**American Enterprise Institute:**
**Lessons Learned from 10 Years of Quantitative Easing**

# The Knowledge Problem

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*“[W]hereas skepticism and uncertainty have always been the heart and soul of science, confidence and certainty are the coin of the realm in much of today’s public discourse.”*

-- Sue Desmond-Hellman, CEO, Bill & Melinda Gates Foundation

I am honored to be here alongside my Chairman, Ben Bernanke.

Ben was the academic star whose remarkable leadership attributes emerged during our nation’s darkest days. And I was fortunate to be at Ben’s side, tasked with distilling market signals and leading a SWAT team of immensely talented, tireless Fed professionals.

When the panic of 2008 showed few signs of abating, I was struck by Ben’s preternatural calm, wisdom, and humility during the battle. These character traits are no less essential today to secure an enduring peace.

Unlike QE’s loudest voices-- zealous supporters and unabashed critics-- Ben and I were “present at the creation” in Dean Acheson’s famous words. So, neither of us have clean hands – nor perhaps thoughts sufficiently detached – to offer a perfected judgment on the topic, ten years hence.

You can judge whether our launch of QE to help defeat the panic makes us reliable scribes of the next draft of history. And you can assess whether my co-authorship of QE1 under Ben’s leadership when we were at sea in 2008-- and my decision to get off the boat a couple years later after the waters calmed and QE2 was christened—was wise or foolhardy.

QE appears to be getting less attention recently than the heated interest rate debate, as if the hard questions around QE are resolved. Whether the FOMC raises short-term rates another 50 or 75 basis points this year is incidental to economic growth and employment this year and next. And while the FOMC participants may be caricatured as hawks and doves based on their professed ‘dots’, the monetary lessons of this era will be found elsewhere. The real money is on central bank balance sheets.

## A Decade Ago

If, with a snap of the fingers, you could eavesdrop on our discussions in Ben’s office a decade ago, you would hear us conceive of QE1 in a late night “blue sky” discussions. You wound not detect any great confidence in QE’s prospects. Nor would you hear us elevate the import of QE over other newfangled policy tools. And you would hear no inkling that a decade later the world’s central banks would still be carrying more than $10 trillion stock of global QE assets, with hundreds of billions of net global QE purchases still being added.

If you traveled back in time and informed us of QE’s dominance a decade later, our faces would look more ashen and our spirits sullen, figuring that our monetary experiment failed, a decade of malaise ensued, fiscal dominance prevailed, and an unwind of QE proved impossible. We would be shocked to hear the juxtaposition in 2018 of peak QE and a global economic boom.

And what if you time-traveled to eavesdrop on our discussion in Ben's office 8 years ago? During the difficult, internal Fed debate in the summer and fall of 2010, we pushed each other on the relative risks and rewards of employing war-time policy tools during peace time. I asked a colleague what he would advise if QE2 succeeded, and he told me we should probably do more of it. I then asked what should we do if QE2 did not succeed, he hesitated, shrugged his shoulders, and said we might well need to do more of it. A theory deserves special scrutiny if it can't be disproved.

What began as an ad hoc, necessary, risky Fed policy response to stem a panic morphed into standard operating procedure. The economic regime shifted markedly from crisis to recovery to sustained growth. But you would scarcely know it from the stock and flow of QE.

A decade should have been plenty sufficient to provide strong, compelling evidence of the wisdom or folly of the QE seriatim experiment. But, it is not. For the central bank community evaluating QE, we are still in the thick of history. The 'mission accomplished' signs being trotted out by some advocates should be stowed away. There is no Q.E.D. to QE, even a decade later.

Preliminary Judgments

Policymakers confront the knowledge problem, which has dogged scientists for millennia. Central bankers have no control groups. And with QE, we have neither the benefit of any historical comparison nor a natural experiment: most of the rest of the world's central banks largely remade our policy tool as their own.

So, with those heavy heaps of humility in hand, I will offer several judgments, however unprovable at this remove.

First, QE1 was a success. But it didn't work in isolation as a panic antidote. It worked in concert, however haphazardly, with other Fed talk and tools on offer. And it probably didn't work directly. Fed purchases brought needed liquidity to illiquid markets, but more so, it crowded in private capital. Our liquidity provision bolstered market prices, but higher asset prices were largely the result of improved liquidity inducing higher volumes and better matching of bids and offers.

Second, QE2 and its progeny may have had a small, positive impact on employment and output. But assigning credit of a couple of tenths of one percent of annual GDP to incremental QE provisioning is outside the confidence interval of the profession. Increases in consumption facilitated by lower rates and higher asset prices may or may not have been ultimately offset by, among other things, lower consumption in the out years and lower non-residential fixed investment, which remained anachronistically weak. In fact, the acceleration in output and employment in recent quarters, including a notable increase in business capital expenditures, may well be a function of changes in both fiscal policy and monetary policy, including some clarity about the Fed's QE exit plan.

Third, the effect of QE on financial assets is considerably more significant than its effects on real assets and the real economy. Stocks, credit and other risk assets currently trade at materially higher values than they would absent global QE. Some leading economists seem to believe that QE is now somehow immaterial to financial asset prices. They believe that stocks and other risk-assets are trading at fair and reliable prices in a durable equilibrium. That was largely the Fed's view in the mid- to late- 2000s when the Great Moderation was the consensus moniker for benign conditions and a rosy outlook. Many of us deserve some bit of blame for assenting to the notion the U.S. was approaching the end of economic history-- that the profession's knowledge was so advanced such that significant economic shocks could be avoided. I fear we are mistaken again.

Fourth, the real returns to household wealth have proven significantly larger than to household income. QE, in my view, is a material part of the inequality story. The distributional effects of QE across households are significant. Despite all-time highs in stock and home prices, household net worth since 2007 is down for all income groups except for the top ten 10%. Net worth for the top decile is up an average of 27%. For the middle deciles, it's down 20 to 30% in real terms.[1]

Fifth, inflation is a poor barometer of the wisdom or folly of QE2 and its successors. Prevailing theories of inflation dynamics are not sufficiently robust to allow policymakers to fine-tune the delta between current inflation and inflation targets based on incremental stock or flow of QE. Too often, inflation is used as a cudgel against QE skeptics. And to those who predicted hyperinflation, an effective rhetorical cudgel. But, those of us who were actually in the arena voiced concerns which are not so readily dismissed.

My overriding concern about continued QE, then and now, involves the misallocations of capital in the economy and the misallocation of responsibility in our government. Misallocations seldom operate under their own name. They choose other names to hide behind. They tend to linger for years in plain sight. Until they emerge with force at the most inauspicious of times and do unexpected harm to the economy.

<u>So What Really Separates QE's Fiercest Advocates from its Unabashed Critics?</u>

Policymakers evaluate the benefits and risks of QE differently at different points in the economic cycle. These differing judgments are often ascribed to differences in economic forecasts. But the recited explanation is insufficient. Several questions may help sort out the substantive differences among us.

*How important are price signals?*

Price signals are precious. Market price, volume, volatility, trend, and correlation are replete with information. A policy that seeks to fix or administer a price mutes an invaluable source of insight. So, the bar to quashing price signals is a high one. And when the asset is the ten-year U.S Treasury bond, it obfuscates the true value of the most important price signal in the world's financial markets. If price signals are judged to be less essential to optimize economic growth, then the adoption of continued QE programs is easier to justify.

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[1] Deutsche Bank Research, March 2018.

*How well do policymakers understand and incorporate individuals' decision-making?*

Our economy is highly complex and dynamic. The micro-foundations of macro are central, but imperfectly incorporated. Millions of decisions made daily by individuals are irreducible in the most sophisticated macroeconomic models. The imposition of a newfangled policy like QE on decision-makers is more complex than generally acknowledged by QE advocates. As Richard Reis noted: "Forecasting when the forecasts cause changes in policy, which make people change their choices, which in turn make it required to revise the forecasts, is iteratively hard." (Reis, 2018).

*How should the Fed best accomplish its objectives?*

Some are reassured by the quality of economic data, prescient about global economic developments, and confident of the effects of policy choices on the economy. That makes fine-tuning GDP, employment, and inflation targets unobjectionable. For the rest of us, the knowledge problem is real. It inclines us to recognize that business and financial cycles are real and enduring. And inclines us to want to direct the Fed's considerable monetary capabilities to offset <u>major</u> disturbances arising in the economy. Focus on the tails, not the median. Large shocks, after all, push the Fed farthest away from its inflation and output objectives. Our relative success in dealing with the crisis a decade ago is notable. Buying more insurance against a shock in the years that preceded the crisis could have gone a long way.

*And finally, how durable is the Fed's status and responsibilities?*

In the course of American history, we have two prior experiments in central banking. That history should remind us of the precariousness of the central bank's powers and the tenuousness of its special position in our democracy. So even after the Fed's recent centennial, we ought not to take our third experiment as an independent central bank for granted.

The Fed's monetary powers are rightly heightened in times of panic when central bank liquidity is most needed. When crises erupt, the lines between fiscal and monetary policy becomes blurrier.
As the crises dissipate, the ex ante allocation of responsibility should become clear and sound. And the line between fiscal and monetary policy should be jealously guarded by its protectors on each side.

<u>Conclusion</u>

I come to today's discussion as a candid friend. We ought not depart from today's debate and repair to the ideological conformity of our own. Ben Bernanke assembled a group of different-minded people to prepare for the fight of our lives, and used us each to improve the deliberative process and ensure better decision-making. We should embrace a comparable mind-set today.

References

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