# A Cheeseburger with a small side of Tort Reform

A brief on "Do Cheeseburger Bills Work? Effects of Tort Reform for Fast Food"
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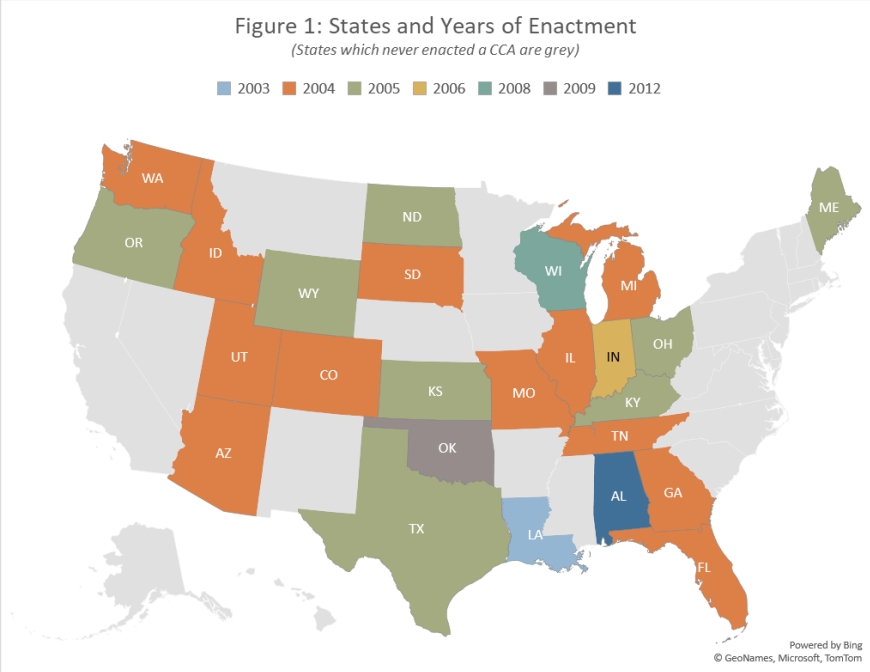
## What is tort reform, and what is a 'Cheeseburger Bill'?

Tort reform refers to a set of changes to legislation which limits the ability of victim to bring litigation based on damages they may have received. In our context, it can translate to legislation reducing a consumer's ability to sue a company for a certain good or practice. Ideally, tort reform should reduce the incentives to pursue litigation, and thereby motivate consumers to be more careful in their consumption choices. For example, in the 1990s several states sued tobacco companies for negative health consequences of their products and subsequent increases in health expenditures borne by the state. If applicable tort reform had been enacted during this period, it could have limited both who could sue the tobacco companies and the extent of the tobacco company's responsibility for the negative health outcomes.

A "cheeseburger bill," as they are colloquially called, is a "commonsense consumption act" (CCA) aimed at limiting the extent to which fast food companies could be held liable to for weight-based claims related to consumption of their fast-food products. Though CCAs are designed to limit what fast-food companies can be held liable for, CCAs do not give carte blanche to food manufacturers and providers when it comes to providing and advertising their goods. Cheeseburger bills also specify the limits of these protections, including in cases where there is misbranding or misleading labeling.




In the early 2000s, several lawsuits (i.e. Barber v. McDonald's Corporation, Pelman v. McDonald's corporation) against fast good giants alleged that corporations like McDonald's induced weight-related health issues as a result of withholding nutritional information from consumers. These types of lawsuits, which were considered frivolous by some, incentivized some states to adopt a version of the CCAs over the years. As seen in Figure 1, some of the first cheeseburger bills appeared in 2003, and by 2015, 26 states had adopted some version of a cheeseburger bill. Federally, CCAs have been less successful pieces of legislation, with the American Personal Responsibility in Food Consumption Act failing to pass in the Senate in both 2004 and 2005.

Given the cascade of cheeseburger bills since the early 2000s, our analysis sought to answer the question, "do cheeseburger bills impact consumer behavior, food prices, and/or the market share of fast-food restaurants?" One hypothesis is that the point of these bills is to incite "personal responsibility" on individuals, so we are interested if the introductions of this bills caused changes in weight-related health behaviors of individuals.

**How might cheeseburger bills change behavior?**

There are several ways that cheeseburger bills could change consumer as well as company behavior.

One potential mechanism for individual behavior is moral hazard.[1] Since the opportunity to sue fast food chains to seek compensation for poor health/weight outcomes is a type of "insurance," consumers may have had less incentive to invest in their weight-related health. CCA legislation essentially removes this recourse, and in turn, should incentivize more investment by heavy individuals in their health. However, for this mechanism to be a driving force in changed behavior resulting from CCAs, there would need to be evidence that the average consumer felt they could successfully sue for weight-related costs, and that subsequent knowledge of CCA passage decreased their confidence in litigation as a form of recourse. An analysis of Google Trends data before and after the passage of a major CCA in 2005 showed evidence of a spike in google searches for "cheeseburger bill," but these trends could not be broken down by states.

An alternative mechanism that does not rely on moral hazard is about communication. It is possible that national coverage and conversations about "cheeseburger bills" may have had its own effect on behavior. Media outlets could have framed the conversation with negative implications about being "obese," shaming individuals who are obese as "not responsible." Heavy individuals may have observed or been reminded by way of CCA legislation, news coverage, and debates that the broader society expected them to take personal responsibility for their food decisions and weight. Regardless of whether a heavy individual considered suing a fast-food chain, this increase in information and focus on food-related weight and health concerns could have had an effect on their desire to lose weight, healthy food choices, or decisions about how often to eat fast-food.

As for fast-food companies, cheeseburger bills would reduce the expected costs associated with litigation and liability insurance. This change could have an effect on the extensive margin and on food prices. In a simple economic model of franchises, CCAs reduce the cost of operating a restaurant in a given state, and this could change dynamics within the fast-food industry.

**Analyzing the impact of CCAs**

To answer this question, our data analysis extends from 2000-2012, a period during which several CCAs were passed, and makes uses of various data sources. Firstly, we primarily utilize the Behavioral Risk Factor Surveillance System (BRFSS). This is an annual phone-survey run by all state health departments in which they ask individuals information about their health. We use these data to

[1] Moral hazard is when an individual or firm would act differently conditional on a mechanism such as insurance. While moral hazard can occur in circumstances where there is no insurance in the traditional sense, insurance illustrates this principle most intuitively. Insurance provides some shelter from sudden shocks (e.g. health insurance minimizes the negative financial impact of an adverse health event or accident). Individuals or firms that know they have insurance may behave with less caution (or more recklessly) than they would if they solely bore the risk and subsequent impact of an adverse event.

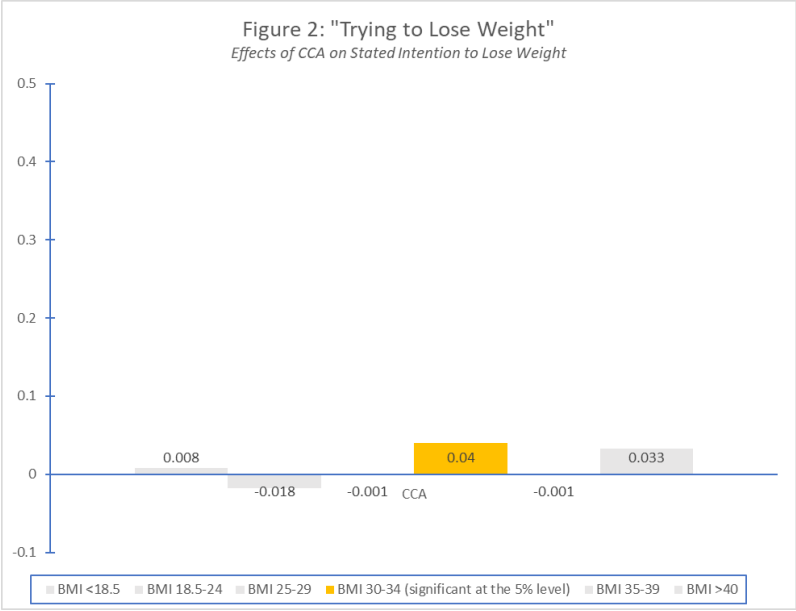
compute body mass index (BMI). We also use the BRFSS for individual responses about exercise (if they did or did not exercise in the past month), healthy food consumption (how many servings of fruits and vegetables in a day), and whether an individual was trying to lose weight.

We use the American Chamber of Commerce Associations (ACCRA) Cost of Living Index, which contains information on prices of highly consumed food items, we use the annual average of these food prices for three fast food items: A McDonald's Quarter Pounder with Cheese, an 11- or 12-inch Pizza Hut or Pizza Inn thin-crust pizza, and a Church's Chicken or KFC thigh and drumstick.

To evaluate the effect on market share for restaurants, we utilize data documenting the number of restaurants in various industries from the Quarterly Census of Employment and Wages (QCEW). Lastly, we use data from the Uniform Franchise Offering Circulars about McDonald's franchises and company-owned restaurants.

As our empirical method, we estimate difference in difference models using plausibly exogenous variation in the cheeseburger bill adoption timing. In the simplest sense, difference in difference compares the period before and after adoption to see if there is an observable and statistically significant effect. Our usage of a staggered difference in difference stems from several important features of the data: 1) variation across states in adoption/enactment timing, as well as some states that will never adopt, and 2) data which covers the period before and after the enactment for the included states. It also relies on a several strong assumptions, chiefly that the timing of adoption is plausibly exogenous—meaning that it believable that the timing of adoption is due to external factors that are not related to the outcomes.

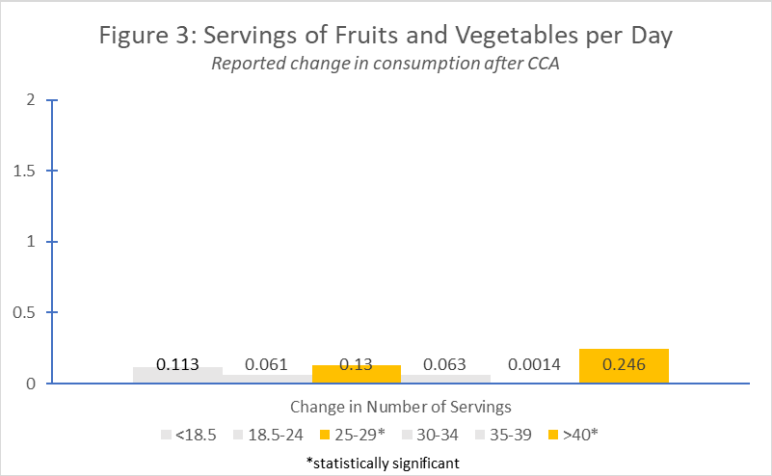
**So, did CCAs change consumer behavior?**




We find evidence that CCAs had an impact on individuals' reported intentions to lose weight. As shown in Figure 2, for individuals with a BMI between 30 and 35 (classified as obese), there was a 4-percentage points increase in intentions to lose weight. Though statistically significant this is not a large effect, is a modest size change. When it came to food choices (shown in Figure 3), overweight and Class 3 obese individuals reported statistically significant increases in the servings of fruits and vegetables per day of about 1/8 of a serving and 1/4 of a serving, respectively.

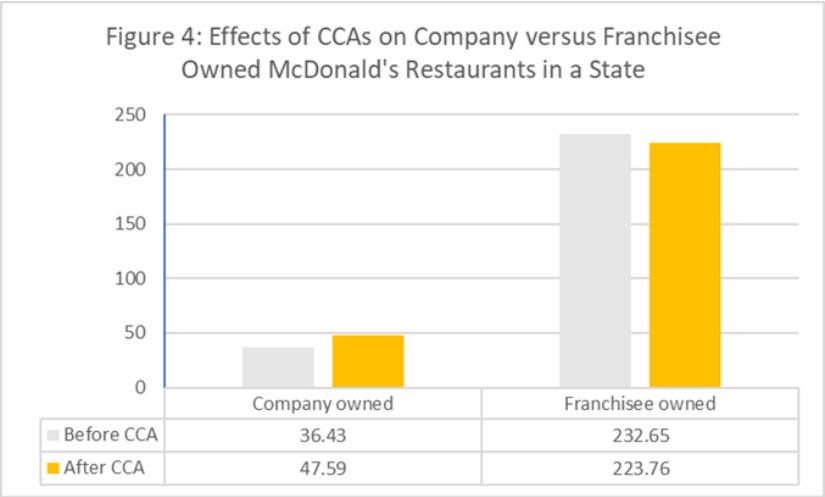
There was no impact on the decision to engage in any exercise. Across categories of BMI under 25 (BMI=24 being the threshold for "normal weight"), there was no evidence of an effect on intentions to lose weight, servings of fruits and vegetables, or exercise participation.

However, when we evaluate impacts on actual weight as measured by BMI, there is no evidence that CCA had an effect on average weight.




**What impact do CCAs have on food prices and fast-food restaurants?**

Prices for the McDonald's Quarter Pounder with Cheese, Pizza Hut Medium Cheese Pizza, and the KFC Thigh and Drumstick are unaffected by CCA. To account a potential overall change in food prices and ensure we are not misattributing changes in fast food prices to an overall increase or decrease in food prices, we also included the prices of a half-gallon of whole milk, a loaf of bread, and a 10-pound sack of potatoes, plus an overall grocery price index. Amongst the "regular" food items used for comparison, these prices by and large showed no change overall as well, although potatoes had a statistically significant price reduction of about 6.6 percent.




While there was no discernible impact on the weekly wage at a fast-food establishment and the overall number of fast-food restaurants in a state during this time-period, we find some evidence that cheeseburger bills led to a marginally significant (at the 10% level) increase in the number of employees.

As shown in Figure 4, we estimate that this increase in the average number of employees of approximately 2,908 employees is a 4.5 percent increase. We also found that CCAs led to a statistically significant increase in the ratio of company owned to franchise-owned McDonald's stores.

**That small side of tort reform**

We find that CCAs had some impacts on behaviors of both individuals and companies. Cheeseburger bills during the 2000s made individuals more likely to report they were trying to lose weight and led to an increase in consumption of fruits and vegetables for overweight individuals. These effects are modest and do not translate to changes in weight. On the company side, there are indications that

CCAs led to an increase in the number of fast-food employees. While there are certain limitations to our study, such as not being able to evaluate corresponding consumption of unhealthy foods, our findings suggest that this particular reform did not substantially incentivized "personal responsibility" among individuals and that it mostly benefited companies by reducing the expected cost of litigation. We don't see evidence that these cost reductions translated into cheaper prices for consumers.