

May 30, 2018

The Honorable Sherrod Brown
United States Senate
Washington, D.C. 20510

Dear Senator:

Enclosed are my responses to the written questions you submitted following the May 15, 2018¹, hearing before the Committee on Banking, Housing, and Urban Affairs. A copy has also been forwarded to the Committee for inclusion in the hearing record.

Please let me know if I can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick Cordale". The signature is written in a cursive style with a large initial "R".

Enclosure

¹ Questions for the record related to this hearing were received on May 23, 2018.

Questions for Mr. Richard Clarida, Member-Designate, Board of Governors of the Federal Reserve System on behalf of Ranking Member Brown:

1. What is your view on what caused the 2008 financial crisis? What responsibility does the Federal Reserve share in terms of failures in regulatory and supervisory policy?

Put simply, by 2007 the U.S. financial system was highly fragile. A build-up of leverage and maturity transformation in the years leading up to the crisis left the U.S. and global economy vulnerable to negative surprises. When the downturn in the U.S. housing market occurred, these vulnerabilities amplified the effects of the initial shocks and the result was the financial crisis.

The crisis revealed shortcomings and failures at private institutions, in the overall regulatory framework, and in the actions of specific agencies, including the Federal Reserve.

In response to the crisis, the Federal Reserve increased its regulatory and supervisory scrutiny of the largest financial institutions, for example, putting in place a comprehensive stress-testing regime. In my view, this response has, broadly speaking, increased the resilience of the system.

The new regulatory regime for large banks ensures that the largest institutions are sufficiently strong to continue to function effectively as intermediaries even in periods of substantial financial stress. Capital is critical to ensuring resiliency, as are the availability of high-quality liquid assets, appropriate management of risks, and the presence of a plan for resolution in case needed. Progress has been made in all of these areas, and newer tools like the stress testing regime and the countercyclical capital buffer should also contribute to the resiliency of the system going forward.

2. How did large bank and investment bank leverage contribute to the 2008 financial crisis?

The build-up of leverage to excessive levels was a key contributor to the spread of the financial crisis. In the run up to the crisis, the firms that experienced the worst problems also had some of the highest leverage ratios. And when the problems at Bear Stearns were resolved through its acquisition by JPMorgan, market participants turned their attention to other firms with similarly high levels of leverage.

However, leverage at large financial institutions alone was not responsible for the 2008 financial crisis. When the housing market turned down and housing-related assets fell in value, a series of vulnerabilities amplified the effects of that shock, including the reliance on short-term wholesale funding at large financial institutions. Some of these institutions faced runs by investors and had to sharply cut back their activities in support of the real economy. And, more broadly, the financial system was highly interconnected in opaque and surprising ways.

3. How would you characterize current risk-weighted and leverage capital levels for the largest U.S. banks – too low, too high, or the correct amount?

It is critical to the safety and soundness of the largest U.S. banks and to the broader U.S. financial system and economy that these firms are well capitalized. Since the financial crisis, the U.S. banking agencies have significantly strengthened regulatory capital requirements for large banking firms, which has made them much more resilient and able to continue lending even when under financial stress.

If confirmed, I look forward to examining this question more closely and consulting with my colleagues. Absent critical supervisory information, it would be premature for me to judge the precise appropriate capital levels. However, given its importance, I am very encouraged by the steps that I have observed the Federal Reserve has taken.

4. As you know, the Federal Reserve recently proposed reducing leverage requirements for the eight biggest U.S. global systemically important banks (GSIBs).¹ In discussing the impact of its proposal, the Federal Reserve noted that it would reduce the amount of tier 1 capital required across the lead insured depository institution (IDI) subsidiaries of the GSIBs by approximately \$121 billion.

- **Could a reduction in IDI capital pose any risks to depositors, taxpayers, or financial stability? Why or why not?**

In setting capital requirements, there is a risk that leverage ratios may become too binding. When a leverage ratio becomes a binding constraint, it can create incentives for firms to increase their investments in higher-risk, higher-return assets and, conversely, reduce their participation in lower-risk activities.

- **What is your view on raising the enhanced prudential standards threshold pursuant to Dodd-Frank section 165 from \$50 billion to \$250 billion in total consolidated assets, as contemplated in S.2155?**

I support increased tailoring of regulation and supervision. I believe that it was prudent for the Congress to raise the \$50 billion asset threshold for larger bank holding companies in order to limit the scope of enhanced prudential standards. In general, regulation and supervision should continue to be tailored to the size, systemic footprint, and risk profiles of institutions, and my understanding of the Economic Growth, Regulatory Relief, and Consumer Protection Act is that while it adjusts the \$50 billion threshold, it still allows the Federal Reserve to subject a firm with a higher risk profile to more rigorous regulation.

- **Federal Reserve Vice Chair Quarles has said that the Volcker Rule “is an example of a complex regulation that is not working well.”² Do you agree or disagree? Why?**

I think it makes sense to explore whether or not the Volcker Rule can be implemented in a simpler, less burdensome way while still achieving the objectives of the statute.

- **What is your view of the Community Reinvestment Act? Does it need to be altered or modernized by the Federal Reserve? If so, what changes do you support?**

¹ <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20180411a.htm>.

² <https://www.reuters.com/article/us-usa-fed-quarles/u-s-considering-material-changes-to-volcker-rule-feds-quarles-idUSKBN1GH2U8>.

The Community Reinvestment Act (CRA) has been a part of banking regulation for 40 years. It would be a very high priority of mine, if confirmed, to make sure that it is enforced.

I support the CRA's goal of encouraging banks to meet their affirmative obligation to serve their entire community, and in particular, the credit needs of low-and moderate-income communities. Doing so benefits low-and moderate-income communities and helps them to thrive by providing opportunities for community members, for example, to buy and improve their homes and to start and expand small businesses.

If confirmed, I would be open-minded to discussions for improving or bringing the CRA up to date, but the essential mission of the act needs to be respected.

5. On May 23, the FDIC released their Quarterly Banking Profile. It shows that that bank profits increased 28 percent over the last year, and even more for community banks.

- **Do you think it is sound policy to reduce capital requirements for banks that have profit levels this high?**

The financial crisis demonstrated the importance of a financial system that has sufficient capital to absorb losses and allow banks to continue lending in an economic downturn. Stronger and higher-quality regulatory capital requirements for U.S. banking firms have therefore been an essential post-crisis reform. However, I believe the banking agencies should continue to examine whether the requirements remain effective over time and adjust the capital framework as appropriate while preserving the essential gains in resiliency and stability of our financial system that have resulted from the reforms put in place since the financial crisis.

- **If confirmed, you will be a member of the Federal Open Market Committee. What experience will you bring to this role? Are there any changes in how monetary policy is currently conducted that you will advocate for?**

In my 35-year professional career, I have achieved recognition among academics, policymakers, and financial market participants as an expert on the economics of monetary policy. My academic work on monetary policy as a professor of economics and international affairs since 1988 at Columbia University (and before that at Yale University) has been frequently cited, and the framework for a more effective monetary policy developed in these papers has been widely consulted by economists at the Federal Reserve and as well as at other major central banks around the world. In this regard, since 2007 I have served as a member of the Deutsche Bundesbank Academic Research Council and have been chairman of this group since 2012. In 2009-2010, I served as an external member of the Norges Bank monetary policy review committee, and since 2012 have served on the Academic Advisory Board of the Hong Kong Monetary Authority's Institute for Monetary Research. Earlier in my career--from 1991 to 1992 and again between 1995 and 1997--I was a consultant at the economic research department of the Federal Reserve Bank of New York as part of a group of academic experts that included Ben Bernanke and future Nobel laureate Christopher Sims. And in 1999, I served as a consultant to Paul Volcker and the Group of 30 and contributed to their Project on Exchange Rate Regimes.

I have been an active member of the National Bureau of Economic Research (NBER) since 1983, and since 2004 have served as a co-organizer of the NBER's annual International Seminar on Macroeconomics, which is typically hosted by a central bank in Europe. I am also a regular participant in the annual Hoover Institution Conference on Monetary Policy, and, last summer, delivered a keynote address at the Bank for International Settlements Annual Research Conference.

Although I have spent most of my career in academia, I have had two opportunities to serve in economic policy positions in the executive branch of the U.S. government: first, as a Senior Staff Economist with Council of Economic Advisers from 1986 to 1987 and second, as Assistant Treasury Secretary for Economic Policy from 2002 to 2003. These experiences were invaluable in providing me a perspective that places a premium on doing economic analysis that is practical, robust, and relevant to better understanding how economic policy impacts individual American and their communities.

Since 2006, I have had the opportunity to advise Pacific Investment Management on global economics and strategy, with a particular focus on global monetary policy. While I myself do not manage portfolios, I have worked with the firm's investment committee to help them interpret and assess global economic and monetary policy trends. I believe this experience has given me an appreciation for the interaction between macroeconomic developments and financial markets that I would not otherwise have obtained.

The Federal Reserve's monetary policy decisions are guided by its statutory mandate to promote maximum employment and price stability. Over the past few years, the Federal Open Market Committee (FOMC) has been gradually reducing monetary policy accommodation. Last year, it raised the target range for the federal funds rate by 3/4 percentage point, and in October it initiated a balance sheet normalization program to gradually reduce its securities holdings. These steps to normalize the stance of monetary policy are welcome, as they reflect the economy's recovery from the financial crisis and recession, the durability of the economic expansion, and the Committee's confidence that inflation will return to 2 percent on a sustained basis. If confirmed, I look forward to working with my colleagues on the FOMC to continue to promote maximum employment and price stability.

- **Since the crisis, do you think the Federal Open Market Committee has been on the right course by gradually increasing interest rates?**

I believe that the gradual increases that the FOMC has made since December 2015 in the target range for the federal funds rate have been consistent with its statutory mandate to promote maximum employment and price stability. Over the past few years, the FOMC has been gradually reducing monetary policy accommodation, reflecting the improvement in the U.S. economy. During 2017, it raised the target range for the federal funds rate by 3/4 percentage point, and in October 2017, it initiated a balance sheet normalization program that is gradually reducing the Federal Reserve's securities holdings.

As I noted previously, these steps to normalize the stance of monetary policy are welcome developments, as they are responses to the U.S. economy's recovery from the financial crisis and recession, the sustained nature of the economic expansion, and the FOMC's confidence that

inflation will return to 2 percent on a sustained basis. In addition, as decisions on the pace of policy firming have reflected the FOMC's assessment of incoming data and the outlook for the economy, recent years' monetary policy developments have underlined the fact that monetary policy is not on a preset course; rather, it is data dependent and is chosen to promote outcomes for the U.S. economy most consistent with the statutory goals of maximum employment and price stability. If confirmed, I look forward to working with FOMC colleagues on shaping policy decisions in pursuit of these goals.

6. As you know, the Federal Reserve currently uses a variety of monetary policy rules, including the Taylor rule, in its analysis and monetary policy decisionmaking, but does not rely solely on rules to determine interest rate adjustments.

- **Do you agree with the Federal Reserve's current approach, or will you advocate that the Fed use a single rule?**

I understand that the simplicity of monetary policy rules has some appeal. But the economy is very complex.

Conducting monetary policy based on simple formulas has a long tradition in the research literature on monetary policy. But economic models are, of necessity, always simplifications of reality, and we need to ask ourselves whether adhering to any simple rule--even if it worked well in an economic mode--would in practice mean that we were implementing the monetary policy that was most consistent with meeting our statutory objectives.

No simple policy rule can capture the full range of considerations that the FOMC must take into consideration when making monetary policy decisions. For example, policymakers must consider not just the current levels of economic variable--which are the variables that appear in many simple policy rule--but also the expected future paths of such variables. In addition, we need to take account of possible risks surrounding those paths and whether the costs associated with particular economic outcomes could be especially high.

We also need to take account of unobservable structural factors that may affect the economy. For example, factors that may persistently lower the level of the neutral federal funds rate or that may affect the longer-run normal level of the unemployment rate. In contrast, simple monetary policy rules often embed the assumption that these longer-run levels of the real interest rate or the unemployment rate are fixed.

In sum, policy rules' prescriptions can be useful inputs in the FOMC's policy deliberations, but they are not an adequate or satisfactory substitute for FOMC decisions on monetary policy based on a wide range of information.

- **While the unemployment rate continues to fall, the labor force participation rate remains at about its lowest level in 40 years. What do you think is contributing to this?**

Although we have seen solid job growth this year and further declines in the unemployment rate, the labor force participation rate is still quite low by historical standards. Much of this is due to

the movement of the large baby boom cohort into ages when participation rates tend to fall sharply as workers retire. That said, the labor force participation rate for prime-age workers--especially men--has also not rebounded to pre-recession levels. A recent survey paper by Katherine Abraham and Melissa Kearney³ attributes much of the longer-run decline in participation among prime-age men to factors such as technical change and globalization. However, I also think that this group could represent an additional margin of slack in the sense that some of them could be enticed to reenter the labor force as the demand for labor continues to strengthen.

- **Do think the opioid addiction epidemic is related to the decline in labor force participation among prime-age workers?**

Yes I do. Economists Anne Case and Angus Deaton⁴ have carefully documented the rise in “deaths of despair” in the United States, to which the opioid epidemic has contributed. In addition, Alan Krueger’s research⁵ on the decline in labor force participation among adult men suggests that the proportion of adult men taking pain medication has risen sharply over the past two decades and is one reason for the decline in labor force participation among this population. More generally, opioid addiction has adversely affected both the health and economic situation of many individuals and their families and is an important issue that needs to be addressed by policymakers.

- **Over the past forty years the link between productivity and wage increases has eroded. More and more, productivity gains aren’t shared with workers. Why do you think wage growth has not kept pace with productivity growth? Is there anything the Fed can do to increase wages? Can the Federal Reserve, through monetary policy or regulatory policy, do more for individuals and communities that have not experienced the benefits from the economic recovery?**

It is the case in recent decades that there has been more dispersion between workers in different categories and that some workers have fallen behind. There is no consensus on the primary reason for this divergence, but economists tend to attribute this to a number of factors, including globalization, technological change, and a need to better equip workers with the skills needed in today’s labor market.

In the aggregate, wage growth is a function of the strength of the economy and the growth in productivity. I think the Federal Reserve can best promote faster wage growth by focusing on its full employment mandate--that is, by getting the unemployment rate to a level that is, on average, consistent with a healthy labor market, but acknowledging that there are factors at work that are impacting different workers in different ways.

- **If confirmed, how will you advocate for increased diversity in the Federal Reserve System?**

³ <http://www.nber.org/papers/w24333>.

⁴ http://www.princeton.edu/~accase/downloads/Mortality_and_Morbidity_in_21st_Century_Case-Deaton-BPEA-published.pdf.

⁵ <https://www.brookings.edu/wp-content/uploads/2018/02/kruegertextfa17bpea.pdf>.

Diversity is a critical aspect of all successful organizations, and it is important to have a diverse workforce at all levels of an organization. I believe that better decisions are made, including in the policy space, when there are individuals with a broad range of backgrounds and perspectives engaged in the process.

If confirmed, I will have the opportunity meet and speak with individuals and groups throughout the Federal Reserve System, the financial and banking sectors, and regional and community organizations. I will use those opportunities to advocate for career opportunities at the Federal Reserve Board (Board) and the System for individuals with diverse backgrounds, experience, and perspectives. And I plan to actively support Board and Federal Reserve Bank (Reserve Bank) initiatives to identify and recruit individuals with diverse backgrounds and perspectives for careers at the Board and the Reserve Banks. Of course, I also recognize that attracting diverse talent is only the first step. To meet our objectives, we need to create an environment where all will thrive and contribute.

- **Federal Reserve Board of Governors nominee Marvin Goodfriend, has recommended that the “central bank put in place systems to raise the cost of storing money by imposing a carry tax on its monetary liabilities.” Do you believe that there should be a currency tax, or that there are financial conditions that would call for a currency tax?**

I am very skeptical that the real-world effects of a tax on currency could justify imposing such a tax.