

## Under the Macroscope: When Stocks and the Economy Diverge

Do you find it puzzling when a bleak economic report emerges from the press, only to be accompanied by a positive surge in the stock market? You're not alone. The last few weeks have produced many examples of a stark contrast between stock market performance and economic indicators. So why the apparent disconnect?

Markets are **forward-looking**, meaning current asset prices reflect market participants' aggregate expectations. Those expectations include whatever future economic developments are anticipated and their potential impact on cash flows, which are key to a stock's value. For example, if the market expects the economic environment to weaken company cash flows, stock markets may react well in advance of when we observe the impact on cash flows, as expectations are embedded in prices. And the eventual direction of the stock market will depend on how the economic outcome compares to expectations. If things aren't as bad as expected, poor economic news can be greeted with a positive stock reaction.

### Looking Ahead

We can see this anticipatory nature of markets in action by looking at the relation between US gross domestic product (GDP) growth and equity premiums (stock market returns in excess of one-month US Treasury bills). Looking at the two variables in each year from 1930 through 2019, there is no discernable relation between the two. However, if you compare GDP growth against the previous year's equity premium, there is in fact a correlation. The positive trend suggests market prices have reacted to changes in GDP but have done so in advance of these economic developments coming to fruition. This result is consistent with markets pricing in their expectation of economic growth. To put it another way, changes in GDP have not been strongly related to simultaneous stock market returns – but

rather the equity return changes come before economic (i.e., GDP) changes.

That brings us to the latest news headline worrying some investors: the eventual fallout from increasingly large US government expenditures designed to ease the economic burden of the COVID-19 pandemic. Will these efforts ultimately create a financial burden for the US government that affects future stock returns?

The results in the below chart should help allay concerns over the debt level impacting equity market performance. When we sort countries each year on their debt-to-GDP for the prior year (top panel), average annual equity premiums have been slightly higher for high-debt countries than low-debt countries in both developed and emerging markets. However, the return differences' small t-statistics—a measure of the precision of a value's estimate – suggest these averages are not reliably different from one another.

The top panel uses prior year debt-to-GDP data to sort countries into the high/low groups. But investors may be more focused on where they expect the debt to end up, rather than on where it's been. In the bottom panel of the table, we

	Developed Markets (1975–2018)	Emerging Markets (1995–2018)
<b>Prior Year Debt/GDP</b>		
High-Debt Countries	8.14%	10.42%
Low-Debt Countries	6.57%	8.68%
Difference	1.57%	1.74%
t-statistic	0.63	0.49
<b>Same Year Debt/GDP</b>		
High-Debt Countries	7.94%	8.28%
Low-Debt Countries	7.06%	9.22%
Difference	0.88%	-0.94%
t-statistic	0.41	-0.25

\*Researchers often cite a t-statistic value of 2.0 as the threshold for statistical reliability.

rank countries on debt-to-GDP at the end of the current year, assuming perfect foresight of end-of-year debt levels. Again, average equity premiums have been similar for high- and low-debt countries. Like the results for GDP growth, these results imply that markets have generally priced in expectations for future government debt.



### Markets at Work

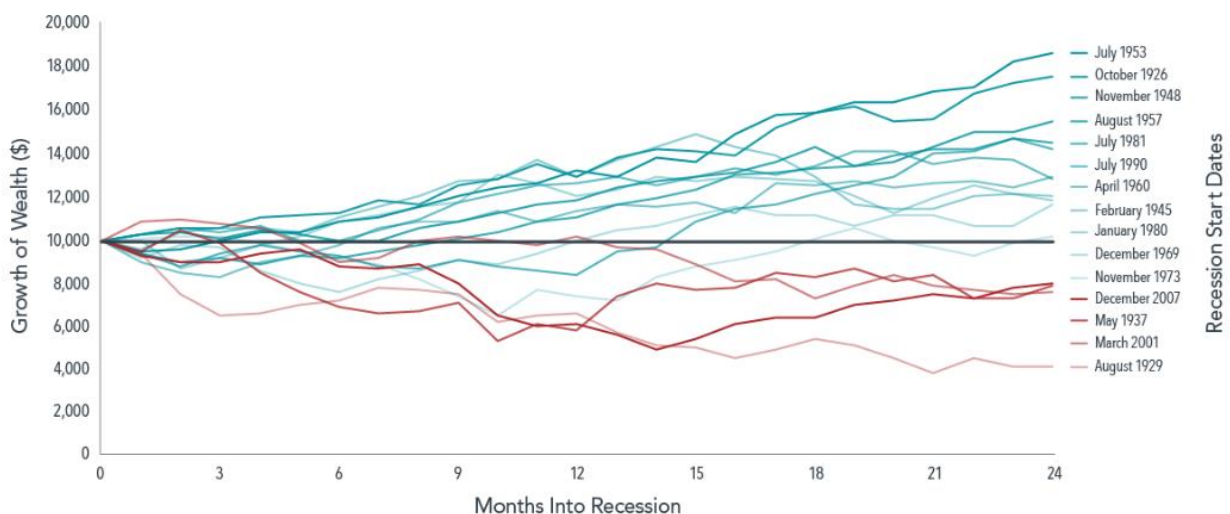
Macroeconomic variables and investment decisions are like frozen turkeys and deep fryers—caution should be exercised when combining the two. The results presented here are consistent with markets aggregating and processing vast sets of macroeconomic indicators and expectations for those indicators. By incorporating this information into market prices, we believe public capital markets effectively become the best available leading macroeconomic indicator.

## Long-Term Investors, Don't Let a Recession Faze You

With activity in many industries sharply curtailed in an effort to reduce the chances of spreading the coronavirus, some economists say a recession is inevitable, if one hasn't already begun.<sup>1</sup> From a markets perspective, we have already experienced a drop in stocks, as prices have likely incorporated the growing chance of recession. Investors may be tempted to abandon equities and go to cash because of perceptions of recessions and their impact. But across the two years that follow a recession's onset, equities have a history of positive performance.

Data covering the past century's 15 US recessions show that investors tended to be rewarded for sticking with stocks. The below chart shows that in 11 of the 15 instances, or 73% of the time, returns on stocks were positive two years after a recession began. The annualized market return for the two years following a recession's start averaged 7.8%.

Recessions understandably trigger worries over how markets might perform. But history can be a comfort for investors wondering whether now may be the time to move out of stocks.





## Exciting Rockwood Wealth Updates



Rockwood is pleased to welcome two new members to the team. **Mike Byrne, CFP®**, a Private Client Advisor comes to us from the Pitcairn

multi-family office where he developed his wealth management skills with a focus on the behavioral side of financial planning. He has a degree in Finance from the University of Delaware. In his free time, Mike enjoys traveling and spending time outdoors with his two dogs. **Cat Morgan**, a Financial Planning Associate, started her career as an organic chemist in R&D at a flavors and fragrances company before her budding interest in personal finance brought her

to Rockwood. With degrees in sociology and chemistry from The College of New Jersey, Cat is currently working on her CFP® certification. Cat enjoys hiking, yoga, and skiing.



Rockwood is also pleased to announce that four of its planners – **Maureen Gribb, John Hagan, Alaina Masler**, and **Craig Morgenstern** – have all met the requirements to use the CFP® designation. We are extremely proud of their commitment to continuing their education and to serving clients.

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