Dr. Raphael W. Bostic
Building an Economy That Works for All of Us

Growing up in Delran, New Jersey, Raphael Bostic loved solving puzzles.

He also loved chemistry and studying “how elements fit together to form the world we live in.”

After graduating from high school, Raphael went to college at Harvard University. He wanted to be a chemical engineer, but a small explosion in the lab made him change his mind.

He started taking other types of classes to see what he liked. He was interested in psychology (the study of people’s minds and behavior) and decided to major in it.

Then, he took a class in ECONOMICS ...the study of people’s choices and decisions. “I got in there and I just fell in love with it. It was interesting. It was intuitive. It was relevant for the real world.”

In 1987, Raphael graduated with a combined major of psychology and economics. These two subjects together helped explain so much about why and how people do what they do.

Raphael earned his Ph.D. in economics from Stanford University in 1995.

Since earning his Ph.D., Dr. Raphael Bostic has worked as an economist for the Federal Reserve* and as a university professor. He also worked on housing policy development and research for the U.S. government.

Today, Dr. Bostic is the President and CEO of the Federal Reserve Bank of Atlanta. He is the first African American and openly gay person to be president of a Federal Reserve Bank.

FUN FACTS!
Dr. Bostic still loves doing puzzles—crossword puzzles, sudoku, and spider solitaire—and plays when he can.

He is also a skilled birdwatcher!

Dr. Bostic studies patterns to solve puzzles and economic problems. He says, “If you don’t really understand the pattern, then you won’t really know what to do to fix the problem.”


FEDERAL RESERVE BANK OF NEW YORK
ECONOMISTS LOOK FOR PATTERNS!
Accomplished economist Dr. Raphael Bostic discovered uneven patterns in data...

In his dissertation,* Dr. Bostic identified patterns that held the BIG ANSWERS he was looking for.

What's a pattern? A pattern is something that happens in a regular and repeated way. Economists, problem-solvers, and observers of all kinds (like birdwatchers!) look for patterns to learn about the world.

Dissertation Title:
“Essays on Urban Growth and Development”

Dr. Bostic’s dissertation focused on how cities grow. And in the last two chapters, he studied data on home loans.

To buy a home, people often apply for a home loan. This kind of loan allows people to borrow a large amount of money from a bank, buy a home, and then pay the borrowed money back slowly over time, with interest.

Lenders, or those loaning money from a bank, must decide who will receive loans. To make their decisions, lenders often ask the people who want to borrow money questions, like:

- Do you have a steady source of income?
- How much money do you have saved in the bank?
- What’s your credit history—have you paid your bills?
- Have you paid back the loans you’ve gotten in the past?

The answers to these questions can tell lenders a lot about how likely a person is to pay back their loan.

But what if lenders used other information, like the color of someone’s skin, to decide whether or not to lend them money? The research Dr. Bostic studied for his dissertation said that lenders were influenced by the borrowers’ skin color when making decisions about home loans. But Dr. Bostic thought the research didn’t show enough evidence.*

Dr. Bostic wondered:
When asking banks for home loans, are people being treated differently based on the color of their skin?

If people are being treated differently, where in the loan process is this discrimination happening?

To find the answer to his BIG QUESTIONS, he studied the data.

Using mathematical tools, Dr. Bostic created an equation to help him find hidden patterns within it.

*A dissertation (dis-er-tay-shun) is a long essay on a specific topic. It includes original research you conduct to find answers to questions about your topic. You write a dissertation to earn your doctoral degree or Ph.D., and to add the “Dr.” before your name, just like Dr. Bostic did.
Dr. Bostic’s equation revealed **new patterns** in the data:

The **patterns** showed that discrimination, or unfair treatment, was happening in home loan lending, and helped Dr. Bostic identify exactly **who** was being treated unfairly.

**ONE pattern** showed that lenders treated all home loan borrowers with **strong credit histories, or lots of money**, the **same way**.

**anoTher pattern** showed that lenders treated home loan borrowers with weaker credit histories, or **less money**, differently depending on their **skin color**. In these cases, lenders were more likely to decide **not** to lend money to Black people and people of color than white people.

With knowledge of the **patterns** of discrimination, Dr. Bostic explains, we can work to build a fairer system and create a stronger economy for everyone.⁵

Dr. Bostic continues to use **patterns** to study data as the President of the Federal Reserve Bank of Atlanta. He directs research, influences housing policy, and helps make sure that banks offering home loans "operate in safe and sound ways...and are not discriminating against people."⁶

1. Why do you think Dr. Bostic’s study is an important one?

2. Circle the drawing (A, B, or C) that best completes the **pattern** below.

   ![Pattern choices](image)

   - A.
   - B.
   - C.

3. Where do you see or use **patterns** in your daily life? Write (or draw!) your answers below.

   ![Image with bird](image)

   What is a **BIG PROBLEM** that you think studying **patterns** could help solve? How?
Dr. Bostic’s advice for students: “Listen to your passion...and don’t take...the first ‘no’ or the second ‘no’ or the third ‘no’ for an answer.”

Dr. Raphael Bostic, President of the Federal Reserve Bank of Atlanta. Photograph courtesy of the Federal Reserve Bank of Atlanta.

To learn more about Dr. Bostic’s work to build a more inclusive economy, read his essays “A Moral and Economic Imperative to End Racism” and “Defining the Pursuit of Maximum Employment.”

Thinking about your own path into the field of economics? Watch this Atlanta Fed interview with Dr. Bostic, where he discusses his early interests and his path into economics.

Want to learn more about home lending patterns with Dr. Bostic? Read his article “A Test of Cultural Affinity in Home Mortgage Lending,” here.

And, if you want to take a look at some housing data, the U.S. Department of Housing and Urban Development’s website is a great place to start.

1. Raphael Bostic, interview notes from Dr. Mary Suiter, Federal Reserve Bank of St. Louis, November 18, 2021.


THANK YOU to Dr. Raphael Bostic for participating in the Economist Spotlight series!

For more information about the New York Fed’s Economic Education, visit: nyfed.org/econ-ed

Federal Reserve Bank of New York
Communications & Outreach
33 Liberty Street
New York, NY 10045
NOT FOR RESALE
COPYRIGHT ©2021