Research
The Limits of Public-Private Partnership
By Chana R. Schoenberger
and social connections they might have,” even if they do not have a college degree or perhaps even a high school diploma.

These businesses get their funding from savings, credit cards, or small loans from family and friends, outside the formal system of business credit. They are in many ways the prototypical American business, since only 20 percent of the hundreds of thousands of businesses founded each year have any employees, he said.

“I was delighted to see that Kylie Hwang and Damon Phillips have called attention to the social and economic significance of such businesses in enabling formerly incarcerated individuals to get a second chance in the labor market,” Aldrich says.


COLLABORATION

The Limits of Public-Private Partnership

BY CHANA R. SCHOENBERGER

Different companies, organizations, and institutions often decide to work together to address society’s biggest problems, such as climate change, inequality, and pandemics. While such partnerships seek to weave the strengths of each party together, they inevitably face the challenge of harmonizing different missions, cultures, priorities, and revenue models to achieve a shared goal.

A new paper looks at how public and private organizations handle projects together by specifically examining the development of antimicrobial drugs over the last 25 years. A growing problem for doctors around the world, drug-resistant bacterial strains spurred public demand for new antibiotics. But for-profit private companies do not have a strong incentive to invest research and development dollars on these agents, because they are unlikely to profit from such investment. Consequently, institutions oriented to the public good, such as universities, government, philanthropies, and nonprofits, are increasingly involved in funding the research.

The study’s authors—Birgul Arslan, assistant professor of innovation strategy at Erasmus University’s Rotterdam School of Management; Gurneeta Vasudeva, associate professor of strategic management and entrepreneurship at the University of Minnesota’s Carlson School of Management; and Elizabeth B. Hirsch, associate professor of experimental and clinical pharmacology at the University of Minnesota’s College of Pharmacy—specifically looked at how governments, universities, nonprofits, and companies worked together on antimicrobial drug development between 1995 and 2019, as a way to examine how the organizations collaborated and where some of the partnerships foundered.

The three researchers came together to study this question after Vasudeva visited the World Health Organization in 2019 with a delegation from her university sent to explore partnerships with international NGOs on issues of social importance. Antimicrobial resistance, she learned, was a problem the WHO was watching closely; it represented a “silent pandemic, an issue which affected millions of people around the world, but there was a problem of market failure,” Vasudeva says. Doctors were reluctant to prescribe new antimicrobial drugs out of fear that overuse would lead to more drug resistance; as a result, companies did not see the drugs as profitable. In response to this market-driven reluctance, public institutions and companies were working together on many of the drugs in the pharmaceutical development pipeline.

To test their theories about how well these partnerships worked and how efficiently they produced effective medicines, the authors analyzed all the antimicrobial drug projects moving through the discovery, preclinical, and clinical trial phases during the study period. For each drug, they broke the development into individual tasks to see how long it took for each to be completed and whether the drug moved on to the next step in the process. They also conducted extensive interviews with three experts on the roadblocks involved in developing this kind of drug and analyzed 176 drug-development contracts from a biomedical database to see how terms differed when public and private organizations worked together.

The researchers found that private companies and public institutions struggle to get as much done together as private companies working together in groups.
The study did find that the initial stages of the drug discovery process, where scientists are analyzing a vast number of organic compounds to see what works against a specific disease, agent, or condition, are better suited to a public-private partnership. However, later in the process, the diverging incentives and goals of companies and public institutions make it more difficult for them to collaborate as the drug gets closer to commercialization.

In a world where public funding is often the only money available for the development of drugs that are vital to society but have little chance of becoming blockbuster profit-drivers for companies, organizations need to be careful about how they set up partnerships. When public and private entities work on the same projects, they should import some governance and conflict-resolution ideas that are more common in private-private contracts, including joint steering committees, development milestones, and joint patent provisions, the authors write.

“The findings provide valuable insights and practical implications for fostering effective collaborations in addressing grand challenges,” says Fabrice Lumineau, a professor of strategic management at the University of Hong Kong’s Business School. He calls the paper “an exciting contribution to the field of innovation management.”


**ECONOMIC DEVELOPMENT**

**Skepticism About UBI**

**BY DANIELA BLEI**

The idea of universal basic income (UBI) is to provide a regular cash payment to all members of a community without any work requirements or other preconditions. Andrew Yang, a candidate in the 2020 Democratic presidential primary, popularized UBI on the campaign trail, turning it into his signature policy. A flood of commentary and analysis followed as voters wondered whether UBI could reduce economic inequality and provide security for millions of Americans living under precarity and facing the threat of automation.

Among economists studying UBI at the time were Diego Daruich, a professor of finance and business economics at the University of Southern California’s Marshall School of Business, and one of his former advisors, Raquel Fernández, a professor of economics at New York University. Watching mounting evidence of the beneficial effects of short-term cash transfers in small-scale settings, the researchers realized that studying larger-scale UBI, which promises payments in the long term, even forever, called for a new, dynamic model. How could economists capture the macroeconomic effects of the U.S. government giving money to all Americans in perpetuity?

The researchers constructed a macroeconomic life-cycle model to account for many individuals of differing ages, the investments that parents make in their children’s education, how much people work, how much they save, tax payments, consumption patterns, and the interactive effects of all these factors. Using a UBI policy financed by labor income taxation that provided each adult with $8,000 annually, drawing on US data that follows households over time, and incorporating many of the costs and benefits associated with UBI to carry out several exercises, the researchers found that the policy decreased overall welfare.

“We asked why our findings turned out that way, while others have found the opposite,” Daruich says. “That’s when we began playing with our model, turning on some features and turning off others. We saw that when UBI is introduced, taxes must be increased to finance it, and those taxes are large, which lowers the return to investments because taxes are higher, leading to lower capital accumulation. In addition, since individuals know they will always have some money from the government, they don’t need rainy-day savings. These two forces lead to lower capital in the economy, which leads to lower wages. If there are no firms, and there are no jobs, wages go down.”

Less capital also shrinks tax revenues from businesses, necessitating additional increases in other taxes to foot the bill for UBI. “All these dynamic, long-run effects take time to appear,” Daruich says. Sharp tax increases, economists have shown, influence the decisions that parents make, such as educational investments. When spending on education diminishes, the result is lower skills in the economy, and declining skills spell welfare losses.

To understand behavioral changes following cash transfers, the researchers looked to empirical studies that track the work norms and spending habits of lottery winners. Since 2020, commentators have expressed concern that UBI will cause Americans to work less. One analysis of lottery winners in the United States, for example, charted a drop in their average annual labor earnings during the five years following the reward. The researchers tested labor market responses to lottery winnings using their life-cycle model and found that cash windfalls led to lower labor earnings and a decline in overall labor supply.

And yet the researchers’ findings do not preclude progressive taxation, Daruich insists. Instead, the evidence suggests that there are better ways to mitigate inequality than UBI, a blunt instrument that gives money to everyone, whether rich or poor. More directed transfers to finance high-quality early childhood education, for example, or even cash distributed in targeted ways, are much more likely to be effective.

“This excellent paper provides an analysis of the effects of UBI programs by concentrating on the dynamic effects of skill formation across generations,” says Gustavo Ventura, professor of economics at Arizona State University. “It complements recent work that shows, in macroeconomic settings, that UBI is generically a bad idea.”