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Top of Mind

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Interview with Roger Farmer

Roger Farmer is Research Director at the UK National Institute of Economic and Social Research, Professor of Economics at the University of Warwick, and Distinguished Professor of Economics at the University of California, Los Angeles. His research focuses on market psychology and macroeconomics. He is a former Senior Houblon-Norman Fellow at the Bank of England and the author of several books, including *Prosperity for All: How to Prevent Financial Crises* (2016). Below, he discusses animal spirits' influence on stock market crashes and unemployment.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.

Allison Nathan: How important is market sentiment to the economy?

Roger Farmer: Animal spirits are incredibly important to growth. Consumption accounts for about 70% of US GDP and, at low frequencies, is highly correlated with wealth. And if confidence erodes, that can have a big impact on consumption. People who feel less wealthy spend less, which can in turn lead to less hiring. This can make people's perceived loss of wealth from changes in stock prices self-fulfilling. My work has focused specifically on the connection between the stock market and the unemployment rate, which tends to be a more reliable indicator than noisy GDP data. You can think of the stock market and unemployment like two wandering drunks tied together by a rope; they can never get too far apart.

Allison Nathan: Unlike many economists, you argue that changes in the stock market not only predict changes in unemployment but actually *cause* them. Tell us about that.

Roger Farmer: I've found that a persistent 10% drop in the market will be followed by a 3pp increase in the unemployment rate 6-12 months later. Note that this doesn't hold for day-to-day movements. Why? Say you're a 65-year-old couple thinking of going on a cruise and your 401(k) declines by 10%. If it rises again the next week, that doesn't influence you much. But if the drop persists, you may start to worry and cancel the cruise.

My work shows that the stock market Granger-causes the future unemployment rate, meaning that the former provides information that helps predict the latter. But in my view there is also a physical causality. Take the following two examples. A weather forecaster who predicts rain provides information on what is likely to happen. But telling the forecaster you don't want it to rain won't achieve much; it will still rain. The forecaster *helps predict* but *doesn't cause* the rain. Now, we also know that dropping a lit cigarette in a dry forested area is very likely to spark a forest fire. But if you prevent people from doing that, you *will* probably prevent forest fires. The relationship is causal only in the case of the cigarette example. And I think the stock market is more like the cigarette.

Allison Nathan: Could current market optimism become self-sustaining, even if, say, US policy changes disappoint?

Roger Farmer: I think so. It comes back to persistence. The rise in the real value of the S&P 500 has lasted for a few months now. If that continues—whether it is driven by expectations about tax cuts and infrastructure spending or something else—then I think we'll see movement in the real economy. As long as people remain optimistic and keep spending, perhaps for other reasons such as positive data, that in my view will be enough to maintain momentum in the economy, which could in turn continue to propel markets. That said, I would caution that other important drivers of growth, like technology and demographics, have little to do with confidence and the stock market. And in the big picture, at least one of those two—demographics—looks less favorable for growth.

Allison Nathan: Given how much the US labor market has tightened, can animal spirits still affect unemployment?

Roger Farmer: Buoyancy in the stock market, in my view, can continue to lower unemployment in the short term. Of course, the unemployment rate cannot fall below 0%, so the magnitude of the effects will become attenuated. However, if asset markets become overinflated there is also a danger of unemployment falling too low and leading to a serious imbalance that will be followed by a future market reversal.

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Allison Nathan: Put differently, are you worried that animal spirits and current market exuberance might go too far?

Roger Farmer: Yes. To be clear, I don't think the stock market will correct tomorrow, even if prices and valuations look high by historical standards. In fact, I'm quite optimistic about where things are moving right now. But further out, I worry that there will be a large correction. And with interest rates so low, there's no ammunition to prevent that from leading to a major recession. I think the 2008 stock crash had a much more lasting impact than the 1987 crash precisely because rates in 1987 were around 8-9%, leaving more room for cuts. If current market exuberance persists long enough for rates to come back to 5-6%, we may be okay. But if the next recession hits while interest rates are still very low, we're in deep trouble.

Allison Nathan: What policies would you prescribe?

Roger Farmer: I would like to see the Fed, the Treasury, or some other government agency actively intervene to prevent volatility. If you're going too high in a hot air balloon, the solution is not to stick a pin in it and crash down; it's to install an escape valve and come down slowly. Today, I worry that if the Fed raises rates too quickly, that's a bit like using a pin. The Fed should instead act to prevent large stock movements, both on the upside and on the downside, from adversely affecting the economy. It would assert this control by managing the value of an indexed fund defined over all publicly traded assets. The FOMC would announce a price path for this fund, and the Fed would stand by ready to buy and sell at the announced price. That's my version of an escape valve.

Disclosure Appendix

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