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## RESEARCH SUMMARY

# HOW THE INTERNET, THE SHARING ECONOMY, AND REPUTATIONAL FEEDBACK MECHANISMS SOLVE THE "LEMONS PROBLEM"

Government regulation is often explained as consumer protection in cases involving asymmetric information: situations when sellers know more about their product than potential buyers do. Proponents of consumer protection regulations argue that if buyers know sellers can withhold key information about a product, meaning buyers are unable to distinguish between good and bad purchases ahead of time, lower-quality products will dominate the market because consumers will be less willing to make purchases. The fear is that without regulations buyers and sellers will not make beneficial exchanges.

A new study conducted for the Mercatus Center at George Mason University shows that reputational feedback mechanisms—buyers' and sellers' abilities to rate one another and share information about their interactions—can help correct these information deficiencies better than traditional regulatory approaches. The Internet and the expansion of the "sharing economy" have provided a solution to the information deficiency problem where regulations have been ineffective. The continued use of outdated regulatory approaches may in fact prove detrimental to consumers.

To read the study in its entirety and learn more about its authors, scholars Adam Thierer, Christopher Koopman, Anne Hobson, and Chris Kuiper, see "How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the 'Lemons Problem.'"

#### THE LEMONS PROBLEM

George A. Akerlof, winner of the Nobel Prize for his contributions to the economics of information, argued in a 1970 paper that information asymmetries between producers and consumers can lead to the "lemons problem," in which lower-quality products crowd out higher-quality products because of uncertainty among consumers.

For example, in the used car market, used cars tend to command a low market price because potential buyers are unable to tell whether a used car is good or bad.

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- Since buyers are unable to differentiate higher-quality cars (plums) from lower-quality cars (lemons), they are unwilling to pay above the average value. As a result, higher-valued used cars exit the market, the average price declines, and buyers' willingness to pay decreases as well.
- Eventually, as the process continues, only a few lemons remain on the market.

### CAN GOVERNMENT REGULATION SOLVE THE LEMONS PROBLEM?

While he admitted that private solutions may emerge to solve information deficiencies, Akerlof argued that government regulation was still necessary. This argument, however, ignores two key facts:

- *Regulations can harm consumers*. Regulatory measures such as food labels or product safety warnings may seem like fail-safe mechanisms to correct information-based uncertainty. Regulations, however, are not as effective as market solutions, and may harm consumers instead of helping them. Regulators can be influenced by regulated industries, erecting barriers to keep out new competition, stifling innovation, and imposing higher prices and reduced quality on consumers. By making it more difficult to do business, regulations can have the unintended consequence of entrenching already-established businesses while closing the market to entrepreneurs with innovative ideas.
- *Private institutions can use trust and reputation to help consumers*. Akerlof is correct that human nature can produce suboptimal behavior in the absence of effective and efficient mechanisms to induce cooperation among buyers and sellers. But his model fails to account for the use of mechanisms such as trust and reputation, as well as social norms, to boost information-sharing. Centuries of history demonstrate that trust and reputation have been crucial to productive exchanges between consumers and producers.

#### KEY FINDINGS: INTERNET AND INFORMATION SYSTEMS SOLVE THE LEMONS PROBLEM

Modern reputational feedback mechanisms are becoming more sophisticated and, in the process, are offering consumers a louder voice in transactions and improving trust between strangers. These reputational tools can help create more effective, and largely self-regulating, markets that provide more information to more individuals at a lower cost than ever before. The Internet has opened the door to developing and dispersing better information by a variety of methods:

- *Professional online reviews and ratings*. With the advent of the Internet, professional product and service reviews, ratings, and awards, such as those provided by *Consumer Reports*, shifted to publication online. Specialty product review sites, such as *CNET*, which reviews technology products, also arose to take advantage of widespread information access via the Internet.
- *Average consumer ratings and reviews of businesses.* Consumers began to use the Internet for their own reviewing and rating. For example, the significant use of Amazon's customer

feedback and rating system eventually evolved into separate service review platforms such as Yelp, which allow customers to review and rate local businesses.

• *Two-way or interactive review and rating*. When two parties that don't know each other interact, such as when an individual sells an item on eBay, a two-way review system is very useful. Both buyers and sellers can leave feedback after every transaction, meaning each gradually develops a feedback profile—a reputational score—based on comments and ratings.

The sharing economy, which includes any marketplace that uses the Internet to bring people together to share or exchange otherwise underutilized assets, has taken these reputational feedback mechanisms to a new level. Sharing economy platforms rely primarily on two types of online reputational feedback mechanisms:

- *Centralized mechanisms*. Centralized mechanisms build trust in a third-party platform but not necessarily between the two transacting parties. Examples of such platforms include eBay, which offers a money-back guarantee and a payment clearing system to facilitate transactions, and Airbnb—a website that allows people to rent short-term lodging from private individuals—which tracks all elements of every transaction to develop a trust score for each reservation, flagging suspicious transactions for further review by the company.
- *Peer-to-peer mechanisms*. Even though a third-party platform may exist, peer-to-peer mechanisms build trust between the two transacting parties directly. In addition to ratings and reviews, technological developments such as blogs, social networking, smartphones, and mobile apps, including geolocation, have made it even easier for all people to have a voice in e-commerce. As a result, companies have become more responsive to consumer demand, establishing their own presence on social media and quickly responding to complaints. There are many examples of peer-to-peer interactions in the sharing economy today, where buyers and sellers can rate and review each other and share that information with other parties.

#### CONCLUSION

Reputational feedback mechanisms are crucial to the success of the sharing economy. When consumers are empowered to rate providers, they get more and better-quality services than regulation ever offered them. Policymakers should reevaluate traditional regulations aimed at addressing information deficiencies, as the sharing economy has done what regulation could not: improve consumer welfare while encouraging innovation and economic growth.