SUNNY SAMARITANS AND EGOMANIACS: PRICE-FIXING IN THE GAMETE MARKET

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I

INTRODUCTION

The modern American marketplace provides many income opportunities, not only to those with golden eggs, but to those with golden sperm as well. The U.S. market for gametes is robust, international, and growing, thanks to advances in fertility treatments; new sources of demand that include older, single, and gay and lesbian parents; and overseas regulatory changes that have prompted gamete shortages and a thriving export market. Data suggest that in 2006 alone nearly 55,000 children in the United States were born through assisted reproduction, more than 7500 of whom were created through the use of "donated" eggs. Although figures on the number of children born through the use of commercially purchased sperm are more variable, reports suggest that the number may be nearly as high, and perhaps higher, than the number born through the use of commercially purchased oocytes.

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- 1. See generally Kimberly D. Krawiec, Altruism and Intermediation in the Market for Babies, 66 WASH. & LEE L. REV 203 (2008) (discussing modern growth in various reproductive markets).
- 2. CTRS. FOR DISEASE CONTROL, U.S. DEP'T OF HEALTH & HUMAN SERVS., 2006 ASSISTED REPRODUCTIVE TECHNOLOGY SUCCESS RATES 13, 56–59 (Nov. 2008) (providing data on assisted reproductive technology (ART) births and ART births using donor eggs).
- 3. The traditional secrecy and lack of reporting requirements regarding births from sperm donation result in highly variable estimates. For example, although a 1988 Congressional Report puts the number at 30,000 births per year, other estimates are as low as 4000 to 5000 births per year. Compare Office of Tech. Assessment, U.S. Cong., Artificial Insemination Practice in the United States: Summary of a 1987 Survey—Background Paper 3 (1988) ("The survey

Yet these superficially similar markets have developed in divergent ways, and, as a result, both suppliers and consumers face drastically different commercial environments in the sperm and egg markets. Only some of these distinctions can be attributed to differences in the type of genetic material donated or to dissimilarities necessitated by the gamete-collection process.

Although the commercial disparities between the egg and sperm markets are numerous, ranging from divergent recruiting and advertising techniques to differences in the donor attributes valued by consumers, the most drastic difference between the two markets relates to open, anticompetitive attempts by the fertility industry to depress the price of eggs. This characteristic of the egg market is not observed in the sperm market and so far has occurred without regulatory notice, public outcry, or legal consequence.

This naked price-fixing of egg donor compensation is so unusual in the modern U.S. regulatory environment of unrestrained competition that the most intriguing question it raises is not whether it violates the Sherman Act—under existing precedent it does. Rather, the relevant question is how, given the government's substantial enforcement resources and the presence of an active and entrepreneurial plaintiffs' bar, this buyers' cartel has managed to survive unchallenged since at least 2000. One is tempted to assert that the twenty-dollar bill cannot be real, given that it is still lying on the sidewalk.

The money is real. Its presence, however, may be obscured by the persistent dialogue of gift-giving and altruistic donation that masks both the highly commercial nature of egg "donation" and the benefits to the fertility industry of controlling the price of eggs, which are a necessary input into many fertility services. As a consequence, the fertility industry has managed to openly engage in anticompetitive attempts to depress egg prices, a feat facilitated by romantic presumptions that the fertility trade differs from other markets because its work is virtuous, and that egg donors are engaged in a form of philanthropy that distinguishes them from suppliers in other industries.

This realization also has the potential to complicate an otherwise straightforward antitrust analysis. As illustrated by *United States v. Brown University*, ⁴ courts are sometimes willing to entertain strained market justifications for collusive restraints on competition when the incentive to collude is not immediately obvious and those restraints are defended by public-

estimates that 172,000 women underwent artificial insemination in 1986–87, at an average cost of \$953, resulting in 35,000 births from artificial insemination by husband (AIH), and 30,000 births from artificial insemination by donor (AID)."), with Cryogenetic Labs. Inc., Children by Donor Insemination, http://www.cryolab.com/Default.aspx?section=postconceptionservices&page=donorOff spring (last visited Mar. 11, 2009) ("We estimate that now about 4,000 to 5,000 children a year are born in the US as the result of anonymous donor insemination."). It is doubtful that these reported differences are attributable solely to reduced demand over time. Although medical advances that address male infertility have reduced demand for donor sperm among heterosexual couples over the past decade, demand from single and lesbian women and from overseas has increased. See Krawiec, supra note 1, at 216–19 (discussing the shifting demand for donor sperm over time and across populations).

^{4. 5} F.3d 658 (3d Cir. 1991).

policy rationales that we hold dear as a society.⁵ And although the oocytebuying agreement can be distinguished from *Brown* and other relevant precedent by the absence of plausible procompetitive justifications,⁶ the egg market surely meets the threshold for cases loaded with emotional content, touching broad-based societal nerves about reproduction, gender, bodily commodification, and the role of markets.

To illustrate the extent to which public-interest rhetoric enables private wealth transfers in the egg market (and to illuminate why such rhetoric is so effective, playing on deeply held societal norms), this article compares the egg market to its closest cousin—the sperm market. In contrast to the egg market, the sperm market is not characterized by collusive attempts to control prices. Instead, as in most other industries, sperm prices are established by the economic forces of supply and demand.

As elaborated in this article, simple economics and biological differences between the sexes that dictate different collection and matching procedures for egg and sperm may contribute to the absence of price-fixing in the sperm market. Economics and biology aside, however, a comparison of the egg market to the sperm market also reveals deeper social norms at work that may contribute both to the different approaches to competition and compensation in the egg and sperm markets and to a societal disregard for collusive, anticompetitive behavior that would be unacceptable (indeed, per se illegal) in other industries. Those norms include gendered notions regarding women's altruistic nature and their role in the marketplace—particularly in sacred areas, such as reproduction—as well as widely held beliefs that egg markets tread dangerously close to baby and organ markets in ways that sperm markets do not.

Importantly, despite the overwhelming evidence to the contrary, there is a clear societal and industry consensus that egg donors are—and should be—motivated primarily by altruism and the desire to help the infertile, rather than by the desire for monetary compensation. This presumption is highlighted by

^{5.} See id. at 672 ("This alleged pure altruistic motive [equality of educational access] and alleged absence of a revenue maximizing purpose contribute to our uncertainty with regard to Overlap's anticompetitiveness, and thus prompts us to give careful scrutiny to the nature of Overlap, and to refrain from declaring Overlap per se unreasonable."); see also infra notes 116–19 and accompanying text (discussing Brown in more detail). Variations on this theme have been raised by some observers troubled by recent unsuccessful Clayton Act challenges to nonprofit-hospital mergers. See Barak D. Richman, Antitrust and Nonprofit Hospital Mergers: A Return to Basics, 156 U. PA. L. REV. 121, 123 (2007) (citing a variety of rationales that have been proffered to explain courts' hands-off approach to such mergers, including that "courts do not want competition in the health care sector and prefer instead to entrust benevolent monopolists to act in the community's best interests," and a judicial conviction that nonprofits do not have the same incentives to raise prices as do for-profits, but concluding that the better explanation is that courts fail to understand the market structure of the health-care industry and its effect on competition).

^{6.} See infra notes 144–48 and accompanying text (distinguishing the oocyte-pricing guidelines based on this factor and others).

^{7.} See infra V.B (discussing the rule of per se illegality normally applied to naked, horizontal price-fixing agreements).

egg donor recruitment materials urging "sunny Samaritans" to "give the gift of life," by donor-agency and fertility-center screening and other practices, and by consumer purchasing behavior. Ironically, the true limit to women's altruistic nature is starkly revealed by the experience of the stem-cell industry and by countries, such as the United Kingdom, Japan, and Canada, that have banned compensated egg donation and subsequently encountered a lack of donors and severe egg shortages.

In contrast, the insistence that sperm donors are motivated primarily by a desire for monetary compensation is so strong that potential donors expressing altruistic motivations are viewed with suspicion and presumed to harbor an egomaniacal desire to propagate. In contrast to the gift-giving rhetoric characteristic of egg donor recruitment materials, prospective sperm donors are attracted through materials that ask, "Why not get paid for it?" and advertise that "[y]our sperm can earn!"

Gender-based marketing, of course, is neither new nor limited to the reproductive industry. Moreover, in some instances (including the market for gametes) these gender-based market constructions may enable the flourishing of industries that otherwise would stagnate. By reframing traditionally unacceptable behavior as a more palatable and familiar transaction, both producers and consumers may be enticed into a market that is otherwise socially problematic or even repulsive. In the gamete market, this reframing frequently takes the form of repackaging socially questionable practices—the sale of motherhood, in the case of egg markets, and masturbation and an evolutionary desire to spread male genes, in the case of sperm markets—into ones that more closely resemble comfortable social stereotypes regarding male and female roles in reproduction and in markets.

Absent a significant shift in the societal conception of motherhood, therefore, it may be the case that appeals to altruistic impulses will always play a vital role in the manner by which egg donors are solicited and packaged to consumers. At the same time, the continued insistence that egg donors are, and should be, motivated primarily by altruism is problematic on various levels. As many scholars have argued, the insistent demand that much valuable female

^{8.} See infra II.C (discussing egg donor recruiting).

^{9.} See infra note 30 and accompanying text (discussing oocyte shortages in other countries caused by various legal restrictions); infra note 66 and accompanying text (discussing the shortage of oocytes for stem-cell research).

^{10.} See, e.g., DAVID PLOTZ, THE GENIUS FACTORY: THE CURIOUS HISTORY OF THE NOBEL PRIZE SPERM BANK 155 (2005) (free pens imprinted, "Why not get paid for it?"); Posting to Craig's List, San Francisco, http://sfbay.craigslist.org/sfc/etc/1119949773.html ("Your sperm can earn!"); see infra III.C (discussing sperm donor motivations and recruitment).

^{11.} Cf. Alan Page Fiske & Philip E. Tetlock, Taboo Trade-Offs: Reactions to Transactions that Transgress the Spheres of Justice, 18 POL. PSYCH. 255, 286–94 (1997) (discussing the readiness with which some research subjects will consider taboo trade-offs when given rationalizing additional facts to consider); Alvin E. Roth, Repugnance as a Constraint on Markets, 21 J. ECON. PERSP. 37 (2007) (urging organ-matching programs as a means to reduce organ shortages without triggering the repugnance prompted by direct financial incentives).

labor should spring from altruistic motives threatens to reinforce gendered notions that the market activities of women are driven in large part by altruism and that women as a group are uninterested in reaping the full gains of trade from the provision of their goods and services.¹² Importantly for this article, however, this persistent dialogue of gift-giving and altruistic donation may obscure the highly commercial nature of egg "donation" and the benefits to the fertility industry of controlling egg prices, enabling anticompetitive behavior that otherwise would not pass muster. As a result, the twenty-dollar bill remains on the sidewalk, untouched.

Section II of this article provides an overview of the oocyte business, highlighting issues relating to recruitment, compensation, controversy, retrieval, and risk. Section III does the same for the sperm business. Sections IV and V, respectively, discuss anticompetitive behavior in the egg market and argue that the horizontal price-fixing embodied in the American Society for Reproductive Medicine's (ASRM)¹³ pricing guidelines violates the Sherman Act. Section VI concludes that market forces, rather than collusive industry agreement, must be allowed to determine the proper mix of altruism (if any) and monetary payment that ultimately constitutes total egg donor compensation.

H

EGG MARKETS: GIVING THE GIFT OF LIFE

A. Recruitment, Retrieval, Risks

The phrase "egg donation" is largely a misnomer in the United States, where nearly all oocytes from unrelated donors are procured through payment. Oocytes are typically obtained through one of four sources: (1) an egg supplier donating for the benefit of a close friend or family member;¹⁴ (2) the fertility

^{12.} See Mary Anne Case, Pets or Meat, 80 CHI.-KENT L. REV. 1129, 1143 (2005) ("Much of what women have market power over, such as their ... reproductive services, they have long been expected not to commodify at all. Even when monetary compensation is allowed, it is often kept low and female providers are expected to be interested in rewards other than money."); Krawiec, supra note 1 (arguing that classifying profit-seeking as an improper or, at best, secondary motivation in the context of the provision of reproductive goods and services reinforces gendered notions regarding the proper role of women in reproduction and in markets, and may subtly reduce their economic bargaining power); Julia D. Mahoney, The Market for Human Tissue, 86 VA. L. REV. 163, 188 (2000) ("[T]he implication that young women should desire to undergo a series of highly uncomfortable procedures that pose both short term and long term risks to their physical well-being for which they will not collect the market clearing price threatens to reinforce stereotypes of females as generous rather than self-interested.").

^{13. &}quot;[ASRM] is a multidisciplinary organization dedicated to the advancement of the art, science, and practice of reproductive medicine. ASRM accomplishes its mission through the pursuit of excellence in education and research and through advocacy on behalf of patients, physicians, and affiliated health care providers." ASRM Mission Statement, http://www.asrm.org/mission.html (last visited Mar. 11, 2009).

^{14.} Although eggs from friends or family members may be free, they are often unavailable or undesirable. For example, if hereditary illness is the reason a prospective parent seeks egg donation in the first place, then a related-party donor might be unacceptable. Moreover, a genetic mother with

clinic's paid-donor recruitment program; (3) the fertility clinic, purchasing through an egg donor agency that recruits through a paid donation program; and (4) a paid egg supplier recruited directly by the consumer, either independently or through a broker, agent, or other intermediary.¹⁵

Research indicates that egg donors are demographically similar to sperm donors in terms of age (young), race (white), and marital status (single), but egg donors have lower levels of education and socioeconomic status than do sperm donors, and are more likely to have children of their own. In addition, although both egg donors and sperm donors report a mix of altruistic and profit motivations for the decision to donate, sperm donors are significantly more likely to report solely or primarily profit motives, whereas egg donors are more likely to report solely or primarily altruistic motives. As elaborated in section II.C., however, there are reasons to view such reported differences with suspicion: egg donors, but not sperm donors, are recruited with materials that highlight the ability to help others, rather than the ability to earn money; egg donors reporting primarily financial motivations for the decision to donate are excluded from consideration as donors; and donor-agency staff frequently coach egg donors, but not sperm donors, on the need to express altruistic motives for the donation in order to appeal to prospective purchasers.

Egg donation is a time-consuming process that carries some health risks. Donors typically must be between the ages of twenty-one and thirty-five. All potential egg donors undergo a comprehensive medical and psychological screening process before acceptance into a donor program. The screening includes general physical and gynecological exams, a psychological evaluation, blood and urine tests, and medical and family histories.

Any number of factors discovered during the screening may be disqualifying, including information gleaned from genetic- or infectious-disease

whom the child and parents have continuing contact risks future complications. Kenneth Baum, *Golden Eggs: Towards the Rational Regulation of Oocyte Donation*, 2001 B.Y.U. L. REV. 107, 116.

^{15.} Sharon N. Covington & William E. Gibbons, What is Happening to the Price of Eggs?, 87 FERTILITY & STERILITY 1001, 1002 (2007). This fourth category generates the most controversy and media attention, because the offer prices tend to be higher than average, and the purchaser frequently seeks a donor with quite specific characteristics, such as a particular ethnic background; GPA or SAT scores in a certain range; or specified aptitudes, such as musical or athletic ability. See infra note 31 (discussing such advertising and purchases in more detail).

^{16.} L.R. Shover et. al., *The Personality and Motivation of Semen Donors: A Comparison with Oocyte Donors*, 7 HUM. REPROD. 575, 575–76 (studying a sample of egg and sperm donors and finding a median age of 28.7 for egg donors—compared to 28.5 for the sperm donors—and that 89% of egg donors are white, 44% are married, and 58% have one or more children).

^{17.} *Id*.

^{18.} See infra II.C.

^{19.} ADVISORY GROUP ON ASSISTED REPROD. TECHS., N.Y. STATE TASK FORCE ON LIFE & THE LAW, THINKING OF BECOMING AN EGG DONOR? 5 (2009), available at http://www.health.state.ny.us/community/reproductive_health/infertility/docs/1127.pdf. The lower limit is designed to ensure legal capacity, whereas the upper limit is designed to maximize the response to fertility drugs and to reduce the chances of birth defects. *Id.*

^{20.} Id. at 6.

tests; risks revealed by the family or medical histories; a history of smoking, drug, or alcohol abuse; current or past use of certain prescription drugs; and many other factors.²¹ Approximately ninety percent of prospective donors are rejected or withdraw from the process prior to donation.²² Once accepted, the donor's profile is added to the center's database to be considered for selection by recipients. In contrast to the sperm donation process, egg extraction will not occur unless a particular recipient selects the donor.²³

Once matched with a recipient, the egg donor undergoes a three-week course of hormone injections to induce ovulation, during which time the donor cannot have unprotected sex, smoke, use illegal drugs, or drink alcohol, and can take prescription and over-the-counter drugs only with permission.²⁴ During this time, frequent doctor visits are required to monitor the donor's hormone levels through drug tests and her ovaries through ultrasound.²⁵ The long-term risks of fertility treatment are unknown, but may include an increased risk of some types of cancer.²⁶ Although the short-term risks of fertility treatment are normally limited to mood swings, fluid retention, and enlarged ovaries, hormone therapy can cause Ovarian Hyperstimulation Syndrome (OHSS), which in its severe form can cause serious medical complications, including blood clots, kidney failure, fluid build-up in the lungs, and shock. Rarely, the condition can be life-threatening and require hospitalization and the removal of one or both ovaries.²⁷

When the eggs are ready for retrieval, they are removed through an outpatient surgical procedure that can cause bleeding and infection. In rare cases, the bladder, bowel, or nearby blood vessels may be punctured during retrieval, causing severe internal bleeding and necessitating major abdominal surgery.²⁸

B. Compensation and Controversy

Although these more-serious risks of egg donation are quite rare (only one to two percent of egg donors require hospitalization during the process),²⁹ it is easy to understand why few women would undergo the process for a stranger

^{21.} Id. at 8.

^{22.} Stephanie Smith, *Dim Economy Drives Women to Donate Eggs for Profit*, CNN, Aug. 8, 2008, http://www.cnn.com/2008/HEALTH/08/05/selling.eggs/index.html#cnnSTCText.

^{23.} Rene Almeling, Selling Genes, Selling Gender: Egg Agencies, Sperm Banks, and the Medical Market in Genetic Material, 72 AM. SOC. REV. 319, 329 (2007).

^{24.} ADVISORY GROUP ON ASSISTED REPROD. TECHS., supra note 19, at 18.

^{25.} Id. at 8.

^{26.} Although some studies document a link between hormone therapy and ovarian cancer, others do not. *Id.* at 16; see also Helen Pearson, *Health Effects of Egg Donation May Take Decades to Emerge*, 442 NATURE 607–08 (2006) (discussing this debate and current research).

^{27.} See ADVISORY GROUP ON ASSISTED REPROD. TECHS., supra note 19, at 15.

^{28.} Id. at 17.

^{29.} Almeling, *supra* note 23, at 320 (reporting an ASRM estimate of egg donor hospitalization rates).

without the inducement of substantial financial compensation. This intuition is borne out by the experiences of the stem-cell industry and of other countries, such as the United Kingdom, Japan, and Canada, that have banned compensation for egg donation and subsequently have faced severe egg shortages, generating a growing reproductive-tourism trade in the United States.³⁰

Although egg donor compensation in the United States varies widely, with prices as low as \$1500 and as high as \$150,000 reported,³¹ surveys of fertility clinics and donor agencies listed with the Society for Assisted Reproductive Technology (SART)³² report average compensation rates per donation cycle of \$4217 and \$5200, respectively.³³ These self-reported numbers, while the most reliable pricing data available, must nonetheless be approached with caution. As elaborated below, SART threatens de-listing for any clinics or agencies that fail to comply with ASRM payment guidelines, which specify a maximum payment per donation cycle of \$5000.³⁴ SART-member clinics and affiliated agencies thus have an incentive to report (even anonymously) pricing data that

^{30.} See infra note 66 (discussing a shortage of eggs for stem-cell research prompted by state legislative bans on oocyte compensation). Overseas demand now accounts for thirty percent of all U.S. egg donations. Jim Hopkins, Egg Donor Business Booms on Campuses, USA TODAY, Mar. 16, 2006, at 1A (discussing the impact in the United States of Canada's 2004 ban on paid egg donation); see also Gina Kolata, Price of Donor Eggs Soars, Setting Off a Debate on Ethics, N.Y. TIMES, Feb. 25, 1998, at A1 (discussing couples in Japan who pay a premium to egg donors of Japanese descent in the United States because the Japanese ban on paid egg donation has severely reduced supply); American RadioWorks: The Fertility Race (Part 8), No Money for Eggs (American Public Media radio broadcast), available at http://americanradioworks.publicradio.org/features/fertility_race/part8/ (discussing the egg shortage created by the U.K. ban on paid donations, and the resulting imports from the United States).

^{31.} The high price was reportedly received through an Internet auction site, launched by a former fashion photographer, through which couples can bid for the eggs and sperm of fashion models. The site claims sales of \$39.2 million through 2004. See Ron's Angels, http://www.ronsangels.com/ (last visited Mar. 11, 2009); see also Carey Goldberg, On Web, Models Auction Their Eggs to Bidders for Beautiful Children, N.Y. TIMES, Oct. 23, 1999, at A11 (reporting that the site auctioned eggs for as much as \$150,000). Aggressive advertising in college newspapers and on-campus flyers—particularly at Ivy League schools—offering prices as high as \$50,000 have also generated controversy. See, e.g., Annie M. Lowrey, Will You Be My Baby's Mama?, HARV. CRIMSON, Apr. 29, 2004 (discussing ads for egg donation in The Harvard Crimson and other Ivy League college newspapers); Ken Schwartz, Ivy Eggs, BUSINESS TODAY, Aug. 5, 2006 (discussing ads for egg and sperm donors in campus newspapers at Princeton and other Ivy League schools); Bioethics.net, http://bioethics.net/blog/images/donor.jpg (last visited Mar. 11, 2009) (photograph of a flyer posted on the campus of the University of Pennsylvania offering \$15,000 to \$25,000 for a fun, attractive donor meeting certain height and ethnicity requirements). Whether fees in this range are common or outliers remains unclear.

^{32. &}quot;[SART] is the primary organization of professionals dedicated to the practice of assisted reproductive technologies (ART) in the United States.... The mission of our organization is to set and help maintain the standards for ART in an effort to better serve our members and our patients." SART Homepage, http://www.sart.org/ (last visited Mar. 11, 2009).

^{33.} Covington & Gibbons, *supra* note 15, at 1002–03 (reporting averages from a survey of SART-affiliated clinics, and from agency Web sites that are registered with SART).

^{34.} See *infra* notes 86–95 and accompanying text.

falls within the range specified by the ASRM ethical guidelines. These numbers may, therefore, understate the true national average.³⁵

Nonetheless, taking these self-reported numbers as the best (though imperfect) estimate of prevailing egg prices suggests some successful price suppression in the egg market. If, as reported by one estimate, egg donors spend fifty-six hours in a medical setting during the average donation cycle, ³⁶ this results in an average hourly compensation of between roughly \$75 and \$93 for time spent in a medical setting, about the same as hourly sperm donor rates. ³⁷ As is evident from the above discussion, however, egg donors—unlike sperm donors—experience pain, discomfort, and inconvenience outside of the time spent in a medical setting due to the effects of hormone therapy. If these self-reported numbers accurately reflect average egg donor compensation, then egg donors earn less per hour than do sperm donors, despite the health risks associated with egg donation. ³⁸

C. Donor Motives

In the United States, egg donation and related compensation issues have generated far more controversy than sperm donation. Although the larger pertransaction sums and greater price differentiation in the egg market probably contribute to this dichotomy, it is likely that presumptions regarding the differing motivations of women and men engaged in reproductive activity on behalf of others significantly affect such discussions as well. In contrast to sperm donors, who are assumed to be motivated primarily—if not solely—by money, there is a clear consensus that egg donors are, and should be, motivated primarily by altruism. This consensus is demonstrated by egg donor recruitment materials, which nearly always reference altruistic motivations and the ability to help an infertile couple, for example, by exhorting "sunny Samaritans" to "give the gift of life." It is also demonstrated by fertility-center and donor-agency screening practices that eliminate as unacceptable potential egg donors who

^{35.} Consistent with this theory, systematic study of college newspaper ads suggests that the average egg donor compensation offered in that setting is over \$9000. Aaron D. Levine, Self-Regulation, Compensation, and the Ethical Recruitment of Oocyte Donors 7 (2009) (unpublished draft, on file with author).

^{36.} Machelle M. Seibel & Ann Kiessling, *Compensating Egg Donors: Equal Pay for Equal Time*?, 328 NEW ENG. J. MED. 737 (1993); Ethics Comm. of the Am. Soc'y for Reprod. Med., *Financial Compensation of Oocyte Donors*, 88 FERTILITY & STERILITY 305, 308 (2007).

^{37.} See infra notes 56-60 and accompanying text (discussing sperm donor compensation rates).

^{38.} In section VI below, I relax the assumption of successful price suppression and consider an alternate motivation for attempted price collusion in the egg market—the desire to avoid public controversy that may trigger more rigorous state or federal oversight of the fertility industry.

^{39.} See Joseph Berger, Our Towns; Yale Gene Pool Seen as Route to Better Baby, N.Y. TIMES, Jan. 10, 1999, at A19 (referencing an ad in The Yale Daily News that read "Desperately Seeking Smart, Sensitive, Sunny Samaritan"); Schwartz, supra note 31, at 1 (discussing ads that urge prospective egg donors to "give the gift of life"); Cornell Egg Donor Home, http://www.eggdonorcornell.com ("You [prospective egg donors] can literally give the gift of life! In addition, you can be compensated \$8,000 for your time and effort and receive a free medical screening.") (last visited Mar. 11, 2009).

claim monetary compensation as the overriding motivation for egg donation.⁴⁰ Indeed, donor-agency staff express disgust and revulsion toward egg donors "just in it for the money" or "trying to make a career" out of egg donation.⁴¹

At some level, this insistence on the altruistic motives of egg donors is driven by customer demand: donor-agency staff believe that fertility customers do not want egg donors who reveal monetary motivations for the desire to donate, and sociological research has shown that donor-agency staff spend significant amounts of time coaching egg donors, but not sperm donors, on how to appropriately package their personalities and their reasons for wanting to become a donor. That package includes a desire to help those who are infertile and downplays profit motivations.

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SPERM MARKETS: "YOUR SPERM CAN EARN!"44

A. Recruitment, Retrieval, Risks

Sperm donation is a physically riskless endeavor that requires a relatively small time commitment once a donor is accepted into a program. Like egg donors, however, sperm donor behavior is constrained during the donation period, and this donation period is longer for sperm donors than for egg donors. In addition, sperm donors may face higher social costs than do egg donors. Historically, for example, sperm donation was associated by some critics (particularly the church) with deviant behavior, and there appears to be some lingering skepticism concerning sperm donor motivations.⁴⁵

40. For example, the Web site of Elite Fertility Solutions states,

If financial gain is your main motivating factor, then you may not be eligible for the program. EFS does not compensate the donor for her eggs. However, we do compensate you for your time, commitment and effort. We are interested in candidates whose primary motivation is to help a couple achieve their dream of having a child. Egg donor compensation is \$5000.00.

Elite Fertility Solutions, http://www.elitefertility.com/egg_donor_faq.html#HMMCIM (last visited Sept. 30, 2008). The Web sites of other egg donation programs contain similar statements. See, e.g., ConceiveAbilities, http://www.conceiveabilities.com/donor_pg_4a.htm (last visited Mar. 11, 2009) ("[W]e strongly advise any potential egg donor not to apply if compensation is the only motivation."); Fertility Alternatives, Inc., Information for Potential Egg Donors, http://www.fertilityalternatives.com/files/eggdonorinfo.pdf (last visited Mar. 11, 2009) ("Candidates understand there is compensation for their time and efforts as a donor[;] however[,] it is not their primary motivation. It is very important that you choose to be a donor for altruistic reasons in addition to the financial compensation.").

- 41. Almeling, *supra* note 23, at 333–34.
- 42. As one egg donor agency director stated, "[Customers] want to know that the person donating is a good person. They want to know that person wasn't doing it for the money." *Id.* at 327.
 - 43. Id. at 329-30.
 - 44. Posting to Craig's List, *supra* note 10.
- 45. See, e.g., Erica Haimes, Issues of Gender in Gamete Donation, 36 SOC. SCI. MED. 85, 87 (1993) (reporting that the Archbishop of Canterbury's Commission in 1948 urged the criminalization of sperm donation because the process requires masturbation and results in the birth of an illegitimate child); John McMillan, The Return of the Inseminator: Eutelegenesis in Past and Contemporary Reproductive Ethics, 38 STUD. HIST. PHILOS. BIOL. BIOMED. SCI. 393 (2007) (calling the 1948 report's position that

As is the case with egg donation, sperm donors are screened fairly rigorously before being accepted into a program, and more than ninety percent are either rejected or withdraw from the process at an early stage. ⁴⁶ Although the specific requirements for sperm donation vary among sperm banks, common requirements include that the donor be between the ages of eighteen and thirty-eight, be a minimum height (usually around 5'8"), have a college degree or be a currently enrolled college student, not use tobacco or alcohol heavily, and be able to make weekly visits to the sperm bank to donate for some minimum period—normally around nine months. ⁴⁷ Studies have shown that most sperm donors are young, white, single, and full-time students. ⁴⁸

Prospective donors must first complete a medical-history questionnaire covering their own histories and those of two generations of family members. Particular attention is paid to information that might reveal a high risk of communicable disease, including HIV, Hepatitis B, and other sexually transmitted diseases.⁴⁹

Prospective donors must also complete a physical exam and be tested for sexually transmitted diseases and a variety of diseases mandated by the FDA, including HIV and hepatitis. Comprehensive genetic testing is considered impractical and prohibitively expensive and, therefore, is not legally required. Nonetheless, many sperm banks test for the most common genetically transmitted diseases, such as Tay-Sachs and cystic fibrosis, and conduct ethnically based genetic-carrier screens. Finally, donors must pass a semen

artificial insemination amounts to adultery as "verging on the bizarre" and discussing other religious objections to artificial insemination). More recently, members of the Warnock Committee (established by the British government to study and make recommendations on issues of human fertilization and embryology, and which led to the British Human Fertilization and Embryology Act of 1990) reported unspecified feelings by the committee of "yuk" and "instinctive dislike" of sperm donation, which they recommended be approved, nonetheless. *Id.* at 89–90; *see also infra* notes 61–65 and accompanying text (discussing the modern social conception of sperm donation).

- 46. Denise Grady, *As the Use of Donor Sperm Increases, Secrecy Can Be a Health Hazard*, N.Y. TIMES, June 6, 2006, at F5.
- 47. See, e.g., Become a Sperm Donor, http://thespermbankofca.org/pages/page.php?pageid=11&cat=11 (last visited Mar. 11, 2009); Becoming a Sperm Donor, http://www.genomeresources.com/?page=becoming (last visited Mar. 11, 2009); How to Become a PRS Sperm Donor, https://www.pacrepro.com/index.php?main_page=how_to_become (last visited Mar. 11, 2009); How to Become a Sperm Donor, http://www.spermcenter.com/formen.htm (last visited Mar. 11, 2009).
- 48. See, e.g., Rachel Cook & Susan Golombok, A Survey of Semen Donation: Phase II—The View of the Donors, 10 HUM. REPROD. 951, 952 (1995) (studying the profiles of a sample of sperm donors and finding an average age of twenty-four, and that 81% were single, 89% were white, and 65% were full-time students); Shover et al., supra note 16, at 576 (reporting similar findings)
- 49. AM. SOC'Y FOR REPROD. MED., THIRD PARTY REPRODUCTION (SPERM, EGG, AND EMBRYO DONATION AND SURROGACY): A GUIDE FOR PATIENTS 10 (2006), available at http://www.asrm.org/Patients/patientbooklets/thirdparty.pdf.

analysis to test for sperm count and the ability of semen samples to withstand freezing in liquid nitrogen and subsequent thawing.⁵¹

Like egg donors, sperm donors are asked to complete donor profiles detailing their hobbies, interests, and other personal information that are then made available to couples seeking a sperm donor. Although it is less common than with egg donors, given the traditional anonymity in the sperm market, some sperm banks may ask donors for photos or videos.⁵² Many sperm banks also allow a donor to specify whether he is willing to have his identity released to offspring once they turn eighteen, and may pay an extra fee to donors willing to agree to this condition.⁵³

Unlike egg donors, who do not donate until they are matched with a specific couple, sperm donors begin donating as soon as they have completed and passed the forgoing steps.⁵⁴ The sperm is then frozen and quarantined for a federally mandated six-month period (when the donor is retested for infectious disease, including HIV) and is then released for purchase.⁵⁵

B. Compensation and Controversy

Sperm donor compensation varies less than does egg donor compensation and has generated comparatively little controversy or discussion in the United States. The Web sites of most sperm banks report compensation levels of between \$50 and \$100 per usable sample, consistent with the reported national average of \$75. Payment levels may increase upon the completion of stated goals, such as making twenty-five successful donations, and bonuses are typically paid for such acts as successfully referring a friend (around \$750) and upon completion of the exit blood test six months after exiting the donor program. The donor program.

^{51.} Several samples typically are required, as sperm susceptibility to damage from freezing varies not only among individuals, but also among samples from the same individual. *Id.*; Becoming a Sperm Donor, *supra* note 47.

^{52.} Id.

^{53.} See, e.g., BioGenetics Corporation, "Become Exclusive Donor" in NJ or NY, http://www.sperm1.com/biogenetics/donor.html#Anchor-When-47857 (last visited Mar. 11, 2009) (offering \$100 per usable specimen for anonymous donors and \$500 per usable specimen to open I.D. donors); California Cryobank, CCB Open Donors, http://www.spermbank.com/newdonors/index.cfm?ID=19 (last visited Mar. 11, 2009) (offering extra payments to donors who agree to have their identity released).

^{54.} Am. SOC'Y. FOR REPROD. MED, supra note 49, at 10.

^{55.} *Id.* (discussing FDA and ASRM guidelines for sperm donation); Jennifer Egan, *Wanted: A Few Good Sperm*, N.Y. TIMES MAG., Mar. 19, 2006, at 13 (discussing the operation of sperm banks).

^{56.} Some exceptions are reported. For example, the previously noted auction Web site for fashion-model gametes begins sperm bidding at \$15,000. See Ron's Angels, supra note 31. Such competition for sperm—particularly based on the physical attractiveness of the donor—is considered less common in the sperm market than in the egg market, however.

^{57.} See sources cited supra note 47.

^{58.} Debora L. Spar, The Baby Business 39 (2006).

^{59.} See sources cited supra note 47.

Donors are expected to donate at least once per week (although many donate more frequently) during the minimum program period, meaning that donors can earn \$4000 or more during a year if their samples are consistently usable. Typical estimates assume that each sample donation requires one hour of the donor's time, including travel to and from the center and any sign-in or waiting times. As noted above, egg donors and sperm donors thus appear to be compensated at roughly equal hourly rates for the time that they are actually in a medical setting. Time spent in a medical setting, however, is not a meaningful metric by which to estimate hourly egg donor wages, due to the health risks, pain, discomfort, and inconvenience of the egg donation process.

C. Donor Motives

In contrast to the heated debates surrounding egg donor compensation, anonymous sperm donors in the United States have always been compensated, largely without controversy. Unlike egg donors, who are presumed to donate reproductive material out of altruism, sperm donors are assumed to donate primarily, if not solely, for profit opportunity. This is reflected in sperm donor recruitment materials, which nearly always focus on the income potential of sperm donation, querying prospective donors, "Why not get paid for it?" and advertising that "Your sperm can earn!" It is also reflected in the attitudes and statements of sperm purchasers and sperm-bank staff, who tend to view sperm donors more like waged employees than the gift-giving altruists that egg donors are expected to be.

Indeed, the presumption that sperm donors are motivated by profit-seeking is so strong that men expressing altruistic motives are frequently viewed with

^{60.} Seibel & Kiessling, *supra* note 36; Ethics Comm. of the Am. Soc'y for Reprod. Med., *supra* note 36, at 308. One hour may be an overly generous estimate. *See* Paul A. Bergh, *Indecent Proposal:* \$5000 Is Not "Reasonable Compensation" For Oocyte Donors—A Reply, 71 FERTILITY & STERILITY 9 (1999) (arguing that although "the complexity and risk faced by an egg donor can't even begin to compare to the relatively easy and risk-free experience of a sperm donor[,] . . . male donors receive between \$50 to \$75 per donation and these often take no more than 5 to 10 minutes to produce") (emphasis added). This estimate, however, does not include time spent during the initial interview and subsequent screening, which probably takes several hours. Ethics Comm. of the Am. Soc'y for Reprod. Med., *supra* note 36, at 308; HEALTH CANADA, FINAL REPORT: WORKSHOP ON THE REIMBURSEMENT OF EXPENDITURES FOR EGG AND SPERM DONORS 5 (2005), *available at* http://www.hc-sc.gc.ca/hl-vs/alt_formats/hpb-dgps/pdf/reprod/section12-eng.pdf ("[A]ll potential [sperm] donors have to visit the clinic more than once before they are accepted as donors, and visits last from thirty minutes to three hours.").

^{61.} Instead, sperm donation controversy has largely focused on issues relating to anonymity, genetic testing, eugenics, and recent sperm-industry scandals. See Krawiec, supra note 1 (discussing each of these controversies in greater detail); see also Naomi Cahn, Accidental Incest: Drawing the Line—Or the Curtain?—for Reproductive Technology, 32 HARV. J.L. & GEND. 59 (discussing the implications of reproductive technology for accidental incest and calling for greater regulation).

^{62.} See, e.g., sources cited supra note 10.

^{63.} See Almeling, supra note 23, at 325–30 (discussing the expectations of sperm bank staff and customers that sperm donors are simply doing a job for money, whereas egg donors are donating an intimate and precious gift).

skepticism and assumed to be deviants or egomaniacs intent on propagating the earth.⁶⁴ Not surprisingly then, a significantly larger percentage of sperm donors than of egg donors report money as the primary motivation behind their donation decision, and neither sperm-bank staff nor consumers reject sperm donors on this basis or seek to coach them into listing more acceptable altruistic motivations.⁶⁵

IV

COMPETITION AND COLLUSION IN THE EGG MARKET

The forgoing sections have described the recruitment, selection, retrieval, and compensation practices for egg and sperm donors, and reveal several differences between them, which are elaborated in section VI below. This section, however, details the most striking difference between the egg and sperm markets—collusive attempts to control egg prices, a practice not seen in the sperm industry. The fertility industry openly employs two different mechanisms to depress egg prices: (1) informal attempts to control egg prices within particular geographic markets, and (2) formal, industry-based, national attempts to control the price of eggs. 66

^{64.} See, e.g., Haimes, supra note 45, at 87 (discussing the concern of the Archbishop of Canterbury's Commission that sperm donors might invoke "altruistic idealism" to disguise what was actually "spiritual pride" in their greater virility and ability to propagate); Scoop A. Wasserstein, Shopping For Sperm: Nobel Prizes Wanted, HARV. CRIMSON, July 22, 2005 (quoting David Plotz, author of The Genius Factory, as stating that the key attraction of sperm donation to most young men is "making money for something you do anyway," and that, although some men claim altruistic motives, many of them are really egomaniacs).

^{65.} See Almeling, supra note 23, at 29 (observing that agency staff will coach or disqualify egg donors who do not report altruistic motivations but do not do the same for sperm donors); Shover et. al., supra note 16, at 576 (reporting motivations for a sample of egg and sperm donors).

^{66.} In addition, California, Massachusetts, Connecticut, Indiana, New Jersey, and Maryland all legislatively prohibit compensation for oocytes procured for use in stem-cell research. Elizabeth Gerber, California Limits Egg Donor Compensation in Privately-Funded Research, 35 J.L. MED. & ETHICS 220 (2007); Russell B. Korobkin, Recent Developments in the "Stem Cell Century": Implications for Embryo Research, Egg Donor Compensation, and Stem Cell Patents 13-14 (UCLA Sch. of Law, Pub. Law & Legal Theory Research Paper No. 08-21, 2008), available at http://ssrn.com/abstract=1143523. The legislation has generated controversy and debate, as well as a severe shortage of eggs for stem-cell research. See generally Korobkin, supra, at 14 (detailing examples, including Harvard University, which spent over \$100,000 in 2007 to recruit women willing to donate eggs for therapeutic-cloning research without compensation and found no volunteers); Lee Romney, New Battle Lines Are Drawn over Egg Donation, L.A. TIMES, Sept. 13, 2006, at A27 (detailing the donor-compensation debate as it relates to stem-cell research); Gerber, supra (same). None of the restrictions apply to eggs donated for fertility treatments, a distinction for which the American College of Obstetricians and Gynecologists (ACOG) has lobbied hard. Romney, supra, at A27. ASRM and ACOG both opposed the California Statute (S.B. 1260). See ASSEMBLY COMM. ON HEALTH, BILL ANALYSIS SB 1260, S.B. 1260, 2005–2006 Sess., at 10 (Cal. 2006), available at http://info.sen.ca.gov/pub/05-06/bill/sen/sb_1251-1300/sb_1260_cfa_20060626_104743_asm_comm.html.

A. Geographic "Community Standards"

In February 1998, the Saint Barnabas Medical Center in New Jersey set off a firestorm of controversy when it placed advertisements in several New York–area publications offering potential egg donors \$5000, twice the \$2500 that the center had been paying. The firestorm was provoked not because Saint Barnabas proposed to pay egg donors for their services, which it and other fertility clinics had been doing for years, but because the proposed payment increase was made in violation of an alleged understanding among New York–area fertility centers to pay no more than \$2500 for eggs. The ensuing debate (during which many fertility doctors openly discussed the need to control egg prices) quickly garnered newspaper and other media attention, and generated arguments in major medical journals.

The argument between physicians at competing New York–area fertility centers is revealing. Doctor Mark Sauer, of the Columbia-Presbyterian Medical Center and a prominent national figure in the field of infertility treatment, ⁷⁰ stated that he "was shocked" by the decision of St. Barnabas "to double the compensation *from the community standard* of \$2,500 to a startling \$5,000 per cycle," which would inflate the cost of egg donor compensation to over \$300 per hour and violated an ASRM Ethics Committee directive limiting oocyte donor compensation to "reasonable" amounts.⁷¹

Dr. Sauer was careful to note that he did not oppose compensation to egg donors and, in fact, had long advocated compensation "based upon time, effort, and risk of involvement." The problem was thus not that Saint Barnabas was paying egg donors, but that it was paying them too much. Sauer's article concluded with a lament that Saint Barnabas, by violating existing community standards regarding egg donor payments, had forced all area fertility centers to raise compensation levels—a cost that, unfortunately, would be passed on to consumers:

Inevitably, all of us will be forced to raise our compensation rates to meet this challenge. Most importantly, and most unfortunately, these expenses will have to be passed on directly to our patients, who are already spending considerable sums of money to seek this procedure.⁷³

^{67.} Kolata, supra note 30.

^{68.} Bergh, supra note 60; Mark V. Sauer, Indecent Proposal: \$5000 Is Not "Reasonable Compensation" for Oocyte Donors, 71 FERTILITY & STERILITY 7 (1999).

^{69.} See, e.g., Bergh, supra note 60, at 9; Kolata, supra note 30; Sauer, supra note 68, at 7; Mark V. Sauer, Letters to the Editor: The Debate Continues, 72 FERTILITY & STERILITY 182, 182–83 (1999) [hereinafter Sauer, The Debate Continues]; American RadioWorks: The Fertility Race (Part 10), The Decision to Donate—Assessing the Risks (American Public Media radio broadcast), available at http://americanradioworks.publicradio.org/features/fertility_race/part10/section3.shtml.

^{70.} Dr. Sauer is currently a Professor of Obstetrics and Gynecology and Director of the Division of Reproductive Endocrinology and Infertility at Columbia University Medical Center. *See* http://www.cumc.columbia.edu/dept/obgyn/services/infertility/clinical_team.html.

^{71.} Sauer, *supra* note 68, at 7 (emphasis added).

^{72.} Id.

^{73.} Id.

Dr. Sauer also wrote letters to leaders in the field, including current, past, and incoming presidents of ASRM and SART, as well as "directors of local programs in New York City." He also wrote to academics in the field, including Dr. Alan DeCherney, editor of the medical journal, *Fertility & Sterility*, who urged Dr. Sauer to expand on his letter and submit it to the journal for publication. In the same journal issue, Dr. Paul Bergh of the Saint Barnabas Medical Center responded, expressing puzzlement at Dr. Sauer's shock: Surely, as an esteemed fertility doctor involved in the field of oocyte donation, Dr. Sauer must be aware that many reputable oocyte donation programs across the country already paid similar rates to egg donors. He queried whether Sauer's concern was prompted more by his own center's physical proximity to Saint Barnabas than by a concern for egg donors, and noted that Dr. Sauer's clinic was one of the first in the New York metropolitan area to match the Saint Barnabas compensation levels of \$5000.

B. National Price-Fixing Through Professional Standards

National attempts by the fertility industry to control egg prices are evidenced by the enforcement efforts and "recommendations" of ASRM and SART. ASRM and SART have taken the position, at least since 1994, that reasonable compensation to gamete donors is ethically permissible. It was not until 2000, however, in the wake of increasing controversy, within and without the medical community, regarding rising rates of egg donor compensation, that ASRM quantified the definition of "reasonable" and began formal attempts to cap the price of eggs at a specific amount.

The 2000 report of the ASRM Ethics Committee regarding financial incentives for egg donors stated that "[p]ayments to women providing oocytes should be fair and not so substantial that they become undue inducements that will lead donors to discount risks," and proceeded to analogize the egg-donation process to the sperm-donation process. As previously noted, a prior study had concluded that sperm donors earned an hourly average of \$60 to \$75 in 2000. The same study estimated that egg donors spend fifty-six hours in a medical setting per donation cycle. If egg donors were paid the same hourly

^{74.} Sauer, The Debate Continues, supra note 69, at 182.

^{75.} Id.

^{76.} Bergh, supra note 60, at 9.

^{77.} Id.

^{78.} Ethics Comm. of the Am. Soc'y for Reprod. Med., *Ethical Considerations of Assisted Reproductive Technologies*, 62 FERTILITY & STERILITY (SUPPLEMENT 1) 47S (1994).

^{79.} Ethics Comm. of the Am. Soc'y for Reprod. Med., Financial Incentives in Recruitment of Oocyte Donors, 74 FERTILITY & STERILITY 216, 216 (2000).

^{80.} Id. at 219.

^{81.} This assumes that each donated sample consumes a full hour of the donor's time, including travel and waiting times. *See* Bergh, *supra* note 60, at 9 (suggesting that this overestimates the time required for sperm donation).

^{82.} Id.

rate as sperm donors, these calculations would support a payment amount of \$3360 to \$4200 per egg-donation cycle. According to ASRM, however, because egg donation involves a time commitment, risk, and discomfort not associated with sperm donation, egg donors may deserve higher amounts. The report concluded that [a]lthough there is no consensus on the precise payment that oocyte donors should receive, at this time sums of \$5000 or more require justification and sums above \$10,000 go beyond what is appropriate."

In other words, ASRM used sperm donation as a bench mark, and then apparently determined that the additional time, risk, and discomfort experienced by egg donors justified an additional maximum payment, without explaining where those numbers came from or why they might represent a reasonable compensation for the additional burdens that the committee agreed egg donors faced. In 2007, ASRM issued new guidelines that restated these same amounts and rationales.⁸⁶

Naturally, a price-fixing agreement would be fruitless in the absence of enforcement efforts, and the ASRM oocyte donor financial-compensation guidelines are no exception. SART, the primary member organization for assisted reproductive technology (ART) professionals in the United States, has a stated purpose of standard setting and maintenance in the ART industry. SART-member clinics, which account for more than eighty-five percent of fertility clinics in the United States, are expected to abide by SART guidelines, including the ASRM Ethics Committee guidelines on oocyte donor compensation. Although recent surveys of SART-member clinics suggest broad compliance with the oocyte-pricing guidelines, these self-reported (and unverified) numbers must be approached with the skepticism appropriate to public self-declarations of compliance with industry ethical guidelines.

As previously indicated, however, many fertility clinics procure eggs from independent egg donor agencies. Without some mechanism for ensuring their compliance, the SART and ASRM efforts would be ineffective. In May 2005, SART, with the support of two consumer organizations—RESOLVE (the national infertility association) and the American Fertility Association (AFA)—sent a letter to independent egg donor agencies informing them that all donor agencies serving SART-member clinics were expected to abide by the

^{83.} *Id*.

^{84.} Id.

⁸⁵ Id

^{86.} Ethics Committee of the Am. Soc'y for Reprod. Med., *supra* note 36, at 305.

^{87.} See generally SART Homepage, supra note 32.

^{88.} Jennifer Durgin, *More Is Not Merrier in Fertility Clinics*, DARTMOUTH MED., Summer 2007, at 3, *available at* http://dartmed.dartmouth.edu/summer07/html/disc_fertility.php.

^{89.} Covington & Gibbons, supra note 15, at 1001.

^{90.} See id.

^{91.} Seventy-one percent of SART-member clinics report the use of egg donors from donor-recruitment agencies. Seventy-five percent report an in-house, paid, donor-recruitment program. *Id.* at 1002.

ASRM egg donor compensation guidelines. ⁹² The agencies were asked to sign a voluntary agreement with SART to abide by the ASRM guidelines and to inform the SART-member clinics with whom they worked of their agreement. In exchange, donor agencies that had signed the agreement would be listed on SART's Web site, and their names would be forwarded to RESOLVE and AFA to provide information to patient-consumers seeking guidance in their efforts to locate donor agencies. 93 In February 2006, a follow-up letter was sent to donor agencies reminding them that a failure to adhere to the SART-ASRM guidelines would result in the removal of their agencies from the list of SARTapproved donor programs. 4 Many donor agencies have a vested interest in maintaining good relations (and a customer-patient listing) with SART by agreeing to abide by the guidelines, and, as of June 2008, ninety-three had agreed to do so. 95 A recent study reviewing the fees listed on Web sites of donor agencies listed as SART-approved concluded that the average donor compensation is \$5200, which (although higher than the average reported by SART-member clinics) is still roughly in accord with the ASRM guidelines. 66 As is the case with the self-reported clinic egg-pricing data, these self-reported numbers must be approached with caution, and other data suggest potentially higher averages.97

Finally, individual fertility clinics report their own policing and enforcement efforts of the ASRM oocyte donor compensation guidelines. For example, Dr. Brian Berger, medical director of the Donor Egg and Gestational Carrier program at the Boston IVF fertility-treatment center, reports that Boston IVF keeps records of egg donor agencies that exceed the ASRM compensation guidelines and refuses to do business with them.⁹⁸

V

ANTITRUST

In this section I contend that the ASRM donor-compensation guidelines and accompanying enforcement mechanisms discussed in section IV are illegal under the Sherman Act. Because the application of antitrust law to the egg industry would be a case of first impression, I analyze the relevant law in some detail, demonstrating that (1) the jurisdictional requirement of interstate

- 92. Id. at 1001.
- 93. Id. at 1001-02.
- 94. Id. at 1002.
- 95. The list is available at http://www.asrm.org/Patients/eggdonor_agencies.pdf.
- 96. Covington & Gibbons, supra note 15, at 1003.
- 97. See *supra* notes 33–35 and accompanying text (elaborating on the problems with self-reported egg-pricing data and discussing disconfirming evidence).
 - 98. Carlene Hempel, Golden Eggs, BOSTON GLOBE MAG., June 25, 2006, at 18.
- 99. Because the evidence of an agreement is weaker with respect to the "community standards" discussed *supra* in section IV.A and because, in any event, those standards appear largely supplanted by the ASRM compensation guidelines, I focus the discussion in this section V on the ASRM guidelines.

commerce is met; (2) neither individual fertility centers, SART, nor ASRM is entitled to any special immunity from antitrust law; (3) the agreements to suppress the price of eggs, as naked price-fixing agreements, should be considered per se illegal; and (4) even under a "quick look" or rule of reason analysis the agreements fail—the fertility centers comprising SART have market power, and the agreements have no legitimate procompetitive or redeeming social-welfare features.

A. Jurisdiction

Section 1 of the Sherman Act declares illegal "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States...." Courts have defined "trade or commerce" broadly, concluding that Congress intended the statute "to embrace the widest array of conduct possible," including such disparate practices as plasma donation, the setting of financial aid for admitted students, and many other activities whose commercial nature is not immediately obvious to the casual observer. As stated by the U.S. Court of Appeals for the Third Circuit, "the exchange of money for services, even by a nonprofit organization, is a quintessential commercial transaction." The exchange of reproductive material for monetary compensation thus quite easily fits within prior judicial interpretations of "trade or commerce" under the Sherman Act.

Moreover, as implied by the foregoing quotation, the Sherman Act applies not only to business enterprises, but to professional organizations, such as law firms and dental and medical practices; to nonprofits, such as institutions of higher education; 105 and to associations of professionals, such as professional associations of lawyers, engineers, and dentists. 106 Clearly then, both individual fertility centers (many of which are separately incorporated, for-profit enterprises, even when affiliated with a nonprofit hospital or university) 107 and the professional organizations of fertility specialists, such as SART and ASRM, are not immune from U.S. antitrust laws. As discussed in section V.C, however,

^{100. 15} U.S.C. § 1 (2006).

^{101.} United States v. Brown Univ., 5 F.3d 658, 665 (3d Cir. 1993).

^{102.} Ancar v. Sara Plasma, Inc., 964 F.2d 465, 470 (5th Cir. 1992) (concluding the trial court abused its discretion by dismissing for lack of jurisdiction the antitrust claims of a homeless person whose livelihood depended on the sale of plasma).

^{103.} *Brown*, 5 F.3d at 667 (holding that a full rule of reason analysis was required to determine whether an agreement to set financial-aid packages violated the Sherman Act).

^{104.} *Id.* at 787–88.

^{105.} See, e.g., NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 100 n.22 (1984) ("There is no doubt that the sweeping language of § 1 applies to nonprofit entities.").

^{106.} See, e.g., Dental Ass'n v. FTC, 526 U.S. 756 (1999) (finding that the FTC had jurisdiction over the California Dental Association, a nonprofit, voluntary association of local dental societies to which 19,000 dentists belonged, including roughly seventy-five percent of those practicing in the state of California); Goldfarb v. Va. State Bar, 421 U.S. 773, 787–88 (1975) (finding that a nonprofit professional association of lawyers violated the Sherman Act).

^{107.} SPAR, supra note 58, at 49 (describing the commercial nature of fertility-center operations).

this does not necessarily mean that the special status of fertility centers as part of the medical profession and the fact that SART and ASRM are professional associations of such medical professionals is irrelevant to an antitrust assessment of the price-fixing agreement.

B. Per Se Illegality

Agreements among competitors (so-called "horizontal agreements") to fix prices have long been considered per se illegal under § 1 of the Sherman Act, whether agreements to fix output prices at some maximum (sellers' cartel agreements) or to fix input prices at some minimum (buyers' cartel agreements). ¹⁰⁸ As stated by one commentator, "no serious argument can be made that antitrust law should make distinctions between buyer power and seller power if significant market power is obtained anti-competitively, such as through horizontal combination or collusion," and, overall, courts have treated the two situations similarly. ¹⁰⁹

Classifying an agreement as a per se violation dispenses with the need to inquire into market structure, the market power of the violators, or the anticompetitive effects of the behavior. Under a per se analysis, therefore, the attempts by fertility professionals and their member organizations to suppress the market price for eggs would be conclusively presumed illegal, as were the agreements among competing physicians to set maximum fees to be submitted to insurers, and the promulgation and enforcement by the Virginia State and Fairfax County bar associations of minimum-fee schedules for lawyers.

C. Rule of Reason Analysis

However, courts have sometimes analyzed alleged anticompetitive behavior by nonprofit or professional associations under a rule of reason or "quick look" analysis, 113 when the same conduct would be considered per se illegal if carried

^{108.} Per se agreements are "agreements whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality—they are 'illegal *per se*." Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 692 (1978). Naked price-fixing is one of the few fact patterns easily characterized as a per se violation of the Sherman Act because "naked price fixing rarely or never has anything to be said in its support." HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY 256 (3d ed. 2005).

^{109.} Roger G. Noll, "Buyer Power" and Economic Policy, 72 ANTITRUST L.J. 589, 591 (2004); see also ROGER D. BLAIR & JEFFREY L. HARRISON, MONOPSONY, ANTITRUST LAW AND ECONOMICS 26 (1993) ("[B]uyers have given in to the temptation to fix prices and have, for the most part, been treated in the same manner as sellers."); HOVENKAMP, supra note 108, at 17 ("[M]onopsony is an important antitrust concern and is just as inconsistent with consumer welfare as monopoly is.").

^{110.} HOVENKAMP, *supra* note 108, at 257. As stated by the Supreme Court, "[T]he absence of proof of market power does not justify a naked restriction on price or output." *NCAA*, 68 U.S. at 109.

^{111.} See Arizona. v. Maricopa County Med. Soc'y, 457 U.S. 332, 342–57 (1982) (holding that maximum-fee agreements for physician services are per se unlawful under § 1 of the Sherman Act).

^{112.} Goldfarb v. Va. State Bar, 421 U.S. 773 (1975).

^{113.} Under a rule of reason analysis, the plaintiff bears the initial burden of demonstrating "adverse, anti-competitive effects within the relevant product and geographic markets," which is typically

out by business organizations.¹¹⁴ Moreover, some antitrust scholars analyzing the health-care field have lamented the extent to which modern courts appear overly deferential to the health-care industry in antitrust challenges, demonstrating a particular willingness to tolerate potential anticompetitive outcomes when the actors in question are nonprofits.¹¹⁵

Such judicial deference is not explicitly a product of the organizational form or nonprofit status of the defendants, but rather of a perception that, in many such cases, the anticompetitive effects of the agreement or the intentions of the alleged violators are not immediately discernable. As elaborated by the Third Circuit in *United States v. Brown University*, the Supreme Court "has been more hesitant to condemn agreements by professional associations as unreasonable per se, or to apply a per se rejection to competitive restraints imposed in contexts where the economic impact of such practices is neither one with which the Court has dealt previously, nor immediately apparent." ¹¹⁶

In *Brown*, for example, the court held that full rule of reason analysis must be employed to determine the legality of the agreement among MIT and eight Ivy League colleges to collectively determine the amount of financial aid that would be awarded to needy students admitted to all nine schools.¹¹⁷ Because the agreement was plainly anticompetitive on its face, MIT (the sole remaining defendant at trial) was required to provide some competitive justification, even in the absence of a detailed market analysis.¹¹⁸ MIT met this burden by claiming that the agreement improved the quality of the product (education), by promoting socioeconomic diversity, and enhanced consumer choice by making an education affordable for a larger number of people.¹¹⁹

The Court also rejected a per se analysis in NCAA v. Board of Regents of the University of Oklahoma, ¹²⁰ carefully noting that its decision was not driven by the NCAA's status as a nonprofit entity or by its traditional role in the

accomplished through proof of the defendant's market power. United States v. Brown Univ., 5 F.3d 658, 668 (3d Cir. 1993). "Quick look" analysis is an intermediate standard that the Court has applied "in cases where per se condemnation is inappropriate, but where 'no elaborate industry analysis is required to demonstrate the anticompetitive character' of an inherently suspect restraint." *Id.* at 669 (quoting *NCAA*, 468 U.S. at 109). Under a quick-look analysis "the defendant must promulgate some competitive justification for the restraint, even in the absence of detailed market analysis." *Id.*

114. See, e.g., Goldfarb, 421 U.S. at 788 n.17 (1975) (condemning the practice at issue—a minimum-fee schedule published by the Fairfax County Bar Association—but noting the special character of the learned professions); Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 682–83 (1978) (invalidating under an abbreviated rule of reason, rather than a per se, analysis an ethics rule promulgated by a nonprofit professional association of engineers that prohibited competitive bidding for jobs).

- 115. See generally Richman, supra note 5.
- 116. See Brown, 5 F.3d at 671; Richman, supra note 5, at 124 (arguing that courts' hands-off approach to nonprofit-hospital mergers reflects a misunderstanding of the ways in which the structure of the American health-care system affects market competition).
 - 117. Brown, 5 F.3d at 660.
 - 118. Id. at 673.
 - 119. Id. at 674-75.
 - 120. 68 U.S. 85 (1984).

preservation of amateurism in athletics (a fact influential to Justice White's dissenting opinion), but rather on the fact that the case involved "an industry in which horizontal restraints on competition are essential if the product is to be available at all." The Court, nonetheless, held that the agreements limiting NCAA members' ability to televise intercollegiate football games violated the Sherman Act, because of their anticompetitive effect on price and output. 122

Finally, in *California Dental Ass'n v. FTC*, ¹²³ the Court held that the California Dental Association's restrictions on advertising "might plausibly be thought to have a net procompetitive effect or no effect at all on competition," as the agreements were "at least on their face, designed to avoid false or deceptive advertising." The Court thus rejected a per se analysis of the advertising restrictions and remanded the case for further analysis. ¹²⁵

In contrast, as discussed in more detail below, the negative economic impacts of the agreement among fertility professionals to suppress egg prices are readily apparent, and there are no arguable procompetitive benefits. Accordingly, this is not the type of arrangement deserving of courts' more-detailed rule of reason analysis such as that afforded MIT in *Brown* or the NCAA in *NCAA v. University of Oklahoma*. Nonetheless, as demonstrated in section V.D, the egg-pricing agreements fail even under a detailed rule of reason analysis.

Finally, defendants (particularly nonprofit and professional-association defendants) sometimes attempt social-welfare justifications for their anticompetitive conduct. Typically, courts reject these justifications as irrelevant to the question of whether the alleged conduct is anticompetitive.

To illustrate, in *National Society of Professional Engineers v. United States*,¹²⁶ the society defended a canon prohibiting its members from competitively bidding for jobs, invoking a public-policy rationale that competitive bidding would induce engineers to cut corners in order to generate the lowest bid, thus undermining consumer safety. The Supreme Court rejected the defense, noting, "the Rule of Reason does not support a defense based on the assumption that competition itself is unreasonable." The Court applied similar reasoning to invalidate a dental-association rule forbidding the submission of X-rays to dental insurers. ¹²⁸

^{121.} Id. at 106-07.

^{122.} *Id*.

^{123. 526} U.S. 756 (1999).

^{124.} *Id.* at 771.

^{125.} Id.

^{126. 435} U.S. 679 (1978).

^{127.} *Id.* at 691 (1978); *NCAA*, 68 U.S. at 116 (rejecting the NCAA's defense, and stating that, "at bottom the NCAA's position is that ticket sales for most college games are unable to compete in a free market").

^{128.} FTC v. Ind. Fed'n of Dentists, 476 U.S. 447, 463 (1986) (rejecting the argument that "an unrestrained market in which consumers are given access to the information they believe to be relevant

In *Brown*, in contrast, the Third Circuit held that the district court erred in failing to consider MIT's social-welfare justification—equality of educational access—a goal that Congress had repeatedly sought to promote. ¹²⁹ Although *Brown* is considered a deviant case in its embrace of social-policy defenses to collusive behavior, it is always possible that markets in reproductive material will generate similarly aberrant judicial analyses, making an understanding of the social-welfare impact of the ASRM–SART price-fixing agreement important. In the following subsection, therefore, I argue that even in the unlikely event that social-welfare justifications were considered relevant to an antitrust analysis of the horizontal egg-price-fixing agreement, those justifications are implausible on their face.

D. Application to Egg-Pricing Agreements

As previously noted, the ASRM-SART agreement to fix the purchase price of eggs should be considered per se illegal. The horizontal agreement is naked, and the context is not one (like that confronted by the *Brown* or *California Dentist* courts) in which the agreement plausibly serves some other procompetitive purpose. Yet the agreements fail even under a rule of reason analysis.

First, the fertility-industry collaborators have market power. Eighty-five percent of fertility centers in the United States are SART members and, because the largest, most prestigious centers tend to join SART, the market share of SART-member clinics is likely even greater. This is significantly more market share than the California Dental Association, which claimed seventy-five percent of the dentists in California as members, and the Indiana Federation of Dentists, which had a smaller (though highly concentrated) market share.

Moreover, the fertility industry presents barriers to entry, including the costs of a medical education and setting up a practice, as well as licensing and other requirements.¹³³ In addition, SART members believe that membership in the organization is important and is valued by consumers of fertility services, all of which contribute to market power.¹³⁴

Second, the type of agreement here—a horizontal agreement to fix the purchase price of eggs—plainly presents the same danger of anticompetitive

to their choices will lead them to make unwise and even dangerous choices" as "'nothing less than a frontal assault on the basic policy of the Sherman Act").

^{129.} United States v. Brown Univ., 5 F.3d 658, 675 (3d Cir. 1993).

^{130.} Durgin, supra note 88, at 3.

^{131.} Cal. Dental Ass'n v. FTC, 526 U.S. 756, 787 (1999).

^{132.} Ind. Fed'n of Dentists, 476 U.S. at 451.

^{133.} Cal. Dental Ass'n, 526 U.S. at 788 (Breyer, J., concurring in part and dissenting in part) (noting that the field of dentistry presents barriers to entry, including the costs of education and setting up a practice).

^{134.} See id. at 789 (making this argument in connection with the California Dental Association as evidence of market power).

effects present in any other collusive buyers' agreement: reduced supply, diminished consumer choice, and a wealth transfer from suppliers that is not passed on to consumers. Infertile couples pay large sums to fertility clinics for the bundle of goods and services (including the egg) that will result in the creation of an embryo for implantation. Although the demand for fertility services may be less elastic with respect to price than is the case with some other markets, there is no evidence that demand is completely price insensitive—consumers seem to care about price and to purchase fewer services when prices rise.¹³⁵

For this reason, fertility clinics have an incentive to contain the price of eggs in order to enjoy the surplus created by the ability to purchase their inputs at below-market prices. Of course, capping input prices reduces the available supply for both fertility centers and consumers. As in the traditional oligopsony model, however, fertility centers accept reduced access to inputs in exchange for a lower purchase price. In other words, assuming that the marginal cost of any unit of a good is the price paid on all prior units, an oligopsonist will fail to purchase some units whose value to the oligopsonist exceeds their costs in order to cap the purchase price of prior units. As a consequence, oligopsony power (like oligopoly power) produces inefficient supply levels. The end result is product scarcity: consumers of fertility services are deprived of the full range and number of eggs that would be available to them in a free market.

Confusion regarding the effects of monopsony markets on consumer prices has sometimes led courts and policymakers to conclude that monopsony is not a concern of antitrust law, which seeks a goal of low consumer prices. ¹³⁹ This analysis, however, incorrectly assumes that the savings from low input prices in a monopsony market will be passed on to consumers. Instead, a monopsonist who sells into a competitive market will charge consumers the same price as a

^{135.} See SPAR, supra note 58, at 32 (discussing the elasticity of demand in the baby market); Kimberly D. Krawiec, Price and Pretense in the Baby Market, in BABY MARKETS: MONEY, MORALS, AND THE NEOPOLITICS OF CHOICE (forthcoming 2009), available at http://ssrn.com/abstract=13427 10 (discussing characteristics, including demand elasticity, of various baby-market sectors).

^{136.} The phrase "monopsony," meaning a single buyer, was first coined by Joan Robinson. JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION 215 (1933). Given that single-buyer models are typically unrealistic as applied to modern markets, economists instead employ models of oligopsony or "competitive monopsony," in which buyer market power persists despite competition among buyers. The phrase "oligopsony" refers to the market power of buyers and not their number, which need not be small. V. Bhaskar et. al., *Oligopsony and Monopsonistic Competition in Labor Markets*, 16 J. ECON. PERSP. 155, 156 (2002).

^{137.} William Boal & Michael Ransom, Monopsony in American Labor Markets, EH.Net Encyclopedia (Jan. 23, 2002), http://eh.net/encyclopedia/article/boal.monopsony.

^{138.} HOVENKAMP, supra note 108, at 256; Boal & Ransom, supra note 137.

^{139.} See, e.g., Balmoral Cinema v. Allied Artists Pictures Corp., 885 F.2d 313, 316 (6th Cir. 1989) (suggesting that the exercise of buyer market power increases consumer welfare through lower consumer prices); Kartell v. Blue Shield of Mass., Inc., 749 F.2d 922, 927 (1st Cir. 1984), cert. denied, 471 U.S. 1029 (1985) (holding that Blue Shield's prohibition against doctors' charging Blue Shield subscribers more than the stipulated payment-schedule amounts did not violate the Sherman Act, because Blue Shield would pass on the benefits of reduced insurance premiums to its customers).

nonmonopsonist, but will supply a lower amount of the good. In contrast, a monopsonist buyer who also enjoys monopoly (or cartel) power over consumers will sell to consumers at a higher price than a nonmonopsonist. Monopsony markets, therefore, do not benefit consumers and create a deadweight efficiency loss (as do monopoly markets) because some market actors engage in a second-choice transaction that produces less social value than their first choice. Consequently, today it is well established that horizontal purchase agreements present just as much anticompetitive danger as do horizontal selling agreements.

Third, there are no plausible procompetitive benefits to the egg-pricing agreement that could not be achieved through less-draconian measures. Indeed, it is telling that neither individual fertility-industry collaborators nor ASRM even raise procompetitive justifications for the agreements, relying instead on social-welfare justifications. This is because, unlike those rare cases in which courts have allowed naked collusion on price or output, collusion on egg prices does not enable an otherwise nonexistent market to operate or enhance the quality or diversity of consumer choice. ¹⁴⁴ Indeed the ASRM–SART agreement has exactly the opposite effect: consumers are deprived of both quantity and choice.

Fourth, and finally, in rare cases (such as *Brown*), courts have considered social welfare or other noneconomic justifications for anticompetitive behavior. It is important to note that even the *Brown* court—notable for its unusual embrace of social-policy justifications—insisted that social policy alone was an insufficient justification for anticompetitive behavior.¹⁴⁵

It is unlikely, therefore, that a court would entertain social policy justifications for the SART-ASRM price-fixing agreements, and even less likely that a court would find them persuasive in the absence of compelling

^{140.} This is because, although the monopsonist can purchase the input at lower prices, its marginal outlay (the total additional cost of producing one more unit) is higher than a buyer in a competitive market. Unless the monopsonist can perfectly price discriminate, each additional unit she purchases increases the price of all previously purchased units. This is in contrast to the buyer in a competitive market, who must pay the market wage regardless of how many inputs she purchases. For more extensive discussion of this point, see BLAIR & HARRISON, *supra* note 109; HOVENKAMP, *supra* note 108, at 14–16, 158–59; Noll, *supra* note 109, at 591.

^{141.} HOVENKAMP, *supra* note 108, at 14–15.

^{142.} *Id.* at 19–20. A difficulty with antitrust analyses of monopsony markets, however, is distinguishing low input purchase prices stemming from monopsony from those stemming from reduced transaction costs or the elimination of upstream market power. *Id.* at 16.

^{143.} See sources cited supra note 109.

^{144.} See, e.g., NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 117–19 (1984) (holding that the special nature of athletic competition requires some cooperation); Broad. Music, Inc. v. CBS, 441 U.S. 1, 23 (1979) (finding that the collusion at issue enabled the creation of a product package that no individual could offer, thus enhancing consumer choice and increasing the volume of music sales); United States v. Brown Univ., 5 F.3d 658, 682–84 (3d Cir. 1993) (finding that collusion improved the product itself because socioeconomic diversity enhances the educational experience).

^{145.} *Brown*, 5 F.3d at 669 ("[A] restraint on competition cannot be justified solely on the basis of social welfare concerns.").

procompetitive justifications. Even in the unlikely event that a court was willing to entertain social-welfare arguments in support of price restraints in the oocyte market, however, such justifications should not carry the day. Unlike *Brown*—in which MIT could point to a social policy (equality of educational access) that Congress had supported for many years and that was arguably furthered by its agreements with the Ivy League colleges to set financial aid compensation—Congress has not ever, much less repeatedly, evinced a desire to exert controls on compensation to either sperm or egg donors.

Furthermore, it is implausible that social welfare concerns, rather than profit opportunity (or, as elaborated below, political maneuvering), ¹⁴⁶ primarily motivate the price-fixing agreements in question, because the agreements do not have the effect of promoting the purported noneconomic justifications. Fertility professionals have long proffered two social-welfare justifications for the need to control oocyte prices: that high egg prices commodify reproductive labor and that egg donors may be coerced by the hope of large financial compensation into taking risks that they otherwise would not. ¹⁴⁷ Elsewhere, I critique each of these arguments in more detail. ¹⁴⁸ For present purposes, however, it is sufficient to note that, if true, these objections would support a *ban* on payments to egg donors—not a *cap* on them. Therefore, fertility professionals truly concerned with the ethical dangers of either commodification or coercion would simply refuse to pay egg donors or to employ purchased eggs in connection with any fertility services they provide.

First, even assuming that commodification objections have some traction in the context of egg markets, and even assuming that it is possible to structure financial incentives to egg donors in a manner that alleviates those objections while compensating donors for the time, effort, and health risks associated with the procedure, there is no evidence that the ASRM price caps appropriately strike that balance. In fact, there is no indication that ASRM even considered such factors when setting standards for permissible egg donor compensation. As

^{146.} See *infra* notes 165–66 and accompanying text (discussing the possibility that the oocyte-pricing agreement primarily serves the political purpose of avoiding more onerous state or federal regulation of the fertility industry).

^{147.} See Am. Soc'y. for Reprod. Med., supra note 49, at 10 (outlining justifications for the ASRM oocyte-pricing guidelines).

^{148.} See generally Krawiec, supra note 1 (critiquing each of these arguments in more detail); Korobkin, supra note 66 (addressing coercion, commodification, and other objections to compensated egg donation for stem-cell research).

^{149.} These contestable assumptions are frequently invoked in debates over the propriety of financial incentives for gametes, organs and other tissue, blood, plasma, and human-subjects research. See generally Rosario M. Isasi & Bartha M. Knoppers, Monetary Payments for the Procurement of Oocytes for Stem Cell Research: In Search of Ethical and Political Consistency, 1 STEM CELL RES. 37 (2007) (discussing compensation mechanisms that the authors conclude have the capacity to preserve the principles of altruism and community solidarity, while increasing participation through financial incentives); Julia D. Mahoney, Altruism, Markets, and Organ Procurement, 72 LAW & CONTEMP. PROBS. 17 (Summer 2009) (discussing a variety of proposed or possible compensation schemes for organ donation, some of which represent a middle ground between market-based compensation and pure altruism).

previously discussed, the benchmark against which ASRM determined appropriate egg donor compensation levels was the existing, market-determined, sperm donor compensation rate. 150

Second, the ability of any sum to coerce or commodify is a direct function of that person's financial need. Accordingly, egg donor compensation caps, without reference to the potential donor's financial needs, do nothing to address the financial coercion and commodification objections. To illustrate, take the hypothetical example of token payments to plasma donors. Suppose that a group of plasma collection centers determines that paying for plasma is problematic, but that compensation in token amounts of twenty-five dollars to cover gas expenditures or inconvenience is permissible. The twenty-five-dollar sum is negligible to many professionals and likely to play little or no role in their decisionmaking or the extent to which they perceive their bodies to have been commodified. Yet the sums are not irrelevant to many poor individuals and, in fact, constitute the only source of income for some homeless persons. For this reason, the only court to consider the case has recognized that, assuming the homeless plaintiff can prove the existence of a collusive agreement, the plasma collection centers have violated the Sherman Act. 151

A similar argument was recently raised by Mark D. Fox in connection with the debate over financial incentives for organ donation, albeit to argue *against* such monetary incentives. In response to a proposal by Gaston, Danovitch, Epstein, Kahn, Matas, and Schnitzler to increase live organ donation rates through a package of financial incentives that includes insurance, reimbursement of lost wages and direct expenses, and a fixed payment for pain and suffering, ¹⁵² Fox contended that,

[w]hile the proposed benefit may not be a deciding factor to the CEO of a Fortune 500 company, to someone earning only minimum wage, the compensation may represent several months' pay. To deny the potential of this proposal to 'coerce an otherwise unwarranted decision to donate' reflects the folly of the privileged, not the reality of the poor. [153]

Ironically, the most likely effect of the ASRM price cap is to drive from the market the most highly desired egg donors, who tend to be better-educated and of a higher socioeconomic status.¹⁵⁴ These donors are arguably in a better position to evaluate the risks of egg donation against the monetary benefits and should be less susceptible to the "coercive" effects of monetary compensation,

^{150.} See supra notes 31–33 and accompanying text (discussing the rationales and mechanisms by which ASRM developed pricing guidelines for oocyte donation).

^{151.} See Ancar v. Sara Plasma, Inc., 964 F.2d 465 (5th Cir. 1992).

^{152.} Robert S. Gaston et. al., *Limiting Financial Disincentives in Live Organ Donation: A Rational Solution to the Kidney Shortage*, 6 AM. J. TRANSPLANTATION 2548–55 (2006).

^{153.} Mark D. Fox, *The Price is Wrong: The Moral Cost of Living Donor Inducements*, 6 Am. J. Transplantation 2529–30 (2006).

^{154.} *Cf.* Richard A. Epstein, *The Human and Economic Dimensions of Altruism: The Case of Organ Transplantation*, 37 J. LEGAL STUD. 459, 483 (2008) (arguing that, because organ recipients care deeply about quality, demand is low under a market-based procurement system for organs from those who are "down and out").

because they are more likely to have other income opportunities to choose from.

Therefore, if either commodification or coercion concerns were truly the motivating force behind the fertility industry's efforts to control egg prices, those controls would take the form of bans on egg donor compensation resembling those in other countries, rather than a cap. A ban on payment, of course, would severely reduce the supply of donated eggs, a necessary component of many of the fertility treatments offered by fertility centers, thus reducing fertility professionals' profits.

Other potential defenses of caps on payments to egg donors, which are understandably not raised by the fertility industry (since, if valid, they would render current egg donor compensation practices illegal) but sometimes emerge in egg market debates, best fit under the rubric of what Alvin Roth has termed "slippery slope" objections. I address these concerns only briefly here, both because they are irrelevant to an antitrust analysis and because—like the coercion and commodification objections—these slippery-slope objections, if true, would justify a ban on egg sales, not a collusive cap on egg prices.

First, some of the discomfort with a pure market approach to egg donor compensation seems to stem from perceptions that egg markets tread dangerously close to baby markets in ways that sperm markets do not, and that women are more attached to their reproductive material and their possible future children than are men. It seems unnecessary at first blush to even mention that, as a biological matter, egg and sperm markets should have an equal capacity to engender (or not) fears of baby markets run amok. Yet gendered stereotypes of women as caring mothers, emotionally attached to both their reproductive material and to their possible future children, and men as distant fathers with no emotional attachment to either their reproductive material or the anonymous children potentially born from it, are longstanding. These stereotypes have the capacity to affect the construction of reproductive markets in important ways, including potential emotive reactions to egg sales that simply are not evoked by sperm sales. For example, some egg-market critics exhibit a near-obsessive concern that young women, but not young men, will later regret their decisions to genetically parent children that they do not raise. 156 This variant on the coercion objection frequently emerges in debates

^{155.} See Roth, supra note 11, at 47 (arguing that much of the repugnance to cadaveric organ sales stems from a fear that it will lead to living-donor sales).

^{156.} See Rene Almeling, Gender and the Value of Bodily Goods: Commodification in Egg and Sperm Donation, 72 LAW & CONTEMP. PROBS. 37 (Summer 2009) (reporting that, of the agencies she studied, egg agencies required psychological counseling to explore donors' psychological readiness to produce unknown genetic offspring, but that sperm agencies did not); Carlene Hempel, Golden Eggs, supra note 98, at 18 (worrying that young women will later regret the decision to produce genetic offspring that they do not raise, particularly if they decide to do so for money). See generally GAY BECKER, THE ELUSIVE EMBRYO: HOW MEN AND WOMEN APPROACH NEW REPRODUCTIVE TECHNOLOGIES (2000) (demonstrating the ways in which new reproductive technologies reflect gendered cultural meanings of parenthood and infertility).

over egg donor compensation, yet is rarely, if ever, raised in connection with sperm markets.

Second, some egg-market critics seem motivated at least in part by a fear that unrestrained egg markets will inevitably lead to unrestrained organ markets. The relationship between egg and organ donation is a complex one, particularly given the regenerative ability of liver tissue. Currently, no federal law directly governs egg or sperm donation. The National Organ Transplantation Act (NOTA) "makes it unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce." The statutory term "organ," however, has not been extended to include sperm, ova, or embryos. ¹⁵⁸

Unlike renewable tissue, such as sperm and plasma, for which compensation has long been accepted, eggs are a technically nonrenewable but realistically unlimited tissue. This distinction may lead some observers to equate egg markets to organ markets, rather than to sperm, blood, and plasma markets. The *process* by which egg extraction occurs—outpatient surgery—is also different and more invasive than the process by which sperm donation occurs. This alone, however, should not—and under current law, does not—dictate whether eggs are more like organs than like sperm.

VI

CONCLUSION AND CONTRASTS

Economics and biology play an important role in the market structure of the gamete industry and in the different approaches to compensation and competition observed in egg and sperm markets. As to economics, some features of the sperm industry, as compared to the egg industry, would suggest a comparative difficulty in fixing prices, whereas others indicate the opposite. For example, the egg market is characterized by similar hourly wages, but higher per-unit prices, than the sperm market. To the extent that price-fixing entails enforcement, opportunity, or other costs, it may be worthwhile to incur such

^{157. 42} U.S.C. § 274e (2006). Louisiana specifically prohibits paid egg donation, whereas Virginia specifically permits it. Other states' laws are silent on the matter. THE PRESIDENT'S COUNCIL ON BIOETHICS, REPRODUCTION AND RESPONSIBILITY: THE REGULATION OF NEW BIOTECHNOLOGIES 174 (2004)

^{158.} Perhaps to minimize the risk of noncompliance with NOTA, the ASRM Ethics Committee Report regarding financial incentives for egg donation specifies that compensation arrangements should suggest that payment is for the donor's time and inconvenience alone, is not payment for the eggs themselves, and should not be so large as to be an "undue inducement" into the procedure. Am. Soc'y for Reprod. Med., *supra* note 79, at 216; *see also* John Robertson, *Legal Issues in Human Egg Donation and Gestational Surrogacy*, 13 SEMINARS REPROD. ENDOCRINOLOGY 210, 213–15 (1995) (suggesting these restrictions as a means to address legal uncertainty regarding the status of egg and sperm payments under organ transplant laws.)

^{159.} See Baum, supra note 14, at 127 (noting that the average woman has over 400,000 pre-oocytes at puberty, yet will menstruate only about 500 times in her life, meaning that under normal conditions no woman will ever use up all her eggs, even if many are donated to others).

costs in the egg industry, but not in the sperm industry. ¹⁶⁰ Moreover, due to the ease of freezing and shipping sperm, the U.S. sperm industry faces more international competition than the domestic egg market. ¹⁶¹ Each of these factors would suggest a greater difficulty in profitably fixing sperm prices than in fixing egg prices.

At the same time, however, the costs of sperm storage and testing are substantial, resulting in economies of scale.¹⁶² As a result, the sperm business has tended to be dominated by a small number of large, highly efficient producers, increasing the ease and reducing the costs associated with industry collusion.¹⁶³

Regarding biology, the more limited ability of eggs to withstand freezing and the need to synchronize the reproductive cycles of egg donor and intended mother, among other factors, dictate different matching and collection procedures in the sperm and egg markets that result in an impersonal, "mass production" model in the sperm market, and a more individuated, almost intimate, approach in the egg market. It is possible that this egg-market model lends itself, in a way that the sperm-market model does not, to gift-giving rhetoric and reinforces a pretense that the relationship between egg purchasers and egg donors is a personal one, largely motivated by a desire to help those suffering from infertility, rather than a commercial transaction motivated by a desire for profit.¹⁶⁴

Given that cartels are notoriously difficult to police and sustain, it is worth re-emphasizing in closing the limited empirical data on egg market pricing. Although the available evidence suggests some price suppression, existing price data is largely self-reported, or based on price information gathered from Web sites, newspapers, and other venues. The bulk of these advertisements make

^{160.} In general, if the organization, management, and litigation costs of operating a cartel are greater on a per-unit basis than the amount of price suppression, then collusion will not be worthwhile. Significantly, for this computation, it is the absolute price and not the price per hour that is relevant. Thus, if sperm goes for \$75 per transaction and eggs for \$5000, then organizing a sperm cartel may not be worth its costs, even if the result were to drive sperm prices to zero.

^{161.} Whereas sperm can be frozen and shipped overseas, those employing the services of an egg donor residing in a different geographic region either travel to the donor's location for the fertility procedure or pay the expenses for the donor's travel to the purchaser's geographic location, substantially increasing the costs of the egg trade across geographic regions. Krawiec, *supra* note 1, at 14–21 (discussing the international egg and sperm trades). With the exception of Denmark, which is a large exporter of sperm to other countries, the direction of export in the case of both egg and sperm is more commonly from the United States to other countries, due to shortages caused by legal restrictions in many other jurisdictions. *Id*.

^{162.} SPAR, supra note 58, at 37–38.

^{163.} Id. at 38.

^{164.} As discussed *supra* notes 19–37 and accompanying text, in contrast to sperm donation, in which sperm donor samples are collected and the donor is paid prior to placing samples on the market, egg donation does not occur unless a donor is selected by a particular purchaser and a price is agreed upon. As a result, egg purchases seem in many ways more personal than sperm purchases. *See also* Almeling, *supra* note 23, at 333 (arguing that these different collection procedures lend themselves to "a caring gift cycle," rather than to a "legalistic economic transaction," and that egg donor agencies reinforce that perception by expressing appreciation to egg donors for their generosity in ways that are not done with sperm donors, who are perceived more like waged labor.)

clear that the offered price is merely a starting point for negotiation, a fact confirmed by direct observation of the donor payment process.¹⁶⁵

It is thus an open question whether motives beyond price suppression lie at the heart of fertility industry collusion in the egg market. The fertility industry is currently governed largely by professional self-regulation, a fact increasingly questioned by fertility market critics. ¹⁶⁶ Industry controversy, including controversy related to egg donor compensation, threatens to displace this self-regulatory regime with more coercive state or federal regulation. It is possible that industry attempts to control egg donor compensation are prompted, at least in part, by a desire to provide the appearance that the industry is addressing issues of public concern and controversy, forestalling the need for state intervention.

If true, however, this political-motivation narrative is much more disturbing than the price-fixing narrative and reinforces a central tenet of this article: deeply held communal norms prompt very different societal reactions to the prospect of payment for egg and sperm. Indeed, the political-motivation narrative implies that the prospect of allowing the same market forces that determine the price of male reproductive tissue to set the price of female reproductive tissue is so troubling that the instinctual response would be to tighten government control of the entire industry.

Economic sociologists, ¹⁶⁷ cognitive theorists, ¹⁶⁸ and (more recently) economists, ¹⁶⁹ have begun to turn their attention to the social and psychological factors that affect both market structure and the acceptable means of exchange within the context of certain transactions. These insights may have important implications for gamete markets, which traditionally have caused some level of cognitive, social, and legal discomfort.

Sperm donation, historically associated with deviant behavior, continues to evoke a lingering skepticism regarding donor motives. Monetary payment may have the capacity to normalize these transactions, providing an acceptable donor motive unrelated to sexual impulses or egoistic desires to spread male

^{165.} See sources cited *supra* notes 31, 39–40; Almeling, supra note 23, at 332–33 (discussing fee negotiation, and gifts and "bonuses" paid to successful egg donors). There are also allegations that some egg donor ads offering very large sums are not legitimate, but instead are "bait and switch" tactics designed to lure prospective donors into the pool. ADVISORY GROUP ON ASSISTED REPROD. TECHS., *supra* note 19, at 7 (warning prospective egg donors that, "in some cases, there is actually no couple willing to pay the enticing fees. Instead, a broker is trying to attract a large number of applicants.")

^{166.} Adam Pertman & Naomi Cahn, *Limiting Reproduction*, BALTIMORE SUN, Feb. 25, 2009 (citing recent fertility industry controversies and arguing that it is time to consider federal and state regulation of the fertility industry, rather than relying solely on self-regulation); Melissa Jacoby, *The Debt Financing of Parenthood*, 72 LAW & CONTEMP. PROBS. 147 (Summer 2009) (citing researchers that call for increased regulation of the fertility industry).

^{167.} See, e.g., VIVIANA ZELIZER, THE PURCHASE OF INTIMACY 27–34 (2005) (discussing the means by which different rules of exchange may be employed to differentiate similar relationships).

^{168.} See, e.g., Fiske & Tetlock, supra note 11, at 285–94.

^{169.} See, e.g., Epstein, supra note 154; Roth, supra note 11.

genes. Sperm donation thus becomes a job like any other, mapping onto more comfortable stereotypes of male interests in financial gain.

The willingness of women to procreate solely for monetary gain, however, causes discomfort of a different sort. As is the case with commercial surrogates, egg donors are reframed as loving altruists, generously giving "the gift of life" to help others less fortunate. Absent a severe shift in societal conceptions of motherhood and the propriety of female reproductive labor, appeals to altruistic impulses are thus likely to continue to play an important role in both the recruitment and marketing of egg donors. Market forces, however, and not industry collusion, must be allowed to determine the ultimate mix of altruism and monetary gain that constitutes total egg donor payment.