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***“Ethics and Economics: Making Cyclical
Downturns Less Severe”***

Eric S. Rosengren
President & Chief Executive Officer
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*Fourth Annual O. John Olcay Lecture on
Ethics and Economics at the
Peterson Institute for International Economics*

Washington, D.C.
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Good afternoon. I want to thank the Peterson Institute for International Economics for inviting me to join you today. I am truly honored to be asked to give a talk in memory of John Olcay, whom I met through his connection to Harvard University professor Benjamin Friedman. I would see John on his periodic trips to Boston; our first meeting occurred in 2007, just as financial markets were starting to show stress. John and I shared rising concerns during this period and, unfortunately, through what turned into the global financial crisis and “Great Recession.”

In those days, John was troubled by the condition of financial markets, and also had a deep concern about the human implications of serious economic downturns – a topic I am going

to focus on today. Before I do, however, let me note that the views I express are my own, not necessarily those of my colleagues on the Federal Reserve Board of Governors, or the Federal Open Market Committee (FOMC).

Given the matters with which John was concerned, it is very fitting that this lecture series is focused on “Ethics and Economics.” I should note that many academic disciplines incorporate ethics into required coursework (take medicine, philosophy, or psychology, for example), but I would argue that ethics is not an especially prevalent part of the curriculum of economics. In most courses, core economic concepts tend to overwhelm the syllabus and displace the study of ethical issues. If there is any discussion of ethics in profit- or utility-maximizing frameworks, my sense is that it might take place in the last week of an introductory economics class. Given this underweighting in the profession, I think it is wonderful that the Peterson Institute hosts this series dedicated to ethics and economics.

Today, my remarks will focus on some of the ways in which the impact of negative outcomes in the economy *are distributed* – disproportionately, I’ll argue. These distributional effects have ethical dimensions that should motivate economic policymakers to do more to reduce the negative outcomes.

Given the Fed’s dual mandate – stable prices and maximum sustainable employment – it makes sense for us to look at inflation and unemployment as we begin today. First, inflation: **Figure 1** shows that there has been quite a change in the pattern of inflation over the past 50 years, as measured by the change in the core personal consumption expenditures (PCE) price index. In the United States, as in many advanced economies, the cyclical inflation pattern has been significantly muted. This moderation beginning around 1980 reflects, by the way, the

important role that independent central banks could and did play in dampening the inflation cycles seen in the past.

However, **Figure 2** shows that the economic cycle, as measured by the unemployment rate, has *not* been muted and has not steadily moderated like inflation.

To preview my main points, in my view the costs of high unemployment are disproportionately borne by those who can least afford them, and a variety of actions could be taken by policymakers to make periods of high unemployment less likely. This brings us to the ethical dimension of economics. This is not just about thoughts or feelings – I want to talk today about manifesting those ethical decisions in very tangible policymaking. While there are many examples of policies that could mitigate periods of high unemployment, today I will address three specific realms of policy – state and local government spending; bank regulatory policy; and finally, monetary policy.

First, however, I will touch on the impact of high unemployment and its distribution across several dimensions of the population.

The Distributional Impact of Periods of High Unemployment

The United States has spent the past nine years recovering from a severe recession. Some populations in particular suffered disproportionately, and despite the recovery, historic gaps persist.

Figure 3 provides the unemployment rate by racial and ethnic background from 1972 to 2018. The overall U.S unemployment rate hit 10 percent in the most recent recession – the

second such time since 1972 in which the overall unemployment rate reached 10 percent.¹ However, it is striking that in *every* recession over this period, Black or African-American unemployment rates have exceeded 10 percent. Moreover, in the 1982 recession the Black or African-American unemployment rate exceeded 20 percent; and in the most recent recession, the Black or African-American unemployment rate exceeded 15 percent. Similarly, Hispanic unemployment during recessions is much more elevated than that of the overall population, although not as elevated as for Black or African-Americans.

Economic recessions also disproportionately impact unemployment for those with less education, as shown in **Figure 4**. The figure shows the unemployment rate by educational attainment (ranging from less than a high school diploma, to a bachelor's degree or higher) from 1992 to 2018.² While the unemployment rate for those with a college education reached 5 percent during the most recent recession, the rate exceeded 15 percent for those *without* a high school education.

Furthermore, while unemployment significantly impacts individuals, it also affects families. As **Figure 5** shows, the share of U.S. children under age 18 who are below the poverty line increased significantly in the two recessions where the unemployment rate exceeded 10 percent – with more than 20 percent of children below the poverty level during the Great Recession. Another sobering observation I take from this chart is that the child poverty rate in the U.S. has dropped to 15 percent only once in the past nearly 60 years – hovering just above or just below 15 percent from 1969 to 1973.

In sum, the sad reality is that unemployment disproportionately affects minorities, the less educated, and children whose families are experiencing unemployment. The costs to both the entire economy and to parts of our population are significant. In my view, if policies could

mitigate the severity of economic slowdowns, some of those costs could be avoided – and taking actions now, when the economy is strong, could be particularly important to lessening the severity of a hypothetical future downturn and its impact on individuals.

State and Local Government Spending

Fiscal policy is certainly not in the Fed’s portfolio of mandated responsibilities, but it has a major impact on the economy so we must take it into account.³ Drawing on the historical record, I want to suggest some opportunities for fiscal policy to address the issues I have just highlighted. In my view, state and local government financing should be designed to buffer the economy during recessions, or at a minimum should not reduce the stimulative effects of spending when the economy is most troubled.

However, **Figure 6** shows that since 1960, state and local government spending tends to decline when the unemployment rate is high, and increase when the unemployment rate is low. This pattern likely arises from the fall in state and local tax revenues during economic downturns, coupled with a desire to spend within one’s means – after all, most state and local governments face balanced budget requirements. But it tends to aggravate economic downturns or add additional fuel to an already humming economy (scenarios that would be characterized as “procyclical” in the parlance of economists). And for context, state and local government spending is significant in the overall economy, accounting for 11 percent of U.S. GDP, compared to 4 percent for residential investment (which also tends to fall in economic downturns) and 7 percent for federal government spending.

As I have just suggested, state and local governments likely reduce spending in recessions for good reasons. I would suggest, however, that a number of steps can be taken by officials that would lessen the problematic impact.

First, the cyclical nature of revenue sources for state and local governments can be lessened – in other words, revenue streams might be redesigned to move less cyclically if other competing goals allow.⁴ For example, states that are highly dependent on capital gains taxes are much more likely to experience funding shortfalls during economic downturns, so if possible, reducing this dependence could help.⁵

Second, steps can be taken so that the fiscal health of a state does not drive substantial cuts during downturns. A number of large states (such as Illinois or New Jersey) have seen deterioration in their financial conditions over the past several years, as represented by declines in their credit ratings (**Figure 7**). This is, in part, the result of chronic underfunding of pension liabilities in some states. Ideally, a time like now – when the national economy is growing and employment is robust – would be an opportunity, it seems to me, to prepare for the next downturn. This would perhaps include shoring up state finances, reducing unfunded pension liabilities, and significantly increasing “rainy day” funds.⁶ I am not suggesting it would be easy, even in these economic times. But progress could be made. A similar argument could be made for the federal government, given how beneficial it would be to have the capacity to be more fiscally expansive in a future recession.⁷

In sum, my view is that in the long run, states should consider how to balance the various competing goals of their fiscal approach – for example the goal of having stable revenue streams and of achieving progressivity. But to return to my main point, state and local governments

should reassess their revenue structure and fiscal approach with an eye on cyclical downturns and the potential to lessen their impact on people, through policy.

Bank Regulation

While it may seem somewhat counterintuitive, banking regulation can also amplify the business cycle, and policymakers can look for ways to lessen these effects. For example, lenders' losses on loans tend to increase significantly during economic downturns, reflecting rising unemployment and the difficulty that many households and firms have in meeting debt obligations during hard economic times. **Figure 8** shows that nonperforming loans at U.S. banks tend to rise during periods of high unemployment and fall during periods of low unemployment.⁸

Certain aspects of bank regulation can actually exacerbate the consequences of this trend. For example, capital regulations set a threshold on how low a bank's capital – that is, its total assets (e.g. loans) less its total liabilities (e.g. deposits) – can fall. While this is well-intended – and designed to ensure that banks can meet all their obligations – certain aspects of capital regulations can actually cause banks to act in a manner that essentially extends their problems to their customers in a downturn.

When their capital-to-assets ratio gets too low, banks can choose to either raise their capital level, or shrink assets, to restore the ratio. Raising additional capital is especially costly during economic downturns, and is generally opposed by existing shareholders who do not want their ownership stake diluted.

As a consequence, banks most often raise the capital-to-assets ratio by shrinking assets – and of course, loans are key assets for banks. Thus raising the capital-to-assets ratio can mean

less lending at just the time the economy may need stimulus. And banks may try to reduce downturn-related losses by raising interest rates or tightening lending standards – both of which can hurt otherwise credit-worthy borrowers.

In light of all this, I would suggest that – just as state and local governments need to shore up their finances and build their rainy day funds during a boom – it is incumbent on a bank to raise more capital during good economic times so that it can deplete that fund during a recession, rather than shrink loans when the economy most needs them. An important regulatory tool that can be used to ensure that a bank builds up this so-called rainy day fund during good times is known as the Countercyclical Capital Buffer (CCyB).⁹

Figure 9 shows two different ways to implement capital regulations – one using a static capital requirement and one using a variable capital requirement. We see a hypothetical scenario in which an economic downturn leads to a loss of 300 basis points (or 3 percentage points) on capital. On the left, this causes the bank to fall below its capital requirement, given that the bank was holding 200 basis points of excess capital. As just described, banks often react by shrinking their assets to try to satisfy their capital requirement, reducing lending when borrowers most need it.

On the right side of Figure 9, we see an alternate scenario in which the bank has accumulated a CCyB of 250 basis points during the good economic times that precede the downturn, as required by regulation upon the activation of the CCyB. If the CCyB is deactivated when the economic downturn occurs and losses are realized, the bank has an additional capital buffer of 450 basis points. As a result of the bank's losses stemming from the economic downturn, the buffer is consumed and reduced to zero. But the 300 basis point loss does not push the capital ratio below what is required, and thus the incentive to reduce lending is lessened.

While this type of CCyB is currently being used in many European countries and in Hong Kong, the CCyB in the United States remains at zero.¹⁰ Given the overall health of the economy and the relatively rich asset valuations now prevailing, it is my view that this would be the ideal time to build up capital buffers in the U.S. Doing so could help address the incentive that banks will have to pull back on lending to shrink assets in a future economic downturn.¹¹

Monetary Policy

Monetary policy is primarily conducted by moving short-term interest rates. During good times, the interest rate is set to keep the economy at maximum sustainable employment and at the inflation target, which is 2 percent in the United States. However, when a recession occurs and the unemployment rate rises, policymakers push down interest rates. This has the effect of lowering payments for households and firms that are borrowing, and ideally mitigates the severity of the economic cycle. As **Figure 10** illustrates, since the Volcker disinflation episode in the late 1970s and early 1980s, the short-term federal funds rate has been lowered significantly, particularly during periods of very high unemployment rates.

However, in the last economic cycle the inflation rate was relatively modest, and real interest rates were low because of slow growth in population and productivity, so the federal funds rate began the downturn at an already relatively low level. This meant that when the recession hit, as the funds rate was reduced in response, it fairly quickly hit zero. Because short-term interest rates started off low, the extent to which they could be reduced to offset high unemployment rates was limited.

As **Figure 11** shows, estimates of the equilibrium interest rate¹² have been declining. According to the FOMC's Summary of Economic Projections (SEP), currently Fed policymakers anticipate that the median federal funds interest rate in the long run is expected to be only 2.9 percent in nominal terms. Subtracting the Fed's 2 percent inflation goals, this implies a long-run real interest rate of just 0.9 percent.

While the central bank has other tools to offset economic downturns, such as expanding its balance sheet to lower long-term interest rates, many economists view short-term interest rates as a more effective (and certainly a better-tested and understood) countercyclical tool. The Federal Reserve can do little to change the equilibrium real interest rate in the long run, since it is determined more by factors such as productivity and demographics. So it is appropriate to consider other ways to avoid hitting zero with short-term interest rates. One possibility is to consider more flexibility with the inflation target, perhaps focusing more on an inflation range than a specific number.¹³ One might allow the inflation target to rise within the range during periods of low real rates, thus providing more room for the funds rate to fall during an economic downturn.

Such a change in the monetary policy framework is something that should be considered, along with a careful assessment of the potential costs and benefits. However, if the monetary policy framework is not changed, policymakers should look at other policy tools that can more effectively reduce the severity of recessions.

Current policy also has a role in preparing for, or postponing, the next recession. As **Figure 12** shows, over the time period since 1960, whenever the economy significantly exceeded full employment, a recession ensued. The one counter-example is the 1960s, when fiscal policy was quite expansionary because of the deficit-financed Vietnam War, even though the economy

was already running strong with the unemployment rate below the level associated with full employment. However, that period was also characterized by rising inflation, which triggered significant problems in the following decade related to elevated inflation and inflation expectations.

Whether imbalances appear as higher wages and prices, or higher asset prices, correcting imbalances in the economy (for example, if unemployment falls below a sustainable rate) without a recession is a challenge for central banks to accomplish. As a result, I think the policy path that will increase the probability of a longer recession-free period is the path where the economy does not run above capacity and thus, fall far below the sustainable unemployment rate. I put these notions forward as policymakers continue to seek ways to lessen the severity and impact – particularly the disparate impact – of cyclical economic downturns.

Concluding Observations

In summary and conclusion, while ethics is not generally a central focus of the discipline of economics, my view is that the costs of economic downturns – and the uneven distribution of their impact – are, in fact, ethical issues. I suspect our friend John Olcay would concur. Both in the spirit of ethics and to sharpen policy effectiveness, I believe a more active discussion should be occurring among fiscal, supervisory, and monetary policymakers. All of them, as I have suggested today, could continue and perhaps expand their efforts to make cyclical downturns – and resulting periods of high unemployment – less severe.

Thank you.

¹ 1972 is the first date for which this breakdown is available.

² 1992 is the first date for which this breakdown is available.

³ For additional perspective, see remarks by Eric S. Rosengren: "[Monetary, Fiscal, and Financial Stability Policy Tools: Are We Equipped for the Next Recession?](#)" delivered on March 23, 2018, in Washington D.C.

⁴ Tax policies have multiple, often competing goals and therefore policymakers face tradeoffs. One important goal is to reduce income inequality. While income taxes (especially capital gains taxes) are very cyclical, they are often more progressive (i.e., tax as a share of income is higher for higher-income households) than sales taxes and other tax vehicles.

⁵ Capital gains taxes are a large revenue source for many states. Cutting or eliminating capital gains taxes will automatically require a very large increase in sales taxes and other taxes and fees if we talk about a revenue-neutral scenario.

⁶ Linking cyclical revenue sources (such as capital gains taxes) to rainy day funds could be a good compromise among maintaining high revenue-raising capacity, improving progressivity, and reducing cyclicity. In my view, the macroeconomic effects have probably been underweighted. For additional discussion on the needed size of state rainy day funds, see 2014 Working Paper by Boston Fed Senior Economist Bo Zhao: "[Saving for a Rainy Day: Estimating the Appropriate Size of U.S. State Budget Stabilization Funds.](#)"

⁷ It is worth noting that despite long-run fiscal challenges, lack of support during serious recessions extends the recession, and thus extends the period of lost tax revenue, and exacerbates underlying woes in the state. In my view, a short-term investment in a modest increase in indebtedness may pay back over time.

⁸ Furthermore, the combination of nonperforming loans and lower interest rates during recessions have the effect of adding pressure to banks' earnings.

⁹ For more info on the CCyB, see: <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20160908b.htm>. In addition to the CCyB, other bank regulatory tools include the Comprehensive Capital Analysis and Review (CCAR) and the Dodd-Frank Stress Tests (DFAST). There are countercyclical elements to the stress tests. More stressful scenarios in good times require banks to build more capital. For more on CCAR and DFAST see <http://www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm>.

¹⁰ As Federal Reserve Chairman Jerome H. Powell noted in his recent press conference on June 13, 2018, "...the countercyclical capital buffer gives us the ability to raise capital requirements on the largest institutions when financial stability vulnerabilities are meaningfully above normal." I am suggesting a slightly different application might also be appropriate. (See transcript of the Chairman's press conference [here](#).)

¹¹ For additional perspective, see remarks by Eric S. Rosengren: "[Monetary, Fiscal, and Financial Stability Policy Tools: Are We Equipped for the Next Recession?](#)" delivered on March 23, 2018, in Washington D.C.

¹² It is important to note that the equilibrium interest rate isn't precisely known.

¹³ For additional perspective, see remarks by Eric S. Rosengren: "[Considering Alternative Frameworks: an Inflation Range with an Adjustable Inflation Target](#)", delivered on Jan. 12, 2018 in San Diego, California.