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All's Well That Ends Better:

The Outlook, Education, and the Future of the American Economy

Thank you, Brahm. And congratulations, Nicholas. You and Mrs. Steyer are the reason everyone at the Arizona Council on Economic Education does what they do. Thank you, too, to everyone involved in the ACEE. And most of all, thank you to the teachers who take the time—and often the out-of-pocket expense—to make sure they arm their students with the tools to be financially and economically fluent. Please give yourselves a round of applause.

Thank you. Now I can go home and tell my wife and sons that I was getting applause from the second I took the stage….

I've been told that, incongruously, people want to hear an economic forecast after a social event and dinner on a Saturday. I aim to please, so I'm going to give you an overview of the economy and where I see things going. This is my first public speech since the Federal Open Market Committee met last week, and it turns out there's more than the usual amount of interest in what the Fed is doing. You might notice the reporters in the back of the room…. In any case, it's a pleasure to be able to do it by addressing this crowd, who make economic education a priority, and I'm honored to be here. Now is a good time to interject that anything I say tonight reflects my views alone and does not necessarily reflect the opinions of my Fed colleagues.

The outlook

Moving headlong into the issue everyone wants to hear about: The FOMC again decided to hold off on raising interest rates. To my mind, the decision was a close call, in part reflecting the crosscurrents we're navigating: On one hand, the U.S. economy continues to grow and is closing in on full employment. On the other, in large part due to developments abroad, inflation has remained lower than we'd like.

In any event, we should fully celebrate that the economic expansion is entering its seventh year with good momentum. Real GDP growth has averaged a little over 2 percent over the past five years and the unemployment rate has fallen by nearly a percentage point per year.

Consumer spending is powering the economy and has increased more than 3 percent over the past year. Strong fundamentals point to continued solid gains going forward and business spending is increasing as well. Overall, I see real GDP increasing at about a 2 percent annual rate on average over the second half of 2015 and next year.

As for the labor market, we're on pace to add about 2½ million jobs this year and job openings are plentiful. With the unemployment rate now at 5 percent, we've reached my estimate of full employment based on that measure. Given the progress we've made and the momentum we're seeing, we should reach or exceed full employment across a broad set of measures by the end of this year or early next year.

Turning to inflation: It is still much lower than I'd like, hovering just above zero for the past year. There are a number of reasons that inflation has remained low despite an economy nearing full employment. First and foremost, the rise of the dollar and the fall in oil prices over the past year have lowered import prices and pushed inflation down. Based on past experience, these effects should prove transitory. Second, the prices for health care have been rising much more slowly than is usual of late. This in part reflects legislated changes in payments made to hospitals and other providers.

Therefore, in trying to gauge the underlying trend in inflation, I find it useful to follow measures that strip out the volatile components that may reflect temporary or special factors. My preferred measure is the trimmed mean rate constructed by the Dallas Fed. That actually shows the underlying inflation rate for the past year to be 1.7 percent—still below our 2 percent target, but not by much. Looking ahead, as the effects of the dollar and oil prices ebb, and as the economy strengthens further, I see inflation moving back up to our 2 percent goal within the next two years.

My forecast has some upside risks, specifically an even stronger and faster rebound in housing. And there are, of course, the downside risks: the threat of slowdowns and spillovers from abroad, or the dollar appreciating further.

Normalizing policy

These developments factor into the question of whether or not to raise rates. A considerable amount of ink has been spilled on the subject, and just about everyone has an opinion. Which, of course, I'm always delighted to hear. Our decisions are based on a careful analysis of two sides of the ledger: the one that argues for a little more patience and the one that prefers the "sooner rather than later" approach.

On the patience side, there are two main concerns. First, there's what we call the constraint of the "zero lower bound." That is, rates are essentially zero right now and can't go much lower. If the economy slows or inflation falls even further, we don't have much room to lower rates. Conversely, it's much easier to respond to a move in the other direction: If growth or inflation pick up quickly, we can raise rates without difficulty.[1]

[1] Evans et al. (2015).

Second, there's inflation, which has stayed stubbornly below our 2 percent target for nearly 3½ years now. The inflation conundrum is not unique to the U.S.; it's a problem in virtually every part of the world. And while we can ultimately control our own inflationary destiny, as it were, there's no question that globally low inflation, and the policies other countries have adopted to combat it, has contributed to downward pressure in the U.S. As I said, I see inflation bouncing back. But forecasts aren't guarantees, and there is always the risk that it could take longer than I expect. Some ask: "What's the rush to raise rates when inflation has been persistently so low?"

That brings me to the other side of the issue, the arguments for raising rates sooner rather than later.

Milton Friedman famously taught us that monetary policy has long and variable lags.[2] Research shows it takes at least a year or two for monetary policy to have its full effect.[3] So the decisions we make today have to aim for where we're going, not where we are, and the economy is a moving target. We can't wait until we see the whites of inflation's eyes; if we did, we would overshoot the mark.

An earlier start to raising rates would also allow a smoother, more gradual process of policy normalization, giving us space to fine-tune our responses to any surprise changes in economic conditions. If we were to wait too long to raise rates, the need to play catch-up wouldn't leave much room for maneuver. Not to mention, it could roil financial markets and slow the economy in unintended ways.

Finally, experience shows that an economy that runs too hot for too long can generate imbalances that ultimately lead to either excessive inflation or an economic correction and

[2] Friedman (1961).
[3] Havranek and Rusnak (2013).

recession. In the 1960s and 1970s, it was runaway inflation. In the late 1990s, the expansion became increasingly fueled by euphoria over the "new economy," the dot-com bubble, and massive overinvestment in tech-related industries. And in the first half of the 2000s, the economy was propelled by irrational exuberance over housing, sending house prices spiraling far beyond fundamentals and leading to massive overbuilding. If we wait too long to remove monetary accommodation, we hazard allowing these imbalances to grow, at great cost to our economy.

So those are the main arguments on both sides of the ledger.

My view has been, as all my economic views are, data-driven. In the past, I found the arguments for greater patience to clearly outweigh those for raising rates. The labor market was still far from full strength and the risk to the recovery's momentum was very real. As the economy closed in on full employment, the other side of the ledger started gaining greater weight and the arguments moved into closer balance.

My forecast is that we'll reach our maximum employment mandate in the near future and I'm increasingly confident that inflation will gradually move back to our 2 percent goal. It makes sense, therefore, to start gradually moving away from the extraordinary stimulus that got us here. We already took a step in that direction when we ended QE3. Given the progress we continue to make on our goals, I view the next appropriate step as the start of a process of gradually raising interest rates. That's the "how"; as I said, the data will determine the "when."

I also want to stress that when we're looking at monetary policy choices, it's important to remember that we're in a very different place now than when we first instituted extremely accommodative policy. Since the dark days of late 2009, we've added 13 million jobs; more than 3 million of those came last year, and most of those were full-time. It's been a tough journey back, and when I look ahead, I'm highly conscious that monetary policy played a crucial role in healing a once-ailing economy.[4]

The new normal

As we make our way back to an economy that's at full health, it's also important to consider what constitutes a realistic view of the new normal—a perhaps over-used, but apt, phrase.

The pace of employment growth and the decline in the unemployment rate have slowed a bit this year relative to last year. But that's to be expected. When unemployment was at its 10 percent peak, and as it struggled to come down during the recovery, we needed rapid declines to get the economy back on track. Now that we're getting closer, the pace has to start slowing. Once the economy is operating at full strength, we're only going to need between 60,000 and 100,000 new jobs a month to keep up with the growing labor force.[5] In the mindset of the recovery, that sounds like nothing; but in the context of a healthy economy, it's what we'll need for stable growth.

As the next year unfolds, we want to see a steady pace of economic growth at around 2 percent. If jobs and growth kept the same pace as last year, we would seriously overshoot our mark. I want to see continued improvement, but it's not surprising, and it's actually desirable, that the pace is slowing.

[4] See Swanson and Williams (2014) and Williams (2014).
[5] Aaronson et al. (2014).

Education and human capital

I firmly believe that monetary policy has helped heal a fractured economy and is crucial for economic stability. But monetary policy is by no means alone in its effect on the economy or the nation's prosperity or success. In fact, all monetary policymakers can really do is focus on our dual mandate—and it's all we should do. The rest takes the proverbial village.

Our greatest resource, and our greatest engine of growth, is human capital.[6] This is not a new concept. From ancient times to the modern day, philosophers, academics, and leaders of nations have known that education is the foundation of fortune. Aristotle said all who think about governing are "convinced that the fate of empires depends on the education of youth." Nelson Mandela said education is "the most powerful weapon which you can use to change the world." And another great teacher, Yoda, summed it up best: "pass on what you have learned."

Teachers are the people who do that, and we all owe a debt to those who help cultivate our means of strength and growth, as a community, a region, and a country.

I'd like to end with this: It's human instinct to want to leave our mark. We all want to know that somehow, some way, we've made a difference. When I was a teenager I aimed to do that by being a world famous Dungeons & Dragons player, but that goal eluded me. Instead, my family instilled in me a sense of public service. But nothing leaves a legacy like a teacher. I know that it's long hours, and people don't recognize all the work that goes into it outside of the school day. It can be difficult and unglamorous and thankless and it's far, far too underpaid. But a teacher who reaches a student changes a life. You make your mark on someone's personal history. Whether you've helped someone tap into a talent, find a calling, or understand that

[6] See, for example, Fernald and Jones (2015).

education is vital. When you've shown someone that they can, in fact, pass the test, go to college, or be anything they want to be. All of that has an impact not just on your students, but on their friends, their families, and the families they'll have down the road. You'll help to build the next generation of adults in this country who prize education and know that it's the greatest resource they can provide their own children. You have an effect that resonates in perpetuity. And you build this country's human capital.

So thank you for that. And again, give yourselves a round of applause. And again, I'm going to tell everyone how hard you clapped at the end….

Thank you for your time and your dedication, and thank you for inviting me to share tonight with all of you.

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