfolio over the near half-century long period averaged a return annually on par with stocks but with much less risk! The data on these seven indexes representing these asset classes only goes back to 1970, which is why having another year of

Multi-Asset Portfolio

1970-2018	Large US Equity	Small US Equity	Non-US Equity	US Bonds	Cash	Real Estate	Commodities	7-Asset Portfolio
49-Year Average Annual Return	10.21	10.60	8.42	7.37	4.80	11.41	6.51	9.48
49-Year Standard Deviation of Annual Returns	16.98	21.41	21.75	6.55	3.53	18.59	24.92	10.23
Number Of Losing Years	10	15	15	3	0	9	15	7
Worst Three-Year Performance	(37.61)	(42.24)	(43.32)	4.39	0.14	(35.61)	(55.60)	(13.37)

Equity-like return with less risk

Past performance is not a guarantee of your future results.

Performance of an equal-weighted portfolio of seven assets for the 49 years through 2018 validated the theory pioneered in academic research in 1948 by Harry Markowitz. MPT holds that a broadly diversified portfolio rebalanced periodically is the best way to get equity-like returns with less risk. The Standard & Poor's index of the 500 largest publicly-held companies over the 49-years averaged a 10.21% return annually and a 16.98% standard deviation (risk rating), compared with a 10.23% risk rating and 9.48% return on a broadly diversified portfolio. This big news happened in plain sight — as it does every year — and, as always, it occurred so very slowly that it was easy to overlook. Based on monthly portfolio design research reports we license by Craig Israelsen, Ph.D., who's taught this class annually for three decades, here's what happened.

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What Are The Odds!

We've all heard that phrase before. Usually exclaiming the low probability that something happens, like winning the lottery. For many, odds (probability) is something magical, like luck. But odds are not luck, they're a well-developed math discipline used by investment managers, life insurers, casinos and many others. Their predictions work very well when combined with the "Law of Large Numbers."

Last December the markets went through a "correction." (Defined as when the combined average prices of securities drop at least 10 %.) While we can't accurately predict when these events will occur, we can say the "odds" are high we'll have about eight or nine of them each decade. We can also observe that over most decades, US Stock markets average around 6% to 8% returns.

But like corrections, average returns, or any other odds based predictions, individual years and even individual decades can differ widely. It's only about the long term averages that probability informs us. Knowing this is the key to successful investing, just as it provides assurances to insurance companies and casinos that their financial risks are under control. There are no guarantees with probability, of course, but a lot of financial entities have used these math principals for decades to successfully run their businesses.

We talk more about how we use probability building our portfolio in our attached quarterly letter.

Be Well;

Ric, Trang, Greg and Tricia

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Sun Starts Setting On Solar Tax Credit From Uncle Sam

The sun is shining on the tax credit for solar power but this federal tax credit that lightens your tax burden significantly starts sunsetting in 2020.

The good news is that the cost of solar panels and equipment is dropping, down about 6.5% in 2018, and putting in solar panels can cut your utility bills by a lot. The bad news is the upfront cost isn't cheap — an average of $13,188 in 2018, according to EnergySage, a marketplace for solar equipment.

Luckily, federal tax credits can cut your cost. That $13,188 upfront cost is after taking the tax credit. Far more valuable than a deduction against your taxable income, a credit reduces your tax dollar for dollar. But you better hurry to beat the phase-out of the credits.

Currently, the tax credit reduces the net cost of a solar system in residential and commercial properties by 30%. In 2020, that drops to 26%, and drops again in 2021 to 22%. The credit then zeroes out in 2022. The break for commercial use does remain, but only at 10%.

One small saving grace is that some states, local governments, and utilities also offer rebates and other tax incentives that can further lower the solar system costs. In the meantime, while the credit lasts, qualifying expenses include the panels themselves, the wiring to connect them to your home electrical system, and the cost of the labor in the installation.

If you don't have a big enough tax liability to use the full credit to cut your tax bill, the amount left over can be carried forward to the next tax year. The home served by solar power does not have to be your principal residence, and no limit is placed on the dollar amount of your credit, which is good if you own a large home.

A caveat: Should you rent out your home for part of the year, you have to reduce the credit for the time you're not present. In an example from TurboTax, if you live in the house for just three months, your credit is one quarter of the amount you'd benefit by had you lived in the place year-round: So, for a system costing $10,000, the 30% credit is $3,000, but you as a part-time resident and landlord get only $750. Rent out the house for the entire year, and you get zilch.

Certainly, some systems cost more than others. For instance, if you have a rectangular south-facing roof, your installation is simple. Yet if the roof is broken up by dormers, skylights and multiple levels, putting in a system is trickier, and more expensive. Nonetheless, whatever you end up paying, the shiniest deals are available now, so you may want to act before the sun starts to set on solar tax credits from Uncle Sam. ●

Sidestepping New Limits On Charitable Donations

If you think you're no longer allowed to deduct items like charitable donations on your income tax return, think again.

The new tax law doubled the standard deduction, slashing the number of Americans eligible to itemize deductions from 37 million to 16 million.

However, if you are among those who will lose your ability to deduct charitable donations, there is a simple strategy for managing the new limits on charitable giving, and it enables you to continue doing good while doing well for yourself by reducing your tax bill.

The strategy is simple: bunch a few years of donations into a single tax year instead of making them annually.

Rather than report charitable donations on your tax return every year, you bunch two or more years of contributions into a single tax year — enough to boost the charitable total above that year's standard deduction.

Say you're married and you give $10,000 in Year 1, $6,000 in Year 2 and $10,000 in Year 3. Your $26,000 total surmounts the $24,000 eligibility. If you deduct the total donations of $26,000 in Year 3, you

Retirement Income Portfolio Survival

As financial professionals, we believe understanding the dynamics of retirement income portfolio risk can be crucial to investment success. The survivability of five hypothetical retirement portfolios over the 20-year period ended December 31st, 2018 shown in the accompanying table is not intended as investment advice but is intended to help clients better understand retirement portfolio risk and conquer perhaps the worst of all financial fears: running out of money in retirement. The data is based on a continuing professional education session by Professor Dr. Craig Israelsen, an independent economist whose research we license.

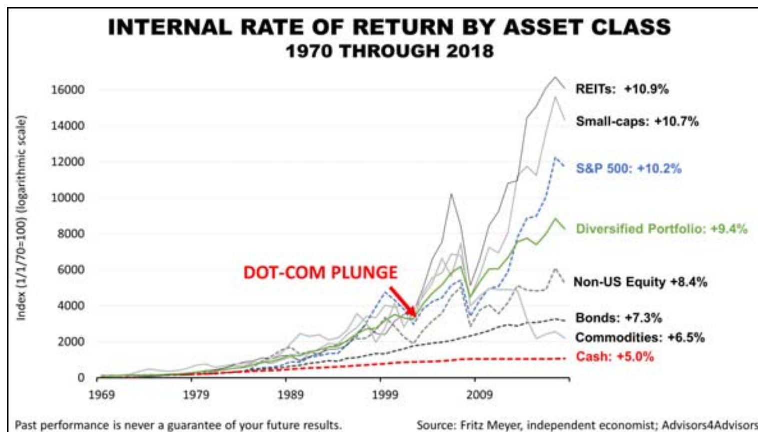
The results of the five portfolio risk levels illustrated a range from very conservative to aggressive. All five portfolios assume a retiree withdrew 5% of the portfolio value annually, and annually increased withdrawals by 3% to keep up with inflation. Pick whichever starting balance — $250,000, $500,000 or $1 million — best applies to your situation.

Retirement Portfolio Survival Analysis
20-Years Ended Dec. 31, 2018

Risk Level	Asset Allocation	20-Year IRR (%)	Starting Balance: $250,000 Withdrawn $335,880	Starting Balance: $500,000 Withdrawn: $671,760	Starting balance $1M Withdrawn: $1,343,520
				BALANCE AFTER 20 YEARS ($)	
Very Conservative	100% Cash	2.09	-3,538	-7,077	-14,154
Conservative	50% Cash/50% Bonds	3.37	53,562	107,124	214,248
Moderate	60% US Stock/40% Bonds	4.76	137,933	275,867	551,734
Moderate	12-Asset Portfolio	7.29	379,494	758,987	1,517,974
Aggressive	100% US Large Stock	2.69	20,778	41,556	83,113

Past performance is never a guarantee of your future results. Source: Craig Israelsen, Ph.D., Advisors4Advisors, Jan. 31, 2018.

What stands out is that the most diversified of the five portfolios outperformed considerably — broad diversification worked! That diversification worked may come as no great surprise; conventional wisdom and academic research hold that diversifying is wise. Remarkably, diversification worked even though this was a 20-year period of low returns on stocks.



Past performance is never a guarantee of your future results. Source: Fritz Meyer, independent economist; Advisors4Advisors.

Stocks, a riskier investment in a retirement portfolio, showed an internal rate of return over the 20 years of just 2.69% — only six-tenths of 1% better than the least risky of the five portfolios, the one 100% invested in short-term Treasury Bills.

Why did stocks perform so poorly? The 20-year period started in 1999, at the peak of the dot-com bubble. The Standard Poor's 500 index did not recover until 2006, and then it dropped again in the bear market of 2008. A retiree picked a terrible 20 years to be an aggressive investor 100% invested in stocks.

Over the much longer 49-year period, stocks did outperform cash by a huge amount and they also outperformed a diversified portfolio.

The point is that even in this terrible period for stocks, the growth engine of a retirement portfolio, a broadly diversified portfolio outperformed. The next 20 years are likely to be as unpredictable as the last 20 years, but this illustrates how broad diversification helped a retirement portfolio survive through a period in which stocks performed unexpectedly poorly. ●

Disclosure

These are the indexes that represent the ETFs used in the Passive 7Twelve® Portfolio.
Calculations By Craig Israelsen, Ph.D., Raw data source: Steele Mutual Fund Expert.
Performance reflects performance of the following indexes:

US Large cap	S&P 500 Index (TR)
US Mid Cap	S&P Midcap 400 Index (TR)
US Small Cap	S&P Small Cap 600 Index (TR)
Non-US Developed	MSCI EAFE Index NR USD
Emerging	MSCI EM Index GR USD
Real Estate	S&P Global REIT Index TR USD
Natural Resources	S&P North American Natural Resources Index TR
Commodities	Deutsche Bank Liquid Commodity Optimum Yield Diversified Commodity Index Total Return
US Bonds	Barclays US Aggregate Bond Index TR USD
TIPS	Barclays U.S. Treasury US TIPS Index TR USD
Non-US Bonds	Barclays Global Treasury Index TR
Cash	USTREAS Stat US T-Bill 90 Day TR

INTERNAL RATE OF RETURN BY ASSET CLASS LINE CHART 1970 THROUGH 2018
Performance reflects performance of the following indexes:

Small-cap US equity represented by the Ibbotson Small Companies Index from 1970-1978, and the Russell 2000 Index starting in 1979. Non-US equity represented by the MSCI EAFE Index. Real estate represented by the NAREIT Index from 1970-1977 and the Dow Jones US Select REIT Index starting in 1978. Commodities represented by the Goldman Sachs Commodities Index (GSCI). As of February 6, 2007, the GSCI became the S&P GSCI Commodity Index. U.S. Aggregate Bonds represented by the Ibbotson Intermediate Term Bond Index from 1970-75 and the Barclays Capital Aggregate Bond index starting in 1976. Cash represented by 3-month Treasury Bills.

can take the standard deduction in Years 1 and 2 and itemize in Year 3.

Instead of giving in dribs and drabs, you will need to plan your giving strategy, but this will allow you to give as much as you used to before the limits without losing the tax benefits.

And if you can plan to make the larger donations in a year when you expect higher income, bunching charitable donations can be even more effective in lowering your tax bill.

We'll be speaking with clients about this in the months ahead because this tactic does take some planning in advance.

If you have any questions about your personal situation, please do not hesitate to give us a call. ●

The New Math Of Renting Out A Vacation Home

If you've ever thought about becoming a landlord, here's an update on recent tax breaks that changed the equation for weighing whether to rent a property or be the sole tenant throughout the year.

If you bought a home in 2018, only the first $750,000 of the mortgage interest is deductible, down from $1 million under the old rules. But a rental property is not subject to these limits.

While the math of renting out your place may not have worked before, you may want to look at it again. Your mortgage could be several million dollars, but you'd still be able to deduct *all* of the interest on it — just as you did before the new law. If you live in the residence for part of the year and rent it out for the rest, you're entitled to a partial break.

Another advantage for rental property owners is that you can now deduct only $10,000 in state and local income tax and property tax annually on a home if you are not renting it out. But if you rent out a property for at least 15 days a year, you can take a deduction on part of the property taxes paid.

A homeowner who pays $12,000 in property levies annually, for example, may deduct only the first $10,000. Renting out that property for three months qualifies you for a deduction on 25% of property taxes paid, or $3,000, and you could separately deduct the other $9,000 in property taxes paid.

Rental property owners also get a break on making home improvements. Under tax reform, landlords may immediately deduct capital spending on equipment and machinery. Gone is the requirement to take the break over many years. If you install a new kitchen in a rental property, for instance, it's deductible all at once.

Becoming a landlord is fraught with issues beyond finances, chief among them: privacy. Letting others invade your personal space literally is no small decision and a very personal one. However, the economics of renting out a vacation home have changed, and you may want to reconsider your options.

In the era of Airbnb, deciding to rent a vacation home requires advice from a professional who understands the strategic tax and financial planning as well as your personal situation. Please give us a call if you have any questions. ●

Important Financial News Of 2018

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data supporting the theory is important confirmation that this relatively new theory explaining investing is correct. Despite the stagflation of 1970s, high inflation of the 1980s, boom and tech crash of the 1990s, the credit bubble and financial crisis of 2008, and current uncertainty, a prudent course of moderation and quantitative analysis has worked as expected for another year.

The 9.48% total return on the diversified portfolio is comparable to the return on a 100% large stock portfolio, the best return of the seven assets, but the diversified portfolio's risk was much lower. The third-best return across the seven types of asset classes was the 8.42% annualized return on non-U.S. equities, which was an equity-like return, but its 21.75% standard means it carried more than twice the price risk of the diversified portfolio.

The number of losing years and worst three-year performance also add context for understanding the relative risk of the seven asset classes versus the equal-weighted diversified combination of the seven types of assets. In seven of the 49 years, the diversified portfolio suffered negative returns versus 15 losing years on the top-performing asset class, and the worst three-year loss was 13.37% on the diversified portfolio, much lower than the 37.61% drawdown on the S&P 500.

Although the news that a broadly diversified portfolio from 1970 through 2018 worked just the way conventional wisdom said it would did not make headlines, it was the most important financial news story of 2018. ●

Past performance is not a guarantee of your future results. Calculations by Craig Israelsen, Ph.D. Indices are unmanaged and not available for direct investment. Investments with higher return potential carry greater risk for loss. Raw data source: Steele Mutual Fund Expert. Asset class and style data reflects performance of the following indexes: US Large Cap: S&P 500 Index (TR). US Mid Cap: S&P Midcap 400 Index (TR). US Small Cap: S&P Small Cap 600 Index (TR). Non-US Developed: MSCI EAFE Index NR USD. Emerging: MSCI EM Index GR USD. Real Estate: S&P Global REIT Index TR USD. Natural Resources: S&P North American Natural Resources Index TR. Commodities: Deutsche Bank Liquid Commodity Optimum Yield, Diversified Commodity Index Total Return. US Bonds: Barclays US Aggregate Bond Index TR USD. TIPS: Barclays U.S. Treasury US TIPS Index TR USD. Non-US Bonds: Barclays Global Treasury Index TR. Cash: USTREAS Stat US T-Bill 90 Day TR.

Polaris Advisors, LLC • www.polarisadv.com
550 Cochituate Road, East Wing, 4th Floor, Suite 25, Framingham, MA 01701 • P (508) 481.2299 • F (508) 655.4066
25 Braintree Hill Road, Suite 200, Braintree, MA 02184 • P (781) 431.9432 • P.O. Box 3036, Wakefield, MA 01880
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