POLARIS
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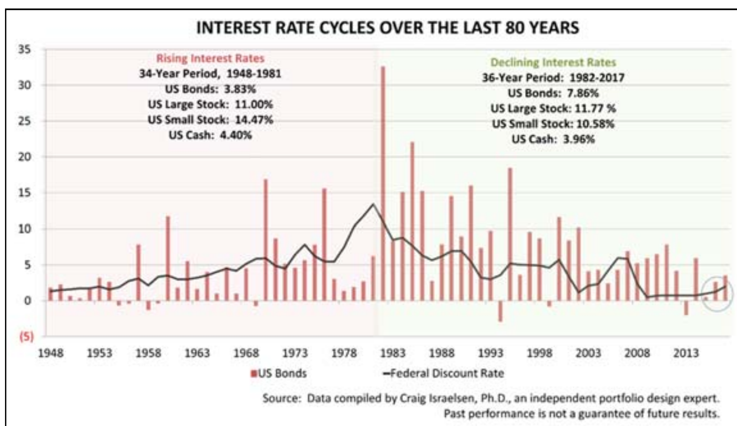
The Interest Rate Inflection Point And Your Portfolio

Interest rates are on the rise, and that means bond prices will decline. Here's a summary of financial history since World War II demonstrating how long interest rate cycles last and how it is likely to affect you.

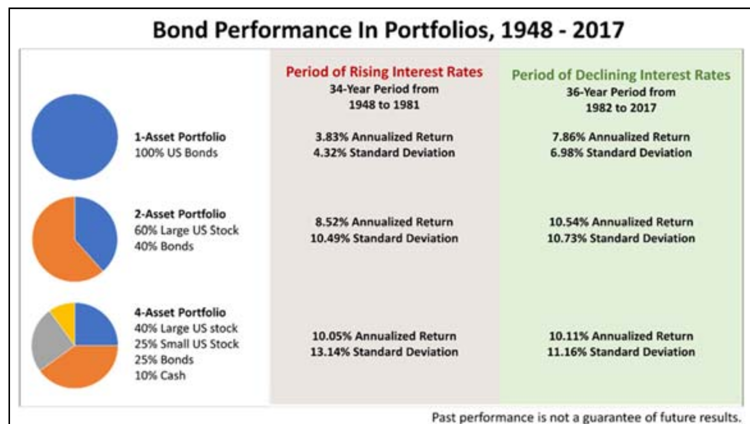


From the end of World War II to 1981, interest rates rose, as is shown in the black line in the chart. Of course, when interest rates rise, bonds prices fall because bonds paying less than the new, higher rate are less desirable and their prices adjust downward. Thus, from 1948 to 1981, the average annual return on bonds was just 3.83% annually.

Now look at what happened since the declining rate cycle began in 1982 through the end of 2017. As interest rates moved lower, the prices of bonds climbed. Bonds returned an annual average of 7.86%, for this 36-year period. Which brings us to where we are today.

Interest rates started moving up about two years ago, which means bond holdings declined in value. The Federal Reserve, which controls short-term rates — the black line — will continue to push rates higher for many years, if history is a guide. In fact, amid the strengthening economy, the Fed says it expects to ratchet rates higher again and again in 2018.

For investors who, over three decades, have grown accustomed to bonds appreciating at a rate rivalling



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Investment Markets Include Both Stocks And Bonds

Most people are aware of the US stock market, but very few are aware of the US bond market. Yet the size of the US bond market exceeds the size of the US stock market ($40 trillion to $30 trillion).

But bonds are not CDs. They generally mature (get repaid) in 3 to 30 years, exposing bond owners to what's called "Interest Rate Risk." That's the risk you take when you buy a long-term bond at x%, only to find that next year the same bond is being sold at x+1%. If you waited, you could have gotten a higher interest rate, but instead you're stuck for many years at the lower one.

The flipside of this is when interest rates decline. In that case your older bond looks like a good move. If it's not due for many years, it will actually increase in value as its higher rate would be attractive to new investors.

At Polaris we mix stocks and bonds in most of our clients' accounts. This is because the price action of one tends to offset the other. In other words, we add stability to our accounts when we get half our return from stocks and the other half from bonds. Our lead article this quarter delves further into the workings of the bond market, illustrating its long term behavior since 1948. This knowledge is important when viewing the performance of our balanced accounts, especially in light of the returns of 100% stock-only indexes that the nightly news is reporting.

You'll find more insight in our quarterly letter.

Stay Well,

Ric and Trang

Past performance is no guarantee of future returns. Investing involves risk and possible loss of principal. No advice may be rendered by Polaris Advisors without an in force client agreement. Information is believed to be from reliable sources, but we make no representations as to completeness or accuracy. Opinions expressed are subject to change without notice.

Key Facts On Deducting Medical Expenses

Medical expenses can run up your expenses a lot. For that reason, the new tax law gives people a break by sweetening the long-time tax deduction for health care, at least for a couple of years.

Before the Tax Cuts and Jobs Act (TCJA), you could deduct medical expenses that exceeded 10% of your adjusted gross income (AGI). For the tax years of 2017 and 2018, the TCJA lowered the threshold to 7.5%. AGI is taxable income minus all deductions, IRA contributions and student loan interest. Of course, the medical tax break is available only to people who itemize.

The trouble is the more generous deduction expires after 2018, when the threshold rises back to 10%. Groups like AARP are lobbying in Washington to get the 7.5% level extended or made permanent, and that could factor into your timing and decisions about medical expenses in the months ahead.

Say your AGI is $45,000 and you rack up $5,475 in medical costs. You multiply $45,000 by 0.075 (7.5 percent) to get your deduction threshold of $3.375. Only medical expenses above $3,375 would be deductible. Result: your medical expense deduction is $2,100 ($5,475 minus $3,375).

Some big-ticket items are deductible medical expenses, like long-term care insurance premiums, nursing home payments and Medicare costs — including Medicare Part B, Medigap policies, Medicare Advantage programs and Part D Prescription plans.

In addition, any health insurance you pay out of pocket can be deducted. But that can't include coverage you pay for with before-tax dollars, which is often the case with employer-sponsored medical plans.

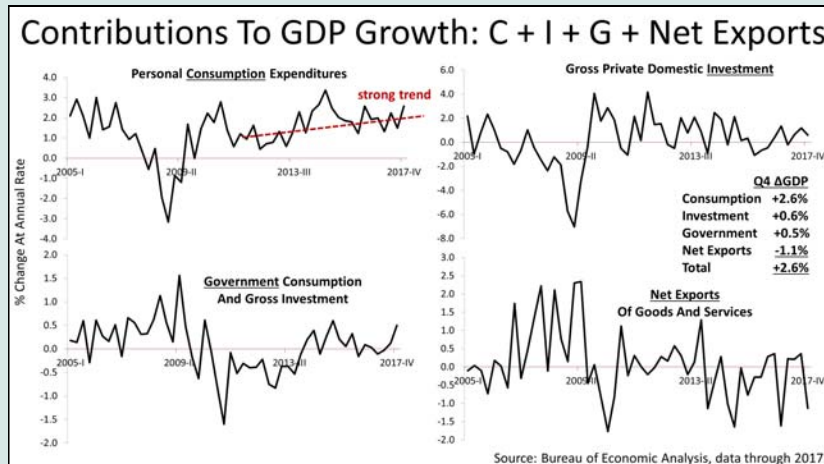
Another big deductible item is co-payments for prescription drugs — and also out-of-pocket fees for doctors, dentists, physical therapists and other health-care professionals not covered by Medicare or any other health insurance. Add in prescription eyeglasses, hearings aids and wheelchairs, and transportation costs to and from medical appointments, as well as alcohol and drug treatment programs.

Medical expenses are deductible only if they alleviate or prevent a physical or mental defect or illness, including dental and vision. So, you cannot deduct a gym membership if it is to promote your general wellness. However, if a doctor diagnoses you with a specific medical condition, such as obesity or hypertension, then the expense of the prescribed treatment may indeed be tax-deductible, including a gym membership. ●

A Bright Outlook For Consumer Spending

Investing prudently requires understanding economic fundamentals. Here's some insight into current economic conditions and the kind of ongoing analysis required to manage wealth prudently for the long term over up and down economic cycles.

The economy is measured quarterly in terms of gross domestic product (GDP), which is the sum of four factors: consumption, investment, government and net exports. Consumer spending is by far most important, accounting for 69% of U.S. economic activity. The key to strong economic growth, then, is a strong American consumer.



In the final quarter of 2017, net exports were a drag on GDP growth. However, net exports are volatile month-to-month and its dips have been followed repeatedly by surges over the past two cycles of the economic expansion and recession that occurred since

You Don't Need Perfect Knowledge To Invest Well

If you had the power to predict which one of 12 types of investments representing a wide range of assets was going to be No. 1 every year for each of the 15 years from 2002 through 2016, you would have averaged a 29.9% annual return.

Of course, no one has the power to predict which investments will be No. 1 every year. Surprisingly, accepting that you cannot predict the future and maintaining equally-weighted positions in the same 12 types of investments in the same period averaged a 7.5% annual return with less volatility.

To be clear, to get that 29.9% return every year from 2002 through 2016, you would have had to invest 100% of your portfolio in the No. 1% asset class on January 1 and held it until the end of the year, and then bought the coming year's leader. The yellow boxes highlight the No. 1 asset classes in each of those 15 years. On January 1, 2003, you would have had to choose which one of the 12 types of investments would be No. 1 again, and you would have had to do that annually for 15 years to average a 30% return.

It's obviously totally unrealistic to have expected this. It would take a miracle to pull this off!

However, even more miraculous is that common sense, an understanding of the history of investing, and rebalancing annually, achieved an annualized total return of 7.5%, and that may be enough to achieve your financial goals in life.

This approach to investing is grounded in a large body of academic research developed over the past 70 years, generally called "modern portfolio theory." It's an approach we believe has merit, and it is very different from trying to predict the future or picking next year's No. 1 performer.

The lesson here is that you do not need perfect knowledge to succeed financially in life. You do not need a miracle in your portfolio. Sticking with a plan for the long-term that is not based on miracles but, rather, on moderation, may be enough to pay for all you need in life.

Withdrawing money from leading investments and deploying it in lagging types of assets to reset a portfolio back to equilibrium at the end of every year, lowered the risk of this portfolio and returned enough to enable financial independence.

It's counterintuitive but those are the facts. The data is from Dr. Craig Israelsen, an expert of low-expense portfolio design, whose research we license to share with you. Of course, past performance is not a guarantee of your future results and diversification neither assures a profit nor guarantees against loss in a declining market. Nor is a quantitatively-driven discipline infallible.

If You Had Perfect Knowledge And Picked The Top Asset Class Annually

29.88% Annualized, 2002 Through 2016

Year	Large U.S. Stock	Midcap U.S. Stock	Small-Cap U.S. Stock	Developed Non-U.S. Stock	Emerging Non-U.S. Stock	REIT	Natural Resources	Commodities	U.S. Bonds	TIPS	Non-U.S. Bonds	Cash
2002	(22.12)	(15.77)	(14.63)	(15.61)	(6.00)	7.88	(13.00)	22.01	10.25	16.57	19.59	1.65
2003	28.39	35.20	38.79	38.45	56.28	38.96	33.63	25.56	4.10	8.40	14.78	0.90
2004	10.75	16.14	22.65	19.75	25.95	33.80	24.24	36.38	4.34	8.21	10.33	1.11
2005	4.79	12.17	6.20	13.39	34.54	12.00	35.79	27.83	2.43	2.65	(6.66)	3.01
2006	15.69	10.05	19.40	26.00	29.53	35.20	16.30	11.47	4.33	0.29	6.44	4.88
2007	5.39	7.64	(6.96)	10.97	39.05	(16.38)	33.82	31.34	6.97	11.46	10.57	5.14
2008	(36.97)	(36.38)	(31.99)	(43.14)	(52.77)	(36.98)	(42.78)	(30.80)	5.18	(2.52)	4.41	2.77
2009	26.42	36.87	30.52	31.41	76.28	29.76	36.92	15.08	6.03	11.38	6.51	0.53
2010	14.93	26.17	24.97	7.52	18.99	28.44	23.23	11.86	6.51	6.10	4.13	0.06
2011	2.06	(1.99)	(4.05)	(12.18)	(18.68)	8.62	(7.81)	(2.71)	7.72	13.40	3.60	0.04
2012	15.84	17.58	18.78	17.22	18.84	17.67	1.71	3.31	4.04	6.80	5.85	0.04
2013	32.21	33.08	36.57	22.62	(5.00)	2.42	15.89	(7.57)	(2.15)	(8.65)	(3.66)	0.02
2014	13.53	9.42	10.55	(5.04)	0.60	30.29	(10.21)	(28.18)	1.32	(1.17)	8.83	0.01
2015	1.34	(2.40)	(4.67)	(0.90)	(15.35)	2.36	(24.52)	(18.64)	0.92	(0.15)	1.08	0.05
2016	11.80	20.33	24.80	0.96	11.75	8.53	30.13	4.27	1.42	2.69	4.67	0.33

Past performance is not a guarantee of your future results. Source: Dr. Craig Israelsen

However, with stocks appreciating sharply in 2017 and early 2018, be sure you are rebalancing properly. You can call on us for prudent portfolio management based on economic fundamentals and quantitative analysis or with any questions about your portfolio. ●

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

January 2002.

Government spending, which includes state and municipal expenditures, has been on the rebound after suffering years of cutbacks in The Great Recession and its aftermath. With real incomes rising since the financial crisis, tax receipts have risen and state and local government spending grew, which has been a positive factor in GDP growth in recent years.

However, business investment and government spending are together not even half as important a factor in growth of the U.S. economy as consumers. If consumers keep spending, the good times for the U.S. could keep on rolling, and there is some reason for optimism on that score.

Consumer strength rose in closing out the year, according to the most recent data, extending the strong growth trend line (in red) experienced in recent years. In addition, in February, a lower rate of withholding federal taxes on employee paychecks kicked in, and that is putting more money in consumers' pockets to spend. That could show up in GDP growth figures to be released in early April 2018.

Economic growth shows up in profits of companies and is the key determinant in the value of stocks. Profit expectations at the Standard & Poor's 500 companies grew sharply in the opening quarter of 2018, according to independent economist Fritz Meyer, and the outlook for consumer strength was bright despite an 11.8% correction. ●

10 Things: New Education Tax Breaks For A Child Or Grandchild

1. If you have a child or grandchild, for the first time ever, you can now pay tuition for kindergarten through 12th grade at private, public or religious schools with money saved in tax-advantaged 529 college savings accounts.

2. Thanks to the Tax Cuts And Jobs Act (TCJA), you now can draw up to $10,000 tax-free per student from a 529 plan, which is a tax-advantaged program sponsored by states, state agencies, and educational institutions.

3. While your contributions to a 529 plan are not deductible, earnings grow free of federal income tax on withdrawals to pay for qualified school expenses.

4. You are not limited to 529 plans sponsored by your state. You can choose from a long list of 529s sponsored by other states and choose the right one for you. Call us if you want help with this.

5. A big relief is that the new law leaves the student loan interest deduction unchanged at $2,500. Some lawmakers wanted to scrap it, but the majority rallied to the tax break's defense. Americans owe some $1.48 trillion in student debt, and it's definitely a thing to watch.

6. When student loans are cancelled due to death or disability, they now become tax-exempt. Till now, the debt would be added to the income of a deceased or disabled individual. This new tax benefit is not retroactive, and only affects loans taken from 2018 through 2025. Congress may choose to extend this tax break.

7. The TCJA axes taxes on alimony payments, so custodial parents should have it easier qualifying for need-based aid. Their income won't be as high as what's reflected in tax records, which is what federal aid officials rely on to determine who to help and by how much.

8. Tax deductions for interest on home equity loans and lines of credit were eliminated. These are major sources of education funding, businesses, and a range of other expenses. It's gone.

9. The new federal levy on colleges with big endowments could result in still-higher tuition costs.

10. Education tax breaks were boosted overall by the TCJA, but you almost must be a financial professional to manage the complexities of funding the education of a child tax-efficiently and with low investment expenses. ●

Interest Rate Inflection Point

(Continued from page 1)

stocks, the future seems likely to be very different, which especially affects the demographic bubble of baby-boomer retirees, who have long favored bonds for producing reliable income.

To understand the effect the new rising rate cycle might have on your portfolio in the years ahead, this table gives you the key facts.

The 11% annual return on stocks and the return of about 4% on Treasury Bills stayed approximately the same through both the rising and falling interest rate cycles. However, the 3.8% average annual return on bonds in the rising rate cycle from 1948 to 1981 was less than half the 7.86% annually averaged on bonds during the 1982 to 2017 period. This poses a new kind of risk that many investors have never experienced before.

During the rising rate cycle, when the average annual return on bonds was a measly 3.83%, stocks and 90-day Treasury Bills averaged about the same annual return as they did in the falling rate cycle. The performance of stocks, bonds, and cash over this period demonstrates why diversification and a strategic approach are so important to long-term investing.

Shorter maturity bonds — due in three- to seven-years, as opposed to 10, 20, or 30 — are less susceptible to interest rate risk than longer maturity bonds with more years to run paying your interest before returning your principal.

These illustrations do not reflect the impact of inflation, which adds another dimension and requires a separate discussion. The takeaway here is that rates may be at the start in a new long-term cycle and clients can rely on our advice on the best way to manage this risk. Please do not hesitate to contact us with questions. ●

Large-cap US equity represented by the S&P 500 Index. 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.

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