DEFINING “PRICE GOUGING” BY EXAMINING THE (ONLY) SENSIBLE REASON TO PROHIBIT IT AND HOW THE PROHIBITION SHOULD WORK

by

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ABSTRACT

During times of disaster many use the term “price gouging” as an epithet to describe and condemn seemingly large price increases for basic necessities. Many states have latched on to this epithet and enacted laws prohibiting price gouging and effectively capping post-disaster prices at pre-disaster levels. And following disasters Congress often threatens similar legislation. Economists generally condemn these prohibitions on the grounds that free markets will produce socially and economically optimal results in post-disaster scenarios, or, at least better results than price caps. All this debate and legislative action has taken place while price gouging remains a largely indefinite concept and while economists and lawmakers ignore each other’s legitimate concerns.

This paper identifies the sole legitimate reason for lawmakers to prohibit price gouging and recommends ways that laws can be structured to further that legitimate objective while recognizing the importance of economists’ legitimate assertions that free markets will produce better results than markets limited by price caps. This paper concludes with a definition of price gouging derived from reconciling the legitimate concerns of economists and lawmakers.

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I. INTRODUCTION.

At least thirty-three states consider post-disaster price gouging (“gouging”) to be a problem. They have passed laws prohibiting it. And Congress often considers doing so. The economics-minded condemn such prohibitions because the price increases that might be called “gouging” are what make goods and services available to consumers after a disaster. In a narrow set of circumstances prohibiting price gouging can benefit consumers. But many laws that prohibit price gouging (“price gouging laws”) are not limited to those circumstances and are supported for the wrong reasons.

After many major disasters, claims of “price gouging” abound. The media frequently reports on suppliers that “gouge” consumers by raising prices for necessities. Legislators often react by passing laws that prohibit price gouging. Professor Rapp, who wrote one of the first papers that seriously considered this topic, traced the origins of many states’ price gouging laws to specific disasters: Florida passed its law in 1992 after Hurricane Andrew; California passed its law in 1994 after the Northridge Earthquake; and Virginia passed its price gouging law in 2004 in response to Hurricane Isabel.

Claims of price gouging are associated with disasters because under normal circumstances markets are competitive, and suppliers cannot gouge. In a normal market, if a supplier charges exorbitant prices he loses business to those suppliers with lower

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2 Appendix A: Table of Citations to States’ Price Gouging Laws.
4 See, e.g., Michael Brewer, NOTE: Planning Disaster: Price Gouging Statutes and the Shortages They Create, 72 BROOKLYN L. REV. 1101.
5 E.g., R. A. Dyer, State Penalizes Businesses for Price Gouging, FORT-WORTH STAR TELEGRAM, Sept. 22, 2007, at B (reporting on Texas hotel owners that gouged Hurricane Rita evacuees and how they were being prosecuted under the state’s price gouging law); S. J. Diamond, Con Men Eager to Compound Disaster, L.A. TIMES, Oct. 27, 1989, Business Section (discussing instances of price gouging after an earthquake in California); Kinsey Wilson, Invasion of Kuwait Gas-Price Surge Alarms Officials Oil Industry Accused of Gouging Consumers, NEWSDAY (USA), Aug. 7, 1990, News (discussing public accusations of price gouging allegedly committed by oil companies after the U.S. invasion of Kuwait during the first Gulf War).
prices. After disasters, however, many suppliers find themselves with more bargaining power because many of their competitors are disabled and many consumers have pressing needs. Some suppliers use this newfound power to extract high prices from consumers.

The concept of price gouging is often inappropriately used to describe situations where suppliers raise prices because the market is uncompetitive for non-disaster-related reasons. Price gouging is not the correct concept to explain or remedy non-disaster-related price inflation. Antitrust law can do that. Rather, the term price gouging should only be used to describe price increases that follow disasters in a post-disaster market. The “post-disaster market” is used here to describe the geographic region where a disaster has made price gouging possible.

A. THE PROBLEMS WITH PRICE CONTROLS.

History shows that price controls hurt consumers more than they help. From 1973 to 1981 Congress tried to control the price of crude oil in the United States. In response to the Arab Oil Embargo and the formation of the Organization of Arab Petroleum Exporting Countries (“OAPEC”), Congress enacted a complex regulatory scheme that allocated the nation’s oil supply and controlled oil prices. As a result of this regulation,

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7 See, e.g., Erin McCormick, Gallon of Water Goes for $50 and L.A. Gougers Demand $10 for a Loaf of Bread, SAN FRANCISCO EXAMINER, Jan. 20, 1994, News (reporting that in the days following a major earthquake only 10% of the stores were able to remain open).
8 E.g., supra note 5. See also People v. Two Wheel Corp., 525 N.E.2d 692, 695 (N.Y. 1988) (holding that “The use of such leverage [or bargaining power] is what defines price gouging, not some arbitrarily drawn line of excessiveness.”).
9 See, e.g., Ian Ayres, Market Power and Inequality: A Competitive Conduct Standard for Assessing when Disparate Impacts are Unjustified, 95 CAL. L. REV. 669, 698-70 (2007). The author of this article uses the term price gouging to describe situations where racial minorities are charged higher prices than their non-minority counterparts. While the situation described in his article is a serious problem, it is not price gouging.
10 If the author’s analysis is sound, and there is no reason to doubt its soundness in this respect, certain racial minorities systematically pay higher prices than their non-minority counterparts. The author concludes that the higher prices they pay are not due to any differences in the costs of selling to these groups, but is due to racism.
11 In the part of his article cited, the author suggests the use of price gouging laws to remedy the problem. This is unadvisable because antitrust laws or civil rights laws are better suited to remedying the root of the problem—a lack of competition for these groups’ business or racism. Price gouging laws can only put a cap on the price charged to these groups. It would not remedy the underlying causes of the problem.
12 See Rapp, supra note 6, at 539-42 (discussing the use of antitrust laws to prosecute suppliers that engage in horizontal price fixing in post-disaster markets); Brewer, supra note 4, at 1106-13 (same).
13 Cf. Section V, infra (defining disasters to include hurricanes, tornadoes, tsunamis, blizzards, war, and terrorism) with e.g., Andy Miller, Not Quite an Arm and a Leg, But . . . Market-up Flu Vaccines Offered to Health Systems, ATLANTA J. AND CONST., Oct. 28, 2004, Metro News (reporting that suppliers of flu vaccine offered it to hospitals at inflated prices during a nationwide shortage of the vaccine); Deborah Vrana, Flu Shot Firms Subpoenaed in Price-Gouging Inquiry, L.A. TIMES, Oct. 23, 2004, Main News (reporting that California investigated suppliers of flu vaccine that allegedly gouged during a nationwide shortage).
15 Id.
lines at gas stations and fuel shortages were prevalent. Many economists believe that those price controls resulted in significant economic losses, even though the regulatory scheme was intended to benefit consumers.

The reasons that price controls actually harm consumers are closely related to the three functions that prices serve in a market economy. First, prices tell suppliers how much to supply. High prices provide them with the incentive to supply more while low prices give suppliers the incentive to supply less. Second, prices limit consumers’ consumption. Consumers have limited resources but unlimited wants. Prices are the mechanism that free markets use to keep their desires in check. When prices for one good are high, consumers generally consume less of it. When prices are low, consumers generally consume more. Third, prices allocate resources. Consumers have different incomes and stores of wealth. In conjunction with those differences, prices determine how goods are distributed. The price caps imposed by price gouging laws interfere with these three functions.

When prices are artificially low, suppliers do not have “enough” of an incentive to supply the market. Temporary price increases give suppliers an incentive to work more. A supplier that knows that he can make an extra $10 per unit for a short period will work harder than a supplier that knows he can make an extra $1 per unit, all else equal. For these reasons, temporary price increases give suppliers the incentive to “hustle.”

High prices may also create a market for producers with higher cost structures. For example, suppliers A and B both sell hammers. It costs supplier A $10 to make each hammer. It costs B $30. If consumers are willing to pay $40 per hammer, both A and B can profitably enter the hammer market. But if a price gouging law restricted the price to $20, only A would sell hammers, and fewer hammers may be available to consumers.

Price controls, such as price gouging laws, keep higher cost suppliers out of the market. When there is insufficient supply, shortages result. Shortages cause lines, and lines result in wasted time. These two effects of price controls—the diminished incentive to hustle and the exclusion of higher-cost producers—partly explain post-disaster shortages, but there are other causes.

Price controls also interfere with prices’ ability to limit consumers’ consumption. When the price of a particular good is high, consumers generally conserve, but when a particular price is low, consumers conserve less. When price caps remove consumers’ financial incentive to conserve, shortages, lines, and wasted time result.

Yet another problem with price controls is that they misallocate resources and cause deadweight efficiency losses. For example, suppose that both consumer X and consumer Y want a hammer. X needs the hammer to re-hang his favorite painting that fell off the wall during a hurricane, but Y needs the hammer to repair his grocery store. X therefore values the hammer at $10 and Y values it at $20.

If a benevolent social planner were looking at the situation, he would give the hammer to Y because Y would make better use of it than X; Y’s owning the hammer

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14 Id.
15 Id. at 187-88, 208.
16 Scott Harvey & Calvin T. Roush, Jr., Petroleum Product Price Regulations: Output, Efficiency and Competitive Effects at xii (Staff Report of the Bureau of Economics to the Federal Trade Commission 1981) (stating that the goal of the price controls was to “extract[] windfall gains from crude oil producers and the transfer of these profits to petroleum consumers in the form of lower than free-market petroleum prices.”).
would create an additional $10 in value for the economy. In the United States there is no benevolent social planner to mandate this socially optimal result; prices do that. But price controls may prevent the efficient allocation of resources—i.e., $Y$ getting the hammer. If the price of the hammer were capped at $10, there would be no way for $Y$ to get it, except by chance, and the economy would lose $10 in value. While $X$’s painting would be in its proper place, $Y$’s grocery store would remain closed. $Y$ would lose business and consumers would not be able to buy food. Society loses.

The final problem with price controls is that they may prevent high post-disaster prices from creating a competitive marketplace where low prices prevail, as the following example demonstrates. Suppose that only one person is selling box lunches in a post-disaster market. He can command a price of $50 per box lunch even though the price would only be $10 if the market were competitive. As other suppliers see this profit opportunity, they will start selling box lunches at the market price of $50. At some point, some suppliers will not be able to sell all of their box lunches at that price. Those suppliers will cut prices, and more consumers will buy from them. Other suppliers will then cut prices to avoid losing sales. Prices will continue to drop until they reach the competitive price of $10.

This example demonstrates that high initial prices can lead to lower competitively-set prices. If the price for box lunches had not been high to begin with, suppliers would not have been drawn into the market to compete for business. While under price controls the price would have been lower and competition would not have been necessary to bring the price down, there is no reason to believe that the price gouging law would have resulted in the competitive price being charged, except by chance.

B. THE RIGHT REASON TO PROHIBIT PRICE GOUGING.

These arguments do not meet much resistance in most circumstances, but after disasters they are less persuasive to some because they run counter to notions of fairness and egalitarianism. Parables like the Good Samaritan embody the values at issue.\textsuperscript{17} They teach that it is good and right for individuals to help their neighbors out of selfless disinterest. It is because gougers violate these moral precepts that many support the idea of harshly punishing them for charging seemingly exorbitant prices to the distressed.\textsuperscript{18} Without dismissing these values, indeed while clinging to them, it must be acknowledged that people do not generally behave that way.

Suppliers are profit-driven. If there is no price gouging law in place, suppliers will charge what they can. Similarly, if there is a price gouging law, suppliers will choose the most profitable alternative by either (1) supplying the market with goods at a price that does not violate the law, (2) not supplying goods to the market, or (3) violating the law and hoping not to get caught. Consumers are similarly “profit” driven. They will attempt to get what they need at the lowest possible prices, however much a supplier may “need” the profit.

\textsuperscript{17} Luke 10: 29-37.
\textsuperscript{18} See, e.g., Cal. Penal Code § 396 (Deering 2007) (providing for gougers’ imprisonment for up to one year and imposing fines of up to $10,000 per offense); Miss. Code § 75-24-25(4) (2007) (same except 5 years, and $5,000).
Free markets encourage this kind of interaction between consumers and suppliers. This interaction ensures that the right amount of goods and services are produced and that those goods and services end up in the hands of the consumers that value them most. Prices allow this interaction to take place. Preserving free markets, therefore, requires that prices be allowed to perform their signaling, limiting and allocating functions.

There is however, a set of circumstances where a price gouging law can both benefit consumers and remain largely consistent with a free market system. These circumstances are worth understanding for three reasons. First, as mentioned, there are at least thirty-three price gouging laws already in place. If these laws are to remain, they should be refined to protect consumers while doing as little damage as possible to the free market system. Further, if Congress is going to enact a price gouging law, it should enact the best law possible. Second, these circumstances supply the only sensible rationale for having price gouging laws. Third, understanding the proper rationale for having a price gouging law will lead to a greater understanding of what price gouging is. That understanding will allow policymakers to distinguish it from other legal and economic principles often used to describe and analyze high prices (e.g., antitrust law, the unconscionability doctrine).

But if not fairness, what conceivable economic rationale could recommend price controls? By limiting post-disaster price increases, post-disaster markets may be better able to recover. If sufficiently limited, price controls may not diminish, or only slightly diminish, suppliers’ willingness to supply the post-disaster market. Consequently, the slight lines and shortages that they cause may be counterbalanced by the benefit of preserving consumers’ resources and the market’s ability to recover, as the following example demonstrates.

Suppose that an individual in a post-disaster market had to purchase one box lunch per day to function. This individual has no income because his workplace was destroyed by the disaster, but he has $1,000 in savings. If box lunches cost $10, he can expect his savings to last for 100 days. During that time he can (1) work to rebuild the disaster area, (2) rebuild his home or business, (3) be re-connected with a source of income, and to provide for himself going forward.

If, on the other hand, suppliers “gouge” the consumer by charging him $100 per box lunch, then his savings will be exhausted in a mere 10 days. Once his resources are exhausted, he will be unable to provide for himself. Once he can not purchase the goods and services that he needs, he must wait in line at charitable distribution points to obtain

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19 Accord N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5 (1958) (“[T]he unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic political and social institutions.”).

20 Appendix A.

21 This is undoubtedly an empirical point—one difficult to answer. Whether the benefits of a price gouging law will outweigh the efficiency losses would require comparing the speed with which two identical states, one with a price gouging law and the other without, recovered from a major disaster. Any real-world study would undoubtedly present numerous other factors that could account for any perceived differences. Montgomery et al., supra note 3, at 392 (concluding that price gouging laws led to a total welfare loss of $1.9 billion which comprises $63 million in deadweight losses and the remainder in “nonmarket allocation losses” in September and October of 2005).
them, or he must go without. While he is waiting in line, he is not working to rebuild the disaster area, and when he goes without, he cannot function.

If there are numerous consumers in this position, full recovery of the disaster area becomes operose. Consumers stop patronizing the profit-driven suppliers, who therefore exit the market for lack of customers. Consumers cannot continue rebuilding because they no longer have the resources to make necessary capital investments. The disaster may have been what crippled the market in the first place, but gouging can exacerbate what would otherwise have been a temporary setback.

While high prices can contribute to an increase in the supply of goods in a post-disaster market, at some point that is no longer true. If the gougers in the above example charged $1000 for box lunches instead of $100, it is doubtful that ten times as many suppliers would have been attracted to the market. Even if they were aware of a particular supplier’s ability to charge $1000 for a box lunch, most suppliers would not view this as an opportunity available to them. They would likely recognize this as an anomaly. The $1000 price, therefore, would only have a limited affect on their decision to increase supply to a post-disaster market.

The $1000 box lunch price would, however, bleed off consumers’ resources ten times faster than the $100 price, leaving consumers unable to provide for themselves during the recovery process. This is where it makes sense to implement a price gouging law. A price gouging law can benefit to consumers if it allows prices to rise enough to draw supply into a post-disaster market without letting prices increase to the point of exhausting consumers’ resources.

Although the above example is an oversimplification, the underlying principle is correct. The longer consumers can provide for themselves, the more of their labor and

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22 Professor Rapp made a similar argument in his article. He suggested that price gouging laws may be necessary to facilitate a certain minimum level of commerce during a payment systems collapse. See Rapp, note 6, supra, at 538-39.

23 The above is an oversimplification. First, it is a simplistic description of the recovery process. Second, consumers are heterogeneous. They will have different amounts of resources on hand with which to weather a disaster. Some will have so few resources that they will be dependent on charity almost immediately. Others will have so many that they can pay exorbitant prices for a long time. But, for those in the middle, a price gouging law may keep prices at a level that will allow them to sustain themselves.

Many factors affect how and whether a post-disaster market recovers. For example, the wealth or prosperity of the affected region will have an effect. See generally Jared Bernstein et al., U.S. Poverty Policy in the Aftermath of Hurricane Katrina (Russell Sage Foundation 2006) (explaining that the Gulf Coast Region devastated by Hurricane Katrina was one of the poorest in the country). At best, prohibitions on price gouging are only part of the solution, but they may be an integral part.

The above conclusion nonetheless applies to a market where consumers’ savings are heterogeneous. The following table demonstrates how the price of box lunches will affect the number of days each consumer, A-J, can participate in the market before his resources are exhausted.

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<thead>
<tr>
<th>Worker/Consumer</th>
<th>Savings</th>
<th>$10</th>
<th>$50</th>
<th>$100</th>
<th>$500</th>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>B</td>
<td>$100</td>
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<td>2</td>
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<td>C</td>
<td>$500</td>
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<td>5</td>
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</tbody>
</table>
capital they can contribute to re-building the post-disaster market, and the faster the post-disaster market will recover from the disaster. When their resources are bled off by gougers, the market may be unable to recover. If policymakers are going to prohibit gouging, that is the reason to do it—to prevent price gouging from inhibiting post-disaster recovery.24

Even if policymakers enact a price gouging law for the right reason, there is still cause for concern. This rationale only recommends a price gouging law that is limited to situations where gougers are likely to exhaust consumers’ resources and severely hinder post-disaster recovery.

Therefore, the law must have other safeguards. It must specify how the price increases are limited so that regulation is possible. It must have provisions that ensure suppliers’ profitability, so that they will continue to supply the market. It must apply only in times of disaster and in disaster areas lest it, the exception, swallow the rule that markets set prices. If a supplier violates the law, the penalties must be reasonable, lest the fear of draconian penalties keep suppliers from entering the post-disaster market.

Understanding the right rationale will lead to a better price gouging law—one that ensures that suppliers will supply the post-disaster market and that post-disaster markets are able to recover. But it will also lead to a better understanding and definition of price gouging—a definition otherwise lacking in academic literature.25 It will reveal that “price gouging” is an “unjustified price increase within a post-disaster market following an unforeseen catastrophic event.” This definition will emerge from an understanding of how price gouging laws operate and how they can be made to further their single legitimate policy objective.

It should be apparent that when the price rises to a certain point, most consumers’ resources are exhausted before they can contribute much of their labor or capital to re-building the post-disaster market. Further, some consumers, A and B in this example, will be helpless almost immediately. Others, H-J in this example, can sustain themselves for quite some time even when prices are high.24 There are certain consumers for whom gouging is not a concern. They may have the resources to pay high prices, and they may stand to benefit from paying them. For instance, if a factory owner needed work done immediately to restore operations, he may be willing to pay a high price, and there would be no harm in letting him do so. His factory would be restored, gougers would have made a profit, and the post-disaster market would be one step closer to restoration.

A few states have put “escape hatches” in place that allow suppliers to apply for a price increase with a state agency. E.g., OKLA. STAT. tit. 15, § 777.4 (2007) (providing that a “rate or price increase approved by the appropriate governmental agency is not a violation of this act”). Such provisions are, however, impractical in most circumstances. First, the time that it would take to have the application approved would likely be longer than the short time the law would be operative. Further, such approvals are unlikely to be granted by an elected official that hopes to be reelected.

If there is to be an “escape hatch” provision, the application should be buyer-initiated because a buyer initiated application would not likely raise the electorate’s ire. But that would only avoid the second difficulty. The first—that it would take too long to get them approved—can only be resolved by giving such applications expedited treatment, which may not be possible.25 Others have suggested definitions. For example, Barry Meier of the New York Times suggested a similar definition to the one proposed here. Barry Meier, Consumer’s World; Do Higher Prices for Gasoline Mean Drivers Were Gouged?, N.Y. TIMES, Oct. 6, 1990, Section 1 (“Typically, gouging means sharply raising the price of a vital product in a crisis—anything from a hurricane to a war—when there is no justification for the increase, like a higher cost of doing business.”).
II. CONTROLLING PRICES TO PROTECT POST-DISASTER MARKETS.

A. BASELINE PRICE.

Presumably, pre-disaster prices were set competitively and, as discussed, competitively set prices cannot constitute gouging. Therefore, there is no justification for pushing post-disaster prices below pre-disaster prices. And if the pre-disaster prices were not set competitively, price gouging laws are not the way to correct the problem. As such, a price gouging law should only limit increases in the pre-disaster prices. In other words, pre-disaster prices should be the baseline for post-disaster price controls.\(^\text{26}\)

It is difficult to craft statutory language that captures this principle. The baseline must be clear so that suppliers and regulators can accurately assess price increases to determine whether a supplier has gouged. Suppliers will also presumably try to escape regulatory scrutiny by raising prices before an anticipated disaster so that the increase will be included in the baseline. This evasive activity is referred to as “gaming.”

States have adopted one of four categories of baseline price provisions:\(^\text{27}\)

1. In some states the baseline is the price “immediately before” the disaster struck.\(^\text{28}\)
2. Other states set the baseline as the average price before the disaster.\(^\text{29}\)
3. Tennessee uses less specific language, setting the baseline at the price “generally charged” before the disaster.\(^\text{30}\)
4. West Virginia sets the baseline as the price that prevailed on the 10\(^\text{th}\) day before the disaster struck.\(^\text{31}\) West Virginia’s approach is the clearest and least gameable.

The “immediately prior” approach is the most gameable. It does not prevent gaming during disasters, such as hurricanes, that can be anticipated to some degree. With the “immediately prior” approach, suppliers have the incentive to raise prices as the disaster approaches. By doing so, they can secure high post-disaster prices and cannot be prosecuted for gouging.\(^\text{32}\)

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\(^{26}\) Accord, e.g., ALA. CODE § 8-31-3 (2007) (prohibiting the charging of unconscionable prices, but defining an unconscionable price as a price that exceeds the prices that prevailed before the disaster by more than 25%); see also CAL. PENAL CODE § 396(b) (Deering 2007).

\(^{27}\) These are the author’s categorizations. Also, the statutory language varies widely, and there is little interpretative case law. As such, these categorizations represent the author’s interpretation of the statutory language.

\(^{28}\) See, e.g., ARK. CODE ANN. § 4-88-303 (2007) (making it illegal to sell any goods at more than 10% above the price that prevailed immediately before a state of emergency was declared).

\(^{29}\) See, e.g., IND. CODE § 4-6-9.1-2 (2007) (calculating the average price over the 7 days preceding the disaster); N.C. GEN. STAT. § 75-38 (2007) (calculating the average price over the 30 days preceding the disaster); VA. CODE ANN. § 59.1-527 (2007) (calculating the average price over the 10 days preceding the disaster).


\(^{31}\) W. VA. CODE § 46A-6J-3(a) (2007).

\(^{32}\) Some price gouging laws prohibit gouging “in anticipation of a disaster.” E.g., IND. CODE § 4-6-9.1-1(a) (2007). In so doing, they mix the functions of two other provisions of price gouging laws. An “in anticipation” provision mixes the baseline provision, in that it is aimed at preventing suppliers from gaming the law, and the trigger provision, discussed in section IV.A., infra, in that it fixes when the price controls become operative. By mixing other provisions, it makes it less clear when the law is operative. How certain must suppliers be that a disaster will strike before they are prohibited from raising prices? More importantly, “in anticipation” provisions make the law operative before the rational for imposing price controls is present. Before a disaster the number of competitors has not been reduced to the point where the market is not competitive.
The “average price approach” addresses the problem with the immediately prior approach by diminishing the benefit of raising prices in anticipation of a disaster. Its downside, however, is that calculating the average may require unavailable data. It may be especially burdensome if the disaster destroyed records and computer systems that contained the necessary information and for suppliers that sell many different products.

The “usual” price approach does not require the use of a large and perhaps inaccessible data set, but it is less precise. For goods with prices that fluctuate, such as gasoline, the “usual” price may be indeterminate.

West Virginia’s approach addresses both concerns. First, it is easy to calculate. Most suppliers can quickly and easily determine the price they charged for a particular good or service 10 days before a disaster (especially if they have not changed it leading up to the disaster). Second, it is difficult to game, assuming that most disasters cannot be predicted 10 days in advance.

The potential difficulty with West Virginia’s approach arises when a particular supplier is selling a product at a discount on the 10th day before the disaster. Using the discounted price as the baseline would limit the price increase more than necessary. Apparently anticipating this problem, West Virginia’s legislature crafted its price gouging law to solve this problem. If a supplier was having a sale on the 10th day before the disaster, his baseline is the “usual” price charged before the disaster.

Used this way, the usual price approach’s indeterminateness does not present a significant problem. Most goods with volatile prices, like gasoline, do not go on sale. As such, with West Virginia’s approach the usual price provision is only active when it is least likely to make calculating the baseline difficult. With a baseline that is difficult to game and easy to calculate, such as West Virginia’s, it is feasible to calculate the price increase that constitutes gouging.

B. LIMITS ON PRICE INCREASES—FOUR FRAMEWORKS.

The second dimension to the price control is the limit on the price increase. As with the baseline, the limit on the price increase must be clear and difficult to game. It must also be neither over nor under inclusive. That is: the limit should not prevent price increases that will not impair post-disaster recovery and it should prohibit price increases that will. The thirty-three states with price gouging laws have developed four approaches that address these concerns: unconscionability, no price increase, X% price increase, and

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33 Suppose: That the statute uses the average price approach calculated over ten days; the disaster is predicted two days in advance; and the price for bottled water over the ten days preceding the disaster is as follows: 2,2,2,2,2,2,2,2,10,10. The “immediately prior” approach would set the baseline as $10. The “average price” approach would set the baseline price as $3.60, which is considerably better. But West Virginia’s approach would set the baseline as $2.

34 This is especially likely when the average is calculated over a long period before the disaster struck. E.g., S.C. CODE ANN. § 39-5-145 (2007) (calculating the average over 30 days before the disaster).

35 Comparing the preceding two footnotes will reveal that the “average price” approach puts regulators in a dilemma. The longer the period over which the average must be calculated, the more it mitigates the benefit to gougers of raising prices immediately before the disaster. But the longer the period, the more burdensome the exercise of calculating the average becomes.

36 W. VA. CODE § 46A-6J-3(c) (2007).
a hybrid approach.\textsuperscript{37} None of them is perfect. But one—the hybrid approach—is better than the others.

Some states limit the price increase by prohibiting “unconscionable” or “grossly excessive” price increases.\textsuperscript{38} Most states that take this approach do not define “unconscionable,” and the available definitions are impressionistic at best.\textsuperscript{39} The vagueness of the unconscionability standard gives suppliers little guidance as to how much they can raise prices before they risk being prosecuted. This is not only unfair, but it has the potential to keep some suppliers out of the post-disaster market.

The “no increase” framework is clear;\textsuperscript{40} any non-cost-justified price increase constitutes gouging.\textsuperscript{41} However, this is over inclusive. Post-disaster markets can likely sustain some price increases before their ability to recover is in jeopardy. Further, this framework does not allow for entry of higher-cost providers. Some suppliers might not be able to profitably supply the post-disaster market at pre-disaster prices, but they might be able to do so by increasing prices by 10%, for example. It is after major disasters that these high-cost suppliers are needed.

Recognizing this, other states have adopted the $X\%$ price increase framework where a non-cost-justified price increase of more than $X\%$ constitutes price gouging.\textsuperscript{42} Most of the $X\%$ states use 10% as the benchmark.\textsuperscript{43} The $X\%$ approach is easier to calculate than the unconscionability approach, and allows higher cost suppliers to enter the market. But the $X\%$ framework is arbitrary. Why 10%? Why not 17.2%? Because it is arbitrary, it may be over inclusive in some cases and under inclusive in others. For example, a price increase of 15% may not cripple the post-disaster market, but it may draw suppliers into the market. Under the $X\%$ framework, suppliers that needed a 15% price increase would not enter into the market.

Presumably to address the concerns raised by the other approaches, some states have adopted a hybrid approach.\textsuperscript{44} The hybrid approach blends the $X\%$ and unconscionability frameworks. Hybrid price gouging laws make unconscionable price increases illegal, but they have provisions that make price increases of more than 25% prima facie evidence of price gouging.\textsuperscript{45} Suppliers that raise their prices by more than

\textsuperscript{37} But see Rapp, supra note 6, at 43-51 (2005) (recognizing three not four different categories); Brewer, supra note 5, at 1114-16 (same).


\textsuperscript{39} E.g., S.C. CODE ANN. § 39-5-145(A)(5)(a) (2007) (“Unconscionable price’ means an amount charged which: (i) represents a gross disparity between the [average] price of the commodity, [etc.] . . . during the thirty days immediately before a declaration of a state of emergency . . .; or (ii) grossly exceeds the average price at which the same or similar commodity, [etc.] . . . is readily obtainable in the trade area during the thirty days immediately before a declaration of a state of emergency . . .”).

\textsuperscript{40} E.g., MISS. CODE § 75-24-25 (2007); CONN. GEN. STAT. § 42-230 (2007); D.C. CODE § 28-4102 (2007).

\textsuperscript{41} Id.


\textsuperscript{43} But see, e.g., ME. REV. STAT. ANN. tit. 10, § 1105 D. (2007) (15%).

\textsuperscript{44} E.g., ALA. CODE § 8-31-3 (2007); KAN. STAT. ANN. § 50-6,106 (2007); ME. REV. STAT. ANN. tit. 10, § 1105 (2007).

\textsuperscript{45} E.g., ALA. CODE § 8-31-3 (2007) (making it “unlawful . . . for any person to impose unconscionable prices for the sale . . . of any commodity . . . during the period of a declared state of emergency.” Section 8-31-4 further provides that, “It is prima facie evidence that a price is unconscionable if any person . . .
that amount must demonstrate that the increase was either cost-justified or not unconscionable. If the increase is less than 25%, prosecutors bear the likely difficult burden of showing that the increase was unconscionable.\textsuperscript{46} 

The hybrid approach gives prosecutors the flexibility to pursue gougers that are most likely to harm the post-disaster market while preserving clarity. The unconscionability provision allows them to prosecute anyone who unjustifiably raises prices, but the $X\%$ provision alerts suppliers when they are or are not likely to be prosecuted for gouging. Suppliers that can only profitably enter the post-disaster market by increasing prices by more than 25% can still enter; they simply must be prepared with a defensible argument to justify the prices that they charge.

III. Making Entry Enticing to Suppliers.

As discussed, even clear price-gouging laws are likely to diminish suppliers’ incentives to supply the post-disaster market. Therefore, safeguards are necessary to combat this tendency. In general, suppliers must be able to recoup their costs, or they will not supply the market. Suppliers must also make a profit for entry to be worthwhile. And the penalties they face for violating the law must not be draconian, or entry may not be worth the risk.

A. Costs.

In general, if prices do not exceed a supplier’s costs, he will not supply the market. Price gouging laws must, therefore, allow suppliers to increase their prices to cover cost increases. Each of the states’ price gouging laws allows suppliers to do so, but some do not clearly state which cost increases can justify price increases.\textsuperscript{47} Hence, the real question is: Which costs should be allowed to justify price increases?

Categorizing suppliers’ costs in two different ways will highlight the difficulties associated with answering this question and will also reveal possible solutions. One way to categorize them is to divide them into implicit and explicit costs. Another is to divide them into “replacement costs” and “overhead.” Replacement costs are what suppliers must pay for their next shipment of inventory. Overhead are costs that cannot be easily

\textsuperscript{46} The principal drawback of the hybrid approach is that it allows for some gamesmanship. Suppliers can raise their prices by up to 24%, whether or not the increase is justified, and leave the difficult burden of demonstrating unconscionability with prosecutors. This drawback can be easily overcome with a sliding scale burden of proof. That is: with a 24% price increase, a court might require a great deal less proof that the price was not unconscionable than it would if the price increase were 2%, for example.

But, adopting a sliding scale approach is not advisable because it would undermine the apparent purpose of the 25% threshold. With a sliding scale burden of proof suppliers would lose the certainty that the 25% threshold brings. They could not confidently raise prices to any particular point without knowing that they will not be prosecuted. As such, the “game-ability” and arbitrariness of the 25% threshold are necessary evils. Unlike the other frameworks, however, those evils are mitigated under a hybrid framework.

\textsuperscript{47} See, e.g., ALA. CODE § 8-31-4 (2007) (stating that a supplier may increase prices if the increase is attributable to reasonable costs associated with supplying the good or service; it does not define what constitutes a reasonable cost).
traced to specific goods or services. They are spread over all of a supplier’s goods or services and incorporated indirectly into the prices.

1. Replacement Costs.

In most instances the idea of allowing suppliers to increase prices to cover increased replacement costs is unobjectionable, but replacement costs are controversial under the following circumstances. Suppose a supplier purchased a hammer at the wholesale price of $10 but foresaw that his next shipment would cost $15 per hammer. Some “original cost” policymakers would call it price gouging for that supplier to charge $15 for the hammers for which he paid $10. They would prefer that he charge $10 for the hammers currently in inventory and then charge $15 for the new hammers.

This preference is embodied in provisions of certain price gouging laws that prohibit suppliers from passing on replacement costs if they can reasonably foresee recouping them after the disaster. Preventing suppliers from passing on replacement costs poses at least two problems. First, it pushes on to them the cost of credit. Second, it makes their economic viability more dependent on the fluctuating market prices of inputs. Both of these will make suppliers less likely to supply the post-disaster market.

To understand why, consider the example of Harry the hammer hawker: Harry sells hammers at cost. He bought 10 hammers for $10 each. He knows that the next shipment of 10 hammers will cost $15 each. If he behaves as the “original cost” regulators dictated, he would have $100 with which to buy his next shipment of 10 hammers (he sold 10 hammers at $10 each). But his next shipment will cost $150 (ten hammers at $15 each). Since he only has $100 on hand, he has to borrow $50, presumably at interest, to buy his next shipment. Because of the interest, he must pay on the $50, he is now worse off than if he had charged $15 for the initial 10 hammers to cover the future cost increase.

49 E.g., MO. CODE REGS. ANN. tit. 15, § 60-8.030 (2007) (illegalizing the charging of excessive prices in certain circumstances and defining excessive prices to mean anything more than the actual cost which is defined as “money expended or credit incurred and no allowance shall be made for the replacement cost of merchandise that the seller is reasonably assured of recouping the replacement cost as part of the price of subsequent sales of the merchandise”) (emphasis added); IOWA ADMIN. CODE r. 61-31.1(714) (2007).
50 Id.
51 For simplicity’s sake, this example does not include a profit margin, but the discussion would be the same if one were included. Presume that a supplier paid $10 for the hammers in inventory and normally included a $5 profit margin. Also, assume that his next shipment would cost $15 per hammer. Regulators would object to his raising prices to $20 (the new $15 retail cost plus his traditional $5 markup) for the hammers currently in inventory. They would prefer that he charge $15 for the hammers currently in inventory and $20 for the new hammers.
52 This assumes that credit markets are functioning in disaster areas. If they were not, he would not be able to buy as many hammers to sell, which is an equally undesirable result. See Rapp, supra note 7, at 553-58 (discussing the likelihood and impact of a massive payment systems collapse after a disaster and why that may justify the use of a price gouging law).
53 The result would be the same even if Harry had used his savings to finance the next shipment because he would have had to forego the interest he could have earned. Either way there is a cost that he should be allowed to incorporate into his prices.
The example demonstrates one problem with preventing suppliers from adjusting prices to reflect replacement costs. Suppliers must use credit to increase the amount of their working capital just to carry on business as usual. If Harry had charged the replacement cost in the first place, he would have received $150 for the initial inventory. Then, he would have had to pay $150 to get the second shipment, bringing him back to zero. By charging the replacement cost, he did not earn any extra profit; he did not gouge; he just recouped his costs. Recouping costs is necessary for him, and those like him, to be willing to supply the post-disaster market.

There is a second problem. What if, to return to the example, the price continued to rise? Harry would have to borrow more and more money to carry on. The only time he could satisfy his creditors would be when (if) the prices fell. Hence, Harry’s income would be more dependent on price fluctuations and, therefore, less certain. The less certain his income, the higher his general prices must be to reflect the increased risk, and the more likely it is for him to exit the market when a disaster strikes. Therefore, for the benefit of consumers and suppliers alike, suppliers should be allowed to increase prices to cover increased replacement costs.

2. **Overhead.**

“Overhead” as used here signifies those costs that must be spread over the cost of the goods sold and incorporated indirectly into prices. It includes things like the costs to transport the goods into the post-disaster market, or the cost of repairing a shop’s broken window. Most states’ price gouging laws only permit overhead directly related to bringing supply to the post-disaster market or distributing it to consumers to justify price increases.\(^5\)

This may seem problematic because before entering the market rational suppliers consider all marginal costs, which are the costs that can be avoided by refraining from a given activity. And before a supplier enters a market, all costs are seemingly marginal costs, including those unrelated to bringing supply to the post-disaster market. But in the post-disaster context this is not quite true. Suppliers of post-disaster markets will be one of two groups. They will either be incumbents, who supplied the market before the disaster, or they will be new entrants, who are supplying the post-disaster market for the first time.

Most incumbents will have insurance to cover the costs of replacing broken windows and the like. So the only additional cost associated with the disaster will be those associated with increased distribution costs. New entrants will not likely have significant overhead costs either. They are apt to be individuals bringing in supplies and selling them out of vehicles, not setting up shops. The costs associated with their bringing goods into the post-disaster markets would constitute distribution costs that may be incorporated into their prices. As such, limiting the overhead costs that can justify price increases to things directly related to transporting and distributing supplies is not likely to deter entry.

\(^5\) *E.g.*, Ark. Code Ann. § 4-88-303 (2007) (“However, a greater price increase shall not be unlawful if that person can prove that the increase in price was *directly* attributable to additional costs imposed on it by the supplier of the goods or *directly* attributable to additional costs for labor or materials used to provide the services. . . .” (emphasis added)).
The other problems posed by overhead costs are (1) determining how to allow suppliers to allocate and incorporate their increased overhead costs into their post-disaster prices and (2) verifying that the price increases were in fact justified by increases in overhead. Accounting principles give guidance as to how overhead costs should be spread across the goods sold, but the concern that suppliers will lie about overhead cost increases is not easily resolved. Forensic accounting techniques and evidentiary presumptions are perhaps the only solutions.

3. IMPLICIT AND EXPLICIT COSTS.

Most price gouging laws that address suppliers’ costs in any detail address them by distinguishing between replacement costs and overhead. Distinguishing between implicit and explicit costs is also useful in analyzing suppliers’ incentives. Costs that require a cash outlay, now or in the future, are explicit costs. Costs that do not are implicit. Costs to pay for inventory or to fix a broken window, for example, are explicit costs. The increased risk that a seller may face by staying open in a disaster area is an implicit cost, unless he pays for it in insurance premiums and until the risk has come to fruition and results in an explicit cost.

Because both implicit and explicit costs will affect whether a supplier supplies the post-disaster market, it might seem that suppliers should be allowed to increase prices to account for both. The discussion of replacement costs and overhead addressed the issues associated with explicit costs. Implicit costs, however, require further analysis.

While, implicit costs are often legitimate costs that suppliers should be compensated for, they also present a way for suppliers to manipulate the law. If increases in implicit costs could justify post-disaster price increases, a supplier prosecuted for gouging could justify just about any price increase by claiming to have experienced increased risk, for example. It would be difficult to determine whether supplying a

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55 A “market test” is, however, available to determine whether certain “upstream suppliers” are gouging. Upstream suppliers are wholesalers and distributors, as opposed to retailers who sell directly to consumers. Comparing the prices within the post-disaster market with those in unaffected parts of the upstream supplier’s distribution network will likely reveal whether the supplier is gouging in the post-disaster market. If the prices are the same throughout, then the seller is probably not gouging in the disaster area. If they are different, then gouging is a possible explanation. The test works for upstream sellers with nationwide distribution networks or with distribution networks that are large enough that the post-disaster market is a small part of the distribution network.

56 Accord, e.g., VA. CODE ANN. § 59.1-527 (2007) (“Proof that the supplier incurred such additional costs during the time of disaster shall be prima facie evidence that the price increase was not unconscionable”).

57 While some price gouging laws use the word “replacement costs,” e.g., IND. CODE § 4-6-9.1-2 (2007); ME. REV. STAT. ANN. tit. 10, § 1105 (2007), none use the word “overhead.” Instead they frequently list the particular costs that are allowed to justify a price increase. E.g., MISS. CODE § 75-24-25 (2007) (allowing any expenses and costs associated with bringing the goods into the market to justify a price increase). Those costs fall into the category here labeled as “overhead.”

58 N. GREGORY MANKIW, PRINCIPLES OF MICROECONOMICS 271 (2d. ed. Harcourt Publishers 2001) (defining explicit costs as those “input costs that require an outlay of money by the firm”).

59 Id. (defining implicit costs as those “input costs that do not require an outlay of money by the firm”).

60 Id. (explaining that firms make decisions based on implicit costs and explicit costs although accountants only account for the latter).

61 Some states allow suppliers to justify price increases by claiming to have experienced increased risk. E.g., LA. REV. STAT. § 29:732 (2007); N.C. GEN. STAT. § 75-38 (2007).
given market was actually more risky or whether a supplier was lying to cover his violation of the price gouging law.

This presents a problem. On the one hand if the price gouging law does not allow implicit costs to justify a price increase, it may risk deterring entry into the post-disaster market. On the other hand, if it allows implicit costs to justify a price increase, it risks allowing gougers to evade the law. There is no perfect solution to this dilemma. Other components of a price gouging law, however, may mitigate the entry-deterring effect of a law that did not permit suppliers to pass on increases in implicit costs. First, as discussed, the formula used to calculate the permissible price increase will allow some price increase without the seller having to justify it. Part of that “margin” can be considered an allowance for implicit costs. Second, a judicious prosecutor could decide not to prosecute suppliers that raised prices to cover legitimate increases in implicit costs.

B. PENALTY AND ENFORCEMENT PROVISIONS.

Prosecutors and plaintiffs have discretion in determining whether to prosecute a particular gouger. How their discretion is exercised will, in part, determine whether suppliers choose to supply the post-disaster market. How harshly gougers are punished once they are successfully prosecuted will also affect their decision to enter the market.

Suppliers are assumed to be rational profit maximizers. That is: they will presumably set their prices to maximize their profit. They are also likely to charge that price whether or not it is legal. But legality will play a role in their decision-making process. When deciding whether to violate the applicable price gouging law, suppliers will consider the expected payoffs from doing so.

Suppliers’ expected payoff from gouging is the sum of (1) the payoff they receive from gouging when they are not caught plus (2) the payoff they receive from gouging when they are caught minus any fines that they must pay when they are caught. Mathematically:

\[ \$EP = [(1 - Pr) \times $G] + [Pr \times ($G - $F)] \]

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62 This is not to say that all suppliers that claim to have raised prices due to increased risk are lying. For example, in Two Wheel Corp., supra note 8, the owners of a hardware store procured additional electric generators to sell during a widespread power outage. They charged as much as 30% more than usual for them. One of their arguments was that they took a tremendous risk in acquiring the additional inventory. Had the power come back on, they would have been left with a large stock of inventory. They were probably telling the truth, although the court did not accept that argument as a justification for the price increases.

63 But there are no safeguards the other way. For statutes that allow increased risk to justify price increases, there are no statutory provisions that would allow a regulator or prosecutor to determine whether the supplier actually experienced increased risk and whether the entire price increase was justified by that risk.

64 Montgomery, supra note 3, at 358 (“Excessively harsh penalties for setting the wrong price could give pause to market decisions that are critical to alleviate shortages especially if individuals, unsure about the actions of enforcers, were to adopt very conservative behavior so as to ensure compliance with the law.”).


66 Ehrlich, supra note 65, at 44-45.

67 Id.

68 Id.
where $EP$ is the expected payoff to gouging, $Pr$ is the probability of getting caught, $G$ is the amount gained by gouging, and $F$ is the penalty or fine if caught. The following example demonstrates how the penalty and enforcement provisions work together to affect a potential supplier’s decision to gouge.

Mr. and Mrs. Gouger are both gouging consumers on bottled water in a post-disaster market. Potential Gouger, their son, has not made his decision. Mr. and Mrs. Gouger have each sold 10 bottles and have gouged by $10 per bottle. Each of them, therefore, has made $100 in profits from gouging, i.e., $G = $100. Mr. Attorney General catches Mr. Gouger and makes him pay civil damages of $100, i.e., $F = $100. Mrs. Gouger does not get caught.

Potential Gouger is good at math. He can see that he has a 50% chance of getting caught, i.e., $Pr = .5$ as is $1 - Pr$. His payoff if caught is $0$; $100$ in profit minus the $100$ in civil penalties. His payoff is $100$ if he is not caught, so, on average, he can expect to make $50$ by gouging ($100 \times 50\%$, if not caught plus ($100 - 100) \times 50\%$ if caught). Because gouging is profitable on average, Potential Gouger will likely change his name to Actual Gouger and set to work.

On the other hand, if Mr. Gouger had to pay twice what he made by gouging, or double damages, i.e., $F = $200, Potential Gouger’s calculation would look different. There would still be only a 50% chance of getting caught, and, if he is not caught he would still make $100$. If caught, however, he would lose $100$ ($100$ in profits minus $200$ double damages). On average, then, gouging has a $0$ payoff ($100 \times 50\%$ if not caught plus $100 - 200 \times 50\%$ if caught; $50 - 50 = 0$). In this case, Potential Gouger is unlikely to gouge.

This example makes it apparent that a supplier’s decision whether or not to gouge is directly related to the payoff from gouging, $G$, the probability of being caught, $Pr$, and the penalty he must pay if he is caught, $F$. Policymakers have no control over how profitable any instance of gouging is, $G$, but they have direct control over the probability of getting caught and the penalties they impose on gougers that are caught. To a large degree, who the enforcers are will determine the probability of being caught, $Pr$ and $1 - Pr$. The penalty provisions will affect the payoffs of a gouger that is caught, $F$.

Optimally, policymakers would use that control to structure suppliers’ incentives such that gouging is unprofitable on average, i.e., $EP \leq 0$. Regulators can accomplish this in one of a few ways. They can take a penalty approach, in which they increase the monetary penalties to the point where gouging is unprofitable on average. Or they can take an enforcement approach where they make getting caught a near certainty by choosing tenacious prosecutors to pursue gougers. They can also use some combination of the two.

1. **Penalties.**

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69 The equation used here differs slightly from Ehrlich’s, although the analysis is substantially the same. *Id.*

70 Cooter and Ulen used a similar example to demonstrate that criminals will determine whether to commit a crime based on the payoffs associated with doing so. Their example involved the crime of embezzlement, however, not gouging. ROBERT COOTER & THOMAS ULEN, LAW & ECONOMICS 454-61 (Denise Clinton ed., Pearson Addison Wesley 4th ed. 2004) (2004).

71 See also *id.*; Ehrlich, *supra* note 65, at 44-45 (1996).

72 *Id.*
Using the “penalty” approach, some states have made willful gouging punishable by up to one year in jail.\textsuperscript{73} They also fine gougers. It is difficult to conceive of a more severe penalty for price gouging. These suppliers are presumably businessmen, not hoodlums. For most suppliers, jailtime is akin to an infinite $SF$. Even the slight risk of going to jail might keep them from supplying the post-disaster market. This suggests that jailtime is an inappropriate penalty for price gougers because it would hurt consumers by denying them a much needed source of supply.

There is a second difficulty. A statute that imposes jailtime typically requires a mental element—a requirement that the defendant knew one of three things when he acted.\textsuperscript{74} First, the law could require that the gouger knew he raised prices, but that would provide an unreasonable basis for criminal prosecution because most suppliers need to raise prices, and most price gouging laws allow them to do so. Second, it could require that the gouger knew that he violated the price gouging law by raising prices by more than was permissible, but that would reward ignorance of the law. Third, it could require that the supplier knew that he gouged, in the more general sense, but there is no well-accepted definition of price gouging; so, holding suppliers to this murky standard would be unjust. The impossibility of creating a just and economically sensible mental element further suggests that jailing gougers is a bad or at least unworkable idea.

Monetary penalties like fines, civil penalties, and damages, are better options so long as they are flexibly applied. Flexibility is the key to ensuring that monetary penalties correctly structure suppliers’ incentives. There is no way to know how much any given supplier stands to make by gouging before the fact, $SG$. Therefore, setting a fixed monetary penalty cannot correctly structure their incentives, except by chance. But, if the law imposed a penalty of some multiple of $SG$, as determined after the fact, it is theoretically possible to correctly structure their incentives in every instance.

Optimally, the penalty would be related to the number of gougers that are caught. Mathematically, the penalty that would make the expected payoff from gouging, $SEP$, equal to zero is: $SF=SG/Pr$. The penalty would be higher if a small percentage of gougers are caught and lower if a high percentage are caught. But precisely determining the percentage of gougers caught would be difficult and costly. Hence, this optimal provision is not feasible.

Therefore, the best that regulators can do is to set the penalty at some multiple of damages based on their best guess as to the proportion of gougers caught. Using multiple damages will probably deter suppliers from gouging without deterring entry. To avoid the high penalties suppliers simply need to give the law’s edges wide birth. Using the second approach—detering gouging by selecting tenacious enforcers—is another more problematic option.

2. Enforcers.

\textsuperscript{73} \textit{E.g.}, CAL. PENAL CODE § 396(f) (Deering 2007) (providing for punishment of up to one year in jail and as much as a $10,000 fine per violation or both).

\textsuperscript{74} \textit{See, e.g.}, MISS. CODE § 75-24-25(3)-(4)(2007) (penalizing knowing and willful violations of the price gouging law); N.C. GEN. STAT. § 75-38 (2007) (making it illegal to “with knowledge and intent” charge a price that is unreasonably excessive under the circumstances).
While the penalties imposed on gougers can be formulaically adjusted to correctly structure gougers’ incentives, there is no formulaic way to increase the probability of catching a gouger. Adjusting the probability that a gouger is caught is accomplished by choosing an enforcer with a greater or lesser incentive to prosecute. There are three potential groups of enforcers or prosecutors: attorneys general,75 private plaintiffs,76 and private plaintiffs suing in class action.77 While the probability of getting caught is not mathematically related to who is enforcing the law, there is a predictable relationship.

Plaintiffs pursuing gougers in class action would have a strong financial incentive to prosecute because of the potentially high judgments. Empowering plaintiffs to prosecute gougers would increase the likelihood that gougers would be caught. But because plaintiffs know that defending class action lawsuits can be expensive, they may sue in hopes of securing a nuisance-value settlement, even on a weak claim.78 Because of the high defense costs and the high judgments, even the slight risk of an erroneous prosecution, let alone an erroneous judgment, may be enough to scare potential suppliers out of the post-disaster market.

Denying plaintiffs the right to pursue gougers in class action will probably mean that private plaintiffs won’t bring claims. Most plaintiffs will have been gouged out of a relatively small amount by a number of suppliers. The potential recovery is likely to be too small to justify suing a particular gouger.79 That said: there would be no real harm in allowing private plaintiffs to bring claims in the rare case where it was worthwhile. They are unlikely to bring anything but the most meritorious claims if they are not also waived attorneys’ fees. Therefore, private plaintiffs not suing in class action may be an appropriate enforcer of a price gouging law.

Attorneys general appear to be the best enforcers of a price gouging law. Their motivation to prosecute is political, not financial. The political motive is probably strong enough to encourage them to bring claims, but not strong enough to “manufacture” claims or over-prosecute. Their incentive should be to get the “right” answer by prosecuting only those that they in good faith believed to have gouged.80

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76 E.g. KAN. STAT. ANN. § 50-634(b) (permitting private plaintiffs to sue but not in class action).
77 See, e.g., TEX. BUS. & COM. CODE ANN. § 17.501 (Vernon 2007) (allowing class actions under Texas’s unfair and deceptive trade practices act); KAN. STAT. ANN. § 50-634(d) (2007) (allowing consumers who suffered actual losses to sue gougers in a class action).
79 Frances Kahn Zemans, Fee Shifting and the Implementation of Public Policy, 47 LAW AND CONTEMPORARY PROBLEMS 187, 204 (1984) (“Under the American rule the consumer or the disgruntled neighbor, for example, is often faced with a ‘so sue me’ response to a valid claim. With the cost of legal fees for pursuing the claim prohibitive, given the size of many consumer and neighborhood claims, there is no incentive for the violator to redress the wrong. (Were it not for contingency fees, the same would hold true for larger cases.) Accordingly, there is no incentive to avoid committing the legal wrong in the first place.”); see also Brian J. Linn, Gretchen J. Newman, Part III: Implementing the Washington Consumer Protection Act, 10 GONZ. L. REV. 593, 598 (1974).
80 This is not to suggest that there are not “rogue prosecutors” who may wish to over-prosecute. But the number of rogue prosecutors is probably smaller than the number of class action plaintiffs willing to bring claims for their settlement or nuisance value.
Limiting the enforcers of price gouging laws to attorneys general and private plaintiffs (not in class action) reduces the probability that gougers will be caught relative to allowing class-action law suits. It also prevents over-prosecution. The decreased deterrence caused by the reduced incentives to prosecute can be compensated for by increasing the monetary penalties that gougers must pay. By adjusting the probability of getting caught and the payoffs from gouging, the law can make gouging unprofitable without deterring entry into the market. It will thereby serve its legitimate policy objective. But further safeguards are necessary.

IV. Harmonizing Price Gouging Laws with the Free Market System.

A price gouging law that puts an artificial ceiling on prices is conceptually inconsistent with a free-market system. The limitations discussed thus far are designed to ensure that the law operates fairly, administrably, and without deterring entry. But it still needs to be reconciled with a free market system, where markets, not regulations set prices. Temporal and geographic limits are, therefore, essential.\(^{81}\)

A. Temporal Limits.

Temporal limitations are essential to ensure that the law is not generally applicable. Trigger provisions set the free-market as the default establisher of prices by specifying a definite event that makes the law operative. If the law is not triggered, suppliers may set prices without reference to the price gouging law. Once the law is triggered, however, the limitations on price increases apply.

The need for a trigger is not controversial, most price gouging laws have one.\(^{82}\) The trick is picking the right trigger.\(^{83}\) The rationale for having a price gouging law is to keep price gouging from inhibiting long-term recovery.\(^{84}\) Hence, the price gouging law

\(^{81}\) Others believe that price gouging has a further limitation. See Meier, supra note 25 (including the clause “of a vital product” in his definition of price gouging). Some price gouging laws only apply to particular goods and services. \(E.g.,\) ILL. ADMIN. CODE tit. 14, § 465.30 (2007) (petroleum products only); IDAHO CODE ANN. § 48-603(19) (2007) (“fuel or food, pharmaceuticals, or water for human consumption”). But see, \(e.g.,\) OKLA. STAT. tit. 15, § 777.4 (2007) (“any goods, services, dwelling units, or storage space”). In some states, the law applies only to “necessities.” See ALA. CODE § 8-31-3 (2007). Others list all of the things that the law applies to. \(E.g.,\) KY. REV. STAT. ANN. § 367.374 (2007).

The product limitation adds unnecessary complexity because consumers are not likely to be gouged on goods that they do not need. Creating a complete list of all of the goods and services that a consumer may need after a disaster is difficult and likely to be either over or under inclusive, and the laws that apply only to “necessities” are ambiguous. What is optional to one person may be necessary for another. The fact that a particular consumer was gouged on a particular good is some evidence that they needed the good.

This complexity is avoided by making the law applicable to all goods and services within a post-disaster market. While this makes the law more broad than is strictly necessary to avoid inhibiting recovery, it makes it clearer and more easily administrable.

\(^{82}\) \(E.g.,\) TENN. CODE ANN. § 47-18-5101 (2007) (being activated by “the proclamation of a state of emergency”); VA. CODE ANN. § 59.1-527 (2007) (being active “during any time of disaster”).

\(^{83}\) See Brewer, supra note 4 at 1120 (discussing how New York’s trigger provision “fundamentally misunderstands the functioning and the capability of a market”).

\(^{84}\) \(But see id.\) (suggesting that markets are fully capable of recovering without a price gouging law and that that is what markets are best at doing—reacting to changed circumstances).
should only be operative in post-disaster markets, and, therefore, should only be triggered by a disaster of some kind.

An effective trigger provision will make it obvious to all concerned whether the law is operative because if suppliers are constantly in doubt as to whether they may increase prices, they may exit the market. An effective trigger provision will also allow the law to be triggered only by a disaster. Obviously, every little April shower or gust of wind will not leave a market vulnerable to gouging, but flooding and tornadoes may. Distinguishing, therefore, between events that should and should not trigger the law is essential.

States generally have one of two types of triggers—“occurrence triggers” and “declaration triggers.” Some take an either / or approach. With occurrence triggers, the price gouging law becomes operative when a disaster occurs. With declaration triggers, the law is operative only when it is declared operative by a government official. The occurrence trigger is vague. How much rain must fall? How fast must the wind be blowing? It is, therefore, sub-optimal. The declaration trigger is clear and therefore better. Because the declaration of a state of emergency is easily publicized, there will rarely be any doubt as to whether the law is active. However, the declaration trigger could be improved.

In many states with declaration triggers it appears that regulators cannot declare a state of emergency without triggering the price gouging laws. But the rationale for having a price gouging law may not be present in every emergency. A better provision, therefore, would allow regulators to declare a state of emergency without activating the law. Because whether a disaster has left consumers vulnerable to gouging can only be determined on a case-by-case basis, regulators must be given discretion.

Regulators, however, will probably face political pressure to activate the law, whether or not it is necessary to protect the recovery process. To ensure that the law is only active when necessary, therefore, their discretion must be limited. Georgia’s price-gouging law, for instance, requires that the governor’s office of consumer affairs investigate whether gouging is a problem before declaring the law active. Then, if they find gouging to be a problem generally, the governor’s office authorizes the attorney general to begin its own investigation and initiate prosecutions. Such a system limits the discretion of any one political actor. There are other ways to limit their discretion, but a limit is essential.

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85 See 940 MASS. CODE REGS. 3.18 (2007) (making it an unfair business practice for any person to charge an unconscionable price for petroleum during a “market emergency” which is defined as “[a]ny abnormal disruption of any market for petroleum products, including but not limited to any actual or threatened shortage in the supply of petroleum products, or any actual or threatened increase in the price of petroleum products, resulting from severe weather, convulsion of nature, failure or shortage of electric power or other source of energy, strike, civil disorder, act of war, national or local emergency or other extraordinary adverse circumstances.”).
87 LA. REV. STAT. § 29:732 (2007) (“During a state of emergency as declared by the governor or as declared by the parish president, or during a named tropical storm or hurricane in or threatening the Gulf of Mexico . . . .”).
88 See Miller, supra note 11 (discussing how Georgia’s price gouging law operates in conjunction with its discussion of suppliers gouging hospitals for flu vaccines).
There must also be a deactivation trigger, or else, once activated, prices would be capped for longer than necessary to prevent increases from inhibiting post-disaster recovery. Recognizing this, most states set a time when the law deactivates automatically.\textsuperscript{89} As with the activation trigger, however, regulators need some discretion in deactivating the law because it is difficult to tell beforehand when the law will have accomplished its purpose. But that discretion must be limited because leaving the law operative will probably be more politically popular than deactivating it. This is probably why some laws deactivate automatically after a set time but allow the legislature to extend the outside date one or two times.\textsuperscript{90}

B. \textbf{Geographic Limits.}

Temporal limits ensure that the law’s limits on price increases remain a rare exception as opposed to the general rule of the marketplace, but they are not sufficient. The price gouging law must also have a geographic limitation to prevent regulators from being trigger happy (pun intended). The price gouging law should not apply outside of the geographic area where the disaster struck.\textsuperscript{91}

If the price gouging law is active outside of the post-disaster market, it is either regulating prices that do not need regulating or encroaching on the province of other bodies of law. \textit{Weaver Petroleum} is a prime example.\textsuperscript{92} There, a New York gas station owner increased his prices by more than was necessary to recoup his replacement costs shortly after Hurricane Katrina struck the Gulf Coast region in 2006.\textsuperscript{93}

New York’s price gouging law is triggered by an “abnormal market disruption.”\textsuperscript{94} The court in \textit{Weaver Petroleum} found that the disruption caused by Hurricane Katrina in the Gulf Coast region was sufficient to trigger New York’s price gouging law.\textsuperscript{95} That may be a correct interpretation of New York law, but it is not how a price gouging law should operate. When prices rise in New York after a hurricane hits the Gulf Coast one of a few things is going on.

First, the price increase could represent the new market clearing price, that is: the price at which the quantity supplied equals the quantity demanded. If the hurricane caused a supply shortage, then one would expect prices to rise across the nation for that particular good. Suppliers should not be prosecuted for gouging when they charge the market-clearing price in New York where there is no risk that price increases will prevent the market from recovering from a disaster that did not occur in or otherwise affect the state.

\textsuperscript{89} \textit{E.g.,} \textit{Okla. Stat. tit. 15, § 777.4} (2007) (providing that the prohibitions on price increases shall remain in effect for 30 days plus an additional 180 days following a disaster).
\textsuperscript{90} \textit{E.g.,} \textit{Cal. Penal Code} § 396(e) (Deering 2007) (“The provisions of this section may be extended for additional 30-day periods by a local legislative body or the California Legislature, if deemed necessary to protect the lives, property, or welfare of the citizens.”).
\textsuperscript{91} \textit{E.g.,} \textit{N.C. Gen. Stat.} § 75-38(a) (2007) (“This prohibition shall apply in the area where the state of disaster or emergency has been declared or the abnormal market disruption has been found.”); \textit{S.C. Code Ann.} § 39-5-145 (2007) (same).
\textsuperscript{92} \textit{People v. Weaver Petroleum, Inc.}, 827 N.Y.S.2d 813 (2006).
\textsuperscript{93} \textit{Id.} at 814-15.
\textsuperscript{94} \textit{Id.} at 815-16; \textit{see also} \textit{N.Y. Gen. Bus. Law} § 396-r (Consol. 2007).
\textsuperscript{95} \textit{People v. Weaver Petroleum, Inc.}, 827 N.Y.S.2d at 815.
Second, the prices could have risen because the market for that product in that location is not competitive. Suppliers may be colluding, for example. If that is the case, the antitrust laws are the appropriate remedial tool. All a price gouging law can do is limit price increases. Whereas the antitrust laws can stop the anticompetitive practices and thereby increase competition and lower prices using market mechanisms.

Third, there may not be “enough” suppliers relative to the number of demanders for the market to remain competitive. When that is the case, doing nothing would solve the problem. One would predict that a lone supplier will charge high prices. Another supplier will then see the profit opportunity and enter the market forcing the initial supplier’s prices down. Competition will increase and prices will decrease without any legal intervention at all.

One of these three things was probably behind the price increases discussed in Weaver Petroleum. Whichever it was, prosecution under the price gouging law was not the best way to handle the situation. Using the antitrust laws or doing nothing would have been better approaches. Temporal and geographic limitations are essential to keep the price gouging laws from being abused. The price gouging law should not apply unless: (1) the price gouging law is specifically declared active by two political actors, (2) the disaster occurred within the state, and (3) it has not been deactivated by proclamation or the passage of time.

V. CONCLUSION: A DEFINITION OF PRICE GOUGING.

Thus far the discussion has centered on understanding how a price gouging law can be made to further three policy objectives—preventing gouging from inhibiting post-disaster recovery, not deterring suppliers from entering the post-disaster market, and making the law compatible with a free market system. The conclusion is that such a price gouging law can be crafted. But hopefully the discussion has been more useful than

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96 As used in most of this paper “competition” includes both the strict definition and general definitions. Strictly speaking an economic agent behaves competitively if he “believes that the market price is given or that the agent’s actions do not influence the price.” OZ SHY, INDUSTRIAL ORGANIZATION THEORY AND APPLICATIONS 63 (The MIT Press, 6th prtg. 2001) (1995). But competition is also used to describe markets where firms, even firms that may be able to affect prices, are rivals. They compete with one another for consumers’ business even though they are not price-takers. DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 84 (Denise Clinton ed., Addison Wesley 3d ed.) (2000).

After some disasters, many suppliers businesses are destroyed leaving very few suppliers open to service a large market of desperate consumers. E.g., Erin McCormick, Gallon of Water Goes for $50 and L.A. Gougers Demand $10 for a Loaf of Bread, SAN FRANCISCO EXAMINER, Jan. 20, 1994, News (reporting that in the days following a major earthquake only 10% of the stores were able to remain open). Recognizing the situation, suppliers stop seeing themselves as price-takers and start behaving as if they can control prices. When that happens, the market is no longer perfectly competitive in the strict sense. See Shy, supra.

Even when suppliers are not behaving competitively as strictly defined, when there are “enough” suppliers relative to demanders the perfectly competitive result can still be achieved. When there are a small number of suppliers relative to demanders, however, the possibility of a perfectly competitive result is completely foreclosed. See Shy, supra at 103 (explaining that when goods are homogeneous, suppliers compete in quantity supplied. When there are numerous suppliers a perfectly competitive outcome can result despite the fact that firms are not behaving “competitively” as strictly defined).
that—even if one arrives at the opposite conclusion. The three policies that have been at the center of this discussion are also central to a conceptual definition of price gouging. Many find price gouging to be an amorphous concept—impossible to define.\textsuperscript{97} A brief review of the above discussion, however, will reveal a conceptual definition of price gouging. It will become apparent that price gouging is \textit{an unjustified price increase within a post-disaster market following an unforeseen catastrophic event}. The definition comprises five elements: (1) unjustified, (2) price increases, (3) within a post-disaster market, following an (4) unforeseen (5) catastrophic event.

First, a price increase \textit{justified} by a supplier’s higher costs cannot constitute price gouging. Disallowing such increases would push onto suppliers the costs of the disaster. This is unfair, because consumers are not paying suppliers for the value of the goods and services that they provide. And it is inconsistent with consumers’ needs as it would lead suppliers not to supply the market.

Second, because pre-disaster markets are presumptively competitive, it is only price \textit{increases} that can constitute gouging. The free market is or should be the baseline for all economic regulation. If price gouging is to be conceptually compatible with a free-market system, competitively set prices cannot constitute gouging and cannot be illegal. It is, therefore, the difference between the pre-disaster and post-disaster prices that are evaluated to determine whether gouging has occurred.

Third, gouging can only occur within the geographic region devastated by the disaster—the \textit{post-disaster market}. That is because the only legitimate rationale for evaluating prices for gouging does not apply outside that area; there is no recovery to be hampered in markets not devastated by disasters. Further, if prices rise outside of a post-disaster market it is more likely that (1) the new prices are the market-clearing prices, (2) there are not enough suppliers for the market to be competitive, or (3) the suppliers are colluding or otherwise violating the antitrust laws. Price gouging is not the right concept to evaluate these situations.

Fourth, gouging only occurs after \textit{unforeseen} events because it is only then that disaster victims are vulnerable to price gouging. Practically, unforeseen catastrophic events take the form of hurricanes, tornadoes, tsunamis, blizzards, war, and terrorism, among others. Any event that is unexpected and catastrophic enough to disrupt competition and render consumers’ precaution-taking ineffective is sufficient to constitute an unforeseen catastrophic event. Consumers can generally prepare for disasters and reduce the likelihood that they will be gouged.\textsuperscript{98} Consumers can prepare for disasters generally and specifically. When a specific disaster is not foreseen, consumers can still prepare in general, or on average, thanks to things like savings accounts, insurance, and root cellars. When a specific

\textsuperscript{97}See The Becker-Posner Blog, \textit{Should Price Gouging in the Aftermath of Catastrophes Be Punished?—Posner}, Oct. 23, 2005, available at http://www.becker-posner-blog.com/archives/2005/10/ (“Hurricane Katrina has produced a mass of interesting revelations. One is that more than half the states have laws forbidding ‘price gouging,’ often defined often defined with unpardonable vagueness as charging "unconscionably" high prices.”).

\textsuperscript{98}Whether or not consumers actually prepare for disasters, they should be encouraged to do so. See Howard Kunreuther, \textit{Mitigation and Insurance: Learning from Katrina}, 604 ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE 208, 209-16 (2006) available at: http://ann.sagepub.com/cgi/content/abstract/604/1/208 (explaining that consumers that live in disaster-prone regions often do not take precautions against disasters for a variety of reasons).
disaster is predicted in advance, consumers can prepare for that particular disaster by buying extra supplies and protecting their property.

Well-prepared consumers make gouging unlikely, and they make it unlikely that gouging will exhaust their resources and render post-disaster markets unable to recover. When consumers are prepared in the disaster-specific sense they will have enough supplies on hand that they need not pay what gougers demand. When they are prepared in the general sense they can rely on insurance and savings to carry them through the time between when the disaster strikes and when markets become competitive again.

But, when disasters are unexpected or are of unexpected severity, consumers’ preparations avail little. If a consumer does not know that a specific disaster is coming, he cannot be expected to prepare in the disaster-specific sense. If a disaster is more severe than expected, consumers’ general preparations may not be adequate. When consumers are unprepared, they are most susceptible to gougers and their resources will likely be insufficient to sustain them.

Fifth, whether or not consumers are prepared, they will not be susceptible to gouging unless the unforeseen event is also catastrophic. When disasters are unexpected but mild, market mechanisms will presumably remain intact and keep prices competitive. However, when disasters are catastrophic they may disable numerous suppliers and leave consumers desperate for goods and services thereby allowing suppliers to gouge.

Just as consumers are unlikely to be gouged except after unforeseen catastrophes, it is only then that gouging is likely to inhibit a market’s recovery. Markets are presumptively resilient. It is not lightly presumed that a disaster can cripple them. Because consumers are otherwise unlikely to be gouged and recovery is unlikely to be impeded, an unforeseen catastrophic event is a prerequisite to gouging and an essential element of its definition.

Normally, whether or not a price increase is justified is irrelevant. Markets set prices. Following unforeseen catastrophes, however, consumers may be unprepared and vulnerable to gouging, and they may have few resources at their disposal with which to withstand high prices. Once their resources are drawn down, consumers cannot patronize suppliers that the high prices were intended to draw into the market, and recovery may be hampered. That, and only that, is why producers may be required to justify price increases in post-disaster markets following unforeseen catastrophes.
<table>
<thead>
<tr>
<th>STATE</th>
<th>CITATION</th>
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**APPENDIX A: TABLE OF CITATIONS TO STATES’ PRICE GOUGING LAWS**

26
<table>
<thead>
<tr>
<th>State</th>
<th>Code Reference</th>
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</tr>
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<td>Indiana</td>
<td>Ind. Code § 4-6-9.1-1 (2007)</td>
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<td>Mississippi</td>
<td>Miss. Code § 75-24-25 (2007)</td>
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