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**Managing Risks for Manufacturing Cities and the Broader  
U.S. Economy**

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**FEDERAL RESERVE BANK OF CHICAGO**

The views expressed today are my own and not necessarily  
Those of the Federal Reserve System or the FOMC.

## **Managing Risks for Manufacturing Cities and the Broader U.S. Economy**

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President and Chief Executive Officer  
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Good afternoon.

Thank you for inviting me to this year's Annual Meeting of the Columbus Economic Development Board. This kind invitation originated from Harold Force, president and CEO of Force Construction Company and a member of the Chicago Fed's Advisory Council on Agriculture, Small Business and Labor. The Advisory Council meetings provide us with opportunities to gain ground-level insights in these key areas and share with Council members our perspective on the economy and information on Fed projects.

Today I would like to highlight one of those projects — our Industrial Cities Initiative, or ICI,<sup>1</sup> before sharing my economic outlook and perspective on monetary policy. Let me note that my comments reflect my own views and do not necessarily represent the views of my colleagues on the Federal Open Market Committee (FOMC) or within the Federal Reserve System.

### **The Industrial Cities Initiative**

The goal of the ICI, which began in 2011, is to understand the factors and strategies that shaped the economic development of communities that experienced significant declines in manufacturing jobs over the past few decades. The ICI is a comprehensive study of 10 industrial cities in the Seventh Federal Reserve District<sup>2</sup> that had a population of at least 50,000 and 25 percent of its employment in manufacturing in 1960. In Indiana, we profiled Gary and Fort Wayne. While Columbus did have a sufficiently large manufacturing base in 1960, its population back then was below the study's threshold.

We want to understand such midwestern cities as they strive to either build upon or replace their manufacturing legacies, so that they can more fully participate in both the regional and global economies. The conclusions of the ICI study are based on long-term demographic and economic trends and insights from almost 200 on-site interviews.

We found that leaders in cities struggling economically are acutely aware of the challenges they're facing. Leaders in cities enjoying greater success are cautiously optimistic about the future. And since we published the ICI study, we've been approached by officials from cities that we didn't profile who want to gain a greater

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<sup>1</sup> For more details on the ICI, see <https://www.chicagofed.org/region/community-development/community-economic-development/ici/index>.

<sup>2</sup> The Seventh District comprises all of Iowa and most of Illinois, Indiana, Michigan and Wisconsin. For more details, see <https://www.chicagofed.org/utilities/about-us/seventh-district-economy>.

understanding of who their peers are, how they compare with them, and what they can learn and share.

I'd like to highlight some of the themes that emerged from the ICI project thus far. Though Columbus is thriving, some of the following will surely resonate with you. We often heard about the importance of having strong leadership and a shared vision for the future. A candid assessment by the community's leaders of its assets and vulnerabilities was critical. Many city leaders referred to the early 1980s—a period when manufacturing jobs disappeared rapidly—as a “wake-up call.” Few cities in the study, if any, had a commercial legacy beyond that of a hard-working manufacturing town. For many people in these communities, coming to terms with their cities' altered roles in a highly competitive global economy was a significant challenge that continues today. The ability of community leadership — representing many sectors — to craft a unified vision for the future largely defines the difference between those communities that were able to adapt to a new economic landscape and those that were not. I understand from your Economic Development Board's executive director that in many respects Columbus' leaders were ahead of the curve: They recognized its dependence on one company as early as the late 1970s, which quickly led to formal economic development planning.

All these cities face the challenge of promoting job growth at living wages. Job growth, obviously, is a common economic development goal. However, many of the ICI cities with favorable job growth also have experienced increases in poverty, indicating that these new jobs may not pay well enough to lift a family above the poverty line. Growth in living-wage jobs requires a work force trained and educated to compete in the global marketplace.

So, not surprisingly, educational attainment is another factor in economic success. The days when a high school diploma promised a lifetime of comfortable employment are gone. Today's workers need twenty-first-century technical skills and the ability to interface with people and technology in ways unfamiliar to workers of even a decade ago. We found that many former manufacturing hubs suffer from an educational deficit. Most ICI cities do not have a large number of adults with at least some college education, so the study's participants often mentioned a “skills mismatch” — where employers are unable to fill open positions while prospective employees lament the lack of available jobs. In response, community colleges, economic development entities and business leaders have crafted innovative responses to employment needs — often in partnership with one another. There is no one-size-fits-all path to success. However, those from resurgent and economically healthy cities noted their populations' flexibility, creativity and innovation in responding to work force needs identified by employers. The Columbus Community Education Coalition is one such example. Having the K–16 leadership at the table with business leaders sends a clear message that career planning and skills building starts early.

Another factor that distinguishes some ICI cities from others is their proximity to large urban centers. Some are close to Chicago. Others though, such as Green Bay, Wisconsin, and Cedar Rapids, Iowa, have formed their own distinct economic regions

by drawing workers, entrepreneurs and commerce into their metro areas. I was interested to learn that although Columbus has a population of 45,000, over 1 million people live within a 45-minute drive, with a high concentration of engineers. These features of your area are important assets for companies considering a move here.

Many city leaders also noted the importance of embracing the principles of diversity and inclusion as an economic imperative. Isolation and exclusion are detrimental to economic fundamentals such as educational attainment, labor force participation and crime rates. Several of these cities still struggle to shake off a legacy of racial issues and segregation, which their leaders describe as their “Achilles’ heel.” Similarly, many cities are wrestling with how to accommodate and integrate new arrivals. I understand that efforts led by your community foundation are under way to address these issues locally and ensure that all populations feel welcome.

Finally, a recurring theme was housing affordability. Like most places across the nation, ICI cities were deeply affected by the economic crisis and saw rising foreclosure rates and declining property values. Most of them are recovering. But demand for affordable rental housing has increased dramatically while the supply has not kept pace. In many ICI cities, community development organizations are working in concert with economic development groups to address these issues.

Our staff has returned to many of the ICI cities to share our findings and to identify ways to engage with leaders from these communities. For many of these leaders, the Fed is a new partner and resource. Several of our fellow Reserve Banks are also exploring the challenges facing their older industrial cities. We continue to partner with them — in our research, policy analysis and outreach efforts. That said, regardless of its location, industry concentration or size, no place is immune to macroeconomic trends and forces.

So let me turn to my outlook for the economy and views on monetary policy.

### **Economic Outlook and Views on Monetary Policy**

To give you the punchline, I think the outlook for growth in economic activity and the labor market is good. However, inflation is too low, and I expect it will be so for some time. Based on this forecast, and the risks to the outlook, I think the FOMC should refrain from raising the federal funds rate (our traditional short-term interest rate policy tool) until there is much greater confidence that inflation one or two years ahead will be at our 2 percent target. I see no compelling reason for us to be in a hurry to tighten financial conditions until then.

Now for the details.

### **Nearing Our Employment Goal**

Following years of false starts and tepid growth, economic activity advanced at a solid pace over the past two years. Real gross domestic product (GDP) increased at an average rate of about 2-1/2 percent over this time, and growth was quite rapid in the second half of 2014. True, growth stalled in the first quarter of this year, coming in at

just 0.2 percent, but this appears to reflect in some part transitory factors. The underlying fundamentals still look good. So, moving forward, I expect growth to average in the 2-1/2 to 3 percent range over the next couple years.

As output growth has improved, so has the labor market. Average monthly payroll employment growth was about 260,000 per month in 2014 and early 2015. This is well above the average monthly gain of roughly 190,000 over the previous two years. Similar to output growth in the first quarter, we think the more subdued pace of job gains in March will prove to be transitory. Looking ahead, with 2-1/2 to 3 percent output growth, average job gains should remain above the 200,000 mark for a while longer before gradually moving back down toward its longer-run trend.

Meanwhile, the unemployment rate has declined significantly. In each of the past four years, it has fallen by about 1 percentage point and now stands at 5.5 percent. This is terrific progress, but it remains somewhat higher than what a normal, sustainable unemployment rate should be.

Four times a year, my colleagues and I are asked to submit forecasts of real GDP growth, the unemployment rate and inflation over the next three years and for the longer run.<sup>3</sup> Last March, most FOMC participants' estimates for the longer-run, normal rate of unemployment fell in the range of 5.0 percent to 5.2 percent. Based in part on the extensive analysis done by my staff on demographic and other changes in the composition of the labor force, my estimate was 5.0 percent.<sup>4</sup> So, we are still one-half percentage point above my assumption for the long-run normal rate of unemployment.

Furthermore, some other indicators suggest that there is more slack in labor markets than one would infer from the unemployment rate alone. For example, the number of people who are employed part time for economic reasons remains unusually high. If the economy were closer to full employment, these individuals would have more opportunities to find full-time jobs. Moreover, wage growth has been much lower than one would expect if labor markets were closer to normal.

Even with these caveats, it's clear that the economic activity and labor markets have improved significantly over the past two years. And monetary policy has been an important factor in helping the economy achieve this progress.

### **Missing Our Inflation Goal**

Things are different with inflation.

Since 2012, the FOMC has set an explicit longer-run goal for inflation of 2 percent as measured by the year-over-year rate of change in the Price Index for Personal

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<sup>3</sup> See Federal Open Market Committee (2015a), which features the most recent results from the Summary of Economic Projections. The longer-run projections represent each participant's assessment of where the variables would be under appropriate policy and in the absence of any economic shocks. The full range of longer-run projections for the unemployment rate is 4.9 percent to 5.8 percent.

<sup>4</sup> See Aaronson et al. (2014)—which is recent research by Chicago Fed staff on labor force participation rates and the natural rate of unemployment.

Consumption Expenditures (PCE).<sup>5</sup> Inflation has been running well below this rate for quite some time, averaging about 1-1/2 percent for the past six years. Currently, core PCE inflation, which is a better indicator of underlying trends, was 1.3 percent over the past year.<sup>6</sup> Of course, there are other measures of inflation, such as the well-known Consumer Price Index (CPI).<sup>7</sup> The CPI inflation runs 1/4 to 1/2 of a percentage point higher than PCE measure on average due to differences in the methodologies used to compute the indexes. So a 2 percent goal for PCE inflation equates to something closer to a 2-1/2 percent goal in terms of CPI inflation. By this measure, too, inflation is falling well short of our goal, as the CPI has averaged less than 2 percent since 2008.

Simply put, inflation is too low. Just as too-high inflation can impose significant costs on the economy, so can too-low inflation. When prices and, along with them, wages and incomes rise at a slower rate than anticipated, borrowers' fixed monthly loan obligations become more burdensome. These costs now have been accumulating for the past six plus years that inflation has underrun the FOMC's 2 percent target that borrowers had relied upon. To meet these higher real costs, borrowers must cut back other spending, reducing aggregate demand and ultimately weighing on economic activity. This is an important reason why we need to achieve our 2 percent inflation objective.

Looking ahead, I am anticipating inflation to rise at a pretty gradual pace, reaching our 2 percent objective only in 2018. That's a pretty slow increase. Furthermore, there are downside risks to my projection.

Some of this risk surrounds two factors that have held down inflation recently. First, there is the stronger dollar, which has reduced the prices of imported products we buy. Second, the dramatic decline in oil prices has lowered the costs of energy related items, albeit as it also has bolstered the real spending capacity of consumers and businesses.

If lower import and energy prices result in just a one-time drop in consumer prices, then they would not be an issue for monetary policymakers to worry about. But if the lower pricing gets embedded more persistently in the longer-run inflationary expectations of households and businesses, it would be even harder to get inflation back to its 2 percent target. This is not in my baseline forecast, but such a drop in inflation expectations is a downside risk that we need to be on the watch for.

I should note, too, that low inflation is a global phenomenon. In part, this reflects slower global growth and disinflationary pressures in most advanced economies. Of course, a global slowdown also presents some downside risk for growth in the United States as well.

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<sup>5</sup> This was first acknowledged in Federal Open Market Committee (2012). It remains in the most recent statement of our longer-run goals; see Federal Open Market Committee (2015b).

<sup>6</sup> Core PCE inflation strips out the volatile energy and food prices and thus provides a more accurate reading on underlying inflation trends than overall PCE inflation. I discuss this measure again later.

<sup>7</sup> The CPI differs from the PCE in methodology and the basket of goods and services it tracks.

## **An Appropriate Path for Monetary Policy**

What does this all mean for my assessment of appropriate monetary policy?

Along with projections for the key metrics of the economy that I mentioned earlier, each FOMC participant provides his or her assumption for the appropriate path of the federal funds rate that underlies their economic forecasts. In the latest projections, 15 of the 17 FOMC participants expected that it would be appropriate to raise rates sometime this year.

Looking further ahead, the median path for the target fed funds rate is consistent with roughly a 25 basis point increase at every other FOMC meeting for the next year and a half. This is a considerably slower, more gradual pace of rate increases than those implemented in 2004 through 2006 — the last time the Fed normalized policy following an extended period of very low interest rates.

Financial market participants expect an even slower pace of rate hikes than FOMC participants do. The most recent reading on market expectations puts the target rate at the end of 2016 a bit below 1 percent — a full percentage point below the median FOMC forecast.

In my view, it likely will not be appropriate to begin raising the federal funds rate until sometime in early 2016. Economic activity appears to be on a solid, sustainable growth path, which, on its own, would support a rate hike soon. However, the weak first-quarter data do give me pause, and I would like to see confirmation that they are indeed a transitory aberration. Furthermore, and most important, inflation is low and is expected to remain low for some time.

A prudent risk-management and goal-oriented approach to monetary policy also prescribes waiting to increase the federal funds rate.<sup>8</sup> One risk we face is that we begin to raise rates only to learn that we have misjudged the strength of the economy. In order to rekindle growth and boost inflation, we would have to cut rates back to zero and possibly resort to unconventional, second-best policy tools. It could take some time, then, to get back out of the mess. In contrast, if we wait too long to raise rates, we face the opposite risk of inflation rising too quickly. Here, though, we could likely keep inflation in check with moderate increases in interest rates. Furthermore, there aren't any serious costs of modestly overshooting our inflation target—particularly considering how long inflation has been below our target, this simply would be a natural manifestation of our symmetric inflation target.

This risk-management approach can be thought of in another way. Economists like to talk about an abstract concept called a “natural” or “equilibrium” real rate of interest. This is the inflation-adjusted interest rate consistent with full employment of labor and productive capital and with inflation at its long-run target. When the actual inflation-adjusted federal funds rate is below the theoretical equilibrium rate, policy is accommodative and we would expect inflation pressures to build. When the actual

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<sup>8</sup> I have made the case for patience in earlier speeches. See, for example, Evans (2014).

federal funds rate is higher than the equilibrium rate, policy is restrictive, and there is downward pressure on inflation. The bigger the gaps between the actual and equilibrium rates, the greater these pressures.

During the financial crisis, the equilibrium real interest rate was quite low — indeed quite negative — reflecting the dearth of spending opportunities that looked attractive to households, businesses and the financial sector, all of which needed to rebuild scarred balance sheets. To try to drive actual interest rates towards the natural rate, policy had to be as accommodative as possible — however, the zero lower bound on interest rates prevented us from actually getting there.

Over time, as the economy has worked through the scars from the financial crisis, the equilibrium real rate has risen. And it should continue to rise as the healing process continues. The key question is: Has it risen enough so that the gap between the actual and equilibrium federal funds rate has reached the point that we are actually providing too much policy accommodation and so we should begin to raise the federal funds rate?

I think the answer is no.

There is a great deal of uncertainty over the current equilibrium real rate. It could be lower or higher than the level needed to justify a rate hike. However, there are a number of simple observations that suggest the current level of the federal funds rate relative to the natural rate is not overly accommodative. Namely, we still have resource slack, there is no meaningful upward momentum in inflation and instead of investing businesses are sitting on piles of cash or distributing it to stockholders — a sign that they think the real rate of return on prospective investment projects is quite low.

Indeed, one could argue that we currently do not have enough policy accommodation in place. As I noted earlier my forecast does not see inflation rising to our 2 percent target until 2018—for me, that's too far down the road given how long we have underrun our target. If policy truly were highly accommodative, we'd be getting to our inflation target sooner.

### **Markers of Progress**

Going forward, I will be looking for several important markers to assess if the equilibrium real rate has risen to the point that we're likely to achieve our policy goals in a timely fashion. Only then will I be confident enough to support the start of the policy normalization process.

First, it goes without saying that we need to see continued improvements in labor markets and solid GDP growth. Even though we have made great strides, the economy has not yet returned to full employment, and we must be confident that growth will be adequate to get there.

Second, we should feel quite confident that inflation is going to reach our goal of 2 percent on a sustainable basis within a year or two. Of course, given the lags in how



monetary policy influences the economy, this means the first rate hike will occur based on a forecast. There are a lot of elements in play, and we have to be humble about our ability to forecast inflation. This means we need a range of evidence to be confident inflation will rise.

All else equal, a tighter labor market historically has been associated with higher inflation, and so further improvements relative to our employment mandate should also be consistent with a forecast that achieves our inflation mandate.

Another simple but powerful signal will be if we start seeing a pickup in the year-over-year rate of change in the price index for PCE inflation excluding food and energy. This index may be about the single best predictor of where total inflation will be a year from now. So I would feel more confident about my inflation outlook if core PCE inflation began to rise in a sustainable fashion.

I would also want to see stronger growth in wages and other forms of labor compensation. Wage growth has been very weak for quite some time, averaging only 2 to 2-1/2 percent per year for the past five years. Usually, productivity growth of 1 to 2 percent annually and 2 percent inflation would produce wage growth in the range of 3 to 4 percent per year. Wage and compensation growth closer to this range is an important sign not just of diminished labor market slack, but also of cost increases more consistent with an economy running closer to a 2 percent inflation rate. Of course, a lot of factors—some of which we don't have a good handle on right now—go into wage determination, and in the past rising inflation has tended to precede rising wages. Nonetheless, faster wage growth would be good corroborating evidence that inflation was on its way up.

Another signal that would make me more confident relates to measures of inflation expectations, which are an important determinant of actual inflation. To reach our 2 percent inflation target, the public and financial markets need expect that inflation will run at 2 percent over the medium term. Of particular concern on this score is the fact that the compensation financial market participants require for taking on inflation risk has been moving down dramatically for nearly a year. There are a few reasons why inflation compensation could be low. Benign technical financial market considerations are one possibility. However, it could be that people are expecting inflation to be low. Alternatively, the cost to investors of higher inflation might have fallen or the cost of low inflation might have risen. Neither depressed inflation expectations nor higher costs of low inflation bode well for the outlook. So I also would feel more confident about the inflation outlook, if either inflation compensation picked back up or we had more evidence that the drop in compensation was due to benign technical factors.

### **Current Circumstances Call for Caution**

In summary, I think we should be cautious in the timing of the first rate hike and our pace of policy normalization thereafter. My current view is that my economic outlook and my assessment of the balance of risks will evolve in such a way that I likely will not feel confident enough to begin to raise rates until early next year. But there is no

prescribed timeline that must be adhered to, and no preset script to follow, other than that we should let economic conditions and risks to the outlook be our guides. Given uncomfortably low inflation and uncertainties about the economic environment, I see significant risks, but few benefits, to increasing interest rates prematurely.

Let's be confident that we will achieve both dual mandate goals within a reasonable period of time before taking actions that could undermine the very progress we seek.

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