Thinking Globally and Locally: The Art and Science of Data Dependence

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- Atlanta Fed president Raphael Bostic speaks on the art and science of data dependence in a speech to the Money Marketeers of New York University Inc. in New York City.
- Bostic explains that the Atlanta Fed continually harvests insights from an extensive network of business decision-makers and blends that information with macroeconomic models and data to help him understand why firms are behaving as they are.
- The availability of quality labor is a top concern for most firms in the Atlanta Fed's district, according to Bostic.
- Anecdotes from Sixth District contacts suggest the economy may have gone a bit beyond full employment, Bostic says.
- Bostic thinks the U.S. economy is on solid footing and likely to remain so.
- Bostic believes the Fed's current policy stance is a bit accommodative and favors weighing incoming data over the coming months before deciding on further adjustments.

Good evening. Thank you for the kind introduction and for inviting me to speak at this prestigious venue. It's humbling to join the list of luminaries that the Money Marketeers have hosted. I will do my best to not disappoint.

Before I go further, I'd like to recognize my friends from the Federal Reserve Bank of New York. Thank you all for coming.

Now the usual disclaimer: the views I will express are my own and do not necessarily reflect those of my colleagues on the Federal Open Market Committee (FOMC) or at the Atlanta Fed.

Grassroots information explains the *why*

I'm pretty sure that everyone here has heard the phrase "The devil is in the details." As you know, this refers to something that, at first glance, seems utterly simple, but upon further inspection is actually incredibly complex, with crucial elements embedded in details not expressly articulated. We all face these situations regularly but don't always give close attention to the details. How many of you have accepted an app's user agreement without reading the details? Heaven knows whom you have agreed to share your data with. But just so you know I'm not throwing stones, I don't scrutinize them either.

When it comes to monitoring the macroeconomy and thinking about monetary policy, though, it is dangerous to not dive sufficiently deeply into the details. We learned this the hard way via the Great Recession, and this caused the Atlanta Fed to overhaul its approach to gathering data to gain insights about how businesses and the economy are doing in real time.

Today, I'd like to give you a sense of these efforts and provide a window into how this relatively new way that we gather on-the-ground intelligence informs my view of the economy and of the appropriate stance of policy. In short, it gives me a richer, more nuanced view of what is happening and what may happen than I could gain through macromodels and data alone.

To start, I'd like to take you back to late 2006 and into 2007. (I recognize that many of you might prefer not to go there.) The macroeconomic data were showing robust growth and there were few signs in macromodels that any downturn was imminent—let alone a downturn of the magnitude of the Great Recession.

Coming out of this, we at the Atlanta Fed decided to rethink our approach to gathering the grassroots intelligence that always has served as a supplement to the macrodata. We formalized this process by establishing the Regional Economic Information Network, or REIN.

Through REIN, we continually harvest insights from an extensive network of business decision-makers, along with community and nonprofit organizations, and blend that information with macroeconomic models and data. Regional executives and analysts in our six offices keep me plugged in to conditions on the ground by systematically connecting with a broad cross-section of firms, with the goal of getting input from businesses that vary by size, sector, and geography, among other dimensions. Importantly, this outreach helps my staff and me understand *why* firms are behaving as they are.

Let me give an example of how this has helped us. During the middle to later stages of the recovery, wages climbed less sharply than economic theory suggests they might in a tightening labor market, and many were wondering why wage growth was so lackluster. Because the aggregate data offered only partial clues, we turned to our REIN team, who asked employers why they were not substantially increasing pay even as they complained of labor shortages.

We learned that many employers were still smarting from disruptive layoffs they had made in the Great Recession. During the recovery, they avoided significant boosts in payroll costs, lest they put their business in peril should demand decline as it did a decade ago.

Therefore, instead of long-term wage commitments, employers told us they were taking other steps to attract and retain talent: selective pay increases for particular jobs or locations; incentive pay and bonuses; flexible work hours; more freedom to work remotely; and other "culture investments."

Our contacts helped me learn what employers were doing and why they were doing it. This information enriched our policy discussion and helped sharpen the questions we explore through the data and that we ask our contacts.

Employers still struggle with finding quality labor

Fast forward to today. Currently, the information gathered from my REIN network suggests that labor market conditions are tight. In contrast to earlier in the recovery, wage growth has moved up moderately, though perhaps not as much as some would expect given a very low unemployment rate. That said, availability of quality labor is the top concern for most firms, and many contacts report vacancies that go unfilled for long periods of time—a factor that is constraining growth.

Almost to a firm, our contacts tell us they continue to struggle with recruitment and retention. Some of the stories I hear have me wondering whether we've gone a bit beyond full employment. For example, staffing agencies report that new employees often never show up at placements because they find better positions so quickly. A large firm in the food service industry reports that it eliminated background checks, drug tests, and even traditional job interviews for some positions. The company has adopted an "apply-and-start-the-same-day" approach to hiring.

Tax cuts not substantially changing firms' investing, hiring

Overall, the information REIN collects is valuable for numerous reasons, but let me highlight a couple.

First, the economy of the Sixth Federal Reserve District is big. If our six states were a stand-alone economy, it would be the world's eighth largest—just smaller than India's and larger than Italy's. Second, the composition of our regional economy nicely simulates the makeup of the national economy. These two facts mean that, by systematically targeting a representative basket of contacts in terms of industry sectors, firm size, and urban and rural geography, we can gain a mini-snapshot of economic conditions nationally. And it gives us a better opportunity to discover burgeoning risks—remember the Great Recession experience—by pulling together disparate perspectives to identify emerging macrotrends much earlier than we could before.

REIN wasn't the Atlanta Fed's only response to potential gaps regarding information gathering. We also bolstered our insight into firm behavior through surveys. We currently field a number of surveys, including the Survey of Business Uncertainty and the Business Inflation Expectations surveys. These surveys, which vary in scale and scope, allow us to probe particular real-time issues in detail to give us another view on how businesses are responding to economic conditions and why. Like the REIN information, our survey data have been quite helpful for our understanding of contemporaneous issues.

Toward the end of 2017, as the ink was still drying on the Tax Cuts and Jobs Act, the economics and policy community was trying to gauge its likely impact on the overall economy.

Many private forecasters, using more or less standard macroforecasting models, were predicting a sizeable boost to business investment and labor supply. To be sure, there was ample disagreement among private forecasters regarding the initial impact of the tax reform. However, the Tax Policy Center, the Tax Foundation, and the International Monetary Fund (IMF) all initially estimated the impact of tax reform to be equivalent to around three-quarters of a percentage point on near-term gross domestic product (GDP) growth.

I, too, rely on the input from many of these same models and would have had a similar view on the impact of tax reform—except that input we were gathering from firms told a different story.

As Congress was finalizing the tax reform package, the Atlanta Fed had two surveys in the field: (1) our Business Inflation Expectations survey of firms in the Sixth District and (2) the Survey of Business Uncertainty, a national survey we conduct with Stanford University and the University of Chicago. In both of these surveys, we asked firms how tax reform would affect their capital expenditure plans for 2018. And in the Business Inflation Expectations survey, we also asked how tax reform would affect hiring plans.

An overwhelming majority (two-thirds) of respondents to our national survey indicated that the reform would not affect their capital expenditures at all. Further, just 15 percent said they would increase their capital spending by 10 percent or more.

On hiring, the story was similar. About 70 percent of respondents indicated they would make no changes in their hiring plans because of tax reform.

At first, I was skeptical, given the apparent disconnect between these findings and aggregate forecasting models. However, input from the Southeast business community echoed our survey results. These firms expressed considerable optimism following the passage of the tax reform, but that exuberance had yet to affect capital investment or hiring plans.

Through these conversations with business decision-makers, I gathered an overwhelming sense that the legislation was complex and that firms were still untangling the implications for their businesses. So, my first thought was that our surveys had been in the field a bit too early.

Yet as we got clarity about the tax structure, another round of surveys suggested businesses held firm in their responses. In February of 2018, three months after the reform was passed, nearly 75 percent of our survey respondents still indicated that tax reform was not materially changing their capital spending plans for the remainder of 2018 and 2019.

And, again, my REIN team probed more deeply for any nuances that our survey did not cover. The answers confirmed the survey results: the majority of our contacts said they were not substantially shifting investment expenditures based on the tax cut. Instead, the majority indicated they were using tax savings on stock buybacks, debt reduction, and compensation to employees. Only a handful said they would make expansionary or productivity-enhancing investments.

Looking back on the performance of the economy in 2018, my tentative conclusion is that information we gathered directly from firms early in the year looked prescient. (I say "tentative" because the aggregate economic data are *always* subject to further revision.) Real GDP increased by 2.5 percent in 2018, only modestly outpacing its average growth rate over the previous 7½ years, and coming in about half of a percentage point shy of the IMF's April 2018 forecast for growth.

Business fixed investment grew by a little less than 6 percent, a healthy number to be sure, but far from a transformative year.

Moreover, the details suggest that investment growth in 2018 was largely driven by spending on software and research and development, which may reflect attempts to incorporate labor-saving technology in a tight labor market rather than a surge in expansionary equipment and structures investment, which the tax changes were designed to encourage.

And, as suggested by firms in my district early in the year, 2018 was a record year for stock buybacks and dividend payments.

Trade situation remains murky

Move ahead to the current economic environment, one marked by heightened uncertainty surrounding trade tensions and tariffs. Many macromodels suggest that in the face of high uncertainty, businesses will delay capital expenditures and hiring, leading to a material slowdown in growth.

Yet the details we glean from Main Street suggest that not all firms are impacted by the current uncertainties, nor do they all respond in the same way. And this has implications for attempting to measure how much of an impact uncertainty is having on the aggregate economy.

Regarding trade policy uncertainty, the feedback I receive and the survey evidence my staff analyzes suggest that it is largely a nonissue for most firms.

We fielded a set of special questions regarding the impact of tariffs and trade policy tensions to panelists in our Survey of Business Uncertainty over the third quarter, as U.S.-China trade tensions were escalating.

Overall, our results say the negative effects of trade policy on U.S. business activity have grown over time, particularly for firms with an international reach. However, trade policy's impact on the business sector as a whole remains modest, slowing capital expenditures by a few percentage points and leading to a small change in overall employment.

Importantly, as the trade situation has remained murky, firms affected by tariff increases have also indicated they have adjusted supply chains and taken other steps to mitigate tariffs. The effects of these measures are unlikely to be captured by model-based estimates.

My experience using the information we've gathered from the business community gives me some confidence to, again, view firm-level information as an important supplement to the forecasts of macroeconomic models.

Weighing incoming data before making further adjustments is important

Let me close by talking a bit about the current economic picture. The unemployment rate is near historic lows and inflation is more or less at target. Given this, a casual observer might conclude that the job of a central banker is done. Yet even a cursory scan of the horizon will detect a few gathering storm clouds that threaten to disrupt the current sunny picture.

In the face of these gathering clouds—namely risks surrounding trade policy and global growth—the job of a central banker becomes one of weighing the likelihood of these risks occurring and the magnitude of the hit to the economy should they indeed occur.

On this front, there has been a diversity of views among the FOMC over the past three meetings (as evidenced by dissents to policy choice), with some seeing the need to take out some insurance against the apparent downside risks and others arguing that these uncertainties have yet to rise to a level significant enough to derail the current expansion.

For myself, I do think that the economy today is on solid footing and is likely to remain so. But I've gotten to this view only after a thorough and careful examination of the details through our various channels. The combination of the current economic data, survey results, and the information gleaned from our myriad face-to-face interactions with firms via REIN suggest, to me, that the Fed's current stance is, if anything, a bit accommodative. I am fairly comfortable standing pat with policy and strongly favor weighing the incoming data, both macro and micro, over the coming months before deciding on any further adjustments.

I started this evening appealing to the colloquial saying "The devil is in the details." However, further digging and a handy copy of *Bartlett's Familiar Quotations* reveal that the phrase originally had a slightly different meaning: "God is in the details," which suggests, to me at least, that whatever you do, you should do completely and thoroughly. But whichever phrase speaks to you, both convey that the details are important. And, in essence, it's how I approach monetary policy down in Atlanta.

Thank you. I'll be happy to take a few questions.