Toby Madden, regional economist at the Federal Reserve Bank, Minneapolis

An Interview with The Civic Caucus
2104 Girard Ave.S., Minneapolis, MN 55405
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Notes of the Discussion

Present: Dave Broden, Audrey Clay, Janis Clay, Pat Davies, Rick Dornfeld, Paul Gilje (coordinator), Sallie Kemper, Randy Johnson, Dan Loritz (vice chair), Toby Madden (phone), Dana Schroeder and Clarence Shallbetter.

Summary of Discussion

It may not feel like it, but the economy in Minnesota, the country and the world is in a period of expansion, says Toby Madden. The U.S., Minnesota and the world economies are producing record amounts of output. However, the economy is uneven among states, among sectors and among different socio-economic groups, so not everybody feels like we're in an expansion, he says. The Ninth Federal Reserve District has a diverse economy and is doing very well compared with the rest of the country. Madden believes that increases in productivity can free up people to produce other things and will not necessarily lead to fewer people being employed overall. Investment in early childhood education can increase people's productivity throughout their lives, especially in at-risk kids, he posits. Economies in both low-tax states and high-tax states can do well and people are free to move wherever they think they'll be better off. Madden believes the gas tax is too low and that the benefits of immigration far outweigh the costs.

Background

Toby Madden is a regional economist in the public affairs department at the Federal Reserve Bank of Minneapolis. He writes articles for bank publications, frequently speaks on the district economy and is actively involved with the bank's economic education program. He describes his job as finding out what's going on in the economy right now and then reporting on it to give the Fed's leadership current economic information.

He joined the Minneapolis Fed in 1995 as a management analyst in the automated clearinghouse area. Prior to joining the Fed, Madden worked for five years at Ernst and Young as a senior consultant in the financial services industry group. A native of Minnesota, Madden has a bachelor's degree in
accounting and a master's degree in finance from the University of Minnesota. He has taken over 20
master's and PhD-level courses in economics at the University of Minnesota. He is a certified public
accountant and a certified management accountant. Madden is past president of the Minnesota
Economic Association and is on the board of the Institute for Financial Economics.

Discussion

Disclaimer. Toby Madden began his presentation with the disclaimer that the views expressed in the
discussion with the Civic Caucus are his and not necessarily those of the Federal Reserve Bank in
Minneapolis or those of the Federal Reserve System.

It may not feel like it, but the country and Minnesota are in an economic expansion. Madden
defined economic recession, recovery and expansion in terms of economic output, real Gross
Domestic Product adjusted for inflation:

- **Recession**: We're going downhill, producing less than we produced last month or last quarter.
- **Recovery**: We're producing more than last quarter, but still producing less than the previous peak.
- **Expansion**: We're producing record amounts of output, adjusted for inflation.

He then asked the 11 members of the Civic Caucus interview group who were present whether right
now the U.S. economy and the Minnesota economy are in recession, recovery, or expansion. One
answered recession, eight recovery, one expansion and one didn't answer.

He said the people he talks to currently are usually divided into five percent recession, five percent
expansion and 90 percent recovery, approximately how the Caucus interview group answered.

But, Madden said, we're actually in an economic expansion. We're producing more goods and
services than any country has ever produced in the history of the world. The U.S. and Minnesota and
world economies are producing record amounts of output.

Why, then, he asked, doesn't it feel like an expansion?

He gave five reasons for the country as a whole:

1. Output per person hasn't recovered to the previous peak;
2. There are still a lot fewer people working than during the previous peak of jobs;
3. The economy is very uneven across the country: half the states are in a recovery; half the states are in an expansion;
4. Economic growth has been uneven among sectors: some sectors are booming, while others are hurting;
5. Economic growth has been very uneven among different socio-economic groups: some people have gotten hurt a lot more during the recession than others.

Madden said we've been in an economic expansion for nine months plus, although the mass population thinks we're still in recovery or recession. "I don't know how much more economic output
would happen," he said, "if everybody realized we're in an expansion and said, 'Oh, I guess we don't have to hunker down. We're really in a slow economic expansion.'"

He said even most economists still call this recovery, but it's an expansion. Minnesota, the U.S. and the world are producing at record levels. The Ninth Federal Reserve District, which includes Montana, the Dakotas, Minnesota, northwestern Wisconsin and Michigan's Upper Peninsula, is doing very well compared to the rest of the nation.

Madden noted that North Dakota is in a tremendous economic boom. They were 30 percent above their previous peak at the end of 2011 and even further above it in 2012. "They're in a crisis up there in that they're growing too fast. They're trying to control growth. They can't find enough people to work or places to house them."

Two conditions must be met for a job to be created. An interviewer asked, if we're seeing record output with fewer people working, will we see a permanent uptick in unemployment?

Madden responded that a job is created when two conditions are met:

1. The wage must be higher than the "reservation wage," i.e., the wage where people are indifferent between working and not working. The reservation wage level can fluctuate based on policies or personal situations.
2. The value to a business must be positive for it to hire someone; the benefits have to outweigh the costs.

He said the market will adjust by throwing different wage levels out there, based on the value being added by a particular employee.

He noted that unemployment in the U.S. dropped down to 7.7 percent on December 7, 2012, and that the economy added 146,000 jobs in November. He said he disagrees with the premise that we're in a long-term period where we have a bunch of people who can't be very productive in society and are therefore unemployed.

Economy of the Ninth Federal Reserve District is diversified and doing well. The economy is doing pretty well in the Ninth Federal Reserve District, Madden remarked, especially in North Dakota, which is booming. The district has a very diversified economy: mountains in the West with some mining activity, plains with cow/calf operations, oil patches, fertile land, the North Woods, mines and the very diverse economy of the Twin Cities, which accounts for a major portion of economic output in the district. Some areas in the district are very dependent on commodity prices, others are very dependent on rainfall and still others are very dependent on tourism.

"The beauty of our district," Madden said, "is a pretty highly educated and healthy workforce. That's a very solid foundation and can drive the economy forward." Minnesota has higher than average income, showing that investments in education are paying off. Minnesotans have about 8.5 percent more in average income per person than the rest of the country.

Fifty to 60 years ago, Minnesota's income was less than the average nationally. "We're reaping returns on investments in education and health care 50 years later," he said. "Because we're educated and healthy, we're able to produce a lot, which means our income grows."
Some Ninth District industries are declining, while others are growing. Madden outlined trends in industries in various parts of the Ninth District:

- The iron ore industry, located in northern Minnesota and the Upper Peninsula in Michigan, is in decline. Iron ore demand has fallen and mines are starting to shut down or reduce production. Other types of metal deposits, such as copper, are being mined, where the price from selling them is more than the cost of getting them out of the mine.

- The only palladium platinum producer in the country is located in Montana. There are also gold and copper producers there, so the area is doing very well.

- Minnesota had decent agricultural yields this year, combined with higher commodity prices because of the drought elsewhere in the country. But now the drought has intensified in the Ninth District, which is a concern for next year.

- Manufacturing is an important part of the economy, both nationally and in the Ninth District, and contributes about 15 percent of output value-added. However, it consumes less than 10 percent of the workforce. Manufacturing jobs aren't leaving the country; they're actually disappearing. If we can produce lots of stuff with fewer inputs, then we need fewer inputs. Productivity growth in the manufacturing sector is five percent per year.

Education technology is changing. Madden discussed growth in education technology. If that technology allows teachers to teach five percent more students every year, in five years teachers could teach 25 percent or 30 percent more kids. Or, presumably, we could spend 25 percent less teaching the same number of kids. He said he didn't think that would actually happen, "not in public education, anyway."

But market-based education has seen that happen, he suggested. Khan Academy can put a video on YouTube and millions of kids and adults can watch it and learn from it. Education technology is changing and that can be replicated through many aspects of the economy, "including for economists." When he started at the Fed 10 years ago, there were 2½ people doing what he does alone now. "I'm doing more because I have technology at my fingertips and I can find out quicker what's going on," he said.

Increases in productivity can free up people to produce other things. Responding to a question about whether increases in productivity mean we'll need fewer people to do the work, Madden said economists say there's scarcity out there in providing the unlimited wants people have. As an example, he noted that there are now 3D bio printers that can print out cartilage or arteries. And the cost of traditional 3D printers has come down to $1,000 to $1,500 per printer. If one person can produce so much more, then other people will be free to produce other things. We used to need 95 percent of the population to produce our food and now it only takes a few percent.

Early childhood education can increase people's productivity throughout life. An interviewer asked how we can provide the necessary education and training for constantly changing jobs. Madden responded that there is a huge change in education technology and that companies are
embracing this new technology to train their people. If the basic educational system teaches people to learn quickly and to find information quickly, that makes the technological advancement even more rapid.

"Really you need to start at a younger age," he commented. "There are huge private returns and public returns for investing early in life, especially for at-risk kids that are three years old and under. If we can hit them at that level, we can really have them increase their productivity throughout life." He said it's tough for kids to recover from serious damage done before they're two years old.

**Economies in both low tax states and high tax states can do well.** In response to a question about whether Minnesota's tax rates are too high relative to other states, like South Dakota, Madden said Minnesota is considered to be a high-tax, high-service state, while South Dakota is considered to be a low-tax, low-service state. Both economies are successful in terms of increasing output and income and both are doing well. People can move between states to where they think they're better off. Both Minnesota and South Dakota can create jobs by meeting the two conditions discussed earlier: the job must pay more than the reservation wage and the benefits of hiring someone must outweigh the costs.

**Gas tax should be much higher.** An interviewer commented that an advisory committee to Governor Mark Dayton has recommended increasing the gas tax to 40 cents over next 20 years and adding half a percent to the sales tax to fund transit in the metro area. Madden responded, "My personal belief is that the gas tax is a lot lower than socially optimal. We should be taxing at a lot, lot higher rate. Society would be better off with a lot higher gas tax." If we increase the gas tax, there will be less pollution, less congestion and less road use.

**It's tough to determine how the public can share in the windfalls from a public policy decision.** An interviewer asked if there is a way for the public to obtain part of the capital gains from landowners whose land values increase markedly because a freeway exchange or transit station is placed near their property. Madden replied that any public policy decision has winners and losers. It's tough to figure out the exact point where we could hit the winners up for windfalls from that policy. They might have bought the land in the belief that they would get benefits in the future.

**Immigration benefits far exceed the costs.** In response to a question about the impact of the changing demographics of Minnesota, Madden said the Ninth District's share of the country's population is decreasing and the district is not that culturally diverse. The country's population growth is happening in the nonwhite populations. "Immigration has costs and benefits," he said. "My personal belief is that the benefits far exceed the costs." We would have millions more jobs if we brought in millions more people, because there would be more people who need things. If we get stuck in the old ways of doing things, we won't have as much innovation as if we're exposed to new ideas. "Extra creativity in the mix helps."

**Letting economic changes happen allows productivity gains and increases in the standard of living.** In response to a question, Madden pointed out that less and less of the population is involved in agriculture and manufacturing, while natural resources are seeing huge increases. Manufacturing was growing at a fast pace for three years before it began to slow down this summer. There have been huge contractions in real estate and construction, which are still in recovery, but now picking up at a decent pace. Some other sectors are into strong expansion.
We can see the changes going on, he continued. One reason the U.S. is so successful is that we pretty much let those changes happen. Other societies that don't want change fall behind pretty quickly. In the U.S. we pretty much let winners win and losers lose. As a result, we see huge productivity gains and huge increases in our standard of living, even though there may be income and wealth diversity, as well.

In response to a question about whether income disparity will grow wider than it's been this last decade, Madden replied that because we have a free system, we might over time have income and wealth disparities. "If we restrict economic growth and creative destruction (newly created things destroying previous things), we will have less income disparity, but less income to despair over," he said.

**Whether the federal government should give states money as an additional economic stimulus is a political question.** An interviewer asked Madden if he thought this would be a good time for an additional financial stimulus by the federal government giving states some money. Madden said he couldn't answer the question, because it's a political question. He did say that states and local governments "got clobbered" during the recession and began cutting their budgets, because, unlike the federal government, they need to balance their budgets. Government employment is down at both the local and state levels. People are wondering how much government services we can afford. But if lots of the services people want aren't happening, then society would say, "let's pay more taxes."

In conclusion, Madden responded to a question about fiscal vs. monetary policy by saying that the Federal Reserve has two primary objectives regarding monetary policy: low, stable prices and full employment. He said we're doing well on low and stable prices overall, but we're not achieving full employment.