HOW ADVANCES IN TECHNOLOGY KEEP REDUCING INTERVENTIONIST POLICY RATIONALES

Advances in technology enhance the ability of entrepreneurs and markets to solve problems successfully and efficiently. For example, technology can help define property rights, reduce information disparities, eliminate monopolies, provide collective goods, and handle externalities. Technology that empowers people reduces the justification for costly regulations, government interference, and politically motivated spending.

A new paper published by the Mercatus Center at George Mason University explores several concrete examples of how technology is helping to reduce market deficiencies, dealing a blow to demands for government regulation. The political pressure to increase regulations in fields as diverse as environmental policy and consumer protection ignores the evidence that advancing technology is providing customers and entrepreneurs with the knowledge and tools to solve problems without government intervention.

To read the paper in its entirety and learn more about its authors, Fred E. Foldvary and Eric J. Hammer, please see "How Advances in Technology Keep Reducing Interventionist Policy Rationales."

SUMMARY

Proponents of government intervention into markets often cite four classic efficiency problems as warranting regulation to "fix" an asserted market failure: collective goods, asymmetric information, externalities, and monopoly. The theory suggests that because markets fail to fix these problems, government is in the best position to monitor markets for trouble and then regulate it away.

This paper explores each of these perceived market failures by looking at examples of current government regulations and the technological advances that have made these regulations obsolete. These innovations have either corrected a problem better than the government could have or shifted the search for a solution from regulation to defining property rights. Governments have

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trouble adapting to rapidly advancing technology. Regulation often clings to the past while markets push toward a more efficient future. Regulation can also hamper technological progress by skewing and reducing incentives for businesses to adopt new technologies.

KEY EXAMPLES OF TECHNOLOGICAL ADVANCES

Many economic problems that once were difficult for businesses and consumers to solve can now be handled more effectively because of better technology.

Traffic Congestion

The notion that the government must provide and monitor all traffic services as a collective good funded by taxes is being rendered obsolete by technology. Private roads, bridges, and parking lots have long existed, as have private solutions to congestion, such as parking meters and tolls. However, paying with quarters was slow and inefficient. Now, with electronic payment systems, drivers can travel toll roads without delays and pay for parking without hoarding change. Private roads and parking lots become more effective as technology allows businesses to charge and consumers to pay with less hassle.

The South Norfolk Jordan Bridge in South Hampton Roads, Virginia, was rebuilt by a private consortium. The new bridge opened in 2012 and is notable for the method by which it collects tolls while allowing a continuous flow of traffic. The bridge has no toll booths, so motorists crossing the bridge have their license plates photographed. Most pay for the crossing through E-ZPass, and those without E-ZPass are sent a bill in the mail.

Consumer Product Information

The Internet enables consumers to access massive amounts of information about companies and products, reducing the need for costly government-provided consumer protection. Product quality and user experiences are routinely rated on retailers' sites such as Amazon.com or NewEgg.com, and descriptions, evaluations, and recommendations of products and companies are also provided by subscription services such as Consumer Reports and Angie's List. Consumers can receive information about products and services with the click of a button, so businesses have a strong incentive to ensure their reputations remain high and customers are satisfied. The need for the government to provide this information is decreasing rapidly.

Wildlife Preservation and Environmental Externalities

Wildlife preservation has become more effective as the technology involved in tagging animals has advanced, allowing fish farms to protect their property and still provide fish for dinner. This advance means defining and defending property rights is no longer a function that only the government can or should perform. For example, transponder branding involves implanting a small device under the fish's skin, much as pet owners inject their animals with a chip in case they become lost. Using this technology, aquaculturists can track their own fish and harvest them at optimal times, or allow third-party fishermen to capture the fish for a bounty. To avoid depleting the stock, fishermen can also be prohibited from catching unowned fish. In this way, fishermen can avoid many of the socially destructive externalities inherent in an open commons.

Another way technology is helping avoid environmental externalities is by making information on good and bad behavior much more accessible. Just as restaurants fear bad online reviews, polluters can be shamed, boycotted, and otherwise avoided for their behaviors. The University of Massachusetts Amherst's Political Economy Research Institute, for instance, compiles a Greenhouse 100 Polluters Index listing the organizations producing the most pollution in the United States.

Monopolies

Monopolies are sometimes considered a market failure because a single firm without competition can charge higher prices relative to a competitive industry, and such firms are often slow to innovate when they are in a favorable position and protected by government. Yet in many markets formerly characterized by few suppliers, advancing technology has lowered barriers to entry, reducing firms' power to set their own prices independent of the market.

This change is in large part due to cheaper computing ability and easier access to products and information via the Internet. Technological progress requires dominant firms to innovate lest they fall behind. Companies that once dominated their industries, such as IBM and AOL, have lost their prime position within the last decade to new firms such as Microsoft, Google, and Facebook, or to firms such as Apple that reinvented themselves with creative technological and marketing leaps.

Electricity generation and distribution is often considered a natural monopoly, but it exists as such largely due to government policies. Technological advances have reduced the cost of generating electricity, making on-site generation more affordable and large-scale distribution less important. Government regulation and subsidization of electricity has also limited markets' ability to determine an efficient balance of conventional and alternative energy sources. Ultimately, the public bears the cost of an inefficient electricity-generating sector.

CONCLUSION

If consumers and private enterprise have a greater ability to protect themselves from harm by their own efforts, they have less need of government regulations that raise prices and restrict consumer choice. Better technology enables private enterprise to become more competitive and productive while simultaneously providing consumers with more information than they ever had in the past.