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Labor Market Traps

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Abstract. Some products, notably but not only platforms, increase in value for users as the number of other users increases. These interaction or network effects can result in “product market traps” (Bursztyn et al., 2023) where people who use the product would be better off if they all stopped using it and switched to another product, but cannot because of coordination problems. A parallel but overlooked phenomenon is the *labor market trap*, where employees would be better off if they collectively left an employer, job, or profession, but cannot because of the difficulty of coordination. Product market and labor market traps pose a challenge to public policy because of the complexity of people’s behavior in networks, but can be mitigated in some cases with relatively simple taxes and regulatory interventions.

Policymakers normally assume that when people consume goods or services, the utility that they derive from these activities is independent of the consumption activities of other people. The pleasure from eating a banana is not affected by whether other people are also eating bananas. Consumption is individualistic or asocial. At least since Thorstein Veblen, economists have realized that this assumption is not always be correct. Veblen goods—where demand increases with price—are goods whose value depends on the status it confers on people, which is inherently social.² Robinson Crusoe can’t obtain status on his island, but for the rest of us, what we consume may affect others’ attitudes toward us. These themes have played a muted role in economics and policy. But with the growth of platforms that bring consumers together to engage in common activities, they have reengaged scholars. Social media platforms bring to the forefront the complexities that arise when one person’s enjoyment of a service depends on the activities of others using the same service. A paper by Leonardo Bursztyn and his coauthors shows that goods with such interaction effects may collectively harm those who use them even though it is individually rational for those people not to stop using them.³ Cass Sunstein’s Barbie problem, however, suggests that the distinction between platforms and ordinary objects is not as clear as it may first appear.⁴ If toys and other everyday goods operate on people’s utility

¹ Kirkland & Ellis Distinguished Professor of Law, Arthur and Esther Kane Chair, University of Chicago Law School. Thanks to Cass Sunstein for comments, and Shivam Saran for research assistance.

² Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* (1899). See also H. Leibenstein, *Bandwagon, Snob, and Veblen Effects in the Theory of Consumers’ Demand*, 64 *Q.J. Econ.* 183 (1950); Fred Hirsch, *Social Limits to Growth* (1976); Robert H. Frank, *The Demand for Unobservable and Other Nonpositional Goods*, 75 *Am. Econ. Rev.* 101 (1985); Alex Imas & Kristof Madarász, *Superiority-Seeking and the Preference for Exclusion*, *Rev. Econ. Stud.* (2023).

³ Leonardo Bursztyn, Benjamin R. Handel, Rafael Jimenez, & Christopher Roth, *When Product Markets Become Collective Traps: The Case of Social Media* (Nat’l Bureau of Econ. Research, Working Paper No. 31771, 2023), <http://www.nber.org/papers/w31771.pdf>.

⁴ Cass R. Sunstein, *Barbies, Ties, and High Heels: Goods That People Buy But Wish Did Not Exist*, *SSRN Journal* (2023), <https://www.ssrn.com/abstract=4614036>.

functions like platforms, what is left of the assumption that consumption is asocial? What if consumption is usually or inherently social? What impact would that have on law and policy?⁵

A related question is the implications for labor markets. Labor markets are more complex and beset with frictions than most product markets. Jobs, unlike goods, are relational, highly differentiated, and often difficult for workers to compare. But platforms and jobs share certain features.⁶ People who join platforms typically remain on them for a long time. In the course of making contacts, and posting text, images, and videos, they make relationship-specific investments in the platform, and over the platform in friends and colleagues, that they would lose if they exit. People invest in their jobs in the same way. The employee, like the platform user, rationally stays in a job even though she would be better off if the job did not exist. This is a labor market trap.

II. Barbie Goods and Product Market Traps

In Bursztyn and his coauthors' model, people value goods more if other people use them.⁷ Such goods have network effects. Bursztyn et al. observe that the people who value the goods in this way but do *not* buy or use these goods—because they dislike them or cannot afford them—therefore are harmed as the number of users increase. They use the term “non-consumer surplus” to refer to the impact of network-style goods on those who do not enter the network. When the impact is negative, those non-consumers suffer a “negative non-consumer surplus”—or, to avoid this doubly paradoxical formulation, what I will call “bystander harm.” As is obvious from communication devices, like telephones, a person outside the network may be harmed as everyone else switches to the device. If (as in old times) the outsider continues to rely on servants and other couriers to deliver her messages, she may find that few people with telephones reply to her messages since they cannot reach her by phone. The bystander harm is being left out of valued activities. Where Facebook pages are used to advertise community meetups, those who dislike Facebook and refuse to use it will be unable to attend—and that harms those who use Facebook as well, as they lose the chance to hobnob with of additional participants.

In this model, then, everyone values a good as users increase, but only those who use the good experience an increase in utility. The people who do not use the good experience a decline in utility as they become more isolated. That means that the people who *do* use the good will be increasingly reluctant to stop using the good as usage increases—and this will be true even if the good degrades or the person's values or preferences change. That is why people may remain on a social media platform even though they would be better off if no one used the platform and it was extinguished altogether. They are caught in the product market trap. (People who do not use the platforms would also be better off as their friends rejoined them in the physical world.)

⁵ For a recent survey on the economics of network effects, see Bruno Jullien, Alessandro Pavan & Marc Rysman, Two-sided markets, pricing, and network effects, in 4 Handbook of Industrial Organization 485 (Kate Ho, Ali Hortaçsu & Alessandro Lizzeri eds., 2021); for one of many legal discussions, see Tom Ginsburg, Jonathan Masur & Richard H. McAdams, Libertarian Paternalism, Path Dependence, and Temporary Law, 81 U. Chi. L. Rev. 291 (2014).

⁶ See Jonathan Masur & Eric A. Posner, Horizontal Collusion and Parallel Wage Setting in Labor Markets, 90 U. Chi. L. Rev. 545, 555 (2023).

⁷ Bursztyn et al., Product Markets as Collective Traps.

Social media platforms, as the name indicates, have an irreducible social component: people use these platforms to connect with other people, and that means that platforms have value only if enough people use them. As Sunstein emphasizes, one can generalize to any other communal activity—attending parties, for example—and even to ordinary goods like toys and luxury goods. Children value toys in part because they use toys in play with other children: when various children are familiar with the same toys, they can play together more easily. Those who do not own a relevant toy are, and feel, left out, and possible playmates who do own the toy lose out as well because they lose these playmates. Luxury goods for adults can play a more competitive role: they can be markers of status. But the status battles among adults are not free-for-alls: they take place within a set of social understandings that mark out different groups. People choose luxury (and ordinary) goods—watches, jewelry, clothing, cars, houses, even (or especially) educations—to identify themselves with one group and distinguish themselves from others. As with children, familiarity with a particular good (watches, art, music, etc.) facilitates relationships with some people and excludes others. The net impact is not necessarily worse lives for everyone, but it can be.

This logic can extend to many corners of the economy. Consider the entry of Walmart to a small community. Economists usually dismiss complaints about degradation of the community as local retail outlets are outcompeted and shut down. They point out that residents choose Walmart because prices are lower than those at the traditional stores.⁸ But a community is more than a locus for the purchase of low-priced goods. People also value idiosyncratic local retailers and the relationships they establish with shop owners and other residents who they meet in those places. As more price-sensitive residents switch to Walmart, the retailers lose business and eventually fail. That means that people who value the communal aspects of the retail high street more than price discounts will eventually move to Walmart as well. In equilibrium, the town with a bustling Walmart and a hollowed-out main street may be (though is not necessarily) worse for its residents, and that is true even if Walmart does not subsequently raise prices or lower wages once it obtains market power, as some commentators accuse it of doing.⁹ Towns must rebuild their commercial streets by subsidizing rents.

The simplest way of thinking of market traps is as coordination games where users fail to coordinate on the optimal equilibrium.¹⁰ To see why, imagine that a group of people can choose between two forms of communication. Some prefer the phone because communication is synchronous, which minimizes the risk of miscommunication; others prefer email because they can delay responding until convenient. But everyone prefers to use the identical form of communication. It is easy to see that there are two pure-strategy equilibria: everyone uses the phone or everyone uses email. It is also easy to see that the equilibrium that prevails is not necessarily the best one for users. Suppose, for example, that the first adopters choose to use the phone, but that most people prefer email. Later adopters choose the phone in order to communicate with first adopters; eventually, everyone uses phones. The matrix below depicts payoffs.

⁸ See, e.g., Richard Vedder, *The Wal-Mart Revolution: How Big-Box Stores Benefit Consumers, Workers, and the Economy* (2006).

⁹ Justin C. Wiltshire, *Walmart Supercenters and Monopsony Power: How a Large, Low-Wage Employer Impacts Local Labor Markets* (unpub., 2023).

¹⁰ See, e.g., Jullien et al., *supra* at 510.

	phone	email
phone	3, 2	0, 0
email	0, 0	2, 4

An equilibrium can arise in which everyone uses the phone even though email is welfare-maximizing.¹¹ People cannot switch because of the sheer difficulty of coordinating behavior (wealth transfers to phone-preferrers may also have to be arranged to induce them to switch); it is not individually rational for anyone to switch alone.

This can be contrasted with status competitions, which are better modeled as prisoners' dilemmas. The person who spends the most, or the most conspicuously, obtains status at the expense of everyone else. If others match her, then everyone ends up at the same level of status as before while spending more money. The equilibrium is one in which everyone is worst off.

What are the implications for law and policy? Sunstein doubts that law can help, but in principle legal interventions could be both quite effective and no more intrusive than existing regulation. Bursztyn and colleagues' empirical method, which uses the Becker-DeGroot-Marschak (BDM) mechanism, allows regulators to search out "bad goods" and regulate them out of existence: the regulator would simply conduct their test on users and prohibit a good if it is bad—just as regulators already do with dangerous drugs, unsafe consumer products, and risky financial instruments. Regulation of financial instrument offers a helpful model. Virtually any proposed financial instrument is individually valuable (otherwise, it would not be offered) but could be collectively harmful (because it creates systemic risk). Regulators block financial institutions from introducing those that are most obviously collectively harmful (pure gambles), while playing a wait-and-see for the rest. If a financial instrument proves to pose major systemic risks, it will be banned.¹²

Or consider consumer product regulation. When regulators determine that automobiles, appliances, or toys are dangerous, they order manufacturers to pull them off the market. A platform could be similarly harmful according to studies that show that platform use causes mental health problems.¹³ But the twist is that a platform is not necessarily harmful in the abstract; the question is whether it is more harmful than the alternative networks that people might use if the platform in question is "recalled."

But recalls and product bans are not necessarily the right form of regulation. A modest excise tax regime could also be effective for addressing product market traps. To see why, observe that people are likely to have divergent preferences both for the intrinsic value of the good in question (using TikTok to watch videos) and the social value of the good (using TikTok to keep up with friends). A product market trap is most likely to arise when the social value

¹¹ It is easy to see that the same result can obtain even if both types of people prefer the same technology.

¹² See Eric Posner & Glen Weyl, *An FDA for Financial Innovation: Applying the Insurable Interest Doctrine to 21st Century Financial Markets*, 107 *Nw. U. L. Rev.* 1307 (2013) for a discussion.

¹³ Lien Faelens, Kristof Hoorelbeke, Ruben Cambier, Jill van Put, Eowyn Van de Putte, Rudi De Raedt, & Ernst HW Koster, *The Relationship between Instagram Use and Indicators of Mental Health: A Systematic Review*, 4 *Comput. Hum. Behav.* 100121 (2021).

greatly exceeds the intrinsic value. But if people have divergent preferences, then some people are like Sunstein's reluctant partygoer: they barely prefer to use the good or participate in the activity because the intrinsic value is negative, and is just outweighed by the social value. A small tax could deter this person from using the good. And the key point to understand is that if one person stops using the good, then the utility obtained by every other user also declines. Thus, the utility of non-users increases (as they are joined by others), and the utility loss from moving off the platform declines as well. That means that a small tax could be just sufficient to cause a single person to drop out, but once that person is gone, another person drops out, and so on. A small tax could thus through a multiplier effect cause a product market trap to unravel despite its apparent robustness.

This is probably why major social media platforms like Facebook, TikTok, LinkedIn, and Twitter do not charge a usage fee, instead collecting revenues from advertisers on the other side of the platform. Despite network effects, social media platforms must worry that even a tiny price may cause the consumer-facing platform to unravel. This of course means that a small tax could have the same impact.

Not all product market traps are necessarily as susceptible to legal interventions, or should be regulated even if they were. Toys and luxury goods are different and may be more robust than platforms in relevant respects. Toys have high intrinsic value (children often enjoy playing with them alone). A tax could paradoxically make luxury goods more desirable because, unlike platforms, they are signals of wealth and exclusivity.¹⁴ But even when a product market trap persists, a tax may be socially desirable. It may cause people on the margin to drop out of the group and join the non-users, which may in turn improve the utility of the non-users. And if demand for the good is inelastic, the tax is an efficient way to collect revenue to fund government projects.

However, Bursztyn and colleagues' test have a significant problem: it may not properly value the outside option of users. A crucial vulnerability with their test is that it is not clear that respondents adequately take account of how they will use their time once they escape a social media trap. It is possible that they will simply enter another product market trap, whether a worse social media trap (from Instagram to TikTok, or vice versa), or another kind of product market trap (group texts, offline communal activities),¹⁵ while not taking into account this risk when they offer to accept payment for exiting a platform along with everyone else. And if that is the case, then the valuations elicited through the BDM mechanism are inaccurate. If we tax Barbie, children may switch to Ken, and if we tax Ken, they may switch to video games or another toy with identical or worse interaction effects.

Logic pushes in the direction of taxing goods with a significant social component—which would be deeply ironic. We normally worry that people spend too much time alone and not

¹⁴ See Hyunseop Kim, *Is Luxury Tax Justifiable?*, 39 *Econ. & Phil.* 446 (2023).

¹⁵ Joseph Farrell & Garth Saloner, *Standardization, Compatibility, and Innovation*, 16 *RAND J. Econ.* 70 (1985). Bursztyn et al., *Product Markets as Collective Traps*, *supra* at s. 3.4.5, argue that this is unlikely because users' best outside option is offline and because there is little difference between single- and multi-homers. However, the product market trap they describe can occur offline, as they recognize.

enough interacting with others.¹⁶ The model and evidence do not (yet) prove that people would be better off bowling alone than using goods that could lead to product market traps.

Interaction effects pose another problem for regulatory policy. If network effects are pervasive, then the cost calculations that are used in cost-benefit analysis will be inaccurate. For a simple example, consider a regulation that increases the cost of manufacturing gasoline-powered cars, which results in higher prices. An agency that uses a cost-benefit analysis to evaluate the regulation would compare the benefits (for example, environmental benefits) against those costs. But if car use has great network effects, then those costs may overstate the harm. If the costs are passed on as higher prices, then some people may switch to (say) electric cars, which in turn would increase producers' incentives to supply charging stations, which in turn would further increase the appeal of electric cars to consumers—ultimately spurring a shift in equilibrium from gas-powered to electric cars, possibly to the benefit of all. A regulation that failed cost-benefit analysis of a “product” might pass a cost-benefit analysis of a “product market.”¹⁷ Revealed preference based on market behavior does not reveal preferences about markets.¹⁸

III. Labor Market Traps

A labor market trap exists when workers refuse to quit a job but would be better off if the job were eliminated (or their fellow workers all quit and moved with them to another employer). For example, imagine that a law firm has a toxic culture because of an overbearing managing partner. No one quits because of their connections with other lawyers in the firm: they earn more by working with them than by moving to another firm, and they enjoy friendships with some of their colleagues. If all the employees managed to leave the firm and start or join another firm, they could be better off. Yet they do not because of a coordination problem. Whoever quits first would suffer a significant loss in earnings and opportunities, and coordination may be impossible because the various lawyers have divergent preferences for job conditions and amenities.¹⁹

Labor market traps superficially resemble but actually differ from the harms caused by labor-market frictions that have previously been identified by economists. These frictions include search costs (the cost of finding a new job, which involves research, interviews, etc.); job differentiation (the apparently small differences between otherwise identical jobs that reduce their appeal to qualified workers); and market concentration (the absence of competing

¹⁶ Viji Diane Kannan & Peter J. Veazie, *US Trends in Social Isolation, Social Engagement, and Companionship – Nationally and by Age, Sex, Race/Ethnicity, Family Income, and Work Hours, 2003–2020*, 21 *SSM Popul. Health* 101331 (2023).

¹⁷ Compare the inversion problem for algorithms: Jon Kleinberg, Jens Ludwig, Sendhil Mullainathan & Manish Raghavan, *The Inversion Problem Why Algorithms Should Infer Mental State and Not Just Predict Behavior*, *Perspect. Psychol. Sci.* (2023).

¹⁸ Cf. Bursztyn et al., *supra* at 5-6.

¹⁹ There is a related literature on the role of social networks in determining employment opportunities. See, e.g., Antoni Calvó-Armengol & Matthew O. Jackson, *The Effects of Social Networks on Employment and Inequality*, 94 *Am. Econ. Rev.* 426 (2004); Mark S. Granovetter, *The Strength of Weak Ties*, 78 *Am. J. Sociology* 1360 (1973). These models explain how employment outcomes can differ but do not rationalize the labor market trap discussed here.

employers).²⁰ These frictions reduce the incentives of workers to leave their jobs, and may contribute to a feeling of being trapped. But they are distinguished from the labor market trap that I have described by their unilateral nature. Labor market traps are generated by network effects, which in principle can be overcome through collective action. Traditional job-market frictions cannot be overcome by the workers themselves.

Consider, for example, the rebellion of OpenAI employees against the company's nonprofit board after it fired CEO Sam Altman. The employees, who owned rights to future profits in the underlying commercial entity, believed Altman's departure would destroy the organization. But rather than quit, the employees coordinated a threat to leave and move to Microsoft en masse unless Altman was reinstated.²¹ Microsoft, in turn, announced that it would welcome the employees and place them together in a new division of the company.²² It is easy to see that an OpenAI employee would prefer not to quit the company unless all others quit because otherwise the employee would be isolated and separated from colleagues with whom she shared complementary skills and common values and interests that had been forged over time. They would either resign together or not at all.

But this type of coordination is extremely rare. Normally, employees cannot coordinate around a significant event like this one, which potentially destroyed \$86 billion in value; and employees at most other companies are less sophisticated. OpenAI also had a relatively small and homogenous workforce. Antitrust law could also interfere with such attempts to coordinate if they led to collusion with other firms.

One can imagine similar traps in the initial choice of profession or training. Imagine that college students choose professions (finance, law, medicine) based in part on what their friends choose. They do so because they want to maintain these friendships after they leave college.²³ It can easily turn out that friends who end up in, say, finance would be better off if they all switched to law, but are unable to do so because of coordination problems.

Similarly, college friends may worry that if they fall behind in wealth, they will lose their friendships or, more broadly, status. Accordingly, they enter high-paying but miserable professions like investment banking, or invest in law degrees despite lacking an interest in legal practice.²⁴ Once there, they cannot leave without losing their social connections.²⁵

²⁰ See James Albrecht, Search Theory: The 2010 Nobel Memorial Prize in Economic Sciences, 113 *Scandinavian J. Econ.* 237 (2011); V. Bhaskar & Ted To, Minimum Wages for Ronald McDonald Monopsonies: A Theory of Monopsonistic Competition, 109 *Econ. J.* 190 (1999); José Azar, Ioana Marinescu & Marshall Steinbaum, Labor Market Concentration, 57 *J. Hum. Res.* S167 (2022).

²¹ The Employee Letter to OpenAI's Board, *The New York Times*, Nov. 20, 2023, <https://www.nytimes.com/interactive/2023/11/20/technology/letter-to-the-open-ai-board.html>.

²² Ashley Capoot, Microsoft Exec Says OpenAI Employees Can Join with Same Compensation, *CNBC* (2023), <https://www.cnbc.com/2023/11/21/microsoft-exec-says-openai-employees-can-join-with-same-compensation.html>.

²³ Keaton C. Muzika, Aaron Hudyma, Patton O. Garriott, Dana Santiago & Jessica Morse, Social Class Fragility and College Students' Career Decision-Making at a Private University, 46 *J. Career Development* 112 (2019) (discussing influence of friends among others).

²⁴ Sarah Ward, Choosing Money Over Meaningful Work: Examining Relative Job Preferences for High Compensation Versus Meaningful Work, *Pers. Soc. Psychol. Bull.* (2023).

²⁵ For a recent discussion, see Daniel Markovits, *The Meritocracy Trap: How America's Foundational Myth Feeds Inequality, Dismantles the Middle Class, and Devours the Elite* (2019).

These sorts of traps can occur within the employment relationship as well—in the choice of bargaining for amenities or even accepting amenities that employers offer. Imagine that, among a group of employees, no one takes parental leave or time off for vacations because of fears of missing out on opportunities for projects, advancement, and promotion, or of letting down coworkers with whom they collaborate who remain on the job. There is evidence for such behavior:

Nearly half of workers who have paid time off say they typically take less time off than their employer offers. About half of these workers say they don't feel they need to take more time off (52%) or worry they might fall behind at work if they took more time off (49%). Some 43% say they feel badly about their co-workers taking on additional work, while smaller shares cite concerns that taking more time off might hurt their chances for job advancement (19%) or that they might risk losing their job (16%) or say their manager or supervisor discourages them from taking time off (12%).²⁶

The statistic showing 43% of workers concerned about the impact of taking time off on their co-workers shows the operation of interaction effects.

Many workers complain of being “trapped” in various ways—trapped in their jobs despite long hours and insufficient pay. These complaints have sparked a large academic literature that explores reasons why people do not simply quit and take another job. Much of this literature is sociological or psychological, but as noted above, a standard economic explanation would blame frictions: people may feel trapped in a job because they are aware that better jobs exist but cannot at reasonable cost find one for themselves. While an economist would not speculate about those people's mental states, one conjectures that people feel regret that they did not choose differently when they were younger.²⁷

Similarly, people might feel not only regret but frustration if they find themselves in a labor market trap—frustration because a better life is imaginable but not achievable as a result of coordination costs. The papers by Sunstein and Bursztyl et al. helpfully emphasize that observable human behavior—revealed preference, in economics—superficially suggests that people value their jobs—that's why they network furiously, work long hours, and refuse to quit—when in fact they would be better off in other jobs where interaction effects are lower. That helps reconcile popular complaints about overwork and survey data with observed behavior.²⁸

²⁶ Juliana Menasce Horowitz & Kim Parker, *How Americans View Their Jobs*, Pew Research Center's Social & Demographic Trends Project (Mar. 30, 2023), <https://www.pewresearch.org/social-trends/2023/03/30/how-americans-view-their-jobs/>.

²⁷ Some scholars are skeptical of the whole debate. See Mark Fabian & Robert Breunig, *Long Work Hours and Job Satisfaction: Do Overworkers Get Trapped in Bad Jobs?*, 100 *Soc. Sci. Q.* 1932 (2019) (finding evidence in Australia that people work hard because they like their jobs).

²⁸ Hunt Alcott, Luca Braghieri, Sarah Eichmeyer & Matthew Gentzkow, *The welfare effects of social media*, 110 *Am. Econ. Rev.* 629 (2020).

A problem specific to labor is the widespread adoption of noncompete requirements by employers.²⁹ Workers may agree to a noncompete because a wage premium compensates them for the loss of future opportunities. This is individually rational but may be collectively harmful. If enough workers agree to noncompetes, then the coordination costs of collectively departing from the employer is increased if they realize they would all be better off working for a competitor or starting a competing firm. With noncompetes and related contractual restrictions, employers may try to take advantage of labor market traps to reduce turnover and suppress wages.

IV. Remedies

Unions may suggest themselves as the primary solution to labor market traps. Workers can coordinate through unions, and pressure employers to resolve product market traps that arise within firms. But unions are themselves networks, and so could also generate traps. And unions are limited in how much they can help workers when labor market traps extend beyond firms and into professions or vocational choices.

Taxes and mandates may improve outcomes for workers. In principle, rather than compel employers to offer (voluntary) parental leave or vacation as law often does, the law should compel employees to *use* parental leave or vacation time—for example, by taxing them if they work instead or subsidizing them if they take time off. But if the law actually prohibited labor in this way, lawmakers would need to ensure that people actually benefit from parental leave (when they might prefer to hire caregivers and continue to climb the corporate ladder) or vacations (same). Otherwise, the law might compel people to engage in activities that they do not value. The BDM mechanism, and related empirical methods, could help shed light on people's preferences for work and alternatives, but probably cannot and this stage be used to design laws that would clearly make people better off.

The optimal product or labor “trap tax” would be a Pigouvian tax that forced consumers or workers to internalize the cost they impose on others when they join a network. This is easier said than done, but a brief sketch of the analysis will show that such a tax is not necessarily burdensome.

Ex ante tax. An ex ante tax would be one imposed on a new platform or its users. Let us focus on the users. When a person P joins the platform, she imposes a cost on all non-users—the cost of being deprived of opportunities to interact with P. She also creates a benefit for all existing users—the benefit of having new opportunities to interact with P. An early user most likely creates net positive externalities. The second user benefits the first user who now has someone to interact with, while imposing a tiny cost on the thousands of non-users—tiny because those non-users continue to interact with one another and share the loss of only one person. If the product is what one might a “pure sharing product,” one that no one minds using and that does not become congested—then net externalities will continue to be positive or flatten out to zero as more people join. But if enough people stay off the platform because it is unpleasant to use, then eventually externalities could turn negative as the platform gains more

²⁹ Evan P. Starr, J.J. Prescott, & Norman D. Bishara, Noncompete Agreements in the US Labor Force, 64 J.L. & Econ. 53 (2021).

users and the non-users become isolated. One could imagine a tax imposed on users that was adjusted as the number of users increased: the tax would be zero (or negative) at the start, and then increasing as more users join. (The employer could be required to collect the tax, which would result in an increasing net price for users as more of them join.) Because taxes would be imposed from the outset—at the launch of the platform—even low taxes imposed on earlier users could be sufficient to undermine the platform, and those low taxes would be optimal if the platform imposes negative externalities even if those negative externalities would occur only in the future after a critical mass of users had joined.

It is not clear whether such a tax would be administrable. The government would be required to apply the BDM mechanism or other suitable instrument at intervals as users joined, and then adjust taxes accordingly. Moreover, people's elicited evaluations may change radically over time as they learn more about how the platform works, or as the platform changes.

Ex post tax. An ex post tax (or related intervention, such as a ban), which is imposed after a platform has achieved popularity, might work more effectively because the government could more easily rely on evaluations of a platform's past performance, as it does when it evaluates drugs and financial instruments. Consider Instagram, for example. If Bursztyn et al. are right that Instagram causes net harm, the government can impose a small tax on users. The small tax would have two advantages over a ban. First, it will be felt as less intrusive. Second, if enough users continue to use the platform despite the tax, that would indicate that the government's calculations are off. As noted earlier, marginal users (people who just barely prefer to use the platform, either because they dislike or because they do not want to interact with many other people) will drop off in response to a small tax, which will reduce the value of the platform for others, cause them to drop off, and so on.

In the case of labor markets, the tax would be imposed on workers rather than consumers. While this might be seen as a hardship, the extra revenue would enable the government to reduce the income tax. This would push workers to quit jobs and professions that heavily draw on networks and join jobs and professions that do not.

One can think of these taxes as methods for reducing the market advantage of platforms that appeal to users but produce large negative spillovers for non-users. Consider a world in which competing firms launch different platforms, each one with somewhat different features that are intended to appeal to users, and each one imposing spillovers of various magnitudes. The tax system would increase the relative appeal to users of platforms with lower negative spillovers, thus increasing the probability that those platforms will win the coordination game and shoulder aside the socially worse competitors.

Noncompetes and other contractual frictions on job mobility should also be discouraged. But, as before, the law must take account of alternatives: if workers manage to coordinate so that they can leave one employer and join another, nothing is accomplished if the new equilibrium is worse than the earlier one.

Conclusion

Market traps pose difficult but illuminating conceptual problems for policymakers. They cast doubt on the capacity of standard methods in economics to determine the impact of legal interventions on people's well-being. And they cast doubt on the capacity of markets to advance welfare when products or occupations have significant interaction effects, as is the case with so many platforms. Yet they also may help explain public dissatisfaction with certain firms, institutions, and market outputs, and point to directions for reform.