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Price Includes Tax: Protecting Consumers from Tax-Exclusive Pricing

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INTRODUCTION

Millions of Americans are suffering economic harm every day, and not just as a result of the current economic crisis. Savings are being lost, people are sacrificing leisure time to make ends meet, debt is rising, and consumers are finding that they are unable to afford the goods they prefer. The cause of this harm is a seemingly benign practice, a practice so widespread that many people probably have not thought twice about it. That practice is tax-exclusive pricing, whereby prices are presented without tax included.

The European Community requires that prices on consumer goods include tax.[1] Indeed, other countries have embraced this idea and also require tax-inclusive pricing.[2] This practice is thought to protect consumers from becoming misled as to the total cost of the products they purchase. Tax-exclusive pricing presents a problem because it lowers the salience of taxes, causing them to become hidden from consumers. Recent studies and economic analyses of behavior show that consumers will systematically undervalue the cost of hidden taxes and, as a result, will over-consume.[3] Overconsumption can lead to decreased savings, overworked individuals, and increased amounts of debts or cuts in consumption of other desired products. To prevent these effects, consumers must be given the total cost of a product before they decide to buy it, not after.

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1. Council Directive 98/6, art. 2, 1998 O.J. (L 80) 27 (EC).

2. *See* Value Added Tax Law, 5736-1975, 30 LSI 46 (1975-76) (Isr.); ALAN A. TAIT, VALUE ADDED TAX: INTERNATIONAL PRACTICE AND PROBLEMS 357 (1988) (providing that New Zealand requires tax-inclusive pricing).

3. *See generally* Raj Chetty, Adam Looney & Kory Kroft, *Salience and Taxation: Theory and Evidence*, 99 AM. ECON. REV. 1145 (2009) (studying hidden taxes in grocery stores and in alcoholic beverage sales); Amy Finkelstein, *E-ZTax: Tax Salience and Tax Rates*, 124 Q. J. ECON. 969 (2009) (studying hidden charges at toll plazas).

The harms resulting from the undervaluation of hidden taxes have received scholarly attention, but this Note approaches them from a different angle, analyzing them through the lens of United States consumer protection law. This analysis concludes that the Federal Trade Commission (FTC or Commission) should use its rulemaking authority to mandate tax-inclusive pricing for consumer goods. For the purposes of this Note, "consumer goods" are understood to be those products and services purchased by "consumers"; that is, unsophisticated end users.[4] Therefore, business purchases and distributor purchases are excluded from this analysis for the most part. A mandate requiring tax-inclusive pricing would ensure that the costs of taxes are not hidden from consumers by presenting them with the information they need to make accurate purchasing decisions. There are three general forms this mandate could take: it could require that tax and price both be stated separately but not added together, that tax and price both be stated separately and added together, or that fully tax-inclusive prices with no breakdown be presented. As will be developed, the FTC should require that tax and price both be stated separately and added together. There are two ways to accomplish this scheme: having both the tax and the tax-inclusive price presented on the price tag,[5] or having only the tax-inclusive price on the price tag along with a breakdown of tax and price on the receipt. Either way should suffice to prevent consumer harm.

In a country that prides itself on demand-driven markets, consumers should be given as much information relevant to their purchasing decisions as is reasonably necessary and possible.[6] What information is reasonably necessary is debatable, but cost is a necessary piece of information for any consumer-driven market. Consumers must see the total cost of a product on the price tag, or they will continue to make imperfect decisions. Some taxes are already

4. *See* BLACK'S LAW DICTIONARY 359 (9th ed. 2009) (defining consumer product as "[a]n item of personal property that is distributed in commerce and is normally used for personal, family, or household purposes"); *accord* FTC Cooling-Off Rule, 16 C.F.R. § 429.0(b) (2010). *See* BLACK'S LAW DICTIONARY, *supra*, at 358 (defining consumer as "[a] person who buys goods or services for personal, family, or household use, with no intention of resale; a natural person who uses products for personal rather than business purposes").

5. "Price tag" should be taken to include both the posted price in-store and online (as the case may be) and advertised prices.

6. Neil W. Averitt & Robert H. Lande, *Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law*, 65 ANTITRUST L.J. 713, 722–23 (1997) (discussing how failures "inside the head" of consumers, such as making decisions on incomplete information, can cause markets to operate inefficiently).

included in price in the United States, most notably excise taxes. Excise taxes are taxes imposed on specific goods—unlike sales taxes, which are imposed on purchases generally.[7] However, there are still many taxes that are not, such as state sales taxes, and consumers are being harmed by the exclusion of those taxes. Almost every consumer, acting rationally or irrationally, has probably ignored taxes in his or her life, and has over-consumed as a result. While the harm from each individual purchase is relatively small, the aggregate harm to consumers is monumental. Mandating that consumers be presented with a tax-inclusive price will ensure that these harms are avoided.

This Note is divided into five parts. Part I describes the current tax disclosure scheme for consumer goods and also how consumers make their purchasing decisions. This Part provides background information necessary to frame the remaining discussions, describing the current tax disclosure regime and illustrating the consumer purchase decisionmaking process that leads to the undervaluation of undisclosed taxes. Because current law does not require the disclosure of all taxes on the price tag and because consumers make their purchasing decisions based on price tags and not total cost, the current tax disclosure regime can be expected to negatively affect consumer purchasing decisions.

Part II considers the effects of tax salience on consumers, concluding that hidden taxes should be expected and that consumers undervalue those taxes. Both rational actor theory and behavioral economics analyses are used to reach this conclusion. Rational actor theory shows that consumers should be expected to ignore taxes on very low priced items, calculate taxes on highly priced items, and approximate taxes on the remainder of their purchases. Behavioral economics enhances this showing by explaining why individuals, suffering from multiple cognitive biases, will either ignore or approximate the taxes on most items; and when they approximate, they will systematically undervalue the cost of those taxes.

Part III discusses the welfare implications of consumers' undervaluation of taxes. This Part finds that hidden taxes likely harm social welfare by fostering over-taxation and by operating in a regressive manner. Individuals suffer from the income effects of their undervaluations, causing them to decrease their savings, work more than they would prefer, take on increased amounts of debt, or cut consumption of other desired products. Given that hidden

7. *Compare* BLACK'S LAW DICTIONARY, *supra* note 4, at 646 (defining excise tax), *with id.* at 1597 (defining sales tax).

taxes likely cause social harm, there do not appear to be any benefits to individuals that offset the harms of overconsumption.

Part IV considers the policy implications of these harms. This Part establishes that the FTC is the best actor to solve the problem of these harms, and that it has the authority to act. By analyzing the harms through the FTC's unfair trade practice jurisprudence, it is shown that tax-exclusive pricing is an unfair trade practice. The strengths and weaknesses of the different tax disclosure schemes are then considered, and it is shown why requiring that both the tax-inclusive price and the tax on an item be presented is the best way to prevent consumer harms. Part V concludes.

I.
BACKGROUND

This Part will briefly discuss the current tax disclosure scheme and the process of consumer decisionmaking to help frame the rest of the Note. Recall that consumer goods are those products and services purchased by unsophisticated end users, and that consumers are understood to be those end users.

A. The Current Tax Disclosure Scheme

Currently, state and local governments are the main entities imposing taxes on consumer goods. To date, the federal government does not levy taxes on consumer goods as a whole, but does impose taxes on some discrete categories of goods.[8] However, some academics and policy makers have advocated for a value added tax that would tax general consumption.[9] If such a tax were imposed, then the issues discussed in this Note would become relevant to such a tax.

Taxation schemes differ from state to state. There are a plethora of taxes that could be levied on consumer goods.[10] For simplicity's sake, this Note will focus on state sales taxes, which are probably the most prominent type of taxes that can become hid-

8. *See, e.g.*, I.R.C. § 5701 (federal tax on tobacco products). Federal taxes on consumer goods are found in Subtitles D and E of the Internal Revenue Code, I.R.C. §§ 4000–5891.

9. *See generally* Paul R. McDaniel, *A Value Added Tax for the United States? Some Preliminary Reflections*, 6 J. CORP. L. 15 (1981) (discussing issues surrounding adoption of value added tax in United States).

10. *See, e.g.*, KY. REV. STAT. ANN. §139.200 (West 2010) (levying general sales tax, hotel tax, tax on sewer services, tax on prepaid calling services, tax on communications services, and tax on distribution services for natural gas).

den. Forty-five of the fifty states impose a sales tax, which is not typically included in the good's posted price.[11]

While this Note will only make reference to sales taxes, other taxes on consumer goods should not be ignored when considering the welfare and policy implications of the current taxation scheme. For now it suffices to say that consumer goods are taxed differently by each state, and not all of these taxes are included in posted prices.

While posted prices across the United States do not typically include all taxes, the full price of products is revealed at the register before the consumer ultimately pays. Therefore, taxes are technically disclosed to consumers before they make their purchase. However, this form of disclosure has little impact on consumers, as a brief exploration of the process of consumer purchasing decisions will show.

B. Consumer Purchasing Decisions

The previous Section gave a brief background of the current state of tax disclosure laws, showing that not all taxes on consumer goods are included in price. This Section shows that consumers make their purchasing decisions before they reach the register, and they are very reluctant to change those decisions, even when presented with full price information at the register. As such, when coupled with the fact that not all taxes are included in price, it can be expected that undisclosed taxes will affect consumer perceptions of the cost of a product. While direct research on this particular behavior is somewhat sparse, research into consumer choice supports the conclusion that purchasing decisions are made before the register, and rational and behavioral analyses explain why consumers are reluctant to change their minds.[12]

Consumers take a number of different approaches to their purchasing decisions.[13] These approaches may be complex and

11. Alaska, Delaware, Montana, New Hampshire, and Oregon are the five states without any general sales taxes. *See* 2 JEROME R. HELLERSTEIN, WALTER HELLERSTEIN & JOHN A. SWAIN, STATE TAXATION ¶ 12.02 (3d ed. 2010). However, some municipalities in Alaska do charge a local sales tax. *Id.*

12. Under rational actor theory, individuals weigh the costs of choices and select the least costly alternative. *See infra* note 30 and accompanying text. Behavioral analyses look to actual human behavior to formulate predictions of future human behavior. *See* Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476–77 (1998).

13. *See* Michele D. Bunn, *Taxonomy of Buying Decision Approaches*, 57 J. MARKETING 38, 38, 46–50 (1993) (offering detailed analysis of buyer decision approaches for different types of purchases).

multi-stepped, but what is important for this Note is that consumers tend to make their decision to purchase before they reach the register.[14] Price is an important dimension in consumer purchasing decisions, and posted prices carry heavy weight because consumers make their purchasing decisions based on the information that is readily accessible to them at the time they make their decision. This occurs when they select the item, not when they pay for it. Information that is given later, such as the fully tax-inclusive price, has a significantly reduced impact on the consumer.[15] This reduced impact creates the potential for valuation mistakes by consumers.

Further, consumers should not be expected to change their decisions once they are presented with full price information at the register. Rational actor theory can explain this behavior if the cost of turning back and finding different products outweighs the additional disclosed cost. It seems plausible that it would be less costly to simply buy the product, since in many cases the additional cost from the tax will be relatively small, and the hassle of finding new products can be time-consuming. Even if rational actor theory would imply turning back, the endowment effect is a bias in individuals that causes them to attach above market value to items they already possess.[16] If a consumer has already decided to purchase a product, then he will value it higher than its economic value and thus be reluctant to swap it out for another item upon disclosure of the true price.

Given this model of consumer decisionmaking, the practice of tax-exclusive pricing can be expected to affect consumer percep-

14. Richard M. Bird, *Policy Forum: Visibility and Accountability—Is Tax-Inclusive Pricing a Good Thing?*, 58 CAN. TAX J. 63, 68–69 (2010) ("[M]ost consumer purchase decisions are made in the aisles, not at the cash register."); *see* Chetty et al., *supra* note 3, at 1149 (noting that in their model explaining the effects of tax salience, "[t]he price that consumers see when deciding what to purchase is [the posted price]; the sales tax is not included in the posted price").

15. *See* Stephanie Stern, *Temporal Dynamics of Disclosure: The Example of Residential Real Estate Conveyancing*, 2005 UTAH L. REV. 57, 73–81 (2005). Stern discusses the "considerable body of research establishing that individuals have difficulty changing course once they have made an overt commitment to a certain path or action." *Id.* at 73.

16. Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. ECON. BEHAV. & ORG. 39, 44 (1980) ("[A] certain degree of inertia is introduced into the consumer choice process since goods that are included in the individual's endowment will be more highly valued than those not held in the endowment."). *See generally* Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990) (discussing experiments observing endowment effect).

tion of the total cost of a product. Those effects are considered in the following Part II.

II.
THE EFFECTS OF THE CURRENT TAX DISCLOSURE SCHEME

The current tax disclosure scheme for consumer goods leads to interesting and perhaps unexpected effects on consumers. Taxes that are not presented in the posted price, such as sales taxes, are so weakly salient that they effectively become hidden from consumers. Consumers have been shown to undervalue the cost of such hidden taxes, and indeed, rational and behavioral actor models show that consumers should be expected to undervalue hidden taxes. As will be seen, rational actor theory shows that consumers will approximate the cost of hidden taxes in some situations, and behavioral analysis builds on the rational actor discovery to show that consumers frequently approximate, and subsequently underestimate, the cost of taxes. This Part explores these ideas—first establishing that taxes on consumer goods which are not disclosed at the time the decision to purchase is made should be expected to become hidden, then showing why consumers will undervalue those taxes once they are hidden.

A. Tax Salience and Hidden Taxes

This Section takes a look at the background literature surrounding tax salience and its effect on the perceived cost of taxes. Tax salience refers to how noticeable or easy to process taxes are.[17] Reducing either the ability to notice the tax or the ability to figure the tax out will result in lower salience. Some taxes are so weakly salient that they can be aptly described as hidden, in that they "collect revenue or redistribute wealth without also affecting decisions about whether or where to earn or spend."[18] In essence, the idea behind hidden taxes is that they affect people's behavior less than they predictably should under traditional economic models of anal-

17. Brian Galle, *Hidden Taxes*, 87 WASH. U. L. REV. 59, 62 (2009) (citing Edward J. McCaffery & Jonathan Baron, *Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies*, 19 J. BEHAV. DEC. MAKING 289, 289 (2006) for support of this definition of "salient" taxes). Chetty et al. offer an alternate definition by defining tax salience as "the visibility of the tax-inclusive price." Chetty et al., *supra* note 3, at 1146 n.2. This definition removes considerations of the tax rate. As this Note will assume that consumers are aware of tax rates, whichever definition the reader finds more accessible will suffice.

18. Galle, *supra* note 17, at 61.

ysis. Hidden taxes could conceivably arise from many different practices,[19] but this Note focuses on taxes that become hidden because of their low salience levels.

There are two seminal studies in the low salience hidden-tax literature. The first study concerns tolls paid on roads.[20] The author collected data from 123 toll plazas around the country that had been in operation since at least 1985. Many of these toll plazas have electronic toll collection devices which allow drivers to pass through toll collection sites without having to stop to manually pay the toll on the road. After comparing the data while controlling for certain differences, the author found that consumers were less sensitive to toll increases when they paid through a debit from an electronic toll collection device, such as E-Z Pass, than when they paid in cash.[21] The author suggests that because of the passive nature of electronic toll collection, the tolls and toll increases were lowly salient to electronic toll payers.[22] The study found that tolls collected at facilities with electronic toll collection devices rose on average 20–40% more than facilities without those devices, and it attributed this finding to the low salience of the tolls.[23] Since the author did not find a comparative decline in usage with the rise of tolls, it is possible that electronic toll payers were undervaluing or ignoring the tolls, as they did not adjust their behavior relative to the increase in toll prices.

The second study had two findings. The first part concerned taxes on consumer goods in grocery stores, and the second observed the effects of more and less salient taxes on alcoholic beverage sales.[24] For the first part of the study, the authors presented tax-inclusive pricing on selected types of consumer goods subject to sales taxes in a chain of grocery stores for a period of three weeks

19. *See generally* Aradhna Krishna & Joel Slemrod, *Behavioral Public Finance: Tax Design as Price Presentation*, 10 INT'L TAX & PUB. FIN. 189 (2003) (discussing various pricing techniques such as framing, disaggregation, and timing issues that could also possibly cause taxes to become hidden). The authors describe how various practices can affect price perception, with the idea that businesses would like for consumers to perceive prices to be lower than they are, to encourage extra consumption. *Id.* at 190–98. They then predict that such techniques might also be able to be used by the government to lower individuals' perception of tax burdens, focusing mainly on the U.S. income tax. *Id.*

20. Amy Finkelstein, *supra* note 3, at 969–71.

21. *Id.* at 970, 983–86 (discussing methodology and data).

22. *Id.* at 970–971.

23. *Id.* at 971.

24. Chetty et al., *supra* note 3, at 1146.

and monitored purchasing trends through register scanner data.[25] They found that when sales taxes were presented with the price on the shelf, rather than only at the register, consumers were more responsive to the taxes. Consumers were shown to buy less of a product once its total cost was disclosed by the inclusion of tax.[26] This is direct evidence that the salience of taxes affects the purchasing decisions of consumers because when the taxes were made salient by increasing their noticeability, consumers altered the expression of their preferences.

The results from the grocery store part of the study were supported by a study of taxes on alcoholic beverages. In this study, the authors compared data on aggregate annual beer consumption by state, compiled from administrative state tax records, with data on excise and sales tax rates on beer by state.[27] The authors reported finding that increases in excise taxes on alcoholic beverages, which were included in price and thus highly salient to consumers, caused a greater decline in consumption than increases in sales taxes, which were not as salient.[28] The authors concluded that this reaction by consumers shows that the salience level of taxes directly impacts consumer purchasing decisions.[29]

These two studies suggest that consumers undervalue taxes that are not above a certain level of salience. The remaining sections of this Part II ask if traditional rational actor and behavioral analyses can explain this behavior, concluding that they can and that undervaluation should be expected for a majority of purchases.

B. A Rational Explanation: Rational Ignorance and Approximation

This Section establishes a basic understanding of consumer behavior using rational actor theory, which will subsequently be enhanced with behavioral analyses. Rational actor theory shows that consumers can be expected to approximate the cost of hidden taxes, and behavioral economics then shows that approximation

25. *Id.* at 1150–53 (describing methodology of grocery store experiment). One important part of this experiment was that all the similar consumer products studied had their taxes disclosed. As such, potential confusion between tax-inclusive and tax-exclusive pricing was controlled for. Additionally, the tax-inclusive price was clearly visible.

26. *Id.* at 1153–58 (describing results of grocery store experiment). Particularly telling from the results of the experiment is the observation that making a 7.375% sales tax salient decreased demand by 7.6%. *Id.* at 1155.

27. *Id.* at 1158–59 (describing methodology of alcohol sales study).

28. *Id.* at 1160–64 (describing results of alcohol sales study).

29. *Id.* at 1164 ("This finding supports the claim that the excise tax has a larger effect on demand than the sales tax because it is fully salient.").

should occur most of the time and that undervaluation of total costs should be expected when consumers approximate.

Traditional rational actor economic analyses of human behavior assume that "all human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets."[30] Under the most basic of these models—in which actors are perfectly rational and have perfect information—taxes could not become hidden. Consumers would have perfect information about the tax, and even if it was not salient, the consumer would still consider its cost when making a purchasing decision. While this basic model is clearly an idealized view of the world, it offers a good starting place to consider the effects of hidden taxes. Removing the assumption of perfect information provides a much more realistic view of the world, and under it the rational actor model can explain why some hidden taxes are not calculated.

A quick note here is important. The analysis in this Section will focus on how consumers evaluate the imperfect information they receive regarding taxes. It is important to understand that perfect rationality will be assumed throughout this analysis in the sense that consumers will be assumed to make rational decisions based on the information that they have. For example, if Abe's rational preference would be for a candy bar over all other things when the price is $0.99, it will be assumed that Abe will buy the candy bar and not something else. This assumption is made because consumer protection law does not aim to force consumers to make rational choices, but rather aims to give them the information they need to make such choices.[31] However, assuming perfect rationality in the ultimate decision in the presence of imperfect information does not mean that perfect rationality is used when evaluating imperfect information.[32] The important point of this aside is that when rational-

30. GARY S. BECKER, THE ECONOMIC APPROACH TO HUMAN BEHAVIOR 14 (1976).

31. *See infra* text accompanying notes 108–111. The author makes no judgment about this assumption of rationality.

32. Individuals who do not use perfect rationality to evaluate imperfect information are said to use "bounded rationality." Bounded rationality occurs because "[t]he capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world—or even for a reasonable approximation to such objective rationality." Thaler, *supra* note 16, at 40 (quoting HERBERT A. SIMON, MODELS OF MAN 198 (1957)). Individuals are unable to process all of the information they are given so they use shortcuts, or heuristics, to come to

ity is discussed, it refers to the evaluation of information, not to the making of the final purchasing decision.

1. Rational Ignorance

When faced with imperfect information, the rational actor will weigh the opportunity cost of discovering the information against the cost of acting with the imperfect information.[33] If there is greater benefit to acting on full information than on incomplete information, the missing information will be discovered. The imperfect information in the hidden tax scenario is the actual costs of the taxes, which are not known because they are not disclosed at the time the consumer makes her purchasing decisions. The cost of calculation of the cost of the taxes is the sum of the costs of discovering and of applying the tax rate to the price of a product.[34] The cost of ignorance is the cost of the tax minus the cost of time saved from not calculating. If the cost of calculation is larger than the cost of ignorance, consumers will intentionally ignore the cost of the tax.[35] For example, Betty may be a lawyer making $180 an hour who wants to buy a $39.99 shirt subject to a 4.75% sales tax that is not included in the price. Assume that Betty can work whenever she

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their final decisions. These decisions may appear irrational when an "incorrect" choice is made, but technically they are rational on the basis of the information gained from the shortcuts the individual has used. The use of the shortcuts skews information and thus can lead to a rationally made irrational choice. *See* Jolls et al., *supra* note 12, at 1477–78. In a companion piece to their published article, Chetty et al., *supra* note 3, Chetty et al. propose a theory of bounded rationality to explain the effects of low tax salience. Raj Chetty, Adam Looney & Kory Kroft, *Salience And Taxation: Theory and Evidence* 28–35 (Nat'l Bureau of Econ. Research, Working Paper No. 13,330, 2007) [hereinafter Chetty et al., Working Paper], *available at* http://www.nber.org/papers/w13330.

33. BECKER, *supra* note 30, at 6–7.

34. For the sake of the analysis in this Note, consumers will be assumed to know the taxes that exist on consumer goods. Chetty et al. make a similar assumption in their article and also provide some anecdotal evidence that consumers are indeed aware of taxes on consumer goods and the rates of those taxes. *See* Chetty et al., *supra* note 3, at 1165. Whether it is unrealistic or not to assume that individuals are aware of all the taxes on consumer goods, individuals' knowledge of taxes, while closely related to this Note, is beyond the scope of this Note.

35. Chetty et al., Working Paper, *supra* note 32, at 30–32, and Finkelstein, *supra* note 3, at 973–75, 980–83, both propose this idea as a reason for consumer ignorance of taxes. One can imagine the costs of calculating the cost of the tax would be quite high when compared to the cost of acting without full information. Assuming that the existence of all of the taxes on the product is known, the costs of calculation arise from the need to discover the tax rate and to apply it to the stated price. The cost of acting without full information is the cost of the tax assuming an all-or-nothing approach, but may be smaller than the full cost of the tax when approximation is taken into account, as noted below.

likes, for as long as she likes, so that her time is presumptively worth $0.05 a second. The cost of calculation, assuming it always takes her 30 seconds to figure out the cost of the tax and add it to the price, is $1.50. The cost of ignorance would be $1.89 – $1.50, or $0.39. Because the cost of calculation is greater than the cost of ignorance, Betty will ignore the tax. If Betty were purchasing a $3999.99 high definition television instead of the shirt, she would calculate the cost of the tax, since the cost of calculation would remain $1.50, but the cost of ignorance would jump to $190 – $1.50, or $188.50, assuming the same 4.75% tax rate.[36]

The rational ignorance model shows that consumers are more likely to ignore the cost of taxes when prices are relatively low and more likely to calculate the cost of taxes when prices rise. However, calculation and ignorance are not the only two options available to consumers when considering the cost of hidden taxes. Approximation of the cost could also occur.

2. Approximation

The rational ignorance model does not have to entail all-or-nothing ignorance of taxes. Consumers are also able to approximate the cost of hidden taxes. The cost of approximation is the sum of the cost of figuring out an approximate cost and the difference between that approximation and the actual cost, minus the cost of the time saved from not calculating.[37] When the cost of approximation is less than the costs of calculation and of ignorance, rational consumers will approximate.

The three situations—ignorance, approximation, and calculation—should be expected to occur under different circumstances. Ignorance should be expected when prices are very low, such as when buying a $1.00 cup of coffee. In such circumstances, the time needed to form an approximation or to calculate the actual cost of the tax will cost more to the consumer than the tax itself does. When prices—and thus the cost of taxes on the product—rise above a certain level, which can still be relatively low, the cost of the tax becomes greater than the cost of the time needed to form an approximation, and approximation will ensue. For example, Chuck buys a $3.00 cappuccino instead of the $1.00 cup of coffee in a state

36. This example operates under a number of simplifying assumptions, one of the biggest being that Betty would be able to become aware of the costs of ignorance and of calculation, but should remain illustrative nonetheless.

37. An approximation could be achieved in a number of ways. For example, one could approximate using a simple tax rate, such as 10%, or one could simply add a few dollars to the price.

where the sales tax is 4.75%. Assume Chuck always approximates by adding $0.04 for each dollar he spends, and also that his time is worth $0.01 a second and it takes him five seconds to approximate rather than ten seconds to calculate. Chuck's cost of approximation is -$0.03.[38] The cost of ignorance is $0.04.[39] The cost of calculation is $0.10.[40] The cost of approximation is less than the costs of ignorance and calculation, so Chuck will approximate.

As prices rise, the costs of approximation and of ignorance also rise, but the cost of calculation remains constant.[41] This is because the cost of calculation is not tied to price, whereas the costs of approximation and of ignorance are. Therefore, even with approximation as an option, rational consumers will be more likely to calculate the costs of taxes as prices rise.[42]

In all likelihood, rational consumers will find approximation to be valuable for a significant number of goods purchased. Because the practice of approximation suggests that consumers might undervalue some taxes while overvaluing others, hidden taxes might not necessarily lead to undervaluation by consumers of their total tax burden. One might expect an averaging out of overestimation and underestimation of tax burdens such that the end result comes close to the actual tax burden, resulting in no significant net consumer harm. Rational actors should also be able to learn from past mistakes and become increasingly accurate in their approximations, reducing each individual instance of harm.[43] Therefore, traditional rational actor models cannot fully explain the undervaluation of hidden taxes and likely assume too much about the cogni-

38. Cost of approximation = -$0.03 = $0.05 [cost of figuring out approximation] + $0.02 [cost of tax ($0.14) – approximated cost ($0.12)] – $0.10 [cost of time saved from not calculating]. In this case, Chuck receives a benefit from approximating, seen from the fact that the cost is negative.

39. Cost of ignorance = $0.04 = $0.14 [cost of tax] – $0.10 [cost of time saved from not calculating].

40. Cost of calculation = $0.10 = $0.01[cost of time] * 10 [time to calculate].

41. Chetty et al., Working Paper, *supra* note 32, at 34. ("[T]he cognitive cost is a fixed amount paid at each transaction, whereas the benefit of computing [the tax-inclusive price] scales up with expenditure on the good.").

42. This observation assumes that the marginal utility of money remains constant. Otherwise, if individuals making expensive purchases have a decreasing marginal utility of money (perhaps because they are wealthy), then the cost of ignorance will decrease as the utility of each dollar lost decreases.

43. *See* Lawrence E. Blume & David Easley, *Rational Expectations and Rational Learning*, *in* ORGANIZATIONS WITH INCOMPLETE INFORMATION: ESSAYS IN ECONOMIC ANALYSIS: A TRIBUTE TO ROY RADNER 61, 65–76 (Mukul Majumdar ed., 1998) (discussing the dynamics of learning in the context of single-actor decisionmaking).

tive capabilities of consumers.[44] Further development is needed. Removing the assumption thus far of perfect rationality opens the door to cognitive explanations that explain why undervaluation of hidden taxes should be expected in almost every case.

C. A Behavioral Explanation: Behavioral Ignorance and Undervaluation

This Section will use behavioral analysis to supplement the rational actor model of consumer behavior in response to hidden taxes developed in the previous section. In particular, cognitive biases explain both why consumers should not be expected to calculate the costs of hidden taxes and why approximation will lead to undervaluation in almost all cases. These cognitive biases raise the cost of information, making it unlikely that consumers will find it worthwhile to calculate the cost of hidden taxes for most of their purchases.

1. Behavioral Ignorance

The rational actor model would have consumers calculate the cost of taxes when the cost of calculation is less than the cost of acting with imperfect information. This Section explores cognitive biases and processes that raise the cost of calculation in the rational actor model.[45] The cost of calculation can become so high that consumers will likely never calculate the cost of hidden taxes. Some of the biases and errors most relevant to this idea include a lack of computational skills needed to figure out the tax burden,[46] the possibility of hyperbolic discounters who do not correctly value future

44. *See* Galle, *supra* note 17, at 83 (noting evidence that consumers' choices are not always the result of considered reflection).

45. *See id.* at 83–84 (surveying cognitive processes that could lead to ignorance of taxes).

46. *See* B. Douglas Bernheim & Antonio Rangel, *Behavioral Public Economics: Welfare and Policy Analysis with Non-Standard Decision Makers*, *in* BEHAVIORAL ECONOMICS AND ITS APPLICATIONS 7, 24–25 (Peter Diamond & Hannu Vartiainen eds., 2007); Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449, 1453, 1459, 1464 (2003); Daniel Read, George Loewenstein & Matthew Rabin, *Choice Bracketing*, 19 J. RISK & UNCERTAINTY 171, 187 (1999).

events,[47] and the possibility that people have trouble combining the cost of the tax with the price even when it is figured out.[48]

For example, Dave might lack the ability to multiply a $3.99 loaf of bread by a 4.75% sales tax rate, raising the cost of calculation to a relatively high level—perhaps the cost of calculator—which would outweigh the cost of approximation, probably just a few cents in this case. Dave should be expected to approximate or ignore the tax. Emily might be able to make the calculation of the tax on the loaf of bread, but is a hyperbolic discounter who incorrectly undervalues the future benefit of calculating the tax and thus ignores the cost of the tax. She may think that the value of her current time saved by not calculating the cost of tax is worth more than the future $0.19 of tax, only to find at the register that she was wrong and should not have ignored the cost of the tax.[49] Finally, Frank might have the ability to calculate the tax, but experiences frustration and confusion when trying to add it to the price, adding to his cost of calculation, and opts to avoid this burden by approximating or ignoring the tax. It might seem counterintuitive that Frank could multiply but not add, but if the sales tax were a simple 10% and the price was $3.99, there could conceivably be some initial confusion and frustration at adding $0.39 to $3.99, enough that Frank might prefer just to approximate the total price.

These behaviors can explain why actors would not calculate the cost of hidden taxes within the rational actor model.[50] While one could argue that these are irrational behaviors, where the consumer does not weigh the cost of calculation against the cost of acting with

47. *See* R. H. Strotz, *Myopia and Inconsistency in Dynamic Utility Maximization*, 23 REV. ECON. STUD. 165, 170–71, 177–78 (1955) (describing effects of time on a consumer's optimal demand curve); *see generally* Shane Frederick, George Loewenstein & Ted O'Donoghue, *Time Discounting and Time Preference: A Critical Review*, 40 J. ECON. LITERATURE 351 (2002) (reviewing literature on myopia). Hyperbolic discounting is also referred to as "myopia" and is discussed again below, *infra* text accompanying note 57.

48. *See* Kahneman, *supra* note 46, at 1459.

49. Procrastination is a common expression of myopia. The pain of doing something now feels much greater than of doing that same thing in the future, though technically the pain should be the same (barring changed circumstances).

50. In addition, taxation schemes vary from state to state and even from good to good within each state. For the purpose of simplicity, this Note assumes that consumers are aware of the taxes on consumer goods, *see supra* note 34, but to the extent that they actually are not aware of the taxes, these two forms of variations could significantly increase the cognitive costs of calculating taxes to a point where consumers give up on calculation in most cases.

imperfect information at all,[51] it is more accurate to consider them as supplementing the understanding obtained through the rational actor model by increasing the cost of calculation.[52] In addition to explaining why calculation should not be expected, behavioral analysis further shows that consumers will undervalue costs when they approximate.

2. Undervaluation

The rational actor model showed that when consumers do not calculate the costs of taxes, they will approximate those costs unless price is very low. Consumers can approximate the costs of taxes directly by estimating the costs and adding them to the posted price of a product or indirectly by simply estimating the total cost of a product. Regardless of the means of approximation, behavioral analysis shows that approximation leads to systematic undervaluation of taxes. Given the results of the studies, undervaluation may be expected. Even so, it could be expected that consumers would overestimate the cost of taxes. Therefore, it is important to establish why consumers will undervalue the costs of hidden taxes when they do elect to approximate.

The universe of behavioral economics is quite large, and this Note will address cognitive biases that are some of the strongest indicators of consumers' tendency to underestimate the cost of taxes. The discussion here is not meant to be exhaustive. It examines the anchoring bias, the disaggregation bias, the optimism bias, and consumer myopia. These biases do not operate in a vacuum and a consumer may suffer from multiple biases, however, for ease, their effects are explained individually.

The anchoring bias causes individuals to gravitate towards a starting point when making estimations.[53] The bias can take hold even if the starting point is not an accurate value for whatever is being considered, although starting points that are close to being

51. Galle, *supra* note 17, at 83–84 (providing examples of situations where consumers do not calculate taxes regardless of the cost of avoiding taxation).

52. Jolls et al. note that "[t]he project of behavioral law and economics . . . is to take the core insights and successes of economics and build upon them by making more realistic assumptions about human behavior." Jolls et al., *supra* note 12, at 1487.

53. *See, e.g.*, Amos Tversky & Daniel Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1128 (1974); *see also* Stern, *supra* note 15, at 78 ("Anchoring is a pervasive judgment bias in which starting points or initial values systematically and disproportionately influence decision makers.").

accurate create a stronger bias.[54] Anchoring affects consumers who engage in indirect approximation of the cost of the tax. If consumers see the presented tax-exclusive price as the starting point for estimating the total cost of the product, then they are likely to underestimate the total cost, and implicitly the cost of the tax, by staying too close to the posted price. Returning to the $3.99 loaf of bread, with the anchoring bias Greg might approximate the total cost of the bread, but stay too close to the posted price, even if he understood abstractly that the cost of the tax should add more to the price. Under a 4.75% sales tax, Greg might approximate the total cost at $4.10 when the actual cost is $4.18.

Closely related to the anchoring bias is the disaggregation bias. The disaggregation bias causes individuals to underestimate the total cost of a product when prices are presented as broken down in smaller parts.[55] This undervaluation occurs because individuals have difficulty adding the parts together and will thus gravitate toward the most salient parts of the price and undervalue the less salient parts of the price. It stands to reason therefore, that by making prices tax-exclusive, the total cost of the product will be underestimated because the tax will be undervalued as the smaller, less salient part of the total cost, even if the initial estimation is fairly accurate. For example, Henry, suffering from the disaggregation bias, might have trouble adding together the two price components of his bread purchase—the $3.99 posted price and $0.19 of tax—and thus focus on the larger and more salient $3.99, finding it easier to do so while adding a few cents on the top to account for the tax he knows is there.

Further, the optimism bias, which basically states that individuals do not rationally perceive negative events in their lives and thus undervalue their impact or probability, suggests that consumers who were not certain of their tax liability would tend to undervalue

54. Stern, *supra* note 15, at 79 (noting that "[r]esearchers have found anchoring effects even when the anchor presented is uninformative or extreme," but also that "the anchoring effect is strongest when the anchor is moderate rather than extreme").

55. *See* Krishna & Slemrod, *supra* note 19, at 192–94 (citing various pieces of experimental data pointing to disaggregation bias phenomenon); *see also* John M. Clark & Sidne G. Ward, *Consumer Behavior in Online Auctions: An Examination of Partitioned Prices on eBay*, 16 J. MARKETING THEORY & PRAC. 57, 57–66 (2008); Tanjim Hossain & John Morgan, *Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiments on eBay*, 6 ADVANCES ECON. ANALYSIS & POL'Y, no. 2, art. 2, 2006, at 1–4. *See generally* Vicki G. Morwitz, Eric A. Greenleaf & Eric J. Johnson, *Divide and Prosper: Consumers' Reactions to Partitioned Prices*, 35 J. MARKETING RES. 453, 453–63 (1998).

its negative impact on them: they would assume the tax is not as big as it is.[56] Isabelle might see a 4.75% sales tax on the $3.99 loaf of bread and assume that there is no way its cost could be as high as $0.19. Thus, she will underestimate its cost, perhaps as $0.10.

Consumer myopia refers to the tendency in individuals to undervalue future expenses and overvalue current expenses.[57] Myopia causes consumers to give undue weight to the posted price and undervalue the impact of the hidden tax, which can be considered a future expense since it is not disclosed at the time the posted price is disclosed, but figured out or approximated sometime thereafter. Jenny might be aware that a tax exists on a $3.99 loaf of bread, but be unsure what it will be. Since myopia causes future harms to seem less painful, Jenny will assume the cost of the tax to be less than what it will actually be.

These biases explain why consumers will undervalue the costs of hidden taxes. When combined together they can create powerful cognitive hurdles to accurate approximation. However, there may be some cognitive processes that would tend to push consumers in the other direction, processes that would diminish the harm from undervaluing hidden taxes. The next Section explores those processes and finds that consumers should not be able to significantly mitigate the harms from undervaluing taxes.

3. Can Consumers Mitigate the Effects of Hidden Taxes?

Processes of bias removal and of preference ordering imply that the harms resulting from the undervaluation of hidden taxes should be short lived or minimal in the long run.[58] Consumers suffering harm from their biases are thus incentivized to correct those biases.[59] Individuals can learn of the taxes themselves or third par-

56. *See generally* David A. Armor & Shelley E. Taylor, *When Predictions Fail: The Dilemma of Unrealistic Optimism*, *in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 334 (Thomas Gilovich, Dale Griffin & Daniel Kahneman eds., 2002) (reviewing and discussing optimism bias); *see also* J.D. Trout, *Paternalism and Cognitive Bias*, 24 L. & PHIL. 393, 403–04 (2005) (discussing how overconfidence can make individuals overly optimistic about their abilities to evaluate information).

57. For literature regarding myopia, see *supra* note 47.

58. Galle, *supra* note 17, at 85. As will be seen in Part IV, bias removal is exactly what this Note argues for. However, the process referred to here is individuals' ability to remove biases without government action.

59. *Id.* at 89 (citing Jonathan Klick & Gregory Mitchell, *Government Regulation of Irrationality: Moral and Cognitive Hazards*, 90 MINN. L. REV. 1620, 1647–48 (2006)).

ties can intervene and inform the individuals. However, problems abound with processes of bias removal.[60]

Initially, it will be hard for irrational individuals to remove their own biases. They would have to be aware that they were constantly underestimating. As the harm to each individual is not substantial, the injury causing the harm may be hard to locate. Assume that an individual overspends by $10 a month due to undervaluing hidden taxes. Only the most pious of bookkeepers would likely be able to discover that the $10 of harm resulted from undervaluing taxes and not some other expenditure or mistake, such as simply dropping a ten dollar bill. Also, if individuals do not check their estimations each time, they will not be able to correct themselves very easily.

Even third parties that attempt to alert individuals to the hidden taxes may be met with some resistance from consumers if they are not offering simple disclosures of total price, as advocated for in this Note.[61] Notably, consumers are the ones who actually go to the store and see what they buy and how much it costs. Because consumers have first-hand information on their own purchases, they may simply not believe the others who do not have that information. Furthermore, as the harm on each individual purchase is likely to be relatively small, the consumers may just not care about it once it is revealed to them, a reaction that hearkens back to disaggregation theory. Consumers may thus have a hard time realizing the aggregate harm they suffer. Optimism bias would cause consumers to believe that the harm that the groups reveal is not happening to them, but to other consumers. These and other cognitive biases and errors will lead consumers to dismiss the watchdog groups' claims of serious harm.

It is also argued that the effects of undervaluing hidden taxes are minimal because of consumer ordering of preferences, which is the idea that consumers will anticipate that some unknown income effects will adversely affect their budgets and thus they will purchase the goods they prefer the most before purchasing the goods they prefer the least.[62] Therefore, because the consumers are only de-

60. *See id.* at 89–93 (discussing complications with effectiveness of bias removal).

61. *See id.* at 90–92 (discussing potential problems of external actors attempting to educate taxpayers on their tax burdens including noisy signals and credibility issues).

62. *See id.* at 79–80; *see also* Chetty et al. Working Paper, *supra* note 32, at 41–46 (describing various possibilities of how consumer may order his preferences).

nied their least preferred goods, the harm incurred is presumably minimized. It is unclear though that individuals order preferences in such a way, and the anticipation scenario rests on rather unstable ground.[63] Regardless, this idea admits undervaluation and the harm, but attempts to justify them by claiming that the harm is not that great. However, income effects of taxes are real, and where income is lost, it should not matter if it is on the front or back end of consumer preferences. Consumers will have lost the ability to spend their money and express their preferences accurately. On balance then, processes of bias removal and preference ordering are not likely to counterbalance the effects of the anchoring bias, the disaggregation bias, the optimism bias, and consumer myopia.

In conclusion, Part II has examined how consumers react to hidden taxes created by low salience levels. Consumers can process these hidden taxes in three ways: by ignoring them, approximating them, or calculating them. Given consumers' imperfect rationality when considering hidden taxes, it should be expected that they will not calculate the costs of the taxes for the majority of their purchases, but rather will approximate or ignore them, leading to undervaluation of those costs.

III.
WELFARE IMPLICATIONS

Part II established that consumers should be expected to undervalue the cost of hidden taxes in almost all situations. Part III will examine the impact of undervaluation on both social and individual consumer welfare. As will be seen, the social impacts are somewhat speculative, but can be described in general terms. It is likely that hidden taxes lead to over-taxation and that they are regressive. Taxes are regressive when they impact poorer consumers more than wealthy consumers.[64] Regressive taxes impose less of an effective burden on individuals as their wealth increases.[65] Regres-

63. Galle, *supra* note 17, at 80, 87–89 (noting that it is unclear if consumers actually calculate taxes, and if they do, whether they act rationally with that information); *see also* Marianne Bertrand, Sendhil Mullainathan & Eldar Shafir, *Behavioral Economics and Marketing in Aid of Decision Making Among the Poor*, 25 J. PUB. POL'Y & MARKETING 8, 10 (2006).

64. *See* BLACK'S LAW DICTIONARY 1597 (9th ed. 2009) (defining regressive tax); *accord* Joseph Bankman & Thomas Griffith, *Social Welfare and the Rate Structure: A New Look at Progressive Taxation*, 75 CAL. L. REV. 1905, 1908 (1987) ("Under a regressive tax, the percentage of income paid to the government falls as income rises, although the absolute amount paid to the government may rise, fall, or remain constant.").

65. Galle, *supra* note 17, at 69, 102.

sive taxes create welfare concerns because they burden one class of individuals—the poor—more than another—the rich—even though it is thought that the rich have the better ability to pay. The impact on individuals is much clearer. Undervaluation causes individuals to over-consume,[66] resulting in individual welfare losses.[67]

A. Society

Section A explains the effects of hidden taxes on social welfare. The effects that the undervaluation of hidden taxes has on social welfare are not entirely clear, but can be discussed generally. On the one hand, some argue that undervaluation will lead to over-taxation and that hidden taxes are particularly regressive.[68] On the other hand, some argue that undervaluation can increase social welfare by reducing the deadweight losses associated with the taxes.[69]

Finkelstein's study addresses the over-taxation issue and focuses on fiscal illusion.[70] This bias is said to cause individuals to undervalue the cost of government when they are unaware of government revenues.[71] If individuals are unaware of taxes—whether from fiscal illusion or something else[72]—then opportunists in government may use this ignorance to tax people more heavily than is

66. *See supra* Part II.A.; *infra* Appendix, Figure 2.

67. *See* William Congdon, Jeffrey R. Kling & Sendhil Mullainathan, *Behavioral Economics and Tax Policy* 8 (Nat'l Bureau of Econ. Research, Working Paper No. 15,328, 2009), *available at* http://www.nber.org/papers/w15328 ("[W]ith a binding budget constraint, spending too much on the good with a hidden tax will leave less income for subsequent purchases—distorting individual consumption and decreasing welfare.").

68. Galle, *supra* note 17, at 93–104 (suggesting that hidden taxes could lead to over-taxation and to regressive taxation).

69. *Id.* at 93; *see also* Congdon et al., *supra* note 67, at 10.

70. Finkelstein, *supra* note 3, at 970.

71. *See generally* Wallace E. Oates, *On the Nature and Measurement of the Fiscal Illusion: A Survey*, *in* TAXATION AND FISCAL FEDERALISM: ESSAYS IN HONOUR OF RUSSELL MATHEWS 65 (Geoffrey Brennan et al. eds., 1988) (discussing different versions of fiscal illusion hypothesis and examining empirical studies); Brian E. Dollery & Andrew C. Worthington, *The Empirical Analysis of Fiscal Illusion*, 10 J. ECON. SURVS. 261 (1996) (examining and evaluating empirical research on five main hypotheses within fiscal illusion).

72. Oates finds that a persuasive case for the fiscal illusion has not yet been made. *See* Oates, *supra* note 71, at 65–66. However, to the extent that it does exist, it only mandates that individuals be shown the revenues the government brings in. In the case of consumer goods, the cost of taxes is presented on receipts, so consumers have the opportunity to see what the government is taking in from them. For the purposes of this Note's discussion of over-taxation, it is not particularly important why individuals are ignoring their taxes, only that they are ignored.

necessary. It may also simply be the case that when taxes are not properly evaluated because they are hidden, they may not be set at an optimal level.[73] Taxpayers might accept over-taxation because they perceive the tax rate to be at an acceptable level. No bad actors are necessary in this scenario. Finkelstein's study provides some robust evidence that hidden taxes can lead to non-optimal taxation; her study found evidence of over-taxation.[74] Indeed, over-taxation has been a concern since at least the time of John Stuart Mill,[75] and such over-taxation seems a very likely result of the undervaluation of hidden taxes.

As to the regressivity concern, given the nature of hidden taxes and the processes that cause people to ignore them, poorer consumers will likely be disproportionately affected by the hidden taxes. Such consumers' cognitive abilities are likely not as developed as richer consumers, which would predictably lead to less accurate estimations of the cost of hidden taxes.[76] In addition, poorer consumers are likely to spend a higher proportion of their budgets than rich consumers on inexpensive items, which should lead to more approximation or ignorance of tax costs, especially where cognitive costs are higher for poorer consumers. If poor consumers are disproportionately affected by hidden taxes, then hidden taxes may be said to be regressive.[77] Finally, sales taxes, which are some of the most prominent hidden taxes, are widely recognized as regres-

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73. The widely accepted and used basic model for determining what taxation scheme is optimal is found in James Mirrlees's seminal 1971 article *An Exploration in the Theory of Optimum Income Taxation*. Under the Mirrlees model, the goal of government is to choose a tax structure that maximizes the welfare of society as defined by a social welfare function. *See* J. A. Mirrlees, *An Exploration in the Theory of Optimal Income Taxation*, 38 REV. ECON. STUD. 175, 178 (1971).

74. *See* Finkelstein, *supra* note 3, at 991–1005 (describing impact of electronic toll collection on political behavior).

75. *See* 2 JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY WITH SOME OF THEIR APPLICATIONS TO SOCIAL PHILOSOPHY 491–93 (New York, D. Appleton & Co. 1892) (1848).

76. Galle, *supra* note 17, at 102–03 ("[A] regressive influence is the likelihood that the disutility of engaging in calculations diminishes as wealth increases. More precisely, it seems likely that the difficulty of carrying out mathematical operations declines with education, and education correlates with wealth. Wealthier individuals may also have computational aids, such as an accountant on speed-dial, that are unavailable to those of more modest means. . . . [E]ducation seems likely to improve taxpayers capacity to observe and compute taxes, and, again, education is strongly correlated with wealth.").

77. *Id.* at 100 ("[I]f the likelihood that a consumer will pay sales taxes rather than shift to a consumption decision that is not taxed correlates with lower income, then imposing hidden sales tax will result in a more regressive tax structure.").

sive.[78] If they become hidden, sales taxes' regressive effects might seem smaller than they actually are and thus more socially acceptable. While this doesn't affect the actual regressive impact of the taxes, it could cause society to be less willing to address the impact.

Of course, high taxes and regressive taxes do not necessarily represent a social welfare cost. If taxpayers are receiving benefits greater than or equal to the costs of the taxes, then there is not necessarily a social welfare problem, though the taxes may not be optimal. High taxes could lead to a plethora of public benefits, and these benefits could disproportionately accrue to the poor, removing net regressivity concerns. However, in a federal system, horizontal fiscal externalities—the effects of the abilities of citizens to move to different taxing jurisdictions—can cause states to compete away redistributive objectives, thus causing state tax regimes to be more regressive.[79] Thus, to the extent that hidden taxes are state sales taxes, they are likely to be regressive.[80]

Additionally, there is an idea that the undervaluation of hidden taxes causes consumers to express pre-tax preferences, thereby reducing the substitution effects of the taxes.[81] The substitution effect of a tax is the change in preferences it causes.[82] For example, Kosha may prefer a $5.00 magazine in a tax-free world, but once a tax is imposed on magazines, the substitution effect of the tax causes her to prefer a $4.50 magazine instead. The actual economic effect the market feels from this substitution effect is referred to as "deadweight loss".[83] When pre-tax consumer preferences are expressed, the effect that society feels from the deadweight loss associated with taxes may be lessened because of the absence (or

78. *See, e.g.*, RICHARD A. MUSGRAVE & PEGGY B. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 331–32 (2d ed. 1976).

79. *See* Robin Boadway, Maurice Marchand & Marianne Vigneault, *The Consequences of Overlapping Tax Bases for Redistribution and Public Spending in a Federation*, 68 J. PUB. ECON. 453, 474 (1998); *see also* David E. Wildasin, *Income Redistribution in a Common Labor Market*, 81 AM. ECON. REV. 757, 761–65 (1991) (outlining model showing externalities of localized redistribution in federal system).

80. One instance where there would not be net regressivity concerns would be where taxes that have become hidden are solely dedicated to funding social welfare programs.

81. Galle, *supra* note 17, at 77–79, 93; Congdon et al., *supra* note 67, at 10. The idea here is that hidden taxes presumably have no effect on purchasing decisions, thus removing the expected substitution effect of the tax and eliminating the resulting deadweight loss.

82. Bankman & Griffith, *supra* note 64, at 1919–20.

83. *See* JONATHAN GRUBER, PUBLIC FINANCE AND PUBLIC POLICY 33–35, 49–50, 548–58 (2005); MUSGRAVE, *supra* note 78, at 461–71. For a graphical representation of deadweight loss, see Figure 1 in the attached Appendix.

lessening) of the substitution effect, creating a more robust marketplace.[84] While this argument has some initial appeal, it rests on tenuous ground because its focus on aggregate markets ignores the income effect on welfare felt by individual consumers.[85] The income effect of a tax refers to the fact that it costs more to buy the same goods after they have been taxed, thus more income is required to maintain pre-tax preferences, causing the value of income to increase.[86] This income effect could cause individuals to work more, save less, or take on more debt—any of which could have negative impacts on social welfare. What is important to take from these ideas is that the social welfare costs of the undervaluation of hidden taxes are somewhat unclear, but it is likely that over-taxation and regressive taxation result. The next Section examines the harm to individuals resulting from the undervaluation of taxes. Compared with the social harms, the individual harms are rather straightforward.

B. Individuals

Given that consumers undervalue hidden taxes, tax-exclusive pricing injures consumer welfare by causing consumers to over-consume.[87] Overconsumption causes consumers to suffer due to the unexpected income effects of the hidden taxes.[88] As a result, consumers must save less money than they expected, work more than they would prefer, take on more debt than they would prefer, or consume less overall than they initially preferred when they thought their tax burden would be smaller. Authors of many studies have noted that such results are expected in the real world, as evidenced by sellers' anticipations that sales would decline with tax-inclusive pricing.[89]

Even though the actual income effect of the undervaluation of each individual hidden tax may be slight, even slight harms such as these spread over such a large number of purchases and a large

84. For a detailed analysis of this argument, *see* Chetty et. al., *supra* note 3, at 1173.

85. Galle, *supra* note 17, at 79.

86. Bankman & Griffith, *supra* note 64, at 1920.

87. *See infra* app. fig.2.

88. Congdon et al., *supra* note 67, at 8 ("[W]ith a binding budget constraint, spending too much on the good with a hidden tax will leave less income for subsequent purchases—distorting individual consumption and decreasing welfare.").

89. Chetty et al., *supra* note 3, at 1150 ("The grocery chain's managers expected that posting tax-inclusive prices would reduce sales."); *see also* Bird, *supra* note 14, at 70–71.

number of people can create substantial harm.[90] Consumers are undervaluing taxes on a number of purchases every day, and one could estimate that each individual consumer's yearly harm is not insignificant, even if each purchase only results in a few pennies worth of harm.[91] However, the effect of losing a few pennies on each purchase does not make the harm salient enough to compel action from any individual consumer, creating a classic collective action problem.[92]

Further, the harm from hidden taxes is not outweighed by any countervailing benefits. The undervaluation itself does not directly benefit individuals in their capacity as consumers but could indirectly benefit them by increasing social welfare. However, as already discussed, social welfare is not necessarily raised by the undervaluation of hidden taxes. Hidden taxes appear to be regressive in nature, thus causing individual welfare losses for poorer consumers. These welfare losses are relatively more painful to poorer consumers, who should be expected to undervalue hidden taxes with a greater degree of error than wealthier individuals. Also, if the undervaluation of hidden taxes results in over-taxation, then individuals are not receiving an optimal set of benefits from the government. Thus, overtaxed consumers are being harmed because their income could be better spent. Finally, even if the undervaluation of hidden taxes reduces the deadweight loss of the substitution effect of taxes, individual consumers suffer from the income effects.

It is clear therefore that tax-exclusive pricing harms individual consumer welfare by creating hidden taxes that cause consumers to over-consume. This practice does not have any countervailing benefits for individual welfare, and naturally leads to the question of

90. *See* Chetty et al. Working Paper, *supra* note 32, at 3 ("Even though *individual* welfare may be minimally affected by ignoring taxes, the same taxes can have large impacts on *social* welfare and tax revenue."). The Federal Trade Commission has also recognized that small individual harms can lead to substantial harms when a large number of people are affected. For example, one purpose for enacting the FTC Octane Rule was to prevent millions of consumers from spending a few extra pennies per gallon when buying gasoline. *See* Posting of Minimum Octane Numbers on Gasoline Dispensing Pumps, 36 Fed. Reg. 23,871, 23,872 (Dec. 16, 1971) (to be codified at 16 C.F.R. pt. 306).

91. For example, if a consumer made five purchases a day and underestimated the cost by an average of $0.05 on each purchase, then he alone would suffer $91 of harm yearly.

92. *E.g.* Posting of Minimum Octane Numbers on Gasoline Dispensing Pumps, 36 Fed. Reg. at 23,875 (discussing how consumers were unable to individually obtain information that they needed, creating a collective action problem that the rule sought to remedy).

whether consumers should be protected from tax-exclusive pricing. That question is answered affirmatively in the next Part.

IV.
POLICY IMPLICATIONS

Given the welfare implications of undervaluing hidden taxes established in the last Part, consumers should be protected from tax-exclusive pricing on consumer goods. Individual welfare is being harmed by the systematic undervaluing of hidden taxes. Consumers' inability to overcome their biases and accurately consider the cost of hidden taxes prohibits market forces from eliminating the harm. If consumers are unable to correctly value the tax, then sellers who include tax will suffer in open competition because their prices will be perceived as higher than the prices of sellers who do not include the tax. Therefore, a competitive market will lead to tax-exclusive pricing to the ultimate detriment of the consumer.[93] Market failures such as this one "open[ ] the door to the possibility of welfare-enhancing legal intervention."[94] As the federal consumer protection agency, the Federal Trade Commission has the power and responsibility to intervene and should use its rulemaking authority to establish a minimally intrusive rule mandating tax-inclusive pricing.

A. Who Should Act, and Why

1. The Federal Trade Commission

The federal agency charged with protecting consumers is the FTC.[95] Using its authority granted in the Federal Trade Commission Act (FTCA),[96] the FTC has tackled a wide range of practices causing consumer injury. Examples of previous actions include mandating disclosure of octane levels in gasoline,[97] mandating the disclosure of proper care standards for garments,[98] creating strict rules for the presentation of the prices for funeral parlor services

93. It is admitted that some sellers do present tax-inclusive prices, but this observation about the effects of competition should explain why so few sellers do choose to present tax-inclusive prices.

94. Oren Bar-Gill, *Informing Consumers About Themselves* 43 (N.Y. Univ. Law & Econ. Research Paper Series, Working Paper No. 07-44, 2007), *available at* http://ssrn.com/abstract=1056381.

95. 15 U.S.C. § 45(a)(2) (2006).

96. Federal Trade Commission Act, 15 U.S.C. §§ 41–58 (2006).

97. 16 C.F.R. § 306.10 (2010).

98. 16 C.F.R. § 423.3 (2010).

and goods,[99] creating strict disclosure requirements for franchisors,[100] and regulating credit practices.[101]

The FTC's position as the federal consumer protection agency makes it the best actor to tackle the problems surrounding hidden taxes. While it may seem unclear who should act since the problems involve taxes, this murkiness is easily dissipated. The problem arises not from the taxes themselves, but from the fact that the taxes are not disclosed on the price tag. Therefore, the injury arises from the choice of sellers not to include taxes in their prices. Since this is a trade practice that is adversely affecting consumers, the FTC has jurisdiction.

Granted, there is the issue that taxes are not imposed by sellers on consumers. It is therefore unclear that sellers should be responsible for disclosing taxes. Even so, sellers are responsible for the practice of tax-exclusive pricing and benefit from it at the expense of consumers. The FTC has regulated similar practices in the past, as exemplified by rules concerning fees such as shipping and handling fees[102] or per call fees.[103] Even though such costs are not considered part of the price of the product, the Commission still requires that sellers disclose them to consumers, since they are part of the total cost. It follows from this observation that since taxes are part of the total cost, though not part of the price, they also are prime for similar FTC action. Also, at the most basic level, sellers are the least-cost providers of such information, as it would cost them next to nothing to provide the tax information.[104] On this basis alone, they are ideal candidates to disclose the information.[105]

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99. 16 C.F.R. § 453.2 (2010).

100. 16 C.F.R. § 436.2 (2010).

101. 16 C.F.R. § 444 (2010).

102. 16 C.F.R. § 310.3(a)(1) (2010) (requiring total cost to consumer to be disclosed before payment in telemarketing sales).

103. 16 C.F.R. § 308.3 (2010) (requiring disclosure of cost of call for pay-per-call service).

104. Bar-Gill, *supra* note 94, at 63.

105. *Cf.* Stephen G. Gilles, *Negligence, Strict Liability, and the Cheapest Cost-Avoider*, 78 VA. L. REV. 1291, 1306 (1992) (discussing general understanding that assigning liability to least-cost avoider in tort actions leads to efficient level of care). The argument for efficient results in tort by assigning liability to the least-cost avoider is easily translatable to the current discussion. The harm from tax-exclusive pricing could be corrected by sellers, the government, or consumers themselves. In any scenario, the cost of fixing the harm is likely to fall on consumers. Sellers will pass any costs along in price, the government will collect more taxes or decrease spending (although neither of these technically have to affect consumers) to account for any costs, and consumers would bear their own costs, which have been shown to be high. Since sellers can disclose taxes most cheaply, as

2. Consumer Protection

It is important to understand how the FTC exercises its consumer protection authority. Consumer protection laws are designed to ensure that consumers have the ability to choose effectively between different options in the marketplace. Such choices require that consumers possess the information reasonably necessary to accurately express their preferences and that they are not misled by certain trade practices.[106] Therefore, the federal law of consumer protection as found in section 5 of the FTCA prohibits "unfair and deceptive trade practices."[107]

Consumer protection law and interpretation of the FTCA are guided by the principle of protecting consumer sovereignty.[108] Consumer sovereignty is an expression of the ideal that consumers should have both the opportunity to define their desires and the opportunity to act to fulfill those desires.[109] Implicit in the definition of consumer sovereignty and in the current analysis of consumer injuries is that consumers make rational decisions.[110] Thus, when consumers are given choices and the information needed to choose, they will perfectly express their preferences, and markets will operate efficiently by responding to consumer demand rather than government directives or business preferences.[111]

The FTCA in its current form is a rather vague grant of power. Congress intended for the FTC to develop a framework for identifying unfair trade practices and recognized the Commission's need for flexibility in this area, since prohibiting specific actions would have simply driven offenders to find loopholes and new methods of

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they are already responsible for displaying price to consumers, they are the least-cost provider of the information (or least-cost avoider of the harm). Therefore, they should be required to provide the tax information.

106. Averitt & Lande, *supra* note 6, at 713–14.

107. Federal Trade Commission Act § 5. 15 U.S.C. § 45 (2006).

108. Neil W. Averitt, *The Meaning of "Unfair Acts or Practices" in Section 5 of the Federal Trade Commission Act*, 70 GEO. L.J. 225, 281 (1981).

109. Averitt & Lande, *supra* note 6, at 713.

110. *See* Int'l Harvester Co., 104 F.T.C. 949, 1061 (1984) ("The Commission does not ordinarily seek to mandate specific conduct or specific social outcomes, but rather seeks to ensure simply that markets operate freely, so that consumers can make their own decisions."); Thomas B. Leary, *Unfairness and the Internet*, 46 WAYNE L. REV. 1711, 1713 (2000) (noting that current standard "gives primacy to economic factors, and introduces the notion of consumer responsibility"); Joel Waldfogel, *Does Consumer Irrationality Trump Consumer Sovereignty?*, 87 REV. ECON. & STAT. 691, 691 (2005) (stating that consumer sovereignty and rationality is central to economic theory, although empirical evidence suggests otherwise).

111. Averitt & Lande, *supra* note 6, at 715–16.

exploiting consumers.[112] The original framework, the "S&H" test,[113] was used until 1980. It examined whether the act or practice in question 1) violated established public policy, 2) was immoral or unethical, or 3) resulted in substantial consumer injury.[114] A 1980 letter from the FTC to Congress outlined a modified version of this test.[115] The letter explained that unjustified consumer injury would

112. *See* S. REP. No. 63-597, at 13 (1914) ("The committee gave careful consideration to the question as to whether it would attempt to define the many and variable unfair practices which prevail in commerce and to forbid their continuance or whether it would, by a general declaration condemning unfair practices, leave it to the commission to determine what practices were unfair. It concluded that the latter course would be the better, for the reason . . . that there were too many unfair practices to define, and after writing 20 of them into the law it would be quite possible to invent others."); *see also* H.R. REP. No. 63-1142, at 19 (1914) ("It is impossible to frame definitions which embrace all unfair practices. There is no limit to human inventiveness in this field. Even if all known unfair practices were specifically defined and prohibited, it would be at once necessary to begin over again. If Congress were to adopt the method of definition, it would undertake an endless task."). The Supreme Court has also acknowledged this need for flexibility. *See* FTC v. R.F. Keppel & Bro., 291 U.S. 304, 310 (1934) ("Neither the language nor the history of the Act suggests that Congress intended to confine the forbidden methods to fixed and unyielding categories."); FTC v. Raladam Co., 283 U.S. 643, 648 (1931) ("[U]nfair methods of competition. . . belongs to that class of phrases which does not admit of precise definition."). The Court has also recognized that the Commission is responsible for developing the framework for discovering unfair trade practices. *See id.* at 649 ("[T]he Commission is called upon first to determine, as a necessary prerequisite to the issue of a complaint, whether there is reason to believe that a given person, partnership or corporation has been or is using any unfair method of competition in commerce."); Atl. Ref. Co. v. FTC, 381 U.S. 357, 367 (1965) ("In a broad delegation of power it empowers the Commission, in the first instance, to determine whether a method of competition or the act or practice complained of is unfair.").

113. The "S&H" test derives its name from the Supreme Court case *FTC v. Sperry & Hutchinson Co.*, 405 U.S. 233 (1972). In that case, the Supreme Court acquiesced in the FTC's framework for finding unfair trade practices. *Id.* at 244–45 & n.5.

114. *Id.* at 244 n.5 (1972) (recognizing framework as established in Unfair or Deceptive Advertising and Labeling of Cigarettes in Relation to the Health Hazards of Smoking, 29 Fed. Reg. 8324, 8355 (July 2, 1964) (to be codified at 16 C.F.R. pt. 408)).

115. 4 Trade Reg. Rep. (CCH) ¶ 13,203 (Dec. 17, 1980) [hereinafter FTC Unfairness Policy Statement] (letter from the FTC to the Consumer Subcommittee of the Senate Committee on Commerce, Science, and Transportation). The S&H framework is reproduced in the FTC Unfairness Policy Statement, although in slightly different order. *Id.* ¶ 20,908. However, the letter effectively eliminates the "immoral or unethical" prong of the original test and modifies the import of the other two prongs.

thereafter be the main focus of unfairness investigations.[116] Public policy was to be used only as evidence that certain types of conduct cause consumer injury,[117] and the immorality question was considered duplicative.[118] This was all codified as 15 U.S.C. § 45(n),[119] consequently superceding the S&H test.

The Commission has stated that for a consumer injury to be legally unfair it "must be substantial; it must not be outweighed by any countervailing benefits to consumers . . . that the practice produces; and it must be an injury that consumers themselves could not reasonably have avoided."[120] An injury's harm can be substantial if it harms either a small group of consumers in a large way[121] or a large group of consumers in a small way.[122] When considering the net effects of the practice to determine if its benefits outweigh its costs, the Commission may choose to consider the effects on the ultimate consumer only, ignoring the effects the practice has on sellers or even the government.[123] The Commission seeks to deter-

116. *Id.* at 20,908 ("Unjustified consumer injury is the primary focus of the FTC Act, and the most important of the three *S & H* criteria.").

117. *Id.* at 20,909 to -2 (describing how public policy is used in consumer protection cases); *see* Federal Trade Commission Act § 5(n), 15 U.S.C. § 45(n) (2006) ("In determining whether an act or practice is unfair, the Commission may consider established public policies as evidence to be considered with all other evidence. Such public policy considerations may not serve as a primary basis for such determination.").

118. FTC Unfairness Policy Statement, *supra* note 115, at 20,909-3.

119. 15 U.S.C. § 45(n).

120. FTC Unfairness Policy Statement, *supra* note 115, at 20,908.

121. For an example of a situation where substantial injury from large harms to a small group of people could occur consider the rationale behind the FTC Franchise Rule, 16 C.F.R. § 436 (2010). *See* Disclosure Requirements and Prohibitions Concerning Franchising and Business Opportunity Ventures, 43 Fed. Reg. 59,614, 59,621–39 (Dec. 21, 1978) (to be codified at 16 C.F.R. pt. 436) (finding that franchising practices posed significant threats to franchisees and therefore fell under scope of FTCA).

122. *See* Orkin Exterminating Co., 108 F.T.C. 263, 362 (1986), *aff'd sub nom.* Orkin Exterminating Co. v. FTC, 849 F.2d 1354 (11th Cir. 1988) ("[A]n injury may be substantial if it does a small harm to a large number of people."); *see also* Posting of Minimum Octane Numbers on Gasoline Dispensing Pumps, 36 Fed. Reg. 23,871, 23,872 (Dec. 16, 1971) (to be codified at 16 C.F.R. pt. 306) (describing potential harm to consumers from overpaying by a few cents for each gallon of gasoline).

123. The Supreme Court has approved this practice in relation to the competition side of the FTCA. *See* Atl. Ref. Co. v. FTC, 381 U.S. 357, 371 (1965) ("Upon considering the destructive effect on commerce that would result from the widespread use of [the practice,] we conclude that the Commission was clearly justified in refusing the participants an opportunity to offset these evils by a showing of economic benefit to themselves."). This is basically a ban on considering the exter-

mine if terminating the practice would actually make consumers worse off, a consideration that includes the costs of implementing the remedy, as well as the effect of the remedy itself.[124]

The final part of the Commission's consideration, that consumers cannot reasonably avoid the injury on their own,[125] carries the most weight. The FTC has explained that "whether some consequence is 'reasonably avoidable' depends, not just on whether people know the physical steps to take in order to prevent it, but also whether they understand the necessity of actually taking those steps."[126] This framework allows the FTC to step in when the market fails to eliminate potential injuries because consumers are unable to accurately express their choices. When consumers can accurately express their choices, the market will self-correct any potential injuries because consumers will simply avoid harmful practices.

This Note is concerned with two of the most common types of consumer injuries: incomplete information and confusing information.[127] The two are related in that they both obstruct the ability of the consumer to express her preferences accurately. Both drive up the costs of receiving the information reasonably necessary to make a purchasing decision to a point where the consumer is effectively unable to use that information.[128]

Incomplete information is a relative concept. Total disclosure of all information would be costly, if not impossible. Thus, in general, only basic information thought necessary for informed decisionmaking—namely, the price and function of the good—is

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nalities of the harm on any parties other than consumers. This is logical; one would not want to allow an exploitative practice because the exploiter gains from it in an equal or greater amount as the exploited loses.

124. FTC Unfairness Policy Statement, *supra* note 115, at 20,909.

125. *Id.*

126. Int'l Harvester Co., 104 F.T.C. 949, 1066 (1984); *accord Orkin Exterminating Co.*, 849 F.2d at 1365 (quoting *Orkin Exterminating Co.*, 108 F.T.C. at 366) ("Consumers may act to avoid injury before it occurs if they have reason to anticipate the impending harm and the means to avoid it, or they may seek to mitigate the damage afterward if they are aware of potential avenues toward that end.").

127. Averitt & Lande, *supra* note 6, at 733 ("The most common internal market failures fall into five categories: (1) overt coercion; (2) undue influence; (3) deception; (4) incomplete information; or (5) confusing information."). Averitt & Lande give brief descriptions of all five categories of harm. *See id.* at 733–34.

128. *See id.*; Averitt, *supra* note 108, at 258–61 (explaining that consumers are unable to make rational decisions without disclosure of material information, even though such information is technically discoverable but only at very high costs to individual).

required to be disclosed.[129] Specific disclosures of non-basic information may be required on a case-by-case basis.[130] Only the price at the time of the sale is required to be disclosed because almost every bit of information regarding the future value of a product could be monetized, and to require disclosure of such values would essentially require full disclosure of all tangentially related information.[131] Thus, things such as maintenance costs and scrap value are typically not required to be disclosed. Following the same logic, the information on the function of a product required for disclosure is typically only the primary function of the product, not any secondary functions.[132]

A final basic category of required disclosures includes those necessary to correct misconceptions about the product or service where the misconceptions are causing consumer injury.[133] The seller would have to know that the misconceptions exist and are injuring consumers. The Commission has long required these sorts of disclosures, as seen in various rules and cases, particularly in instances concerning misleading advertising.[134] These disclosures are not central to this Note, as it is assumed that consumers are aware that taxes exist.[135]

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129. *See* Averitt, *supra* note 108, at 260–65 (noting that "[t]here are obviously a great many pieces of information about a product that consumers might want[,] . . . [y]et the Commission surely would not require such time-consuming data to be compiled" and discussing basic disclosures of price, function, and information needed to correct misconceptions about products).

130. *See, e.g.*, 16 C.F.R. § 436.5 (2010) (describing required disclosures of wealth of non-basic information about franchising opportunities); 16 C.F.R. § 423.3 (2010) (requiring disclosure of instructions for proper care of garments).

131. Averitt, *supra* note 108, at 262.

132. *Id.* at 263–64.

133. *Id.* at 264–65.

134. *Id.*; *see, e.g.*, 16 C.F.R. § 424.1 (2010) (requiring disclosure that advertised goods may be limited in availability, if such is the case); Heavenly Creations, Inc. v. FTC, 339 F.2d 7, 8–9 (2d Cir. 1964) (upholding FTC's cease and desist decree against petitioner for failing to disclose certain information in advertisements while noting that "if the Commission . . . thinks it best to insist upon a form of advertising clear enough so that, in the words of the prophet Isaiah, 'wayfaring men, though fools, shall not err therein,' it is not for the courts to revise their judgment").

135. To the extent that consumers are actually unaware that taxes exist, there is a case that their disclosure should be mandated under this theory of curing misconceptions.

Also, information should not be disclosed in a confusing way.[136] Disclosed information would serve little purpose if consumers were unable to understand what the information meant. Confusing information can be seen as a subset of incomplete information because it is effectively taken out of the picture, or as a deceptive trade practice, if the confusion misleads consumers.[137] Examples of attempts to prevent confusing information are seen in the FTC's guides concerning environmental marketing claims[138] and the use of endorsements and testimonials in advertisements.[139]

3. Tax-Exclusive Pricing is an Unfair Trade Practice

Given its welfare implications, tax-exclusive pricing is an unfair trade practice under the FTCA because it causes consumer injury. Tax-exclusive pricing is a clear case of incomplete information in that it impedes consumers' ability to form accurate preferences in a way that consumers cannot overcome on their own because of their cognitive biases discussed above.[140] Part II of this Note showed that tax-exclusive pricing leads to taxes being hidden and to consumers not correctly valuing their costs. This undervaluation leads to substantial aggregate consumer harm, as consumers suffer from every purchase that has a hidden tax. Because the individual harm on each purchase is so small, many consumers may not realize that they are being harmed, thus not realizing the necessity of correcting their actions even if they had the ability to do so. Finally, as developed in Part III, individual consumers' welfare is being harmed, and there are no countervailing benefits to tax-exclusive pricing that would remove it from the realm of consumer injury. However, in addition to finding consumer injury, the FTC must also be assured that the potential remedy's costs do not outweigh its benefits before it takes action.

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136. *See* Bakers Franchise Corp. v. FTC, 302 F.2d 258, 262 (3d Cir. 1962) (upholding Commission's order to bread company to stop using language likely to confuse consumers).

137. Averitt & Lande, *supra* note 6, at 733–34; Gulf Oil Corp. v. FTC, 150 F.2d 106, 109 (5th Cir. 1945) (quoting Florence Mfg. Co. v. J.C. Dowd & Co., 178 F. 73, 75 (2d. Cir. 1910) ("The law is not made for the protection of experts, but for the public—that vast multitude which includes the ignorant, the unthinking and the credulous, who, in making purchases, do not stop to analyze, but are governed by appearances and general impressions.")).

138. 16 C.F.R. § 260.7 (2010).

139. *Id.* § 255 (2010).

140. *See* Trout, *supra* note 56, at 412 (noting that "serious doubts" exist concerning "the ability of normal individuals to make decisions that are" as accurate as "tested institutional decisions" because of cognitive biases).

B. How Should the FTC Fix It?

1. The Ideal Disclosure Rule

Given that the FTC has the jurisdiction to tackle the injuries created by tax-exclusive pricing, what action should it take? The FTC could best address this issue through a disclosure rule. Mandatory disclosure of hidden taxes would create substantial benefits for individuals by eliminating the potential for consumer undervaluation of hidden taxes while imposing only a minimal cost on sellers.[141]

Disclosure requirements are frequently simple and relatively cost-efficient means of regulation,[142] and are often used in regard to consumer products.[143] Disclosure does not regulate market forces, but merely disseminates information with the hope that individuals will use the information to better define their preferences. Disclosure facilitates efficient markets by removing barriers to information, thus reducing the cost of information. In this case, disclosure would prevent undervaluation by removing the costs associated with calculation. However, disclosure is not without costs. The direct costs of disclosure include the costs to sellers of collecting, compiling, and distributing information.[144] In addition, too much disclosure could flood consumers, and consumers may not be able to process complex or confusing disclosures.[145] As will be seen, however, there is a simple way to disclose the costs of hidden taxes with minimal costs to sellers and little danger of flooding or confusing consumers.

When considering the disclosure scheme it should be observed that the taxes that should be disclosed are those that a consumer without any special tax exemptions would have to pay.[146] While it would be ideal for each individual to know the total tax-inclusive price before purchasing, such a system would be impractical.

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141. *See* Stern, *supra* note 15, at 87 ("Providing disclosure at the outset of a transaction ameliorates the information-processing deficits elicited by latecoming disclosure . . . [and] does not appear to [be] burdensome for sellers and their agents.").

142. Bar-Gill, *supra* note 94, at 44, 46, 63.

143. *E.g.*, 16 C.F.R. § 306.10 (2010) (requiring disclosure of automotive fuel ratings); 16 C.F.R. § 423.3 (2010) (requiring disclosure of care requirements on apparel labels).

144. Bar-Gill, *supra* note 94, at 63.

145. *Id.* at 64; Colin Camerer et al., *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism,"* 151 U. PA. L. REV. 1211, 1235 (2003).

146. That different goods may not be taxed the same is tax policy that this Note is not concerned with.

Therefore, it must be assumed that consumers with special tax exemptions will be sophisticated enough to realize that they have those exemptions and that they will be able to calculate their actual burden. While such an assumption would be contrary to the argument of this Note, it is the safest assumption to make when creating the rule. It will cause the least amount of harm until the day when consumers can find their individual total prices before making purchasing decisions. While the exemptions differ from state to state, non-profit organizations are one of the main classes of exempt consumers. Non-profits may be more sophisticated than individual consumers due to institutional knowledge and protections. Indirect taxes on goods, such as corporate taxes that are already worked into price to some degree, will not need to be disclosed.[147]

One can conceive of four general schemes for the disclosure of the price and taxes for consumer goods: 1) fully tax-exclusive prices, 2) tax and price both stated separately but not added together, 3) tax and price both stated separately and added together, and 4) fully tax-inclusive prices with no breakdown. To optimize consumer sovereignty, price and taxes should be both stated separately and added together. To arrive at this conclusion, consider the effects of each scheme.

The first two means of presenting prices—fully tax-exclusive and separate disclosure of price and tax—are tax-exclusive pricing schemes and cannot be allowed because they will cause consumer injury. Although the second scheme would present the cost of taxes, the cognitive biases discussed in Part II would still lead to undervaluation of the total cost of goods even with that disclosure. Since undervaluation of cost is the target of the disclosure requirement, it would not make sense to implement such a scheme if it would not prevent consumer injury.

A fully tax-inclusive scheme is appealing due to its simplicity but would create its own problems by hiding taxes in another way—making their existence less salient.[148] Consumers would then have trouble discovering what their tax burden is in comparison to the price for a product. This would make it difficult for consumers to

147. Fees are analogous to taxes. Some fees are already required to be disclosed by the FTC, *see, e.g.*, 16 C.F.R. § 453.2 (2010) (requiring disclosure of fees for funeral parlor goods and services), but many are not. This Note does not address fees, but one could surmise that the analysis here would easily apply to fee-exclusive pricing.

148. *See* Bird, *supra* note 14, at 66–68 (describing possible effects of keeping existence of taxes salient by excluding them from posted prices and exposing them separately at the register).

challenge taxes and might lead to over-taxation by the government.[149] Sellers might also inflate prices and blame the total cost rise on taxes, although this would most likely constitute a deceptive act and be illegal as such under the FTCA. While a fully tax-inclusive scheme could viably solve the undervaluation problem, it is not the best option given its costs.

The tax-inclusive pricing scheme with a breakdown of price and tax represents the best solution for consumers. This tax-inclusive scheme would ensure that the total price of the product would be presented to the consumer before the purchasing decision is made while also giving her the opportunity to understand her actual tax burden, alleviating over-taxation concerns.[150] This solution may also cause the taxes that have become hidden to become less regressive by making them more salient if the public takes notice of them and wishes to make a change.

There are two possible ways to disclose prices and taxes under this scheme, and sellers should be given the choice between the two. The first option would be to state the price, the taxes, and the total cost before the consumer makes the purchase, presumably by putting all the information on the price tag. Sellers wanting to distinguish between their prices and taxes would prefer this method. This type of disclosure could lead to consumer confusion, but any confusion could easily be avoided by mandating that the total cost be in a more noticeable font. The second way to disclose under the scheme is simple, easy, and practically cost-free. It would be to merely change the posted price to the tax-inclusive price and maintain the current tax and price breakdown on receipts.[151] Since disclosure requirements should impose as small a burden as possible

149. *See* Finkelstein, *supra* note 3, at 1002–05 (discussing reduced consumer response to increases in tolls, which allowed for increases in the tolls, even during election years, without negative political impact).

150. The concern arising from the disaggregation bias that consumers will undervalue their total tax burden will still exist, but the cost of providing consumers with constant reminders of what they have spent would far outweigh the benefits under this new system.

151. It is admitted that the current price and tax breakdown on receipts has not effectively counteracted the behavioral processes that lead to undervaluation of hidden taxes, and valid concerns exist that failing to change this structure will still encourage over-taxation because individuals will not be aware of their tax burden. However, by presenting the tax-inclusive price to consumers on the price tag rather than the tax-exclusive price, consumers will technically become aware of the cost of the taxes, and can determine the exact cost by looking at their receipts. Over-taxation will be less of a concern because consumers will realize the total costs of products before deciding to purchase them, and if they feel that those costs are too high, they can lobby the government to lower the tax rate.

on sellers,[152] implementing a scheme that requires only a change in posted prices—while also affording the option to present price breakdowns on the price tag—is ideal. Additionally, as the costs of implementing this rule would be small and the benefits huge, it would pass the FTC's cost-benefit analysis.

2. Implementation Challenges

Though a tax-inclusive scheme with a breakdown of price and tax appears to be the best way to prevent consumer injuries from tax-exclusive pricing, it will undoubtedly face some challenges to its implementation. Such regulation might be attacked as overly paternalistic for failing to give consumers the chance to de-bias themselves. However, consumers have proven unable to de-bias themselves, and this disclosure rule would constitute only "weak paternalism," where regulators provide individuals with the information they need to decide what they want.[153] Also, given the negligible costs of disclosure to sophisticated consumers who are relatively unharmed by undervaluation and the substantial benefits it would bring to the unsophisticated consumers suffering the most from undervaluation, the regulation would fit the definition of "asymmetrical paternalism."[154] Asymmetrically paternalistic regulation has been used approvingly in the past, especially in the consumer protection context.[155]

The regulation might also be attacked for its reliance on behavioral economics to define the consumer injury. However, the FTC's goal in all cases is to accurately understand how trade prac-

152. *See* Bar-Gill, *supra* note 94, at 63 (noting that if disclosure requirements impose too large a burden on seller, cost will be passed to consumer).

153. *See* Cass R. Sunstein, *Boundedly Rational Borrowing*, 73 U. CHI. L. REV. 249, 258 (2006) (describing de-biasing efforts through law as the "weakest form of weak paternalism [because] the relevant steering operates directly on bounded rationality and allows people to act as they see fit"); Klick & Mitchell, *supra* note 59, at 1621 (noting that under "softer forms of paternalism . . . the government regulates the form in which information and options are presented to citizens and restricts the role of laypersons in the market, legal, and political systems without completely controlling choices").

154. Camerer et al., *supra* note 145, at 1212 ("A regulation is asymmetrically paternalistic if it creates large benefits for those who make errors, while imposing little or no harm on those who are fully rational."); *see* Sunstein, *supra* note 153, at 256.

155. *See* Camerer et al., *supra* note 145, at 1212 (describing asymmetrically paternalistic regulation in consumer protection context and using Truth in Lending Act, 15 U.S.C. §§ 1601–1667f (2006), as example). Indeed most, if not all, of the FTC disclosure regulations cited in this Note, *e.g.*, *supra* notes 97–103, 138–39, fit the definition of asymmetrically paternalistic regulation.

tices affect consumers. In this instance, behavioral economics is used to supplement the rational response to hidden taxes in a way that gives a more accurate picture of consumers' reactions. Such analysis is a valuable tool when used methodically and should not be ignored by the FTC. Behavioral economics provides valuable insight into the way that trade practices will affect consumer decision-making,[156] and the FTC can use behavioral analysis to help effectively de-bias consumers, which will lead to more robust and accurate consumer protection.[157] However, behavioral economic analyses must be carefully used. There are dangers inherent in crafting regulation from such tools, and the Commission should be cautious when so doing.[158] A cautious approach would mean crafting regulations based on behavioral economic analysis only where the analysis leads to clear conclusions about consumers, as has been done here regarding the effects of tax-exclusive pricing.

A further problem is that the FTC has been reluctant to engage in substantive unfairness rulemaking, although it has not expressed a similar reluctance towards disclosure rules.[159] While the current trend of the FTC's rulemaking has involved disclosure requirements, as advocated here, most of those rules have followed congressional mandates.[160] Therefore, it may be necessary for Congress to mandate that prices be tax-inclusive before the Commission will act. Congressional action may be difficult, given the challenges of the United States political structure.[161] However, given that all voters are presumably consumers, such a provision could be expected to have a reasonable prospect of success if it made it to votes in the Senate and House of Representatives.

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156. *See, e.g.*, Congdon et al., *supra* note 67, at 2 ("Imperfectly rational people will respond to taxes in a way that is mediated by psychology.").

157. *See* Trout, *supra* note 56, at 433–34 (explaining that de-biasing through government regulation will enhance both autonomy and welfare).

158. *See* Klick & Mitchell, *supra* note 59, at 1626 (bringing attention to the potential "moral and cognitive hazards" of paternalistic interventions); Camerer, *supra* note 145, at 1253–54 (discussing need for carefully analysis of cognitive biases in order to determine if a seemingly irrational behavior is actually rational).

159. *See* Alan M. White & Cathy Lesser Mansfield, *Literacy and Contract*, 13 STAN. L. & POL'Y REV. 233, 259 (2002) ("The FTC has not issued a substantive consumer-contract regulation since the 1984 Credit Practices Rule. Recent rules tend to emphasize disclosures or the avoidance of misrepresentations and to regulate abusive conduct, rather than regulating substantive terms.").

160. MARY DEE PRIDGEN, CONSUMER PROTECTION AND THE LAW § 12:14 (2009).

161. *See, e.g.*, Daniel A. Farber & Philip P. Frickey, *Legislative Intent and Public Choice*, 74 VA. L. REV. 423, 425–37 (1988) (detailing and responding to commonly accepted problems attributed to legislative action by public choice theory).

As a practical matter, the regulation will need to have a preemption clause since taxes on consumer products are mostly state imposed rather than federally imposed.[162] Serious problems would result if the tax-inclusive scheme were not uniform. Individuals would be drawn to tax-exclusive prices and the whole scheme would be undermined. This would raise consumer protection concerns in itself as individuals could be misled by the tax-exclusive prices if they expect that all prices are tax-inclusive. Therefore, the rule would need a preemption clause to ensure that sellers in all states would fall under its mandate. Agency preemption actions can be problematic though, and may present a hurdle to adoption of the rule.[163]

Monitoring sellers also presents a challenge. There could be a large incentive to cheat the system by not including taxes because of the advantages just described. However, doing so would certainly fall under the jurisdiction of the FTCA, and sellers that violate the rule could be subjected to fines and injunctive relief.[164] This could be a strict liability offense in order to remedy the situations quickly and cheaply. Individuals would presumably be able to act as watchdogs. Price tags and receipts would allow for easy proof of violations.

Even given the challenges, the FTC should still take action. FTC Commissioners have noted that one of the strengths of the Commission is that it is charged with developing innovative regulatory solutions to potentially harmful market practices.[165] A rule mandating disclosure of taxes on consumer goods, as proposed, would play to that strength and reaffirm the Commission's commitments to innovative thinking and consumer protection.

V.
CONCLUSION

This Note has proposed that the FTC create a rule mandating tax-inclusive pricing of consumer goods. Such a dramatic shift in the way prices of consumer goods are presented may appear hope-

162. For an example of a preemption clause in a FTC rule, see 16 C.F.R. § 306.4 (2010).

163. *See* Ernest A. Young, *Executive Preemption*, 102 NW. U. L. REV. 869, 871–81 (2008) (discussing executive preemption and federalism doctrine).

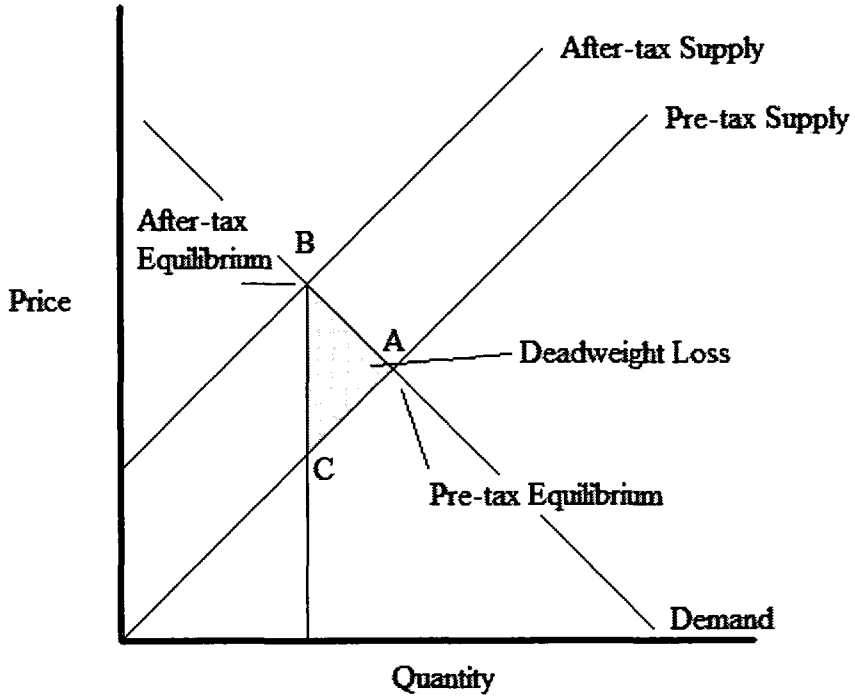
164. Federal Trade Commission Act § 5(m), 15 U.S.C. § 45(m) (2006).

165. *See generally More Than Law Enforcement: The FTC's Many Tools—A Conversation With Tim Muris and Bob Pitofsky*, 72 ANTITRUST L.J. 773 (2005) (edited version of the original conversation at the FTC 90th Anniversary Symposium (Sept. 22, 2004)).

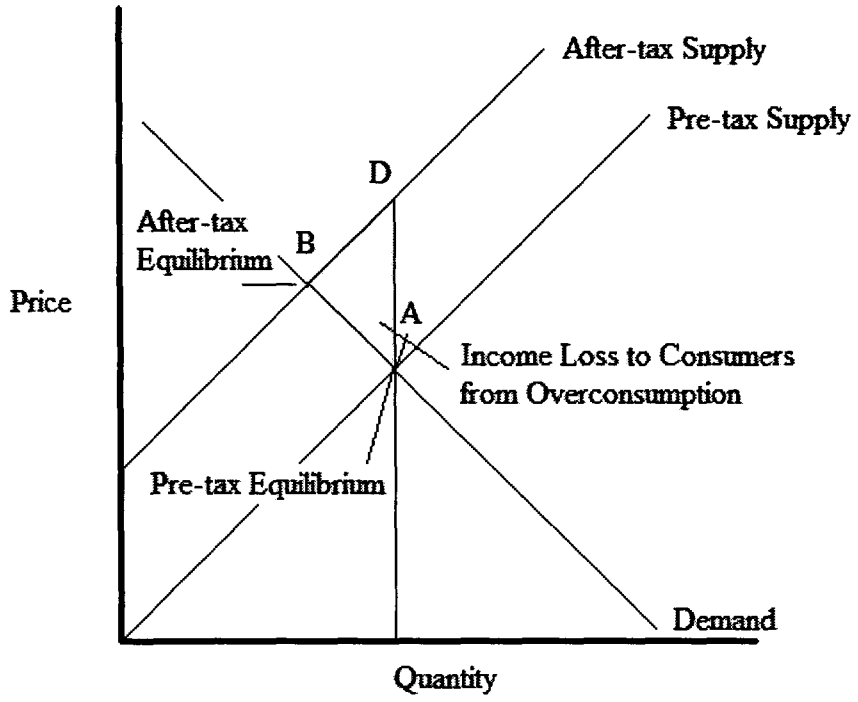
less at first glance, but the experience of the European Community and other countries provides evidence that it can work. While the United States is certainly different from its neighbors worldwide, it should not ignore the examples those neighbors provide. This Note by no means advocates that the FTC follow other countries' laws over U.S. laws, but when deciding how to draft regulation, the Commission would be wise to consider the difficulties and successes of those countries that have mandated tax-inclusive pricing.

This Note has applied the FTC's determination that incomplete information can create serious injuries to consumer sovereignty—the ability of consumers to freely choose from a variety of options on the market—to the practice of tax-exclusive pricing. Tax-exclusive pricing creates incomplete pricing information by lowering levels of tax salience such that taxes on consumer goods become hidden from and undervalued by consumers. Undervaluation leads to overconsumption and significant harm to individuals' welfare. The FTC must step in and provide consumers with the price information they are unable to discover on their own. Requiring sellers to present tax-inclusive prices is the cheapest and most efficient way of correcting this problem, and thus the Commission should mandate this practice.

APPENDIX



In this traditional model, the tax is fully salient to the consumer and its cost is considered in purchasing decisions, creating a deadweight loss to society. The deadweight loss from the tax is represented by area ABC, which is created because consumers who would be willing to purchase pre-tax are not willing to purchase after-tax.



In this hidden tax model, consumers ignore the cost of the tax and continue to purchase at pre-tax levels, causing overconsumption given the total price. The income loss to consumers from overconsumption is represented by area ABD, which is created because consumers pay more for the pre-tax equilibrium quantities than they anticipate.