KIDNEYS SAVE LIVES: MARKETS WOULD PROBABLY HELP

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The National Organ Transplant Act of 1984 prohibited the exchange of human organs for "valuable consideration" and so effectively banned kidney markets. This legislation was motivated by political, cultural, and religious resistance to the idea of commodifying the human body, worries about donors' safety, and a range of other ethical concerns. At the time, the prohibition had few drawbacks: the frequency of transplantation was low, and there was optimism about our ability to secure a sufficient number of healthy organs through donation.

Much has changed in the last thirty years. As anti-rejection drugs have improved, the number of patients who would substantially benefit from a medically justifiable transplant has increased dramatically. It has also become evident that our exclusive reliance on donation is insufficient to meet the demand; as of November 2012, according to the Organ Procurement and Transplantation Network (OPTN), the waiting list for a kidney, in the United States alone, includes over 90,000 people.² Consequently, the number of deaths that could be prevented by an increase in the supply of kidneys is far greater than it once was. Further, developments in surgical technique have made nephrectomies less invasive, and mounting evidence suggests that donors' long-term health outcomes are largely unaffected by their gift.³

There is a rather straightforward argument, based on the value of human life, for the conclusion that organ sales, under certain circumstances, ought to be permitted. The argument is as follows: (1) Many people are suffering and dying for lack of a healthy kidney; (2) this death and suffering is bad; (3) if we can act to address this problem without bringing about a comparable or worse harm, we should;⁴ and (4) a carefully regulated market would increase the supply of transplantable kidneys, thus reducing the death and suffering caused by the current shortage. (5) We have compelling reason to think that such a market can be arranged so as to secure this increase in supply without causing comparable or worse harm; (c) therefore, we should establish a carefully regulated market. I will call this the "value of life argument."

Before delving into this argument, it is worth immediately clarifying how the value of life argument differs from the pro-market argument offered by James Stacey Taylor in his 2005 book, *Stakes and Kidneys*. In making his case for a market in human body parts, Taylor has relied heavily on a substantive conception of autonomy that he has developed and refined.⁵ However, while autonomy continues to play a significant role in medical ethics, there is still much disagreement about what the proper account of autonomy is, and how that value should feature in medical ethics more generally.⁶ Rather than relying on a controversial value like autonomy, the argument on offer here takes as its lynchpin a far less contentious value, namely, the value of life. For this reason, I hope it is met with less resistance.

There is a second, related way in which the value of life argument deviates from Taylor's. As a result of emphasizing autonomy, Taylor's position recommends "a competitive market for the distribution of transplant kidneys." That is to say, if one accepts the conception of autonomy Taylor defends, then, he argues, one should also accept that the market ought to operate both to procure and to distribute kidneys for transplant. The value of life argument, in contrast, recommends employment of a monopsonistic market in which the government, or some other suitable agency, is the sole purchaser of kidneys. On this scheme, the market plays no role in distribution.

Given the variety and complexity of the issues involved, a full defense of the value of life argument is not possible here. My more limited ambition is to show that a kidney market, properly regulated, can improve the lives of both recipients and donors. I begin by arguing that variations on the current means of organ procurement are inadequate for three reasons: living kidney transplants, which are likely to be increased only through market mechanisms, are healthier than cadaveric kidneys; non-market solutions are unlikely to meet the real demand for kidneys; and vendors stand to benefit from participating in a market.

Next, in the second section, I distinguish between two kinds of objections to kidney markets: those that depend for their force on the likelihood of actual markets operating imperfectly, which I'll call "real-world" objections, and those that would undermine the use of markets even under ideal conditions, or "ideal condition" objections. One important reason to attend to this later class of objections is that if successful, they would render disputes about "real-world" objections superfluous.

In the third section, I consider an objection that challenges premise (5) of the value of life argument by claiming that a kidney market would violate the "Do No Harm" principle, which is central to medical ethics. Arthur Caplan, a prominent New York University bioethicist, offers this line of resistance. Caplan's objection is worth attention, as he has significant influence both in academic discussion of this matter and in the public square. Further, Caplan's objection demonstrates a conceptual confusion that is common in work on the permissibility of kidney markets.

In the fourth section, I present and respond to the claim that a market will actually decrease the supply of kidneys, which challenges premise (4). This is an important line of resistance for two reasons: First, the claim that a market would decrease the supply of kidneys, if correct, would represent an obvious challenge to the value of life argument. Second, the claim that a market would decrease supply remains common throughout the biomedical literature.⁸ Additionally, Stanford philosopher Debra Satz has recently explored this line of reasoning and concluded that it is a source of uncertainty for arguments that rely on the market to increase the supply of transplantable kidneys.⁹

Then, in the fifth section, I consider Satz's claim that even if an individual may suffer no harm in selling her kidney, the practice, when permitted on a large scale, may result in harm to those who would rather not participate in the market. ¹⁰ If true, this would undermine premise (5). Satz's line of resistance offers a unique challenge. Typically, arguments to the effect that a market would result in harm focus on the participants; but Satz makes a compelling case for the conclusion that those who do *not* participate will be harmed. This objection merits careful treatment because it represents a serious challenge to the value of life argument and has received little attention in the literature.

I. THE PRIMA FACIE CASE FOR A MARKET

Many opposed to markets advocate incremental adjustments to our current approach to procuring organs. These general adjustments include improving communication about donation through public education and marketing; facilitating living individuals' choices to donate; facilitating family's choices to donate their deceased loved one's kidneys; and expanding the criteria for suitable donor organs. There are more specific proposals as well: Some have devised ways of overcoming problems of blood type incompatibility; others have developed methods of transplant that mitigate other concerns about incompatibility; there is increasing acceptance of non-directed donation; and "paired kidney exchange" offers a further means of facilitating transplants between those who would otherwise be incompatible. Economist David Kaserman has argued that we may be able to meet the current demand if we pursue, successfully, the measures mentioned above, achieve a 100 percent cadaveric kidney donation rate, and become willing to accept kidneys from "marginal" donors: those with non-ideal health.

Addressing the problem through incremental change, however, is inadequate. There are three reasons why, even when assuming Kaserman's most optimistic forecast is accurate, the market proposal remains motivated. One reason is that kidneys from living donors are of better quality than those from deceased donors, and function for nearly twice as long.¹⁷ Thus, even if we were able to supply enough cadaveric organs to meet demand, we would still have cause to explore market solutions: Recipients have legitimate reasons to prefer live organs, and

the market is the only proposal that has the potential of significantly increasing the number of live transplants.

The second reason is that the optimistic projection suggesting that current demand can be met is based on the number of people on the waiting list. But this is not a wholly reliable indicator of demand, as it does not represent all of those who would medically benefit from a transplant. Research suggests that many populations, especially minorities, non-English speakers, and the poorly educated face barriers to accessing the waiting list. Further, many who would substantially benefit from an organ are, by current measures, not permitted access to the list; it was estimated that in 2008 almost 135,000 people sufficiently healthy to be expected to live at least five more years were never entered on a waiting list. In light of these facts, we have good reason to believe that many more people would benefit medically from a transplant than the waiting list suggests.

The third reason to pursue a market solution to the problem presented by the shortage of transplantable kidneys has to do with the potential benefits accruing to vendors. It has been estimated that a transplant from a single living unrelated donor saves over \$94,000 (US dollars, 2002) relative to the cost of dialysis.²⁰ In 2012 dollars, this is close to \$120,000. This total savings per kidney increases to close to \$250,000 (close to \$320,000 in 2012 dollars) when the expected increase in quality adjusted life years is taken into account. There are many ways these funds could be distributed to vendors, apart from simply offering a lump sum payment. Vendors might receive health insurance, funds for education, or an annuity. While more work must be done to determine the optimal compensation package, we can reasonably assume that there is likely to be some benefit to those who participate as vendors.²¹

Every means of increasing the supply of transplantable kidneys should be explored, as every additional kidney can save a life. However, the considerations presented above give us reason to prefer a well-regulated monopsonistic market to incremental adjustments to the current procurement system. In summary, the live kidneys a market could produce are healthier, and so will lead to fewer surgeries and better health outcomes; it is unlikely that non-market solutions will ever meet the real demand for transplantable kidneys; and, finally, there is reason to think that vendors, and not just recipients, will benefit from participating in the market. Thus, we should pursue a market solution to the problem presented by the shortage of organs.

2. Two Distinct Challenges to Market Proposals

The value of life argument defended here depends on both empirical facts and normative claims, and each premise has been subject to a great deal of criticism. Some of the more common objections challenge premise (5), and claim that such a market would inevitably involve exploitation of the poor;²² harm to donors;²³

coercion through ignorance or poverty;²⁴ an erosion of trust in the medical establishment;²⁵ exacerbation of social inequality;²⁶ and an expansion of the black market.²⁷ These objections focus primarily on the possible consequences of a kidney market operating in non-ideal conditions.

Much has been done to rebuff these "real-world' objections. For example, Taylor argues that exploitation would not be a problem in a properly regulated market and that fears of an expansion in black market-type exchanges are unconvincing;²⁸ Michele Goodwin argues that social inequality, especially among African Americans, would actually be reduced by the introduction of a market;²⁹ and Benjamin Hippen argues, based on a comprehensive study of Iran's kidney market, that harm to donors can be minimized through extensive follow-up care for and ongoing attention to patient outcomes.³⁰

While many of these responses are compelling, the paucity of relevant and reliable empirical evidence leaves room for uncertainty. To be sure, there has been a great deal of research into markets, both regulated and unregulated, in places like Iran, India, and the Philippines.³¹ However, given the vast differences in economic development, medical resources, and sociopolitical climate, one can draw from these cases few conclusions about a market in the United States. Further, there are many importantly different ways one might arrange a market, and these differences will have a significant impact on donors' and recipients' outcomes.

Many market advocates are sensitive to the current limits of our knowledge. Benjamin Hippen, for example, is careful to stress the dangers of extrapolating too much from the data we have on Iran's market experience to the operation of a market in the United States. And his response to the inadequacy of available data is entirely appropriate: "While the lack of accurate data justifies concern, it does not justify abandoning the idea of organ vending. The solution is to carefully monitor outcomes and adjust the vending system or, if need be, abandon it should results prove unacceptable." Although there is much more to be said about real-world objections, and the pro-market rejoinders that have already been offered, one thing seems clear: many of these disputes cannot be decisively resolved without data obtainable only through experimentation with markets.

However, market opponents are likely to resist experimental trials of kidney markets. There are two forms this resistance might take. First, market opponents may offer "real-world" objections like those just considered. The cogency of these lines of resistance will depend in part on what our best empirical evidence suggests about the likely consequences of introducing a market. And, as long as this kind of empirical evidence is relevant to determining the permissibility of a kidney market, market opponents will have to supply reasons for resisting even small-scale trials. A second way one might resist experimental trials is to argue that *even in ideal conditions*, a kidney market would be objectionable. This form of resistance is, in at least one respect, more troubling than that which takes the form of "real-world" objections. For, if one denies that markets are permissible

even in ideal conditions, then experimental trials are worse than otiose: they are immoral. My central concern in what follows is to develop and refute what I take to be the three most compelling "ideal condition" objections.

3. WOULD A MARKET VIOLATE MEDICAL ETHICS?

Arthur Caplan argues that a market would violate an important tenet of medical ethics, namely, the "Do No Harm" principle, and so should be prohibited. One obvious reason to respond to this challenge is that, if true, Caplan's claim would undermine premise (5) of the value of life argument. But there is a second reason: Caplan's objection, I will argue, depends on a failure to distinguish between the motive on which a person acts and the act performed. Clarifying this distinction will help when evaluating the objection presented in the next section.

Caplan argues that a market in kidneys would be, in principle, unethical.³³ To be as charitable as possible to Caplan, I quote extensively from a passage containing a full expression of his argument:

Medicine has long held that the core ethical norm of the profession is the principle 'Do no Harm'. Taking organs from living persons is in direct violation of this moral norm. The only way in which it seems morally defensible to remove an organ from someone is on the grounds that the donor chooses to undergo the harm solely to help another and that there is sufficient medical benefit to the recipient.

The creation of a market puts medicine in the position of removing body parts from persons solely to abet their interest in securing compensation for themselves. . . . A key moral problem with markets in kidneys and other body parts is what it does to the ethics of the medical profession. In a market, even a regulated one, doctors use their skills to help people harm themselves for money and solely for money.³⁴

If we accept Thomas Nagel's understanding of altruism as "any behavior motivated merely by the belief that someone else will benefit or avoid harm by it," then the first condition on which Caplan insists, namely, that the choice to give is made "solely to help another," appears to be a requirement of altruism. The second condition is that there is "sufficient medical benefit." It is only because donation meets these two conditions, and so overcomes the "Do No Harm" principle, that it is permissible. It would be perfectly acceptable, for example, for a mother to donate her kidney to her ailing son; her choice meets both conditions.

Caplan's objection is predicated on the false assumption that the distinction between the acts of giving and selling corresponds to the distinction between motives of altruism and selfishness. That is, Caplan assumes that uncompensated donors always act altruistically and compensated vendors always act selfishly. This is mistaken. We can easily modify the above scenario such that the mother's child is not suffering from renal failure, but instead has been diagnosed with

leukemia. Her kidney is unlikely to send her son's cancer into remission, but the proceeds from its sale might afford him a badly needed course of chemotherapy. ³⁶ In this case, both of Caplan's criteria are met: the mother is acting "solely to help another" and "there is sufficient medical benefit." Clearly, then, a commercial exchange can be conducted for altruistic purposes consistent with the "Do No Harm" principle. It should be obvious that more ordinary expenditures, for things like health care, education, and housing, when purchased by a parent for a child, are similarly altruistic, and so provide a suitable basis to motivate sales.

Further, unpaid donation, which is typically thought to be undertaken "solely to help another," may be motivated by selfish purposes. Just as someone might, for example, present herself as having certain religious commitments in order to win the good favor of a wealthy relative, one might also agree to a superficially altruistic donation in hopes of securing favorable treatment. An elderly grandparent may be more likely to leave you a substantial sum in her will if you donate a kidney to your uncle. There are other motives as well; prospective non-directed donors have admitted that they were motivated to donate by a desire to make a statement against their family.³⁷

Caplan takes the "Do No Harm" principle to require that donors act on purely altruistic motives. However, even if this were a legitimate requirement, it would not justify a prohibition on the market; payment is consistent with altruism, and so is also consistent with Caplan's reading of the principle. Having disentangled the donating/selling distinction from the altruistic/selfish distinction, it is clear that the "Do No Harm" principle does not preclude a market.

4. WOULD A MARKET REDUCE THE SUPPLY OF KIDNEYS?

In his oft-cited *The Gift Relationship*, Richard Titmuss argued that "the commercialization of blood and donor relationships represses the expression of altruism [and] erodes the sense of community." Titmuss's work has frequently been cited by market opponents who offer it as evidence for the claim that a market will erode altruism and, in doing so, reduce the supply of kidneys. Sheila Rothman and David Rothman offer a typical expression of the worry: "[I]ntroducing financial incentives might undermine the system, discourage donation, and reduce supply."³⁹

Corroborating Titmuss's position, much work has been done in motivational crowding theory to show that extrinsic incentives or disincentives can suppress intrinsic motivation. Behavioral economists Uri Gneezy and Aldo Rustichini have found that instituting a penalty for a particular behavior can actually increase its frequency. Having observed regular rates of late pickups at ten daycare centers in Israel, a modest fine was levied on tardy parents at six centers. Within a week, the incidence of late pickups increased substantially at the centers that implemented the fine. Further, when the fine scheme was later rescinded, incidence of

late pickups remained close to what it became after the fine was instituted.⁴⁰ The authors' titular hypothesis was that "a fine is a price." The introduction of the fine altered the exchange from one subject to social norms of right and wrong, to one governed by market norms, wherein one can purchase the privilege of leaving their children late at the center. The introduction of the fine changed the character of the exchange, and so changed the norms governing it.

Similarly, a 1997 study lends further support to the claim that the introduction of extrinsic incentives can effectively destroy intrinsic motivation and, in doing so, reduce the effectiveness of price mechanisms.⁴¹ Having informed Swiss residents of the liabilities of locating a new nuclear waste site near their homes, researchers surveyed their willingness to host the site. Initially, just over 50 percent favored locating the site in their neighborhoods. However, when another offer was made, this time including a financial award, the number willing to host the site dropped to close to 25 percent. Even when the financial incentive was later significantly increased, all but one of the nearly three hundred respondents remained opposed to the site. The authors explain this shift in support by positing that the introduction of financial incentives reduced the "civic spirit" of those supporters of nuclear energy who would have otherwise been willing to host the site. Their intrinsic motivation was crowded out by the extrinsic incentive.

Debra Satz notes that the markets studied in motivational crowding theory are significantly different from markets in human kidneys, as they "involve questions of life and death, not simply convenience, and so it may well be that different motivations are invoked in those performing altruistic actions." Satz is right to attend carefully to the ways in which the markets studied in the literature on motivational crowding theory are importantly different from the market under examination here. But I think she draws the wrong conclusion from this difference when she goes on to suggest that these "motivations are more likely to be vulnerable to crowding out." In the remainder of this section, by examining the motives of the different classes of donors, I hope to show that we have little reason to expect the net supply of kidneys to decrease with the introduction of a market.

Research has found that among those non-directed donors deemed psychologically suitable to donate, the most common motives were as follows: 58 percent of participants acted on the desire to act in a way "consistent with [their] spiritual belief system"; 48 percent sought to "substantially improve the quality of another's life at an acceptable personal cost"; 43 percent sought to act in a way "consistent with a spirit of altruism." Given that these donors are motivated largely by altruism, they seem most susceptible to motivational crowding out. Whereas under the current arrangement, donors are immediately and unambiguously identified as altruistic, the introduction of market elements may weaken this association. The worry then is that the altruistic potency of the act may be diluted when some donors are vendors.

There are two points market advocates can offer in response to this worry. First, this class of donors is incredibly small: Based on OPTN data from several years ago, there were just over a total of 1,100 non-directed donations completed in the United States by the end of 2011.⁴⁶ So even if all potential non-directed donors elect not to donate, the loss may be easily outweighed by the increase in supply delivered by those acting on extrinsic incentives.⁴⁷

Second, there is reason to doubt that this class will shrink. Some would-be uncompensated donors may become compensated donors when the selling price is right.⁴⁸ These donors would be like the Swiss resident who would have permitted toxic waste to be stored near her home out of a concern for civic duty, but would also allow it for a high-enough price. Additionally, a market could allow for uncompensated donation, and even enhance it. Peter Singer, in a 2006 article in *The New York Times*, mentions Zell Kravinsky, who, after having donated nearly \$45 million to charity, donated his kidney to a stranger.⁴⁹ If given the opportunity, Zell, or someone like him, may have opted to sell his kidney and donate the proceeds to charity.

The real threat of crowding out comes from directed donors, who contribute significantly to the supply of kidneys. According to OPTN data accessed in November of 2012, annually, directed donations comprise about 30 percent to 40 percent of all transplants, and more than 99 percent of all live donations.⁵⁰ If we had reason to believe that this class of donors would shrink with the introduction of a market, then we would have to also have reason to think that the loss would be compensated for. Our best evidence suggests that, while there may be some donors displaced by vendors, there will be no decrease in net supply.

Consider the varied forces at work in a directed donation. The OPTN data from November 2012 indicates that almost 90 percent are either genetically or legally related, for example, as the spouse, sibling, parent, or child of the recipient. Typically, such donors are principally concerned about the well-being of their loved one. Some also act out of a sense of familial obligation. There are other motives, too, that are ethically problematic. Some donors are motivated to restore the health of the family member with a significant and important income; this financial pressure could be a non-trivial factor in one's decision that may be regarded as inappropriate. Other directed donors may want to avoid the guilt of choosing not to donate. Further, as Nancy Scheper-Hughes has pointed out, there appears to be a significant difference in donation rates by sex;⁵¹ According to OPTN, to date, roughly 66,000 women have donated, while only 47,000 men have. This may be the product of undue societal or familial pressure.

The strength and variety of motives on which many directed donors act suggests that the choice to donate is often over-determined. Such donors may be acting on a number of motives, any one of which alone may be sufficient. So, whereas the motive of altruism may be necessary for moving non-directed donors to act, potential donors concerned about a loved one, compelled by familial obligations,

or hoping to restore to health an important breadwinner, will still have ample reason to donate in the absence of the altruistic motive.⁵²

In discussion of Caplan's objection, I emphasized the need to differentiate between the act performed and the motive acted on. Worries about market incentives crowding out altruism and leading to a reduction in supply are the result of a similar kind of error. I am suggesting, without intending to impugn the generosity of directed donors, that many directed donations are not significantly motivated by altruism. They are not moved to donate "merely by the belief that someone else will benefit or avoid harm by it."53 Altruism may be one of many motives on which they act, but it may not be sufficiently strong on its own, and there may be many other sufficiently strong non-altruistic motives. The critical point is that there is a structural difference in the ways the two classes confront the choice to donate. Directed donors do not begin with the desire to act altruistically and then come to see donation as an opportunity for that; they are presented with a loved one in need and, in helping that person, engage in an act we describe as altruistic. While we might call such an act altruistic, it would be a mistake to think that it is this feature of the act that explains why it was undertaken. It is but one, relatively small, part of that explanation.

Having offered some rather general reasons to doubt that market incentives will reduce the supply of kidneys, I turn now to a slightly different concern. Some market opponents have pointed to certain kinds of cases in which, they claim, the market supply of kidneys will lead to a reduction in donations, and so a reduction in supply.⁵⁴ These cases involve individuals' motivations, but do not rely on any substantive claims about altruism. In each case, I argue, any reduction in the number of kidneys donated will be balanced by an increase in the number of kidneys secured through vending.

The Recipient's Preference case: Currently, many recipients may only reluctantly allow their loved ones to donate. Parents, for example, are often resistant to permitting their children to incur the risks associated with surgery. If a commercial alternative were available that would allow, for example, Susan, a concerned mother, to receive a kidney from an unrelated source rather than from her son Jake, then some would pursue this kind of option.

Notice, however, that this possibility does not support the conclusion that there will be a net reduction in organs available. There are two relevant elements to consider: the existence of a market and the recipient's willingness to accept a kidney from the potential donor. There are four conditions then, taking Susan and Jake's case:

- (1) Susan will not accept Jake's kidney, and there's no market option.
- (2) Susan will not accept Jake's kidney, and there is a market option.
- (3) Susan will accept Jake's kidney, and there's no market option, so *Jake donates*.

(4) Susan would accept Jake's kidney, *but* there is a market option, so Jake doesn't donate.

In the first two conditions, Susan is, out of a concern for Jake's health, unwilling to take his kidney. The existence of the market is irrelevant in her decision to reject his offer. Opponents of the market point to the difference between the second pair of conditions as supporting their objection that a market will lead to a net reduction in supply. Without the market Jake would have donated, but with it, he won't.

This line of reasoning, however, shows only that there may be a reduction of directed donations, not that there will be a reduction in net supply. In condition (4), Jake refrains only because the market has made more kidneys available. If the market has not increased supply, then, effectively, condition (4) collapses into condition (3). So the only circumstances in which a directed donor would have given, but elects not to do so on the basis of the recipient's preference, are those in which someone else has donated. The result is displacement, not reduction.

The Donor's Preference case: It is plausible that some potential directed donors may choose not to become actual donors if a market can supply a kidney for their loved one instead. But, again, this possibility does not support the claim that there will be a net decrease in supply. It only shows that some people will refrain from donating when someone else can donate instead.

To suggest that a market could result in a net decrease in available organs on account of directed donors' preferences requires attributing to potential donors a rather implausible set of motives. For this reduction to materialize, we have to suppose these potential directed donors would have donated in the absence of a market, but would rather watch the would-have-been recipient suffer without a functioning organ, than give freely alongside vendors. It is hard to see how, and no evidence has been provided to suggest that, any donor, let alone an appreciable number of donors, operates with these preferences. Rather, most perspective-directed donors are strongly motivated to help the recipient, and will do so at great cost.⁵⁵

The Reduced Pressure case: If more kidneys were available, then some reluctant potential donors—those who would prefer not to donate but feel unable to refuse due to familial or financial pressure—may choose not to. One would expect this kind of pressure to decrease if there were available an alternative means of securing a healthy organ. One might then worry that this will result in fewer donations.

As was the case in the previous two examples, any donations lost by the "reduced pressure" mechanism are really just displaced by kidneys from the market. The only way someone who would have donated will refrain from doing so is if the market actually reduces pressure to give. But this only happens if the market functions as designed and increases supply. If the market does not, then these donors once again face the same pressure to donate that they would have faced if the market did not exist.

Further, the reduced pressure case actually illustrates one of the virtues of the market. Whereas, under the status quo, many family members are compelled to

give, the market, if it functions as expected and increases supply, would afford these people an alternative. Rather then being thought of as the only one who can help, and feeling the pressure that is likely to come from being in that position, the market presents another option. We might then expect a reduction in the number of donations that result from ethically worrisome coercive forces.

I have argued that the introduction of a market will not result in fewer living kidney donors. However, market opponents might modify their challenge. Rather than pointing to a reduction in living donation, they could claim that the market will lead to a reduction in *cadaveric* donation. The first concern is that a market might crowd out the altruistic cadaveric kidney donors, resulting in a net decrease in supply. The second concern is even more serious; a market in kidneys may change people's attitudes about organ donation in general, and this could result in a shortage of hearts, lungs, livers, and other vital organs. This would bring about a harm that very well may exceed the benefit of a kidney market, and so clearly challenges the value of life argument.

There are two reasons to think that this grim possibility is remote. First, there is a lack of theoretical evidence supporting it. It is not at all clear that motivational crowding theory is an appropriate model for deceased donation. The support for motivational crowding theory reviewed here involves the comparison of the *same* agent's motivation for the *same* behavior, with and without extrinsic disincentives or incentives. But the concern about deceased donation alongside a market involves one agent's willingness to donate freely after death, and other agents' willingness to donate with compensation while living. There are two *different* acts, performed by two *different* agents. So, motivational crowding theory cannot provide theoretical support for the objection that a market in living kidneys will result in a decrease in cadaveric donations.

There is a second reason, based in historical precedent, to doubt that deceased donation will decrease. The government-sanctioned kidney market in Iran suffers many problems, and is in many important ways different from any market that might be established in the United States. However, it is worth noting that deceased donation in Iran has actually increased since the market was introduced in 1988.⁵⁶ Deceased donation was not practically or culturally feasible before 2000, when organs from deceased donors represented only 1.8 percent of the total.⁵⁷ After legislation in 2000 removed many barriers to deceased donation, rates increased to 10% in 2005.⁵⁸ Given the differences between the United States and Iran, this evidence does not ensure that rates of deceased donation will rise here, or even remain constant. It does, however, militate against the assertion that markets are likely to lead to decreased deceased donation.

Our best evidence suggests that, while it is possible that the number of non-directed donors may shrink, on balance we should expect a net increase in supply. Some non-directed donors may take advantage of the chance to increase the value of their gift by giving away their kidney *and* the proceeds from its sale. Many

who never would have given will become vendors. And those with a loved one in need of a transplant will still be motivated to give if the market is unable to meet the demand.

5. WOULD A MARKET OBJECTIONABLY PENALIZE THOSE WHO DO NOT PARTICIPATE?

The objection I turn to now, offered by Debra Satz, challenges the value of life argument by identifying some detrimental effects the market may have on those who would rather *not* participate in it. If a kidney market can be shown to have these harmful effects, and these effects are significant, then the fifth premise of the value of life argument would be rendered false.

To see the source of harm that Satz is concerned about, we need to first consider how individuals' choices impact the choices open to others. Generally, when more rather than fewer people want to purchase a good, that good can command a higher price than it otherwise could. Satz points to the development of a market in second homes to demonstrate what she has in mind: If more participants enter the market for a second home, then the demand for homes increases, and real estate prices rise. As a consequence, those who could have afforded a first home, had others bought just one, may no longer be able to.⁵⁹

Similarly, if many people elect to sell a kidney in a given community, then this may impact the decisions open to those who would prefer not to. Satz notes, for example, "where kidneys are viewed as potential collateral, moneylenders may acquire incentives to seek out additional borrowers as well as to change the terms of loans." The worry here is that someone who did not want to sell or mortgage her kidney, may find it more difficult to secure a loan, or may be unable to get the same favorable rates she could have, were there no market. Those in this position may "have less effective choices insofar as they will no longer be able to find reasonable loan rates without mortgaging their organs." It appears then, that those who do not want to participate in the market are made worse off than they would be were there no market at all.

At this point in her argument, Satz notes that what has been shown thus far does not undermine the case for a market in human kidneys any more than it undermines the case for a market in second homes. Costs of goods are affected by what buyers do in every market, and this, in itself, is no reason to prohibit commercial exchange. Rather, Satz suggests, "we need to ask: should people have to pay a cost for their unwillingness to sell their organs?"⁶² It is not enough to show that one person's choices impact others. It must further be shown that the way in which other people's choices are altered is ethically objectionable.

Satz suggests that there is reason to think that people should not be forced to pay a price for refusing to sell a kidney. She develops this thought by appealing to work done by Ronald Dworkin. In the work Satz references, Dworkin appears concerned to determine the difference between a person and that person's circumstances. His theory of equality recommends equalizing resources, and so requires that this distinction be made clearly in order to determine fair distribution. There are many ways one might distinguish a person from her circumstances (and the resources they afford her), and each will recommend a different distribution of resources. This leads to difficult questions: "Would it be outrageous to require blood donations according to some fair lottery? Kidney donations? Eye donations?"⁶³

Dworkin's response to these troubling questions is to suggest that "we might well wish to resist this chain of questions by adopting a prophylactic line that comes close to making the body inviolate." I will refer to this as the Body Boundary Commitment (BBC). The BBC claims that people's body parts should not be subject to market forces. Dworkin supports the BBC on the basis of "the importance of protecting the person," and Satz "concur[s] that there is something to this line of thought." In a paper that served as an earlier version of the chapter in the book I've focused on here, Satz says, more specifically, that she approves of the BBC because "our relationship to our body parts is so closely bound up with our ability to control what happens to us, what we can be and do."

Thus, while the market for second homes limits the options available to others, this is a consequence of an unobjectionable expression of autonomy; pricing some first-time homebuyers out of the market is not morally troublesome. But a kidney market is: as Satz notes, some non-donors "would have preferred loans be available at worse terms than those they could have if they were willing to put up their kidneys, but better terms than they will find in a world where kidney selling is legal and they do not wish to sell their kidneys." As the situation is described, body parts have become a consideration in commercial transactions, and non-donors have been economically disadvantaged because of their unwillingness to part with their kidney. According to the BBC, however, the body should not be subject to market forces. So, the BBC rules out kidney markets.

It is worth noting that Satz is not entirely persuaded of the BBC. She finds the above reasoning compelling, but worries that it "does not take into account the person who may be dying for lack of a kidney." One reason to doubt the legitimacy of the BBC, then, is that it fails to account for the interests of those who stand to benefit from a market. This is not an insignificant shortcoming. We may, along with Dworkin, want to protect the body from market forces. This is especially clear if we, and our loved ones, are well. But if we are among those in need of a transplant, or know someone who is, we may also want access to healthy kidneys. From this perspective, the BBC is far less appealing.

But there is a reason to reject the BBC outright. In claiming an interest in preserving our "ability to control what happens to us, what we can be and do," Satz frames her view in language familiar to the capabilities approach introduced by Amartya Sen and developed by Martha Nussbaum.⁷⁰ Satz also approvingly references Sen's view of entitlements as "the conditions that enable individuals

to mobilize the resources they have as a means to becoming full members of society." But, I argue, if we are interested in preserving the substantive freedoms associated with the capabilities approach, then we ought to reject the BBC; it is ill-suited for promoting and protecting these values.

The BBC is extensionally inadequate in two ways. First, it disallows some actions that seem fully consistent with our "ability to control what happens to us, what we can be and do." It, for example, precludes markets in solid organs, but also likely blocks sales of sperm, ova, blood, plasma, and surrogacy. All of these exchanges, when engaged in by a sufficiently large number of people, will lead to the same kind of effects that motivated the prohibition on a market in human kidneys. Many of these practices are already common, and some are generally regarded as ethically unproblematic, for example, selling plasma. While I think a prohibition on the seemingly innocuous practice of selling plasma is counter-intuitive, and unsupported by concerns about capabilities, this failure of extensionality is not what is most worrisome about the BBC.

The problem I want to highlight is what the BBC *permits*. The BBC is fully consistent with our willingness to pay people to do dangerous work, some of which is clearly more risky than having a kidney removed, and clearly a greater threat to our "ability to control what happens to us and what we can do and be." Our best data suggests that 3 in 10,000 kidney transplants will result in death. This stands in sharp contrast to the annual expected 11.6 deaths per 10,000 fishermen and the 9.2 deaths per 10,000 loggers. Further, in 2011, the median annual wage for a logger was \$33,760. So, while a vendor, if Matas and Schnitzler's previously cited estimates are correct, might be offered a compensation package worth \$100,000 or more, a logger, working an entire year, faces three times as much risk and is paid about one-third as much. I appreciate Dworkin's and Satz's desire to identify impermissible market encroachments, but I doubt that the BBC can serve that purpose. For it is entirely unclear why, if commercial fishing is consistent with the BBC, selling one's kidney in a well-regulated market is not.

Further, the choice of some individuals to take these dangerous jobs may impact the choices others face. When a coal mine opens in a community, or logging jobs become available, members of that community who are unwilling to take up that risky work may suffer a disadvantage in much the same way those who are unwilling to sell a kidney might. A loan applicant with a reliable job at the local mine will be preferred to the applicant with lower-paying, less stable employment at the café. Accepting these dangerous jobs can have the same pecuniary externalities that Satz worried would come about if large numbers of people within a community choose to sell their spare kidneys.

Insofar as the BBC was motivated by a concern for "the importance of persons,"⁷⁴ and a desire to preserve our "ability to control what happens to us, what we can be and do," this formulation seems wrong. The trouble is not just that the BBC blocks seemingly innocuous commercial transactions, but that it

simultaneously permits others that are far more worrisome. A principle designed to delineate the limits of market forces should not deliver such counter-intuitive and seemingly inconsistent results.

Satz's claim—that markets can adversely affect even those who do not participate in them—is a welcome and insightful contribution to the debate over kidney markets. And we should be attentive to the ways in which markets impact our lives and the lives of those around us in unexpected ways. However, Satz is unable to show that a kidney market would result in a distinctive harm; the BBC is an inadequate means of limiting market forces, and so cannot serve to justify a prohibition.

6. Conclusion

My aim in the preceding has been to respond to three distinctive objections to the value of life argument. What these lines of resistance had in common is that each sought to show that a market, in principle, would be unacceptable. Against Caplan, I argued that a kidney market need not violate the "Do No Harm" principle. And in response to Titmuss-inspired worries about the crowding out of altruistic donors, I showed that we have ample reason to think that a market will, on balance, increase the supply of transplantable organs. Finally, I showed that Satz's concerns about non-participants being unduly disadvantaged by the market were inadequate to justify a market prohibition.

Refuting these objections was an important first step to developing and implementing a market solution to the shortage of transplantable kidneys. But, having shown that these challenges fail to undermine the case for a market is insufficient to show that a market should be established. We must now turn out attention to the "real-world" objections, for the viability of the market hinges on our ability to adequately address these worries. While some of these objections may be assessable with reflection on the limited evidence we already have, others, I suspect, will only be decided after experimentation with actual markets. And this is one benefit of refuting the ideal conditions objections: The remaining disputes are, largely, sensitive to empirical data. And the prospect of small-scale trails is a bit brighter.

Finally, to determine how serious the real-world objections are, much work must be done to determine the optimal design of a market. I have already suggested that a single-buyer market is most promising.⁷⁵ I suspect this carefully regulated approach will best protect both vendors and recipients. Further, the composition and size of the compensation packages must be determined as well. Now, it is to these matters that market proponents should turn their attention.

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NOTES

- 1. National Organ Transplant Act, § 301.
- 2. http://optn.transplant.hrsa.gov (accessed November 1, 2012).
- 3. Segev et al., "Perioperative Mortality."
- 4. This premise, in substance, expresses Peter Singer's "comparable moral harm" principle. See Singer, "Famine, Affluence, and Morality."
 - 5. Taylor, Stakes and Kidneys; "Autonomy and Organ Sales."
- 6. For general discussion of autonomy in medical ethics see, for example, O'Neill, *Autonomy and Trust*; Stirrat and Gill, "Autonomy in Medical Ethics"; and Varelius, "Value of Autonomy." For direct engagement with Taylor, see Hughes, "Constraint, Consent, and Well-Being"; and Kerstein, "Autonomy, Moral Constraints, and Markets."
 - 7. Taylor, Stakes and Kidneys, 194.
- 8. See, for example, Danovitch and Leichtman, "Kidney Vending"; Rothman and Rothman, "Hidden Cost of Organ Sale"; and Rippon, "Organ Markets and Harms"; and "Imposing Options."
 - 9. Satz, Why Some Things Should Not Be for Sale.
- 10. Michael Sandel offers a consideration against a kidney market that, like Satz's objection, points to a harm suffered by all members of the community, not just those participating in the market: Sandel, "What Money Can't Buy." His claim is that markets can infect the social meaning of what is exchanged, and degrade its value. I do not engage with Sandel's objection in this paper in part because of space constraints, and in part because his position on kidney markets in particular is undeveloped.
 - 11. Childress and Liverman, Organ Donation.
 - 12. Park et al., "Accommodation in Abo-Incompatible Kidney Allografts."
- 13. Glotz et al., "Desensitization and Subsequent Kidney Transplantation"; Jordan et al., "Intravenous Immune Globulin Treatment."
 - 14. Matas et al., "Nondirected Donation of Kidneys."
 - 15. Segev et al., "Kidney Paired Donation."
 - 16. Kaserman, "On the Feasiblility of Resolving the Organ Shortage."
 - 17. Davis and Delmonico, "Living-Donor Kidney Transplantation."
- 18. Gaston et al., "Report of a National Conference on the Wait List for Kidney Transplantation."
 - 19. Schold et al., "Overlapping Risk Profile."
 - 20. Matas and Schnitzler, "Payment for Living Donor (Vendor) Kidneys," 218.
- 21. Danovitch and Leichtman point to research on the kidney market in India that suggests that vendors' financial circumstances did not improve after their sale: Danovitch and Leichtman, "Kidney Vending." This observation is supposed to undermine the claim that vendors will benefit from the market. However, the study that Danovitch

and Leichtman reference indicates that venders were paid, on average \$1070: Goyal et al., "Economic and Health Consequences," 1589. The vast difference in the amount of compensation is but one of many reasons that suggest outcomes will be different in a market in the United States.

- 22. Hughes, "Exploitation, Autonomy, and the Case for Organ Sales"; Josefson, "Selling a Kidney."
 - 23. Goyal et al., "Economic and Health Consequences."
 - 24. Delmonico et al., "Ethical Incentives."
 - 25. Danovitch and Leichtman, "Kidney Vending."
 - 26. Scheper-Hughes, "Tyranny of the Gift."
 - 27. Plant, "Is It Desirable?"
 - 28. Taylor, Stakes and Kidneys, 73–80; "Black Markets."
 - 29. Goodwin, Black Markets; "Private Ordering and Intimate Spaces."
 - 30. Hippen, "Organ Sales and Moral Travails."
- 31. See, for example: Goyal et al., "Economic and Health Consequences; Hippen, "Organ Sales and Moral Travails; Padilla, "Regulated Compensation for Kidney Donors"; Yea, "Trafficking in Part (S)."
 - 32. Hippen, "Organ Sales and Moral Travails," 6.
- 33. Caplan, "Transplantation at Any Price?"; Ravitsky et al., *Penn Center Guide to Bioethics*.
 - 34. Caplan, "Transplantation at Any Price?," 1933–34.
 - 35. Nagel, Possibility of Altruism, 16.
- 36. For discussion of this kind of "indirect altruism," see Dossetor, "Rewarded Gifting?"
 - 37. Henderson et al., "Living Anonymous Kidney Donor."
 - 38. Titmuss, Gift Relationship, 245.
 - 39. Rothman and Rothman, "Hidden Cost of Organ Sale," 1526.
 - 40. Gneezy and Rustichini, "Fine Is a Price."
 - 41. Frey and Oberholzer-Gee, "Cost of Price Incentives."
 - 42. Satz, Why Some Things Should Not Be for Sale, 194.
 - 43. Ibid., 197.
 - 44. Henderson et al., "Living Anonymous Kidney Donor," 207.
- 45. It is worth noting that not all of these non-directed donors acted on altruist motives; 10 percent of donors were motivated by a desire to increase their self-esteem, 19 percent wanted a relationship with the recipient, and 14 percent wanted accolades, and viewed donation as a means of expressing their uniqueness. Henderson et al., "Living Anonymous Kidney Donor," 207.

- 46. http://optn.transplant.hrsa.gov/latestData/rptData.asp (accessed October 24, 2013).
- 47. Richard Epstein has devised an economic model of altruism that incorporates the distinctive motives of non-directed donors, which suggests that even under unfavorable assumptions the total number of transplants would increase in a market. Epstein, "Human and Economic Dimensions," 18–20.
- 48. Unsurprisingly, the offer of a sufficiently high price can lead to increased performance of a targeted behavior even with crowding effects in force. For discussion, see Gneezy and Rustichini's "Pay Enough or Don't Pay at All."
 - 49. Singer, "What Should a Billionaire Give?"
- 50. http://optn.transplant.hrsa.gov/. All further OPTN statistics can be found at this link (accessed November 2012).
 - 51. Scheper-Hughes, "Tyranny of the Gift."
- 52. For further argument in support of the conclusion that many motives for donation will remain in force even in a market context, see Cherry, "Body Parts and the Market Place."
 - 53. Nagel, Possibility of Altruism, 16.
 - 54. See, for example, Danovitch and Leichtman, "Kidney Vending."
- 55. Even fervent opponent of organs sales, and George W. Bush appointee to The President's Council on Bioethics, Leon Kass concedes that he would buy an organ, or sell his own, if that is what was needed to save his child's life: Kass, "Organs for Sale?," 68.
 - 56. Hippen, "Organ Sales and Moral Travails."
 - 57. Hippen, "Modest Approach to a New Frontier."
 - 58. Ibid.
 - 59. Satz, Why Some Things Should Not Be for Sale, 201.
 - 60. Ibid., 200.
 - 61. Ibid., 201.
 - 62. Ibid.
 - 63. Dworkin, "In Defense of Equality," 39.
 - 64. Ibid.
 - 65. Ibid.
 - 66. Satz, Why Some Things Should Not Be for Sale, 201.
 - 67. Satz, "Moral Limits of Markets," 277.
 - 68. Ibid., 267.
 - 69. Satz, Why Some Things Should Not Be for Sale, 201.
 - 70. Nussbaum, Nature, Function, and Capability; Sen, "Equality of What?"
 - 71. Satz, "Moral Limits of Markets," 276.

- 72. Matas et al., "Morbidity and Mortality."
- 73. U.S. Department of Labor. Bureau of Labor Statistics, National Census of Fatal Occupational Injuries in 2010 (Preliminary Results). http://www.bls.gov/oes/current/oes454029.html (accessed August 2012).
 - 74. Dworkin, "In Defense of Equality," 39.
- 75. For an insightful discussion of market design, see Erin and Harris, "Monopsonistic Market."

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