


# The Challenger



*Peter J. Walker* profiles **David Card**, the economist who has questioned conventional wisdom on minimum wages, immigration, and education

A piece of paper: dog-eared and taped—somewhat haphazardly—to the wall. The makeshift faculty listing at the University of California, Berkeley’s Economics Department symbolizes a humility that flies in the face of its towering academic reputation. One of Berkeley’s economists—also esteemed but modest—is David Card.

Card rose to prominence in 1995 when he won the coveted John Bates Clark Medal, then awarded every two years by the American Economic Association (AEA) to the leading economist under the age of 40 who is working in the United States. It is considered to be the top award in economics barring the Nobel Prize. Through empirical research into a series of “natural experiments”—real-life situations underpinned by robust data—Card challenged conventional economic thinking in several important areas.

### Challenging convention

He found that, unlike in classical models, raising the minimum wage does not necessarily increase unemployment, and even has the potential to reduce it. More than 15 years of research led to a landmark 1993 paper and subsequent book—coauthored with Princeton professor Alan B. Krueger—that analyzed the impact of the minimum wage on the New Jersey fast-food industry. In April 1992, the U.S. state of New Jersey increased the minimum wage from \$4.25 to \$5.05 an hour, while neighboring Pennsylvania kept it unchanged. It was the ideal natural experiment. Card and Krueger found that, relative to those in Pennsylvania, fast-food restaurants in New Jersey actually increased employment by 13 percent—evidence that the rise in the minimum wage did not have the adverse effect feared by so many.

The study made a lot of noise, but it almost didn’t happen, coauthor Krueger recalls: “Our natural experiment almost didn’t come to pass, as the [New Jersey] state legislature changed and voted to repeal the minimum wage increase before it took effect. The governor vetoed the repeal and had just enough votes to avoid being overridden. . . . In a way,” Krueger notes, “this made our comparison more compelling because the minimum wage increase partly came as a surprise, so employers wouldn’t have fully adjusted to it in advance.”

Another study by Card that also challenged conventional wisdom found that accepting more migrants does not necessarily cost native workers their jobs or lower their wages. Card’s 1989 study on the Mariel Boatlift examined the impact of the sudden arrival of 125,000 Cuban immigrants to the Miami labor market between 1980 and 1985. Many contemporary observers had argued that the influx—representing a 7 percent increase in Miami’s labor force—would harm the job prospects of low-skilled native workers already in the city. But Card found it had virtually no effect on the wages and unemployment rate of low-skilled natives. Even among the Cuban population, wages and employment rates of earlier immigrants were not substantially reduced by the arrival of the Mariels.

On these fronts and others, Card’s research rocked the boat, generating a degree of excitement but also significant skepticism. If Card and his critics could agree on one thing,

however, it was that bucking the trend—even if just a little too much—was, at that time, far from a surefire route to mainstream acclaim.

Speaking in his office at Berkeley—a nondescript view outside on a damp and dreary January morning—Card explains that he was on vacation with his wife when he learned of the Bates Clark award: “They were trying to

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reach me and tell me that I had won the prize. In all honesty, no one ever would have thought that someone like me would win, and I certainly would never have thought that,” Card recalls, with a personal modesty that belies his reputation as a pioneering academic.

That shock, however, paled in comparison with the hostility he felt when he received the prize. Furious about his findings and temerity in challenging established economic thinking, many economists at the AEA conference protested and organized their own seminars bashing his work: “My belief was that this was purposefully to try and defend the AEA from criticism that we were a bunch of left-wing nuts.”

To say Card was not immediately embraced by the wider economics community is an understatement. As he noted in a later defense of the New Jersey paper: “Replication and reanalysis are important endeavors in economics, especially when new findings run counter to conventional wisdom.” Being challenged as an academic is normal and healthy, but in this particular case, he felt, things got very personal very fast. “I would have extremely awkward conversations at dinner, or my students would be grilled because people thought I was crazy. It left an extremely bad taste in my mouth.”

### The accidental economist

In a sense, economics has always been personal for Card. Growing up in rural Ontario, Canada, his family “was not, and is not, particularly rich,” and very few of his friends went to university. Living on a dairy farm—which his elderly father keeps to this day—Card became fascinated by the science surrounding the care of cows—for example, how to treat cows so that they produce nutrient-rich milk for the optimal amount of time.

His scientific interest led him to study physics at Queen’s University in Kingston, Ontario—funded in part by a short stint working at a steel plant.

Then, at university, a revelation came to him—by accident. Helping out his then-girlfriend with her economics assignment, Card read a textbook chapter about demand and supply in agriculture. Producing more grain, or milk, would lower prices across the industry. Drawing on his experience helping his family keep a dairy farm afloat, this excited Card: “It was an unbelievably useful insight. When I saw that, I

thought, ‘Wow, this is really awesome stuff.’ I read the rest of the book over the next few weeks, just for fun.” He switched to economics, and never looked back.

Because he initially lacked the prerequisites for some of the most popular courses, he had to take the less-desired ones, such as income distribution and labor economics. Card gives these courses credit as “the reason I became a labor economist.” These classes were taught by two young professors who had recently completed their doctorates at Princeton and embraced an empirical style of research. So struck were they by Card’s ability that they put him in touch with their own thesis advisor at Princeton, Orley Ashenfelter, who in turn persuaded Card to attend the New Jersey school for his PhD.

Card would make his big splash at Princeton, pioneering his trademark empirical research in a range of natural experiments that eventually led to the aforementioned John Bates Clark Medal. “David has made empirical research more influential by making it more credible,” Ashenfelter said at the time of the award. “Many people who are considered for this prize write papers you could never read.”

Princeton and Card were a match made in heaven, but it was fated not to last. “My wife was an assistant professor at Columbia’s music department, and she did not get tenure. She really wanted to move out of academia and move to California,” he explains.

So they moved west, with Card joining the faculty at the University of California, Berkeley. They bought a house in nearby Sonoma and built a woodworking shop to support his hobby making Mission style furniture. At high school in Canada, boys were required to take either Latin or woodworking. He chose the latter, something that has been a life-long interest. “It’s fairly precise, it can be frustrating, but I like it—it’s similar to empirical work, in a way.”

### A foggy discipline

His empirical work has always been shaped by a degree of uncertainty. “Our basic state of knowledge in economics is way below where you would think it was,” he says, adding that “the thing that annoys noneconomists about economists is their unbelievable certainty that they know what they are talking about, when the actual reality is they do not really know.”

Card describes this uncertainty as a “fog.” When asked about one dimension of labor economics—specifically, the role of trust between workers, employers, and governments in creating efficient and effective labor markets, he expands on his fog analogy: “It might be true, but it’s extremely hard as a scientific matter to prove, because you don’t have a treatment group and a control group in the same place. I’m not aware of anybody that’s ever got rid of that fog.”

Despite the uncertainty surrounding labor economics, Card’s research on minimum wages has frequently been cited by campaigners who seem fairly certain about the benefits of increasing it. This makes Card uncomfortable. “I don’t go around saying you should raise the minimum wage—yet advocates point to my work to say they should raise minimum wages. That’s one reason why I don’t work on that topic



anymore, because everyone just assumes I’m advocating for raising the minimum wage, and therefore everything I do will be discredited.”

“It’s the same with immigration,” he continues. “There is no point in me writing another paper on that, because everyone just assumes that I must be advocating raising immigration.”

Card’s frustration is palpable—he is tired of seeing his research oversimplified and used as lobby fodder, despite all the caveats attached to his work.

In the aforementioned Mariel Boatlift study, for example, he emphasized that the observations could not be generalized. Specifically, Miami’s labor market is not typical in its track record of successfully absorbing immigrants, not least thanks to the city’s myriad opportunities for low-skilled workers and its vast Spanish-speaking population.

In a 2001 paper he acknowledged that increases in unskilled immigration—if massive—could actually reduce employment rates for younger and less-educated natives by 1 to 3 percentage points in traditional gateway cities such as Los Angeles.

And in 2009 he even identified a link—albeit very small—between immigration and inequality, with immigration accounting for 5 percent of the increase in U.S. wage inequality between 1980 and 2000.

More recently, when looking at individual attitudes toward immigration in Europe, Card found that fears about immigration are not primarily job concerns; they are mostly about culture. In fact, personal concerns over the “compositional effects” of migration—such as on language and culture—are between two and five times more important to people than economic concerns such as jobs.

But Card is also eager to point out that his research extends well beyond minimum wages and immigration. Moving on to other areas, he appears more animated, more excited.

### Finding talent

Card has been a prolific researcher on education policy, for example. In 1992, he found that the quality of schooling affected future earnings. An obvious conclusion, one might think, but at the time there was support for an alternative



view that, given a lack of association between school quality and standardized test scores, increases in public school funding had few important benefits for students. Card found that

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reducing the pupil-teacher ratio by five students was associated with a 0.4 percentage point increase in the rate of return on schooling. And a 10 percent increase in teachers' pay was associated with a 0.1 percentage point increase in schooling's rate of return.

Only last year, Card made another important contribution on the education front, examining the impact of universal screening on the representation of low-income and minority students in gifted programs. Gifted programs in schools, he explains, are "targeted to very high ability children as measured by IQ"—but IQ is a poor indicator of raw talent because it tends to favor more affluent children who are more likely to receive educational support at home than their poorer counterparts. Furthermore, getting into a gifted program can depend to a certain degree on a parental push—more likely in an affluent household. Both dimensions mean that low-income and minority students are less likely to enter a gifted program.

To address this disparity, a school district in Florida decided to screen all children and to introduce a nonverbal ability test to complement the standard IQ test. In his study, Card found that the gifted rate among disadvantaged students increased by 180 percent thanks to these innovations. Despite this success, however, universal screening proved too costly and was discontinued in the context of other spending pressures.

Another recent natural experiment that stands out as both innovative and socially valuable looks at unexpected emotional outbursts and domestic violence. Though professing to be "the two people in the world who know the least about sports," Card and coauthor Gordon Dahl looked at domestic violence increases after "shock losses"—that is, when a strongly favored team loses—in the National Football League (NFL). An inspiration for the study was frustration with a classical theory about domestic violence—that it is largely a combination of premeditated control and mutual dependency. "There is just something completely screwed up about that," says Card. "Sometimes," Card continues, "the papers I have written are motivated by 'That can't be right; let's challenge it.'" So Card and Dahl challenged the assumption and found convincing evidence to support their case that much family violence is not premeditated, but sudden and irrational. Specifically, they found that when a home NFL team suffered a shock loss, there was an 8 percent increase in local police reports of domestic violence—suggesting that spontaneous outbursts often play a key role.

Returning to more familiar territory—and looking ahead to the future—Card intends to explore further a recent finding on wage inequality. In 2015 he published a study about Portugal, where women were found to be earning just 90 percent of what men earned at equivalent firms. Not only were women less likely to work at firms paying high wages, but even if they did their wages were still below those of their male counterparts. "Women should try and be a bit more aggressive in wage negotiations—there's no question that's true," Card notes, adding that "they don't quite benefit as much from working at high-wage employers, and that contributes to the overall gender gap." Card suspects, however, that wage gaps are not just a matter of gender. He also plans to explore the racial dimensions of wage inequality—using data from Brazil.

Many of Card's research findings have practical policy implications. So has he considered becoming a policy-maker? "No," he responds, before explaining. "This is a sad statement, but my favorite thing is to start a new project and play around with data sets." "Moreover," he adds, "I'm a terrible manager."

Later that day, Berkeley's charismatic chair of economics, Shachar Kariv, refuses to describe Card's management skills as a weakness, pointing instead to his lack of appetite for such tasks. It may be true, however, that management is "not his area of comparative advantage. The curse of very smart people is that they are not as smart as they think they are," Kariv adds with a flourish: "This is not Dave—he knows what his comparative advantages are, and he's using them."

Kariv describes Card as "someone who not only steers the department intellectually, but in many other ways." He is "an ego-free person" who "does more than his fair share of undergraduate teaching" while "going above and beyond at the graduate level." He also has "a very quiet type of leadership."

Card is also notable for working late into the night. It is an observation that his longtime collaborator, Krueger, has made: "He had the work ethic of a dairy farmer as a Princeton professor—he would often work until the library closed, around midnight. We worked long hours together, discussed many research issues around making cups of coffee." Kariv shares a similar experience at Berkeley: "At 10 p.m. at night, my assumption is that Dave's in his office with his graduate students. . . . That's my assumption, and you know my assumption is based on data because this is the case."

As the conversation with Kariv winds down he bats away praise for his panoramic view of San Francisco Bay, with the Golden Gate Bridge on the horizon—spectacular, even on this misty gray, overcast day. "But we all have an amazing view," he shrugs, "Dave's office is also . . . ah, you cannot see it there because of the way his office is arranged," recalling the gloomy view from Card's window. "He needs to rearrange his furniture so you can see the Bay," Kariv asserts. "If you're looking for a weakness in Dave, that's it—he is not a good interior designer; he needs to work on his feng shui." ■

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