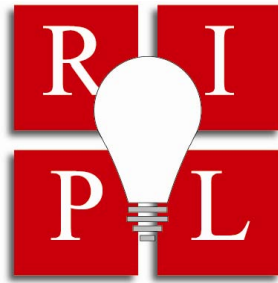


# THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



PINWHEEL OF FORTUNE

JAMES MING CHEN

## ABSTRACT

This paper examines public health law in the context of prospect theory, the leading behavioral account of risk aversion and risk-seeking. The paper first demonstrates how international environmental law can be mapped along prospect theory's risk-seeking axis. It then completes this picture of prospect theory by examining *National Federation of Independent Business v. Sebelius*, which upheld the constitutionality of the Patient Protection and Affordable Care Act ("PPACA"). Although *Sebelius* upheld the PPACA as an exercise of the federal government's taxing authority, it reasoned that a directive aimed at uninsured individuals to buy health insurance lay beyond the power of Congress to regulate interstate commerce. There is now at least a tacit liberty interest against being coerced to insure against health risks, enforced in constitutional doctrine through a limit on Congress's power to regulate commerce. Applying that interest against coercion to defeat compulsory acceptance of annuity-like income streams would complete a legal axis that actively defends the right of the healthy, optimistic individual to refuse risk-averse hedges against improbable losses or against the comparably improbable failure to attain future wealth. For good or ill, therefore, the law of intellectual property and health care, as illustrated through international law on biodiversity conservation and through constitutional controversies involving universal health care coverage, appears to privilege private risk-seeking behavior over risk-averse public policy. So spins the law's *Pinwheel of Fortune*.

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# PINWHEEL OF FORTUNE

JAMES MING CHEN

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## PINWHEEL OF FORTUNE

JAMES MING CHEN\*



If you've got no place to go, if you're feeling down  
If you're all alone when the pretty birds have flown  
Honey I'm still free  
Take a chance on me . . .  
Take a chance, take a chance, take a chance on me<sup>1</sup>

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\* © James Ming Chen 2014. Justin Smith Morrill Chair in Law, Michigan State University; Of Counsel, Technology Law Group of Washington, D.C. I presented this paper on November 8, 2013, at the *John Marshall Review of Intellectual Property's* 2013 symposium, "IPublic Health: The Intersection of Intellectual Property and Public Health." I presented a version of this paper on October 2, 2013, at a faculty workshop at the Michigan State University College of Law. Christopher French, Andrew Long, Sean Pager, Andrew Torrance, Ryan Vacca, and Katharine Van Tassel provided helpful comments. Special thanks to Heather Elaine Worland Chen.

<sup>1</sup> Hear ABBA, *Take A Chance On Me*, on ABBA: The Album (Polar Music International AB, 1977).

## I. INTRODUCTION

Neither the global environment nor personal health should come down to gambling. “One life to live” is not just a soap opera; it is an indisputable medical directive. “In the long run we are all dead.”<sup>1</sup> The goal is to put off the long run as long as we can. As for the earth at large, this too bears remembering: “One planet, one experiment.”<sup>2</sup>

In light of such infallible wisdom, to say nothing of the judiciary’s innate suspicion of gambling,<sup>3</sup> one might expect both international environmental law and domestic health law to rank among the law’s most risk-averse enterprises. One would be wrong. The law of global biodiversity protection and the constitutional debate on the Patient Protection and Affordable Care Act (“PPACA”)<sup>4</sup> rest on astoundingly risk-seeking assumptions and pronouncements. Charged with conserving the global biospheric commons, the international community seems affirmatively eager to place deep, out-of-the-money bets on bioprospecting of rare and endangered species for pharmaceutical gain.<sup>5</sup> The truly desperate state of biodiversity and climate change law has apparently prompted some very rich countries (especially the United States) to behave as if these sources of truly irreparable environmental harm defy meaningful precautions.<sup>6</sup>

Within America’s own borders, the constitutional law of public health strikes a comparably risk-seeking pose. Once upon a time (in 1936 to be exact), the Supreme Court treated the “[t]hreat of loss, not the prospect of gain, [as] the essence of

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<sup>1</sup> JOHN MAYNARD KEYNES, A TRACT ON MONETARY REFORM 80 (1924); *see also* ROBERT SKIDELSKY, KEYNES 56 (Oxford University Press 1996); *cf.* JOHN IRVING, THE WORLD ACCORDING TO GARP 688 (Modern Library 1998) (“[I]n the world according to Garp, we are all terminal cases.”).

<sup>2</sup> EDWARD O. WILSON, THE DIVERSITY OF LIFE 182 (2d ed. 1999).

<sup>3</sup> *See, e.g.*, *Phalen v. Va.*, 49 U.S. (8 How.) 163, 168 (1850) (decrying “the widespread pestilence of lotteries” as a disease that “infests the whole community; . . . enters every dwelling; . . . reaches every class; . . . preys upon the hard earnings of the poor; [and] plunders the ignorant and simple”); *accord* *Champion v. Ames*, 188 U.S. 321, 356 (1903).

<sup>4</sup> Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119, 119 (2010).

<sup>5</sup> *See generally, e.g.*, E.A. Evans-Illidge & P.T. Murphy, *A New Approach to Benefit Sharing in Bioprospecting*, AUSTRALIAN INST. OF MARINE SCI. 6, <http://www.cbd.int/doc/case-studies/abs/cs-abs-au.pdf> (last visited Apr. 19, 2014) (arguing that bioprospecting, despite its high costs and high risks, is likely to yield beneficial and profitable commercial products); Michael I. Jeffery, *Bioprospecting: Access to Genetic Resources and Benefit-Sharing Under the Convention on Biodiversity and the Bonn Guidelines*, 6 SING. J. INT’L COMP. L. 747, 747 (2002) (describing how rapid advances in biotechnology have prompted a surge of interest in commercializing biodiversity).

<sup>6</sup> *See generally, e.g.*, Edgar J. Asebey & Jill D. Kempenaar, *Biodiversity Prospecting: Fulfilling the Mandate of the Biodiversity Convention*, 28 VAND. J. TRANSNAT’L L. 703, 706–07 (1995) (explaining why source countries are unlikely to capture the full benefits of newly discovered bioactive compounds, “[b]ecause almost all screening facilities are located in the developed world” and because “the identification of a valuable plant” might create such “tremendous demand that expansive harvesting [would] lead[] to extinction”); Jeffery, *supra* note 5, at 748 (noting that “the current concern over the earth’s continuing ‘biodiversity crisis’, in combination with the clear economic significance of genetic resources, has provided the basis for which bioprospecting . . . has become the recent focus of much attention”).

economic coercion.”<sup>7</sup> *National Federation of Independent Business v. Sebelius*,<sup>8</sup> the 2012 decision upholding the PPACA, suggests otherwise. Although *Sebelius* upheld the PPACA as an exercise of the federal government’s taxing authority, it reasoned that a directive aimed at uninsured individuals to buy health insurance lay beyond the power of Congress to regulate interstate commerce.<sup>9</sup> If Congress may not compel (presumably young, healthy) people to buy health insurance, precisely because those individuals believe that they are better off bearing the relatively modest risk of catastrophic illness or injury, Congress likewise should not have the power to compel wage-earners to accept annuities or annuity-like income streams through Social Security or through limitations on IRAs and employer-sponsored retirement plans.<sup>10</sup>

International environmental law and American health law act perversely precisely because they are products of human decisionmaking that address life and death issues at the very points where emotion overrides reason. These otherwise baffling phenomena manifest different facets of prospect theory, the leading behavioral account of risk aversion and risk-seeking.<sup>11</sup> These two bodies of law provide enough material to cover the entire pinwheel-shaped “fourfold pattern” that defines prospect theory.

Part I of this article, “Biopropect Theory,” will demonstrate how international environmental law can be mapped along prospect theory’s risk-seeking axis. Although there is no defensible basis for treating pharmaceutical exploitation of ethnobiological knowledge as the foundation of a coherent approach to global economic development, international law squanders precious diplomatic capital on the folly of biopropecting.

Part II of this article, “The Patient in the Tower,” explores *Sebelius* as a distinct illustration of prospect theory. *Sebelius* appears to embrace a theory of commerce clause jurisprudence that carries more than a hint of substantive due process. There is now at least a tacit liberty interest against being coerced to insure against health risks, enforced in constitutional doctrine through a limit on congressional power to regulate commerce. Applying that interest against coercion to defeat compulsory acceptance of annuity-like income streams would complete a second, countervailing legal axis, one that actively defends the right of the healthy, optimistic individual to refuse risk-averse hedges against improbable losses or against the comparably improbable failure to attain future wealth.

For good or ill, the law of intellectual property and health care, as illustrated through international law on biodiversity conservation and through the leading constitutional controversy involving universal health care coverage, appears to privilege private risk-seeking behavior over risk management through public policy. So spins the law’s *Pinwheel of Fortune*.

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<sup>7</sup> *United States v. Butler*, 297 U.S. 1, 81 (1936).

<sup>8</sup> *Nat’l Fed’n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2566, 2608–09 (2012).

<sup>9</sup> *Id.* at 2587, 2591.

<sup>10</sup> *Id.* at 2590, 2591.

<sup>11</sup> See Chris Guthrie, *Prospect Theory, Risk Preference, and the Law*, 97 NW. U. L. REV. 1115, 1116 (2003) (“[P]rospect theory predicts that people generally make risk-averse decisions when choosing between options that appear to be gains and risk-seeking decisions when choosing between options that appear to be losses.”).



## II. BIOPROSPECT THEORY<sup>12</sup>

Conventional wisdom treats biodiversity and biotechnology as rivalrous values. The global south is home to most of earth's vanishing species, while the global north holds the capital and technology needed to develop this natural wealth. The south argues that intellectual property laws enable pharmaceutical companies and seed breeders in the industrialized north to commit biopiracy.<sup>13</sup> By contrast, the United States has characterized calls for profit-sharing as a threat to the global life sciences industry. Both sides magnify the dispute, on the apparent consensus that commercial exploitation of genetic resources holds the key to biodiversity conservation.

Both sides of this debate misunderstand the relationship between biodiversity and biotechnology.<sup>14</sup> Both sides have overstated the significance of bioprospecting. It is misleading to frame the issue as whether intellectual property in the abstract can coexist with the international legal framework for preserving biodiversity. As a matter of legal gymnastics, any lawyer can reconfigure intellectual property to embrace all of the intangible assets at stake, including raw genetic resources,

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<sup>12</sup> This section draws heavily upon a separate paper of mine. *See generally* Jim Chen, *Bioprospect Theory* (Oct. 21, 2012), available at <http://bit.ly/BioprospectTheory>.

<sup>13</sup> *See* Jim Chen, *There's No Such Thing as Biopiracy . . . And It's a Good Thing Too*, 37 MCGEORGE L. REV. 1, 6 (2006).

<sup>14</sup> *See* Jim Chen, *Biodiversity and Biotechnology: A Misunderstood Relation*, 2005 MICH. ST. L. REV. 51, 52 (2005).

advanced agricultural and pharmaceutical research, and ethnobiological knowledge.<sup>15</sup>

The real challenge lies in directing the law of biodiversity conservation and the law of intellectual property toward appropriate preservation and exploitation of the global biospheric commons.<sup>16</sup> Commercial development aids biodiversity primarily by overcoming perverse economic incentives to consume scarce natural resources that may turn out to have greater global, long-term value. We continue to debate these issues not because we are rational, but precisely because we are not.

Indeed, legal approaches to biodiversity and biotechnology are so twisted that they represent an extreme application of prospect theory. Nearly half a century before Daniel Kahneman and Amos Tversky published *Prospect Theory: An Analysis of Decision Under Risk*,<sup>17</sup> the 1979 article that would become the foundational work of behavioral economics and the principal basis for Kahneman's 2002 Nobel Prize in Economics, the Supreme Court of the United States succinctly summarized a core tenet of prospect theory: "[t]hreat of loss, not hope of gain, is the essence of economic coercion."<sup>18</sup> In plainer terms, losing hurts worse than winning feels good. Stated in formal terms, prospect theory posits that most individuals, as an expression of innate risk aversion, fear potential losses far more than they covet potential gains.<sup>19</sup>

The law of biodiversity and biotechnology appears to reverse this presumption. Although humans innately fear losses more than they value gains, worldwide policy appears to assign relatively little value to biodiversity as an invaluable, incommensurate, and indefinitely important component of global ecological health.<sup>20</sup> Biodiversity loss is staggering and undeniable.<sup>21</sup> Humans are responsible for the sixth great extinction spasm of the Phanerozoic Eon, a unit of geologic time spanning half a billion years.<sup>22</sup> Cataclysmic loss of biological diversity is merely one of several ecological threats looming over Holocene humanity.<sup>23</sup>

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<sup>15</sup> See Joseph Straus, *Bargaining Around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions*, 9 DUKE J. COMP. & INT'L L. 91, 104 (1998).

<sup>16</sup> See Jim Chen, *Webs of Life: Biodiversity Conservation as a Species of Information Policy*, 89 IOWA L. REV. 495, 589 (2004).

<sup>17</sup> Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263, 263 (1979).

<sup>18</sup> *United States v. Butler*, 297 U.S. 1, 82 (1936).

<sup>19</sup> See DANIEL KAHNEMAN, THINKING, FAST AND SLOW 278–88 (2011) (providing Kahneman's own summary of prospect theory).

<sup>20</sup> And human health, too. See Jim Robbins, *The Ecology of Disease*, N.Y. TIMES, July 14, 2012, at SR1, available at <http://www.nytimes.com/2012/07/15/sunday-review/the-ecology-of-disease.html>.

<sup>21</sup> See Jim Chen, *Across the Apocalypse on Horseback: Imperfect Legal Responses to Biodiversity Loss*, 17 WASH. U. J.L. & POL'Y 12, 12, 13 (2005); Jim Chen, *Across the Apocalypse on Horseback: Biodiversity Loss and the Law*, in BIODIVERSITY AND THE LAW: INTELLECTUAL PROPERTY, BIOTECHNOLOGY AND TRADITIONAL KNOWLEDGE 42 (Charles R. McManis ed., 2007); Jim Chen, *Legal Mythmaking in a Time of Mass Extinctions: Reconciling Stories of Origin with Human Destiny*, 29 HARV. ENV'T'L. L. REV. 279, 283 (2005); Tracy Dobson, *Loss of Biodiversity: An International Environmental Policy Perspective*, 17 N.C. J. INT'L L. & COM. REG. 277, 279–81 (1992).

<sup>22</sup> See, e.g., RICHARD LEAKEY & ROGER LEWIN, THE SIXTH EXTINCTION: PATTERNS OF LIFE AND THE FUTURE OF MANKIND 233, 234 (1996).

<sup>23</sup> See Roy Scranton, *Learning How to Die in the Anthropocene*, N.Y. TIMES (Nov. 10, 2013), <http://opinionator.blogs.nytimes.com/2013/11/10/learning-how-to-die-in-the-anthropocene>.

In assembling this brief analysis, I hasten to add this observation: so far I have assigned no weight to global climate change, a threat that has raised the probability of human extinction to a non-negligible value. Risks as grandiose as these, sufficient in their magnitude to portend the end of civilization, possibly even the survival of humans as a species, support the most dismal of theorems in the dismal science of economics: “the catastrophe-insurance aspect of such a fat-tailed unlimited-exposure situation, which can never be fully learned away, can dominate the social-discounting aspect, the pure-risk aspect, and the consumption-smoothing aspect.”<sup>24</sup> In plainer language, the dismal theorem posits that “under limited conditions concerning the structure of uncertainty and societal preferences, the expected loss from certain risks such as climate change is infinite and that standard economic analysis cannot be applied.”<sup>25</sup>

By contrast, the global north and the global south alike have reached an apparent consensus that the primary object of the international debate over “biopiracy” is the appropriate profit-sharing protocol (including the possibility of no redistributive mechanism whatsoever) for gains from bioprospecting. Such gains, at best, are highly speculative.<sup>26</sup> Even if profits from bioprospecting are ever realized, they will be extremely concentrated. No champion of redistributive justice on a global scale could defend a system of transferring northern wealth that would favor Brazil, Costa Rica, and Madagascar while neglecting Bolivia, Mali, and Afghanistan.

There simply is no defensible basis for treating ethnobiological knowledge as the foundation of a globally coherent approach to economic development. Yet the global community continues to spend its extremely small and fragile storehouse of political capital on this contentious corner of international environmental law. Global economic diplomacy should be made of saner stuff. The fact that it is not invites us to treat the entire charade as a distinct branch of behavioral law and economics: bioprospect theory.

Upon closer examination, prospect theory and related branches of behavioral economics do supply a powerful explanation for international economic law’s systematic failure to reach the optimal solutions for biodiversity conservation. Prospect theory arises from three basic features of human beings’ core cognitive system:

1. All decisionmaking takes place relative to a *neutral reference point*, or “adaptation level.” Outcomes exceeding this reference point are gains. Outcomes below the reference point are losses.

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<sup>24</sup> Martin L. Weitzman, *On Modeling and Interpreting the Economics of Catastrophic Climate Change*, 91 REV. ECON. & STAT. 1, 1 (2009).

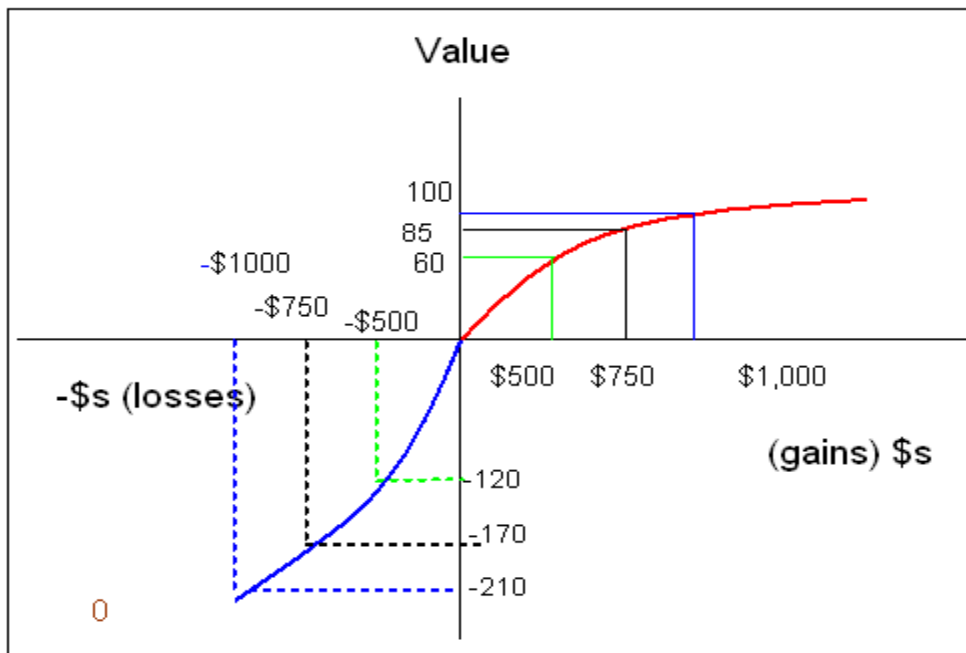
<sup>25</sup> William D. Nordhaus, *The Economics of Tail Events with an Application to Climate Change*, 5 REV. ENVTL. ECON. & POL’Y 240, 240 (2011).

<sup>26</sup> [N]o plausible scientific argument at present supports the claim that the extinction of species . . . courts environmental disaster. It is far more plausible that rare and endangered species [are] affected by the environment but hav[e] little effect upon it. Moral, aesthetic, and spiritual arguments amply may justify [biodiversity conservation], but an instrumental or economic rationale appears beyond reach.” Mark Sagoff, *Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act*, 38 WM. & MARY L. REV. 825, 844 (1997).



2. *Loss aversion* means that losses, when directly weighted or compared against gains, loom larger.
3. *Diminishing sensitivity* applies to upward and downward perceptions and to evaluation of changes of wealth.<sup>27</sup>

In concert, these three principles—neutral reference point, loss aversion, diminishing sensitivity—can be illustrated through a graph showing an asymmetrical sigmoid curve (1) whose inflection point occurs at the neutral adaptation level, (2) whose steeper slope below the adaptation level demonstrates loss aversion, and (3) whose declining rate of change in both directions reflects diminishing sensitivity to gains and to losses:<sup>28</sup>



Source: DANIEL KAHNEMAN, THINKING, FAST AND SLOW 283 (2011).

“If prospect theory had a flag, this image would be drawn on it.”<sup>29</sup> The asymmetrical utility curve that emerges from prospect theory’s reevaluation of conventional accounts of expected economic utility leads to some seeming

<sup>27</sup> See KAHNEMAN, *supra* note 19, at 282.

<sup>28</sup> See *id.* at 282–83. One readily implemented way of parametrically modeling prospect theory with closed-form expressions and elementary functions is the cumulative distribution function of the log-logistic distribution. See James Ming Chen, *Flagging Prospect Theory*, <http://www.ssrn.com/abstract=2216916> (March 20, 2014). See generally Peter R. Fisk, *The Graduation of Income Distributions*, 29 *ECONOMETRICA* 171 (1961).

<sup>29</sup> KAHNEMAN, *supra* note 19, at 282.

contradictions.<sup>30</sup> In mixed gambles, for instance, where a decisionmaker may realize either a gain or a loss, loss aversion leads to extreme, even costly risk aversion. This is the primary conclusion of prospect theory, the one most readily summarized by the slogan, “losing hurts worse than winning feels good.”<sup>31</sup>

But prospect theory predicts affirmatively *risk-seeking* behavior in other circumstances. When a decisionmaker is confronted with nothing but “bad choices”—specifically, those “where a sure loss is compared to a larger loss that is merely probable”—diminishing sensitivity to losses will generate a greater willingness to absorb risk.<sup>32</sup>

Prospect theory therefore rests on two principal insights. First, humans “attach values to gains and losses rather than to wealth.”<sup>33</sup> Second, humans making decisions assign “weights . . . to outcomes [that] are different from probabilities.”<sup>34</sup> The combination of these two heuristics generates “a distinctive pattern of preferences” that Kahneman and Tversky have called the “fourfold pattern”:<sup>35</sup>

<b>The four-fold pattern</b>	Gains	Losses
High probability (certainty effect)	<i>E.g.</i> , a 95% chance to win \$10,000 leads to . . .  <i>Risk aversion</i> (annuities and sinecures)	<i>E.g.</i> , a 95% chance to lose \$10,000 leads to . . .  <b>Risk seeking</b> (rogue trading and other reckless gambles)
Low probability (possibility effect)	<i>E.g.</i> , a 5% chance to win \$10,000 leads to . . .  <b>Risk seeking</b> (lotteries)	<i>E.g.</i> , a 5% chance to lose \$10,000 leads to . . .  <i>Risk aversion</i> (insurance)

Let us examine more closely each of the four vanes in prospect theory’s pinwheel of fortune. Three of these four behavioral possibilities have long been understood; prospect theory merely provided the means by which to describe them formally.<sup>36</sup> The cell at top left describes how risk aversion leads people to lock in a sure gain below the expected value of a gamble. Annuities work on this principle, as do employment guarantees in unionized trades or on tenure-protected university faculties.

The cell at lower right describes insurance: individuals will pay much more than the expected value of a loss to insure themselves against the disturbing prospect

<sup>30</sup> *See id.* at 285.

<sup>31</sup> LEWIS GRIZZARD & KATHY SUE LOUDERMILK, *I LOVE YOU: A GOOD BEER JOINT IS HARD TO FIND, AND OTHER FACTS OF LIFE* (1979); *accord* JOE GARAGIOLA, *IT’S ANYONE’S BALLGAME* (1988).

<sup>32</sup> KAHNEMAN, *supra* note 19, at 285.

<sup>33</sup> *Id.* at 316–17.

<sup>34</sup> *Id.* at 317.

<sup>35</sup> *Id.*

<sup>36</sup> *See id.* at 318.

of a catastrophic loss.<sup>37</sup> On the flip side of that transaction, insurance companies can pool risks assigned to them by risk-averse policyholders and profit from the spread between expected losses and premium payments. These risk-averse decisions reflect the core instinct of prospect theory.

But there is also a risk-seeking side to this account of human behavior. Lotteries routinely exploit the possibility effect. When the potential payout is enormous, ticket buyers become indifferent to their miniscule chances of winning. This is the behavioral pattern reflected by the lower left cell. It is sufficiently powerful that banks and credit unions have resorted to depositor lotteries to induce lower- to middle-income customers to open and fund savings accounts.<sup>38</sup>

What Kahneman and Tversky found most surprising was the fourth possibility, the one described in the risk-seeking cell at upper right. When humans face the high probability of severe losses, they engage in affirmatively riskier behavior. Prospect theory identifies two reasons for this sudden shift in strategy.<sup>39</sup> First, diminishing sensitivity means that humans react very adversely to a sure loss: “the reaction to a loss of \$900 is more than 90% as intense as the reaction to a loss of \$1,000.”<sup>40</sup> Second and perhaps even more significant, humans assign a much lower decision weight to an extreme loss than its rationally expected value as calculated by the laws of probability. The certainty effect, coupled with diminishing sensitivity, enhances the aversiveness of a sure loss and reduces the aversiveness of the gamble.

This is the ugly corner of human decisionmaking where otherwise responsible parties find themselves tempted to take risks that can “turn[] manageable failures into disasters.”<sup>41</sup> “Rogue traders” who have amassed appalling losses let it all ride on a single act of reckless arbitrage. That gamble may destroy a systemically important financial institution.<sup>42</sup> “Because defeat is so difficult to accept,” chief executive officers and field marshals suffer from a comparable inability to cut their losses and salvage what is left of their companies and armies.<sup>43</sup>

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<sup>37</sup> See, e.g., Arthur D. Roy, *Safety First and the Holding of Assets*, 20 *ECONOMETRICA* 431, 440 (1952).

<sup>38</sup> See Tina Rosenberg, *Playing the Odds on Savings*, *N.Y. TIMES* (Jan. 15, 2014), at SR3, available at <http://opinionator.blogs.nytimes.com/2014/01/15/playing-the-odds-on-saving/>; cf. Charles T. Clotfelter et al., *State Lotteries at the Turn of the Century: Report to the National Gambling Impact Study Commission* 13 (Apr. 23, 1999), available at <http://govinfo.library.unt.edu/ngisc/reports/lotfinal.pdf> (reporting that “lottery expenditures represent a much larger burden on the household budget for those with low incomes than for those with high incomes”).

<sup>39</sup> See KAHNEMAN, *supra* note 19, at 318.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.* at 319.

<sup>42</sup> See e.g., Stephen Gandel, *How JPMorgan Made Its Multi-billion Dollar Blunder*, *CNN MONEY* (May 15, 2012), <http://finance.fortune.cnn.com/2012/05/15/jpmorgan-london-whale-blunder/> (discussing Bruno Iksil, better known as the “London Whale,” who inflicted a multibillion dollar loss on J.P. Morgan Chase in 2012); Roger Parloff, *How MF Global’s ‘Missing’ \$1.5 Billion was Lost—and Found*, *CNN MONEY* (Nov. 15, 2013), <http://features.blogs.fortune.cnn.com/2013/11/15/mf-global-jon-corzine/>; Roger Lowenstein, *Long-Term Capital Management: It’s a Short-term Memory*, *N.Y. TIMES* (Sept. 6, 2008), <http://www.nytimes.com/2008/09/07/business/worldbusiness/07iht-07lcm.15941880.html?pagewanted=all>; *The Economy: How Leeson Broke the Bank*, *BBC NEWS BUSINESS* (June 22, 1999), <http://news.bbc.co.uk/2/hi/business/375259.stm> (detailing how Nick Leeson’s ill-fated trade destroyed Barings Bank in 1995).

<sup>43</sup> KAHNEMAN, *supra* note 19, at 319.

Bioprospect theory helps explain why international economic and environmental law reaches such perverse outcomes in its approach to biodiversity conservation and bioprospecting. Biodiversity policy stinks because it disobeys the standard risk-averse pattern of human conduct and follows instead the contrary axis of risk-seeking behavior. The fate of the biosphere presents either (1) a low probability of immense gain (through bioprospecting) or (2) a high probability of immense loss (through global climate change). The lottery effect readily explains the overvaluing of commercial bioprospecting. Pharmaceutical companies and protesters accusing them of biopiracy have this much in common: both sides are bedazzled—irrationally—by the possibility that some lucrative cure for cancer may lurk in a Brazilian rain forest.<sup>44</sup>

The looming loss of global biological diversity, on a geologically significant scale, poses an even more disturbing prospect. The magnitude of ecological losses is increasing at an alarming rate, even more so once we move past the relatively narrow frame of biodiversity and contemplate the possibility of complete disruption of global climatic systems. As the costs and the likely futility of mitigating action increase,<sup>45</sup> humans find their own heuristics shoving their collective decisionmaking processes further onto the frontier of desperation, where risk-averse acts such as insurance lose their appeal and yield ground to active risk-seeking. System 1—the rapid, automatic decisionmaking system that has propelled humanity from Pleistocene competitiveness to Holocene dominance<sup>46</sup>—may be pushing *Homo sapiens* to the edge of extinction by its own talented hand. The global collapse of biodiversity is the ultimate ecosystem service provided by indicator species: ask not “for whom the bell tolls; it tolls for *thee*.”<sup>47</sup> Bioprospect theory provides the blueprint by which humanity might eschew the remote prospect of wealth, if only momentarily, and focus on how it might better manage anthropogenic ecological disasters before they become full-blown, irreversible cataclysms of global proportions.

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<sup>44</sup> See Chen, *supra* note 13, at 25; Paul J. Heald, *The Rhetoric of Biopiracy*, 11 CARDOZO J. INT'L & COMP. L. 519, 521, 532, 533, 536 (2003).

<sup>45</sup> See generally *Climate Change 2013: The Physical Science Basis*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2014), available at [http://www.climatechange2013.org/images/uploads/WGIAR5\\_WGI-12Doc2b\\_FinalDraft\\_All.pdf](http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf).

<sup>46</sup> See generally Keith E. Stanovich & Richard F. West, *Individual Differences in Reasoning: Implications for the Rationality Debate*, 23 BEHAV. & BRAIN SCI. 645, 659, 715 (2000).

<sup>47</sup> JOHN DONNE, DEVOTIONS UPON EMERGENT OCCASIONS 198 (Anthony Raspa ed., Oxford Univ. Press U.S.A. 1987) (1624) (emphasis in original).



### III. THE PATIENT IN THE TOWER<sup>48</sup>

Let us turn now from the abortive rescue of the global biospheric commons to the contested reform of the American health care system. The Supreme Court's landmark decision in the 2012 case of *National Federation of Independent Business v. Sebelius*,<sup>49</sup> which upheld the Patient Protection and Affordable Care Act of 2010 as an exercise of the federal government's taxing authority, completes our examination of prospect theory in legal action.

Although *Sebelius* upheld the PPACA, a key portion of that decision illuminates a striking vein of risk-seeking reasoning and rhetoric.<sup>50</sup> A majority of Justices participating in *Sebelius* reasoned that a directive aimed at uninsured individuals to buy health insurance lay beyond the power of Congress to regulate interstate commerce.<sup>51</sup> Chief Justice Roberts and a joint dissent comprising Justices Scalia, Kennedy, Thomas, and Alito, despite their differences, agreed to reject congressional regulation of interstate commerce as a basis for inflicting a financial loss, in the form of a premium paid on unwanted health insurance, through the coercive force of the Affordable Care Act's individual mandate.<sup>52</sup> If Congress may not compel young,

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<sup>48</sup> The title for this part is inspired by *Jungfrun i tornet* (*The Maiden in the Tower*), the only opera by the legendary Finnish composer, Jean Sibelius.

<sup>49</sup> Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566, 2608–09 (2012).

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

healthy individuals to buy insurance, precisely because those people believe that they are better off shouldering catastrophic illness or injury, Congress might lack power to compel wage-earners to accept annuity-like income streams through Social Security.<sup>53</sup>

In dramatic controversies addressing questions of life or death, the Supreme Court is fond of disclaiming such awesome power by declaring instead that it is deciding just another “case about federalism.”<sup>54</sup> *Sebelius* was no exception. In the prologue to his opinion, Chief Justice John Roberts endorsed the Court’s longstanding maxim that “federalism secures to citizens the liberties that derive from the diffusion of sovereign power.”<sup>55</sup> True to Justice Sandra O’Connor’s declaration that “the tension between federal and state power” holds “the promise of liberty,”<sup>56</sup> *Sebelius* observed: “[b]y denying any one government complete jurisdiction over all the concerns of public life, federalism protects the liberty of the individual from arbitrary power.”<sup>57</sup>

Of the 10 titles, 900 pages, and hundreds of sections in the PPACA, *Sebelius* focused on “two key provisions, commonly referred to as the individual mandate and the Medicaid expansion.”<sup>58</sup> The individual mandate requires most Americans to maintain a “minimum essential” level of health insurance.<sup>59</sup> Those who fail to comply with the individual mandate must make a “[s]hared responsibility payment” to the federal government in the form of a “‘penalty’ . . . calculated as a percentage of household income, subject to a floor based on a specified dollar amount and a ceiling based on the average annual premium . . . for qualifying private health insurance.”<sup>60</sup>

The PPACA’s Medicaid expansion builds upon the baseline established in 1965 by the original Medicaid program.<sup>61</sup> By 1982, every state had chosen to accept “federal funding . . . to assist pregnant women, children, needy families, the blind, the elderly, and the disabled in obtaining medical care,” all according to “federal criteria governing matters such as who receives care and what services are provided at what cost.”<sup>62</sup> The expansion commits states to cover all individuals, including childless adults, who are younger than sixty-five and whose income falls below 133 percent of the federal poverty line.<sup>63</sup> Federal support would cover the full cost of the Medicaid expansion through 2016 and would gradually decrease to a minimum of ninety percent.<sup>64</sup>

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<sup>53</sup> See *id.* at 2612. *Contra* Chas. C. Steward Mach. Co. v. Davis, 301 U.S. 548, 598 (1937); *Helvering v. Davis*, 301 U.S. 619, 644–45 (1937).

<sup>54</sup> *Coleman v. Thompson*, 501 U.S. 722, 726 (1991).

<sup>55</sup> *N.Y. v. United States*, 505 U.S. 144, 181 (1992); *accord Sebelius*, 132 S. Ct. at 2578.

<sup>56</sup> *Gregory v. Ashcroft*, 501 U.S. 452, 459 (1991); *accord United States v. Lopez*, 514 U.S. 549, 576 (1995).

<sup>57</sup> *Bond v. United States*, 131 S. Ct. 2355, 2364 (2011); *accord Sebelius*, 132 S. Ct. at 2578.

<sup>58</sup> *Sebelius*, 132 S. Ct. at 2580.

<sup>59</sup> See 26 U.S.C. § 5000A(a) (2012).

<sup>60</sup> *Sebelius*, 132 S. Ct. at 2580 (quoting 26 U.S.C. § 5000A(b)(1), (c) (2012)).

<sup>61</sup> *Id.* at 2581.

<sup>62</sup> *Id.* (citing 42 U.S.C. § 1396a(a)(10) (2012)).

<sup>63</sup> See *id.* at 2601 (citing 42 U.S.C. §§ 1396a(a)(10)(A)(i)(VIII), 1396a(k)(1), 1396u–7(b)(5), 18022(b) (2012)).

<sup>64</sup> See *id.* (citing 42 U.S.C. § 1396d(y)(1) (2012)).

Chief Justice Roberts rejected the individual mandate as a proper exercise of Congress's power "[t]o regulate Commerce . . . among the several States."<sup>65</sup> "The individual mandate," he wrote, "does not regulate existing commercial activity. It instead compels individuals to *become* active in commerce by purchasing a product . . ."<sup>66</sup> He feared that "[c]onstruing the Commerce Clause to permit Congress to regulate individuals precisely *because* they are doing nothing would open a new and potentially vast domain to" federal legislative power.<sup>67</sup> At an extreme, such an interpretation of the commerce clause could let Congress "address the diet problem" in American public health policy "by ordering everyone to buy vegetables."<sup>68</sup> Although Chief Justice Roberts took pains to distinguish the regulation of homegrown wheat in *Wickard v. Filburn*,<sup>69</sup> despite that decision's notoriety as "perhaps the most far reaching" application of the commerce clause to "intrastate activity,"<sup>70</sup> the horror of compulsory broccoli purchases had helped to sink the constitutionality of the individual mandate—at least as an application of the commerce clause.<sup>71</sup>

On this point, Chief Justice Roberts won the support of four dissenting Justices (Scalia, Kennedy, Thomas, and Alito), who characterized the use of the commerce power to impose the individual mandate as a bid "to extend federal power to virtually everything," with "no principled limits."<sup>72</sup> In even more vivid language, the dissent contended that allowing Congress to "reach out and command even those furthest removed from an interstate market to participate in the market" would transmogrify "the Commerce Clause [into] a font of unlimited power . . . 'the hideous monster whose devouring jaws . . . spare neither sex nor age, nor high nor low, nor sacred nor profane.'"<sup>73</sup>

Chief Justice Roberts nevertheless upheld the individual mandate and its enforcement through a "shared responsibility payment" as an exercise of Congress's power "to lay and collect Taxes . . . to pay the Debts and provide for the common

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<sup>65</sup> See *id.* at 2621 (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting in part) (quoting U.S. CONST. art. I, § 8, cl. 3).

<sup>66</sup> *Sebelius*, 132 S. Ct. at 2587 (emphasis in original).

<sup>67</sup> *Id.* (emphasis in original).

<sup>68</sup> *Id.* at 2588; see also *id.* at 2591 (rejecting the government's argument that "upholding the individual mandate would not justify mandatory purchases of items such as cars or broccoli").

<sup>69</sup> *Sebelius*, 132 S. Ct. at 2587; *Wickard v. Filburn*, 317 U.S. 111, 128–29 (1942).

<sup>70</sup> *United States v. Lopez*, 514 U.S. 549, 560 (1995); accord *Sebelius*, 132 S. Ct. at 2588. Although *Filburn*, like *Sebelius*, involved the voluntary avoidance of a market transaction inasmuch as "the farmer's decision to grow wheat for his own use allowed him to avoid purchasing wheat in the market," Chief Justice Roberts reasoned that farmer Filburn "was at least actively engaged in the production of wheat, and the Government could regulate that activity because of its effect on commerce." *Sebelius*, 132 S. Ct. at 2588; see also *id.* at 2643 (Scalia, J., dissenting) (describing *Filburn* "as the *ne plus ultra* of expansive Commerce Clause jurisprudence"); *id.* at 2648 (describing *Filburn* "as the most expansive assertion of the commerce power in our history"). See generally Jim Chen, *Filburn's Legacy*, 52 EMORY L.J. 1719 (2003).

<sup>71</sup> See Mark D. Rosen & Christopher W. Schmidt, *Why Broccoli? Limiting Principles and Popular Constitutionalism in the Health Care Decision*, 61 UCLA L. REV. 66, 109, 119 (2013).

<sup>72</sup> *Sebelius*, 132 S. Ct. at 2648 (Scalia, J., dissenting).

<sup>73</sup> *Id.* at 2646 (quoting THE FEDERALIST NO. 33, at 202 (Alexander Hamilton) (Clinton Rossiter ed., 1961)).

Defence and general Welfare of the United States.”<sup>74</sup> Despite the payment’s considerable impact on revenue—“the payment is expected to raise about \$4 billion per year by 2017”<sup>75</sup>—Chief Justice Roberts conceded that the shared responsibility payment “is plainly designed to expand health insurance coverage.”<sup>76</sup>

In practical terms, Chief Justice Roberts’s decision to uphold the individual mandate as “a valid exercise of the taxing power,”<sup>77</sup> coupled with the willingness of four other Justices (Ginsburg, Breyer, Kagan, Sotomayor) to uphold that provision on either commerce clause or taxing power grounds, preserved this pivotal portion of the PPACA. But the Chief Justice and the *Sebelius* dissenters have left an indelible imprint on the analysis of law as an exercise in behavioral psychology. Those Justices’ shared characterization of the individual mandate as the economic conscription of unwilling individuals into the health insurance market looms as a rejection of the risk-averse axis in prospect theory. So strong is the interest of the healthy individual who prefers to opt out of organized health insurance markets that a majority of today’s Supreme Court—a fractured, defeated majority, to be sure, but five Justices nonetheless—is willing to shelter such a refusal from the otherwise plenary power of the federal government to regulate nationwide commerce.<sup>78</sup>

In turning to the Medicaid expansion provisions of the PPACA, Chief Justice Roberts again struck the mystic chords of federalism, touched by the bitter angels of liberty. Neither the spending power<sup>79</sup> nor any other provision of the Constitution “confer[s] upon Congress the ability to require the States to govern according to Congress’ instructions,”<sup>80</sup> lest “the two-government system . . . give way to a system that vests power in one central government” at the expense of “individual liberty.”<sup>81</sup>

To the Chief Justice, the constitutionality of the Medicaid expansion hinged on the gradual, almost learned dependency of the states on federal funding. “Federal funds received through the Medicaid program have become a substantial part of state budgets, now constituting over [ten] percent of most States’ total revenue.”<sup>82</sup> This fact distinguished the PPACA and *Sebelius* from the drinking age requirement on which the federal government had conditioned five percent of highway funding in *South Dakota v. Dole*.<sup>83</sup> In that case, Chief Justice Roberts reasoned, the federal

<sup>74</sup> *Sebelius*, 132 S. Ct. at 2600; see also U.S. CONST. art. I, § 8, cl. 1.

<sup>75</sup> *Sebelius*, 132 S. Ct. at 2594.

<sup>76</sup> *Id.* at 2596.

<sup>77</sup> *Id.*

<sup>78</sup> Cf. *Wickard v. Filburn*, 317 U.S. 111, 120 (1942) (“At the beginning, Chief Justice Marshall described the federal commerce power with a breadth never yet exceeded.”) (citing *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 194–95 (1824)).

<sup>79</sup> *S.D. v. Dole*, 483 U.S. 203, 206 (1987). The power “[T]o lay and collect Taxes . . . to pay the Debts and provide for the Common Defense and general Welfare of the United States” under U.S. CONST. art. I, § 8, cl. 1, implies a power to spend and a further “[i]ncident[all]” power to “attach conditions on the receipt of federal funds.” *Dole*, 483 U.S. at 206. See generally Jeffrey T. Renz, *What Spending Clause? (or The President’s Paramour): An Examination of the Views of Hamilton, Madison, and Story on Article I, Section 8, Clause 1 of the United States Constitution*, 33 J. MARSHALL L. REV. 81, 85 (1999).

<sup>80</sup> *N.Y. v. United States*, 525 U.S. 144, 162 (1992); accord *Sebelius*, 132 S. Ct. at 2602.

<sup>81</sup> *Sebelius*, 132 S. Ct. at 2602.

<sup>82</sup> *Id.* at 2581.

<sup>83</sup> 483 U.S. 203, 209 (1987).



highway funds that were contingent on the state's raising of its drinking age to twenty-one represented "less than half of one percent of South Dakota's budget at the time."<sup>84</sup> By contrast, Medicaid spending comprises more than a fifth of the average state's total budget, and federal funds cover between one half and five-sixths of those costs.<sup>85</sup>

Under these conditions, wrote Chief Justice Roberts, "the financial 'inducement' Congress has chosen is much more than 'relatively mild encouragement'—it is a gun to the head."<sup>86</sup> Unlike the palpable but ultimately resistible prod of federal highway funding in *Dole*, "[t]he threatened loss of over [ten] percent of a State's overall budget is economic dragooning that leaves the States with no real option but to acquiesce in the Medicaid expansion."<sup>87</sup>

Economic coercion of the states through federal spending is a familiar refrain in American constitutional law. The dispute over the constitutionality of Medicaid expansion in *Sebelius* reprises a debate that was perhaps most famously conducted by the Supreme Court across its 1935 and 1936 terms: *United States v. Butler*<sup>88</sup> and *Steward Machine Co. v. Davis*.<sup>89</sup> *Steward* upheld provisions of the Social Security Act that encouraged states to establish their own social safety nets by offering partial refunds of federal Social Security taxes.<sup>90</sup> Whereas those provisions had not passed "the point at which pressure turns into compulsion,"<sup>91</sup> *Butler* struck down the Agricultural Adjustment Act of 1933 (not to be confused with the 1938 statute of the same name, ultimately upheld in *Wickard v. Filburn*). The contrast between *Butler* and *Steward*, two cases decided merely sixteen months apart, could not have been starker.

In a contemporary constitutional culture that describes a future reduction in federal Medicaid funding as "a gun to the head," *Butler*'s depiction of coercion is worth quoting at length:

*The power to confer or withhold unlimited benefits is the power to coerce or destroy. If the cotton grower elects not to accept the benefits, he will receive less for his crops; those who receive payments will be able to undersell him. The result may well be financial ruin . . . . [T]he Department of Agriculture has properly described the plan as one to keep a nonco-operating minority in line. This is coercion by economic pressure. The asserted power of choice is illusory.*<sup>92</sup>

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<sup>84</sup> *Sebelius*, 132 S. Ct. at 2604 (citing *Dole*, 483 U.S. at 211).

<sup>85</sup> *See id.* (reporting that "approximately \$3.3 trillion between 2010 and 2019" would be needed "[T]o cover the costs of *pre*-expansion Medicaid") (emphasis in original).

<sup>86</sup> *Id.*

<sup>87</sup> *Id.* at 2605; *see also id.* at 2605 n.12 (decrying the possibility that "the Federal Government [could] increase requirements" under the Medicaid program "in such a manner as to impose unfunded mandates on the States").

<sup>88</sup> *United States v. Butler*, 297 U.S. 1, 78 (1936).

<sup>89</sup> *Chas. C. Steward Mach. Co. v. Davis*, 301 U.S. 548, 598 (1937).

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at 590; *accord S.D. v. Dole*, 483 U.S. 203, 211 (1987).

<sup>92</sup> *Butler*, 297 U.S. at 71 (emphasis added).

This vision of coercion finds its strongest contemporary validation in Chief Justice Roberts's opinion in *Sebelius*. Three-quarters of a century after the Supreme Court debated the meaning of coercion in *Butler* and *Steward*, a majority of Justices has reversed the tide of history and sided with *Butler*.<sup>93</sup> Characterizing the power to confer or to withhold benefits as the ultimate power to destroy puts a fine twist on one of the oldest truths in American constitutional law, the recognition that it is truly "the power to tax [that] involves the power to destroy."<sup>94</sup> That this rhetorical inversion of taxing versus spending should be given effect through a decision upholding an individual mandate to buy health insurance as an exercise of Congress's power of the purse is an irony "too extravagant to be maintained."<sup>95</sup>



#### IV. PINWHEEL OF FORTUNE

The Supreme Court's rhetorical flourishes aside, the real irony of the debate over national health care reform in *Sebelius* is that public policy encouraging individuals to insure against calamity is the essence of a temperamentally (if not politically) conservative approach to personal finance. A near cousin of that risk-

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<sup>93</sup> Cf. *W. Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 216 (1994) (Rehnquist, C.J., dissenting) (criticizing *Butler* as an "ill-starred opinion . . . in which the Court held unconstitutional what would have been an otherwise valid tax on the processing of agricultural products because of the use to which the revenue raised by the tax was put").

<sup>94</sup> *McCulloch v. Md.*, 17 U.S. (4 Wheat.) 316, 431 (1819).

<sup>95</sup> *Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 179 (1803).

avoiding principle is a commitment to accepting lower but steadier streams of income as a hedge against the possibility of complete loss, an admittedly unlikely event that would have catastrophic consequences if it should ever come to pass. In questioning the constitutionality of the individual mandate and in invalidating outright the Medicaid expansion provisions of the Affordable Care Act, Chief Justice Roberts' principal opinion in *Sebelius* has raised serious barriers to legislative initiatives that would encourage the population at large to take economic action whose prudence arises from most individuals' aversion to risk.

Despite its contribution to political theater in an ideologically riven United States, *Sebelius* involved at most a modest expansion of constitutional principles governing congressional power to curb risk-seeking behavior among individuals. As Justice Ginsburg noted in her opinion, health care is unique among markets in two respects. First, its consumption is universal and inevitable, albeit "unpredictable."<sup>96</sup> Second, the provision of health care, at least on an emergency basis, is guaranteed.<sup>97</sup> In other markets, consumers "get no free ride or food," much less "at the expense of another consumer forced to pay at an inflated price."<sup>98</sup> Seen in this light, the decision to forgo health insurance is better understood as a decision to self-insure—or, perhaps more accurately, to self-redistribute—against health care expenses incurred over the course of each individual's lifetime.<sup>99</sup> "A person who self-insures opts against prepayment for a product the person will in time consume."<sup>100</sup>

At the governmental level, the case for rationalizing health care and health insurance markets on a national basis is even more compelling. States that might otherwise decide on their own to expand health care coverage face a very real first-mover disadvantage. They are likely to attract the sick, the old, and the poor. Absent federal coordination, health care expansion within a single state will serve as "bait to the needy and dependent elsewhere, encouraging them to migrate and seek a haven of repose."<sup>101</sup> Just as healthy individuals face a powerful incentive to opt out of health insurance markets whose participants are comparatively infirm, individual states are "separately incompetent" to tackle the extraordinary challenges of health care reform.<sup>102</sup> Given the nearly intractable problems of adverse selection in all markets for health care and health insurance,<sup>103</sup> the Affordable Care Act is best

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<sup>96</sup> Nat'l Fed'n of Indep. Bus. v. *Sebelius*, 132 S. Ct. 2566, 2619 (2012) (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting in part).

<sup>97</sup> *Id.* at 2620.

<sup>98</sup> *Id.*

<sup>99</sup> *See id.*; cf. *Mass. Bd. of Ret. v. Murgia*, 427 U.S. 307, 313-14 (1976) (observing that old age "marks a stage that each of us will reach if we live out our normal span").

<sup>100</sup> *Sebelius*, 132 S. Ct. at 2622 n.7 (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting-in-part).

<sup>101</sup> *Helvering v. Davis*, 301 U.S. 619, 644 (1937); accord *Sebelius*, 132 S. Ct. at 2612 (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting in part).

<sup>102</sup> *Sebelius*, 132 S. Ct. at 2628 (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting-in-part).

<sup>103</sup> *See Hosp. Corp. of Am. v. F.T.C.*, 807 F.2d 1381, 1391 (7th Cir. 1986) ("[N]onprofit hospitals, private and public, harbor considerable antipathy toward proprietary hospitals, regarding them as 'cream skimmers' who lure away the affluent patients that nonproprietary hospitals need to defray the costs of serving the less affluent."); David M. Cutler & Richard J. Zeckhauser, *Adverse Selection in Health Insurance*, 1 FORUM FOR HEALTH ECON. & POL'Y 1, 1 (1998); Denis Drechsler & Johannes

understood—and deserves to be upheld, as a matter of constitutional law, if not as necessarily a matter of sound economic policy<sup>104</sup>—as the federal government’s best effort to “avoid[] an insurance-market death spiral.”<sup>105</sup>

When paired with international environmental law’s treatment of biodiversity conservation and bioprospecting, *Sebelius* covers the entirety of prospect theory’s “fourfold pattern.” Whereas “Bioprospect Theory” mapped international environmental law along prospect theory’s risk-seeking axis, the exegesis of *Sebelius* in “The Patient in the Tower” articulates a commerce clause jurisprudence that reeks of substantive due process.<sup>106</sup> *Lochner*’s rough beast, its hour come round at last, slouches toward Washington to be reborn.<sup>107</sup> *Sebelius* recognizes a tacit liberty interest against being coerced to insure. Limiting congressional power to regulate commerce would prevent compulsory acceptance of annuity-like income streams. This limit completes a second, countervailing legal axis, one that actively enables healthy, optimistic individuals to refuse risk-averse hedges against improbable losses or against the comparably improbable failure to attain future wealth.

Sanity knows no refuge in a jurisprudence of risk.<sup>108</sup> The law of intellectual property and health care, as illustrated through international law on biodiversity conservation and through constitutional controversies involving universal health care coverage, privileges private risk-seeking behavior over risk-averse public policy. In both domains, prospect theory evidently condemns lawmakers and the public alike

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Jütting, *Different Countries, Different Needs: The Role of Private Health Insurance in Developing Countries*, 32 J. HEALTH POLITICS, POL’Y & L. 497, 507 (2007) (describing the “common phenomenon” of “[c]ream skimming” in health care, “in which private providers primarily target good-risk individuals”); David A. Hyman, *When and Why Lawyers Are the Problem*, 57 DEPAUL L. REV. 267, 272 (2008) (“The effect of this specialized care delivery model on traditional primary care practices may be to remove some patients and services from the doctor’s office, leaving a sicker population behind.”). See generally George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 493–94 (1970); Jim Chen, *Creamskimming and Competition*, 48 NEW ENG. L. REV. 7, 15 (2014) (describing adverse selection and creamskimming in a wide variety of markets, including health care and health insurance markets).

<sup>104</sup> Cf. *CTS Corp. v. Dynamics Corp. of Am.*, 481 U.S. 69, 96–97 (1987) (Scalia, J., concurring in part and concurring in the judgment) (recognizing that “a law can be both economic folly and constitutional” and expressing willingness to uphold a law that “is at least the latter”).

<sup>105</sup> *Sebelius*, 132 S. Ct. at 2628 n.11 (Ginsburg, J., concurring in part, concurring in the judgment in part, and dissenting in part).

<sup>106</sup> See *id.* at 2629 (contending that the Chief Justice’s commerce clause opinion “and even more so the joint dissenters’ reasoning, . . . bear a disquieting resemblance to . . . long-overruled decisions” in cases such as *Lochner v. N.Y.*, 198 U.S. 45 (1905)); cf. *Sorrell v. IMS Health Inc.*, 131 S. Ct. 2653, 2675, 2685 (2011) (Breyer, J., dissenting) (warning that heightened constitutional review of “ordinary economic regulations” might “reawaken[] *Lochner*’s pre-New Deal threat of substituting judicial for democratic decisionmaking”). See generally Julie E. Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management,”* 97 MICH. L. REV. 462 (1998).

<sup>107</sup> Cf. William Butler Yeats, *The Second Coming*, in THE COLLECTED POEMS OF W.B. YEATS: A NEW EDITION 187 (Richard J. Finneran ed., 1983) (“And what rough beast, its hour come round at last, Slouches towards Bethlehem to be born?”).

<sup>108</sup> Cf. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 844 (1992) (“Liberty finds no refuge in a jurisprudence of doubt.”).

“to wager [their] salvation upon some prophecy based upon imperfect knowledge.”<sup>109</sup>  
So spins the law’s *Pinwheel of Fortune*.

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<sup>109</sup> *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting).