

## **A conversation with Scott Sumner, October 3, 2014**

### **Participants**

- Scott Sumner — Professor of Economics, Bentley University
- Alexander Berger — Senior Research Analyst, GiveWell

**Note:** These notes were compiled by GiveWell and give an overview of the major points made by Professor Sumner.

### **Summary**

GiveWell spoke with Professor Scott Sumner of Bentley University about creating a Nominal Gross Domestic Product (NGDP) futures market as part of the Open Philanthropy Project's investigation of macroeconomic policy. Conversation topics included:

- The case for NGDP targeting
- The purpose of an NGDP futures market
- The importance of liquidity to a successful NGDP futures market
- The logistics of setting up a demonstration NGDP futures market

### **The case for NGDP targeting**

There are two key problems in the market economy that cause instability when NGDP growth is not stable:

1. The stickiness of wages.
2. Debt contracts are written in nominal terms.

When NGDP falls sharply, these problems produce the following results:

1. Sticky wages lead to mass unemployment.
2. As borrowers' income decreases, defaults on debt increase.

However, if there were a credible NGDP target, we would be able to more accurately predict NGDP growth over the medium term. This would allow market actors to overlook short-term problems and avoid the crashes that result when markets don't have reason to think that NGDP growth will resume.

Futures markets are useful in an NGDP targeting regime because they provide a useful market forecast when a variety of economic indicators are moving rapidly. In 2008, the Federal Reserve (Fed) was slow to respond to the emerging crisis because it was concerned about causing high inflation rates over the coming years and was responding to high inflation over the previous year. However, the Treasury Inflation Protection Securities (TIPS) Spread (a measure of market expectations of future inflation) predicted a rate of only 1.2% inflation over the next five years, and the Fed would have been well-served to pay more attention to those market expectations.

## **NGDP versus inflation targeting**

Replacing the Fed's inflation target with an NGDP target would stabilize market expectations. Markets became very pessimistic in late 2008 because they correctly saw that the economy was headed into a recession, which a credible NGDP target could have helped prevent.

NGDP targeting is especially preferable to inflation targeting when there are supply shocks. In 2008, oil prices were rising sharply and inflation rose above 4% on the headline Consumer Price Index (CPI), exceeding the Fed's 2% target. NGDP growth slowed during this period and if the Fed had focused on this indicator, rather than inflation, it may have cut interest rates sooner and mitigated the worst effects of the recession.

Often, people who worry about high inflation rates would be better off focusing on NGDP growth rates. For example, many people believe that high inflation is problematic because savers are taxed on inflated gains. However, the nominal return on investment for savers is correlated more closely with NGDP than with inflation. Additionally, many people think that unexpected inflation is unfair to borrowers and lenders. However, NGDP growth rates are more relevant to debt contracts than inflation because nominal incomes are more closely related to changes in NGDP.

In general, technical microeconomic issues are better correlated with NGDP than with inflation. If the Fed targeted NGDP growth at a certain rate, and the trend rate of growth was a little different than expected, inflation would vary a little from expectations but there would still be a stabilizing effect on growth and long-term debt contracts.

Professor Sumner has published a more detailed defense of NGDP targeting on his blog and in this *National Affairs* essay:  
<http://www.nationalaffairs.com/publications/detail/re-targeting-the-fed>

## **Background on Professor Sumner's proposed NGDP futures market**

Professor Sumner believes that eventually there will be a long-run NGDP futures market in the US. Ideally, the federal government would create this market since it would be a public good. (Most markets exist to meet market demands, but an NGDP futures market would exist in order to communicate market expectations.)

A major obstacle to the creation of a useful demonstration NGDP futures market is that the regulatory regime in the US prevents Americans from trading in any such market.

Due to current obstacles to creating an NGDP futures market in the US, Professor Sumner is working with iPredict, a real-money prediction market run by Victoria University of Wellington, to create a demonstration NGDP futures market in New Zealand. More information is available on Professor Sumner's blog: <http://www.themoneyillusion.com/?p=27695>.

## **The purpose of a demonstration NGDP market**

The utility of Professor Sumner's proposed demonstration NGDP futures market will depend on the amount of liquidity in the market. A sufficiently liquid market would produce a numerical indicator that would be useful for analysts attempting to make sense of current market events. This demonstration project should be more useful than the TIPS Spread because the inflation estimates in the TIPS Spread confound supply and demand shocks.

Such a market would also help advance research, both by showing how predicted NGDP correlated with macroeconomic developments and by allow the microstructure of the prediction market itself to be studied.

In the long-term, if analysts and observers became comfortable with looking at the futures market as an indicator of the status of the economy, the Fed might begin to pay attention as well.

## **Liquidity and the accuracy of an NGDP futures market**

Professor Sumner is not yet sure how accurate a demonstration market needs to be in order to serve its purpose, and it is also unclear what trading volume would be required to ensure that the market is accurate. Robin Hanson, a professor at George Mason University, has written that very small markets can yield surprisingly accurate predictions, and this may be the case with an NGDP futures market.

Professor Sumner predicts that NGDP growth will be fairly stable over the next few years and thus the utility of the demonstration project will be limited during that period. However, the next time the economy approaches a turning point in the business cycle, an established futures market could be very useful for policy makers.

Low trading volume would not pose a problem if the federal government created its own NGDP futures market and used it to guide policy. The absence of activity in such a market would be an indication that the market believed the economy was on target to meet the Fed's goal. A lack of liquidity definitely would pose a problem for Professor Sumner's demonstration market because it is unlikely that observers would pay attention to the price of the contracts on the market without a large trading volume. He hopes to encourage his blog audience outside of the U.S. to participate in the demonstration market.

## **Logistics of creating an NGDP futures market**

In order to set up the demonstration NGDP futures market on the New Zealand prediction market site iPredict, Professor Sumner needs to raise at least \$1500. Due to technical considerations, \$31,500 is necessary if the futures market will pay interest to investors. This is the minimum amount necessary to create a viable market. The payment of interest is one means of providing inducements to potential traders, but Professor Sumner remains open to other suggestions.

If he ultimately raises more than \$31,500, it is possible that there might be other ways of encouraging trading activity. Other potential uses of funds include:

- The creation of NGDP futures contracts for the Eurozone, Australia, Great Britain, or other countries
- Paying above market interest rates on margin accounts
- Providing funds for a PhD student in New Zealand to perform statistical and economic analysis of the resulting data

It is likely that creating contracts for other countries would attract more interest to the exchange as a whole, but it could also be counter-productive as too many contracts could lead to less trading of each contract.

### **State of current fundraising**

Early attempts to raise funds for the demonstration market have been pretty successful – Professor Sumner received pledges for more than the \$31,500 he was hoping to raise within a day or two of his initial blog post requesting funds. He is currently working to ensure that there will be a tax-deductible mechanism for transferring funds to the prediction market in New Zealand.

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