Alternative Solutions for Government Intervention in Climate Crisis Markets: Price Gouging and the Pandemic Egg Market Case Study

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ALTERNATIVE SOLUTIONS FOR GOVERNMENT INTERVENTION IN CLIMATE CRISIS MARKETS:
PRICE GOUGING AND THE PANDEMIC EGG MARKET CASE STUDY

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The cost of a thing is the amount of what I will call life which is required to be exchanged for it, immediately or in the long run.¹

The incredible, edible egg.²

INTRODUCTION

Fires in California,³ hurricanes along the Gulf,⁴ a worldwide pandemic—it is evident that the year 2020 was defined by great crises, most of which were direct results of or exacerbated by climate change.⁵

¹ HENRY DAVID THOREAU, WALDEN 31 (T. Y. Crowell ed., 1899) (1854).
The effects of these crises on broader American society, in particular that of the COVID-19 pandemic, are just beginning to be realized. Nearly every aspect of American life has been impacted by the pandemic and by the corresponding responses of state and federal governments.

Rapid price increases are a common thread linking environmental catastrophes of various causes. Environmental catastrophes, like hurricanes, droughts, and pandemics, all can create scarcity, causing prices to rise. Depending on the magnitude, these price increases may be characterized as “price gouging.” Price gouging as a practice, and crisis price increases more broadly, can take many forms, have varying causes, and are not infrequently the subject of litigation and academic controversy.

The 2020 pandemic-induced price increases were unique in their sheer breadth: commodities from thermometers to toilet paper experienced nationwide price shocks, due to increased demand, challenges...
to supply chains, or both. The strain that the pandemic placed on the food supply was particularly unprecedented. Animal protein markets experienced never-before-seen challenges to their supply chains, while simultaneously dealing with skyrocketing demand. Of these commodities, the egg market experienced the most dramatic shift in price, with a consumer price index increase of 16.1% in April. The next highest increase was 4.3%, for the commodity category of meat, poultry, and fish.

These commodity prices eventually leveled out, and by July even egg prices had returned to relative stability. Even so, four state attorneys general brought actions against egg suppliers for price gouging through the spring and summer of 2020. In addition, calls for federal price gouging legislation have been renewed along bipartisan lines, despite overwhelming...
distaste among neoclassical economists for the kind of price ceilings these laws create.22

Traditional economic critiques, however, have largely ignored the broader ethical, political, and moral concerns of politicians and voters that keep restrictions on price gouging popular.23 These concerns ensure that anti-price gouging laws are an indefinite fixture in American law.24 Litigation under anti-price gouging laws, however, is not the only option that federal and state governments have to prevent or mitigate crisis price increases.25

This Note uses the egg market as a case study to present four policy alternatives that state and federal governments may consider in addressing crisis price increases, rather than resorting to anti-price gouging litigation. Part I narrows the scope of discussion and defines price gouging, a term that can be emotionally charged.26 Part II tells the story of the 2020 egg market, which is both an intrinsically valuable case study and a useful model to frame policy alternatives.27 Part III examines the theoretical underpinnings of price gouging to develop a dichotomous framework with which to evaluate policy alternatives.28 Part IV presents and analyzes the four policy alternatives using this framework.29 The goal of this Note is to describe and analyze alternatives to litigation that will better resolve the concerns that anti-price gouging laws attempt to address.

I. PRICE GOUGING DEFINITION AND SCOPE

"Price gouging" has the potential to be a loaded term, with an amorphous definition.30 In a sterile way, price gouging may be defined as

25 See infra Part IV.
26 See infra Part I.
27 See infra Part II.
28 See infra Part III.
29 See infra Part IV.
the practice of raising prices of necessary commodities during crisis scenarios in a way that is not commensurate with an increase in cost.  

While there is currently no federal anti-price gouging law, the federal government has used price controls before to prevent hoarding of consumer goods during certain crises. One such law is the Defense Production Act (“DPA”), passed in 1950 in response to the Korean War. At least one price gouging lawsuit during the pandemic arose out of the price control provisions in the DPA.

The Georgia lawsuit notwithstanding, most price gouging litigation takes place under state statutes. A majority of states have laws or regulations banning price gouging, though the scope of commodity categories covered varies. Massachusetts, for example, only bans price gouging in the context of petroleum products, and does so through regulation. A more typical statute bans price gouging for a wide array of products that are “necessary” during an emergency, including food, lumber, ice, and petroleum.

Legal standards also vary as to the amount at which a price increase becomes illegal. Many states impose a “hard quantitative threshold” that has to be reached in order to create seller liability. For example, during a declared emergency in California, sellers may not be able to raise prices higher than ten percent of the precrisis level. Other states impose a more flexible standard, banning price increases that are “unconscionable.”

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31 Id. at 347, 349.
36 For a comprehensive list of anti-price gouging statutes by state, see Morton, supra note 24.
37 940 MASS. CODE REGS. § 3.18 (2020).
38 See, e.g., FLA. STAT. § 501.160 (2020).
39 See Morton, supra note 24.
41 Id.; CAL. PENAL CODE § 396 (2020).
42 Buccafusco, Hemel & Talley, supra note 40, at 14; see, e.g., MICH. COMP. LAWS § 445.903 (2021).
Food commodities are typically reached by anti-price gouging laws either explicitly, by statutory prohibitions on price gouging as applied directly to food, or generally by statutory prohibitions on price gouging for broadly termed “necess[ities].”\(^{43}\) Litigation over price gouging in the pandemic egg market, at the time of writing, took place in Texas, Minnesota, New York, and West Virginia.\(^{44}\) Minnesota, New York, and Texas all apply flexible “unconscionable” standards, while West Virginia applies a cap of ten percent.\(^{45}\) Texas bans price gouging of “fuel, food, medicine, lodging, building materials, construction tools, or [other] necess[ities]” during an emergency.\(^{46}\) The Minnesota Executive Order applies to “essential consumer goods.”\(^{47}\) West Virginia lists many different types of goods, “food items” and “essential consumer goods” among them.\(^{48}\) New York applies anti-price gouging laws to “goods and services vital and necessary for health.”\(^{49}\)

It is easy to overstate these differences. Each prohibition has the same intended effect, which is the creation of a price control during crisis scenarios.\(^{50}\) The theoretical implications of these price controls will be discussed in Part III.\(^{51}\) Here, the definition and effect serve as background for addressing the specific context to which these definitions are applied—the United States egg market.

\(^{43}\) Compare, e.g., TEX. BUS. & COM. CODE ANN. § 17.46(b)(27) (2021) with N.Y. GEN. BUS. LAW § 396-r (2020).


\(^{45}\) Minn. Exec. Order No. 20-10 (Mar. 20, 2020); N.Y. GEN. BUS. LAW § 396-r (2020); TEX. BUS. & COM. CODE ANN. § 17.44 (2021) (noting the subchapter is to be applied to protect consumers from “unconscionable actions”); TEX. BUS. & COM. CODE ANN. § 17.46(b)(27) (2021) (banning price gouging using the still-flexible language of “excessive or exorbitant”); W. VA. CODE ANN. § 46A-6J-1 (2020).

\(^{46}\) TEX. BUS. & COM. CODE ANN. § 17.46(b)(27) (2021).


\(^{49}\) N.Y. GEN. BUS. LAW § 396-r (2020).


\(^{51}\) See infra Part III.
II. THE EGG MARKET CASE STUDY

A. Evaluating Price Gouging and the Price Control Mechanism Through the Egg Market

Policy alternatives to anti-price gouging laws will necessarily be context specific, even as the underlying mechanisms of supply and demand, the effect of price controls, and associated economic theories are broadly applicable. Supply chains are not the same across commodity categories or even necessarily across types of crises; neither is demand for a given commodity. The policy alternatives described in Part IV will be useful guides for government action in supply chains and consumer markets across commodity categories, even if tailoring is required to fit the nuances of the specific crisis, commodity market, or supply chain.

There are several reasons why the egg market is a particularly useful case study to examine pandemic price gouging. The first is the availability of information on both supply and demand for eggs in the United States, as well as the availability of historic price and pandemic price information. Additionally, multiple state and federal regulatory controls are in place for the egg market, which leaves open multilevel policy alternatives. These alternatives will be readily applicable to

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54 See infra Part IV.


56 Generally, the USDA and FDA share regulatory oversight over eggs. Gretchen Goetz, Who Inspects What? A Food Safety Scramble, FOOD SAFETY NEWS (Dec. 16, 2010), https://www.foodsafetynews.com/2010/12/who-inspects-what-a-food-safety-scramble/ [https://perma.cc/WP5T-3BBR]. However, states can exert their own regulatory oversight over the industry. Massachusetts, for example, passed animal protection legislation that may
other food commodity markets, which have similarly multifaceted regulatory structures.\textsuperscript{57}

It is also intrinsically valuable to evaluate the availability of food during a crisis, particularly in light of rising food insecurity in the United States during the pandemic.\textsuperscript{58} Eggs are a low-cost protein, both an important part of a healthy diet and a product that is generally accessible across income groups because of their typically low price.\textsuperscript{59} Eggs are also an important protein alternative to meat.\textsuperscript{60} In sum, eggs are just the type of necessity that many anti-price gouging laws seek to protect.\textsuperscript{61} In looking forward to future crises, questions surrounding the protection of the food supply and availability of products like eggs will be paramount to ensure health and safety for Americans in short- and long-term crises.\textsuperscript{62}

B. Demand Shock

Though there is some evidence that COVID-19 had reached the United States as early as December 2019,\textsuperscript{63} awareness of the situation...
and lockdown measures did not begin until March 2020.64 At this point, demand for essential food items started to rapidly increase.65 Almost all food commodity categories experienced price increases, with the egg market experiencing the highest change in the retail price index.66 Consumer panic-buying, coupled with decreased restaurant traffic, led to large increases in demand across food product categories.67

At its peak, the warehouse prices of Midwest large white eggs eclipsed recent historic levels, nearing 270 cents per dozen.68 The Urner Barry benchmark for a dozen conventional eggs in California increased from $1.55 to $3.66 by late March.69 Wholesale customers in New York reported paying four to five times their normal price per carton.70 By late April, however, as demand cooled, prices returned to approximately pre-crisis levels.71 In contrast, the liquid egg market, which consists of eggs liquified and used primarily by the restaurant industry, experienced an all-time low in prices.72 The price for liquid egg bottomed out at almost half of the previous historic low.73

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66 Johansson, supra note 16.
67 Id.
71 Ibarburu, Gates & Vold, supra note 55, at 3 (“As the demand moderated, prices went down at almost the same rate that they rose. During the last week of April, [shell eggs] reached a price level similar to the one before the crisis.”).
72 Id. at 4.
73 The historic low was 14.4 cents per pound in 2017, while prices reached 8 cents per pound in April 2020. Id.
The markets for both liquid egg and shell eggs reflect the larger trends in the United States during the first months of the COVID-19 pandemic.\textsuperscript{74} Decreased restaurant traffic led directly to a large decrease in the amount of liquid egg demanded by the restaurant industry.\textsuperscript{75} Meanwhile, the shutdown also meant more people would be cooking at home, leading to increased demand for shell eggs.\textsuperscript{76}

The egg market price increases largely seem driven by demand, but this is not immediately evident. Supply chain disruptions were not unheard of, particularly in other animal protein markets due to outbreaks of COVID-19 in processing plants.\textsuperscript{77} These were prevalent particularly in labor-intensive industries that relied on farm workers.\textsuperscript{78} Outbreaks of COVID-19 in processing plants disrupted supply while consumer demand was independently rising as well.\textsuperscript{79}

It does not seem, however, that the egg industry experienced a similar shock to its supply chains.\textsuperscript{80} In contrast to areas like pork production, egg processing usually occurs at the same production facility.\textsuperscript{81} Egg handling and processing is primarily automated, at least when compared to labor-intensive industries like pork production.\textsuperscript{82} Disruptions due to labor shortages were not as common. Additionally, cost of production for eggs, primarily a function of feed costs, were at or below normal levels through April 2020.\textsuperscript{83}

C. Attempts at Directly Addressing Egg Market Price Increases

Despite the fact that the period of high prices was relatively short-lived, two noteworthy attempts at market controls specific to the egg

\textsuperscript{74} Id.  
\textsuperscript{75} See id.  
\textsuperscript{76} Id.; Vanek Smith & Garcia, supra note 59.  
\textsuperscript{77} Casey, supra note 53.  
\textsuperscript{79} See Casey, supra note 53. Demand for all food commodities rose—particularly animal proteins. Johansson, supra note 16.  
\textsuperscript{81} Id.  
\textsuperscript{82} Compare id. (“Egg handling and processing is performed with automated equipment”) with Casey, supra note 53 (“On any given day, up to a thousand employees are in one of these [pork processing] facilities, processing meat for grocery and restaurant sales.”).  
\textsuperscript{83} Ibarburu, Gates & Vold, supra note 55, at 5.
market were put into place. These were a modification to the Egg Safety Rule and other rules promulgated by the Food & Drug Administration ("FDA"), and the price gouging litigation brought by state attorneys general.

1. FDA Modification to Egg Safety Rule

The dual issue of decreased demand in the market for liquid egg and skyrocketing demand for shell eggs theoretically presented a clear supply-side solution. Though the Department of Agriculture ("USDA") is responsible for grading eggs and most other regulatory measures for food commodity production, the FDA is responsible for the safety and labeling of shell eggs. The FDA exercises its authority through promulgating regulations, particularly 21 C.F.R. 118, also known as the Egg Safety Rule.

In order to address the scarcity issues caused by increased demand, the FDA promulgated a temporary change to the Egg Safety Rule in early April. This change allowed producers that sent eggs exclusively to processing facilities for “egg products,” e.g., liquid egg, to sell their eggs as table eggs. This new policy relaxed some of the safety conditions egg producers must meet before selling their eggs as table eggs. Additionally, in response to decreased restaurant traffic, the FDA promulgated a guidance allowing restaurants to resell their eggs without labels.

Demand for table eggs, however, had leveled off by late April, shortly after the rule took effect. This limited the time frame for the

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88 See Goetz, supra note 56.
91 Id.
92 Id.
93 TEMPORARY POLICY REGARDING PACKAGING AND LABELING, supra note 90.
efficacy of the policy.\textsuperscript{95} Due to the nature of egg facilities, most liquid egg producers could not quickly change production, and did not have the necessary infrastructure to sell their eggs as shell eggs.\textsuperscript{96} Similarly, egg producers that typically shipped large flats of eggs to restaurants had issues converting their equipment to the smaller flats necessary for in-store shipments.\textsuperscript{97} Some liquid egg producers also found that, even if they could get their eggs to market, many retailers would not accept them.\textsuperscript{98}

Though the rule change may have had some marginal effect on diverting eggs into the higher-demand channels, it was not an overwhelming success.\textsuperscript{99} This demonstrates that the egg supply chain was inelastic in the short term.

2. Price Gouging Litigation

Pursuant to their anti-price gouging state statutes or executive orders, four state attorneys general brought actions against egg producers: Texas, West Virginia, Minnesota, and New York.\textsuperscript{100} At the time of writing, only the Texas and the Minnesota actions have been fully adjudicated,\textsuperscript{101} and in opposite directions.\textsuperscript{102}

a. Texas

Recall that the Texas price gouging statute applies a flexible “exorbitant or excessive” standard to pricing of necessities broadly and to

\textsuperscript{95} See id.
\textsuperscript{96} Id.
\textsuperscript{97} See id.
\textsuperscript{98} Id.
\textsuperscript{99} See id.
\textsuperscript{101} As of March 10, 2021, the New York litigation has been in adjournment since September 2020. See People v. Hillandale Farms, Corp. et al., No. 451650/2020, BLOOMBERG (N.Y. Sup. Ct. Mar. 10, 2021). The West Virginia litigation is currently in the discovery phase. See Morrissey, supra note 21, at 33. West Virginia also filed an additional lawsuit against a different egg distributor in August 2020, which also appears to be ongoing. See id.; Brendan Tierney, Second Lawsuit Filed for Egg Price Gouging, WHSV (Aug. 11, 2020, 1:45 PM), https://www.whsv.com/2020/08/11/second-lawsuit-filed-for-egg-price-gouging/ [https://perma.cc/E4X2-72VX].
several specific categories of commodities, including food.\footnote{TEX. BUS. & COM. CODE ANN. § 17.46(b)(27).} The State of Texas brought the action against Cal-Maine Foods, the largest egg wholesaler in the United States, alleging price increases of up to 300\%.\footnote{Petition at 9–10, Texas v. Cal-Maine Foods, Inc., No. 202025427-7, BLOOMBERG (Tex. Dist. Ct. Apr. 23, 2021).} Cal-Maine bases its pricing off of the spot market.\footnote{Id.} According to Texas, this did not constitute forces outside of Cal-Maine’s control, and Cal-Maine charged high prices to take advantage of the market.\footnote{Id. at 11–12.} Because of this, Cal-Maine was “on track to make windfall profits.”\footnote{Id.}

In response, Cal-Maine raised a number of defenses.\footnote{See Defendants’ Motion to Dismiss at 3, Texas v. Cal-Maine Foods, Inc., No. 202025427-7, BLOOMBERG (Tex. Dist. Ct. June 26, 2021).} Their motion to dismiss was granted, and the case was dismissed with prejudice.\footnote{Order at 1, Texas v. Cal-Maine Foods, Inc., No. 202025427-7, BLOOMBERG (Tex. Dist. Ct. Aug. 13, 2021).} The trial court, however, gave no reasoning in its under-100-word order.\footnote{Id.} The state filed an appeal, but the reasons for dismissal are as of yet unclear.\footnote{Notice of Appeal, Texas v. Cal-Maine Foods, Inc., No. 202025427-7, BLOOMBERG (Tex. Dist. Ct. Sept. 11, 2021).}

b. Minnesota

In contrast, the Minnesota lawsuit was not against a large national company, but a relatively small regional producer.\footnote{Forsman Farms, the defendant, only acquired around $24 million in revenue in 2019. Forsman Farms, Inc., KONAEQUITY, https://www.konaequity.com/company/forsman-farms-inc-4019014863# [https://perma.cc/ZM5K-PLCD]; see FORSMAN FARMS, http://www.forsmanfarms.com/ [https://perma.cc/4GQE-R9L3].} The Minnesota attorney general brought the action pursuant to Emergency Executive Order 20-10, which prohibits the sale of “essential consumer goods” for a price that is “unconscionably excessive.”\footnote{Minn. Exec. Order No. 20-10 (Mar. 20, 2020).} Forsman Farms, like Cal-Maine, tied their prices to a third-party market index.\footnote{Press Release, Off. Minn. Att’y Gen., Attorney General Ellison Reaches Price-Gouging Settlement on Egg Prices (Apr. 28, 2020) [hereinafter Off. Minn. Att’y Gen.], https://www.ag.state.mn.us/Office/Communications/2020/04/28_ForsmanFarms.asp [https://perma.cc/2KY7-SBX5].} This led to a 150% increase in egg prices.\footnote{Id.} The case settled, with interesting provisions.\footnote{Id.}
Despite the executive order creating an “unconscionable” standard for price gouging, the injunctive relief provides for a 20% pre-pandemic cap in egg price increases for Forsman Farms, subject to a stayed civil penalty of $75,000.117 This is the kind of true price ceiling price gouging statutes seek to adopt, and is similar to percentage caps in other statutes.118

III. PRICE GOUGING THEORY AND A FRAMEWORK FOR WEIGHING ALTERNATIVES

Why did the events of 2020, in the egg market as well as in other hard-hit commodity markets, spur so much action and call for anti-price gouging measures? Many economists have long critiqued anti-price gouging laws as “stand[ing] in the way of . . . competitive markets.”119 These critiques, however, have been “about as popular as criticizing Jesus for being a lousy carpenter.”120 The many jurisdictions that have passed price gouging legislation,121 the multiple bipartisan proposals for federal anti-price gouging laws,122 and continued enforcement actions by state attorneys general123 demonstrate that neoclassical economists are losing the price gouging debate.

119 Hill, supra note 23.
121 Thirty-six states, plus Guam, Puerto Rico, the Virgin Islands, and the District of Columbia all have some form of price gouging prohibition in place, either through legislation or regulation. Morton, supra note 24. Minnesota and Maryland do not have anti-price gouging statutes but have prohibited the practice during the pandemic by executive order. Buccafusco, Hemel & Talley, supra note 40, at 13; Minn. Exec. Order No. 20-10 (Mar. 20, 2020), at 1; Md. Exec. Order No. 20-03-23-03 (Mar. 23, 2020), at 1.
It is standard practice for price gouging papers to include sections discussing the theoretical underpinnings of price gouging, and this Section, in part, does the same. However, the primary goal of this Section is to develop a dichotomous framework with which to weigh the distributorial effects of alternative policies. As Professor Snyder notes, alternative policy proposals must be weighed against each other in the price gouging context. This framework will assist in a more robust analysis of policy alternatives than presentation alone. The framework analyzes price gouging alternatives through efficiency and equity, metrics that capture two distinct critiques of anti-price gouging laws.

A. Neoclassical Microeconomic Theory and the Efficiency Metric

Many economists’ contempt for anti-price gouging laws is rooted in neoclassical microeconomic theory. In a disaster scenario, demand for certain goods increases, typically including “essentials,” like food necessities, and “non-essentials,” like generators and gasoline. When demand increases and supply stays the same, price increases. Disasters may also disrupt supply chains, decreasing supply and also causing prices to increase.

Neoclassical economics holds that these kinds of price increases lead to efficient allocation of resources: those that are willing to pay the higher price will be the ones most in need of the commodity, while those without high need will not want to pay the higher price. The high price also

127 Buccafusco, Hemel & Talley, supra note 40, at 5.
128 Snyder, supra note 125, at 275.
129 See id. at 291 n.12.
130 This is a basic feature of supply and demand. For a graphical visualization of the demand curve, see Bae, supra note 124, at 86 fig. 1.1; ENCYCLOPEDIA BRITANNICA, supra note 52.
131 See Bae, supra note 124, at 79–80; Silver, supra note 14.
132 See Zwolinski, supra note 30, at 352 (“[W]illingness to pay the higher price is a reflection of this increased need.”).
induces producers to produce more of the product in demand, or to move more of their product to the market experiencing the price increase.\textsuperscript{133} A price control, like one created by anti-price gouging laws, leads to inefficient allocation of resources.\textsuperscript{134} Price controls lead to long lines and further exhaustion of already scarce supplies, leading to shortages.\textsuperscript{135} Sellers, faced with the cost of selling at a lower price than the market can hold, may turn to or create a black market for the product, in order to charge the efficient market price.\textsuperscript{136} Anti-price gouging laws are thus disruptive of the price mechanism and antithetical to the market forces of supply and demand, according to the neoclassical economic critique.\textsuperscript{137}

To capture this critique, the first metric in the framework is \textit{efficiency}. Alternatives to price gouging may be examined as to whether and to what extent they leave basic market forces in place to generate efficient outcomes.\textsuperscript{138} Policies that are more efficient than anti-price gouging laws will allow the price mechanism to function with relatively less impediment and limit the effects to underlying supply and demand.\textsuperscript{139} The benefits of a relatively efficient policy are near-term supply increases, allocation of resources to those with greater demand for those resources, and the prevention of black market formation.\textsuperscript{140}

\section*{B. Fairness Concerns and the Equity Metric}

For many people, there is still a gut reaction against price gouging.\textsuperscript{141} A good deal of behavioral economics literature has centered around the perceptions of fairness that underlie this “gut feeling” which,\textsuperscript{142} as a

\begin{footnotesize}
\begin{enumerate}
\item See Munger, supra note 126 (“The only way to ensure low prices, and large supply, to buyers is to allow sellers to charge high prices, the highest they can get”) (emphasis in original). For more information on the price mechanism, see generally F. A. Hayek, \textit{The Use of Knowledge in Society}, 35-4 \textit{THE AMERICAN ECON. REV.} 519 (1945).
\item See Montgomery, Baron & Weisskopf, supra note 50, at 379.
\item See id. at 380, 387.
\item See Michael Brewer, \textit{Planning Disaster: Price Gouging Statutes and the Shortages They Create}, 72 \textit{BROOK. L. REV.} 1101, 1128 (2007) (“The most obvious way market actors might avoid price controls is to create black markets in the goods they need.”).
\item See id. at 1126.
\item See id. (“[A] market with a floating price indicative of true supply and demand should result in increased goods delivered from outside the region, as well as increased goods as a consequence of speculative storage by local suppliers.”).
\item Id.
\item Id.; Zwolinski, supra note 30, at 352.
\item Price gouging has a long history as a topic of study for behavioral economists. See, \textit{e.g.},
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\end{footnotesize}
popular sentiment, generates anti-price gouging laws and litigation.\footnote{143}

To state the matter simply, consumers do not perceive crisis price increases as “fair,” and this perception leads to anti-gouging legislation to address the fairness concerns.\footnote{144} The recent work by Buccafusco, Hemel, and Talley suggests that these fairness concerns are context-specific and dependent on relative price increases.\footnote{145}

There are, of course, several different positivist arguments for anti-price gouging laws,\footnote{146} but the messaging from attorneys general around their price gouging litigation implies that distributional concerns are at the heart of their argument.\footnote{147} Because of this messaging, and the general salience of distributional concerns in 2020, the focus here will be on the distributional issues.

Disaster price increases, in the short term, can put certain products out of reach of poorer communities.\footnote{149} Until a new post-disaster equilibrium is reached, the high prices remain, which may be prohibitive for individuals without significant buying power.\footnote{150} The neoclassical approach assumes buying power is an adequate signal for need in a disaster scenario; this may not be true for low- or fixed-income individuals.\footnote{151}

\footnote{143}See Buccafusco, Hemel & Talley, \textit{supra} note 40, at 10 (“[A] legislature might enact a price gouging law simply because a critical fraction of the population shares a distaste for the incidence of price gouging.”).

\footnote{144}See \textit{id.} at 3 (“Much of the concern over price gouging appears to be rooted in a perception that certain types of price hikes during an emergency are simply ‘unfair.’”).

\footnote{145}See \textit{id.} at 7–8; Snyder, \textit{supra} note 125, at 279.

\footnote{146}See, e.g., Off. N.Y. Att’y Gen., \textit{supra} note 70 (“Hillandale made an estimated $4 million from unlawfully increasing the price of these eggs, which were often sold in grocery stores located in low-income communities.”); Off. Minn. Att’y Gen., \textit{supra} note 114 (“It’s harder than ever for Minnesotans to afford their lives during this pandemic.”).


\footnote{148}See \textit{id.}

\footnote{149}See John Bronsteen, Christopher Buccafusco & Jonathan S. Masur, \textit{Well-Being Analysis vs. Cost-Benefit Analysis}, 62 DUKE L. J. 1603, 1652–53 (2013); Buccafusco, Hemel & Talley, \textit{supra} note 40, at 7 (“[P]eople who are poor and/or facing liquidity constraints may simply be unable to pay their true hedonic valuations.”).
In this way, the short-term rationing scheme of price increases favors the wealthy over the poor.\textsuperscript{152}

As Buccafusco, Hemel, and Talley note, however, the distributional argument in favor of price gouging laws is “largely a negative argument against markets, rather than a positive argument for any particular alternatives.”\textsuperscript{153} In addition, price controls have their own distributional shortcomings.\textsuperscript{154} Price controls, of the kind that anti-gouging prohibitions create, lead to allocation based on a first come, first served basis, which is, at best, an imperfect solution.\textsuperscript{155} Even when framed as equitable, price controls and anti-price gouging laws do not ensure equal distribution but only equal opportunity to access the commodity.\textsuperscript{156} The long lines predicted by the neoclassical model create their own barrier to equitable distribution, which may be particularly pronounced for older or disabled consumers who cannot wait in long lines, or low-wage workers who cannot take time to do so.\textsuperscript{157}

To account for the distributional concerns present in both price-controlled markets and free markets, the second metric in the framework is equity. Do the policy alternatives address distribution in low-income communities? In this context, a product being cost-prohibitive may not necessarily be completely “unaffordable” in the common understanding of the word, but it would suffice to be prohibitive if it contributes to changes in buying decisions of low-income individuals.\textsuperscript{158} By addressing distributional concerns, a more equitable policy would also likely correlate with increased popularity among the public.\textsuperscript{159}

\textsuperscript{152} Snyder, \textit{supra} note 125, at 282.

\textsuperscript{153} Buccafusco, Hemel & Talley, \textit{supra} note 40, at 8.

\textsuperscript{154} See Snyder, \textit{supra} note 125, at 284.

\textsuperscript{155} Id.

\textsuperscript{156} Zwolinski, \textit{supra} note 141, at 298.

\textsuperscript{157} See Snyder, \textit{supra} note 125, at 284; Buccafusco, Hemel & Talley, \textit{supra} note 40, at 8.

\textsuperscript{158} See Elaine Waxman, \textit{The Costs and Impacts of Rising Food Prices Among Low-Income Households}, 8 J. Food L. & Pol'y 213, 214 (“An examination of families’ desperate struggle to afford basic needs and to weather shifts in their purchasing power suggests that both the public and policymakers have hastily overlooked the impact food prices have on low-income families.”); \textit{see also id.} at 215 (“As families struggle to make ends meet, there may be a significant incentive to substitute cheaper, energy-dense calories in lieu of more expensive, nutrient-rich foods, which represents another ‘hidden’ cost of food acquisition for low-income households.”).

\textsuperscript{159} Press releases from popularly elected officials highlighting the distributional effects of price gouging, and their attempts to resolve them, seem to suggest this would be the case. \textit{See, e.g.}, Off. N.Y. Att’y Gen., \textit{supra} note 70.
IV. POLICY ALTERNATIVES TO ANTI-PRICE GOUGING LAWS

Even though “[a]ll our distributive options are imperfect,” weighing distributive policies against each other will assist federal and state policy makers in deciding how to address crisis price increases in the most effective ways. Using the framework developed above, four policy options are analyzed here with the goal of correcting efficiency and distributive shortcomings of anti-price gouging laws. These are: (A) a policy not to litigate; (B) supply-side regulatory changes; (C) quantity limits (binding rationing); and (D) food subsidies (non-binding rationing). The analyses below are by no means exhaustive reviews of the implications of these policies, but serve merely to introduce them as alternatives to price gouging litigation and briefly describe how they may advance efficiency and equity goals using the framework developed above.

A. Policy Not to Litigate

A policy not to litigate price gouging claims leaves the price mechanism wholly in place. This is the preferred policy of neoclassical economists arguing for efficient allocation. While the basic implications of this policy are discussed above, it is important to highlight the effects in light of the efficiency-equity framework.

Whether consciously or not, most states chose this policy by not litigating claims against egg producers. California, for example, brought price gouging claims against producers of masks, but not egg producers.

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161 This is a non-exhaustive list. Notable omissions are auctioning, Buccafusco, Hemel & Talley, *supra* note 40, at 20, and income subsidies. Auctioning is seller-specific, not generally a government policy. *See id.* Income subsidies are an interesting policy alternative, but as this Note focuses on one commodity market, income subsidies, which are generally not specific to single commodity markets, have been omitted. *See Brewer, supra* note 136, at 1132–33 (describing food voucher programs as a potential intervention during crisis price increases).
162 *Supra* Part III.
163 *See Brewer, supra* note 136, at 1102.
164 *See id.; Montgomery, Baron & Weisskopf, supra* note 50, at 376.
165 *Supra* Section III.A.
166 The four states described in Part II are the only states to bring egg market price gouging litigation. *See supra* Section II.C.2.
This is not for lack of evidence—a private price gouging action was brought for high egg prices in California during the pandemic.\(^{168}\)

Allowing egg prices to rise without any intervention likely reflected the demand surges of early Spring.\(^{169}\) True demand for food commodities, including eggs, rose with the increased need to cook at home.\(^{170}\) Further, the producers in the egg market litigation did not necessarily make the choice to increase prices, as contract prices were all tied to a third-party market index.\(^{171}\) While price gouging can be a conscious choice to inflate prices, and is often described as such, that does not appear to be what happened in the egg market.\(^{172}\) Even if the price index is a “feedback loop” between large producers and the market,\(^{173}\) smaller producers likely do not exert control over this process.\(^{174}\) Applying the concept more broadly, it is irrelevant if price increases are deliberate, as price gouging liability is generated whether or not it was a conscious choice.\(^{175}\) If price did truly reflect demand in the pandemic egg market, then the price increases

\(^{168}\) See Complaint at 2, Fraser et al. v. Cal-Maine, No. 3:20-cv-02733, BLOOMBERG (N.D. Cal. Apr. 20, 2020). California, along with some other states, creates private rights of action to enforce price gouging claims. See id. at 8; CAL. PENAL CODE § 396 (2020); see, e.g., N.C. GEN. STAT. § 75-16 (2020); N.C. GEN. STAT. § 75-38 (2020).

\(^{169}\) See Ibarburu, Gates & Vold, supra note 55, at 3.

\(^{170}\) Id.


\(^{172}\) See Ibarburu, Gates & Vold, supra note 55, at 3.


\(^{174}\) The New York petition states that the “feedback loop” works by egg retailers feeding their egg price assessments to Urner Barry, which repeats that information back in the form of the price index, which Cal-Maine uses to set prices. Id. Without commenting on the merits of that claim, note that in 2018, Forsman Farms generated $25.54 million in revenue, compared with Cal-Maine, which generated $1.5 billion in the same year. Whether or not Cal-Maine engages in the feedback type of behavior, it is unlikely that smaller producers, like Forsman Farms, have the same power. See Forsman Farms, Inc. Company Profile, DUNN & BRADSTREET, https://www.dnb.com/business-directory/company-profiles.forsman_farms_inc.7e0eb739af89c39ebce90597ab4e6554.html [https://perma.cc/84NR-2B27] (last visited Nov. 3, 2021); Cal-Maine Foods, Inc. Company Profile, DUNN & BRADSTREET, https://www.dnb.com/business-directory/company-profiles.cal-maine_foods_inc.b0d785414805f10267c3f057a477c7.html [https://perma.cc/4CX2-HR55] (last visited Nov. 3, 2021).

\(^{175}\) See, e.g., Minn. Exec. Order No. 20-10; CAL. PENAL CODE § 396 (2020).
should have led to efficient allocation: those who truly demanded eggs would buy them at the higher price; black markets would not arise.\textsuperscript{176}

However, with rising unemployment and food insecurity during 2020,\textsuperscript{177} consumer demand may not have fully captured those for whom the ability to pay constrained their purchasing choices.\textsuperscript{178} There is also evidence of hoarding behavior by consumers, also not reflective of consumers’ true demand.\textsuperscript{179} Finally, the egg supply was inelastic in the short term. Egg producers could not immediately make more eggs to meet demand, so the price-induced, near-term supply increases were generally not seen.\textsuperscript{180} These factors demonstrate that the pricing mechanism, acting by itself, may not meet distributive or equitable goals.

B. Supply-Side Regulatory Changes

The supply-side changes the FDA pursued in April 2020, may be the intervention that best balances efficiency and equity.\textsuperscript{181} Changes to the egg safety rule, as well as permitting restaurants to sell surplus eggs, were policies designed to meet the increased demand in the shell egg market.\textsuperscript{182} One could also imagine similar changes to state regulatory structures, though none appeared to take effect in 2020.\textsuperscript{183} No price controls are involved in these policies, and the price mechanism is thus able to move and be responsive to market forces.\textsuperscript{184} This is characteristic of a highly efficient policy.\textsuperscript{185}

Simultaneously, supply-side changes were government intervention designed to decrease egg prices and meet the demand for eggs across

\textsuperscript{176} Supra Section IV.A.

\textsuperscript{177} See supra text accompanying note 58; Gene Falk et al., Unemployment Rates During the COVID-19 Pandemic: In Brief, CONG. RSRCH. SERV. (Aug. 20, 2021), https://fas.org/sgp/crs/misc/R46554.pdf [https://perma.cc/54ZK-5ALV]; Balch, supra note 58.

\textsuperscript{178} See Bronsteen, Buccafusco & Masur, supra note 151, at 1652–53.

\textsuperscript{179} See Ronald Stiff, Keith Johnson & Khairy Ahmed Tourk, Scarcity and Hoarding: Economic and Social Explanations and Market Implications, 2 NA—ADVANCES IN CONSUMER RSCH. 203, 203 (1975).


\textsuperscript{181} See TEMPORARY POLICY REGARDING PACKAGING AND LABELING, supra note 90.

\textsuperscript{182} For example, if the Massachusetts law had gone into effect in 2020, it could have been relaxed to permit more supply. See Chesto, supra note 56.

\textsuperscript{183} See generally Zwolinski, supra note 30.

\textsuperscript{184} See id.
income groups.\textsuperscript{186} This would have the benefit of addressing distribu-
tional concerns by lowering prices in the near-term and increasing the 
availability of eggs.\textsuperscript{187} This is beneficial for governments that want to be 
perceived as addressing constituent concerns to high prices.\textsuperscript{188}

The change to the egg safety rule, however, was perceived as a 
failure.\textsuperscript{189} Producers could not easily pivot production; when they did, 
their eggs were sometimes not accepted.\textsuperscript{190} Relaxing safety measures has 
its own costs, and retailers may not accept the products for either real or 
perceived quality concerns.\textsuperscript{191} The egg supply chain was also relatively 
resilient, especially compared with labor-intensive industries, and as the 
initial shock of the pandemic wore off, panic buying, as well as overall 
demand, fell to normal levels.\textsuperscript{192} The short-term inelasticity of the egg 
market meant that supply was not increased in time, prices remained 
high for the intervening period, and the equity concerns were not ad-
dressed until the market adjusted.\textsuperscript{193}

C. Quantity Limits and Binding Rationing

Quantity limits place a constraining limit on consumer demand.\textsuperscript{194} 
Rather than buy two, five, or ten cartons of eggs, consumers are con-
strained by an external force setting a limit on consumption, say, to one 
carton of eggs.\textsuperscript{195} This may also be referred to as “binding rationing.”\textsuperscript{196} 
Many governments throughout history have utilized quantity limits during 
 crises, particularly during times of war.\textsuperscript{197}

\textsuperscript{186} See TEMPORARY POLICY REGARDING PACKAGING AND LABELING, supra note 90; U.S. 
FOOD & DRUG ADMIN., supra note 181.

\textsuperscript{187} When supply increases to meet demand, it has a stabilizing effect on price. See EN-
CYCLOPAEDIA BRITANNICA, supra note 52.

\textsuperscript{188} See, e.g., Off. Att’y Gen. Cal., supra note 167; Off. N.Y. Att’y Gen., supra note 70.

\textsuperscript{189} See Ibarburu, Gates & Vold, supra note 55, at 2–3.

\textsuperscript{190} Id.

\textsuperscript{191} See id.

\textsuperscript{192} See id. at 3; Johansson, supra note 16.

\textsuperscript{193} See Ibarburu, Gates & Vold, supra note 55, at 5.

\textsuperscript{194} Buccafusco, Hemel & Talley, supra note 40, at 8.

\textsuperscript{195} See id.

\textsuperscript{196} X. M. Gao, Eric J. Wailes & Gail L. Cramer, Partial Rationing and Chinese Urban House-
hold Food Demand Analysis, 22 J. COMPAR. ECON. 43, 46–47 (1996) (“When rationing is 
strictly binding, consumers’ compensated income increases as a result of rationing, and 
the consumption of nonrationed goods exceeds the optimal level.”) This is contradistinguished 
from non-binding rationing. See discussion infra Section IV.D.

\textsuperscript{197} See, e.g., Thomas E. Fairchild, The Legal Mechanism of Rationing, 28 MARQ. L. REV.
Private retailers began placing quantity limits without government direction early on in the pandemic. As early as the first weeks of March 2020, stores began placing limits on purchases of sanitation products, and later began placing limits on food items as well. Later in the year, as cases of COVID-19 began to rise again in November, some stores returned to this policy to discourage hoarding behavior of essential goods. Walmart even placed quantity limits on online purchases of eggs.

There were no state or federal quantity limits on food items, however, government intervention commonly places quantity limits on certain items, like prescription drugs. Additionally, the federal government has created quantity limits on food purchases in times of crisis, notably during World War II. What if federal and state governments had acted to place quantity limits on consumer goods instead of private retailers?

From an efficiency standpoint, quantity limits typically lead to a general loss of welfare. When a consumer has the demand for two cartons of eggs, but can only purchase one by an external constraint, that...
consumer is worse off. The constraining of demand also creates opportunities for black markets to meet consumers’ actual demand. Binding rationing thus leads to inefficient outcomes.

Binding rationing has the goal of ensuring that there is enough supply for all consumers, in theory leading to equitable distribution. However, quantity limits alone are not targeted to low-income individuals, and result in the same distribution issues as price controls, primarily distributing goods on a first come first served basis. Black markets also interfere with equitable distribution goals; if sophisticated consumers can access the black market, no overall supply is saved. Quantity limits, then, are not generally efficient or equitable.

D. Food Subsidies and Non-Binding Rationing

Instead of placing maximum limits on consumer choice, governments may instead attempt to meet distributional goals by providing minimum supplies to targeted consumer groups. This may take the form of food subsidies, where governments purchase food commodities themselves and provide them to consumers at a lower cost. This may be done with or without quantity limits; here the focus is on the subsidies themselves. Consumers would be free to buy as many eggs as they desire on the free market, but the government distributional program acts as a subsidized market, primarily for the benefit of low-income consumers.

205 See id.
206 Brewer, supra note 136, at 1132.
207 See id.
209 See Brewer, supra note 136, at 1132 (“The higher prices on the black market will cause the seller to divert goods away from the legitimate market.”). Note also that low-income individuals are the least likely to compete in the black market. Id. at 1130.
211 See, e.g., Fleissig & Whitney, supra note 197, at 234–36 (with quantity limits); GOV'T MAHARASHTRA, supra note 210 (without quantity limits).
when free market prices rise.\textsuperscript{212} For example, while the free market price of eggs continues to rise, low-income consumers would still be able to purchase them at a lower, perhaps precrisis cost.\textsuperscript{213} This may also be termed “non-binding” rationing.\textsuperscript{214}

The government operates such a program at an obvious economic loss.\textsuperscript{215} However, the United States already operates a kind of decentralized food distribution program in The Emergency Food Assistance Program (“TEFAP”).\textsuperscript{216} In this program, the USDA purchases food commodities on the free market and distributes them to state agencies, which in turn distribute the commodities to food banks.\textsuperscript{217} States have their own eligibility requirements for TEFAP, but can create additional flexibilities to apply the program more broadly, though they do so at their discretion.\textsuperscript{218} Both of the early coronavirus relief packages provided additional funding for TEFAP.\textsuperscript{219} The most recent relief bill also allocated additional funding to the USDA for the purchase and distribution of food to “individuals in need.”\textsuperscript{220}

TEFAP is not a rationing program, but it is not difficult to imagine it as a part of a more robust non-binding rationing scheme.\textsuperscript{221} A more formalized organizational structure, as opposed to the current decentralized structure with varying requirements, may be beneficial for low-income communities, particularly in times of crisis when food prices increase.\textsuperscript{222} A systematic review of food bank literature in 2016 found that food banks tend to provide inadequate amounts of food.\textsuperscript{223} Limited government funding in previous years has also created strain on the food banking

\textsuperscript{212} See Gao, Wailes & Cramer, supra note 196, at 55 (describing a like system operating in China during the 1980s and early 1990s).
\textsuperscript{213} See id.
\textsuperscript{214} See id. at 46.
\textsuperscript{215} See id.
\textsuperscript{217} Id.
\textsuperscript{219} Id. at 6-7, 14–15. 
\textsuperscript{222} See generally BILLINGS, supra note 216.
\textsuperscript{223} See Waxman, supra note 158, at 220.
system, which is further strained by food price increases. If the federal government took a more active role in the food distribution system by providing commodities like eggs, this might help meet the needs of low-income communities that are reliant on food banks, both in emergencies and regular market conditions.

This kind of non-binding rationing scheme splits the commodity market in two: an open market, responsive to price, and the government subsidized market. This has the potential to lead to inefficient outcomes, particularly in the long term, as governmental bureaucracy is not well-equipped to respond to consumer preferences. However, the bifurcated market ensures that higher income individuals have access to the free market to exert their choice, while lower income individuals have continued access to subsidized essentials. Of the four policy alternatives described, this scheme is the most directly targeted to low-income communities, and could help governments meet equitable goals, particularly during crisis price increases of the sort observed during the pandemic.

CONCLUSION

In February of 2021, a catastrophic and atypical snowstorm hit Texas. It did not take long to set up hotlines to report price gouging, and soon the State was receiving reports of exorbitant prices on food and housing. By March, the Texas Attorney General filed at least one price gouging lawsuit against a San Antonio hotel. In a year that has seen a major environmental crisis in its first two months, and where worldwide

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224 Waxman, supra note 158, at 220.
225 See id.
226 See Gao, Wailes & Cramer, supra note 196, at 55.
227 See id. at 46.
228 See id.
229 See Waxman, supra note 158, at 220.
232 Texas AG sues Bexar County hotel on allegations of price gouging during winter storm, KENS 5 (Mar. 18, 2021, 4:54 PM), https://www.kens5.com/article/weather/texas-ag-sues-san-antonio-hotel-price-gouging-during-winter-storm/273-c56513b0-f7c3-4e75-83ba-c21f8a3e63f5 [https://perma.cc/WT2N-2YL7].
hunger and food insecurity are predicted to get worse, questions of accessibility to essential goods will continue to be paramount.

Lessons learned from the 2020 egg market may help governments answer these questions. The United States egg market experienced a large crisis price increase in 2020. Federal and state governments took steps to address this price increase, but the results of the action were either not successful, inconclusive, or questionable in the first place.

Allowing prices to increase unfettered may give rise to equity and distributional concerns, but price controls themselves have shortcomings in both efficiency and equity. Policies not to litigate price gouging claims, supply-side changes, quantity limits, and food subsidies all have benefits and drawbacks, but these may balance the dual, sometimes competing, goals of efficiency and equity better than price gouging litigation.

Looking forward to future crises, balancing efficiency and equity will be important to ensure that the policies used to combat crisis price increases are effective at achieving their goals and managing essential supplies during environmental crises.

234 Ibarburu, Gates & Vold, supra note 55, at 3.
235 See supra Section II.C.
236 See supra Section IV.A.
237 See supra Section III.B.
238 See supra Part IV.
239 See supra Part III.