

ARTICLES

Does the Individual Mandate Coerce?

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The Patient Protection and Affordable Care Act includes an individual mandate that penalizes individuals who do not purchase health insurance. Critics of the individual mandate, including a majority of justices on the Supreme Court, contend that Congress cannot use its Commerce Clause power to coerce individuals to buy a product. Supporters concede that the mandate coerces but argue that it is otherwise permissible under the Commerce Clause. This article questions whether the individual mandate coerces. It uses a simple economic model to show that, under certain conditions, the individual mandate induces insurers to sell health insurance at a price each individual would voluntarily pay. Accordingly, the article concludes that the premise underlying the debate over the constitutionality of the individual mandate under the Commerce Clause should not be taken for granted.

I. INTRODUCTION	1	R
II. INFORMAL EXAMPLE.....	4	R
III. DISCUSSION	9	R
IV. CONCLUSION	12	R
V. APPENDIX	13	R
A. <i>Equilibrium</i>	15	R
1. SEPARATED MARKET	16	R
2. POOLED MARKET	16	R
B. <i>The Individual Mandate</i>	18	R

I. INTRODUCTION

Imagine that you have not followed the news.¹ You decide to go to an electronics store to browse high-definition televisions (“HDTVs”),

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1. This hypothetical was used previously in a blog post by one of the authors to discuss this article. See Sergio J. Campos, *No Coercion, Maybe?*, PRAWFSBLAWG (Oct. 12, 2012, 11:13 AM), <http://prawfsblawg.blogs.com/prawfsblawg/2012/10/no-coercion-maybe.html>.

and you are willing to buy an HDTV if it is less than \$1,000. To your surprise, your dream HDTV is on sale for \$800. In fact, all of the HDTVs in the store are being sold at much lower prices. After you happily buy your dream HDTV, you walk out of the store and pass by a newspaper stand. You read the following headline on the cover of a newspaper: “GOVERNMENT MANDATE TO PURCHASE HDTVS LOWERS PRICES.” You purchase a copy of the newspaper and read the article, which states that Congress passed a law requiring all persons to buy an HDTV, and that the law caused HDTV manufacturers to decrease the price of televisions.

Were you coerced into buying your HDTV by the mandate? Because you willingly purchased the TV at the new (low) price, a claim of coercion is difficult to support. For example, if the price drop had been caused by competitive market pressure, or by improvements in production technology, then it would be difficult to claim coercion. If the price drop is generated by a mandate, then similar reasoning should also apply: You voluntarily purchased the HDTV because the price was right, and therefore, you were not coerced.

In this article we show that, like the above hypothetical market for HDTVs, a mandate in the market for health insurance does not necessarily lead to coercion. The Patient Protection and Affordable Care Act (“ACA”)² contains provisions that penalize certain individuals who fail to purchase health care insurance.³ These provisions are commonly known as the individual mandate. Since the passage of the ACA, an extensive debate has taken place over Congress’s ability to enact the individual mandate under the Commerce Clause, which gives Congress the “Power . . . [t]o regulate Commerce . . . among the several States”⁴ Critics of the individual mandate contend that Congress cannot use its power under the Commerce Clause to coerce individuals to purchase a product.⁵ Supporters of the individual mandate concede

2. Patient Protection & Affordable Care Act, Pub. L. No. 111–148, 124 Stat. 119 (2010), amended by Health Care & Education Reconciliation Act of 2010, Pub. L. No. 111–152, 124 Stat. 1029 (codified as amended in scattered sections of 25, 26, and 42 U.S.C.).

3. These provisions are entitled the “[r]equirement to maintain minimum essential coverage” and are codified as part of the Internal Revenue Code. I.R.C. § 5000A(b)(1) (Supp. V 2012).

4. U.S. CONST. art. I, § 8, cl. 3.

5. Florida *ex rel.* Att’y Gen. v. U.S. Dep’t of Health & Human Servs., 648 F.3d 1235, 1311 (11th Cir. 2011) (“[W]hat Congress cannot do under the Commerce Clause is mandate that individuals enter into contracts with private insurance companies for the purchase of an expensive product from the time they are born until the time they die.”), *aff’d in part, rev’d in part sub nom.* Nat’l Fed’n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566 (2012); Virginia *ex rel.* Cuccinelli v. Sebelius, 728 F. Supp. 2d 768, 788 (E.D. Va. 2010) (“At its core, this dispute is not simply about regulating the business of insurance—or, crafting a scheme of universal health insurance coverage—it’s about an individual’s right to choose to participate.”), *vacated*, 656 F.3d 253 (4th Cir. 2011); Randy E. Barnett, *Commandeering the People: Why the Individual Health Insurance*

that the mandate coerces, but argue that it is a permissible exercise of Congress's Commerce Clause power because of the uniqueness of the health care market.⁶

The debate has resulted in litigation in a number of state and federal courts, which culminated in *National Federation of Independent Business v. Sebelius*, decided by the Supreme Court at the end of the 2012 term.⁷ There, the Court upheld the mandate as a valid exercise of Congress's tax power.⁸ However, the Court was divided over whether Congress could enact the mandate under the Commerce Clause. A majority of justices agreed with critics that the Commerce Clause does not permit Congress to "compel[] individuals to *become* active in commerce by purchasing a product."⁹ They pointed out that if the individual mandate is upheld under the Commerce Clause, then "Congress could address the diet problem by ordering everyone to buy vegetables."¹⁰ The remaining justices conceded that the individual mandate coerces.¹¹ However, parroting the supporters, they concluded that the individual mandate is valid

Mandate Is Unconstitutional, 5 N.Y.U. J.L. & LIBERTY 581, 634 (2010) (arguing that commandeering citizens to purchase health insurance is unconstitutional, specifically noting that the individual mandate "crosses an important line between limited and unlimited government power"); Interview by Ezra Klein with Randy Barnett, *Obamacare's Most Influential Legal Critic on Tuesday's Oral Arguments*, WASH. POST WONKBLOG (Mar. 27, 2012, 4:52 PM), http://www.washingtonpost.com/blogs/ezra-klein/post/obamacares-most-inuential-legal-critic-on-tuesdays-oral-arguments/2011/08/25/gIQAq2NpeS_blog.html ("What the government is claiming here is this power . . . to make people do business with private companies when Congress thinks it's convenient.").

6. See, e.g., Henry Paul Monaghan, *A Conservative Law Professor on the Obvious Constitutionality of Obamacare*, THE NEW REPUBLIC (Apr. 16, 2012), <http://www.newrepublic.com/article/politics/102685/conservative-defense-obamacare-affordable-care-health> (arguing that the mandate is constitutional because "the market for health care is distinctive (if not entirely unique) in several key respects"); Brief of Amici Curiae Economic Scholars in Support of Petitioners Urging Reversal on the Minimum Coverage Issue at 6, Sec'y of Health & Human Servs. v. Florida, 132 S. Ct. 2566 (2012) (No. 11–398) [hereinafter "Economic Scholars' Brief"] (discussing the "substantial market imperfections in medical care"). For specific reasons why supporters believe that the mandate is justified, see *infra* text accompanying notes 26–30.

7. *Nat'l Fed'n of Indep. Bus.*, 132 S. Ct. 2566.

8. *Id.* at 2600; see also U.S. CONST. art. I, § 8, cl. 1 ("Congress shall have the Power To lay and collect Taxes . . . and provide for the common Defence and general Welfare of the United States . . ."). We do not address the issue, but others have. E.g., Robert D. Cooter & Neil S. Siegel, *Not the Power to Destroy: An Effects Theory of the Tax Power*, 98 VA. L. REV. 1195 (2012).

9. *Nat'l Fed'n of Indep. Bus.*, 123 S. Ct. at 2587. Justice Scalia, in a dissent joined by Justices Kennedy, Thomas, and Alito, echoed Chief Justice Roberts's rejection of the government's Commerce Clause theory. See *id.* at 2575 (majority opinion); *id.* at 2643 (Scalia, J., dissenting).

10. *Id.* at 2588–89 (majority opinion) (citation omitted); see also *id.* at 2648 (Scalia, J., dissenting) ("But the mere fact that we all consume food and are, thus, sooner or later, participants in the 'market' for food, does not empower the Government to say when and what we will buy.").

11. *Id.* at 2619–20 (Ginsburg, J., dissenting) (accepting the idea that Congress is compelling purchase of insurance).

under the Commerce Clause given the special features of the health insurance market.¹²

In this article we question the consensus that the individual mandate coerces. Using a simple economic model provided in the Appendix,¹³ we show that, under certain conditions, the individual mandate may not coerce individuals to purchase health insurance. Under the conditions we identify, the model shows that the individual mandate induces insurers to sell health insurance at a price that *everyone* would voluntarily pay. Like the hypothetical HDTV mandate described above, the individual mandate in the health insurance market may not coerce individuals to purchase insurance against their will. Accordingly, we show that the premise underlying the debate over the constitutionality of the individual mandate under the Commerce Clause should not be taken for granted.

We begin with an informal example to illustrate the consequences of the individual mandate.¹⁴ The example first shows that the individual mandate may generate a reduction in the price of health insurance. It then shows that this price reduction may be large enough that everyone would be willing to purchase insurance at the post-mandate price. After discussing the example, we address counterarguments to our conclusion that the individual mandate may not coerce.¹⁵ After a brief conclusion,¹⁶ we provide an Appendix, which contains a simple formal model that justifies the conclusions contained in the informal example.¹⁷

II. INFORMAL EXAMPLE

We begin with an informal example to illustrate our argument. Imagine that the citizens of the United States who are subject to the individual mandate can be divided into two groups of equal size, for a total of 200 individuals. Individuals within either group may require a health care treatment that costs \$100,000 in a given year, but the groups have a different risk of incurring this cost.¹⁸ The first group, the “high-risk” group, consists of individuals who are relatively more likely to need this treatment. Assume that each individual in the high-risk group

12. *Id.* at 2642 (Ginsburg, J., dissenting).

13. *See infra* Appendix.

14. *See infra* Part II.

15. *See infra* Part III.

16. *See infra* Part IV.

17. *See infra* Appendix.

18. We note that only 1% of all individuals have health care costs averaging \$85,000, while the yearly average for most individuals was \$6,305 in 2007. *See* Economic Scholars’ Brief, *supra* note 6, at 8–9 (citations omitted). In this informal example, we set the numbers for ease of exposition.

has a 3% chance of incurring the cost of \$100,000 in a given year. The second group consists of “low-risk” individuals. In this group, the risk of incurring this cost is lower, and thus each individual only has a 2.5% chance of requiring the \$100,000 treatment. Assume that the individuals in both groups are willing to pay a premium for health insurance that is equal to the expected cost of their health care.¹⁹ Thus, the high-risk group is willing to pay a premium of \$3,000 a year for health insurance, while the low risk group is willing to pay a premium of \$2,500 a year.²⁰

For the sake of simplicity, assume that the United States has only one insurer who has a monopoly in the market for health insurance, but is subject to the threat of competition.²¹ The threat of competition restricts the profit of the monopolist. If the monopolist earns a sufficiently high profit, a competitor may find it beneficial to enter the market. In this example, suppose that the most the monopolist can earn without triggering entry is \$50,000.

Furthermore, assume that the insurer, as a monopolist, can purchase health care for much less than any individual. For example, assume that the insurer only has to pay \$75,000 for the treatment above, rather than the \$100,000 each individual would have to pay if needed. However, assume that the insurer does not have any information about each individual’s risk of needing health care, and thus, instead of pricing the insurance on an individual basis, chooses a single price for everyone.²²

Suppose that the insurer charges \$2,750 for insurance. No one in the low-risk group would purchase the insurance at this price because each individual in the group would only be willing to pay \$2,500. How-

19. Risk-averse individuals may actually be willing to pay *more* for the expected costs of their health insurance. See Jonathan Gruber, *Covering the Uninsured in the United States*, 46 J. ECON. LITERATURE 571, 577 (2008) (discussing risk aversion). We assume that the individuals here are risk neutral for ease of exposition. As noted in the Appendix, the risk preferences of the groups are irrelevant to our conclusions so long as the individuals within each group have the same preferences. See *infra* Appendix.

20. In 2008, the average non-group policy annual premium for all individuals was \$2,985, and the average non-group policy annual premium for individuals aged 30–34, which would approximate the low-risk group in our example, was \$2,104. AMERICA’S HEALTH INS. PLANS CTR. FOR POLICY & RESEARCH, *INDIVIDUAL HEALTH INSURANCE 2009: A COMPREHENSIVE SURVEY OF PREMIUMS, AVAILABILITY, AND BENEFITS 5* (2009), available at <http://www.ahipresearch.org/pdfs/2009IndividualMarketSurveyFinalReport.pdf>; see also Economic Scholars’ Brief, *supra* note 6, at 14 n.39 (citing this study to discuss impact of the individual mandate to low-risk individuals). Again, we set the numbers here for ease of exposition.

21. This constraint is specified in more detail below. See *infra* Appendix.

22. We note that the individuals’ differing preferences, along with the insurer’s inability to price discriminate among the individuals, may result in adverse selection. See George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 493 (1970); see also Gruber, *supra* note 19, at 576. We further note that, as an empirical matter, “there is surprisingly little work on the general question whether those who choose to be insured are adversely selected . . .” *Id.* at 577.

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ever, all 100 of the individuals in the high-risk group would purchase the insurance because they are willing to pay as much as \$3,000. The insurer's revenue is \$275,000 ($\$2,750 \times 100$) for the population, but the insurer would have to subtract costs of \$225,000 ($0.03 \times \$75,000 \times 100$, or $3 \times \$75,000$).²³ By charging a price of \$2,750, the insurer generates a profit of \$50,000 ($\$275,000 - \$225,000$). This is the highest profit that the monopolist can earn without triggering competition.

Now assume that the insurer sells the insurance for \$2,312.50. Here, individuals in both the low-risk group and the high-risk group would be willing to purchase the insurance. The insurer would make \$462,500 ($\$2,312.50 \times 200$) for the population, and have costs of \$225,000 ($0.03 \times \$75,000 \times 100$, or $3 \times \$75,000$) for the high-risk group, and \$187,500 ($0.025 \times \$75,000 \times 100$, or $2.5 \times \$75,000$) for the low-risk group. The total profit for the insurer, then, would be \$50,000 ($\$462,500 - (\$225,000 + \$187,500)$). By charging \$2,312.50, the insurer also makes the highest profit possible without triggering competition. Accordingly, either of these prices (\$2,750 or \$2,312.50) allows the insurer to earn the highest profit possible. From the perspective of the insurer, both of these prices are equivalent.

This equivalence does not hold in all scenarios. If the difference in risk between the high-risk group and the low-risk group is significant, then there may be no price that would induce everyone to buy insurance while still earning the insurer a sufficiently large profit. For example, if the low-risk group had a 1% risk of needing the health treatment, then the insurer could not make a profit because the highest possible price it could charge, \$1,000, would not be able to cover all health costs. It would only gain \$200,000 ($200 \times \$1,000$) in revenues, but have \$300,000 ($(3 \times \$75,000) + (1 \times \$75,000)$) in costs.

However, if the risk of insuring both groups is sufficiently similar (that is, the risk homogeneity of the groups is high), then the mandate has the benefit of inducing the insurer to price health insurance low enough so that everyone would be willing to buy it. And indeed, as shown in more detail in the Appendix, a range of risk homogeneity exists in which the insurer is indifferent between pricing insurance for the high-risk group only, or pricing the insurance low enough so that everyone would be willing to purchase. Either way, the insurer makes the maximum profit possible.²⁴

If the insurer is initially setting a high price and selling only to the high-risk group, then the mandate can change the insurer's pricing

23. If the high-risk group of 100 has a 3% of incurring health care costs of \$75,000, one can infer that three individuals in the group will incur health care costs of \$75,000.

24. See *infra* Appendix.

behavior. By making a credible commitment to the insurer that everyone will purchase, the individual mandate creates a self-fulfilling prophecy. After the mandate is in place, the price drops enough that everyone will, in fact, voluntarily purchase.

The credible commitment communicated by the individual mandate, as it turns out, would not require the government to actually coerce individuals to purchase health insurance against their will. Consider an extreme example: Suppose that Congress communicates the passage of the individual mandate to the insurer and to some (large) portion of consumers, but some consumers remain unaware that the mandate is in place. Once the insurer adjusts the price, even individuals who are unaware of the mandate will voluntarily purchase the health insurance because of the price.²⁵ Thus, the individual mandate does not even have to play a role in each individual's decision-making to cause each individual to purchase health insurance.

Finally, this informal example and the model it relies upon show that coercion is not necessary for the individual mandate to perform the cross-subsidy and prepayment functions identified by the mandate's supporters. Supporters of the individual mandate argue that the mandate is necessary given (1) the inevitability of health care purchases over the course of an individual's lifetime; (2) the uncertainty of when an individual would need to make those purchases; and (3) the refusal by society to deny care to individuals who cannot afford to pay for it.²⁶ Consequently, supporters contend that the mandate forces younger and healthier individuals to purchase health insurance, which, when combined with the "community rating"²⁷ and "guaranteed issue"²⁸ provisions of the ACA, lowers the cost of health insurance for everyone.²⁹

25. We assume for this model that people who are willing to buy health insurance at a given price will do so at that price. For a discussion of this assumption, see *infra* notes 39–40 and accompanying text.

26. *Thomas More Law Ctr. v. Obama*, 651 F.3d 529, 556–57 (6th Cir. 2011) (Sutton, J., concurring); Economic Scholars' Brief, *supra* note 6, at 6–13; see also Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941, 948–54 (1963). The refusal to deny care is reflected in federal and state laws that mandate treatment in certain cases without regard to the patient's ability to pay. *E.g.*, 42 U.S.C. § 1395dd(g)–(h) (2006) (mandating treatment of emergency patients without regard to their ability to pay); FLA. STAT. § 395.1041(3)(k)(1) (2012) (mandating provision of emergency care if requested).

27. 42 U.S.C. § 300gg–4(b) (Supp. V 2012) (prohibiting an insurer from "requir[ing] any individual . . . to pay a premium or contribution which is greater than such premium or contribution for a similarly situated individual" based on certain health-status factors).

28. *Id.* §§ 300gg–1, 300gg–3, 300gg–4(a) (Supp. V 2012). Section 300gg–1 provides that "each health insurance issuer that offers health insurance coverage in the individual or group market in a State must accept every employer and individual in the State that applies for such coverage."

29. Specifically, (1) forcing younger and healthier individuals to purchase health insurance (the individual mandate); (2) prohibiting price discrimination among customers (the community

Supporters also point out that the mandate coerces individuals to prepay for their own health care to eliminate free riding.³⁰

But as the informal example shows, the mandate can perform these functions without coercion. If the insurer sells only to the high-risk group before the mandate, then all of the profits of the insurer are extracted from this group, leaving each high-risk individual with a \$250 gain (\$3,000 – \$2,750) from trade. After the introduction of the mandate, the insurer extracts profit from both groups, relieving some of the pressure on the high-risk group. Under the mandate, the price drops to \$2,312.50, increasing the gains from trade to the high-risk group to \$687.50 (\$3,000 – \$2,312.50), a more than \$400 increase. At the same time, the low-risk group is also voluntarily purchasing, so they must expect positive gains from trade as well, \$2,500 – \$2,312.50, or \$187.50. The insurer is equally well-off in both cases, earning the maximum profit possible without triggering entry from competitors, \$50,000. Introducing the mandate thus improves the payoffs of both groups of individuals without reducing the insurer's profit.

Moreover, the insurer's economies of scale generate an incentive for both groups of individuals to prepay for their health care through health insurance rather than purchase health care when the need arises. As shown in the example above, both groups save money by purchasing

rating provisions); and (3) prohibiting health insurers from refusing to insure an individual (the guaranteed issue provisions) all result in younger and healthier individuals subsidizing the health expenditures of others. See *Thomas More Law Ctr.*, 651 F.3d at 535 (upholding the mandate, noting that “Congress found that ‘[b]y significantly reducing the number of the uninsured, the [minimum coverage] requirement, together with the other provisions of this Act, will lower health insurance premiums.’” (quoting 42 U.S.C. § 18091(a)(2)(F) (Supp. V 2012)); Economic Scholars’ Brief, *supra* note 6, at 10 (“Health insurance is a mechanism for spreading the costs of that medical care across people”); Jack Balkin, *Commerce*, 109 MICH. L. REV. 1, 46 (2010) (“To . . . lower insurance costs, health reform must bring younger and healthier persons into the risk pool.”).

30. See *Thomas More Law Ctr.*, 651 F.3d at 535 (upholding the mandate, noting that “Congress found that without the minimum coverage provision, other provisions in the Act, in particular the guaranteed issue and community rating requirements, would increase the incentives for individuals to ‘wait to purchase health insurance until they needed care’” (quoting 42 U.S.C. § 18091(2)(I) (Supp. V 2012))); see also *id.* at 557 (Sutton, J., concurring) (“The basic policy idea, for better or worse (and courts must assume better), is to compel individuals with the requisite income to pay now rather than later for health care.”); *Seven-Sky v. Holder*, 661 F.3d 1, 18 (D.C. Cir. 2011) (upholding mandate, noting that “Congress, which would, in our minds, clearly have the power to impose insurance purchase conditions on persons who appeared at a hospital for medical services—as rather useless as that would be—is merely imposing the mandate in reasonable anticipation of virtually inevitable future transactions in interstate commerce”), *abrogated by Nat’l Fed’n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2566 (2012); Economic Scholars’ Brief, *supra* note 6, at 10 (noting that health insurance “mitigat[es] the risk of facing overwhelming costs at a particular time by substituting a lower, regular premium cost over a longer period”).

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health insurance from the insurer rather than purchasing the treatment out of pocket.

III. DISCUSSION

The informal example, and the model in the Appendix that justifies it, show that, under certain conditions, the individual mandate may not coerce. In this brief discussion, we address possible counterarguments to our conclusions.

Critics may argue that the model does not take into account the realities of the health care market. We concede that the model does not capture the market's full complexity.³¹ In fact, this was a deliberate choice. We have abstracted away from the many complex facets of the health care market to demonstrate that the individual mandate may not force individuals to buy insurance. In doing so, our model casts some doubt on the central premise of the debate over the mandate's constitutionality under the Commerce Clause.

Conversely, it may be the critics who take too simplistic a view of the health care market. By arguing that the individual mandate coerces individuals into purchasing insurance under the pre-mandate prices,³² critics ignore the price impact of the mandate. As we have argued in this article, understanding the price impact is central to the question of whether the individual mandate coerces. If the price drop is sufficiently large so that all individuals are willing to voluntarily purchase at the new price, claims of coercion are unsubstantiated.

Moreover, the claim that the individual mandate coerces is, at the very least, exaggerated given empirical evidence about the U.S. health care market. First, the model assumes that insurers can use economies of scale in purchasing health care, and thus can purchase health care more cheaply than individuals. There is some evidence to support this assumption. Anecdotally, insurers, hospitals, and other health care providers generally use group-purchasing organizations ("GPOs") to purchase health care supplies and devices, presumably to take advantage of economies of scale.³³ Moreover, arguments in favor of single-payer health care presume cost efficiencies that are consistent with the econo-

31. See Arrow, *supra* note 26, at 948–54 (discussing the unique features of the health care market).

32. See, e.g., Barnett, *supra* note 5, at 633–34.

33. See Group Purchasing Organizations: Use of Contracting Processes and Strategies to Award Contracts for Medical-Surgery Products: Hearing Before the Subcomm. on Antitrust, Competition Policy and Consumer Rights of the S. Comm. on the Judiciary, 108th Cong. 5 (2003) (statement of Marjorie Kanof, Director of Healthcare for Clinical and Military Health Care Issues, U.S. GAO).

mies of scale we assume in the model.³⁴

Second, the model shows that the risk homogeneity among individuals must be sufficiently high to avoid coercion. This may, in fact, be the case. Under the ACA, the two groups with the highest risk of health care expenditures—the elderly and the poor³⁵—are excluded from the mandate and are provided health insurance publicly through Medicare and Medicaid.³⁶ The ACA, moreover, expands the individuals covered by Medicaid, even though, under the Supreme Court’s ruling, states may be less likely to implement the expansion.³⁷ In addition to the limited scope of the individual mandate, the ACA provides subsidies to individuals who may not purchase health insurance because, while it may be otherwise rational to purchase insurance, they do not have the ability to pay for it.³⁸

Critics may further argue that, given the large population affected by the mandate, there may be individuals who are still coerced by it. Under the model, the types of individuals who would be coerced would be individuals who (1) have a very low risk of requiring health care and (2) can self-insure all health care purchases. There is some empirical evidence to suggest that there are not very many individuals who possess these two characteristics. In fact, in her dissent, Justice Ginsburg pointed to a study that showed that the number of uninsured individuals who “did not want or need coverage” was too small “to warrant its own category.”³⁹ The Supreme Court has further stressed that “where a *general regulatory statute bears a substantial relation to commerce*, the *de minimis* character of individual instances arising under that statute is of no consequence.”⁴⁰

34. These arguments rely mostly on the reduction in administrative costs in a single-payer system and a single-payer’s monopsony power to negotiate lower prices for health care. See Sherry Glied, *Single Payer as a Financing Mechanism*, 34 J. HEALTH POL. POL’Y & L. 593, 601–05 (2009) (reviewing literature).

35. See, e.g., JENNIFER JENSON, CONG. RESEARCH SERV., RS22898, GOVERNMENT SPENDING ON HEALTH CARE BENEFITS AND PROGRAMS: A DATA BRIEF tbl.2 (2008).

36. See I.R.C. § 5000A(e)(1) (Supp. V 2012) (exempting individuals from the mandate “who cannot afford coverage”); § 5000A(f)(1)(A)(i)–(ii) (providing that individuals who are covered under Medicare and Medicaid satisfy the individual mandate requirement).

37. Cf. *Nat’l Fed’n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2566, 2604 (2012) (reducing the incentives for states to accept the expansion because the original incentives in the ACA amounted to “a gun to the head”).

38. I.R.C. § 36B(a) (providing “premium assistance” for individuals subject to the mandate based on certain income criteria).

39. *Nat’l Fed’n of Indep. Bus.*, 132 S. Ct. at 2613 n.1 (Ginsburg, J., dissenting) (citing U.S. DEP’T OF HEALTH & HUMAN SERVS., SUMMARY HEALTH STATISTICS FOR THE U.S. POPULATION: NATIONAL HEALTH INTERVIEW SURVEY, 2009 at 71 tbl.25 & 72 n.2 (2010), available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_248.pdf).

40. *United States v. Lopez*, 514 U.S. 549, 558 (1995) (citing *Maryland v. Wirtz*, 392 U.S. 183, 197 n.27 (1968)); see also *Gonzales v. Raich*, 545 U.S. 1, 17 (2005) (noting that the Court

Finally, critics may disagree with the definition of coercion used in this article. We view coercion as a requirement to purchase a product when it would not be rational to do so based upon the product's cost and benefit. In our view, an individual is coerced if he or she is required to purchase a product for which the value she gets for the product is less than the price that she must pay. Critics may have in mind a more expansive definition of coercion in which individuals are coerced if they are forced to purchase health insurance even if it would be rational to do so under the model. For example, an individual may refuse to buy insurance out of spite or ideological commitments.

First, we assume that critics of the mandate do not contend that the Constitution protects the liberty to refuse to purchase insurance and rely on others to pay for health care when the need arises. There is a general consensus that everyone has a responsibility to pay for his or her own health care costs.⁴¹

We further assume that critics do not argue that the law protects the freedom of individuals to refuse to purchase insurance based on misinformation or other rationality defects. Such paternalism may be frowned upon by some,⁴² but it is generally not viewed as coercive under the law. For example, courts generally prevent consumers from waiving certain remedies when they purchase a product.⁴³ As a result, manufacturers pass on their expected remedy costs to the consumers, in effect forcing consumers to purchase "mandatory insurance . . . for a single price" that is tied to the product.⁴⁴ Such "mandatory insurance" tends to be coercive even under our own definition of coercion because the resultant purchases generally do not "mirror the results achieved in voluntary

has "never required Congress to legislate [under the Commerce Clause] with scientific exactitude"); *Perez v. United States*, 402 U.S. 146, 154 (1971) ("When it is necessary [under the Commerce Clause] in order to prevent an evil to make the law embrace more than the precise thing to be prevented it may do so.") (citing *Westfall v. United States*, 274 U.S. 256, 259 (1927)); *cf. Florida ex rel. Att'y Gen. v. Dep't of Health & Human Servs.*, 648 F.3d 1235, 1294 (11th Cir. 2011) ("Congress may, in some instances, regulate individuals who are consuming health care but not themselves causing the cost-shifting problem.").

41. Jedediah Purdy & Neil S. Siegel, *The Liberty of Free Riders: The Minimum Coverage Provision, Mill's "Harm Principle," and American Social Morality*, 38 AM. J.L. & MED. 374, 381–82 (2012) (noting lack of support for this definition of coercion).

42. *Id.* at 383 ("[John Stuart] Mill rejected paternalistic justifications for the exercise of coercive power, which seek to prevent individuals from harming themselves.").

43. *See, e.g.*, Richard A. Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645, 646 (1985) ("[P]ublic policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market.") (quoting *Escola v. Coca-Cola Bottling Co.*, 150 P.2d 436, 440 (Cal. 1944) (Traynor, J., concurring)).

44. Epstein, *supra* note 43, at 688 ("The current doctrines of products liability law can be understood as a form of mandatory insurance that is tied to the sale of an automobile [or other product]," where "a single price has to be charged . . .").

[transactions].”⁴⁵ But such “mandatory insurance” is ubiquitous in many settings, and courts do not consider it coercive.⁴⁶

Second, we are skeptical that preferences based on spite or ideology would cause individuals to forgo health insurance that would be rational to purchase based on their health risks. In addition, the individual mandate would not apply to some of these individuals because the ACA excludes those who refuse to purchase insurance for religious reasons.⁴⁷

Third, and most importantly, we emphasize that the definition of coercion we use in the model is generally accepted in the law. In many contexts, the law has recognized that an individual is not coerced to purchase a private good if that individual otherwise would be willing to pay the price for it. In antitrust cases, for example, courts have concluded that an antitrust violation does not force a purchaser to buy a good at an inflated price if the purchaser would be willing to pay that price in the absence of the violation.⁴⁸ Similarly, a fraud does not coerce an individual to purchase a good if that person would have willingly purchased the good in the absence of the fraud.⁴⁹

IV. CONCLUSION

Our goal in writing this article is not to prove conclusively that the

45. *Id.* at 668.

46. Critics may argue that a state may coerce the purchase of mandatory insurance by limiting the waiver of remedies, but the federal government cannot do so under the Commerce Clause. However, under the Magnuson-Moss Warranty Act, federal law prohibits a supplier from disclaiming any implied warranties to consumers under certain conditions, which effectively requires consumers to purchase mandatory insurance under those conditions. *See* 15 U.S.C. § 2308(a) (2006) (prohibiting disclaiming of implied warranties if the supplier provides a written warranty or the parties enter into a service contract within 90 days). Relatedly, federal law imposes a limitation on the waiver of remedies in the maritime context, effectively forcing passengers to purchase mandatory insurance from the owner of the vessel. *See* 46 U.S.C. § 30509(a)(1)(A) (2006) (“The owner . . . of a vessel . . . may not include in a regulation or contract a provision limiting . . . the liability of the owner, master, or agent for personal injury or death caused by the negligence or fault of the owner or the owner’s employees or agents . . .”).

47. 26 U.S.C. § 5000A(d)(2) (Supp. V 2012) (exempting from the mandate those who refuse to purchase insurance because of religious objections or who participate in a “health care sharing ministry”).

48. *E.g.*, *In re New Motor Vehicles Can. Exp. Antitrust Litig.*, 522 F.3d 6, 29 (1st Cir. 2008) (noting that an alleged antitrust violation may not have injured all plaintiffs because some “poor negotiators” may have been willing to pay the same price in the absence of the violation); *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 325–26 (3d Cir. 2008) (concluding that an alleged price-fixing conspiracy may not have injured all plaintiffs because some plaintiffs may have been willing to purchase the good at the inflated price).

49. *E.g.*, *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 223 (2d Cir. 2008) (noting that the alleged fraud may not have induced individuals to purchase cigarettes if they would have purchased the cigarettes anyway because they “preferred the taste”); *see also* Sergio J. Campos, *Proof of Classwide Injury*, 37 BROOKLYN J. INT’L L. 751, 758–65 (2012) (discussing examples).

individual mandate does not coerce. Whether the mandate does coerce is an empirical question that, according to the model we provide, depends on a number of factors. Instead, our goal is to suggest that any argument about the coercive effect of the mandate is incomplete if it does not account for any price reduction generated by the mandate. Doing so implicitly assumes that implementing the mandate will not reduce the price. Although the Supreme Court has already passed on the constitutionality of the individual mandate, hopefully we will not make similar assumptions so easily in the future. Because we all know what happens when we assume . . .

V. APPENDIX

We provide a simple formal model to justify our argument. A large population of individuals exists. Each individual is at risk for an adverse event, which can be interpreted as an illness or injury requiring medical care. Different types of individuals face different levels of risk: High-risk individuals are more likely to experience this event than low-risk individuals. Let α_H represent the probability that a high-risk individual experiences the adverse event, and α_L represent the probability that a low-risk individual experiences the event; by definition, $\alpha_H > \alpha_L$. In addition, let g represent the share of low-risk individuals in the population; the probability that an individual drawn from the population is low risk is therefore equal to g . Individuals do not know whether they will have an accident or illness at the time they decide to buy insurance, but they do know their level of risk.⁵⁰ No outsider, particularly an insurance company, can directly observe an individual's type.

If they choose to do so, individuals can purchase insurance. To keep the analysis as straightforward as possible, we assume that only a single insurance plan is offered.⁵¹ In exchange for a premium p , the insurer promises to cover all losses caused by the adverse event, which we normalize to one. Normalizing the payoff of the status quo (no adverse event, no insurance) to zero, an insured individual expects a

50. We assume that individuals cannot affect the level of risk they face by changing their behavior. We therefore do not incorporate moral hazard, a potentially important issue in insurance markets (but not in the argument against the mandate), into the analysis. We note that the evidence of moral hazard may be overstated due to income effects. See Gruber, *supra* note 19, at 578, 581 (citations omitted). Moreover, there are legal mechanisms to reduce or eliminate moral hazard, such as deductibles and co-payments. See STEVEN SHAVELL, *ECONOMIC ANALYSIS OF ACCIDENT LAW* 194–99 (1987); Mark V. Pauly, *The Economics of Moral Hazard: Comment*, 58 AM. ECON. REV. 531, 536 (1963).

51. For simplicity, we assume that an insurer is unable to offer different plans in order to screen the customer's information. We note that the ACA contains community-rating provisions, which prohibit insurers from engaging in price discrimination on the basis of a consumer's health status. 42 U.S.C. § 300gg-4(b)(1) (Supp. V 2012).

payoff of $-p$ whether or not the event occurs, while an uninsured individual receives a payoff of zero if no event takes place and negative one if the individual is required to pay for medical care in case of illness or accident.

	Event	No Event
Insurance	$-p$	$-p$
No Insurance	-1	0

If an individual has probability α_i of having an adverse event and does not purchase insurance, he or she expects payoff $-\alpha_i$. By buying insurance, the individual guarantees a payoff of $-p$. Therefore, the individual will choose to purchase insurance if the price of insurance is less than the probability of accident or illness, $\alpha_i \geq p$.⁵² This simple idea points out a fundamental aspect of the insurance market: High-risk individuals have the greatest incentive to purchase insurance. If low-risk individuals are willing to purchase insurance at a certain price, high-risk individuals are also willing.

The insurance industry is characterized by a single incumbent firm and a potential entrant. In order to enter the market, the entrant must pay a fixed fee β , which covers infrastructure, staff, licenses, and other costs associated with market entry. If the entrant chooses to enter the market at a point in time, the entrant may have an advantage: By undercutting the incumbent's price to consumers slightly and offering slightly more to doctors and medical providers, the entrant could successfully poach both the incumbent's customers and medical providers at terms nearly identical to those offered by the incumbent. The entrant could therefore earn nearly the same expected profit as the incumbent, while effectively forcing the incumbent out of the industry.⁵³ Thus, the presence of the entrant limits the incumbent's ability to earn profit. If the incumbent's expected profit exceeds the entry fee β , the incumbent should anticipate being undercut by the entrant, leaving the incumbent with zero profit. Thus, the incumbent's expected profit cannot exceed β , the entry fee.

Because the incumbent insurance firm is a large buyer of medical services, it is able to negotiate favorable rates for these services with hospitals and doctors, allowing it to pay a lower price for medical care than is available to individual consumers. While an individual with no

52. Our model does not make any assumptions about each individual's risk preferences. Thus, the model can accommodate both risk-averse and risk-seeking individuals as long as their risk preferences are homogenous.

53. The same would be true if we considered competition over a longer time horizon. We focus on one-time competition for ease of exposition.

insurance pays a price of 1 for treatment in case of illness or injury, the insurance company pays only $c < 1$ for its customer's treatment.

In the equilibrium of this market, the entrant chooses the price of insurance to maximize its expected profit, accounting for the limitations placed upon it by the potential entrant; meanwhile, individual consumers choose whether or not to purchase insurance at the prevailing price. Of course, the incumbent's expectation about its profit depends on its beliefs about the type of individuals buying insurance. In turn, individual purchase decisions depend on prices. In equilibrium, sophisticated firms understand consumer incentives to purchase insurance and expect those individuals to purchase insurance for whom doing so is optimal.

To briefly summarize, we consider a market equilibrium in which three conditions are satisfied:

- *Consumer Rationality*: Consumers purchase insurance if the benefit of doing so exceeds the price; that is, if the price of insurance is less than the probability of the adverse event.
- *Profit Maximization*: The insurance provider chooses its price to maximize expected profit, anticipating rational purchase decisions by consumers. The maximum profit that the incumbent can expect to earn is equal to β , the entry fee.
- *Small Entry Barriers*: The fixed fee for entry, β , is positive, but not too large. Specifically, $0 < \beta < (1 - g)(1 - c)\alpha_H$

A. Equilibrium

Because the insurance provider cannot observe an individual's risk level, it cannot charge different prices for different levels of risk. In the simple insurance market that we consider, the firm charges a single price for coverage. Each type of individual is willing to purchase insurance if the price p is less than his or her probability of experiencing the adverse event α_i . Therefore, if low-risk individuals are willing to purchase insurance, then so are high-risk individuals. This implies that an insurance market can operate in only two possible equilibrium configurations:

- *Separated*: High-risk individuals purchase insurance, but low-risk individuals do not purchase insurance.
- *Pooled*: Both high- and low-risk individuals purchase insurance.

Before moving on to the analysis, it is helpful to introduce one simple piece of notation for purposes of exposition: Let $b = \frac{\beta}{\alpha_H}$. The *small entry barriers* assumption then ensures that $b < (1 - g)(1 - c)$.

1. SEPARATED MARKET

In a separated market, only high-risk individuals purchase insurance. In this case, the insurer's expected profit is equal to $\Pi = (1 - g)(p - c\alpha_H)$. Profit maximization then implies that the insurer would like to set a price to achieve its maximum feasible profit β . Assuming that only high-risk individuals buy insurance, the insurer can achieve its maximum profit β by selecting the price that solves the following equation:

$$(1 - g)(p - c\alpha_H) = \beta \leftrightarrow p^* = \frac{\beta}{1 - g} + c\alpha_H$$

Provided that only high-risk consumers are willing to purchase insurance at price p^* , the consumer rationality condition is satisfied, and an equilibrium with a separated market exists. This is the case whenever the following inequality is satisfied:

$$\alpha_L < \frac{\beta}{1 - g} + c < \alpha_H \leftrightarrow \frac{\alpha_L}{\alpha_H} < \frac{b}{1 - g} + c < 1$$

The second part of this inequality, $\frac{b}{1 - g} + c < 1$, is satisfied whenever the *small entry barriers* assumption holds. Thus, an equilibrium with a separated insurance market holds whenever:

$$\frac{\alpha_L}{\alpha_H} < \frac{b}{1 - g} + c$$

This result is intuitive. The ratio $\frac{\alpha_L}{\alpha_H}$ measures the degree of risk homogeneity between the groups. When this ratio is small, the low-risk group is significantly less likely to have an accident than the high-risk group (and vice versa). We have found that, when the risk faced by the two groups differs significantly, an equilibrium exists in which only the high-risk group buys insurance. The insurer achieves its maximum feasible profit by selling only to the high-risk group at relatively high prices. Low-risk individuals have a significantly lower probability of having an accident and are not willing to pay such a high price, leading to a separated market.

2. POOLED MARKET

In a pooled market, both types of individuals purchase insurance. In this case, the insurer's expected profit is equal to $\Pi = p - c(g\alpha_L + (1 - g)\alpha_H)$. The insurer can achieve its maximum feasible profit β by selecting the price that solves the following equation:

$$p - c(g\alpha_L + (1 - g)\alpha_H) = \beta \leftrightarrow p^* = c(g\alpha_L + (1 - g)\alpha_H) + \beta$$

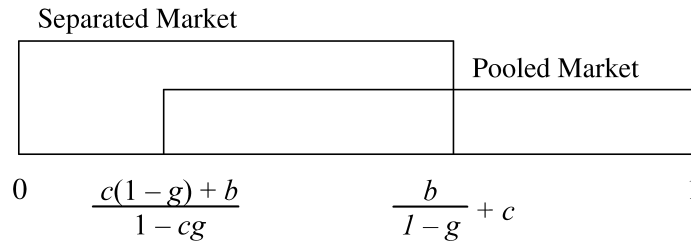
Provided that both types of consumers are willing to purchase insurance

at price p^* , the consumer rationality condition is satisfied, and a pooled equilibrium exists. If it is rational for low-risk individuals to purchase, then it is also rational for high-risk individuals to purchase. Therefore, a pooled equilibrium exists if the following inequality is satisfied:

$$c(g\alpha_L + (1 - g)\alpha_H) + \beta < \alpha_L \leftrightarrow \frac{c(1 - g) + b}{1 - cg} < \frac{\alpha_L}{\alpha_H}$$

If this condition holds, then the market can be pooled in equilibrium. Intuitively, because the two groups face similar (though not identical) levels of risk, both types of individuals are willing to pay similar prices for insurance. Here, the insurer achieves its maximum feasible profit β by setting a relatively low price that both groups are willing to pay.

We summarize these results in the following figure. Note that, as represented in the figure below, $\frac{c(1 - g) + b}{1 - cg} < \frac{b}{1 - g} + c$.



In this figure, the axis represents the degree of risk homogeneity in the population as represented by the ratio $\frac{\alpha_L}{\alpha_H}$. The minimum value of this ratio is zero, and the maximum possible value is one. High values of this ratio correspond to a high degree of homogeneity between the two groups, as each of their chances of having an adverse event is similar. Low values of the ratio indicate that the probability of injury or illness in the two groups differs significantly. In this case, homogeneity is low. Consistent with the results presented above, when this ratio is less than $\frac{b}{1 - g} + c$, an equilibrium exists in which the market is separated. Whenever this ratio is greater than $\frac{c(1 - g) + b}{1 - cg}$, an equilibrium exists in which the market is pooled. Thus we find three cases of interest:

1. *High homogeneity:* If $\frac{\alpha_L}{\alpha_H}$ is high, the equilibrium market is pooled.
2. *Low homogeneity:* If $\frac{\alpha_L}{\alpha_H}$ is low in equilibrium, the market is separated.
3. *Medium homogeneity:* If $\frac{\alpha_L}{\alpha_H}$ is intermediate, the equilibrium market can be either separated or pooled.

B. *The Individual Mandate*

In this section, we consider the effects of the individual mandate in each of the three cases described above. In the high homogeneity case, the market is already pooled. Because both types buy insurance even without the mandate, introducing the mandate does not change the market outcome. If homogeneity is low, the only possible equilibrium outcome is a separated market. Here, imposing a mandate drives down the price of insurance, but does not drive it down enough that low-risk individuals are willing to purchase at the new, lower price. Introducing a mandate in this case *coerces* low-risk individuals to purchase insurance against their will, benefitting high-risk individuals at the expense of low-risk individuals. Therefore, the argument against the mandate applies in a straightforward way.

Consider now the last case, in which homogeneity is in the middle range. Here, both types of equilibria are possible. Which market configuration arises is therefore determined by the behavior of the insurance provider: If the provider sets a relatively high price, the market will be segmented, but a relatively low price leads to a pooled market. Because the insurer expects the same profit in both cases, it has no clear preference for either market configuration; thus, either market structure could naturally arise.

However, if the market that arises is separated, then imposing a mandate will change the prevailing market structure. If both types of consumers are required to purchase insurance, the insurer will be willing to sell to both types of consumers at a lower price, and this price drop will be drastic enough that low-risk individuals will *choose* to purchase at the new price. Here, the mandate does not force anyone to purchase insurance against his or her will. In this case, imposing the mandate causes the industry to switch from a separated equilibrium to a pooled equilibrium; the insurer maintains the highest feasible level of profit, and both types of consumers purchase insurance because it is optimal to do so at the prevailing price. The mandate nudges the market out of a configuration in which healthy individuals are excluded into a new configuration in which both types of individuals voluntarily participate.