

## ASK AN ECONOMIST



**Michael W. McCracken** has been an economist at the Federal Reserve Bank of St. Louis since 2008. An econometrician, he focuses his research on forecasting and, in particular, evaluating the accuracy of forecasts from different models. When he isn't working, he enjoys hiking, spending time with his family and following University of Kansas basketball. For more on his research, see <https://research.stlouisfed.org/econ/mccracken>.

**McCracken and his family at Disney's Epcot park in Florida.**

**Q: What is "big data," and how does FRED-MD contribute to it?**

**A:** Statistical analysis has evolved. In the past, it was focused on one variable measured across people or one variable measured across time. But with the advent of superfast computers, researchers and analysts can jointly model a large number of variables, each with a large number of observations across time. That is "big data."

Although being able to use big data has benefits, such as improving the accuracy of forecasts, collecting the data can be extremely time-consuming. To that end, my co-author, Serena Ng of Columbia University, and I (along with tremendous assistance from staff at the St. Louis Fed's data desk) created FRED-MD, a monthly database of over 130 macro-economic time series that cover categories such as output and income, the labor market and prices. The data series are similar to the ones used by James Stock of Harvard and Mark Watson of Princeton, who created a macroeconomic data set that has become the benchmark for a lot of what people do in economics when they are working with big data. With Stock and Watson's choice of data as a guide, we used series that are available in FRED (Federal Reserve Economic Data), the St. Louis Fed's main economic database. Now, rather than having thousands of economists separately put together their own data set, they can simply download a spreadsheet from our website.<sup>1</sup>

FRED-MD has several advantages. For one, using series from FRED allows us to update our data set relatively quickly each month. In addition, anyone can access the latest file as well as previous vintages, which allows for easier replication of empirical work and for easier comparison between methods used in different lines of research. In other words, results won't differ simply because the researchers used two different data sets. Another advantage of FRED-MD is that it saves users from having to incorporate revisions and changes to the data themselves. Those are handled by the experts at the data desk.

Our main goal in providing this core data set was to make it easier for those who do empirical analysis of big data. Instead of spending time collecting the data, they can focus on the bigger questions that they are trying to answer.

<sup>1</sup> For more information on FRED-MD and FRED-QD, which is a database of quarterly observations, see <https://research.stlouisfed.org/econ/mccracken/fred-databases>.

## SPEND A FEW MINUTES AND LEARN A LOT ABOUT THE FEDERAL BUDGET

Our Economic Education department has many free resources for consumers who would like to learn more about all things related to economics, personal finance and money, in general. One of the newest offerings is a mini online course about the U.S. federal budget.

The interactive Government Budgets course will walk you through the budget process and explain how government programs and other initiatives are financed. You'll play the role of a new member of Congress, taking part in the creation of a budget. In doing so, you will have to balance the desires of your constituents with the long-term goals of the country.

To take the free course, go to [www.stlouisfed.org/education/government-budgets-online-course-for-consumers](http://www.stlouisfed.org/education/government-budgets-online-course-for-consumers).

To see other education-oriented resources that we offer, go to the Econ Lowdown website at [www.stlouisfed.org/education](http://www.stlouisfed.org/education). There, you will find videos, podcasts, courses, infographics and more for multiple audiences.

## SEE HOW COMMUNITY BANKERS FEEL ABOUT KEY ISSUES IN INDUSTRY

More than 500 community bankers from around the country took a survey earlier this year about key industry issues, including compliance costs, small-business lending, financial technology, and mergers and acquisitions. The results of the survey were released at the fourth annual Community Banking in the 21st Century Research and Policy Conference, held at the Federal Reserve Bank of St. Louis at the end of September.

The survey's results can be seen at [www.communitybanking.org](http://www.communitybanking.org). There, you will also find the research papers that were presented at the conference, as well as a series of short videos that show how community bankers and state regulators have given their communities a boost.

The conference is sponsored every year by the Federal Reserve System and the Conference of State Bank Supervisors.

## CREDIT RATINGS VARY WIDELY ACROSS LOW- AND MODERATE-INCOME NEIGHBORHOODS

In the latest issue of Bridges, our community development newsletter, read about the disparities in credit ratings across low- and moderate-income (LMI) neighborhoods around the country. Those areas with better credit ratings tend to have a higher percentage of white occupants and are usually located in the East, West and Upper Midwest. Those areas with poorer credit ratings tend to have a higher percentage of black residents and tend to be located in the South. The disparity is important not just to the residents but to the banks that are required to provide fair and impartial access to credit in underserved areas.

This article is based on consumer credit data for LMI areas in more than 200 metro areas around the country. For the first time, these data are available to the public. (See link in article.)

To read this and all the other articles in this issue of Bridges, see [www.stlouisfed.org/publications/bridges/summer-2016](http://www.stlouisfed.org/publications/bridges/summer-2016). Bridges is a quarterly newsletter that aims to inform bankers, community development organizations, representatives of state and local government agencies, and others, about current issues and initiatives in community and economic development.