Fraternity membership and labor market outcomes

College "Greek"-style fraternities have been an important part of U.S. campus life since the nation's founding. Although they have always represented a minority of the students at colleges and universities, fraternities and their members have wielded considerable influence—both on campus and off. For example, most U.S. Presidents were members of fraternities. And while fraternities are primarily social organizations, their advocates claim that members get better grades, are more involved in campus life, and earn higher incomes after graduating than their nonfraternity counterparts. Prospective employees regularly include membership in fraternities and sororities on their resumes, which suggests that employers use that information in some way during the applicant-screening process. But why should being a member of one of these organizations have a positive effect on labor market outcomes? After all, fraternities and sororities generally require their members to devote considerable time to the organization, and students arguably could use that time more productively by studying and developing the skills they will need for their future careers.

In "Fraternities and Labor-Market Outcomes" (*American Economic Journal: Microeconomics*, American Economic Association, February 2012), economists Sergey V. Popov and Dan Bernhardt attempt to shed some light on this issue by developing what they call "a theory of fraternity membership and filtering by firms." Drawing on James M. Buchanan's seminal work on club membership ("An Economic Theory of Clubs," *Economica*, February 1965), the authors construct a model to examine the complex "signaling" interplay between three economic agents—students, fraternities, and firms. In the model, students have a "fraternity socializing value" and a projected level of worker productivity. Fraternities value both the socializing skills and the future wages of their members. Firms set wages by combining applicants' fraternity membership status with imperfect information ("noisy signals") about applicants' expected productivity as workers. Popov and Bernhardt test a number of hypotheses under varying conditions in an effort to isolate the purely economic factors involved in a given student's decision to join a fraternity or sorority and the filtering process firms use to choose among job applicants.

Popov and Bernhardt begin by identifying the conditions necessary for fraternity membership to have no effect on labor market outcomes. Specifically, they show that if firms receive "perfectly informative" or "perfectly noisy" signals about an applicant's productivity, then equilibrium wages are affected *only* by the students' socializing skills. The authors then show that for fraternity membership to have an effect on labor market outcomes, firms must receive productivity signals "that are noisy, but not perfectly so." Because more productive students earn higher wages, fraternities trade off between productivity and fraternity-socializing values when making decisions about which pledges to accept. Students confront a different kind of trade-off: those with higher productivity values may experience a negative effect from joining a fraternity and thus be less likely to pledge.

Popov and Bernhardt, using a "three-signal setting" to determine three kinds of equilibriums, find that data support a "single-peaked" equilibrium, in which the majority of fraternity members fall into the intermediate skill-level category—some less able students apply but are accepted only if they have strong socializing skills, while students with greater ability but lacking socializing skills do not apply. The researchers look at a randomly selected sample of students at the University of Illinois who were seniors in 2007; after eliminating those whose average was below 2.0, Popov and Bernhardt find that fraternity members, representing about a sixth of the senior student population, had higher overall grade point averages than the rest of the seniors, but students with the highest averages were more likely to be nonmembers.

Popov and Bernhardt conclude from their analysis that under certain conditions, fraternity or sorority membership does have an effect on labor market outcomes—even when they "assume away" any correlation between productivity and socializing skills in order to focus on the decision-making and filtering process among students, fraternities, and employers. They identify two equilibriums in which students value membership for its positive labor market effects. In the first, membership leads to higher wages because firms believe that fraternity members possess greater skills and abilities than nonmembers. Under this scenario, all of the students that the fraternity would like to become a pledge do so. In the second equilibrium, more able students experience

a negative effect on labor market outcomes from their membership in fraternities, while students with less ability benefit from membership. In this case, most fraternity members' abilities fall in the intermediate range, which accords with the authors' empirical data from the University if Illinois. In concluding their article, Popov and Bernhardt suggest that their analysis might be extended to other campus membership organizations, such as the Reserve Officers' Training Corps (ROTC).

Walmart in Iowa revisited

Updating a 1988 study about Walmart's economic impact on retailers and sales in Iowa, economics professor Kenneth E. Stone—who had conducted that study—and scientist Georgeanne M. Artz, both from Iowa State University, analyze the topic with new data. Their 2012 analysis, "Revisiting WalMart's Impact on Iowa Small-Town Retail: 25 Years Later" (*Economic Development Quarterly: The Journal of American Economic Revitalization,* Sage Publications, November 2012), shows that when Walmart was introduced into small trade centers in Iowa, there was a large effect on smaller retailers initially, both positive and negative. For retailers selling similar products, the initial effect was a negative one. Some of these retailers had to close up, although others found ways to compete by offering better service and reducing prices, thereby providing a benefit to the consumer. Retailers selling complementary goods initially experienced positive effects as traffic from local, non-Walmart-hosting towns increased.

Although the effects diminished over time for both groups of retailers, the recent study shows that after 15 years, towns hosting a Walmart store were better off in terms of total retail sales, lower prices, and improved quality and customer service. This new study incorporates both 15 additional years of data and a look at 15 years of economic conditions prior to the entry of Walmart. In contrast, the earlier study used as a comparison a "base year" before Walmart opened that did not take into account pre-existing long-term trends. Also, while Stone's original study included a control group for comparison, the new study tries to account for Walmart's strategic site selection using propensity score matching to choose appropriate comparison towns.

The authors used *Iowa Retail Sales and Use Tax Reports,* published annually by the Iowa Department of Revenue and Finance, to acquire retail sales data, believing them to be a more reliable "retail vitality" measure than a count of the number of businesses. Population and income data came from the Census Bureau. Towns included in the sample contained stores opened no later than 1994; this both ensured 15 years of data since the time the stores opened and inclusion of stores that were part of the first wave of Walmart expansion. Because Walmart's early strategy centered on small towns, and because it is much less difficult to isolate the effects of Walmart in smaller communities than in larger cities, only towns with a population of no more than 20,000 were included in the study. Control towns were limited to those with no Walmart store by 2008 and with populations of less than 20,000 in 1980.

The estimated sales generated by a Walmart store in the host town showed that while the Walmart store was capturing sales from existing retailers of products similar to those sold by Walmart, there was also a geographic shift as existing retailers of noncompeting products captured sales from smaller, neighboring communities. Over the study period, per capita sales increased slightly in Walmart towns and fell by roughly 25 percent in non-Walmart towns.

While there was concern by some business owners and chambers of commerce over the potential loss of revenue for existing establishments when Walmart first opened its stores in rural communities, 25 years later there is much less controversy. The recent study shows that though some businesses are forced to close while others experience some loss of trade, there are yet other businesses that adapt to the changed business environment, often to the benefit of the consumer. The presence of a Walmart also tended to stabilize and, in some cases, expand the local retail sector.

In discussing policy implications of their findings for local economic developers who are trying to decide whether to recruit or discourage large retailers such as Walmart, the authors point out that "economists agree that incentives should only be used when they do not compromise the competitiveness of other local firms." That is, the public sector should maintain a competitive and level playing field by avoiding any actions that favor one establishment over another.

Similarly, the authors warn that development incentives may merely shift sales from one community to another. Because the population in rural Iowa is fairly stable, the spending "pie" isn't expandable; increased sales in one community can translate into decreased sales in another. The authors suggest a more regional

approach to retail development because such development can benefit rural consumers by offering convenience, quality, and variety at lower prices. The negative impacts of a Walmart could then be addressed by such means as sharing the tax revenue generated by higher retail sales in the host community with local nonhosting communities. The authors note that future research could investigate the impact of the entry of Walmart on the shift in retail sales from small towns to larger regional trade centers. □