

# Muscle Melee: Redefining Anabolic Steroid Policy in a Post-“Great Recession” Economy

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I. INTRODUCTION	44
II. STEROIDS AND HEALTH	45
III. ENFORCEMENT ECONOMICS	47
a. Current Economy	47
b. Underground Steroid Market	49
IV. STEROIDS IN SPORTS	50
a. Actual User Demographics	51
b. “Cheating” and the “Purity” of Athletic Competition	52
c. The Current Regulatory Structure	53
d. Towards More Coherent Sports Regulation	53
V. CONCLUSION	55

## I. INTRODUCTION

On September 24, 2009, federal authorities executed a search warrant on a sports supplement website’s warehouse in Boise, Idaho.<sup>1</sup> The nutrition company, BodyBuilding.com (the “Website”), was charged with selling dietary supplements containing anabolic steroids and designer anabolic steroids (“steroids”). The raid was part of an ongoing effort by the Food and Drug Administration to regulate companies that sell anabolic steroids masked as dietary supplements.<sup>2</sup> Ironically, the Website is not an outlier illuminated from a dark corner of the worldwide web (where crazed steroid fiends go to get a “fix”). In fact, the Website is the world’s largest bodybuilding and fitness website, boasting over one million “forum” members and a controlling ownership (purchased for \$100 million in 2008) maintained by Liberty Media, a conglomerate that owns the Atlanta Braves and QVC.<sup>3</sup>

As has been the case with much of the “War on Drugs,” criminally enforcing a ban on the use of steroids (the “Policy”) as Schedule III drugs in the United States has failed.<sup>4</sup> The rise of dangerous and unregulated grey market alternatives and underground laboratory production are proof of that. The main arguments historically posed against responsible steroid use by adults focus on (1) teenage access to the drugs if decriminalized or legalized, and (2) use in sports to create an unfair advantage. While each argument is separately considered, modern market realities vitiated much of their appeal.

First, with increasing accessibility to capsule form steroids and “pro-hormones,” it seems intuitive that teens now have much greater access to more dangerous versions of popular steroids. The hypothetical “little Jimmy” high school football player can now order unregulated—and, in many cases,

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<sup>1</sup> See Michael S. Schmidt, *BodyBuilding.com Sells Supplements That Contain Steroids, Court Papers Say*, N.Y. TIMES, Sept. 25, 2009, at B12, available at [http://www.nytimes.com/2009/09/25/sports/baseball/25doping.html?\\_r=2](http://www.nytimes.com/2009/09/25/sports/baseball/25doping.html?_r=2).

<sup>2</sup> *Id.*

<sup>3</sup> See Bill Roberts, *Feds raid Meridian Online Fitness Retailer Bodybuilding.com*, IDAHO STATESMAN, Sept. 25, 2009, <http://www.idahostatesman.com/102/story/912308.html>.

<sup>4</sup> See Nicholas D. Kristoff, *Drugs Won the War*, N.Y. TIMES, June 14, 2009, at WK10, available at <http://www.nytimes.com/2009/06/14/opinion/14kristof.html>; see *infra* p. 46 for an explanation of Schedule III drugs.

misabeled—steroids from any number of online retailers with next-day shipping.<sup>5</sup> Although federal raids occur, rendering certain substances illegal, inventive chemists, driven by enormous profits, continue to produce novel and exotic compounds.<sup>6</sup> Second, steroid use in professional sports has historically been one of the main reasons to continue steroids prohibition; however, use of steroids and human growth hormone (“HGH”) in professional sports has skyrocketed in recent years and does not seem to be declining.<sup>7</sup>

Aside from these issues looms the corollary question: whether anabolic steroids actually pose such a risk to society that prohibition should continue—contrary to current medical knowledge—specifically when heavily documented dangers such as cigarettes and fast food continue to poison the American population on a daily basis.<sup>8</sup> Finally, the current economic situation facing the U.S. (and future economic prospects in a globalized marketplace) raises the question of whether it makes sense to continue allocating funds to steroid enforcement at federal, state, and local government levels. This article considers each of these questions, and argues that steroids (although subject to continual media hype and fear mongering) do not pose the inordinate public health risk necessary to justify continued spending on enforcement. Instead, we should allocate such resources to more critical societal needs.

## II. STEROIDS AND HEALTH

In 1990, the U.S. Congress passed the Anabolic Steroid Control Act, classifying steroids as Schedule III drugs. The Act made it illegal to possess steroids without a legitimate medical reason and a prescription from a licensed physician. The legislation passed despite expert witnesses from the Drug Enforcement Administration (“DEA”), the Federal Drug Administration (“FDA”), and the American Medical Association (“AMA”) all testifying against any such criminalization.<sup>9</sup> In his 2004 State of the Union address, President George W. Bush stated: “[t]he use of performance-enhancing drugs like steroids in baseball, football, and other sports is dangerous.”<sup>10</sup> If steroids indeed harbor the potential for widespread abuse and present serious risks to public health, continued enforcement in the face of lagging economic resources may be a logical conclusion. The medical evidence, however, does not support that

<sup>5</sup> See Amy Shipley, *Designer Steroids: Hide and Seek*, WASHINGTON POST, Oct. 18, 2005, available at <http://www.washingtonpost.com/wp-dyn/content/graphic/2005/10/18/GR2005101800648.html>.

<sup>6</sup> See, e.g., Lance Williams, *Steroid Raid on Castro District Store*, S.F. CHRONICLE, July 24, 2009, at A11, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/07/23/MN4018UC8L.DTL>; see also Teri Thompson, Christian Reed and Nathaniel Vinton, *FDA Flexes Muscle as Raid Sends Message to The Supplement Industry*, N.Y. DAILY NEWS, July 27, 2009, [http://www.nydailynews.com/sports/baseball/2009/07/27/2009-07-27\\_fda\\_flexes\\_muscle.html](http://www.nydailynews.com/sports/baseball/2009/07/27/2009-07-27_fda_flexes_muscle.html).

<sup>7</sup> See generally Tom Verducci, *Another big-name slugger busted for steroids? Better get used to it*, SPORTS ILLUSTRATED, June 16, 2009, available at [http://sportsillustrated.cnn.com/2009/writers/tom\\_verducci/06/16/sosa.react/index.html](http://sportsillustrated.cnn.com/2009/writers/tom_verducci/06/16/sosa.react/index.html); Mark Maske, *NFL Hopes Suspensions End With Harrison, Wilson*, WASHINGTON POST, Sept. 2, 2007, available at <http://www.washingtonpost.com/wp-dyn/content/article/2007/09/01/AR2007090101235.html>; Michael S. Schmidt, *Company Agrees to a Fine Over HGH Shipments*, N.Y. TIMES, Sept. 19, 2007, available at <http://www.nytimes.com/2007/09/19/sports/othersports/19doping.html>; Michael S. Schmidt, *Sosa Is Said to Have Tested Positive in 2003*, N.Y. TIMES, June 17, 2009, at B11, available at <http://www.nytimes.com/2009/06/17/sports/baseball/17doping.html>.

<sup>8</sup> See Betsy McKay, *Cost of Treating Obesity Soars*, THE WALL STREET JOURNAL, July 28, 2009, available at <http://online.wsj.com/article/SB10001424052970204563304574314794089897258.html>.

<sup>9</sup> See generally John Burge, *Legalize and Regulate: A Prescription for Reforming Anabolic Steroid Legislation*, 15 LOY. L.A. ENT. L.J., 33, 45 (1994).

<sup>10</sup> See President George W. Bush's address before a joint session of the Congress on the State of the Union, January 20, 2004, [http://www.c-span.org/executive/transcript.asp?cat=current&code=bush\\_admin&year=2004](http://www.c-span.org/executive/transcript.asp?cat=current&code=bush_admin&year=2004).

conclusion.<sup>11</sup> In most cases, general misinformation and media attention on steroid use in professional sports magnify steroid abuse and its associated deleterious effects. Interestingly, the Policy encourages two of the greatest public health concerns: using impure black market substances and failing to maintain medical monitoring.

Steroids are synthetic forms of testosterone, the male sex hormone produced in the testicles and an essential natural hormone present in both males and females.<sup>12</sup> Testosterone serves three main physiological functions: (1) stimulating protein production; (2) reducing protein breakdown; and (3) inducing male characteristics when in high concentration.<sup>13</sup> Steroids take the form of pills, injectable liquids, and creams; they are available in pure form or as steroid precursors in dietary supplements.<sup>14</sup> In 2002, doctors wrote nearly two million U.S. prescriptions for testosterone, and the AMA calculated nearly 30 percent annual growth rates in usage.<sup>15</sup> Medical studies correlate low testosterone levels to Alzheimer's disease, diabetes, and obesity.<sup>16</sup> Testosterone therapy can effectively mitigate many symptoms of male aging, including loss of libido, lean muscle mass, and memory.<sup>17</sup> In the individual sports setting, athletes and bodybuilders only use steroids in intermittent “cycles,”<sup>18</sup> minimizing perceivable health risks even when “super therapeutic” doses are used. In the HGH context,<sup>19</sup> strong arguments exist on whether federal legislation has stripped doctors of their power to determine the proper use of HGH in treating adult disease.<sup>20</sup>

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<sup>11</sup> See Leonard S. Marks et al., *Effect of Testosterone Replacement Therapy on Prostate Tissue in Men With Late-Onset Hypogonadism: A Randomized Controlled Trial*, 296 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 2351, 2351–61 (Nov. 15, 2006), available at <http://jama.ama-assn.org/cgi/content/full/296/19/2351>.

<sup>12</sup> See NAT'L INST. ON DRUG ABUSE, U.S. DEPT. OF HEALTH & HUMAN SERV., PUB. NO. 00-3721, ANABOLIC STEROID ABUSE 1 (Apr. 2000), available at <http://www.nida.nih.gov/PDF/RRSteroi.pdf> (last visited Sept. 6, 2006).

<sup>13</sup> See ROBERT VOY, M.D., DRUGS, SPORT, AND POLITICS 13 (1991).

<sup>14</sup> George Fan, *Anabolic Steroid and Human Growth Hormone Abuse: Creating an Effective and Equitable Ergogenic Drug Policy*, 1994 U. CHI. LEGAL F. 439, 442 (1994); NAT'L INST. ON DRUG ABUSE, *supra* note 12, at 3–4.

<sup>15</sup> *Id.*

<sup>16</sup> See Bruce Goldfarb, *Low Testosterone Should Arouse Clinical Interest*, 2 DOC NEWS (no. 12) 1, 1–8 (Dec. 2005), available at <http://docnews.diabetesjournals.org/content/2/12/1.2.full>.

<sup>17</sup> See C. A. Allan et al., *Testosterone Therapy Prevents Gain in Visceral Adipose Tissue and Loss of Skeletal Muscle in Non-obese Aging Men*, 93 JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM (No. 1), 139, 139–46 (Oct. 16, 2007); Jerald Bain, M.D., *Andropause: Testosterone Therapy For Aging Men*, 47 CANADIAN FAMILY PHYSICIAN 91, 93–97 (Jan. 2001), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2014707/pdf/11212438.pdf>.

<sup>18</sup> Andrew B. Parkinson & Nick A. Evans, *Anabolic Androgenic Steroids: A Survey of 500 Users*, 38 MED. & SCI. SPORTS & EXERCISE 644, 648 (2006) (90 percent of steroids users surveyed administered anabolic androgenic steroids in cycles of four to twelve weeks with drug-free intervals in between these cycles); Chris Street, Jose Antonio, & David Cudlipp, *Androgen Use by Athletes: A Reevaluation of the Health Risks*, CANADIAN J. APPLIED PHYSIOLOGY 421, 434–36 (1996) (noting that most athletes use steroids intermittently and that moderate use produces only minor and reversible side effects).

<sup>19</sup> HGH is a hormone that declines with age and has garnered extreme popularity in “anti-aging” medical practices. Elmer M. Cranton, M.D., & William Fryer, *HGH: The Body of Evidence* (adapted from the book ELMER M. CRANTON, M.D. & WILLIAM FRYER, *RESETTING THE CLOCK: 5 ANTIAGING HORMONES THAT ARE REVOLUTIONIZING THE QUALITY AND LENGTH OF LIFE* (M. & Evans Co. 1996)), available at [http://www.drcranton.com/hrt/hGH\\_Body\\_of\\_Evidence.pdf](http://www.drcranton.com/hrt/hGH_Body_of_Evidence.pdf).

<sup>20</sup> See generally Ryan Cronin, *Bureaucrats vs. Physicians: Have Doctors Been Stripped of Their Power to Determine the Proper Use of Human Growth Hormone in Treating Adult Disease?*, 27 WASH. U. J.L. & POL'Y 191 (2008).

While skeptical researchers warn that additional research is needed, evidence indicates that the feared risks of steroid use, such as heart disease and prostate cancer, are greatly overstated or contrary to their actual effects.<sup>21</sup> Richard Collins, bodybuilder and criminal defense attorney, observes:

The medical establishment's characterization of steroids as dangerous is a scare tactic promulgated to preserve the "purity" of athletic competition. Past studies concluding that steroids are ineffective at promoting muscle growth and cause irreversible side effects are not credible and were based on faulty methodology. While there are health risks associated with steroid use, particularly for women and adolescents, recent research indicates that adverse side effects, such as liver damage and psychiatric problems, have been highly overstated. Forty years of steroid use by athletes provides no evidence of a serious health crisis or epidemic of steroid-related deaths.<sup>22</sup>

In any case, the public health issues that steroids pose pale in insignificance when compared to legal vices such as fast food, U.S. obesity's main contributor. "The medical costs of treating obesity-related diseases may have soared as high as \$147 billion in 2008. . . . The prevalence of obesity rose 37% between 1998 and 2006, and medical costs climbed to about 9.1% of all U.S. medical costs. . . ."<sup>23</sup> As the debate on U.S. healthcare reform continues to conflagrate, it is questionable whether, as a society, we should continue to expend resources enforcing drugs proven to decrease obesity,<sup>24</sup> while allowing the mass proliferation of chemical-laden food proven to increase obesity and other health risks.<sup>25</sup>

### III. ENFORCEMENT ECONOMICS

Speculators may do no harm as bubbles on a steady stream of enterprise. However, the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.<sup>26</sup>

#### a. Current Economy

It is well documented and undisputed that the U.S. economy is currently in a crisis. With unemployment nearing 10 percent<sup>27</sup> and many state and local governments teetering on the precipice of failure, recovery still seems elusive.<sup>28</sup> No current policy analysis could be complete without a brief summary of the current issues facing the U.S. and global economy.

The "Efficient Market" hypothesis, dominating economic theory over the last 40 years with the notion that asset prices reflect all information available in the market, has proven false.<sup>29</sup> Noted free

<sup>21</sup> See Parkinson & Evans, *supra* note 18.

<sup>22</sup> Richard Collins, *The Health Risks of Steroid Use Have Been Exaggerated*, in PERFORMANCE-ENHANCING DRUGS (James Haley ed., Greenhaven Press 2003).

<sup>23</sup> See McKay, *supra* note 8.

<sup>24</sup> See Goldfarb, *supra* note 16.

<sup>25</sup> See McKay, *supra* note 8.

<sup>26</sup> JOHN MAYNARD KEYNES, THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY 142 (Google Book ed., Atlantic Publishers 2006) (1936).

<sup>27</sup> See Bureau of Labor Statistics, *Employment Situation Summary—September 2009*, Oct. 2, 2009, <http://www.bls.gov/news.release/empst.nr0.htm>.

<sup>28</sup> See Elliot Spitzer, *State of Fear*, SLATE, July 13, 2009, <http://www.slate.com/id/2222776/>.

<sup>29</sup> See generally Paul Krugman, *How Did Economists Get It So Wrong?*, N.Y. TIMES, Sept. 2, 2009, at MM36, available at [http://www.nytimes.com/2009/09/06/magazine/06Economic-t.html?\\_r=2&pagewanted=1&sq=how%20economists%20got%20it&st=cse&scp=1](http://www.nytimes.com/2009/09/06/magazine/06Economic-t.html?_r=2&pagewanted=1&sq=how%20economists%20got%20it&st=cse&scp=1).

market champion and former Federal Reserve chair Alan Greenspan admitted that a basic premise of the free market (that firms have the enlightened self-interest to monitor their own risk exposure) failed.<sup>30</sup> Because of continuous deregulation since the Reagan Administration<sup>31</sup> and a movement of the best and brightest students into finance, complex derivatives created false market value,<sup>32</sup> leading to devastating effects.

Although the U.S. narrowly averted total economic cataclysm just a year ago, the finance sector shows no sign of altering dangerous trading practices. Economists argue that finance is creating a new leveraged-asset bubble based on “currency carry trades,” which the U.S. dollar mainly finances.<sup>33</sup> This ultra-risky practice is a form of interest rate arbitrage, allowing investment banks to currently borrow dollars at zero to negative interest rates, convert the dollars into foreign currency, and buy assets (currently buoyed by global government fiscal stimulus spending) that realize a greater interest rate. If the dollar appreciates, however, serious consequences could follow as investors scramble to unload assets, similar to a cataclysmic game of “musical chairs.”<sup>34</sup>

At the same time, Wall Street excess and tax cuts to the wealthiest have left working people’s wages essentially frozen since the 1980s.<sup>35</sup> The top one percent of U.S. households now makes up ninety-five percent of the financial wealth,<sup>36</sup> making the American economic landscape resemble many Latin American countries. Considering these hurdles, the U.S. economy will continue to struggle, the future marked by hard choices on resource allocation. While the Obama Administration’s stimulus package attempted to fight the downturn with Keynesian fiscal policies, some economists argue that the current stimulus will prove insufficient, and state and local governments should receive more stimulus money.<sup>37</sup>

In weighing such economic pressures and future resource limitations, shouldn’t policy makers jettison historically ineffective and socially expensive policies? Under the best available estimates, enforcement and testing of steroids cost U.S. taxpayers nearly \$7 billion in 2005.<sup>38</sup> Other non-harmful drugs, such as marijuana,<sup>39</sup> are moving towards decriminalization due to lack of enforcement resources and the availability of large tax revenues for cash-strapped states.<sup>40</sup>

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<sup>30</sup> See Kristina Cooke, *Recession will be worst since 1930’s: Greenspan*, REUTERS, Feb. 18, 2009, <http://www.reuters.com/article/newsOne/idUSTRE51H0OX20090218>.

<sup>31</sup> See Paul Krugman, *Reagan Did It*, N.Y. TIMES, June 1, 2009, at A21, available at <http://www.nytimes.com/2009/06/01/opinion/01krugman.html>.

<sup>32</sup> See generally Felix Salmon, *Recipe for Disaster: The Formula That Killed Wall Street*, WIRED, Feb. 23, 2009, available at [http://www.wired.com/techbiz/it/magazine/17-03/wp\\_quant?currentPage=all](http://www.wired.com/techbiz/it/magazine/17-03/wp_quant?currentPage=all).

<sup>33</sup> See Nouriel Roubini, *Mother of All Carry Trades Faces Inevitable Bust*, FINANCIAL TIMES, Nov. 1, 2009, available at [http://www.ft.com/cms/s/0/9a5b3216-c70b-11d0-bb6f-00144feab49a.html?nclink\\_check=1](http://www.ft.com/cms/s/0/9a5b3216-c70b-11d0-bb6f-00144feab49a.html?nclink_check=1).

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

<sup>35</sup> See Dean Baker, *THE PRODUCTIVITY TO PAYCHECK GAP: WHAT THE DATA SHOW*, CENTER FOR ECONOMIC AND POLICY RESEARCH (Apr. 2007), available at <http://www.cepr.net/index.php/publications/reports/the-productivity-to-paycheck-gap-what-the-data-show/> (“The real hourly wage of a typical worker is only slightly higher in 2006 than it was in the seventies”).

<sup>36</sup> See Robert Frank, *Plutonomics*, WALL STREET JOURNAL, Jan. 8, 2007, <http://blogs.wsj.com/wealth/2007/01/08/plutonomics/>.

<sup>37</sup> See Paul Krugman, *Mission Not Accomplished*, N.Y. TIMES, Oct. 2, 2009, at A31, available at <http://www.nytimes.com/2009/10/02/opinion/02krugman.html>.

<sup>38</sup> See Aaron Kuriloff, *Steroids Put Bulge in Budgets*, ESPN, Mar. 16, 2005, <http://sports.espn.go.com/mlb/news/story?id=2013674>.

<sup>39</sup> See John Dever, *Health Risks Of Marijuana Still Not Nailed Down*, MEDPAGE TODAY, Oct. 15, 2009, <http://www.medpagetoday.com/Psychiatry/Addictions/16456>; Neil Osterweil, *ATS: Marijuana Smoking Found Non-Carcinogenic*, MEDPAGE TODAY, May 24, 2006, <http://www.medpagetoday.com/Psychiatry/Addictions/3393>.

<sup>40</sup> See Bob Egelko, *Medical-pot backers react to new Obama policy*, S.F. CHRONICLE, Oct. 19, 2009, at A1, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/10/19/MNO01A7S79.DTL>.

**b. Underground Steroid Market**

Policy has actually created greater access to more dangerous forms of steroids through the supplement industry's rampant production of pro-hormones<sup>41</sup> and underground laboratory production of injectable Steroid products. Sales of these black-market steroids have exploded in recent years, using the web as a vehicle to locate both national and international sources.<sup>42</sup> Assuming arguendo that enforcement is necessary, any time one imposes an enforcement regime, black-market activity will arise, presenting many problems in the steroid context.

In the pro-hormone market, supplement companies sell steroid laced dietary supplements legally on myriad internet websites, usually leaving the consumer unaware of the actual product contained within.<sup>43</sup> Even if the consumer is aware of the actual product contained in the supplement, supplement company chemists must "methylate" the steroid (a chemical process that allows the steroid to be broken down in the liver) to make it orally "available" to the human body. This generally poses much greater health risks than traditional injectable steroids that do not need to pass through the liver.<sup>44</sup>

Purity problems present even greater risks in the underground laboratory production context. Many steroid producers, fueled by quick profits from web customers, will produce steroid compounds in unsanitary conditions.<sup>45</sup> In 2007, the DEA's "Raw Deal" enforcement action revealed a vast network of national and international suppliers producing all types of steroids, using the internet and U.S. mail system to consummate sales of, in many cases, impure injectable steroids.<sup>46</sup>

In sum, continued steroids enforcement currently costs the U.S. over \$7 billion annually and has inadvertently fueled a large market of more dangerous drugs that are readily available to teenage users. In light of the aforementioned economic choices, it seems logical that a system of decriminalization and regulation would produce the best result for all. A recent study on steroids in the United Kingdom outlined the current policy across the pond:

In the United Kingdom, steroids (along with the related drugs clenbuterol, growth hormone and chorionic gonadotrophin) are controlled as Class C drugs under Schedule 4, Part II of the Misuse of Drugs Act 1971. There, possession for personal use is legal if in the form of a medicinal product (including import and export). However, supply (including giving or sharing), intent to supply and production are illegal and punishable with up to 14 years imprisonment and/or an unlimited fine.<sup>47</sup>

This approach echoes the enforcement technique of many other European countries. It seems to strike a positive balance by maintaining drug purity through pharmacy distribution while discouraging

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<sup>41</sup> Shipley, *supra* note 5.

<sup>42</sup> See Kevin Curtin, *Steroids Easy To Find On the Internet, Investigators Find*, CAPITOL NEWS SERVICE, Nov. 11, 2005, [http://cns.jrn.msu.edu/articles/2005\\_1111/STEROIDS.HTML](http://cns.jrn.msu.edu/articles/2005_1111/STEROIDS.HTML); *DEA Leads Largest Steroid Bust in History*, Department of Justice Website, Dec. 15, 2005, <http://www.usdoj.gov/dea/pubs/pressrel/pr121505.html>.

<sup>43</sup> Shipley, *supra* note 5.

<sup>44</sup> See generally Jerry Brainum, *Steroids, Supplements and Liver Damage*, IRON MAN, Feb. 9, 2009, available at <http://www.ironmanmagazine.com/site/?p=1356>.

<sup>45</sup> See generally *DEA Announces Largest Steroid Enforcement Action in History*, Department of Justice Website, Sept. 24, 2007, <http://www.justice.gov/dea/pubs/pressrel/pr092407.html> ("Today we reveal the truth behind the underground steroid market: dangerous drugs cooked up all too often in filthy conditions with no regard to safety, giving Americans who purchase them the ultimate raw deal.").

<sup>46</sup> *Id.*

<sup>47</sup> Jim McVeigh & Michael Evans-Brown, *Anabolic Steroids*, CENTRE FOR PUBLIC HEALTH, Mar. 2009, [www.scan.uk.net/docstore/SMMGP\\_steroids.pdf](http://www.scan.uk.net/docstore/SMMGP_steroids.pdf).

underground production or distribution and defraying many of the costs associated with enforcing the Policy.

#### IV. STEROIDS IN SPORTS

The final (and historically, most prolific) arrow in the criminal enforcement quiver is the use of steroids in the sporting context (“*doping*”). Private organizations govern many sports and have the authority to create individual league policy regarding doping. Sports use, however, has consistently been a major policy driver behind the criminalization of steroids in the U.S.<sup>48</sup> Although private sports entity figureheads claim “[i]t is a question of sporting ethics, rather than a question of crime and criminality,”<sup>49</sup> the actions of these private entities belie the truth. While this article focuses chiefly on criminal and socioeconomic policy, it will examine whether sports prohibition is a valid criminal policy driver and, in the event a certain sport chooses prohibition, will address proposals for more effective sports regulation.

The belief that a higher purity exists in athletic competition was a main driver behind the criminalization of steroids.<sup>50</sup> It is no secret that sports occupy an exalted position in American society, entangling steroids with strong historical biases and moral opinions among countless sports fans. Amateur and professional sports continue to fascinate a substantial portion of the nation. National and local broadcasting networks allocate massive resources to associating with high-profile events like the NCAA’s Final Four, the NFL’s Super Bowl, MLB’s World Series, and the International Olympic Committee’s (“IOC”) Summer and Winter “Olympic Games.” In the 1980s, media reports highlighting an increasing use of steroids in sports garnered the attention of the U.S. government. Between 1988 and 1990, Congress held hearings to determine whether the Controlled Substances Act should include anabolic steroids, joining more socially harmful drugs like cocaine, methamphetamine and heroin.<sup>51</sup> Representatives from competitive athletics comprised the majority of testifying witnesses, and the legislative efforts seemed far less focused on public health protection than athletic “cheating.” At base, Congress wanted steroids out of sports and classified steroids as Schedule III controlled substances.<sup>52</sup> Consequently, these synthetic sex hormones form a curious anomaly among the central nervous system depressants, codeine derivatives, and stimulants that comprise the rest of Schedule III.<sup>53</sup>

The pronounced position of sports competition in American society has catapulted steroid use into one of the most scrutinized issues in recent history. The resulting cornucopia of academic literature has explored nearly every aspect of doping in sports, both amateur and professional; media coverage of steroid scandals in professional sports has become commonplace, and BALCO is now a household

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<sup>48</sup> See generally Selena Roberts, *Sports of The Times; Steroid Laws: Equal Justice and Punishment for All*, N.Y. TIMES, Nov. 2, 2005, available at <http://query.nytimes.com/gst/fullpage.html?res=9B04E0DB163EF931A35752C1A9639C8B63&sec=&spon=&page=wanted=all>.

<sup>49</sup> *Id.* (quoting IOC president Jacques Rogge).

<sup>50</sup> Roberts, *supra* note 48.

<sup>51</sup> See also Anne E. Kornblut, *Now Batting: Hearings in Congress on Steroids*, N.Y. TIMES, Mar. 12, 2005, available at <http://www.nytimes.com/2005/03/13/sports/13steroids.html#>. See generally Legislation to Amend the Controlled Substances Act (Anabolic Steroids): Hearings on H.R. 3216 Before the Subcomm. on Crime of the House of Representatives Comm. on the Judiciary, 100th Cong., 2d Sess. 99, July 27, 1988; Steroids in Amateur and Professional Sports—The Medical and Social Costs of Steroid Abuse: Hearings Before the Senate Comm. on the Judiciary, 101st Cong. 1st Sess. 736, Apr. 3 and May 9, 1989; Abuse of Steroids in Amateur and Professional Athletics: Hearings Before the Subcomm. on Crime of the House Comm. on the Judiciary, 101st Cong., 2d Sess. 92, Mar. 22, 1990; Hearings on H.R. 4658 Before the Subcomm. on Crime of the House Comm. on the Judiciary, 101st Cong., 2d Sess. 90, May 17, 1990.

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

<sup>53</sup> See U.S. Department of Justice, *DEA Drug Scheduling*, <http://www.justice.gov/dea/pubs/scheduling.html>.

name.<sup>54</sup> Many arguments exist concerning doping, but the question remains whether doping is an issue of such national magnitude that it justifies continuing a failed and costly criminal prohibition of drugs proven (in many cases) to have medically positive effects. Are athletes disproportionate users of steroids compared to other users? Further, with continued use in professional sports and the myriad of technological advances allowed, is maintaining the “purity” of athletic competition a laudable goal or a mythical ideal dictating the Policy?

**a. Actual User Demographics**

The typical criminal steroid user is “[a] 40-something health-club barfly who wakes up with mirrors over his bed and sleeveless T-shirts in his closet. The guy owns a tackle-box full of steroids that he purchased over the Internet in hopes of bulking up just enough to pick up the ladies.”<sup>55</sup> Therefore, the Policy ruins the lives and disproportionately affects “[t]he truck driver, the guy working at the Stop & Shop—as narcissistic or misguided as they might be.”<sup>56</sup> Although legislators originally modeled the Policy around the belief that the largest users of steroids are athletes and teenagers, recent studies paint a different picture. Steroid use among teens has consistently declined from 2000–2008 in a University of Michigan study.<sup>57</sup> Furthermore, a 2007 study of 1,955 non-medical steroid users in the U.S. produced interesting results on steroid-use demographics.<sup>58</sup> In the study, researchers recruited males from various websites, mass emails, and print media to participate in a 291-item web-based survey. The internet medium preserved the participants’ anonymity and produced a larger, more geographically diverse sample. Interestingly, the majority of the participants:

[D]id not initiate AAS use during adolescence and their NMAAS (non-medical anabolic-androgenic steroid) use was not motivated by athletics. The typical user was a Caucasian, highly-educated, gainfully employed professional approximately 30 years of age, who was earning an above-average income, was not active in organized sports, and whose use was motivated by increases in skeletal muscle mass, strength, and physical attractiveness. These findings question commonly held views of the typical NMAAS user and the associated underlying motivations.<sup>59</sup>

The above study supports the argument that most men use steroids at an age where steroids are medically beneficial. The study concluded that the “[f]ocus on ‘cheating’ athletes and at[-]risk youth has led to ineffective policy as it relates to the predominant group of NMAAS users. Effective policy, prevention[,] or intervention should address the target population(s) and their reasons for use while utilizing their desire for responsible use and education.”

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<sup>54</sup> See generally Jere Longman, *Plea Agreement in Balco Case Draws Criticism*, N.Y. TIMES, July 16, 2005, available at <http://www.nytimes.com/2005/07/16/sports/othersports/16conte.html>; *Balco Scandal*, Wikipedia, [http://en.wikipedia.org/wiki/BALCO\\_Scandal](http://en.wikipedia.org/wiki/BALCO_Scandal).

<sup>55</sup> Roberts, *supra* note 48.

<sup>56</sup> *Id.* (quoting Richard Collins).

<sup>57</sup> See Lloyd D. Johnston et al., MONITORING THE FUTURE: NATIONAL RESULTS ON ADOLESCENT DRUG USE, OVERVIEW OF KEY FINDINGS 2008, U.S. Department of Health and Human Services (May 2009), (finding that, of 8th, 10th and 12th graders, the percentage of 8th graders who reported using steroids at least once in their lives went from a high of 3.0% in 2000 down to 1.4% in 2008. Among 10th graders, the figure went from 3.5% in 2000 down to 3.0% in 2003, then down to 2.0% in 2005, down to 1.8% in 2007, and now down to 1.4% in 2008. Among 12th graders, the decrease was from a high of 4.0% in 2002, to 3.5% in 2003, to 3.4% in 2004, and now dramatically down to 2.2% in 2007 and 2008.).

<sup>58</sup> Jason Cohen, Rick Collins & Jack Darkes, *A League Of Their Own: Demographics, Motivations And Patterns Of Use Of 1,955 Male Adult Non-Medical Anabolic Steroid Users In The United States*, 4 JOURNAL OF THE INTERNATIONAL SOCIETY OF SPORTS NUTRITION \_\_ (Oct. 2007), available at <http://www.jissn.com/content/4/1/12>.

<sup>59</sup> *Id.*



**b. “Cheating” and the “Purity” of Athletic Competition**

“When athletes who dope displace clean athletes in rankings, records, competitions, and on teams, they breach their covenant with spectators, including children who hold them out as role models; they violate the terms of their contracts of engagement with their governing bodies; and they steal from the athletes they unfairly displace.”<sup>60</sup> This statement encapsulates the athletic purity argument: modern athletes, if allowed steroids, would outpace their historical counterparts or rob non-user athletes of their hard work. While this argument held some sway in the past, the unrelenting evidence of steroid and HGH use in professional sports has obliterated any persuasiveness this argument once contained.<sup>61</sup> Sports figures continue to stay ahead of testing and use steroids or other performance-enhancing substances to gain an edge, mainly because steroids are difficult to detect<sup>62</sup> and the financial rewards of winning are so great. Additionally, the difficulty of defining a banned substance presents a major impediment.<sup>63</sup> Thus, cheating is only inherent because of the imperfect enforcement of the regulatory prohibition against steroid use. Consequently, allowing steroid use may level a currently unlevel playing field where individual owners and players have an incentive to disregard anti-doping rules in pursuit of gain.

Defining a “level” playing field and the purity of athletic competition finds further obscurity when evaluating numerous technological improvements that have boosted the performance of modern athletes, from gear and facilities to various surgeries.<sup>64</sup> One need only observe the modern metal tennis racquet for evidence of a constantly evolving playing field. In the 2000 Summer Olympics, the “sharkskin” full-body racing suit reduced water drag and allowed swimmers to assault the record books.<sup>65</sup> In the 2006 Winter Olympics, speed skaters employed the “Swift Skin” racing suit, while others used new technology for their skis, boards, and bobsleds to gain a competitive edge over their rivals.<sup>66</sup> Most recently, at the 2008 Beijing Olympic Games, the Speedo LZR Racer suit helped swimmers break twenty-three world records, compared with only two that were broken by the swimmers who did not wear the suits.<sup>67</sup> It follows that technological enhancements invariably are costly for athletes, again giving an edge (in the Olympic arena) to athletes from wealthy, well-developed countries.

Surgical enhancements have also improved the physical well being and performance of modern athletes. Tiger Woods used the “LASIK” surgical procedure to improve his vision to 20/15, allowing him (by his own account) to see blades of grass and read the greens better than before.<sup>68</sup> Baseball players opt for “Tommy John” surgery, which transplants healthy tendons from one area of the body into the

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<sup>60</sup> Doriane Lambelet Coleman, *The Problem of Doping*, 57 DUKE L.J. 1743, 1783 (2008).

<sup>61</sup> See Verducci, *supra* note 7.

<sup>62</sup> See Richard A. Posner, *In Defense of Prometheus: Some Ethical, Economic, and Regulatory Issues of Sports Doping*, 57 DUKE L.J. 1725, 1736 (2008); Bob Nightengale, *Is HGH Hiding Steroid Use?*, USA TODAY, Sept. 12, 2007, at 1C (use of human growth hormone helps athletes conceal the use of steroids).

<sup>63</sup> See E. Tim Walker, Comment, *Missing the Target: How Performance-Enhancing Drugs Go Unnoticed and Endanger the Lives of Athletes*, 10 VILL. SPORTS & ENT. L.J. 181, 208 (2003).

<sup>64</sup> Posner, *supra* note 62, at 1731 (“Steroids, in contrast it may seem, enable a football player whose natural gifts are no greater than those of his predecessor in the pre-steroid era to outperform that predecessor, precluding skill rankings across time. But this distinction overlooks the many uncontroversial technological and institutional improvements that have boosted modern athletic performance over that of earlier eras: better nutrition, better health care, better methods of training, better surface composition of running tracks, and, yes, better running shoes.”).

<sup>65</sup> Alan Boyle, *The High-Tech Race for Olympic Gold*, MSNBC, Feb. 1, 2006, <http://www.msnbc.msn.com/id/3079010>.

<sup>66</sup> *Id.*

<sup>67</sup> Alan Boyle, *The Science Behind the Swimsuit War*, MSNBC, July 29, 2009, <http://cosmiclog.msnbc.msn.com/archive/2009/07/29/2013052.aspx>.

<sup>68</sup> See Craig Bestrom & John Strege, *Eyes of the Tiger*, GOLF DIGEST, June 1, 2002, *available at* [http://www.findarticles.com/p/articles/mi\\_m0HFI/is\\_6\\_53/ai\\_86204880](http://www.findarticles.com/p/articles/mi_m0HFI/is_6_53/ai_86204880).

throwing arm, increasing pitching performance.<sup>69</sup> If these enhancements were not enough, gene doping represents a nearly undetectable form of doping that may be the next frontier in performance enhancement.<sup>70</sup> Gene doping involves modifying an athlete's DNA by injecting genes into muscle or bone cells to increase performance.<sup>71</sup>

Because notions of purity in athletic competition meet consistent subversion and nuance, a continued prohibition against steroids based on the specter of sport use seems illogical, particularly from a resource-allocation standpoint in current economic circumstances.

**c. The Current Regulatory Structure for Athletes**

Aside from the criminalization of steroids under the Controlled Substances Act, a tangled web of sports regulation also greets the amateur or professional athlete. Worldwide, each organized sport has a governing body that sets the structure for competition and lays out the basic rules and regulations that its athletes must follow.<sup>72</sup> Separate national and international agencies regulate and test for doping violations, invariably leading to jurisdictional overlap. Regulatory bodies such as the World Anti-Doping Agency (WADA), The U.S. Anti-Doping Agency (USADA), the NCAA, and various professional sports provide a confusing mix of regulations and rules. For instance, college athletes in the U.S. follow NCAA rules, but if they also participate in national and international events, the athletes must follow U.S. Track and Field (USATF) rules and IOC regulations.

The overlapping and varied regulatory standards that govern athletes further obfuscate sports steroid policy, but their effect makes the Policy even more ironic: Athlete prosecutions are extremely rare because private organizations administer the punishment, shielding athletes from criminal liability.<sup>73</sup> This begs the question, if sports are such a powerful Policy driver, why not follow Italian law and make "sports cheating" illegal?<sup>74</sup> Why must we exempt the main stimulus for the Policy? We probably do not want to see heroes doing hard time, but that seems to be an ineffective foundation upon which to construct a national policy.

**d. Towards More Coherent Sports Regulation**

An alternative policy might involve making legal the use of drugs associated with low harm and testing health rather than testing for drugs. Implicit in this argument is that more athletes would use performance enhancing drugs if they were both legal and safe, thereby obviating both the moral and level playing field problems. This view holds that if health is safeguarded it does not matter how performance is supplemented.<sup>75</sup>

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<sup>69</sup> See Mike Dodd, *Tommy John Surgery: Pitcher's Best Friend*, USA TODAY, July 28, 2003, available at [http://www.usatoday.com/sports/baseball/2003-07-28-cover-tommy-john\\_x.htm](http://www.usatoday.com/sports/baseball/2003-07-28-cover-tommy-john_x.htm). See also Steven Johnson, *A Cut Above: Why Wait for an Injury? The Next-Gen Performance Enhancer is Surgery*, WIRED, March 13, 2005, available at <http://www.wired.com/wired/archive/13.03/start.html?pg=2>.

<sup>70</sup> See Jamie Reno, *Juice for Today's Athlete*, NEWSWEEK, Aug. 11, 2008, available at <http://www.newsweek.com/id/151988>.

<sup>71</sup> *Id.*

<sup>72</sup> See generally Darryl C. Wilson, "Let Them Do Drugs"—A Commentary on Random Efforts at Shot Blocking in the Sports Drug Game, 8 FLA. COASTAL L. REV. 53, 75–80 (2006).

<sup>73</sup> Roberts, *supra* note 48, (stating ". . . athletes haven't been the targets of steroid possession laws, even though their using prompted the Anabolic Steroid Act of 1990 and 2004.").

<sup>74</sup> *Id.*

<sup>75</sup> Bengt Kayser, *Globalisation of Anti-Doping: The Reverse Side of the Medal*, BRITISH MEDICAL JOURNAL 2008; 337:a584 (July 4, 2008).

Many persuasive arguments exist concerning reformation of the current regulatory systems governing amateur and professional sports. Like the Policy, the reigning “test and punish” regime in sports has proven quite ineffective, evidenced by continued steroid scandals. Although a complete treatment of the myriad available options in each sport is outside the scope of this article, I will examine several persuasive options.

For instance, some argue that sports could adopt the corporate Sarbanes-Oxley regulations, providing standards to hold corporate executives accountable for financial reporting.<sup>76</sup> Many similarities exist between corporate America and sports (desire to win, large complex business), so team owners and managers could be subject to similar liability for steroid use within their organizations.<sup>77</sup>

Similarly, others argue that federal securities regulation and state “Blue Sky” laws could serve as a model for steroid regulation in sports.<sup>78</sup> This approach holds much appeal; here, rather than the current “test and punish” regime, athletes must file disclosure statements outlining all non-food substances he or she injected or ingested. The athlete could file these statements with the league office on a regular basis, and the league could delete references to medicines that implicate privacy concerns, such as drugs for individual illnesses. The public then views a final list published online, either on the league’s website or on the team’s website.

Assuming *arguendo* that the main actors affected by doping policy changes are team owners, league officials, and individual athletes, it follows that, in the absence of a ban, a player’s choice not to dope could be subverted, forcing clean athletes to use steroids to compete. This argument, while persuasive in the context of individual choice, glosses over the fact that sports are, at base, marketable products. Consumer preference heavily dictates the “sport product.” Therefore, in the absence of a ban, it is conceivable that the market of consumers, owners, athletes and officials would decide steroid implications in the context of a particular sport. It is plausible that consumers could reject steroid use in particular sports markets, leading to financially negative consequences for athletes or teams who choose to dope.

In this economic landscape, doping issues would be determined through the collective bargaining process that many leagues employ, rendering a holistic result on steroid use within the league. While a league decision to allow doping could (in the distant future) result in a displacement of “clean” athletes by doped athletes in a particular sport, the economic actors and consumer market for the sport would vet such a result. In this sense, it is also possible that the market could opt for the opposite result and maintain the status quo. If we choose a non-enforcement policy, another alternative would involve different medals and accolades for “clean” and doped athletes.

Although a valid issue, a remote fear of future “clean” athlete displacement does not seem compelling enough (in the broad sense of socioeconomic policy) to rebut other economic evidence and continue the Policy. Interestingly, when 198 U.S. Olympians or aspiring Olympians were surveyed for a 1995 poll, 195 would take a hypothetical wonder drug if it guaranteed winning every time and was completely undetectable.<sup>79</sup> More than half indicated that they would take such a drug even if it guaranteed death in five years.<sup>80</sup> On the topic of doping regulation in sports, Judge Richard Posner observes:

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<sup>76</sup> See generally Sarah R. Heisler, *Steroid Regulation in Professional Sports: Sarbanes-Oxley as a Guide*, 27 CARDOZO ARTS & ENT. L.J. 199 (2009).

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

<sup>78</sup> See generally Geoffrey Rapp, *Blue Sky Steroids*, 99 J. CRIM. L. & CRIMINOLOGY 599 (2009).

<sup>79</sup> Michael Bamberger & Don Yaeger, *Over the Edge*, SPORTS ILLUSTRATED, Apr. 14, 1997, at 60.

<sup>80</sup> *Id.*

The only externality, besides the cost of a regime of public law enforcement to back up the private sanctions available to team owners and league officials, is the cost that one team imposes on another or one player imposes on another by violating a ban imposed by the team owners in their mutual self-interest.<sup>81</sup>

Current sports doping policies are confusing, overlapping, and misdirected. Particular sports and leagues will have the ability to shape their own doping policies. In case such sports choose to continue a prohibition, better options exist than the current “test and punish” regime.

## V. CONCLUSION

From a broad criminal policy standpoint, there is little or no evidence that harsher sanctions reduce crime rates in Western populations.<sup>82</sup> As a recent article observed:

If a criminal law rule is to deter violators, three prerequisites must be satisfied: The potential offender must know of the rule; he must perceive the cost of violation as greater than the perceived benefit; and he must be able and willing to bring such knowledge to bear on his conduct decision at the time of the offense. But as we describe elsewhere, one or more of these hurdles typically block any material deterrent effect of doctrinal manipulation. The social science literature suggests that potential offenders commonly do not know the law, do not perceive an expected cost for a violation that outweighs the expected gain, and do not make rational self-interest choices.<sup>83</sup>

Even in the narrower sense of applying a criminal policy to steroids, all available evidence suggests that continued prohibition is futile and costly. The Policy is ineffective because it affects a class of people not even contemplated in its idealistic foundations—an adult class generally using these naturally occurring hormones because of medically-documented positive health effects.<sup>84</sup> Prohibition further contorts the issues by creating a dangerous black market and forcing consumers to use spurious or mislabeled products.<sup>85</sup> Ironically, the Policy exempts from criminal liability the very athletes who were the stimulus for the Policy’s creation.

Policy reformation that would regulate steroids as prescription drugs and remove criminal penalties for adult personal use (similar to European regimes) would solve many of the problems the current Policy creates. Responsible users could obtain pure drugs from physicians without the physician or patient fearing criminal prosecution, restricting steroids to adults. This addresses the main public health concerns of impure products and infrequent medical monitoring, while discouraging youth use and leaving sports leagues the latitude to formulate their own policies.

Compounding the aforementioned inequity of the Policy is the waste of national resources in such dire economic circumstances. The annual price tag for this ineffective prohibition stands at nearly \$7

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<sup>81</sup> Posner, *supra* note 62, at 1738.

<sup>82</sup> Anthony N. Doob & Cheryl Marie Webster, *Sentence Severity and Crime: Accepting the Null Hypothesis*, 30 CRIME & JUST. 143 (2003).

<sup>83</sup> Paul H. Robinson & John M. Darley, *The Role of Deterrence in the Formulation of Criminal Law Rules: At Its Worst When Doing Its Best*, 91 GEO. L.J. 949, 953 (2003).

<sup>84</sup> See Cohen, Collins, & Darkes, *supra* note 58.

<sup>85</sup> See DEA, *supra* note 42; Dubose & Logan, *infra* note 86.

billion and fosters an underground black market of debatable size, with best estimates at \$400 million.<sup>86</sup> Conceivably, reformation would slash costs by shifting prosecution to only large traffickers. Supply would shift to properly produced, FDA-regulated products. Even this model fails to scratch the surface of the possible healthcare savings available if medically administered testosterone therapy and HGH were more widely available for overweight middle-aged men. As the healthcare policy debate reaches a crescendo, a major legislative policy concern centers around the need for more preventative care and individual responsibility for physical fitness.<sup>87</sup> No amount of subsidy or spending will defray exorbitant healthcare costs if Americans continue to lead sedentary lifestyles sustained by fast food and high-fructose corn syrup. Doctors and patients must have all medically sound options available, and the Policy subverts viable medical choices that could complement a fitness routine, possibly leading to increased results from adhering to that regiment.

Although many political hurdles face reformation of the Policy, based on all available evidence, its continued existence makes little sense from a socioeconomic standpoint. Rationality and necessity dictate exploring new legislative options to end this fruitless prescription for displaced ideals.

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<sup>86</sup> See Renee Dubose & Lee Logan, *Online Steroid Culture Reacts to Recent Drug Bust*, COLUMBIA MISSOURIAN, Oct. 2, 2007, available at <http://www.columbiamissourian.com/stories/2007/10/02/online-steroid-culture-reacts-recent-drug-bust/>.

<sup>87</sup> See generally Navi Radjou, *Health Care Reform Should Include Preventive Medicine*, HARVARD BUSINESS PUBLISHING, Aug. 7, 2009, available at <http://blogs.harvardbusiness.org/radjou/2009/08/health-care-reform-should-incl.html>.