MERCATUS CENTER
George Mason University

POLICY BRIEF

# The Effect of Regulation on Low-Income Households

*Dustin Chambers, Diana Thomas, Patrick A. McLaughlin, and Kathryn Waldron*

January 2019

Regulation dictates the lives of ordinary American citizens in a myriad of ways. Although most regulation is created with the intention of protecting people from possible dangers, it can have the reverse effect. Even regulation that focuses on consumer, workplace, and environmental protection has economic costs, as it requires businesses to hire additional staff to navigate the legal landscape, among other costs. Even more worryingly, red tape can also discourage outside companies from entering more heavily regulated industries in the future.[1]

While regulation can significantly affect firms' bottom lines, regulation also often disproportionately hurts American households with lower incomes—a much less discussed phenomenon. Reducing competition—by creating barriers or hurdles that limit the ability of new individuals or companies to enter a market—can raise prices, slow wage growth, and diminish economic opportunities for low-income workers. After the passage of new regulation and the concomitant increase in prices, low-income families may find that their incomes no longer go as far, and they are forced to cut expenses elsewhere to pay for regulated goods and services, making them worse off.

The regulatory agenda is largely set by the middle and professional classes, where political power rests, and the needs of low-income households are often underrepresented or overlooked in the process. Once in place, regulation often hurts these low-income households through the harmful effects on prices, wages, and employment. Regulation also has a positive statistical relationship with poverty rates—as regulation grows, poverty rates also tend to rise. While this may seem grim, understanding these effects of regulation can help agencies counteract or at least minimize the costs borne by low-income households. Some particular steps that agencies can take include regulating only to solve well-documented and widespread or systematic social problems, identifying and analyzing multiple alternative approaches to solve a particular problem, and reviewing existing regulation to understand and combat unintended consequences that disproportionately harm poor people.

The goal of this policy brief is to trace the ways regulation imposes a disproportionate burden on poor American households. Benefits are an important consideration when evaluating regulation. Unfortunately, to our knowledge, the only empirical estimates of regulatory benefits consist of regulation-specific or industry-specific case studies, and these cover only a small subset of all industries and regulation. Thus, a thorough review or analysis of the distribution of regulatory benefits is far beyond the purview of this paper. The purpose is instead to inform the reader of the ways in which regulatory costs are disproportionately borne by low-income households—a phenomenon that is rarely discussed but has important implications when designing or evaluating the effects of regulation.

## WHO SETS THE REGULATORY AGENDA?

As long ago as 1970, George Stigler suggested that changing employment trends in the 20th century had concentrated political power in the hands of the middle class. In his paper Stigler used Director's law—originally proposed by economist Aaron Director—which says, "Public expenditures are made for the primary benefit of the middle classes, and financed with taxes which are borne in considerable part by the poor and rich."[2] Stigler found that in the institutions of higher education in California in the 1960s, while low-income taxpayers (those with an annual income of $4,000 or less) in 1961 paid 17 percent of the total tax burden, their children only represented 4.5 percent of the student body at the University of California and other state colleges in 1964. By comparison, taxpayers in the adjacent income bracket (those with an annual income between $4,000 and $8,000) paid 23 percent of the total state and local tax burden while their children represented 46 percent of the student body. The gap continues into the next income bracket (those with an annual income between $8,000 and $14,000) where share of tax burden was only 27 percent but share of student body was 43 percent.[3]

Examples like this are not uncommon—among his many other illustrations, Stigler notes the regressive nature of US agricultural policy. Even today, the rhetoric behind farming subsidies, tariffs on agricultural goods, and restrictions on output focuses on how these regulations benefit small farm owners, farm laborers, or tenants. However, the majority of the benefits of farm subsidies accrue to wealthy farm households.[4] Similarly, a majority of the benefits from tariffs on sugar go to the small number of large companies that dominate the sugar market. The effect on American consumers has been sugar prices that are, on average, twice the world sugar price.[5] As we will describe in more detail later, examples like these disproportionately harm low-income households because those households tend to spend a larger portion of their incomes on such goods.

These are just a couple of examples of how regulation and policy can benefit wealthy households at the expense of low-income households. Part of the reason for this redistribution may be that the preferences of middle- and higher-income households are overrepresented in the political process. Empirical studies show that "when Americans of different income classes differ in their policy preferences, actual policy outcomes strongly reflect the preferences of the most affluent."[6] The wealthy have more resources available to them to make their preferences known. They may have better access to lobbyists and special interest groups, and they have more money to promote politicians with favored policy positions. As a political minority with fewer resources at hand, low-income individuals have less of an incentive to be active participants in the political process.

Even if the purpose of regulation is not to benefit the wealthy at the expense of the poor, this uneven representation within the political process may nevertheless lead to that outcome because of the information available to policymakers and the affluent. Since wealthy households have a disproportionately large influence over the political process, any regulation that leads to unexpectedly high costs for those households may also lead to quick redress once the harm is realized. However, if the unexpectedly high costs fall on low-income households, those with political sway may not even be aware of these unintended consequences. The result is that policymakers and regulators ultimately avoid regulation that harms high-income households, while being less responsive about regulation that harms low-income households.

## Case Study: The Export-Import Bank

The Export-Import (Ex-Im) Bank is a government agency that provides private exporting businesses with financing that is backed by taxpayer money. The bank finances these exporting businesses through loan guarantees, working capital guarantees, direct loans, and export-credit insurance. A few large beneficiaries of these subsidies successfully lobby for the continued existence of the Ex-Im Bank and access to its benefits.

As of 2013, the Ex-Im Bank had $27.2 billion in taxpayer funding, with exposure to failure and nonpayment risk of $113.83 billion.[7] Most of this financing benefits a small number of large businesses, at the expense of smaller businesses and taxpayers. As Veronique de Rugy, Nita Ghei, and Michael Wilt put it, "The bank subsidizes the exports of a handful of large US firms while exposing tax-payers, borrowers, and consumers to risk."[8]

For example, Boeing receives about 40 percent of the total loan authorizations from the bank, compared to the 25 percent that small businesses receive. In fact, the top 10 beneficiaries of the Ex-Im Bank—a list including General Electric and Caterpillar—received about 76 percent of the total financial assistance in 2014.[9]

Evidence shows that the Ex-Im Bank fails to provide the benefits that its proponents often cite as justification for the bank's continued existence:[10]

- It does not promote exports or level the playing field for US businesses.
- Rather than promote job creation, theory and evidence indicate that the Ex-Im Bank likely results in a net job loss.
- The Ex-Im Bank does not support small businesses.
- The Ex-Im Bank's accounting practices could cost taxpayers billions of dollars.

The Ex-Im Bank still survives even in the face of strong evidence that the bank favors a few large businesses at the expense of everyone else and fails to accomplish its policy objectives. This is the result of a political system that often favors the preferences of the wealthy and is swayed by concentrated special interests. The continued existence of the Ex-Im Bank is both unsurprising and disheartening.

### Who Sets the Regulatory Agenda? Section Highlights

- When the desires of low-income voters and high-income voters conflict, high-income voters often prevail.
- As a result, regulation is more likely to reflect the desires of higher-income individuals.
- Because the costs and benefits of regulation are distributed unevenly—whether by intention or not—seemingly innocuous regulation such as educational or agricultural subsidies can have regressive effects.
- Special interests may successfully lobby for harmful regulation that provides concentrated benefits, such as the financing provided by the Ex-Im Bank.

## WHO BEARS THE COSTS OF REGULATION?

Even regulation passed with the best of intentions can have regressive effects. It is difficult to estimate the magnitude of these regressive effects without first knowing the total cost of federal regulation. Annually, the Office of Management and Budget (OMB) reports an estimate of the costs and benefits of federal regulation. In 2017, the OMB reported that "estimated annual costs are in the aggregate between $59 billion and $88 billion, reported in 2001 dollars."[11] However, the annual reports only include costs associated with major rules passed within the past 10 years for which agencies monetized benefits and costs. This means that OMB only counted 137 out of the roughly 36,000 total rules from the past 10 years in this cost estimate.[12] Consequently, researchers have sought to calculate the effects of regulation more fully than do the annual OMB reports. W. Mark Crain and Nicole Crain argue that the actual total cost of regulation (including indirect costs) is closer to *$2 trillion*.[13] Using the RegData database at George Mason University, researchers Bentley Coffey, Patrick McLaughlin, and Pietro Peretto estimate that if "regulation had been held constant at levels observed in 1980, the US economy would have been about 25 percent larger than it actually was as of 2012."[14] Put another way, regulation led to a loss of approximately $13,000 per capita on average.[15]

Regulation's costs result from higher prices, slower wage growth, and barriers to entry in an industry. Increasing prices diminish low-income households' abilities to buy necessary goods in the present. Slow wage growth reduces these households' buying power in the future. Barriers to entry reduce opportunities for low-income families to start new businesses or find jobs. In all three cases, regulation diminishes the economic prospects of low-income households.

## Higher Prices for Goods

Regulation often increases the production costs of goods, and these costs are passed on to the consumer in the form of higher prices. Dustin Chambers, Courtney Collins, and Alan Krause combine data from the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the Mercatus Center's RegData database to study the relationship between prices and consumer choices. They finds that a 10 percent increase in total regulation leads to a nearly 1 percent increase in consumer prices.[16] Furthermore, they find that the effects of these price increases are regressive—the poorest income groups experience the highest proportional increases in the prices they pay. This is consistent with spending patterns broken down by income level. Low-income households tend to spend a greater portion of their incomes on necessities such as utilities, food, and healthcare. These goods also tend to be more regulated than other types of commodities.[17]

Adam Hoffer and coauthors' 2015 study examines the effect of taxes on consumption of 12 goods—all "unhealthy" goods, such as alcohol or bacon—by consumers of different economic classes.[18] Hoffer and his fellow researchers find that consumption varies little over the income distribution. Since most of the goods studied are what economists call "own-price inelastic"—meaning that if prices increase, most consumers will still buy the good in question—any policy (tax or regulation) that leads to a price hike will disproportionately hurt low-income households (since the price increase will represent a greater portion of their income than it will other households). The researchers conclude their paper by saying "[the income effect] causes individuals who continue to purchase such goods to see declines in disposable incomes available for spending on other goods, thereby making it more difficult to low-income consumers to climb out of poverty. Stuck in poverty, those households also are unable to adopt healthier diets or to change their behaviors in the ways desired by the supporters of selective consumption taxes."[19] Ironically, taxes and regulation intended to promote healthier behavior may in fact make it more difficult for low-income individuals to adopt better habits.

Other regulation geared toward reducing risk can also have regressive effects. In general, low-income households are more constrained in the amount they can spend on reducing risk compared to more affluent households (in fact, this is often either explicitly or implicitly a justification for risk-reducing regulation). Although low-income households may be disproportionately exposed to certain risks, they may be willing to pay less to achieve a certain size reduction in risk than a more affluent household. Therefore, when regulation favors the preferences of the more affluent, that regulation is likely to force low-income households to spend money—in the form of higher prices—on risk-reducing activities that are not a priority for them. In some instances, the regulating agency may find a way to impose the cost on higher-income groups, making the regulation more progressive. However, as discussed earlier, regulation that imposes costs on a producer is likely to increase prices for the consumer (which often includes low-income families, especially when those families are also the target for the regulatory benefits). There is also an opportunity cost to mitigating risk—spending resources to reduce a given small risk factor necessarily precludes spending the same funds to reduce another (potentially greater) source of risk.

## Slower Wage Growth

Rising prices are not the only channel through which regulation can harm low-income individuals. James Bailey, Diana Thomas, and Joseph Anderson find empirical evidence that regulation leads to slower wage growth, a burden borne disproportionately by lower-wage workers.[20] This is because many of the new jobs created in the wake of regulation are compliance-related positions. The workers who fill these positions are often middle- or upper-class professionals, such as managers, lawyers, and accountants.

Middle- and upper-class professionals have become increasingly valuable to firms as technology develops. Beginning in the 1980s, skill-biased technological change increased the productivity of skilled workers so that their wages increased relative to unskilled workers' wages. New regulation exacerbates this inequality, as firms often find themselves requiring new management processes and specific technology. While the regulated firms may have supported or even lobbied for the regulation in question if they expected to gain some advantage over current or future competitors, the adoption of new technology and the need to navigate red tape stimulates demand for highly skilled compliance workers, not low-skilled workers. Some regulation undoubtedly adds low-skill jobs in some industries; however, as we will see, the compliance-induced increase in high-skilled jobs outweighs this effect.

While low-wage workers in regulated industries do not necessarily experience shrinking paychecks as regulation expands, their wages fail to keep pace with those of managers and accountants. The need to comply with regulation may increase the value of workers "who can navigate increasingly complex legal environments and compliance requirements, while also forcing firms to lower production costs in other areas to compensate for more burdensome regulatory compliance."[21] As a result, regulation forces firms to pay more in wages to managers or lawyers and therefore have fewer funds to raise the wages of other workers. Essentially, regulation diverts money from lower-skilled, blue-collar occupations (such as factory workers) to high-skilled occupations (such as lawyers and accountants).

A paper by Sean Mulholland, which uses data from the Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey, reveals that regulation is a driving force widening the gap in income distribution because "heavier regulatory burdens are associated with higher hourly wage inequality."[22] He calculates that adding approximately 4.08 regulatory constraints increases the income ratio between the average worker in the 90th percentile (high skilled) and the average worker in the bottom 10th percentile (low skilled) by 0.09. This is essentially the same as giving the high-skilled worker a raise of $1.19 (3.5 percent) while holding constant the low-skilled worker's income.

The increasing value of highly skilled workers is not inherently problematic—their ability to navigate a world with ever-evolving technology allows firms to produce goods and services more effectively. However, as the above studies on wage growth show, when it comes to regulation protecting and promoting worker well-being, the wealthy thrive while the poor are left behind.

## Reduced Opportunities

Regulation can reduce economic opportunities for both potential workers and potential business owners. As previously mentioned, regulation shifts demand away from low-skilled labor and toward high-skilled compliance labor. In addition to slowing wage growth for low-skilled workers, this may also mean that some low-skill job opportunities that would have existed never come to fruition, as business owners decide to hire lawyers or accountants instead of low-skilled production workers. Regulation can also legally limit job opportunities through mechanisms such as licensing. This type of regulation raises the cost of entry into an occupation through fees and training requirements. These costs are often difficult for low-income households to afford.

In addition to barriers to entry for workers, regulation also creates barriers to entry for businesses. While advocates often claim that entry regulation is necessary to ensure high standards of quality, there is a lack of convincing evidence that entry regulation actually accomplishes this goal.[23] Dustin Chambers, Patrick McLaughlin, and Laura Stanley find strong evidence that entry regulations, in addition to failing to meet their objectives, disproportionately hurt poor people by increasing income inequality.[24] In an empirical study covering 115 countries, the authors find that nations with greater regulation affecting the number of steps or time required to start a new business see higher levels of income inequality. In particular, within countries with average inequality, increasing the number of procedures required to start a new business by one standard deviation was associated with a 12.9 percent increase in the country's Gini coefficient—a standard measure of income distribution within a country that ranges from 0 (perfect equality) to 1 (perfect inequality).[25]

Although entry regulation is the most direct barrier to business formation, the cost of regulatory accumulation over time can erect barriers as well, and this reduces opportunities for many would-be entrepreneurs—particularly those with fewer resources. As regulation grows, so do the costs that business owners must incur to either begin or maintain a business. Dustin Chambers, Patrick McLaughlin, and Tyler Richards recently found that small businesses have a harder time coping with regulation growth than do larger businesses.[26] Furthermore, this effect compounds as regulation grows: the greater the growth of regulation, the more harm each increase in regulation causes. This finding has important implications for low-income households both because small businesses are more common in low-income areas and because small businesses are an important avenue for economic advancement, particularly for low-income households. As regulation grows, it hurts low-income communities that depend upon small businesses and it limits opportunities for low-income households to start businesses and improve their own economic well-being.

## Case Study: Occupational Licensing

In 1950, approximately 1 in 20 workers needed a government license to do his or her job. By 2006, that number had risen to nearly one out of three workers.[27] According to a 2012 Institute for Justice report that analyzed data from the Bureau of Labor Statistics and US Census Bureau, all 50 states require some form of occupational licensure for many low-income occupations.[28] Even in Wyoming, which has licensing requirements for fewer low-income occupations than any other state, 24 low-income occupations still require a license. This includes occupations such as cosmetologist, manicurist, barber, taxidermist, and travel guide. On the other end of the spectrum, states like Louisiana, Arizona, and California require licenses for more than 60 low-income occupations. In addition to the those mentioned above, these states require licenses for occupations such as home entertainment installer (LA), packager (AZ), funeral attendant (AZ, CA), and upholsterer (CA). These licenses are often costly for those interested in working in those industries. The seven most regulated states require, on average, more than 500 days of education and experience to obtain a license, while the six most highly regulated states charge more than $300 on average in fees for a license.[29]

Occupational licensing does not affect all workers uniformly. Occupational licensing costs create hurdles that are especially difficult for low-income individuals to overcome. When combined with the fact that many states require domestic work experience to qualify for a license, recent immigrants are hit especially hard. A research literature survey on this subject by Patrick McLaughlin, Jerry Ellig, and Dima Shamoun reveals that four out of five studies found disparate negative effects of licensing on ethnic minorities.[30] Another group disproportionately affected is former convicts, as many states will not grant licenses to these individuals. As the list of felonies grows, such policies become more harsh and unforgiving, as they make it difficult for Americans who have paid their debt to society to productively reintegrate into the labor force, likely boosting recidivism rates.

Proponents of regulation argue that regulation is needed to promote high standards of quality. However, summarizing the empirical literature, Chambers, McLaughlin, and Stanley report that occupational licensing regulations do not normally improve service quality. Instead, occupational licensing tends to suppress competition, reducing the pressure on providers to compete on quality. Moreover, regulation in some instances may be unnecessary to protect consumers. Thanks to the internet, we live in a world with unprecedented access to information. Customer feedback and reviews on sites such as Yelp and Amazon make it easier for customers to ascertain product or service quality. Furthermore, the existence of occupational licensing may cause consumers to erroneously conclude that license holders deliver higher-quality goods and services, even when that is not the case.

Occupational licensing also hurts consumers by making goods and services more expensive. The licensed provider passes the costs of education and fees down to the consumer in the form of higher prices. Moreover, low-income households purchase many of these goods and services. As Matthew Mitchell explains, “Licensing laws hit the poor twice—once in the form of limiting job opportunities and then again in the form of higher prices.”[31] One example that Mitchell highlights is the licensing of daycare providers. On the one hand, these onerous licensing requirements limit job opportunities for low-income families lacking the minimum requirements such as a high school diploma. On the other hand, they often price low-income families out of the childcare market. So in addition to limiting job opportunities in the childcare sector and limiting access to an important service, this regulation may limit job opportunities in other sectors for those low-income families who are unable to afford the childcare necessary to leave their homes for work. As Veronique de Rugy aptly wrote, “By erecting barriers to entry to these occupations, we erect barriers to entry to achieving the American dream.”[32]

## Who Bears the Costs of Regulation? Section Highlights

- Regulation raises prices, which disproportionately hurts low-income families.
- Regulation slows wage growth for low-skilled workers by shifting businesses’ employment resources to compliance-focused professionals like lawyers, managers, and accountants.
- Regulation reduces job opportunities and hurts small businesses, which especially affects low-income and rural communities.
- Occupational licensing is expensive, costing low-income workers hundreds of dollars in fees and hundreds of hours in mandated training, thus discouraging many would-be entrants and raising prices for goods and services for low-income consumers.

## CONCLUSION

Regulation has a plethora of unintended consequences that place a disproportionate burden on low-income workers and their families. By raising prices, slowing wage growth, and limiting employment and entrepreneurial opportunities, regulation reduces the economic potential of poor people.

Echoing Chambers, McLaughlin, and Stanley, we recommend three policy goals that regulators should keep in mind to reduce the negative effects of regulation on low-income households. First, regulators should only use regulation to solve well-documented and widespread or systemic social problems. Regulators should avoid rules that address nonexistent problems or are intended to prop up failed policies. Second, regulators should consider alternative methods or policies to ensure that regulation is in fact the optimal tool for fixing the problem at hand. In addition, regulators should ensure they are using the correct regulatory modality. For example, McLaughlin, Ellig, and Shamoun advocate registration, certification, and titling policies because they are less economically damaging than occupational licensing.[33] Finally, regulators should review existing regulation to ensure efficacy and a lack of unintended regressive effects.

While we propose these goals specifically to address entry regulation, we believe they are also useful when considering any new regulation. Regulation may be effective at achieving some of its objectives, but unintentional regressive consequences should serve as warning to proceed with caution to policymakers looking to use regulation as their primary policy instrument.

## ABOUT THE AUTHORS

Dustin Chambers is a professor of economics in the Perdue School of Business at Salisbury University, a senior affiliated scholar for the Mercatus Center at George Mason University, and a policy adviser at the Heartland Institute. Chambers is an applied econometrician who has published widely on the topics of income inequality, poverty, and economic growth. His most recent research focuses on the regressive effects of government regulations, including their unintended impact on consumer prices, entrepreneurship, and social mobility vis-a-vis income inequality and poverty. He earned his MA in economics from UCLA and his PhD in economics from the University of California at Riverside.

Diana Thomas is an associate professor of economics at Creighton University. She is also director for the Institute of Economic Inquiry at Creighton University and the 2016 president-elect of the Society for the Development of Austrian Economics. She was previously an assistant professor of economics at the Jon M. Huntsman School of Business at Utah State University. Thomas earned her diploma in business administration from Fachhochschule Aachen in Germany and her BS in finance from George Mason University in 2004. After working as a junior portfolio manager at Allianz Global Investors in Frankfurt Germany for a year, she returned to George Mason University. She earned her MA and PhD in economics from George Mason University. While pursuing her PhD in economics from George Mason University, she was a Mercatus Center PhD Fellow. Her primary fields of research are public choice, development economics, and Austrian economics.

Patrick A. McLaughlin is the director of Policy Analytics and a senior research fellow at the Mercatus Center at George Mason University. His research focuses primarily on regulations and the regulatory process. He created and leads the RegData and QuantGov projects, deploying machine-learning and other tools of data science to quantify governance indicators found in federal and state regulations and other policy documents. McLaughlin has authored more than a dozen peer-reviewed studies in diverse areas, including regulatory economics, administrative law, industrial organization, and international trade.

Kathryn Waldron is a research associate at the R Street Institute and a graduate research fellow at the Mercatus Center at George Mason University. As a fellow at Mercatus, she works on projects relating to defense spending and the regressive impact of regulation. Before this, she worked for Walmart headquarters in Bentonville, AR, where she was a health and wellness coordinator. While in undergrad, she interned as a research assistant at the Ministry of Foreign Affairs in Kosovo. She is currently pursuing an MA in economics at George Mason University. She received her BA from Wheaton College, where she studied economics and international relations.

## NOTES

1. This can lead companies and special interest groups to spend time and money trying to persuade politicians to pass regulation that would favor their own ends, regardless of whether the greater public would benefit—a phenomenon that economists call rent-seeking.
2. George J. Stigler, "Director's Law of Public Income Redistribution," *Journal of Law and Economics* 13, no. 1 (1970): 1–10. Stigler notes that, owing to falling self-employment and rising employment via large corporations, the amount of economic data available grew tremendously beginning in the late 19th century. As a result, it became easier to tailor federal regulation to target specific industries to achieve the goals of those with political power.
3. Stigler, "Director's Law."
4. Vincent H. Smith, "The 2013 Farm Bill: Limiting Waste by Limiting Farm-Subsidy Budgets" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, 2013).
5. Veronique de Rugy, "The Federal Sugar Racket Should Be Broken Up," Mercatus Center at George Mason University, December 9, 2015.
6. Martin Gilens, "Inequality and Democratic Responsiveness," *Public Opinion Quarterly* 69, no. 5 (2005): 778–96.
7. Veronique de Rugy, Nita Ghei, and Michael Wilt, "Should the US Export-Import Bank Be Reauthorized?," Economic Perspectives, Mercatus Center at George Mason University, July 28, 2015.
8. De Rugy, Ghei, and Wilt, "Should the US Export-Import Bank Be Reauthorized?"
9. Veronique de Rugy, "The Biggest Beneficiaries of the Ex-Im Bank," Mercatus Center at George Mason University, April 29, 2014.
10. De Rugy, Ghei, and Wilt, "Should the US Export-Import Bank Be Reauthorized?"

11. Office of Management and Budget, *2017 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act*, 2017.

12. James Broughel, "Budget Office's Benefits Numbers Are Simply Bananas," *The Hill*, June 15, 2018.

13. W. Mark Crain and Nicole V. Crain, *The Cost of Federal Regulation to the U.S. Economy, Manufacturing and Small Business* (Washington, DC: National Association of Manufacturers, 2014).

14. Bentley Coffey, Patrick A. McLaughlin, and Pietro F. Peretto, "The Cumulative Cost of Regulations" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2016).

15. Coffey, McLaughlin, and Peretto, "The Cumulative Cost of Regulations."

16. Dustin Chambers, Courtney A. Collins, and Alan Krause, "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation," *Public Choice* (2017): 1–34.

17. Chambers, Collins, and Krause, "How Do Federal Regulations Affect Consumer Prices?"

18. Adam Hoffer, Rejeana Gvillo, William Shughart, and Michael Thomas, "Income-Expenditure Elasticities of Less-Healthy Consumption Goods," *Journal of Entrepreneurship and Public Policy* 6, no. 1 (2017): 127–48.

19. Hoffer et al., "Income-Expenditure Elasticities of Less-Healthy Consumption Goods."

20. James B. Bailey, Diana W. Thomas, and Joseph R. Anderson. "Regressive Effects of Regulation on Wages," *Public Choice* (2018): 1–13.

21. Bailey, Thomas, and Anderson, "Regressive Effects of Regulation on Wages."

22. Sean Mulholland, "Stratification by Regulation: Are Bootleggers and Baptists Skill-Biased?," *Public Choice* (2018): 1–26.

23. Patrick A. McLaughlin, Jerry Ellig, and Dima Yazji Shamoun, "Regulatory Reform in Florida: An Opportunity for Greater Competitiveness and Economic Efficiency," *Florida State University Business Review* 13, no. 1 (2014): 95–130.

24. Dustin Chambers, Patrick A. McLaughlin, and Laura Stanley, "Barriers to Prosperity: The Harmful Impact of Entry Regulations on Income Inequality," *Public Choice* (2018): 1–26.

25. Chambers, McLaughlin, and Stanley, "Barriers to Prosperity."

26. Dustin Chambers, Patrick A. McLaughlin, and Tyler Richards, "Regulation, Entrepreneurship, and Firm Size" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2018).

27. Morris M. Kleiner and Alan B. Krueger, "The Prevalence and Effects of Occupational Licensing," *British Journal of Industrial Relations* 48, no. 4 (2010): 676–87.

28. Dick M. Carpenter II, Lisa Knepper, Angela C. Erickson, and John K. Ross, "License to Work: A National Study of Burdens from Occupational Licensing" (Arlington, VA: Institute for Justice, 2012).

29. Carpenter et al., "License to Work."

30. McLaughlin, Ellig, and Shamoun, "Regulatory Reform in Florida."

31. Matthew D. Mitchell, "Occupational Licensing and the Poor Disadvantaged" (Mercatus Policy Spotlight, Mercatus Center at George Mason University, Arlington, VA, September 2017).

32. Veronique de Rugy, "Occupational Licensing: Bad for Competition, Bad for Low-Income Workers," Mercatus Center at George Mason University, 2014.

33. McLaughlin, Ellig, and Shamoun, "Regulatory Reform in Florida."