

Rapid Growth or Stagnation: An Economic Policy Choice

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Abstract. Why has the American economy performed so poorly in the past decade, especially in comparison with the two prior decades? This paper makes the theoretical and empirical case that a series of economic policy decisions provides the most satisfactory explanation and that policy reform will restore good economic performance. The paper also considers alternative explanations including the idea of a new secular stagnation unrelated to policy and the view that the deep financial crisis inevitably delayed recovery from the recession.

Introduction

Among his many innovative contributions to econometric modelling, Lawrence Klein was a pioneer in exploring the reasons for policy differences between models and the economists who build and estimate them. The Model Comparison Seminar that he ran during the 1980s, for example, helped economists understand why the impacts of changes in fiscal and monetary policy were different from model to model.

I will always be grateful to Professor Klein for inviting me to join his Model Comparison Seminar and to add to the mix a new kind of model with rational expectations and sticky prices which I was developing at Stanford in the 1980s. The model was an estimated version of what would come to be called a “new Keynesian” model, and the other models in the comparison would thus logically be called “old Keynesian.” They included such famous workhorse models as the Data Resources Incorporated (DRI) model, the Federal Reserve Board’s model, the

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Wharton Econometric Forecasting Associates (WEFA) model, and Larry Meyer's Macro Advisers model. It was probably the first systematic comparison of old and new Keynesian models and was an invaluable opportunity for someone developing a new and untried model.

The performance comparison results were eventually collected and published in a book (Klein, 1991a). In the opening chapter of that book Klein (1991b) reviewed the comparative performance of the new and old Keynesian models, noting differences and similarities: "The multipliers from John Taylor's model...are, in some cases, different from the general tendency of other models in the comparison, but not in all cases....Fiscal multipliers in his type of model appear to peak quickly and fade back toward zero. Most models have tended to underestimate the amplitude of induced price changes, while Taylor's model shows more proneness toward inflationary movement in experiments where there is a stimulus to the economy." Klein was thus shedding light in why government purchases multipliers were so different—a controversial policy issue that is still of great interest to economists and policy makers as they consider and evaluate the stimulus packages of 2008 and 2009 and other recent policies.

In this paper I review the role of policy in economic performance in recent years. Although the paper is not technical, much of the results are based on the type of empirical modeling and comparison research that Lawrence Klein favored, including "New Keynesian versus Old Keynesian Government Spending Multipliers," in which John Cogan, Tobias Cwik, Volcker Wieland and I evaluated recent policy.

Economic Policy and Economic Performance

The performance of the U.S. economy during the past decade has left much to be desired. The 2007-2009 recession was very deep—made worse by the severe financial crisis, and the

recovery from the recession has been weak. Job growth since the recovery began has been so slow that the employment-to-population ratio hasn't increased at all. Economic growth has been so slow that the gap between real GDP and its pre-recession trend has not materially closed. It's a particularly unsatisfactory performance in comparison with the twenty five years before the recession when the economy was performing so well that economists call the period the Great Moderation or the Long Boom. By the measure that macroeconomists regularly use to assess the macroeconomic stability—the standard deviation of real GDP from trend GDP—economic performance has deteriorated by a factor of three or four since 2006. The low economic and employment growth has harmed many people, and is a tremendous setback for macroeconomists whose job it is to recommend and implement policies to prevent such poor macroeconomic performance.

Like other macroeconomists, I've been researching possible explanations for the poor performance, recognizing that in order to recommend something to deal with the problem one has to have a good diagnosis of the problem. This research has led me to the conclusion that the basic problem is a series of economic policy decisions—a diagnosis which implies that reforming policy is the best way to address the problem. Whether the American economy returns to strong sustained growth or continues its substandard performance is thus a matter of policy choice.

The simplest way to understand this diagnosis is to examine the broad changes in policy that occurred during the decade from around 2003 to the present. This period includes the years leading up to the recession of 2007-2009, the financial panic, the recession itself, and the weak recovery. During this decade, as I document in this paper, there was a dramatic move across a whole range of policies toward more discretion, more intervention and less predictability. This

shift in economic policy correlates over time with the deterioration in economic performance, making it at least a plausible causal factor.

But it's more than a correlation over time. Basic macroeconomic theory indicates that highly discretionary policies do not work well compared with steady predictable policies. This fundamental idea comes from extensive macroeconomic research, including that on the time inconsistency of policy by Finn Kydland and Edward Prescott (1977), on the econometric critique of policy by Robert Lucas (1974), and many econometric model and historical evaluations of specific monetary and fiscal policy rules. There is also empirical evidence of causation from policy to performance found in the actions taken by monetary, regulatory, and fiscal policy makers.

Monetary Policy

First, consider monetary policy. About 10 years ago, the Federal Reserve moved away from a monetary policy that was working quite well by holding interest rates unusually low and then raising them very slowly during 2003-2005. You can see this if you compare policy interest rate settings during this period with the 1980s and 1990s using monetary policy rules, like the so-called Taylor Rule. Similar results emerge from vector auto-regressions, which show that interest rates were very low during this period compared to what they would have been under similar circumstances in the 1980s and 1990s.

You can also look directly at the raw data. For example in 1997, when the inflation rate was about 2% and the economy was pretty close to normal, the Fed set the federal funds rate at 5½ %. In 2003, when the inflation rate was 2% and the economy was pretty close to normal, the

Fed set the federal funds interest rate at 1%. So it's a completely different kind of policy—a deviation from the earlier rule-like policy, and you would expect that it could cause a problem.

According to empirical model simulations (Taylor, 2007) it did cause a problem. Those low rates stimulated a search for yield and risk taking, and they exacerbated the housing boom and thus worsened the eventual bust. The low rates were not the only factor in the housing boom, of course, but they were a big factor. They made low teaser interest rates on adjustable rate mortgages (ARM) possible, and they helped hold long-term mortgage interest rates down compared to what they otherwise would have been.

This discretionary monetary policy has largely continued since then except for the classic lender of last resort actions taken during the panic of the fall of 2008. During that panic the Fed significantly increased liquidity, providing loans to U.S. financial institutions and swaps to foreign central banks. These short-term liquidity operations were similar in purpose to the Fed's temporary lender of last resort actions taken when the financial markets were physically damaged on 9-11-2001.

But after the 2008 panic subsided and these short-term liquidity facilities began to wind down, the Fed restarted its discretionary monetary policy by purchasing large amounts of long-term Treasury and mortgaged-backed securities, through Quantitative Easing—QE1, QE2, and most recently QE3. To finance these purchases the Fed increased bank reserves and liquidity rose by correspondingly large amounts. Whether or not one thinks these large-scale purchases helped stimulate the economy—my research suggests that they did not—they are not anything close to a predictable rule-like policy. The Fed changed policy frequently during the period, and the magnitudes of the interventions are completely unprecedented: commercial banks' reserve

balances at the Fed (a common measure of liquidity provided by the Fed) were about \$10 billion in the summer of 2008; as of this writing they are about \$2,600 billion.

In my view, this shift in monetary policy away from the more predictable kind of policy of the 1980s and 1990s has on balance been damaging, as I summarized in Taylor (2014). Consider QE3, for example, which had the purpose of lowering long-term interest rates. When QE3 started a little over a year ago, the 10-year U.S. Treasury was yielding 1.7%. Now it's yielding about 2.7%. The overall effects of quantitative easing on yield spreads also appear to be contrary to the stated purpose: The average 1-year vs 10-year U.S. Treasury spread from 2003 to 2008 was 1.3%. From 2009-2013 it was 2.4%.

In the past year there have also been noticeable effects of the inevitable unwinding of the large expansion of the Fed's balance sheet on the rest of the world. If there is a common factor in the global market turbulence in 2013, it was this unwinding of unconventional monetary policy. Evidence for this connection appeared in May and June 2013 when the Fed started talking about tapering and volatility increased in foreign exchange markets. This uncertainty has always been one of the dangers of the unconventional policies.

Why does the Fed's unwinding become global? Largely because central bank policy decisions tend to be correlated in today's highly integrated global financial markets. Central banks tend to follow each other, and frequently feel they are forced to. As the unconventional monetary policies were implemented, the very low interest rates and quantitative easing of the Fed forced, or at least encouraged, lower policy rates at other central banks. Such responses often cause monetary policy to deviate from what would otherwise be appropriate based on domestic considerations. In part that response reflected concerns about sharp exchange rate appreciations, as I explain in Taylor (2013). Empirical research reveals that policy deviations

occurred in many countries at roughly the same time as the Fed deviated, creating what Hofmann and Bogdanova (2012) have dubbed the Global Great Deviation.

As the United States began to unwind from these policies it caused other countries to shift policy again—to unwind themselves—in whiplash fashion. Of course, not all the deviations from good policy are due to policy spillovers from abroad. The terrible policy choices in Argentina and Venezuela in recent years are home-grown. And, to be sure, the official Fed view is different. Fed officials often point out that the Fed cannot take account of its effects on the rest of the world when the mandate from Congress is to focus on the U.S. economy. Yet, recent events show that the rest of the world can feed back on the US economy.

Regulatory Policy

Now consider regulatory policy where the story is quite similar. There were hundreds of regulators and supervisors of the Federal Reserve System on the premises of major financial institutions in the United States in the years leading up to the financial crisis. There were rules on the books against excessive risk taking, which the Fed had the power to enforce. But apparently there was a deviation from these rules as many banks undertook excessive risks. In other words there was a discretionary deviation from predictable rules-based policy. There are well documented examples of these deviations in the cases of the Fannie Mae and Freddie Mac (see Morgenson and Rosner, 2011). The problem was not insufficient rules and regulations; it was that regulators and supervisors permitted deviations from existing rules and regulations. Some analysts also question the Securities and Exchange Commission decision in April 2004 to relax the capital ratios of investment banks, such as Bear Sterns and Lehman, and permit such firms to perform their own risk assessments.

The on-again off-again bailout policy leading up to the crisis is another example where policy makers' actions deviated from rules-based policy, in this case the rule of law in the bankruptcy code. Following the Fed's bailout of Bear Stearns' creditors in March 2008, many assumed that Lehman's creditors would also be bailed out if that firm were to fail. There was no attempt to put a predictable framework in place, so it was a surprise when there was no bailout. As a result uncertainty remained high.

Further regulatory interventions continued to raise policy uncertainty. While the Dodd-Frank bill did some good things, such as eliminating the Office of Thrift Supervision and moving that responsibility elsewhere, it also created hundreds of new rules and regulations, many of which have yet to be written.

Fiscal Policy

Fiscal policy also moved in discretionary direction during these years. There were some hints of a change in direction when temporary one-time tax rebates were passed in 2001 as the first installment on the longer-term tax rate cuts. But these were relatively small compared with the 2008 discretionary fiscal stimulus package. I analyzed that stimulus package five years ago in a paper (Taylor, 2009) presented at the American Economic Association annual meetings, and I concluded that it didn't work to boost consumption or the economy. Significant payments were made to people as a result of the stimulus package and personal disposable income went up. But, there was virtually no impact whatsoever on consumption. This finding comes from formal statistical regressions, but can be seen easily in simple time series charts as well.

The 2008 stimulus package was followed by the even larger 2009 stimulus package. My research shows that the 2009 stimulus also had little or no effect on the economy (see Taylor,

2011), but there is debate among economists about the effects. Even if it had a temporary boost, it wore off quickly much as Lawrence Klein described the multiplier in new Keynesian models in his 1991 paper. The same is true of other temporary stimulus packages in recent years such as the first-time homebuyers program. Thus in practice such actions do not help get the economy back on a strong path to recovery. The Cash for Clunkers program is another example. It stimulated the purchases of cars for a month or two and then undid itself as people purchased fewer cars later in the year. In retrospect the idea, which was advanced by advocates at the time, that such a policy could jump-start the economy into a strong expansion seems to make little sense.

Alternative Explanations

These discretionary monetary, regulatory, and fiscal policy actions represented a major policy change compared to the previous two decades during which policy was more predictable and rule-like. As one could have predicted from economic theory or even from the experience with similar actions in the 1970s, things did not work out well and economic performance was disappointing.

There are alternative explanations for the poor economic performance. Summers (2014) argues that the U.S. economy has been experiencing a secular stagnation which began about a decade ago and is continuing now. He argues that the equilibrium real interest has declined below zero—perhaps because of a savings glut or a decline in new investment opportunities. With the nominal interest rate constrained by the zero lower bound and with inflation expectations low, monetary policy cannot get the real interest down enough to stimulate investment.

In my view this theory is not consistent with the facts. If the equilibrium real rate were negative in the years from 2003 to 2005 then the very low interest rates chosen by the Fed should not have created excesses in capital, labor or goods markets. But, on the contrary, demand pressures were high in these markets. The housing market was obviously booming. The unemployment rates fell to 4.4%, well below reasonable estimates of the natural unemployment rate. In addition, the average price of all goods in the economy was picking up: The inflation rate as measured by the GDP price index went up from 1.7% to 3.4% during this period. So there's a lot of evidence that the economy was not being held back by secular factors at this time.

Another explanation for poor performance is that deep recessions with financial crises are normally followed by weak recoveries, with the book by Rogoff and Reinhart (2009) often cited as evidence. However, if you measure recoveries in the classic National Bureau of Economic Research sense as starting with the trough of the recession, then it is by no means normal to have weak recovery following a deep recession with a financial crisis. Indeed, the recent slow recovery is unprecedented in the history of American business cycles, as Bordo and Haubrich (2011) have shown. So this explanation doesn't hold up well either.

Policy Implications

The purpose of a medical diagnosis is to determine the proper way to treat an illness, and the same is true of an economic diagnosis. If the diagnosis of what ails the economy outlined in this paper is correct, then the treatment is clear: implement more predictable, less discretionary policies. For monetary policy this means returning to a more rules-based policy as in the 1980s, 1990s and until around 2003. This means ending QE and getting back to positive (though still likely low) interest rates implied by current economic conditions. This kind of policy worked

very well for the decades of the great moderation and it will work well again. There have been debates over what kind of monetary rule to use, but there is plenty of research and experience to choose from.

For fiscal policy, a more predictable policy would come from a return to a regular order in formulating U.S. budget policy in which the President submits a budget (which balances in a reasonable span of time), the Senate and House put their alternative proposals together, and a budget is negotiated and signed into law. The federal budget plan recently put together by Senator Patty Murray and Congressman Paul Ryan and approved by President Obama represents progress, and it is promising in this respect. For the longer-term, fiscal policy reforms to increase predictability must include entitlement reform that brings spending into line with the growth rate of the economy and tax reform that lowers tax rates and broadens the base.

For regulatory policy, the simple idea of using cost-benefit analysis would go a long way to reducing the uncertainty. In the case of the financial sector, the bailout and "too big to fail" problem is still there, and can be addressed by increasing capital requirements and reforming the bankruptcy code to allow for an orderly bankruptcy for large financial institutions rather than bailouts. In the area of trade policy, it's important to negotiate and implement trade opening agreements—the rule of law for international trade. In the area of education, it's most important to ensure educational opportunity in the poorest, most disadvantaged areas of the country, a policy reform consistent with the overall diagnosis.

Figure 1 illustrates the task facing policy makers and provides a framework for thinking about such policy reforms. Starting at the lower left, the red line shows the history of real GDP from 2007 through 2013. The deep 2007-09 recession—the downturn in GDP—is clearly visible. So is the very slow recovery of GDP.

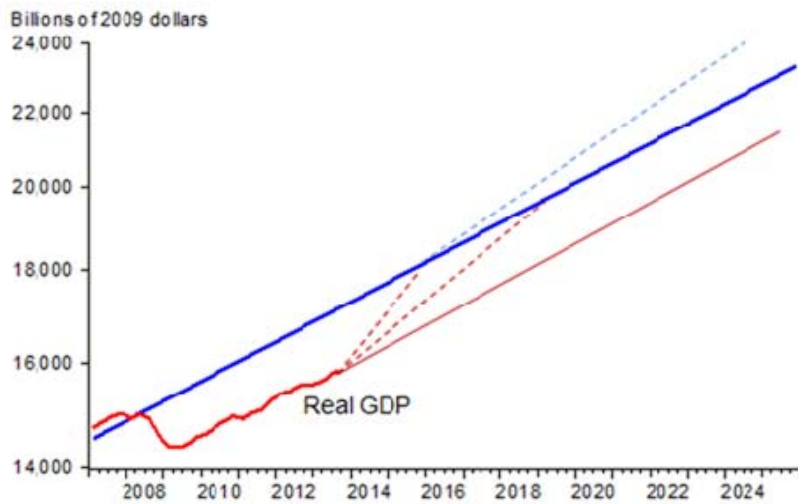


Figure 1. Real GDP, trend GDP and alternative projections

The blue line shows a 2.5% trend for real GDP. This is approximately the average growth rate from 2000 until the recession began, and thus may be taken as a rough estimate of what the economy’s potential was going into the recession. The gap between trend GDP and real GDP thus represents one measure of lost output. If the current recovery was like previous recoveries, then real GDP would already be at trend GDP. Instead the gap remains very large.

The dark red line continues the approximately 2.5 percent average growth rate experienced since the start of the recovery. It is a continuation of the stagnation experienced recently.

The dashed lines give an illustration of the benefits of a policy reform program. There are two inter-related paths. First, the recovery speeds up. If it speeds up to 4 percent—shown by the first dashed line—then it will be 2019 before the economy has returned to normal. Second, the long-run growth path would speed up. The dashed blue line shows trend GDP growth at 3.0%, or

0.5 percent higher than the recent 2.5% trend. These lines represent a reasonable goal for economic growth with a policy reform program.

Policy makers tend to think of the problem of getting real GDP back to trend as being addressed by short-run “demand-side” policies (like stimulus packages) and the problem of increasing long-term growth as being addressed by “supply-side” policies. I disagree with this view. A return to more predictable rules-based policies may seem like a long-term policy, but it can also help get the economy back to trend faster. Either way, the choice between economic growth and economic stagnation is an economic policy choice.

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