## Café Economics

# Taxing Matters

**Stefanie Stantcheva** explains how policymakers can raise taxes without scaring off innovators

The Internal Revenue Service building in Washington, DC, has its raison d'être etched in stone across its facade: "Taxes are what we pay for civilized society." That quote is from Oliver Wendell Holmes Jr., a Supreme Court justice in the early 1900s, but some prominent modern-day Americans, such as Steve Jobs, argue that it is innovation that truly allows societies to evolve: "Innovation distinguishes between a leader and a follower," Jobs said. So what happens when those two things work against each other...when taxes start to weigh on innovation?

Stefanie Stantcheva wants to know how tax policy can make or break the innovative spirit, a subject she studies at Harvard University's Social Economics Lab, which she founded. Her fascination with economics began when she was a young girl growing up in Bulgaria in the 1990s amid bouts of hyperinflation. She later moved to France and East Germany, where she found more economic puzzles to solve. Stantcheva was destined to become an economist and has been doing remarkable research ever since.

Economists need to go beyond conventional data to understand people's reasoning, perceptions, beliefs, and attitudes, Stantcheva tells F&D.

Her work on taxation and innovation won her the 2025 John Bates Clark Medal—known as the Baby Nobel—awarded for the most significant contributions to economic thought and knowledge by an economist under age 40.

Stantcheva's youthful approach has shed light on trends such as zero-sum thinking, which challenges conventional wisdom on growth and, she says, helps explain the reasoning behind the perception of economic policies among younger generations.

Stantcheva, the Nathaniel Ropes Professor of Political Economy at Harvard, discussed old and new thinking in economic policy with F&D contributor Rhoda Metcalfe.

**F&D: You've been involved in many thought-provoking studies, but your work on taxation and innovation has received a lot of attention. What's the connection?**

**SS:** There's an important connection. Innovators and inventors are economic agents, like everyone else, and they care about economic incentives and rewards. Our studies show the effect of taxation on inventors in the United States all the way back to the 1930s. We wanted to understand how taxes shaped the quantity of innovation, where it happened across different states, and its quality. We found that taxation has a negative effect



*Illustration by Sonia Pulido*

on innovation, both in terms of the quantity, as measured by the number of patents, and the location. States with higher personal—and especially higher corporate income taxes—lost out to lower-income-tax states in terms of innovation.

**F&D: So if a state wants more innovation, more start-ups, all it has to do is lower taxes?**

**SS:** It's more complicated, because taxation exists for a good reason. We need to raise revenue to finance important public spending. If a state has a lot of amenities—measured, for instance, by the number of inventors located there already, or by its research infrastructure—this dampens the effects of higher taxes. California, for example, has relatively high taxes. Yet innovators still want to move there because there is so much innovation there already and because of the many amenities, which are partly financed by high taxes. And this is also true in other major patenting countries, in western Europe and Canada, for instance. Superstar inventors are highly mobile and sensitive to taxes. Migration effects are powerful for highly qualified inventors.

The policy conclusion is that because taxes are needed for lots of reasons, it's important to dampen their negative economic effects. The way revenues are spent is critical. Revenues that foster research and innovation infrastructure, that make a location attractive, allow a state or a country to sustain higher taxes without losing all innovative capacity.

**F&D: Taxation is a recurring theme in your research. What makes it so interesting?**

**SS:** Who likes taxes, right? But they affect so many aspects of our lives. A well-designed tax system can encourage growth and equality and provide great infrastructure and public services. But a poorly designed tax system can have terrible cascading effects that hamper economic development. Taxation is such a powerful tool that it's important to study it and get it right.

**F&D: One thing that sets your research apart is the way you use surveys, which are not new, but your approach is a little different. Can you explain?**

**SS:** Surveys have been around for a very long time in economics, but there are things that remain completely invisible in data, no matter how good it is—things like people's reasoning, perceptions, beliefs, attitudes. This is why the surveys we do at the Social Economics Lab are so important. We try to understand how people think about economic issues and economic policies. We go deep into how people reason, why they reason the way they do, why they hold some views and not others. Our surveys also typically incorporate something experimental, which means some people will see one type of information while others will see another. We can see what happens from that additional information or that different angle on an issue. We're creating big data on something unusual: what's happening in people's minds. We can analyze it in a quantitative way. We can see patterns and understand cause and effect. We can draw many lessons from this.

**F&D: Can you give an example?**

**SS:** We tried to see how people in 20 countries feel about major climate policies. An interesting example is the trade-off between taxing pollution and banning it altogether. Should we tax polluting cars and still let people purchase them if they're willing to pay the price? Or should we ban polluting cars altogether? Economic theory suggests that a tax is more efficient than an outright ban. But people feel differently, and our surveys help us understand why. And it turns out people are driven by a strong equity concern. People find it unfair that the rich can simply pay to pollute while others cannot. They consider an outright ban to be fairer.

**F&D: And your other study suggests more people are thinking in zero-sum terms. What's that about?**

**SS:** Zero-sum thinking is the belief that if one individual or group gains, it must come at the expense of another. It's the belief in a limited amount of good. If you get a larger slice of the pie, I must get a smaller slice. It contrasts with positive-sum thinking—the belief that we can grow the pie and don't need to be in direct competition with each other. We set out to study how this mindset is spread across the US—across different groups, different generations, different places—and where it comes from and how it shapes policy views. Zero-sum thinking, it turns out, is much more prevalent among younger people in the US. That might seem surprising, but it's also true in other rich countries. The economic environment really matters. People who grew up in a time of lower growth and lower mobility, as is the case for younger generations in the US, are much more likely to be zero-sum.

The pattern is flipped in emerging market economies, where there is higher growth and higher mobility than before. Younger generations in these countries are less zero-sum than the older ones. But the economic environment also matters at the individual level. So if your own family has experienced upward mobility, then you are less likely to be zero-sum.

**F&D: Do you see this further politicizing economic policy debates?**

**SS:** What's interesting about zero-sum thinking is that, unlike so many other things today, it's not a partisan issue: It's evenly distributed across both sides of the political divide. It's not the case that one political group is more zero-sum than the other. It does, however, explain a lot of within-party variation in policy views. People who are more zero-sum, for instance, want more government intervention to protect the group that's suffering from the zero-sum situation. People who are more zero-sum support more redistribution, driven by the idea that the gains of the rich come at the expense of the poor. It's interesting to think about this in light of younger generations today being more zero-sum. What might this mean for policies in the future? **F&D**

*This interview has been edited for length and clarity. Visit www.imf.org/podcasts to hear the full interview.*