The Consumer Costs of Anticompetitive Regulations

Ryan Bourne, R Evan Scharf Chair in the Public Understanding of Economics at the Cato Institute

Thinking About Antitrust and Regulation

The very existence of antitrust law is predicated on the idea that certain business behaviors and practices can arise in markets which are detrimental to the functioning of effective competition – lowering consumer welfare.

Libertarian scholars, and my colleagues at the Cato Institute, have long debated the extent to which these concerns are justified. We tend to fall down on the side of these fears being overblown.

Though business actions towards consumers can no doubt be harmful in the short-term, market processes attenuate these behaviors in the longer-term, through the ordinary operation of entrepreneurship tied to consumer demands and the profit motive. The proof is in the pudding: rarely has a monopoly survived across generations absent government privileges. Even in imagined cases of cartels which restrict production to keep prices elevated, there are incentives to cheat to pick up market share.

Theoretically, of course, provided antitrust is purely focused on consumer welfare, is instantaneous and does not interfere with the competitive process, one can envisage scenarios where it has beneficial consumer welfare effects. But there tends to inevitably be broader tradeoffs from an active antitrust regime, including potentially adverse incentives against innovation stemming from the risk of cases being brought against successful companies, uncertainty about the law's application, the inability of policymakers to foresee the nature of future competition, and the potential for the regime itself to be captured by vested business or political interests.

This is important for the purposes of this roundtable - for the case against activist antitrust is the flip-side of the case for reviewing anticompetitive regulations. When a firm or company offers a price discount, or invests in some technology, or merges with another company, they may make life more difficult for their existing rivals or potential new entrants. But, absent the power of the government, they cannot explicitly bar them from

the marketplace. In contrast, government rules and regulations often undermine competition too. But backed by the power of the state and by law, these tend to be much more difficult for markets to circumvent and so much more economically damaging to consumer welfare in the long term.

Why do we regulate?

In order to assess whether regulations undermine competition and harm consumers it is first necessary to remember their purpose.

Most regulations are justified, in economic terms, as efforts to correct perceived market failures. In economics textbooks, market failures are said to occur when the level of market transactions are not efficient, lowering net social welfare.

This can theoretically occur for a variety of reasons, including: the existence of positive or negative externalities from the trade (meaning that free markets lead to under-consumption or over-consumption of the good in question), a firm being a natural monopoly, a good being simultaneously non-rivalrous and non-excludable (i.e. a true public good), or the existence of significant asymmetries of information between buyers and sellers.

Most proponents of regulation start from the premise that the market in question fulfils one of these criterion. They then propose a government regulation to purportedly correct for it, taking us to the socially optimal level of consumption or production.

If this were true and the government was all-knowing about the external effects of all transactions, this would be the end of the story. But there are economic reasons to think that the “market failure” paradigm has major problems. Markets fail to deliver public goods much less often than the invokers of regulation or government provision suggest. Entrepreneurship has a tendency to eliminate inefficiencies over time. The government can miscalculate the appropriate scale of taxes and regulations and fail itself. Regulatory agencies can be captured by vested interest groups. And almost all activities have external consequences, meaning that correcting for externalities could justify almost unlimited amounts of intervention.

In order to truly assess whether regulation is effective then, one needs to examine the individual market in question, assessing not only whether a market failure exists, but also whether the corrective regulation works as intended. What one observes in many cases is that regulated markets are not characterized by market failure. And even in those markets characterized by market failure, regulation does not enhance market efficiency. Instead, the regulation redistributes from some firms to others and from some consumers to others and reduces overall efficiency, while the administration and compliance costs associated with the regulation consume both public and private resources.

Anticompetitive regulation

There are two very broad theoretical ways that economic regulation can be anticompetitive.

Some regulations are explicitly designed to affect the structure of the industry, via control of entry (and, less commonly, pricing). Regulations might eliminate competition entirely (see distribution and sale of liquor in states such as Virginia, or monopolistic transit and rail routes). Others might affect entry through the existence of legal hoops a firm must jump through before being able to trade (the most obvious example being occupational licensing). Some regulations and laws could give certain companies and industries exemptions or favorable terms. What unites all of these forms of regulations is that by controlling the supply of producers or by fixing the prices they can charge, the government constrains competition directly or deters new entrants to the sector.

Other regulations might still affect the structure of an industry but indirectly. By raising the cost base for all market participants, a regulation designed to achieve a different objective might create an unintentional barrier to entry. Some regulations might have a “poll tax” like effect with the costs of the provisions only absorbable for large incumbents, who are able to finance large departments working to comply, a luxury not available to smaller firms and start-ups. This potential consequence of regulations is exacerbated if regulations are devised or shaped with incumbents in mind.

The wrong question

This roundtable asks us to consider the consumer costs of anticompetitive regulations. But from an economic perspective this is the wrong question to consider. All regulations impose costs, and in competitive markets at least we would expect a very large proportion of these to borne by consumers. But regulations are introduced on the basis of providing net social benefits. What we should ultimately be concerned about here then is whether, overall, regulations impose net social losses, or generate costly inefficiency rather than correcting for the market failures as advertised.

That is not to say that other regulations will not impose costs on consumers. For the purposes of this paper, however, I focus on regulations where the arguments or evidence for market failure are weak, or where the regulation fails to achieve its objective, and so the regulation imposes costs on the consumer at the same time as hurting overall economic efficiency.

The rest of this paper highlights first examples of current regulations (mainly at the state level) which fulfil this criterion, before then reviewing some older, historical examples.

Regulation of childcare

Individual states regulate formal childcare facilities, particularly in relation to staffing (including the qualifications of caregivers and the number of children per staff member). These regulations are said to be justified because of market failures in the childcare sector. It is believed that some parents would not appreciate the importance of good-quality care for their child's development and that they underestimate the broader social benefits, and so will under-consume high-quality care relative to a social optimum. It is also said that there are problems of information asymmetry in the sector, with parents having incomplete awareness of the range of childcare options available. By regulating staffing levels and qualifications, the theory goes that states can give parents peace of mind, generating a "quality assurance" effect which can stimulate demand for formal care. When care is used, these input regulations are also believed to ensure that care is of high quality, realizing positive social benefits.

But these market failure arguments seem a leap of faith. After all, the market for child care is competitive across types of care and includes homecare, informal care, and care by the parent directly.[i] Regulatory policies affecting perceived quality in formal settings can therefore cause substitutions from one type of care to another, particularly if they affect the costs of provision and hence the price of care.[ii] Furthermore, plenty of European countries operate successful childcare sectors without minimum staff:child regulations.[iii] Parental demands for a safe environment would likely constrain overly dangerous staffing levels in markets, and in other countries providers voluntarily sign up to accreditation and childcare agencies, often with inspections, in order to signal their quality.

It's not at all clear either whether the formal government regulations help achieve the objectives in practice, even if there were considered to be social benefits to high-quality care in theory. Suppose a regulation increases the staff–child ratio or requires child-care workers to achieve higher qualification levels. The former could theoretically increase quality by increasing staff interactions with individual children, and the latter by increasing caregiver training. Yet raising the staff–child ratio may restrict the wages of caregivers by restricting the revenue potential of each carer, or else raise costs per child for the childcare facility if the number of children cared for is fixed. The lower wages per worker could, in turn, result in lower-quality caregivers being attracted to the industry overall. Higher costs for facilities of more expensive employees would lead to fewer profitable facilities and hence higher childcare prices, leading to substitution away from formal care to home daycare (which is genuinely perceived to be even lower quality, on average). Child-care providers may also respond to higher government certification requirements on caregivers by lowering their standards for support workers or facilities. The overall effect of both regulations on quality is therefore ambiguous.

A burgeoning empirical literature attempts to shed light on these issues. One finding that appears robust across studies is that stringent staff-to-child ratios increase child-care prices substantially to consumers with little beneficial effect on observed quality. Far from the "quality assurance" effect winning out, the regulations prove anticompetitive, reducing the supply of available care and hence raising its price.

Diana Thomas and Devon Gorry, for example, use variation in prices and state regulation requirements to estimate that loosening the staff–child ratio by one child across all age groups (regulations tend to vary by child age) reduces center-based care prices by 9–20% generally, or 2–5% for 4-year-olds particularly.[iv] This echoes an older result from Randal Heeb and Rebecca Kilburn, who found increasing the stringency by reducing the number of children in the allowed staff–child ratio by two raised the price of child care by 12%.[v]

And further evidence suggests the poor suffer disproportionately from this, with the effect manifesting itself through fewer providers in the sector.

Thomas and Gorry show that a small but measurable number of mothers stop working altogether as a result of these regulations. One would imagine that these are likely to be relatively low-income people on the margins of the labor market.[vi]

A more comprehensive paper by Joseph Hotz and Mo Xiao supports the intuition that the effects are particularly regressive.[vii] Using a panel dataset across three census periods and with extensive individual child-care center data, state data on day home care, and a host of control variables, they find tightening the staff–child ratio by one child reduces the number of child-care centers in the average market by 9.2–10.8% without increasing employment levels at other centers. This reduction in supply occurs wholly in relatively low-income areas and leads to lots of substitution to home day care. Increased stringency in the regulation actually increases the number of child-care centers in high-income areas, probably because of the “quality assurance” effect, meaning the overall effect is highly regressive.

Other regulations have similarly large effects on price, although with more mixed consequences for quality. Thomas and Gorry find that requiring lead teachers to have a high school diploma can increase child-care prices by 25–46% percent. Hotz and Xiao find likewise that increasing the average required years of education of center directors by one year reduces the number of child-care centers in the average market by 3.2–3.8%. Again, this effect manifests itself overwhelmingly in low-income markets, with quality improvements (proxied for them by accreditation for the center) overwhelmingly occurring in high-income areas.

Cost to consumers Data from Child Care Aware of America, a nonprofit that works in child-care policy, indicate the average annual cost for full-time care of an infant at a child-care center in 2016 ranged from $5,178 in Mississippi to $23,089 in the District of Columbia.[viii] Even the conservative end of the Thomas and Gorry estimates suggest that relaxing the staff–child ratio by one child across the board in Mississippi and D.C. could reduce average child-care prices by $466 and $2,078 a year, respectively (and in reality, these effects are likely to be non-linear and larger still in areas with the most strenuous regulations). Relaxing them entirely given they fail to achieve their objectives could result in very large savings to families indeed (with the added benefit of making the transition to work more accessible for those with low level of labor market attachment).

There is some evidence that other staffing regulations – such as a requirement for caregivers to have had teacher training in early childhood education - can have positive effects on child development, though this comes with the trade-off of more expensive and less accessible care.

Childcare staffing requirements are anticompetitive regulations which do not achieve their objective but come at a high price for consumers.

Car Dealership Laws

Every state has laws governing the economic relationships of car manufacturers and dealers. These regulations require dealers to be licensed. But they can also incorporate restrictions on when franchise relationships can be terminated, cancelled or transferred, encroachment laws restricting manufacturers from establishing new dealerships in a market area without proof of need, regulations on reimbursement for warranty repairs, rules against price discrimination between dealers and requirements that manufacturers buy back vehicles or other accessories when a dealership franchise is terminated.[ix]

The most prominent impact of these laws in many states is the restriction on direct sales by manufacturers. But the broad consequence of all of them is to insulate dealerships from competition and prevent manufacturers from optimizing their inventory and distribution to best match the demands and preferences of consumers.

Consider two examples of prevalent regulations: “good cause” and “encroachment” provisions.

The former says that automobile manufacturers can only terminate a dealership for a set of enumerated “good cause” reasons, which in most cases does not include a broader desire for efficiency. Manufacturers face penalties and charges if they react to changed demand patterns by terminating dealerships. Though plenty of states allow for termination for noncompliance of the franchise agreement, even then the manufacturer faces the burden of proof in showing that they have acted in good faith, that the reason for termination is reasonable, and in lots of cases that they have given notice and an opportunity for the franchisee to deal with the issue at hand.

Likewise, plenty of states have laws which protect existing franchisees from “encroachment” – meaning that manufacturers have to show a need for a new dealership if it falls within a relevant market area of an existing one. Protection of exclusive territories such as this can create effective monopoly power for dealers, raising profits, when manufacturers might prefer to increase quantity.

The economic justification for this regulation arose in the early 20th century when it was believed that asymmetric information between the franchisor (the manufacturer) and the franchisee (the dealer) was leading to manufacturers exploiting dealers. But it is widely acknowledged that these rules today raise dealership profits through their anticompetitive effects which raise consumer prices. These days, calls to maintain auto dealership laws tend to be predicated instead on the supposed “social benefits” of local dealerships, including their roles in the community, as sponsors of local events etc. Such a claim could be made about all types of local business, and does not provide any robust “market failure” justification for higher profits for dealerships at the expense of consumers and manufacturers.

Cost to consumers This inefficiency raises consumer prices, though the magnitudes of this effect are disputed. A paper exploring data from 1972 suggested that all of the regulations combined raised new car prices by around 9 percent.[x] A report for the Federal Trade Commission in 1986 found an average price increase of just over 6 percent across

all car types.[xi] In 2001, the Consumer Federation of America summarized the existing literature, concluding that these laws raised new automobile prices by between 6 and 8 percent.[xii] This was subsequently critiqued by Brian Shaffer on behalf of the National Automobile Dealers Association, who concluded that the true impact assessed by previous studies raised prices by just 2.2 percent.[xiii] But other papers focusing on other countries have found similarly large effects to the original studies.[xiv]

Unfortunately, little new empirical evidence exists on this subject, and it is beyond the scope of this paper to seek to investigate or quantify it. The internet may have helped to reduce some of the burden on consumers. But given there is no market failure justification for this kind of regulation, the only possible effect is the restraint of competition and hence higher prices for consumers.

Occupational Licensure

Individual states regulate a large number of occupations through licensing schemes requiring education, training or passing of examinations, which act as an anticompetitive barrier to entry to people practicing a trade. This is a clear restriction on availability of supply (both within state and for movement of workers in an industry across state lines) and so would be expected to raise the price of the service, whatever the other costs and benefits.

Licensing is justified often on grounds of imperfect information, particularly when harm could result for low quality service.

This argument is usually most forcefully made in relation to medical professions, where it is argued that “quack” practitioners might do substantial harm to patients. Yet even here there are likely to be clear trade-offs to restricted entry requirements, not least higher prices and the deterrence of many talented people from going into the profession in the first place. Ideally, one must assess whether there is evidence that licensing requirements reduce quackery and weigh up these benefits against the effects of restricting supply.

It is more clear cut in other sectors, such as hair braiding, barbers, sign language interpreters etc, that the costs associated with low quality providers is low, and in plenty of instances licensure boards are dominated by existing providers with a vested interest

against competitors. To the extent that there might be a trade-off, consumers should be able to judge a price-quality bundle, and increasingly intermediate institutions such as online rating sites provide information about the nature and expected quality of service. Markets may also deliver certification mechanisms for safety or quality-sensitive consumers.

The arguments that licensure corrects for “market failure” then is increasingly difficult to justify. Yet it is now believed that up to 25-30 percent of Americans work in an occupation requiring a license.[xv]

A plethora of research has sought to assess the impact of licensure on labor markets, and tends to find that licensure puts upward pressure on wages (relative to no licensure or certification). A recent paper by Maury Gittleman, Mark Klee, and Morris Kleiner, found that “having a license when it is not required has no influence on wage determination, but, when it is required, licensing raises wages by 7.5 percent,” even after controlling for a host of occupational characteristics.[xvi]

Costs to consumers The extent to which this raises costs to consumers really depends on the extent to which consumers would demand similar certification measures to ensure quality in a more open market. In the absence of licensure constraints, prices of services are likely to be lower, unless the government can provide significant economies of scale in delivering licenses relative to private certificates. However, in many cases consumers are unlikely to demand certification instead, and so prices would be reduced.

Work examining individual markets has shown clear evidence of this. Kleiner et al have shown that a relaxation of occupational licensing laws to allow nurse practitioners the ability to perform more tasks without the supervision of medical doctors reduced prices of well-child exams by between 3 percent and 16 percent.[xvii] Older papers from the 1980s have likewise suggested that licensing for dental assistants and hygienists raised the price of a visit to the dentist by between 7 and 11 percent[xviii] , and optician licensing the price of eye care by 5 to 13 percent.[xix]

The Heritage Foundation’s Salim Furth estimates that occupational licensing across the whole economy costs the average household $1,033 per year, based on an average 8.8

percent wage premium.[xx] This is based on a simple calculation undertaken by Kleiner at all, who estimated a $203 billion annual cost to consumers based on a 15 percent wage premium.[xxi] One has to be careful when making these calculations to bear two things in mind (and ensure you do not over-estimate the effect): first, if consumers demand private certification to replace licensure then the savings in certain sectors might not be large; second, given licensing restricts people from practicing certain occupations, this enables a larger labor supply in non-licensed sectors, putting downward pressure on labor costs and hence prices in other industries. Overall then occupational licensing is likely to be costly to consumers, though not perhaps as costly as some critics imply.

Sugar policy

Though it might be beyond the scope of today's roundtable, it is worth remembering that lots of the most anticompetitive regulations at a federal level relate to trade policy, and attempts to insulate domestic industry from the competition of foreign producers.

The federal government's approach to sugar policy perhaps exemplifies this best.[xxii] Substantial interventions are made on highly speculative "market failure" grounds that absent interventions farmers would suffer from wild price swings, or that a sustained domestic supply is needed for "national security" – a public good as such. Yet many markets deal effectively with price volatility, and substantial numbers of countries seem to manage just fine without a domestic sugar supply (and it is unlikely that removal of protection would result in an elimination of domestic supply anyway).

The US federal government effectively cartelizes the sugar market. As my Cato colleague Colin Grabow has explained, the US Department Agriculture (USDA) facilitates loans to sugar processors using raw sugarcane as collateral, effectively creating a floor for the domestic sugar price.[xxiii] To ensure these loans are then more likely to be repaid, it then restricts the supply of domestic sugar through allotment quantities, influences demand by making purchases and limits the amount of sugar that can be imported without tariffs or with low tariffs, all in order to drive the market price higher.

Costs to consumers Unsurprisingly, the combination of these moves raise domestic sugar prices substantially. Data from the USDA shows that in March 2018 the US sugar

price was 24.73 cents per pound, almost double the world price of 12.83 cents.[xxiv] This, of course, means consumers not only face higher retail prices for sugar, but also more expensive foods which contain sugar as an ingredient.

Economic analysis of the consumer cost of the program has tended to look at the aggregate impact. The economist Michael Wohlgenant has suggested that the burden amounts to $2.4 billion per year, an average of around $19 per household.[xxv] A 2017 paper by John Beghin and Amani Elobeid estimated the cost to consumers higher still, with a total burden of between $3.4 billion to $4 billion.[xxvi]

Non-price and entry regulation

So far, the examples given have been price and entry regulations, which are clearly anticompetitive in that they restrict entry or trade in a way harmful to consumers, based on very tenuous market failure arguments. The more difficult regulations to assess tend to be environmental and health and safety regulations, where there may be well be externalities not “priced in”, but where the specific nature of the regulations or mis-pricing of this externality has anticompetitive effects which go beyond what is necessary to correct for it.

The most obvious example of this worldwide relates to CO2 emissions and global warming. Lots of governments seek to price the social cost of carbon through minimum carbon prices or carbon taxes. But rather than just estimating and correcting for the social cost of carbon directly, allowing markets to adjust to the changed price signals, they then also mandate how much electricity, for example, must be generated from renewable resources or other means. This amounts to a “green industrial strategy.” Indeed, governments have subsidized renewable energy resources and nuclear power in ways which distort the ordinary competitive process, and raise prices to consumers beyond what is necessary to account for externalities associated with carbon.

My Cato colleague and editor of Cato’s Regulation magazine Peter Van Doren has made similar arguments pertaining to air pollution regulation. Economic analysis of Clean Air policy suggests that previous command-and-control regimes enacted by Congress, and their pattern of enforcement, is consistent with an attempt by politicians in already

developed areas to retard the growth of industrial competitors in the South and the West and give excess profits (economic rents) to incumbent firms rather than clean up the environment at least cost. The provisions that prevent deterioration of environmental quality in pristine areas, the patterns of enforcement activity, and the grandfathering provisions for preexisting facilities were all consistent with restrictions on competition rather than environmental quality improvement. Other research has shown that the costs of building inefficiently sized plants in suboptimal locations were significant.[xxvii]

A similar story emerges with health and safety regulation, some of which might be justified where risks from health hazards are not known to workers or where labor markets are not competitive. Yet in many areas the mere existence of a health risk is thought justification enough for a regulatory intervention, even though labor markets tend to deal with risk via "compensating differentials" in pay setting.

Economic analysis has suggested that health and safety regulation often reflects the tastes of higher income individuals, who tend to have a stronger preference for the mitigation of risks which occur with relatively low probabilities.[xxviii] A study by Dustin Chambers and Courtney Collins used regression analysis to analyze the relationship between levels of federal regulation in certain industries and prices.[xxix] Lower-income groups tend to spend a larger proportion of their incomes on goods and services from heavily regulated sectors, and they find a positive and statistically significant relationship between the level of regulation and prices.

Looking at the impact on consumers of other non-price and entry regulations though really requires analysis on a regulation-by-regulation basis, examining again what "market failure" is supposedly being solved for and how much compliance costs with the regulation or the process of regulatory development itself entrenches incumbents and deters entry.

Historic examples of successful deregulation

There are some clear examples through history of where the move away from government regulation, or at least its relaxation, has led to improved outcomes for consumers:

- **Banking**: the legacy of historic US banking regulation led to a fragmented banking system whose costs were excessive. The repeal of restrictions on branch banking in the 1980s and 1990s increased bank efficiency greatly and benefited consumers.[xxx] Loan losses and operating costs fell sharply, which translated into lower interest rates for borrowers. Better performing banks quickly grew through branching. State branching restrictions had acted as a ceiling on the size of well-managed banks and S&Ls, preventing their expansion and protecting less efficient, more risky competitors. Of course, this sector had a host of other problems which manifested themselves in the 2008/09 crisis.
- **Airlines:** forty years ago, the Civil Aeronautics Board (CAB) regulated the airlines industry, prohibiting new carriers, controlling routes and fixing rates. Academic work in the 1960s and 70s increasingly showed that the sector was inherently competitive and that regulation was simply raising prices for consumers. The CAB gradually relaxed ticket sale regulations, and approved carrier requests for more pricing freedom and control of routes. Subsequently, Congress passed the Airline Deregulation Act in 1978, removing federal control over routes and fares in the early 1980s (though subsidies to maintain some routes was implemented). This all led to a big increase in the number of carriers, and it has been estimated that between 1977 and 1996 real airfares fell by 40 percent. The Federal Trade Commission estimated that deregulation itself reduced fares by 25 percent, though there were some non-monetary costs to consumers in terms of more congestion in airports and on flights.[xxxi]
- **Trucking:** in the same way as the CAB, the Interstate Commerce Commission regulated trucking, controlling rates, and imposing tight restrictions on routes and firm entry. This began to be overturned in the mid to late 1970s. In 1975, the Commission began to focus more on competitive behavior and later approving applications for new authority. By 1979, the ICC expanded areas free of federal control, and started taking rates into consideration when approving new operating rights. In 1980 the Motor Carrier Act greatly liberalized licensing requirements, putting the onus on opponents of new authority to

prove why it would be harmful, rather on the entrant themselves. In the mid-1990s, further deregulation occurred, with the ICC abolished and the industry becoming fully competitive. It is widely acknowledged that these changes led to lower rates for truckers, and had the positive spin off for other businesses of enabling them to operate flexibly with "just-in-time" deliveries.

---

[i] "Who's Minding the Kids? Child-Care Arrangements: Spring 2011," by Lynda Laughlin. Household Economic Studies (U.S. Census Bureau), April 2013.

[ii] "The Child Care Problem: An Economic Analysis," Blau, D. M., New York: The Russell Sage Foundation, 2001.

[iii] "Getting the State out of Pre-School & Childcare," by Ryan Bourne and Len Shackleton. Institute of Economic Affairs, Feb. 6, 2017.

[iv] "Regulation and the Cost of Child Care," by Diana Thomas and Devon Gerry. Mercatus Center at George Mason University working paper, Aug. 17, 2015.

[v] "The Effects of State Regulations on Childcare Prices and Choices," by Randal Heeb and M. Rebecca Kilburn. RAND Labor and Population working paper, January 2004.

[vi] "The Effect of Child Care Cost on the Employment and Welfare Recipiency of Single Mothers," by Rachel Connelly and Jean Kimmel. Southern Economic Journal 69(3): 498–519 (2003).

[vii] "The Impact of Regulations on the Supply and Quality of Care in Child-Care Markets," by V. Joseph Hotz and Mo Xiao. American Economic Review, 101(5): 1775–1805 (2011).

[viii] "Parents and the High Cost of Childare," by Child Care Aware of America, 2017 Report.

[ix] "State Franchise Laws, Dealer Terminations, and the Auto Crisis," by Francine Lafontaine and Fiona Scott Morton, Journal of Economic Perspectives, Vol. 24, No. 3 (Summer 2010), pp. 233–250

[x] "Franchise Regulation: An Economic Analysis of State Restrictions on Automobile Distribution," by Richard L. Smith II, Journal of Law and Economics 25, no. 1 (1982): 150

[xi] "The Effect of State Entry Regulation On Retail On Retail Automobile Markets," by Robert Rogers, Bureau of Economics Staff Report to the Federal Trade Commission.

[xii] "A Roadblock on the Information Superhighway: Anticompetitive Restrictions on Automotive Markets," Cooper, M., Consumer Federation of America, 2001.

[xiii] "An Assessment Of Franchise Laws and Internet Auto Sales," Brian Shaffer, NADA Public Affairs, August 2001.

[xiv] "The Economic Effects of Automobile Dealer Regulation," Frank Mathewson and Ralph Winter, Annales d'Économie et de Statistique, No. 15/16; "Economic Effects of State Bans on Direct Manufacturer Sales to Car Buyers," Gerald Bodisch, U.S. Department of Justice, Economic Analysis Group, May 2009.

[xv] "The National Occupational Licensing Database," National Conference of State Legislatures, "Reforming Occupational Licensing Policies," Morris M. Kleiner, Brooking Institution Discussion Paper No. 2015-01, March 2015 and "Analyzing the Labor Market Outcomes of Occupational Licensing," Maury Gittleman, Mark Klee, and Morris Kleiner, Industrial Relations, Volume 57 No.1.

[xvi] "Analyzing the Labor Market Outcomes of Occupational Licensing," Maury Gittleman, Mark Klee, and Morris Kleiner, Industrial Relations, Volume 57 No.1.

[xvii] "Relaxing Occupational Licensing Requirements: Analyzing Wages and Prices for a Medical Service," Morris M. Kleiner et al., National Bureau of Economic Research Working Paper No. 19906, February 2014.

[xviii] "Restrictions on Dental Auxiliaries: An Economic Policy Analysis," Nellie J. Liang and Jonathan D. Ogur, Federal Trade Commission, 1987.

[xix] "The Effect of Commercial Practice Restrictions: The Case of Optometry," Deborah Haas-Wilson, Journal of Law & Economics 29, no. 1 (1986): 165–86.

[xx] "Costly Mistakes: How Bad Policies Raise the Cost of Living," Salim Furth, Backgrounder No. 3081, The Heritage Foundation, November 23 2015.

[xxi] "A Proposal to Encourage States to Rationalize Occupational Licensing Practices," Kleiner, Morris M., Alan B. Krueger, and Alex Mas. 2011. Princeton University, Princeton, NJ. April.

[xxiii] "Candy-Coated Cartel: Time to Kill the U.S. Sugar Program," Colin Grabow, Policy Analysis No. 837, Cato Institute.
[xxiv] US Department of Agriculture, Sugar and Sweeteners.
[xxv] "Sweets for the Sweet: The Costly Benefits of the US Sugar Program," Michael K. Wohlgenant, American Enterprise Institute, 2011.
[xxvi] "Impact of the U.S. Sugar Program Redux," John C. Beghin and Amani Elobeid, Iowa State University Department of Economics Working Ppaer No. 13010, May 2013.
[xxvii] "Costs of Air Quality Regulation, "Randy Becker, Randy A and J. Vernon Henderson. Behavioral and Distributional Effects of Environmental Policy, edited by Carlo Carraro and Gilbert E. Metcalf, 159–68. Chicago: University of Chicago Press, 2001.
[xxviii] "Regressive Effects of Regulation," Diana Thomas, Working Paper No. 12-35, Mercatus Center, George Mason University, Arlington, VA, November, 2012.
[xxix] "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation" Dustin Chambers and Courtney Collins, Mercatus Working Paper, February 2016.
[xxx] "The Benefits of Branching Deregulation," Jith Jayaratne and Philip E. Strahan, Regulation 22 (Issue 1 1999): 8-16.
[xxxi] "Moving Ahead," by Thomas Gale Moore, Regulation 25 (Issue 2 2002): 6-13.