the Plan

FINANCIAL PLAN INC.
2115 Barkley Blvd, Suite 101
Bellingham, WA 98226
p (360) 714-1234
f (360) 738-3125
www.FinancialPlanInc.com

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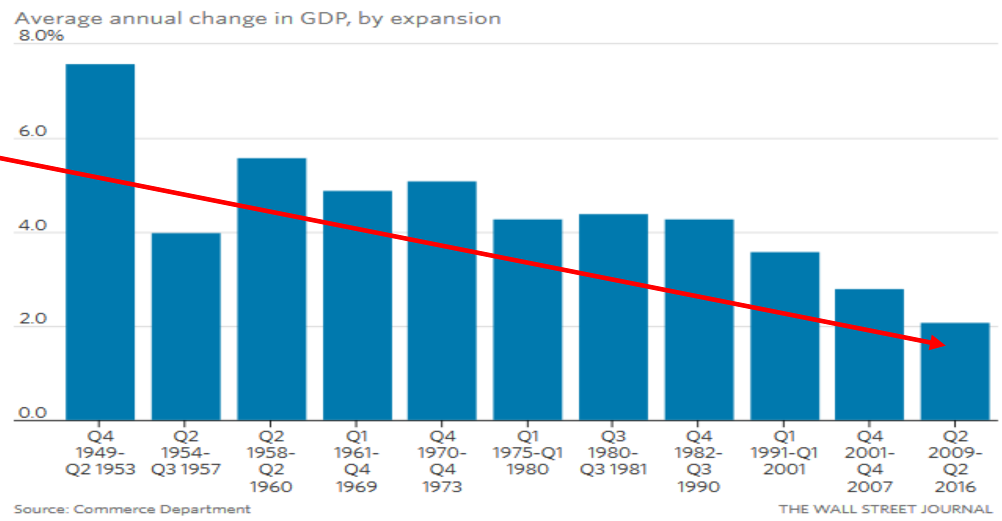
Is Economic Growth a Reliable Indicator of Future Equity Returns?

James B. Twining, CFP

We recently learned that the US economy has grown at a 2.1% annual rate since the recovery began in 2009. This pace of expansion has been the weakest of any in modern times:



It seems to make sense to treat economic growth as an indicator of future equity returns. However, the relationship between economic growth and returns in the historical data has been shown to be weak.

This should not come as a surprise given that returns are determined by discount rates and investors' aggregate expectations of future growth and cash flows. Surprises relative to those expectations, whether positive or negative, may cause realized returns to differ from expectations. A relevant question for investors is whether their view of global growth should impact how they invest. The answer may be illuminated by evaluating the following data:

Equity Returns and Economic Growth in High and Low Growth Countries

	Developed Markets (1975–2014)		Emerging Markets (1995–2014)	
	Average annual return	Annual standard deviation	Average annual return	Annual standard deviation
Prior Year Economic Growth				
High growth countries	12.00%	19.01%	12.57%	38.88%
Low growth countries	13.14%	21.20%	12.91%	34.85%
Difference	−1.14%	—	−0.34%	—
t-statistic[4]	−0.47	—	−0.08	—
Same Year Economic Growth				
High growth countries	11.23%	19.38%	13.47%	37.17%
Low growth countries	13.17%	21.63%	11.42%	36.20%
Difference	−1.94%	—	2.04%	—
t-statistic	−0.74	—	0.67	—

Sources: World Bank, MSCI, International Finance Corporation (World Bank). Past performance is no guarantee of future results. Filters were applied to data retroactively and with the benefit of hindsight. Returns are not representative of indices or actual strategies and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. Please see Data Appendix for more information.

A t-statistic is a measure for the reliability of an average return difference. Normally, a t-statistic of at least 2 in absolute value is necessary to reliably say that the result is different from zero.

The chart above shows that historically, differences in GDP growth over the past year contained little information about differences in equity returns this year. In both developed and emerging markets, average annual returns were similar for high and low growth countries. In fact, low growth countries had slightly higher average returns than high growth countries, although the return difference was not reliably different from zero. In other words, there is no evidence that the return difference occurred by anything other than random chance.

The analysis is also extended to assume perfect foresight about GDP growth over the next year. This is not an implementable strategy because investors do not have the advantage of knowing economic growth in advance. Yet even with perfect foresight of future GDP growth, investors would not have realized an advantage. Once again, low growth countries actually had higher returns than high growth countries; and once again, the difference is not great enough to have confidence that it is the result of anything other than random chance.

Differences in equity returns seem to be driven more by differences in discount rates than by differences in GDP growth, even under a perfect forecasting scenario.

The moral of the story is this: knowledge about the health of the economy, whether positive or negative, should not be relied upon as an indicator of the future direction of the market. Future market returns will continue to be a result of future surprises, which are by definition unknowable now.

on a Personal note

Devin and Stephanie

Spring is finally here! We had a busy end to the winter season with Stella competing in chess, Graedon completing his first wrestling season, Elodie participating in gymnastics and both girls doing dance. Add a ski day with all three kids (thanks Pops!), lots of snow days, my coaching, helping out on two different wrestling teams, teaching night classes at the community college and Steph running a large auction event for Stella's school and you've got our own special recipe for fun and chaos! After the dust finally settled in mid-March, I managed to sneak away for an epic long weekend playing golf (36 holes every day!) at Bandon Dunes. We are now looking forward to a little more downtime and having loads of fun with the kids this summer!

Dave and Bonnie

David & I enjoyed one week away at the end of March to Cabo San Lucas. This was a late 20th Anniversary celebration. Can you believe this was the first time we've taken a week away without children? For a variety of reasons it's just never worked out but this was the year! I feel a bit guilty to say we did absolutely nothing. I, (Bonnie) literally sat in the sun from 11-5 every day. I was DESPERATE for Vitamin D. David would join me for a few hours on either end of my pool time and he took a few hours in the gym midday and then we would head out for a beautiful dinner. Actually, everywhere we went they celebrated our anniversary as the concierge made sure each restaurant knew. It was a great time, to sit, read and enjoy each other with no demands. A preview of "empty nest" I guess. The kids all finish up grades 6, 8 & 10—so it's hard to believe we'll have two in High School next year. It's just going WAY too fast. Part of me wants to slow down the clock but the other part is just so excited to see how they are each blooming! We are incredibly grateful!

Jamie and Jeanne

The saga continues….

From my last note, you will remember that Jeanne and I were headed to Zihuatanejo, Mexico for a vacation. The night before our flight, we were packing our suitcases and getting our airplane tickets, rental car and hotel reservation together. Jeanne was getting our passports and I hear her say something like this: ***"C#*%!!! Our passports are expired!!!"***

We came dragging into the office the next morning. Bonnie could tell that Jeanne was feeling pretty low. I heard Bonnie working furiously at her keyboard, and the next thing we knew she handed us some papers. "Here are hotel reservations, here is a rental car agreement, and here are two airplane tickets to Maui!"

Hyatt Regency Maui Resort

That is typical Bonnie; empathetic, and always going out of her way to make things right.

We did ***absolutely nothing*** in Maui. Jeanne's idea of the perfect vacation!

Nate and Lisa

It felt like this Winter would never end, but my daughters didn't seem to mind. My after-work routine consisted of me dragging them around on their sled (I thought they were supposed to ride down hills, not up hills!) and spending the twilight hours playing in the snow.

It was usually dark out by the time I got home, so I would just point their sled down the hills and hope for the best.

Sometimes you just have to make the best of endless snow days.

Earlier in the year, the office headed south for a conference in San Diego. As a good-bye treat, I took my family to Red Robin for a childhood essential; the Mile High Mississippi Mud Pie!

Needless to say, the girls loved it (I ate some as well to make sure they didn't get too full).

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