

Repugnance as a Constraint on Markets

Alvin E. Roth

Why can't you eat horse or dog meat in a restaurant in California, a state with a population that hails from all over the world, including some places where such meals are appreciated? The answer is that many Californians not only don't wish to eat horses or dogs themselves, but find it repugnant that anyone else should do so, and they enacted this repugnance into California law by referendum in 1998. Section 598 of the California Penal Code states in part: "[H]orsemeat may not be offered for sale for human consumption. No restaurant, cafe, or other public eating place may offer horsemeat for human consumption." The measure passed by a margin of 60 to 40 percent with over 4.6 million people voting for it (see <http://vote98.ss.ca.gov>Returns/prop/00.htm>).

Notice that this law does not seek to protect the safety of *consumers* by governing the slaughter, sale, preparation, and labeling of animals used for food. It is different from laws prohibiting the inhumane *treatment* of animals, like rules on how farm animals can be raised or slaughtered, or laws prohibiting cockfights, or the recently established (and still contested) ban on selling *foie gras* in Chicago restaurants (Ruethling, 2006). It is not illegal in California to kill horses; the California law only outlaws such killing "if that person knows or should have known that any part of that horse will be used for human consumption." The prohibited use is "*human consumption*," so it apparently remains legal in California to buy and sell pet food that contains horse meat (although the use of horse meat in pet food has declined in the face of the demand in Europe for U.S. horse meat for human consumption).

The repugnance of eating horses is not limited to California. On September 7,

■ *Alvin E. Roth is George Gund Professor of Economics and Business Administration, Harvard University, Cambridge, Massachusetts. His e-mail is <Al_Roth@harvard.edu> and his web-page is <<http://kuznets.fas.harvard.edu/~aroth/alroth.html>>.*

2006, the U.S. House of Representatives passed by a vote of 351–40, and sent to the Senate, H.R. 503: “To . . . prohibit the shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of horses and other equines to be slaughtered for human consumption.” (That bill seems unlikely to pass into law, however.)

Apparently, some kinds of transactions are repugnant in some times and places and not in others. This essay examines repugnance and its consequences for what transactions and markets we see. When my colleagues and I have helped design markets and allocation procedures, we have often found that distaste for certain kinds of transactions can be a real constraint on markets and how they are designed, every bit as real as the constraints imposed by technology or by the requirements of incentives and efficiency. In this essay, I’ll first consider a wide range of examples, including slavery and indentured servitude, lending money for interest, price-gouging after disasters, selling pollution permits and life insurance, and dwarf tossing.

This discussion will bring me naturally to the laws against the buying and selling of kidneys for transplantation, which will connect this essay with the others on organ transplantation in this issue. Because healthy people have two kidneys and can remain healthy with only one, kidneys from living donors are now widely used for kidney transplantation, the preferred treatment for end-stage renal disease. The laws against buying or selling kidneys reflect a reasonably widespread repugnance, and this repugnance may make it difficult for arguments that focus only on the gains from trade to make headway in changing these laws. That does not mean that no gains from exchange can be realized; in fact some gains are beginning to be realized in the kidney exchange programs that Tayfun Sönmez, Utku Ünver, and I helped to design in New England and elsewhere. In the simplest form of kidney exchange, a patient with a willing donor who has an incompatible blood type (or who is incompatible for another reason) can exchange a kidney with another such incompatible patient–donor pair. (That is, the pairs are matched so that the donor from one pair is compatible with the patient from the other, and each patient receives a kidney from the other patient’s donor.) This sort of “in kind” exchange has gained acceptance in the transplant community.¹

More generally, this essay will explain why I think economists need to understand better and engage more with the phenomenon of repugnant transactions. Attitudes about the repugnance (or other kinds of inappropriateness) of transactions shape whole markets, and therefore shape what choices people face.

¹ See Roth, Sönmez, and Ünver (2004, 2005a, b, forthcoming), Saidman, Roth, Sönmez, Ünver, and Delmonico (2006), and Roth, Sönmez, Ünver, Delmonico, and Saidman (2006) for discussions of the issues involved in organizing kidney exchange on an efficient scale. A very small number of individual kidney exchanges had been conducted before the issue of efficient organization was raised, giving an early indication that this kind of exchange did not arouse the repugnance associated with monetary payments for organs.

Table 1
Markets In Which Some Transactions Are, or Were Once, Repugnant

<i>Human remains</i>	<i>Finance</i>
Cadavers for anatomical study, organ donation, bone and tissue	Short selling, currency speculation
Live donor organs (kidneys, livers)	Interest on loans
<i>Labor</i>	<i>Pollution markets</i>
Indentured servitude, slavery	Tradable emissions entitlements
Volunteer army, mercenary soldiers	Dirty industries in less developed countries
Discrimination based on race, gender, handicap, marital status, etc.	<i>"Price gouging"</i>
<i>Reproduction and sex</i>	After natural disasters
Adoption	Ticket scalping
Surrogate mothers, egg and sperm donation, abortion, birth control	<i>Religion/Sports</i>
Prostitution, pornography	Sale of indulgences and ecclesiastical offices ("simony")
Brideprice, dowry	Endorsements/payments for amateur versus pro athletes
Polygamy, gay marriage, incest	Drugs and sports
<i>Words, ideas, and art</i>	<i>Food, drink, and drugs</i>
Obscenity, profanity, and blasphemy	Horse and dog meat
Cultural treasures, art, and antiquities	Alcohol (Prohibition)
<i>Risk</i>	Marijuana and narcotics
Life insurance for adults, children, and strangers	<i>Vote selling and bribery</i>
Gambling	<i>Dwarf-tossing</i>
Prediction markets	

Repugnant Markets

Table 1 lists some examples of transactions in which repugnance has established important constraints, presently or at some time in the past. The arrow of time points in both directions: some markets that are repugnant today, once were not (or not sufficiently to serve as a binding constraint). Other markets are not widely repugnant today, but once were.

Slavery is an obvious example of a market that is now repugnant and illegal even in places like the United States where such markets were once openly conducted. Slavery was forbidden by the 13th amendment to the U.S. Constitution in 1865, which states: "Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction." Courts have interpreted this amendment as also outlawing indentured servitude, and today we find servitude so repugnant that a person may not even sell him- or herself into slavery or indentured servitude. But indentured servitude was once one of the common ways for Europeans to buy passage across the Atlantic to America (Galenson, 1981).

Lending money for interest was once widely repugnant and no longer is (with the important exception that Islamic law is commonly interpreted as prohibiting it). State usury laws in the United States and Islamic banks in some countries are

examples of modern expressions of this repugnance.² The changing repugnance of debt and of involuntary servitude have even interacted in changes to bankruptcy law. In colonial America and the early years of the Republic, insolvent debtors could be imprisoned, or sentenced to indentured servitude (Coleman, 1974 [1999]). But as involuntary servitude became more repugnant and debts less repugnant, bankruptcy laws were rewritten to be less punitive to debtors.

The examples in Table 1 and others I will discuss reflect that, even where there may be willing suppliers and demanders of certain transactions, aversion to those transactions by others may constrain or even prevent the transactions. For many of the examples in Table 1, “repugnance” or even “revulsion” is exactly the right word for how the transactions are or were once regarded. For the rest, a milder word might be more apt—some transactions may be called distasteful, inappropriate, unfair, undignified, or unprofessional.

Of course, there may also be other reasons to object to markets that some people find repugnant, and so it may be difficult to attribute only to repugnance the limits on these markets. For example, while hiring mercenaries was once an accepted way of dealing with military affairs (and although there has once again been increasing use of private security firms to perform defensive military functions), mercenaries have largely fallen out of favor. The declining use of mercenaries is due not only to repugnance at the fact that mercenaries kill for pay, rather than for state-sanctioned duty or patriotism. But that such repugnance plays a role is strongly suggested by the lesser protection mercenaries receive under international law. For example, Article 47 of the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts states: “A mercenary shall not have the right to be a combatant or a prisoner of war.”

How Repugnance Combines With Other Factors

Some markets are banned or limited for combinations of reasons that include both repugnance and also concerns about negative externalities. For example, limits on prostitution or pornography depend in part on revulsion at commercializing sex. Fiske and Tetlock (1997) talk about “taboo tradeoffs between different spheres of justice” to discuss why bringing to the market activities or goods that are customarily provided in other settings, like within families, may seem inappropriate or worse. But concern also arises about the negative effects pornography or commercial sex may have on the quality of life in neighborhoods where it is sold.

² Near the beginning of his essay “The Spirit of Capitalism,” Max Weber quotes Benjamin Franklin on the virtues of responsible lending and borrowing, and near the end of the essay, Weber ([1905] 1930, p. 74) asks, “Now, how could activity, which was at best ethically tolerated, turn into a calling in the sense of Benjamin Franklin?” Hirschman (1977, p. 9) paraphrases Weber’s question as: “How did commercial, banking, and similar money-making pursuits become honorable at some point in the modern age after having stood condemned or despised as greed, love of lucre, and avarice for centuries past?” In this journal, see Persky (2007) on the Jeremy Bentham/Adam Smith arguments about usury, and Kuran (1995) on Islamic banks.

In addition, prostitution and pornography may not always involve transactions between willing parties.

Bans on commerce involving material judged to be obscene may also involve concerns about externalities, as in Federal Communications Commission regulations regarding certain words forbidden on radio and television broadcasts, or voluntary regulations concerning whether children can see certain movies; for example, Fairman (2006) discusses the laws and jurisprudence concerning the word “fuck.” But repugnance can be present even when externalities are minimal. For example, in 1959 the U.S. Post Office imposed a ban on sending copies of D. H. Lawrence’s *Lady Chatterley’s Lover* through the mail (this story and several related obscenity trials are recounted in Rembar, 1968). Similarly, bans in various times and places on profane language may primarily concern externalities, but bans on blasphemy—like banning the sale of Salman Rushdie’s *Satanic Verses* in a number of Islamic countries—seem also to be aimed at limiting private consumption (and production).

Limits on the sale of alcohol and various drugs, and on gambling, may also be complicated in this way. (The sale of alcohol was banned throughout the United States from 1920 to 1933 by the 18th amendment to the Constitution, known as “Prohibition,” which was repealed by the 21st amendment, although individual states and counties still retain a variety of restrictions.) When addiction is an issue, even apart from the negative externality imposed on third parties (through increases in bankruptcy and crime, for example), we may question whether the parties to the transaction are willing in the sense that economists normally mean when we discuss voluntary transactions.

Some kinds of repugnance are also intermixed with concerns about providing incentives for bad behavior. The very idea of life insurance (“You want to set a *price* on your life, and then place a *bet* on your date of death?”) seems to have had to overcome initial repugnance in the early 1800s (Zelizer, 1979). The incentive issue was often addressed by “insurable interest” laws specifying who could be a beneficiary of life insurance. As discussed by Justice Oliver Wendell Holmes Jr. in a 1911 Supreme Court case: “A contract of insurance upon a life in which the insured has no interest is a pure wager that gives the insured a sinister counter interest in having the life come to an end” (*Grigsby v. Russell*, 222 U.S. 149 [1911]). Even today, life insurance for small children raises questions about motives. The insurance industry lobbies against Stranger (or Investor) Owned Life Insurance (SOLI) and “viatical settlements,” which are third party markets and funds that purchase life insurance policies from elderly or terminally ill patients who wish to realize the cash value of their policies while still alive. The arguments against such funds often focus on the repugnance of having life insurance held by an entity that profits from deaths (in contrast to insurance companies, which make money when their customers continue living). Of course, sellers of annuities also profit from untimely deaths. To get a flavor of the discussions about these issues, see Silverman (2005).

Repugnance to betting on life and death also shows up in other contexts. In July 2003, a proposed U.S. government-funded “prediction market” for terrorism-related events was scrapped amidst much publicity, with the Senate Minority Leader (Tom Daschle) saying, “I can’t believe that anybody would seriously propose that

we trade in death.” Senator Barbara Boxer was quoted as saying, “There is something very sick about it,” and adding that those responsible should be fired. In this discussion, there was also some concern that terrorists themselves shouldn’t be encouraged to play such markets (CNN.com, 2003).

To clarify ideas about repugnance, it may be helpful to look at a relatively uncomplicated case, in which little else besides repugnance seems to be at work. Dwarf tossing seems like a market whose widespread banning involves no more than simple repugnance.

Dwarf Tossing

Dwarf tossing is an activity in which a large person throws a small person. The venue often is one in which alcohol is served. It is often a source of livelihood for the small person, with the large person paying for the privilege. While dwarf-tossing is legal in many places, it is sometimes banned by law. These bans suggest a concern quite different from occupational health and safety regulations that might attempt to regulate how to conduct such an event (for instance, by requiring the wearing of helmets and kneepads). For example, the summary of the Ontario Dwarf Tossing Ban Act of 2003 states: “The Bill bans dwarf tossing in Ontario and makes it an offence to engage in dwarf tossing.”

The matter came before the United Nations Human Rights Committee after the French Ministry of the Interior in 1991 issued a statement saying that “dwarf tossing should be banned on the basis of, among other things, article 3 of the European Convention for the Protection of Human Rights and Fundamental Freedoms.” After bans were subsequently enforced in some municipalities, a French dwarf, who had been employed by a company called Société Fun-Productions, successfully sued in French courts to have the bans overturned. However, the bans were upheld on appeal in 1995 by the French Council of State on the grounds that “dwarf tossing . . . affronted human dignity.” The dwarf then brought his complaint to the United Nations, asserting that he was the victim of a discriminatory violation by France of his right to employment. A report from the Office of the United Nations High Commissioner for Human Rights (2002) further notes that he stated “that there is no work for dwarves in France and that his job does not constitute an affront to human dignity since dignity consists in having a job.” However the UN committee found in favor of France: “The Committee considers that [France] has demonstrated . . . that the ban on dwarf tossing . . . did not constitute an abusive measure but was necessary in order to protect public order, which brings into play considerations of human dignity that are compatible with the objectives of the Covenant.” Thus the UN committee, like the French Council of State, essentially concluded that dwarf tossing was so repugnant that it imposed a negative externality by diminishing human dignity, a public good.

Repugnance Is Hard To Predict

Repugnance, whether alone or in alliance with other objections, can impose serious constraints on various transactions. However, predicting when repugnance

will play a decisive role is difficult, because apparently similar activities and transactions are often judged differently. For example, while dwarf tossing is repugnant in many places, wife carrying, another sport that involves persons of disparate stature, has North American and world championships. In wife carrying, large men carrying small women (not necessarily their wives) race to complete an obstacle course in the fastest time, with the prize traditionally including the “wife’s” weight in beer. The website of the world championship in Finland is at <http://www.sonkajarvi.fi/?depid=15136>.

Many other examples of apparently similar activities have elicited very different reactions regarding their repugnance.

The proposed prediction market for terrorist events met with vigorous denunciation, but general prediction markets have thrived, including some that include bets on various aspects of current events, as discussed by Wolfers and Zitowitz (2004) in this journal.

In 1990, the Clean Air Act was amended to allow trading of rights to pollute through tradable emissions entitlements. In 1991, the World Bank issued a memo under the signature of its then–chief economist Lawrence Summers, suggesting that it would be efficient for polluting industries to be located in low-income countries. Both policies involve relocating pollution. Although some critics found “selling a right to pollute” to be repugnant, the 1990 law passed as an efficiency-enhancing measure with relatively little public controversy (Schmalensee, Joskow, Ellerman, Montero, and Bailey, 1998). However, the World Bank memo set off a firestorm of public controversy (*Harvard Magazine*, 2001). Similar controversies have erupted around issues such as whether New York City can send its garbage to landfills in other states.

There are laws criminalizing kickbacks offered by vendors to purchasing agents, and such behavior is viewed with repugnance. However, no legal and few corporate restrictions exist on frequent flier miles given to business travelers, who book their flights in their capacity as purchasing agents for their companies. Frequent flyer miles are not viewed as a repugnant kickback, but as an appropriate reward.

There are laws against various forms of “price gouging,” and ticket scalping remains illegal in many places. However, Ticketmaster has recently started auctioning some tickets just before the time of the event (Smith and Silver, 2006).

Payment to a birth mother for a child to whom she is genetically related is widely regarded as repugnant, and is forbidden both internationally by the Hague Convention on Intercountry Adoption and in the United States though the Intercountry Adoption Act of 2000. However, largely unregulated markets have developed for many relatively new forms of reproductive technology, from markets for sperm and eggs, to the hiring of surrogate mothers who have a fertilized egg implanted and carry out the pregnancy of a child to whom they are genetically unrelated (Spar, 2006).

Finally, the sale of food crops that have been modified by traditional methods of cross breeding do not seem widely repugnant anywhere. However, food crops genetically modified by recombinant DNA technology are not accepted nearly as

widely. See, for example, the European Union's wide array of regulations limiting genetically modified crops, listed at (http://ec.europa.eu/food/food/biotechnology/gmfood/legisl_en.htm).

Cash Payments and Repugnance

One often-noted regularity is that some transactions that are not repugnant as gifts and in-kind exchanges become repugnant when money is added. The historical repugnance to charging interest for loans seems to fall into this class as do prohibitions on paying birth mothers of children put up for adoption; perhaps, prostitution also falls into this class. That is, loans themselves and adoption and love are widely regarded as good things when given freely, even when their commercial counterparts are regarded in a negative way. Similarly, in Massachusetts and California, it is legal to sell human eggs for fertilization but illegal to sell them for research purposes, although it is legal to donate them for research (Associated Press, January 20, 2007). And widespread outrage in Britain greeted the decision to allow sailors recently released from captivity in Iran to sell their stories to the news media: after two sailors had done so, the remaining sailors were no longer allowed to receive money for interviews (Peck, 2007).

Offering money is often regarded as inappropriate even when not repugnant. For example, dinner guests at your home may respond in-kind, by bringing wine or inviting you to dinner in return, but they would likely not be invited back if they offered to pay for their dinner. Sometimes the level of the price is regarded as repugnant rather than the existence of a price: after a natural disaster it is often regarded as acceptable to sell supplies at their pre-disaster price, but as repugnant *price-gouging* to raise the price (for example, Kahneman, Knetsch, and Thaler, 1986). Also, there may be resistance to charging for goods that have previously been provided for free or at low cost, like water or the right to drive in cities during rush hours.

Of course, sometimes laws or public outrage focus on monetary transactions only because they are easier to ban than nonmonetary transactions. For example, the supporters of the law that forbids restaurants from selling horsemeat in California aren't trying to preserve the sanctity of the family barbecue; they find eating horses repugnant, but regulation of restaurants is easier than passing laws about what can be cooked at home.

Concerns about the monetization of transactions fall into three principal classes. One concern is *objectification*: that is, the fear that putting a price on certain things and buying or selling them might move them into a class of impersonal *objects* to which they should not belong. The sociology literature has shown a longstanding interest in how the introduction of money changes many kinds of social relationships and their meanings (as a starting point, see Simmel, 1990). A second concern is that offering substantial monetary payments might be *coercive*, in the sense that it might leave some people, particularly the poor, open to *exploitation* from which they deserve protection. A third concern, sometimes less clearly artic-

ulated, is that monetizing certain transactions that might not themselves be objectionable may cause society to slide down a *slippery slope* to genuinely repugnant transactions. Let's consider these three concerns in more detail as they apply to paying organ donors.

Compensating Organ Donors

Objectification

Many people clearly regard monetary compensation for organ donation as something that transforms a good deed into a bad one. In both Western Europe and the United States, governments strongly encourage organ donation, but forbid monetary payments to donors or their heirs. For example, Article 21 of the Council of Europe's (2002) *Additional Protocol to the Convention on Human Rights and Biomedicine, on Transplantation of Organs and Tissues of Human Origin* states: "The human body and its parts shall not, as such, give rise to financial gain." However, the European legislation does exempt from this prohibition compensation to donors for expenses and loss of earnings. The U.S. National Organ Transplant Act of 1984 states: "[I]t shall be unlawful for any person to knowingly acquire, receive or otherwise transfer any human organ for valuable consideration for use in human transplantation." This law also exempts payment of expenses directly incurred by organ donors, like travel expenses.

The feeling that virtuous organ donations are transformed into immoral commercial transactions by the introduction of monetary payments is clearly enunciated in the writings and speeches of Pope John Paul II. In his 1998 encyclical letter *Evangelium Vitae* (paragraph 86), the Pope mentions the donation of organs as a "particularly praiseworthy example" of an action that builds "an authentic culture of life." But in an address to transplant surgeons in Rome, John Paul II (2000) warned that "any procedure which tends to commercialize human organs or to consider them as items of exchange or trade must be considered morally unacceptable, because to use the body as an 'object' is to violate the dignity of the human person." The Lutheran Church in America (1984) expresses a similar sentiment.

I note in passing that other religious traditions view the matter very differently. The emerging Jewish consensus on live kidney donations, for example, is that donation of organs is a good thing, and that under some circumstances, it would be allowable to offer and accept compensation.³ This opinion reflects the tremendous

³ While there is no central authority on the application of Jewish law to modern concerns such as transplantation, the most authoritative opinions are contained in various "*responsa*" or answers to particular questions by rabbis acting as legal "deciders" (*poskim*), whose authority arises from the respect of their peers. The consensus on the matter of live kidney donation, for example, seems to be that live donation is allowed (since it saves lives), but it is not required (since the donor becomes wounded and takes some risk to his own life), and hence it falls into the category of things for which compensation could be offered and accepted (unlike actions that are either forbidden or required). See, for example, Eisenberg (2006), Grazi and Wolowelsky (2004), Kunin (2005), and Israeli (1997) who cite eminent modern *poskim* such as Rabbi Shlomo Zalman Auerbach and Rabbi Moshe Feinstein.

importance that Jewish law gives to saving a life, which can overturn many more mundane prohibitions. For example, Avraham (2004, p. 271–2) reports the opinion of the eminent Rabbi Shlomo Zalman Auerbach that someone who sells a kidney with the intention of saving a life does a good deed “even if he would not have donated his kidney only to save life.” But he goes on to note, “[I]n spite of all that has been said above, it seems to me that it is the community that needs soul-searching for allowing a person to reach such a depth of despair that he must sell a kidney, either because of poverty, debts, or the inability to pay for a relative’s medical expenses.”

I am less familiar with Islamic thought on the matter, but I surmise that it is in some respects similar, since the Islamic Republic of Iran presently allows live kidney donors to receive monetary payments (Bagheri, 2006; Ghods and Savaj, 2006).

Coercion

A different concern, quite common in the organ transplant literature and elsewhere, is that money may be coercive, so that allowing kidneys to be sold would allow the poor to be exploited. Even in the absence of money, transplant surgeons are eager to avoid accepting organs from donors who may feel coerced, perhaps by family pressure. Contract law in general holds that contracts may be voidable by the courts in case of coercion due to, among other things, “undue influence” by parties with special relationships (Farnsworth, 1990, section 4.20). (I am not aware, however, of any part of contract law that views excessive monetary compensation as a source of coercion.) Interestingly, Ghods and Savaj (2006) express the view that the availability of paid unrelated kidney donors in Iran has reduced the coercion of unpaid related donors.

In a recent exchange, Gaston, Danovitch, Epstein, Kahn, Matas, and Schnitzler (2006) proposed in the *American Journal of Transplantation* that it might be possible to avoid the repugnance of outright payments for kidneys, while “limiting financial disincentives in live organ donation,” by providing a fixed package of benefits to kidney donors, including insurance, compensation for expenses and lost wages, and a fixed payment (they suggest \$5,000) to compensate donors for pain and suffering. In response, in an editorial in the same issue of the journal, Fox (2006) writes of the “moral cost of living donor inducements.” Fox argues, “While 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.” Similarly, Kahn and Delmonico (2004) summarize their opposition to buying and selling organs by saying, “It is an unethical approach to shift the tragedy from those waiting for organs to those exploited into selling them.”

This viewpoint is not restricted to the transplant community. The National Bioethics Advisory Commission (2001), writes that paying subjects to participate in

medical experiments may be coercive.⁴ They go on to say that, if an institutional review board is concerned that the subjects in an experiment may be economically disadvantaged, it may require that the researchers reduce the payments they make to participants. The concern here is not to protect the research design against the possibility that rich and poor participants might self-select differently into the experiment for a given participation fee, but rather to protect low-income participants from being faced with such a high participation fee that they would feel coerced to participate. Baron (2006) offers a critical view of this line of argument.

Slippery Slope

Concern that monetizing some transactions might lead to other changes seems to lurk beneath the more explicit concerns. Some critics fear a commercial dystopia in which kidney sales would enter into contracts: for example, as collateral, or as payment for other medical services, or to repay debts, or as means tests for eligibility for social services and financial aid. Such scenarios have found their way into fiction and movies also (Ishiguro, 2005; Picoult, 2004; Farmer, 2002).

This concern is not altogether different from concerns about how legalizing certain kinds of voluntary transactions may change the terms of trade so as to disadvantage those who don't wish to participate in them. In this journal, Basu (2003) uses sexual harassment as an example and argues that legalizing labor contracts that allowed sexual harassment would put workers who did not wish to be party to such contracts at a disadvantage relative to the status quo in which such contracts are illegal. Similarly, for example, bans on polygamy might be understood as outlawing certain kinds of competition that would disadvantage some men and some women relative to the monogamous status quo, even while allowing others to engage in welfare-improving transactions.

Some (but by no means all) of the opposition to monetary compensation for *deceased* donor organs seems also to be of the slippery slope variety, with the concern being that it might pave the way for live organ sales. Accounts of black markets for kidney transplants lead to concerns about whether legal markets would inevitably be similar. In this connection, Scheper-Hughes (2003, p. 1645) summarizes the black market experience as follows: "In general, the circulation of kidneys follows established routes of capital from South to North, from East to West, from poorer to more affluent bodies, from black and brown bodies to white ones, and from female to male or from poor, low status men to more affluent men." She concludes (p. 1648): "The division of the world into organ buyers and organ sellers is a medical, social, and moral tragedy of immense and not yet fully recognized proportions."

A related concern is that monetary markets might crowd out altruistic giving and that this might both reduce the supply of transplantable kidneys (Howard, this issue; Institute of Medicine, 2006) and harm other characteristics of the organ

⁴ In contrast, experimental economists often think that paying subjects in economic experiments, based on their performance, is an essential element in creating an economic environment in the laboratory in which the experimenter can exercise some control over subjects' preferences.

transplantation process. For example, Danovitch and Leichtman (2006) worry that monetary markets could reduce the incidence of deceased donation, which supplies not only kidneys but other organs as well. A related literature in economics and psychology is concerned with the loss of intrinsic motivation that might accompany the introduction of monetary payments (for example, Gneezy and Rustichini, 2000).

The medical literature encompasses broad views on these subjects and also contains arguments in reply. For example, Hippen (2005) notes that regulated legal markets might be quite different from illegal ones, and that similar slippery slope fears were expressed about allowing live kidney donations from unrelated donors, but that unrelated donors are now a substantial percentage of all donors. Matas and Schnitzler (2004) argue that allowing kidney sales would be socially cost effective. (Matas is the current president of the American Society of Transplant Surgeons.)

Other Sources of Repugnance Toward Paying For Live Donor Kidneys

Although I have argued that the repugnance felt with regard to kidney sales shares characteristics with repugnance for the monetization of other kinds of transactions, the case of kidneys may also have some unique features.

For example, taking a kidney from a healthy donor holds little appeal to surgeons trained in the Hippocratic tradition of “first, do no harm.” While live donor kidney transplants save lives, it is not the life of the donor that is being saved. A surgeon who is already overcoming some distaste for performing a nephrectomy (kidney removal) on a healthy person may find the distaste more difficult to overcome if he views himself as facilitating a commercial transaction. However surgeons may not (or may no longer) be the primary locus of repugnance to kidney sales. In an informal poll following a debate on the subject at a recent meeting of the American Society of Transplant Surgeons, a majority of those polled expressed a willingness to contemplate a trial or demonstration project involving compensation for organ donors (personal communication, Arthur Matas, 1/27/07).

Overall, Boulware, Troll, Wang, and Powe (2006) report on the basis of a telephone survey of randomly selected households: “The U.S. public is not generally supportive of incentives for DD [deceased organ donation], but is supportive of limited incentives for LD [live donation]. Racial/ethnic minorities are more supportive than Whites of some incentives. Persons with low income may be more accepting of certain monetary incentives.”

Historical Perspective

To put the debate about organ donation into some historical context, consider the case of cadavers. When the British medical journal *The Lancet* published its first volume in 1824, its pages reflected a concern that too few cadavers were available for anatomy classes. The main source of cadavers was an illegal black market supplied by so-called “resurrection men,” and an editorial by that name opens with the news that a reliable resurrection man had recently been arrested and sentenced. The editorial goes on to suggest—in an early observation that how issues

are framed may influence how they are perceived—that the government policy of only allowing the bodies of executed murderers to be used for anatomy studies “tends to keep up . . . the prejudice which is at present so strong against the obtaining of bodies for dissection” (Lancet, 1824).

The situation has changed, slowly but profoundly. In Britain, the Anatomy Act of 1832 considerably expanded the source of legal cadavers for dissection. Today, the “Bodyworlds” exhibits that have been touring museums worldwide feature partially dissected cadavers in artful poses. Such exhibits do arouse some repugnance, although not at the level that prevents the company from obtaining cadavers, or the shows from attracting large audiences (<http://www.bodyworlds.com>); Barboza, 2006). There are also today legal, regulated international markets for various storable transplantable cadaver tissues (for example, bones), that can be used in surgical procedures such as hip replacements (Mahoney, 2000). Opponents of regulated markets for organs will not be reassured: there have been some notable abuses in the market for cadaver tissues, including the widely publicized scandal (and subsequent prosecutions) associated with the fraudulent sale of some of the body parts of Alistair Cooke, host of the television show “Masterpiece Theater,” who died of cancer at the age of 95. Bone (2006) discusses how the family authorization to harvest Cooke’s body parts was falsified, and so was Cooke’s age and cause of death, thus interfering with medical decision making on appropriate use of body parts (see also Howley, 2007).

Economists’ Voices in the Debate About Organ Sales

Sandel (2005) begins this way: “My topic tonight is ‘The Moral Limits of Markets.’ My question is: Are there some things that should not be bought and sold, and, if so, why?” His talk was introduced by Stanley Hoffmann, who wrote: “The topic falls a bit between the cracks of business school professors, who often hate to raise ethical problems, and economists, who don’t always know what ethical problems are!” While Hoffman’s jibe overstates the case, it does seem true that when confronted with repugnance toward a market transaction, economists often respond as if a sufficiently clear argument focused on the welfare gains due to trade will overcome that repugnance.

Becker and Elias in this issue present many of the arguments with which economists and others often respond to concerns over the repugnance of paying live kidney donors. The claim that organ sales “objectify” people is met by noting that in labor markets generally, poorer workers tend to take more dangerous and less pleasant jobs in return for wages, and that we mostly think they do not diminish their humanity by doing so. The response to arguments about “coercion” is typically that voluntary transactions increase welfare of both the seller and the buyer, if the transaction is truly voluntary. The response to “slippery slope” arguments is that markets can be regulated if necessary. Sometimes these arguments are supplemented by the observation that organ donation itself, even with a ban on monetary payments, could be criticized with some of the same objections made to organ sales. For references to both sides of the debate, particularly in the medical literature, see

McCarrick and Darragh (2003) and Nadel and Nadel (2005), and also Leonard (2004).

In making such arguments, the role of repugnance *per se* is often regarded as a side issue. For example, Radcliffe-Richards et al. (1998) conclude their “case for allowing kidney sales” with the following statement: “The weakness of the familiar arguments [against kidney sales] suggests that they are attempts to justify the deep feelings of repugnance which are the real driving force of prohibition, and feelings of repugnance among the rich and healthy, no matter how strongly felt, cannot justify removing the only hope of the destitute and dying. This is why we conclude that the issue should be considered again, and with scrupulous impartiality.”

Some discussion has focused on thinking about how the worst abuses of unregulated markets could be reduced by regulations. Such regulations might include restrictions on compensation (Gaston, Danovitch, Epstein, Kahn, Matas, and Schnitzler, 2006); allowing outright purchases but only by a single authorized governmental buyer (Satel, 2006); requiring an above-market-clearing price (that might be bundled with insurance or annuities); mandatory standards for the health and postoperative care of donors; or perhaps bans on international trade (since the thought of rich Americans importing kidneys from the third world seems to arouse a repugnance distinct from that toward the kidney sales themselves). Of course, how many new kidneys would be elicited at what price depends on whether the market would be international, and how perceptions of repugnance (and not just of risk) would influence the willingness to sell.

These arguments against banning organ sales leave many opponents unpersuaded. For example, Harmon and Delmonico (2006) write: “The Transplantation Society, the American Society of Transplantation, the American Society of Transplant Surgeons, the European Union, Eurotransplant, the National Kidney Foundation, the World Health Organization, and more have long recognized the unethical realities regarding a regulated market, and each organization has consistently opposed it.”

Readers who want to test their own potential repugnance to voluntary transactions by well-informed, consenting adults might note that most of the arguments designed to disarm repugnance to legalizing the sale of a kidney would also, in principle, apply to a live donor who was willing, for a sufficiently high price, to sell an eye, an arm, a leg—or a heart.

Market Design When Repugnance Matters

My colleagues and I have encountered resistance to certain kinds of transactions when helping design both markets that involve monetary transactions, like labor markets, and allocation procedures that do not, like allocating public school places to children. Our experience suggests that ideas about the inappropriateness of certain kinds of transactions—even when this inappropriateness falls short of outright repugnance—can constrain market design.

Many labor markets for entry-level professionals have suffered market failures

due to unraveling of the transaction times at which new employees are hired. Typically in these markets, the hiring date moves further and further in advance of employment, with firms making potential employees “exploding offers” with the effect of not allowing employees the opportunity to consider other opportunities before responding (Roth and Xing, 1994). This kind of unraveling occurs in a variety of markets, from markets for new doctors and lawyers, to markets for teams participating in college football bowls. Often this leads to clearly inefficient outcomes. In Niederle and Roth (2003), my coauthor and I show how this unraveling of appointment dates caused the markets for new gastroenterologists to fragment from a national market into much more local markets. In Frechette, Roth, and Ünver (2007), my coauthors and I show how better matchups at bowl games increase the television viewership of the games. Sometimes there is an opportunity to correct the market failures associated with unraveling and exploding offers by creating clearinghouses that will provide a thick market (for example, Roth, 1984). Clearinghouses are also sometimes employed to fix market failures due to congestion (Roth and Xing, 1997; Abdulkadiroğlu, Pathak, and Roth, 2005).

When Muriel Niederle and I were asked to help implement a clearinghouse for the entry-level market for gastroenterologists along the lines of the medical match for new medical graduates (Roth and Peranson, 1999), one issue was whether the gastroenterology professional societies would adopt a resolution that would allow applicants who had accepted early exploding offers, well before the date for the clearinghouse to operate, to decline these offers subsequently and participate in the clearinghouse. Many gastroenterologists felt that it would be *unprofessional* for future gastroenterologists to begin their careers by first accepting an offer and subsequently declining it. But it was also widely felt that early exploding offers were inappropriate and anticompetitive, and should be discouraged. After much discussion, the four gastroenterology professional organizations became convinced that allowing applicants to change their minds about exploding offers would make such offers unprofitable, so that in the future, very few such offers would be made and subsequently declined. This prediction ultimately was fulfilled (Niederle, Proctor, and Roth, 2006; Niederle and Roth, 2006). The relevance for the present essay is that much of the debate focused on the *propriety* of how offers should be made, and accepted or rejected.

Discussions about propriety are not always decided on the basis of welfare. My colleagues and I have encountered this at several junctures in designing public school choice allocation procedures (for which monetary payments would be widely regarded as inappropriate). In Boston, one of the ways that children are assigned priority to enter particular schools is if they have an older sibling already attending that school. We proposed two alternative designs for a strategy-proof allocation procedure, one of which was adopted (Abdulkadiroğlu, Pathak, Roth, and Sönmez, 2005). The procedure that was rejected would have produced welfare gains in cases in which two students each would have preferred to go to the school for which the other had a high priority. But this proposal was rejected because it would have allowed the “trading” of sibling priorities, which was felt to be an *inappropriate* transaction, because sibling priorities in particular shouldn’t be trad-

able, as they were assigned to families only to make it easier for them to have both children in the same school if that was their preference. Instead, Boston adopted a clearinghouse built along the lines of the clearinghouses designed for medical matches, a modified version of which was also adapted for matching students to high schools in New York City (Abulkadiroğlu, Pathak, and Roth, 2005).

This brings me back to kidney exchange. My point in the present essay is simply that, unlike the buying and selling of kidneys, in-kind exchanges have not aroused a repugnant reaction. In Roth, Sönmez, Ünver, Delmonico, and Saidman (2006), my coauthors and I reported the success of a novel kind of exchange in New England. This article appeared, without any negative reaction, in the same issue of the *American Journal of Transplantation* as the Gaston, Danovitch, Epstein, Kahn, Matas, and Schnitzler (2006) proposal for modest payments and the Fox (2006) editorial reply that that proposal was repugnant. In fact, legislation has passed Congress to amend the National Organ Transplant Act to endorse kidney exchange explicitly: the Living Kidney Organ Donation Clarification Act of 2007 passed in the Senate (S. 487) on February 15, 2007, and it passed in the House of Representatives (H.R. 710) on March 7, 2007 (although the law has yet to be enacted).

Kidney exchange by itself won't solve the general shortage of transplantable kidneys. In-kind kidney exchange directly helps only people who already have a willing live donor (although more complex kinds of exchanges can also directly help some patients on the waiting list for a deceased-donor kidney, and every live donor transplant helps reduce the demand for scarce deceased donor kidneys). However, if we can successfully organize kidney exchange on a national scale, we might be able to do several thousand more transplants per year (instead of the dozens to which the local and regional exchanges are still presently limited). The increase would come both from extending the possibility of exchange to all regions of the country, and from the additional exchanges arising as a result of a thicker market consisting of more available patient–donor pairs. Whatever other policies might be adopted in the more distant future to benefit patients who need transplants, or to reduce the incidence of kidney disease, kidney exchange offers real gains that have proved to be achievable.

Conclusions

Repugnance can be a real constraint on markets. Almost whenever I have been involved in practical market design, the question of whether certain kinds of transactions may be inappropriate has come up for discussion.⁵

⁵ One notable exception has been in my role as chair of the American Economic Association's Ad Hoc Committee on the Job Market, which has implemented several changes in the market for new Ph.D. economists. As nearly as I can recall, our discussions have focused only on efficiency and incentives. (The other members of that committee are John Cawley, Philip Levine, Muriel Niederle, and John Siegfried.)

To say that repugnance is a real phenomenon doesn't mean that repugnance isn't sometimes deployed for strategic purposes by self-interested parties to recruit allies who would not respond to a clear appeal to narrower motives such as rent seeking. The opposition of insurance companies to viatical settlements might be an example. Experiments in the laboratory show clearly how arguments about unfairness can be deployed in a self-interested way, with agents' perception of what is fair closely correlated with their interests (for example, Roth and Murnighan, 1982). But the real repugnance that some people feel toward some transactions means that economists interested in proposing and designing markets must take this repugnance into account.

The debate over whether the sale of kidneys should be legalized is just one example among many in which repugnance plays a large role. Because of its importance, the arguments on both sides have been presented with particular force and clarity. All parties agree it is urgently desirable to cure patients with end-stage renal disease, and that the best current treatment is organ transplantation, particularly from live donors. The current situation in the United States involves long wait times for deceased donor kidneys by tens of thousands of patients without a live donor; difficult and costly palliative treatment by dialysis; and thousands of deaths annually while waiting. But opponents of organ sales find the prospect of a market for organs so repugnant as to be worse than the current situation. Proponents of markets are correspondingly frustrated at the failure to adopt what they see as a feasible solution that could be implemented quickly.

One way of seeing the role that repugnance plays in this debate is to compare it to a difficult technological barrier. If the technological barriers could be overcome that currently prevent, say, transplanting pig kidneys into human patients, such "xenotransplants" would also end the kidney shortage. But no one supposes that this solution can be implemented quickly, because some technological barriers cannot be overcome quickly, if at all. I've argued in this essay that repugnance is similar to technological barriers in this respect: markets that we can envision may nevertheless not be easily achievable. I would not like to guess whether repeal of the widespread laws against kidney sales is likely to happen more quickly than the advances in xenotransplantation, or artificial kidneys, or other medical breakthroughs that would end the shortage of kidneys.

Of course, there can also be "technological" developments in the law. For example, Volokh (forthcoming) endorses a "medical right to self-defense," that would give a person dying of end-stage renal disease the right to pursue all reasonable avenues to preserve their life, including purchasing a kidney. If this argument or one like it makes headway, the courts might end bans on organ sales. Popular repugnance often affects courts differently than legislatures; for example, the ban on gay marriage was lifted in Massachusetts by a court interpreting the state constitution's guarantee of equal protection, not by new legislation. The Massachusetts court decision is an example in which a ban based on a repugnance that had survived since at least Biblical antiquity was ended quite suddenly, although repugnance-inspired political battles on the issue continue.

The persistence of repugnance in many markets doesn't mean that economists

should give up on the important educational role of pointing to inefficiencies and tradeoffs, and costs and benefits. But neither should economists expect such arguments to win every debate immediately. Being aware of the sources of repugnance can only help make such discussions more productive, not least because it can help separate the issues that are fundamentally empirical—like the degree of crowding out of altruistic donations that might result from different incentive schemes compared to how much new supply might be produced—from areas of disagreement that are not primarily empirical.

Just as economists and other proponents of legalizing kidney sales may not always take repugnance with sufficient seriousness, opponents of such sales often fail to directly address the costs of the current kidney shortage that are borne directly by kidney patients, and indirectly by society as a whole. Although economists see very few tradeoffs as completely taboo, noneconomists often decline to discuss tradeoffs at all, preferring to focus on the repugnance of transactions like organ sales. Advocates of well-regulated markets for organ transplants could more clearly address the concern that markets are hard to regulate perfectly and that at least some repugnant transactions would likely slip through even the best regulatory barriers. Opponents could better engage the question of whether it is possible that a carefully regulated market with some inevitable abuses would, nevertheless, be an improvement over current conditions. In this view, the current situation can be viewed as a regulated market with the only legal price being zero, which makes it difficult to prevent unregulated transactions on international black markets (for example, see the account in Morais, 2007).

Discussion itself may change some views on repugnance (Baron and Leshner, 2000)—in some cases by reducing visceral repugnance and in others by refining it. A participant in the discussion of a draft of this paper by the Chicago Transplant Ethics Consortium (personal communication, Jason Snyder, 1/29/2007) noted: “I think that the visceral response that almost everyone has to the notion of a market for organs, what they feel the first 10 seconds after hearing about such a market, is a significant sense of repugnance. According to [the previous discussion], a few years ago most people in the transplant community felt this way. However it appears that there is a growing divergence of opinion on this topic in the transplant community. Essentially what I think is happening is that the more people carefully think about these issues, the more they get beyond the initial yuck factor. Some go toward the pro-market side, and others stay on the anti-market side for reasons that go deeper than the first visceral response.”

No one can contemplate the costs to the sick and dying without sharing the concern for a solution to the shortage of transplantable organs. The questions are, what kinds of solution are feasible and desirable, how to get from here to there, on what time scale, with what costs to whom, and what to do in the meantime?

■ *I have had helpful correspondence and conversations with Michael Abecassis, Nava Ashraf, George Baker, Jon Baron, Greg Barron, Max Bazerman, Eric Budish, Frank Delmonico, Drew Fudenberg, Jerry Green, Ben Greiner, Rakesh Khurana, Steve Leider, Arthur Matas, Eva Myrsson Milgrom, Muriel Niederle, Doug Penrod, Michael Rees, Susan Saidman, Dov*

Samet, Jason Snyder, Guhan Subramanian, Cass Sunstein, Steve Woodle, and seminar participants and coffee drinkers at the University of Chicago and Harvard and the Eastern Psychological Association and Royal Economic Society, and members of the Chicago Transplant Ethics Consortium, whose members circulated and commented on an earlier draft of this paper. Some of this work has been supported by grants from the National Science Foundation.

References

- Abdulkadiroğlu, Atila, Parag A. Pathak, and Alvin E. Roth.** 2005. "The New York City High School Match." *American Economic Review*, 95(2): 364–7.
- Abdulkadiroğlu, Atila, Parag A. Pathak, Alvin E. Roth, and Tayfun Sönmez.** 2005. "The Boston Public School Match." *American Economic Review*, 95(2): 368–71.
- Associated Press.** 2007. "Payment for Stem Cell Eggs Debated." January 20. <http://www.nytimes.com/aponline/us/AP-Stem-Cell-Eggs.html?ex=1169960400&en=d93c9f0ff31002fd&ei=5070&emc=eta1>.
- Avraham, Avraham S.** 2004. *Even Ha'Ezer and Choshen Mishpat*. Vol. 3 of *Nishmat Avraham: Medical Halachah for Doctors, Nurses, Health-care Personnel and Patients*. ArtScroll Halachah Series. Brooklyn, NY: Mesorah Publications.
- Bagheri, Alireza.** 2006. "Compensated Kidney Donation: An Ethical Review of the Iranian Model." *Kennedy Institute of Ethics Journal*, 16(3): 269–82.
- Barboza, David.** 2006. "China Turns Out Mummified Bodies for Displays." *New York Times*. August 8.
- Baron, Jonathan.** 2006. *Against Bioethics*. MIT Press.
- Baron, Jonathan, and Sarah Leshner.** 2000. "How Serious are Expressions of Protected Values." *Journal of Experimental Psychology: Applied*, vol. 6, pp. 183–194.
- Basu, Kaushik.** 2003. "The Economics and Law of Sexual Harassment in the Workplace." *Journal of Economic Perspectives*, 17(3): 141–57.
- Bone, James.** 2006. "Undertaker Admits Stealing and Selling Alistair Cooke Body Parts." *Times Online*. October 20. http://www.timesonline.co.uk/article/0,,3-2412747_1,00.html.
- Boulware, L. E., M. U. Troll, N. Y. Wang, and N. R. Powe.** 2006. "Public Attitudes Toward Incentives for Organ Donation: A National Study of Different Racial/Ethnic and Income Groups." *American Journal of Transplantation*, 6(11): 2774–85.
- California Penal Code.** Section 598. <http://www.leginfo.ca.gov/calaw.html>.
- CNN.com.** 2003. "Amid Furor, Pentagon Kills Terrorism Futures Market." <http://www.cnn.com/2003/ALLPOLITICS/07/29/terror.market/index.html>.
- Coleman, Peter J.** 1974 [1999]. *Debtors and Creditors in America: Insolvency, Imprisonment for Debt, and Bankruptcy, 1607–1900*. Reprint. Beard Books. State Historical Society of Wisconsin, 1974.
- Congress of the United States.** 1990. *Clean Air Act Amendments*. S.1630, Title IV, Acid Deposition Control. 101st Congress. <http://www.epa.gov/oar/caa/caaa.txt>.
- Congress of the United States.** 2007. *Living Kidney Organ Donation Clarification Act*, S. 487 IS. 110th Congress, February 1. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=fs487is.txt.pdf.
- Council of Europe.** 2002. *Additional Protocol to the Convention on Human Rights and Biomedicine, on Transplantation of Organs and Tissues of Human Origin*. Strasbourg, 24.I.2002. <http://conventions.coe.int/Treaty/en/Treaties/Html/186.htm>.
- Danovitch, Gabriel M., and Alan B. Leichtman.** 2006. "Kidney Vending: The 'Trojan Horse' of Organ Transplantation." *Clinical Journal of the American Society of Nephrology*, 1(6): 1133–5.
- Eisenberg, Daniel.** 2006. "Live Organ Donation." *Society Today*. February. http://www.aish.com/societyWork/sciencenature/Live_Organ_Donation.asp.
- Fairman, Christopher M.** "Fuck." 2006. Ohio State Public Law Working Paper 59. Available at

- SSRN: <http://ssrn.com/abstract=896790>. (*Cardozo Law Review*, forthcoming.)
- Farmer, Nancy.** 2002. *House of the Scorpion*. Atheneum/Richard Jackson Books.
- Farnsworth, E. Allan.** 1990. *Contracts*. Boston: Little Brown and Company.
- Fiske, Alan P., and Philip E. Tetlock.** 1997. "Taboo Trade-offs: Reactions to Transactions that Transgress Spheres of Justice." *Political Psychology*, 18(2): 255–97.
- Fox, M. D.** 2006. "The Price Is Wrong: The Moral Cost of Living Donor Inducements." *American Journal of Transplantation*, 6(11): 2529–30.
- Fréchette, Guillaume, Alvin E. Roth, and M. Utku Ünver.** Forthcoming. "Unraveling Yields Inefficient Matchings: Evidence from Post-Season College Football Bowls." *Rand Journal of Economics*.
- Gneezy, Uri, and Aldo Rustichini.** 2000. "Pay Enough or Don't Pay at All." *Quarterly Journal of Economics*, 115(3): 791–810.
- Grazi, Richard V., and Joel B. Wolowelsky.** 2004. "Jewish Medical Ethics: Monetary Compensation for Donating Kidneys." *Israel Medical Association Journal*, 6(March): 185–8.
- Ghods, Ahad J., and Shekoufeh Savaj.** 2006. "Iranian Model of Paid and Regulated Living Unrelated Kidney Donation." *Clinical Journal of the American Society of Nephrology*, 1(6): 1136–45.
- Galenson, David W.** 1981. *White Servitude in Colonial America: An Economic Analysis*. New York: Cambridge University Press.
- Gaston, R. S., G. M. Danovitch, R. A. Epstein, J. P. Kahn, A. J. Matas, and M. A. Schnitzler.** 2006. "Limiting Financial Disincentives in Live Organ Donation: A Rational Solution to the Kidney Shortage." *American Journal of Transplantation*, 6(11): 2548–55.
- Hague Convention on Protection of Children and Co-operation in Respect of Intercountry Adoption.** 1993. May, 29. http://www.hcch.net/index_en.php?act=conventions.text&cid=69.
- Harmon, William, and Francis Delmonico.** 2006. "Payment for Kidneys: A Government Regulated System is Not Ethically Achievable." *Clinical Journal of the American Society of Nephrology*, 1(6): 1146–7.
- Harvard Magazine.** 2001. "Toxic Memo." May–June, <http://www.harvardmagazine.com/on-line/050171.html>.
- Hippen, Benjamin E.** 2005. "In Defense of a Regulated Market in Kidneys from Living Vendors." *Journal of Medicine and Philosophy*, 30(6): 593–626.
- Hirschman, Albert.** 1977. *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph*. Princeton: Princeton University Press.
- Howley, Kerry.** 2007. "Who Owns Your Body Parts?" *Reason Magazine*, March. <http://www.reason.com/news/show/118517.html>.
- Institute of Medicine (IOM).** 2006. *Organ Donation: Opportunities for Action*. Washington, DC: National Academies Press.
- Ishiguro, Kazuo.** 2005. *Never Let Me Go*. Knopf.
- Israeli, Shaul.** 1997. "Organ Transplants: Responsa." *ASSIA–Jewish Medical Ethics*, 3(1): 14–17. http://www.szmc.org.il/index.asp?id=97&top=1&page_id=231.
- John Paul II.** 1998. "Evangelium Vitae." <http://www.cin.org/jp2ency/jp2evang.html>.
- John Paul II.** 2000. "Address to International Congress on Transplants." Rome, August 29. <http://www.cin.org/pope/organ-transplant-cloning.html>.
- Kahn, Jeffrey P., and Francis L. Delmonico.** 2004. "The Consequences of Public Policy to Buy and Sell Organs for Transplantation." *American Journal of Transplantation*. 4(2): 178–180.
- Kahneman, Daniel, Jack Knetsch, and Richard H. Thaler.** 1986. "Fairness as a Constraint on Profit-Seeking: Entitlements in the Market." *American Economic Review*, 76(4): 728–41.
- Kunin, J. D.** 2005. "The Search for Organs: Halachic Perspectives on Altruistic Giving and the Selling of Organs." *Journal of Medical Ethics*, 31(5): 269–72.
- Kuran, Timur.** 1995. "Islamic Economics and the Islamic Subeconomy." *Journal of Economic Perspectives*. 9(4): 155–73.
- Lancet.** 1824. "Resurrection Men." Discussion (unsigned editorial). Vol. 1, no. 19, pp. 194–5.
- Leonard, Thomas C.** 2004. "The Price is Wrong: Causes and Consequences of Ethical Restraint of Trade." *Journal des Économistes et des Études Humaines*, 14(2): 133–50.
- Lutheran Church in America.** 1984. "Organ Donation: A Resolution." Adopted by the Twelfth Biennial Convention of the Lutheran Church in America, Toronto. <http://www.elca.org/jle/article.asp?k=341>.
- MacDonald, Helen P.** 2005. *Human Remains: Episodes in Human Dissection*. Melbourne University Press.
- Mahoney, Julia D.** 2000. "The Market for Human Tissue." *Virginia Law Review*, 86(2): 163–223.
- Matas, Arthur J., and Mark Schnitzler.** 2004. "Payment for Living Donor (Vendor) Kidneys: A Cost-Effectiveness Analysis." *American Journal of Transplantation*, 4(2): 216–21.
- McCarrick, Patricia Milmoe, and Martina Daragh.** 2003. "Scope Note 43: Incentives for Providing Organs." *Kennedy Institute of Ethics Journal*. March, 13(1): 53–64.
- Morais, Richard C.** 2007. "Desperate Arrange-

- ments." *Forbes Magazine*, January 29. http://www.forbes.com/forbes/2007/0129/072_print.html.
- Nadel, Mark S., and Caroline A. Nadel.** 2005. "Using Reciprocity to Motivate Organ Donations." *Yale Journal of Health Policy, Law, and Ethics*, 5(1): 293–325.
- National Bioethics Advisory Commission.** 2001. *Ethical and Policy Issues in Research Involving Human Participants*. Vol. 1: *Report and Recommendations of the National Bioethics Advisory Commission*. Bethesda, Maryland. <http://www.georgetown.edu/research/nrcbl/nbac/human/overvoll.html>.
- Niederle, Muriel, and Alvin E. Roth.** 2003. "Unraveling Reduces Mobility in a Labor Market: Gastroenterology with and without a Centralized Match." *Journal of Political Economy*, 111(6): 1342–52.
- Niederle, Muriel, and Alvin E. Roth.** 2006. "Making Markets Thick: How Norms Governing Exploding Offers Affect Market Performance." <http://kuznets.fas.harvard.edu/~aroth/papers/ExplodingOffers.pdf>.
- Niederle, Muriel, Deborah D. Proctor, and Alvin E. Roth.** 2006. "What Will be Needed for the New GI Fellowship Match to Succeed?" *Gastroenterology*, 130(January): 218–24.
- Legislative Assembly of Ontario.** 2003. *Ontario Dwarf Tossing Ban Act*. http://www.ontla.on.ca/documents/bills/37_parliament/session4/b097_e.htm.
- Office of the United Nations High Commissioner for Human Rights.** 1977. *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I)*. Adopted on 8 June 1977 by the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts; entry into force 7 December 1979, in accordance with Article 95. <http://www.unhcr.ch/html/menu3/b/93.htm>.
- Office of the United Nations High Commissioner for Human Rights.** 2002. *International Covenant on Civil and Political Rights*. Communication No. 854/1999; France. 26/07/2002. CCPR/C/75/D/854/1999(Jurisprudence).<http://www.unhcr.ch/tbs/doc.nsf/0/09d49050a9b34aaa c1256c6e0031b919?OpenDocument>.
- Peck, Sally.** 2007. "Blair: Iranian Stories Deal 'Not a Good Idea.'" *Telegraph*, April 11. <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/04/11/nbrowne211.xml>.
- Persky, Joseph.** 2007. "Retrospectives: From Usury to Interest." *Journal of Economic Perspectives*, 21(1): 227–36.
- Picoult, Jodi.** 2004. *My Sister's Keeper: A Novel*. Washington Square Press.
- Radcliffe-Richards, J. et al. [for the International Forum for Transplant Ethics].** 1998. "The Case for Allowing Kidney Sales." *Lancet*, 351(9120): 1950–52.
- Rembar, Charles.** 1968. *The End of Obscenity: The Trials of Lady Chatterly, Tropic of Cancer, and Fanny Hill*. New York: Random House.
- Roth, Alvin E.** 1984. "The Evolution of the Labor Market for Medical Interns and Residents: A Case Study in Game Theory." *Journal of Political Economy*, 92(6): 991–1016.
- Roth, Alvin E.** 1991. "A Natural Experiment in the Organization of Entry Level Labor Markets: Regional Markets for New Physicians and Surgeons in the U.K." *American Economic Review*, 81(3): 415–40.
- Roth, Alvin E., and Elliot Peranson.** 1999. "The Redesign of the Matching Market for American Physicians: Some Engineering Aspects of Economic Design." *American Economic Review*, 89(4): 748–80.
- Roth, Alvin E. and J. Keith Murnighan.** 1982. "The Role of Information in Bargaining: An Experimental Study." *Econometrica*, 50(5): 1123–42.
- Roth, Alvin E., Tayfun Sönmez, and M. Utku Ünver.** 2004. "Kidney Exchange." *Quarterly Journal of Economics*, 119(2): 457–88.
- Roth, Alvin E., Tayfun Sönmez, and M. Utku Ünver.** 2005a. "A Kidney Exchange Clearinghouse in New England." *American Economic Review*, 95(2): 376–80.
- Roth, Alvin E., Tayfun Sönmez, and M. Utku Ünver.** 2005b. "Pairwise Kidney Exchange." *Journal of Economic Theory*. 125(2): 151–88.
- Roth, Alvin E., Tayfun Sönmez, and M. Utku Ünver.** Forthcoming. "Efficient Kidney Exchange: Coincidence of Wants in a Structured Market." *American Economic Review*.
- Roth, Alvin E., Tayfun Sönmez, M. Utku Ünver, Francis L. Delmonico, and Susan L. Saidman.** 2006. "Utilizing List Exchange and Undirected Good Samaritan Donation through 'Chain' Paired Kidney Exchanges." *American Journal of Transplantation*, 6(11): 2694–2705.
- Roth, Alvin E., and Xiaolin Xing.** 1994. "Jumping the Gun: Imperfections and Institutions Related to the Timing of Market Transactions." *American Economic Review*, 84(September): 992–1044.
- Roth, Alvin E., and Xiaolin Xing.** 1997. "Turn-around Time and Bottlenecks in Market Clearing: Decentralized Matching in the Market for Clinical Psychologists." *Journal of Political Economy*, 105(April): 284–329.
- Ruethling, Gretchen.** 2006. "Chicago Prohibits Foie Gras." *New York Times*, April 27.
- Saidman, Susan L., Alvin E. Roth, Tayfun Sönmez, M. Utku Ünver, and Francis L. Del-**

monico. 2006. "Increasing the Opportunity of Live Kidney Donation by Matching for Two and Three Way Exchanges." *Transplantation*, 81(5): 773–82.

Sandel, Michael J. 2005. "The Moral Limits of Markets." *Bulletin of the American Academy of Arts and Sciences*. Summer: 6–10.

Satel, Sally. 2006. "Organs for Sale." *The American*. <http://www.american.com/archive/2006/november/organs-for-sale/>.

Scheper-Hughes, Nancy. 2003. "Keeping an Eye on the Global Traffic in Human Organs." *The Lancet*, May 10, 361(9369): 1645–48.

Schmalensee, Richard, Paul L. Joskow, A. Denny Ellerman, Juan Pablo Montero, and Elizabeth M. Bailey. 1998. "An Interim Evaluation of Sulfur Dioxide Emissions Trading." *Journal of Economic Perspectives*, 12(3): 53–68.

Silverman, Rachel Emma. 2005. "Letting an Investor Bet on When You'll Die: New Insurance Deals Aimed at Wealthy Raise Concerns; Surviving a Two-Year Window." *Wall Street Journal*, May 26: D1.

Simmel, Georg. 1990. *The Philosophy of Money*. 2nd ed. London: Routledge.

Smith, Ethan, and Sara Silver. 2006. "Hot Seat: To Protect Its Box-Office Turf, Ticketmaster Plays Rivals' Tune—As Online Threat Crescendos, It Goes After Resellers With Auctions, Exchanges—Artists Get Piece of the Action." *Wall Street Journal*, September, 12: A1.

Spar, Debora L. 2006. *The Baby Business: How Money, Science, and Politics Drive the Commerce of Conception*. Boston: Harvard Business School Press.

U.S. Congress. *Intercountry Adoption Act of 2000*, Public Law 106-279.

Volokh, Eugene. Forthcoming. "Medical Self-Defense, Prohibited Experimental Therapies, and Payment for Organs." *Harvard Law Review*.

Weber, Max. [1905] 1930. *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. New York: Scribner's Sons.

Wolfers, Justin, and Eric Zitzewitz. 2004. "Prediction Markets." *Journal of Economic Perspectives*, 18(2): 107–126.

Zelizer, Viviana A. 1979. *Morals and Markets: The Development of Life Insurance in the United States*. New York: Columbia University Press.

This article has been cited by:

1. Erwin Dekker, Julien Gradoz. 2022. Managing repugnance: how core-stigma shapes firm behavior. *Journal of Institutional Economics* **11**, 1-15. [[Crossref](#)]
2. Tiyi Morris, Hannah Maple, Sam Norton, Joseph Chilcot, Lisa Burnapp, Heather Draper, Nizam Mamode, Paul McCrone. 2022. Challenges and Opportunities in the Supply of Living Kidney Donation in the UK National Health Service: An Economic Perspective. *Transplantation* **106**:11, 2137-2142. [[Crossref](#)]
3. Chenlin Gu, Alvin Roth, Qingyun Wu. 2022. Forbidden Transactions and Black Markets. *Mathematics of Operations Research* **47**:4, 3084-3109. [[Crossref](#)]
4. Neha Agarwal, David Fairris. 2022. Political Commitment, Policy Consequences, and Moral Beliefs: Survey Evidence on the Minimum Wage. *The B.E. Journal of Economic Analysis & Policy*, ahead of print. [[Crossref](#)]
5. Gary S. Becker, Julio Jorge Elias, Karen J. Ye. 2022. The shortage of kidneys for transplant: Altruism, exchanges, opt in vs. opt out, and the market for kidneys. *Journal of Economic Behavior & Organization* **202**, 211-226. [[Crossref](#)]
6. Ronja Demel, Francesco Grassi, Yasaman Rafiee, Michael R. Waldmann, Annekathrin Schacht. 2022. How German and Italian Laypeople Reason about Distributive Shortages during COVID-19. *International Journal of Environmental Research and Public Health* **19**:19, 12067. [[Crossref](#)]
7. Jason Monios. 2022. The Moral Limits of Market-Based Mechanisms: An Application to the International Maritime Sector. *Journal of Business Ethics* **17**. . [[Crossref](#)]
8. Heather Carrasco, Andrea M. Romi. 2022. Toward an omniopicon: the potential of blockchain technology toward influencing vulnerable populations in contested markets. *Accounting, Auditing & Accountability Journal* **35**:7, 1685-1713. [[Crossref](#)]
9. Mitja Kovac. 2022. The Rise of the Mailbox Rule and Formation of Contracts in English, US and Canadian Law. *Liverpool Law Review* **43**:2, 149-174. [[Crossref](#)]
10. Philippe van Basshuysen. 2022. Markets, market algorithms, and algorithmic bias. *Journal of Economic Methodology* **1**, 1-12. [[Crossref](#)]
11. Tobias Gesche. 2022. Reference-price shifts and customer antagonism: Evidence from reviews for online auctions. *Journal of Economics & Management Strategy* **31**:3, 558-578. [[Crossref](#)]
12. Richard E Ericson, Lester A Zeager. 2022. Coordination and Fair Division in Refugee Responsibility Sharing. *Journal of Conflict Resolution* **66**:7-8, 1263-1291. [[Crossref](#)]
13. Qing L. Burke, Mahendra R. Gujarathi. 2022. Accounting for Blood Donation: An Instructional Case. *Issues in Accounting Education* **37**:3, 41-57. [[Crossref](#)]
14. Kimberly D. Krawiec. 2022. Markets, repugnance, and externalities. *Journal of Institutional Economics* **72**, 1-12. [[Crossref](#)]
15. L. Michelle Bruijn, Rafael P. Ribas. 2022. "No drugs in my back yard:" The ambivalent reception of cannabis retailers. *Journal of Economic Behavior & Organization* **199**, 103-121. [[Crossref](#)]
16. Marta Serra-Garcia, Nora Szech. 2022. The (In)Elasticity of Moral Ignorance. *Management Science* **68**:7, 4815-4834. [[Crossref](#)]
17. Alvin E. Roth, Ignazio R. Marino, Kimberly D. Krawiec, Michael A. Rees. 2022. Criminal, Legal, and Ethical Kidney Donation and Transplantation: A Conceptual Framework to Enable Innovation. *Transplant International* **35**. . [[Crossref](#)]
18. Pedro Bustamante, Meina Cai, Marcela Gomez, Colin Harris, Prashant Krishnamurthy, Wilson Law, Michael J. Madison, Ilia Murtazashvili, Jennifer Brick Murtazashvili, Tymofiy Mylovanov, Nataliia

- Shapoval, Annette Vee, Martin Weiss. 2022. Government by Code? Blockchain Applications to Public Sector Governance. *Frontiers in Blockchain* 5. . [\[Crossref\]](#)
19. Daniel L. Chen, Martin Schonger. 2022. Social preferences or sacred values? Theory and evidence of deontological motivations. *Science Advances* 8:19. . [\[Crossref\]](#)
 20. Sayantan Ghosal, Smarajit Jana, Anandi Mani, Sandip Mitra, Sanchari Roy. 2022. Sex Workers, Stigma, and Self-Image: Evidence from Kolkata Brothels. *The Review of Economics and Statistics* 104:3, 431-448. [\[Crossref\]](#)
 21. Marta Serra-Garcia, Nora Szech. 2022. Incentives and Defaults Can Increase COVID-19 Vaccine Intentions and Test Demand. *Management Science* 114. . [\[Crossref\]](#)
 22. Sean F. Ellis, Olesya M. Savchenko, Kent D. Messer. 2022. Mitigating stigma associated with recycled water. *American Journal of Agricultural Economics* 104:3, 1077-1099. [\[Crossref\]](#)
 23. Franklin Shaddy, Anuj K. Shah. 2022. When to Use Markets, Lines, and Lotteries: How Beliefs About Preferences Shape Beliefs About Allocation. *Journal of Marketing* 86:3, 140-156. [\[Crossref\]](#)
 24. Martin Hagen. 2022. Tradable immigration quotas revisited. *Journal of Public Economics* 208, 104619. [\[Crossref\]](#)
 25. Wen You, Yuan Yuan, Kevin J. Boyle, Tzeyu L. Michaud, Chris Parmeter, Richard W. Seidel, Paul A. Estabrooks. 2022. Examining Ways to Improve Weight Control Programs' Population Reach and Representativeness: A Discrete Choice Experiment of Financial Incentives. *Pharmacoeconomics - Open* 6:2, 193-210. [\[Crossref\]](#)
 26. Mengling Li, Yohanes E. Riyanto, Menghan Xu. 2022. Remedying adverse selection in donor-priority rule using freeze period: Theory and experiment. *Journal of Economic Behavior & Organization* 194, 384-407. [\[Crossref\]](#)
 27. Y. P. Voronov. 2022. Reduction and Substitution of Markets. *The world of new economy* 15:3, 6-16. [\[Crossref\]](#)
 28. Jim Leitzel. 2022. Athens or London? The Parthenon Marbles and economic efficiency. *Social Sciences & Humanities Open* 6:1, 100325. [\[Crossref\]](#)
 29. Michel Callon, Alvin E. Roth. 2021. The design and performance of markets: a discussion. *AMS Review* 11:3-4, 219-239. [\[Crossref\]](#)
 30. Christian Johannes Meyer, Egon Tripodi. 2021. Image concerns in pledges to give blood: Evidence from a field experiment. *Journal of Economic Psychology* 87, 102434. [\[Crossref\]](#)
 31. Julien Gradoz. 2021. Modérer l'activité des modérateurs ?. *Revue Française de Socio-Économie* n° 27:2, 231-239. [\[Crossref\]](#)
 32. Chian Jones Ritten, Christopher Bastian, Owen Phillips. 2021. The relative effectiveness of law enforcement policies aimed at reducing illegal trade: Evidence from laboratory markets. *PLOS ONE* 16:11, e0259254. [\[Crossref\]](#)
 33. Milan Zafirovski. 2021. Economics in sociology? Original economic theories, concepts and approaches in classical sociologists. *Review of Social Economy* 79:4, 664-716. [\[Crossref\]](#)
 34. Marina Della Giusta, Maria Laura Di Tommaso, Sarah Jewell, Francesca Bettio. 2021. Quashing demand or changing clients? Evidence of criminalization of sex work in the United Kingdom. *Southern Economic Journal* 88:2, 527-544. [\[Crossref\]](#)
 35. Afshin Nikzad, Mohammad Akbarpour, Michael A. Rees, Alvin E. Roth. 2021. Global kidney chains. *Proceedings of the National Academy of Sciences* 118:36. . [\[Crossref\]](#)
 36. Yan Chen, Peter Cramton, John A. List, Axel Ockenfels. 2021. Market Design, Human Behavior, and Management. *Management Science* 67:9, 5317-5348. [\[Crossref\]](#)

37. Itai Ashlagi, Alvin E. Roth. 2021. Kidney Exchange: An Operations Perspective. *Management Science* **67**:9, 5455-5478. [[Crossref](#)]
38. Clarissa Ricci, Marie Tavinor. 2021. Art, market and agency at the Venice Biennale, 1895–1993. *Journal of Modern Italian Studies* **26**:4, 369–381. [[Crossref](#)]
39. Christina Leuker, Lasare Samartzidis, Ralph Hertwig. 2021. What makes a market transaction morally repugnant?. *Cognition* **212**, 104644. [[Crossref](#)]
40. Viola Ackfeld, Axel Ockenfels. 2021. Do people intervene to make others behave prosocially?. *Games and Economic Behavior* **128**, 58-72. [[Crossref](#)]
41. Christian Bessy. 2021. Addressing Moral Concerns Raised by the Market. *OEconomia* :11-2, 349-364. [[Crossref](#)]
42. Juan Camilo Castillo, Amrita Ahuja, Susan Athey, Arthur Baker, Eric Budish, Tasneem Chifty, Rachel Glennerster, Scott Duke Kominers, Michael Kremer, Greg Larson, Jean Lee, Canice Prendergast, Christopher M. Snyder, Alex Tabarrok, Brandon Joel Tan, Witold Włódek. 2021. Market design to accelerate COVID-19 vaccine supply. *Science* **371**:6534, 1107-1109. [[Crossref](#)]
43. Holly Fernandez Lynch, Thomas C. Darton, Jae Levy, Frank McCormick, Ubaka Ogbogu, Ruth O. Payne, Alvin E. Roth, Akilah Jefferson Shah, Thomas Smiley, Emily A. Largent. 2021. Promoting Ethical Payment in Human Infection Challenge Studies. *The American Journal of Bioethics* **21**:3, 11-31. [[Crossref](#)]
44. Sandro Ambuehl, B. Douglas Bernheim, Axel Ockenfels. 2021. What Motivates Paternalism? An Experimental Study. *American Economic Review* **111**:3, 787-830. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
45. Maria Irene Bellini, Vito Cantisani, Augusto Lauro, Vito D'Andrea. 2021. Living Kidney Donation: Practical Considerations on Setting Up a Program. *Transplantation* **2**:1, 75-86. [[Crossref](#)]
46. Geoffrey M. Hodgson. 2021. On the limits of markets. *Journal of Institutional Economics* **17**:1, 153-170. [[Crossref](#)]
47. Franklin Shaddy, Ayelet Fishbach, Itamar Simonson. 2021. Trade-Offs in Choice. *Annual Review of Psychology* **72**:1, 181-206. [[Crossref](#)]
48. Philip A. Powell. Disgust and Consumer Behaviour 259-279. [[Crossref](#)]
49. Scott Cunningham, Manisha Shah. Economics of Sex Work and Policy Considerations 1-19. [[Crossref](#)]
50. Jaehong Kim, Mengling Li, Menghan Xu. 2021. Organ donation with vouchers. *Journal of Economic Theory* **191**, 105159. [[Crossref](#)]
51. Gabriel Martinez. 2021. Seguro De Salud En México, Siguientes Pasos (Health Insurance in Mexico, Next Steps). *SSRN Electronic Journal* . [[Crossref](#)]
52. Edwin Muñoz. 2021. Incentive-Compatible Triaging in Deceased Donor Transplantation. *SSRN Electronic Journal* **18** . [[Crossref](#)]
53. Scott Duke Kominers, Alexander Teytelboym. 2020. The Parable of the Auctioneer: Complexity in Paul R. Milgrom's Discovering Prices. *Journal of Economic Literature* **58**:4, 1180-1196. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
54. Etienne Mullet, Maria da Conceição Pinto, Félix Neto. 2020. Mapping Brazilian and Portuguese Young People's Positions Towards Highly Paid Sex Work. *Sexuality Research and Social Policy* **17**:4, 568-581. [[Crossref](#)]
55. Leticia Micheli, Nickolas Gagnon. 2020. Unequal chances: ex ante fairness and individual control. *Scientific Reports* **10**:1. . [[Crossref](#)]

56. Sandro Ambuehl, Axel Ockenfels, Alvin E. Roth. 2020. Payment in challenge studies from an economics perspective. *Journal of Medical Ethics* 46:12, 831-832. [[Crossref](#)]
57. Yoel Inbar, Jordan Phelps, Paul Rozin. 2020. Recency negativity: Newer food crops are evaluated less favorably. *Appetite* 154, 104754. [[Crossref](#)]
58. Zoë Hitzig. 2020. The normative gap: mechanism design and ideal theories of justice. *Economics and Philosophy* 36:3, 407-434. [[Crossref](#)]
59. Alvin E. Roth, Stephanie W. Wang. 2020. Popular repugnance contrasts with legal bans on controversial markets. *Proceedings of the National Academy of Sciences* 117:33, 19792-19798. [[Crossref](#)]
60. Abu Bakkar Siddique, Vandana Apte, Sigrid Fry-Revere, Yanhong Jin, Naoru Koizumi. 2020. The impact of country reimbursement programmes on living kidney donations. *BMJ Global Health* 5:8, e002596. [[Crossref](#)]
61. Rita Risser. 2020. The Theatre of National Identity in Modern Sport. *Sport, Ethics and Philosophy* 14:3, 377-390. [[Crossref](#)]
62. Johannes Becker. 2020. Besteuern, wo Werte geschaffen werden – Aufstieg und Niedergang eines Prinzips. *Perspektiven der Wirtschaftspolitik* 21:2, 108-119. [[Crossref](#)]
63. Ricardo Rodrigues. 2020. Caring relationships and their role in users' choices: a study of users of Direct Payments in England. *Ageing and Society* 40:7, 1469-1489. [[Crossref](#)]
64. Andreas Ostermaier, Dominik van Aaken. 2020. Freedom trumps profit: a liberal approach to business ethics. *Journal of Business Economics* 90:5-6, 947-962. [[Crossref](#)]
65. Subimal Chatterjee, M. Deniz Dalman, Satadruta Mookherjee. 2020. To short or not to short? Improving morality judgments of short trades and short traders. *Journal of Business Research* 114, 173-185. [[Crossref](#)]
66. Peter Cramton, Axel Ockenfels, Alvin E. Roth, Robert B. Wilson. 2020. Borrow crisis tactics to get COVID-19 supplies to where they are needed. *Nature* 582:7812, 334-336. [[Crossref](#)]
67. N. Meenakshi. 2020. Taboo in consumption: Social structure, gender and sustainable menstrual products. *International Journal of Consumer Studies* 44:3, 243-257. [[Crossref](#)]
68. Erwin Dekker, Blaž Remic, Carolina Dalla Chiesa. 2020. Incentives Matter, But What Do They Mean? Understanding the Meaning of Market Coordination. *Review of Political Economy* 32:2, 163-179. [[Crossref](#)]
69. Andrew Mackenzie. 2020. An axiomatic analysis of the papal conclave. *Economic Theory* 69:3, 713-743. [[Crossref](#)]
70. Christina Leuker, Lasare Samartzidis, Ralph Hertwig, Timothy J. Pleskac. 2020. When money talks: Judging risk and coercion in high-paying clinical trials. *PLOS ONE* 15:1, e0227898. [[Crossref](#)]
71. Nissim Cohen, Anna Rubinchik, Labib Shami. 2020. Towards a cashless economy: Economic and socio-political implications. *European Journal of Political Economy* 61, 101820. [[Crossref](#)]
72. Antonio J. Trujillo, Taruja Karmarkar, Caleb Alexander, William Padula, Jeremy Greene, Gerard Anderson. 2020. Fairness in drug prices: do economists think differently from the public?. *Health Economics, Policy and Law* 15:1, 18-29. [[Crossref](#)]
73. Jason Potts. 2020. Evolution of the Digital Economy: A Research Program for Evolutionary Economics. *SSRN Electronic Journal* . [[Crossref](#)]
74. Navaz Naghavi, Muhammad Shujaat Mubarak, Rajah Rasiyah, Hamid Sharif Nia. 2020. <p>Prioritizing Factors Affecting Deceased Organ Donation in Malaysia: Is a New Organ Donation System Required? </p>. *International Journal of General Medicine* Volume 13, 641-651. [[Crossref](#)]

75. Antoine Beretti, Charles Figuères, Gilles Grolleau. 2019. How to turn crowding-out into crowding-in? An innovative instrument and some law-related examples. *European Journal of Law and Economics* 48:3, 417-438. [[Crossref](#)]
76. Milan Zafirovski. 2019. Always Rational Choice Theory? Lessons from Conventional Economics and Their Relevance and Potential Benefits for Contemporary Sociologists. *The American Sociologist* 50:4, 509-547. [[Crossref](#)]
77. Philip A. Powell, Christopher R. Jones, Nathan S. Consedine. 2019. It's not queasy being green: The role of disgust in willingness-to-pay for more sustainable product alternatives. *Food Quality and Preference* 78, 103737. [[Crossref](#)]
78. Paavo Monkkonen, Michael Manville. 2019. Opposition to development or opposition to developers? Experimental evidence on attitudes toward new housing. *Journal of Urban Affairs* 41:8, 1123-1141. [[Crossref](#)]
79. Philippe Steiner. 2019. Altruism, sociology and the history of economic thought. *The European Journal of the History of Economic Thought* 26:6, 1252-1274. [[Crossref](#)]
80. Nikhil Agarwal, Itai Ashlagi, Eduardo Azevedo, Clayton R. Featherstone, Ömer Karaduman. 2019. Market Failure in Kidney Exchange. *American Economic Review* 109:11, 4026-4070. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
81. Angelique Slade Shantz, Eileen Fischer, Aurora Liu, Moren Lévesque. 2019. Spoils from the Spoiled: Strategies for Entering Stigmatized Markets. *Journal of Management Studies* 56:7, 1260-1286. [[Crossref](#)]
82. Brigitte Roth Tran. 2019. Divest, Disregard, or Double Down? Philanthropic Endowment Investments in Objectionable Firms. *American Economic Review: Insights* 1:2, 241-256. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
83. Pascal Courty. 2019. Ticket resale, bots, and the fair price ticketing curse. *Journal of Cultural Economics* 43:3, 345-363. [[Crossref](#)]
84. Julio J. Elías, Nicola Lacetera, Mario Macis. 2019. Paying for Kidneys? A Randomized Survey and Choice Experiment. *American Economic Review* 109:8, 2855-2888. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
85. Alvin E. Roth, Robert B. Wilson. 2019. How Market Design Emerged from Game Theory: A Mutual Interview. *Journal of Economic Perspectives* 33:3, 118-143. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
86. Sara Degli Esposti, Vincenzo Pavone. 2019. Oocyte provision as a (quasi) social market: Insights from Spain. *Social Science & Medicine* 234, 112381. [[Crossref](#)]
87. Lawrence Rothfield. 2019. The Past Polluted: A Pigovian Approach to the Black Market in Antiquities. *International Journal of Cultural Property* 26:3, 343-355. [[Crossref](#)]
88. Adrian Walsh. Commodification 1-8. [[Crossref](#)]
89. Conor Lennon, Jose Fernandez, Stephan Gohmann, Keith Teltser. 2019. Minimum Wages, Morality, and Efficiency: A Choice Experiment. *AEA Papers and Proceedings* 109, 176-181. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
90. J.C. Sharman. 2019. Power and Profit at Sea: The Rise of the West in the Making of the International System. *International Security* 43:4, 163-196. [[Crossref](#)]
91. John P. Dickerson, Ariel D. Procaccia, Tuomas Sandholm. 2019. Failure-Aware Kidney Exchange. *Management Science* 65:4, 1768-1791. [[Crossref](#)]
92. Yew-Kwang Ng. Markets and Morals 80, . [[Crossref](#)]

93. Fabio Bertoni, Diego D'Adda, Luca Grilli. 2019. Self-selection of entrepreneurial firms in thin venture capital markets: Theory and empirical evidence. *Strategic Entrepreneurship Journal* 13:1, 47-74. [[Crossref](#)]
94. Ryan Gillespie. 2019. What Money Cannot Buy and What Money Ought Not Buy: Dignity, Motives, and Markets in Human Organ Procurement Debates. *Journal of Medical Humanities* 40:1, 101-116. [[Crossref](#)]
95. Trine Tornøe Platz, Nikolaj Siersbæk, Lars Peter Østerdal. 2019. Ethically Acceptable Compensation for Living Donations of Organs, Tissues, and Cells: An Unexploited Potential?. *Applied Health Economics and Health Policy* 17:1, 1-14. [[Crossref](#)]
96. Farhad Gohardani, Zahra Tizro. Institutional Failure 189-228. [[Crossref](#)]
97. Vincent Conitzer, Rupert Freeman. Algorithmically Driven Shared Ownership Economies 275-285. [[Crossref](#)]
98. Virgil Henry Storr, Ginny Seung Choi. Can Markets Be Moral? 1-15. [[Crossref](#)]
99. A. Rebecca Reuber, Anna Morgan-Thomas. 2019. Communicating Moral Legitimacy in Controversial Industries: The Trade in Human Tissue. *Journal of Business Ethics* 154:1, 49-63. [[Crossref](#)]
100. Richard E. Ericson, Lester Zeager. 2019. Coordination and Fair Division in Refugee Responsibility Sharing. *SSRN Electronic Journal* . [[Crossref](#)]
101. Martin Hagen. 2019. Refugee Relocation: A Mechanism Design Perspective. *SSRN Electronic Journal* . [[Crossref](#)]
102. L. Michelle Bruijn, Rafael Perez Ribas. 2019. 'No Drugs in My Back Yard:' the Ambivalent Reception of Cannabis Retailers. *SSRN Electronic Journal* . [[Crossref](#)]
103. Anna Gunnthorsdottir, Douglas A. Norton. Introduction to Experimental Economics and Culture 1-24. [[Crossref](#)]
104. Suzanne B. Shu, Robert Zeithammer, John W. Payne. 2018. The pivotal role of fairness: Which consumers like annuities?. *FINANCIAL PLANNING REVIEW* 7, e1019. [[Crossref](#)]
105. Ya'akov M. Bayer, Bradley J. Ruffle, Zeev Shtudiner, Ro'i Zultan. 2018. Costly superstitious beliefs: Experimental evidence. *Journal of Economic Psychology* 69, 30-43. [[Crossref](#)]
106. Oliver Schilke, Gabriel Rossman. 2018. It's Only Wrong If It's Transactional: Moral Perceptions of Obfuscated Exchange. *American Sociological Review* 83:6, 1079-1107. [[Crossref](#)]
107. Philip J. Held, Frank McCormick, Glenn M. Chertow, Thomas G. Peters, John P. Roberts. 2018. Would government compensation of living kidney donors exploit the poor? An empirical analysis. *PLOS ONE* 13:11, e0205655. [[Crossref](#)]
108. Björn Meder, Nadine Fleischhut, Magda Osman. 2018. Beyond the confines of choice architecture: A critical analysis. *Journal of Economic Psychology* 68, 36-44. [[Crossref](#)]
109. Ekant Veer, Maja Golf-Papez. 2018. Physically freeing: breaking taboos through online displays of the sexual self. *Journal of Marketing Management* 34:13-14, 1105-1125. [[Crossref](#)]
110. Gretchen Larsen, Maurice Patterson, Ouidade Sabri, Luciana Walther. 2018. A commentary on the treatment of taboo in consumption and marketing. *Journal of Marketing Management* 34:13-14, 1067-1077. [[Crossref](#)]
111. Julian J. Koplin. 2018. Commodification and Human Interests. *Journal of Bioethical Inquiry* 15:3, 429-440. [[Crossref](#)]
112. Djavlonbek Kadirov. 2018. Towards a Theory of Marketing Systems as the Public Good. *Journal of Macromarketing* 38:3, 278-297. [[Crossref](#)]

113. Sydney E. Scott, Yoel Inbar, Christopher D. Wirz, Dominique Brossard, Paul Rozin. 2018. An Overview of Attitudes Toward Genetically Engineered Food. *Annual Review of Nutrition* **38**:1, 459-479. [[Crossref](#)]
114. Itai Ashlagi. Market Design 31-49. [[Crossref](#)]
115. Alvin E. Roth. 2018. Marketplaces, Markets, and Market Design. *American Economic Review* **108**:7, 1609-1658. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
116. Zackary Hawley, Danyang Li, Kurt Schnier, Nicole Turgeon. 2018. Can we increase organ donation by reducing the disincentives? An experimental analysis. *Economics & Human Biology* **29**, 128-137. [[Crossref](#)]
117. Mohammad Mehdi Nayebpour, Naoru Koizumi. 2018. The Social Stigma of Selling Kidneys in Iran as a Barrier to Entry: A Social Determinant of Health. *World Medical & Health Policy* **10**:1, 55-64. [[Crossref](#)]
118. Elias L. Khalil, Alain Marciano. 2018. A Theory of Tasteful and Distasteful Transactions. *Kyklos* **71**:1, 110-131. [[Crossref](#)]
119. Michael A. Clemens. 2018. Testing for Repugnance in Economic Transactions: Evidence from Guest Work in the Gulf. *The Journal of Legal Studies* **47**:S1, S5-S44. [[Crossref](#)]
120. Suzanne B. Shu. Psychological Ownership in Financial Decisions 165-176. [[Crossref](#)]
121. Kurt E. Schnier, Robert M. Merion, Nicole Turgeon, David Howard. 2018. SUBSIDIZING ALTRUISM IN LIVING ORGAN DONATION. *Economic Inquiry* **56**:1, 398-423. [[Crossref](#)]
122. Piotr Dworzak, Scott Duke Kominers, Mohammad Akbarpour. 2018. Redistribution through Markets. *SSRN Electronic Journal* **64**. . [[Crossref](#)]
123. Ya'akov M. Bayer, Bradley J. Ruffle, Ze'ev Shtudiner, Ro'i Zultan. 2018. Costly Superstitious Beliefs: Experimental Evidence. *SSRN Electronic Journal* . [[Crossref](#)]
124. Sandro Ambuehl, Axel Ockenfels, Colin Stewart. 2018. For They Know Not What They Do: Selection Through Incentives When Information is Costly. *SSRN Electronic Journal* . [[Crossref](#)]
125. Patrick Harless, Romans Pancs. 2018. A Social-Status Rationale for Repugnant and Protected Market Transactions. *SSRN Electronic Journal* **36**. . [[Crossref](#)]
126. Gerard P Cachon, Pnina Feldman. 2018. Pricing Capacity Over Time and Recourse Strategies: Facilitate Reselling, Offer Refunds/Options, or Overbook?. *SSRN Electronic Journal* . [[Crossref](#)]
127. Zoë Hitzig. 2018. Bridging the 'Normative Gap': Mechanism Design and Social Justice. *SSRN Electronic Journal* **106**. . [[Crossref](#)]
128. John B. Davis. 2018. Comment on White on the Relationship Between Economics and Ethics. *SSRN Electronic Journal* . [[Crossref](#)]
129. Conor Lennon, Jose M. Fernandez, Stephan Gohmann, Keith Teltser. 2018. Minimum Wages, Morality, and Efficiency: A Choice Experiment. *SSRN Electronic Journal* . [[Crossref](#)]
130. Julio J. Elias, Nicola Lacetera, Mario Macis. 2017. Understanding Repugnance: Implications for Public Policy. *World Medical & Health Policy* **9**:4, 489-504. [[Crossref](#)]
131. Philippe van Basshuysen. 2017. Towards a Fair Distribution Mechanism for Asylum. *Games* **8**:4, 41. [[Crossref](#)]
132. Shengwu Li. 2017. Ethics and market design. *Oxford Review of Economic Policy* **33**:4, 705-720. [[Crossref](#)]
133. Tayfun Sönmez, M Utku Ünver. 2017. Market design for living-donor organ exchanges: an economic policy perspective. *Oxford Review of Economic Policy* **33**:4, 676-704. [[Crossref](#)]
134. Shengwu Li. 2017. Obviously Strategy-Proof Mechanisms. *American Economic Review* **107**:11, 3257-3287. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]

135. Michael Jakob, Dorothea Kübler, Jan Christoph Steckel, Roel van Veldhuizen. 2017. Clean up your own mess: An experimental study of moral responsibility and efficiency. *Journal of Public Economics* **155**, 138-146. [[Crossref](#)]
136. Jean-Paul Carvalho. 2017. Coordination and culture. *Economic Theory* **64**:3, 449-475. [[Crossref](#)]
137. Peter M. Jaworski. 2017. Who Gets What—and Why: The New Economics of Matchmaking and Market Design, Alvin E. Roth . Houghton Mifflin Harcourt, 2015, 262 pages. *Economics and Philosophy* **33**:2, 332-336. [[Crossref](#)]
138. Julio J. Elias, Nicola Lacetera, Mario Macis, Paola Salardi. 2017. Economic Development and the Regulation of Morally Contentious Activities. *American Economic Review* **107**:5, 76-80. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
139. Kieran Healy, Kimberly D. Krawiec. 2017. Repugnance Management and Transactions in the Body. *American Economic Review* **107**:5, 86-90. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
140. Sandro Ambuehl, Axel Ockenfels. 2017. The Ethics of Incentivizing the Uninformed: A Vignette Study. *American Economic Review* **107**:5, 91-95. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
141. Jaeok Park. 2017. Competitive equilibrium and singleton cores in generalized matching problems. *International Journal of Game Theory* **46**:2, 487-509. [[Crossref](#)]
142. Avraham Stoler, Judd B. Kessler, Tamar Ashkenazi, Alvin E. Roth, Jacob Lavee. 2017. Incentivizing Organ Donor Registrations with Organ Allocation Priority. *Health Economics* **26**:4, 500-510. [[Crossref](#)]
143. Shengwu Li. 2017. Ethics and Market Design. *SSRN Electronic Journal* **93**. . [[Crossref](#)]
144. Julio Elias, Nicola Lacetera, Mario Macis. 2017. Understanding Repugnance: Implications for Public Policy. *SSRN Electronic Journal* **21**. . [[Crossref](#)]
145. Marco Fabbri. 2017. How Institutions Shape Preferences: Experimental Evidence from a Large-Scale Property Rights Reform Implemented as Randomized Control-Trial. *SSRN Electronic Journal* **97**. . [[Crossref](#)]
146. Michael A. Clemens. 2017. Testing for Repugnance in Economic Transactions: Evidence from Guest Work in the Gulf. *SSRN Electronic Journal* . [[Crossref](#)]
147. Joseph Bernstein. 2016. Not the Last Word: Ending The Residency Application Arms Race—Starting with the USMLE. *Clinical Orthopaedics and Related Research*® **474**:12, 2571-2576. [[Crossref](#)]
148. Vikram Manjunath. 2016. Fractional matching markets. *Games and Economic Behavior* **100**, 321-336. [[Crossref](#)]
149. Uta K. Schier, Axel Ockenfels, Wilhelm Hofmann. 2016. Moral values and increasing stakes in a dictator game. *Journal of Economic Psychology* **56**, 107-115. [[Crossref](#)]
150. JL Chong. 2016. Policy options for increasing the supply of transplantable kidneys in Singapore. *Singapore Medical Journal* **57**:10, 530-532. [[Crossref](#)]
151. . Références bibliographiques 389-408. [[Crossref](#)]
152. 2016. Book Reviews. *Journal of Economic Literature* **54**:3, 942-958. [[Citation](#)] [[View PDF article](#)] [[PDF with links](#)]
153. 2016. Book Reviews. *Journal of Economic Literature* **54**:3, 953-955. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
154. 2016. Book Reviews. *Journal of Economic Literature* **54**:3, 955-957. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
155. A. Stoler, J. B. Kessler, T. Ashkenazi, A. E. Roth, J. Lavee. 2016. Incentivizing Authorization for Deceased Organ Donation With Organ Allocation Priority: The First 5 Years. *American Journal of Transplantation* **16**:9, 2639-2645. [[Crossref](#)]

156. Jennifer Jacquet, Nicolas Delon. 2016. The values behind calculating the value of trophy hunting. *Conservation Biology* **30**:4, 910-911. [[Crossref](#)]
157. Tianshu Sun, Susan Feng Lu, Ginger Zhe Jin. 2016. Solving shortage in a priceless market: Insights from blood donation. *Journal of Health Economics* **48**, 149-165. [[Crossref](#)]
158. Erik O. Kimbrough, Alexander Vostroknutov. 2016. NORMS MAKE PREFERENCES SOCIAL. *Journal of the European Economic Association* **14**:3, 608-638. [[Crossref](#)]
159. Sydney E. Scott, Yoel Inbar, Paul Rozin. 2016. Evidence for Absolute Moral Opposition to Genetically Modified Food in the United States. *Perspectives on Psychological Science* **11**:3, 315-324. [[Crossref](#)]
160. Nicolas Brisset. 2016. Un marché sans marchandise ? Répugnance et matching market. *Revue d'économie politique* **Vol. 126**:2, 317-345. [[Crossref](#)]
161. Nicolas Brisset. 2016. Economics is not always performative: some limits for performativity. *Journal of Economic Methodology* **23**:2, 160-184. [[Crossref](#)]
162. Roland Pongou, Roberto Serrano. 2016. Volume of trade and dynamic network formation in two-sided economies. *Journal of Mathematical Economics* **63**, 147-163. [[Crossref](#)]
163. Thomas K. Gallagher, Anton I. Skaro, Michael M. Abecassis. 2016. Emerging Ethical Considerations of Donation After Circulatory Death. *Annals of Surgery* **263**:2, 217-218. [[Crossref](#)]
164. Dawn E. Kane, Rosalee S. Hellberg. 2016. Identification of species in ground meat products sold on the U.S. commercial market using DNA-based methods. *Food Control* **59**, 158-163. [[Crossref](#)]
165. Keisuke Bando, Ryo Kawasaki, Shigeo Muto. 2016. TWO-SIDED MATCHING WITH EXTERNALITIES: A SURVEY. *Journal of the Operations Research Society of Japan* **59**:1, 35-71. [[Crossref](#)]
166. Robert Slonim, Carmen Wang. 2016. Market Design for Altruistic Supply: Evidence from the Lab. *SSRN Electronic Journal* **95**. . [[Crossref](#)]
167. James A. Leitzel. 2016. The Parthenon Marbles in the British Museum. *SSRN Electronic Journal* . [[Crossref](#)]
168. Sandro Ambuehl. 2016. An Offer You Can't Refuse? Incentives Change What We Believe. *SSRN Electronic Journal* . [[Crossref](#)]
169. Daniel F. Stone, Daniel H. Wood. 2016. Cognitive Dissonance, Motivated Reasoning, and Confirmation Bias: Applications in Industrial Organization. *SSRN Electronic Journal* . [[Crossref](#)]
170. Boris Gershman. 2016. Long-Run Development and the New Cultural Economics. *SSRN Electronic Journal* . [[Crossref](#)]
171. Sandro Ambuehl, Axel Ockenfels. 2016. The Ethics of Incentivizing the Uninformed. A Vignette Study. *SSRN Electronic Journal* . [[Crossref](#)]
172. Zeynep Burcu Ugur. 2015. Does Presumed Consent Save Lives? Evidence from Europe. *Health Economics* **24**:12, 1560-1572. [[Crossref](#)]
173. Victor M. Bennett, Robert Seamans, Feng Zhu. 2015. Cannibalization and option value effects of secondary markets: Evidence from the US concert industry. *Strategic Management Journal* **36**:11, 1599-1614. [[Crossref](#)]
174. Kurt E. Schnier, Nicole Turgeon, Bruce Kaplan. 2015. A Primer of Neoclassical (Traditional) and Behavioral Economic Principles for Organ Transplantation. *Transplantation* **99**:11, 2247-2251. [[Crossref](#)]
175. Sebastian Lotz. 2015. Engineering Fairness? Market Design as a Resource for Social Justice Research. *Social Justice Research* **28**:3, 391-399. [[Crossref](#)]
176. GIUSEPPE SCHIAVONE, MATTEO MAMELI, GIOVANNI BONIOLO. 2015. Epistocracy for Online Deliberative Bioethics. *Cambridge Quarterly of Healthcare Ethics* **24**:3, 272-280. [[Crossref](#)]

177. Nicolas Brisset. 2015. Nicolas Brisset, Performativité des énoncés de la théorie économique : une approche conventionnaliste. *Revue de la régulation* :17. . [[Crossref](#)]
178. Sandro Ambuehl, Muriel Niederle, Alvin E. Roth. 2015. More Money, More Problems? Can High Pay be Coercive and Repugnant?. *American Economic Review* **105**:5, 357-360. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
179. Julio J. Elias, Nicola Lacetera, Mario Macis. 2015. Sacred Values? The Effect of Information on Attitudes toward Payments for Human Organs. *American Economic Review* **105**:5, 361-365. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
180. D. R. Salomon, A. N. Langnas, A. I. Reed, R. D. Bloom, J. C. Magee, R. S. Gaston. 2015. AST/ASTS Workshop on Increasing Organ Donation in the United States: Creating an “Arc of Change” From Removing Disincentives to Testing Incentives. *American Journal of Transplantation* **15**:5, 1173-1179. [[Crossref](#)]
181. David Austen-Smith. 2015. Jon Elster's Securities against Misrule: Juries, Assemblies, Elections: A Review Essay. *Journal of Economic Literature* **53**:1, 65-78. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
182. Anna Bogomolnaia, Herve Moulin. 2015. Size versus fairness in the assignment problem. *Games and Economic Behavior* **90**, 119-127. [[Crossref](#)]
183. Alvin E. Roth. 2015. Transplantation. *Transplantation* **99**:2, 261-264. [[Crossref](#)]
184. Yuichiro Kamada, Fuhito Kojima. 2015. Efficient Matching under Distributional Constraints: Theory and Applications. *American Economic Review* **105**:1, 67-99. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
185. G. Immordino, F.F. Russo. 2015. Regulating prostitution: A health risk approach. *Journal of Public Economics* **121**, 14-31. [[Crossref](#)]
186. E. J. Gordon, C. H. Patel, M.-W. Sohn, B. Hippen, L. A. Sherman. 2015. Does Financial Compensation for Living Kidney Donation Change Willingness to Donate?. *American Journal of Transplantation* **15**:1, 265-273. [[Crossref](#)]
187. Shengwu Li. 2015. Obviously Strategy-Proof Mechanisms. *SSRN Electronic Journal* **106**. . [[Crossref](#)]
188. Thomas Randolph Beard, James A. Leitzel. 2015. Compensated Live Kidney Donations. *SSRN Electronic Journal* **12**. . [[Crossref](#)]
189. Mark Braverman, Sylvain Chassang. 2015. Data-Driven Incentive Alignment in Capitation Schemes. *SSRN Electronic Journal* **23**. . [[Crossref](#)]
190. Milan Zafirovski. 2014. Rational Choice Requiem: The Decline of an Economic Paradigm and its Implications for Sociology. *The American Sociologist* **45**:4, 432-452. [[Crossref](#)]
191. Ruggiero Cavallo. 2014. Incentive compatible allocation without money. *ACM SIGecom Exchanges* **13**:1, 68-71. [[Crossref](#)]
192. Dan Weijers, Jennifer Richardson. 2014. Is the repugnance about betting on terrorist attacks misguided?. *Ethics and Information Technology* **16**:3, 251-262. [[Crossref](#)]
193. Itai Ashlagi, Alvin E. Roth. 2014. Free riding and participation in large scale, multi-hospital kidney exchange. *Theoretical Economics* **9**:3, 817-863. [[Crossref](#)]
194. Keren Ladin, Rui Wang, Douglas W. Hanto. National Healthcare Policy, Transplant-specific Statutes, and the Future of Organ Transplantation 1703-1723. [[Crossref](#)]
195. Ana Cordeiro Santos, João Rodrigues. 2014. Neoliberalism in the Laboratory? Experimental Economics on Markets and their Limits. *New Political Economy* **19**:4, 507-533. [[Crossref](#)]
196. Judd B. Kessler, Alvin E. Roth. 2014. Loopholes undermine donation: An experiment motivated by an organ donation priority loophole in Israel. *Journal of Public Economics* **114**, 19-28. [[Crossref](#)]

197. Judd B. Kessler, Alvin E. Roth. 2014. Getting More Organs for Transplantation. *American Economic Review* **104**:5, 425-430. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
198. Robert Slonim, Carmen Wang, Ellen Garbarino. 2014. The Market for Blood. *Journal of Economic Perspectives* **28**:2, 177-196. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
199. Raphael Giesecke. The electric mobility business ecosystem 1-13. [[Crossref](#)]
200. Audrey Abitan, Silvia Krauth-Gruber. 2014. « Ça me dégoûte », « Tu me dégoûtes » : déterminants et conséquences du dégoût physique et moral. *L'Année psychologique* **Vol. 114**:1, 97-124. [[Crossref](#)]
201. Audrey Abitan, Silvia Krauth-Gruber. 2014. « Ça me dégoûte », « Tu me dégoûtes » : déterminants et conséquences du dégoût physique et moral. *L'Année psychologique* **114**:01, 97-124. [[Crossref](#)]
202. Élodie Bertrand. 2014. Autorisation à l'échange sur des externalités. *Revue économique* **Vol. 65**:2, 439-459. [[Crossref](#)]
203. Alberto Alesina, Francesco Passarelli. 2014. Regulation versus taxation. *Journal of Public Economics* **110**, 147-156. [[Crossref](#)]
204. Stephen E. G. Lea, Paul Webley. Money: Metaphors and Motives 21-35. [[Crossref](#)]
205. Nicola Lacetera, Mario Macis, Sarah S. Stith. 2014. Removing financial barriers to organ and bone marrow donation: The effect of leave and tax legislation in the U.S. *Journal of Health Economics* **33**, 43-56. [[Crossref](#)]
206. P. Leslie, A. Sorensen. 2014. Resale and Rent-Seeking: An Application to Ticket Markets. *The Review of Economic Studies* **81**:1, 266-300. [[Crossref](#)]
207. Jens Beckert, Frank P. Wehinger. 2014. In the Shadow. Illegal Markets and Economic Sociology. *SSRN Electronic Journal* . [[Crossref](#)]
208. SangMok Lee, Leeat Yariv. 2014. On the Efficiency of Stable Matchings in Large Markets. *SSRN Electronic Journal* . [[Crossref](#)]
209. Zeljka Buturovic, Slavisa Tasic. 2014. Action-Hesitancy Model: Alternative Psychological Foundations for Economics. *SSRN Electronic Journal* . [[Crossref](#)]
210. Nicolas Brisset. 2014. Performer par le dispositif? Un retour critique sur la théorie de la performativité. *L'Année sociologique* **64**:1, 217. [[Crossref](#)]
211. Nicolas Piluso. 2013. Choix technologiques des firmes et équilibres de consommation contestée. *Revue d'économie industrielle* :143, 109-131. [[Crossref](#)]
212. Nicola Lacetera, Mario Macis, Robert Slonim. 2013. In Defense of WHO's Blood Donation Policy —Response. *Science* **342**:6159, 692-692. [[Crossref](#)]
213. Françoise Forges, Guillaume Haeringer, Vincent Iehlé. 2013. Appariement : des modèles de Lloyd Shapley à la conception de marchés d'Alvin Roth. *Revue d'économie politique* **Vol. 123**:5, 663-696. [[Crossref](#)]
214. Michael J. Sandel. 2013. Market Reasoning as Moral Reasoning: Why Economists Should Re-engage with Political Philosophy. *Journal of Economic Perspectives* **27**:4, 121-140. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
215. Daniele Condorelli. 2013. Market and non-market mechanisms for the optimal allocation of scarce resources. *Games and Economic Behavior* **82**, 582-591. [[Crossref](#)]
216. Philip Roscoe. 2013. On the Possibility of Organ Markets and the Performativity of Economics. *Journal of Cultural Economy* **6**:4, 386-401. [[Crossref](#)]
217. Philippe Steiner. 14. La marchandisation de l'humain et de la personne 519-558. [[Crossref](#)]
218. JOSE M. FERNANDEZ, DAVID H. HOWARD, LISA STOHR KROESE. 2013. THE EFFECT OF CADAVERIC KIDNEY DONATIONS ON LIVING KIDNEY DONATIONS: AN INSTRUMENTAL VARIABLES APPROACH. *Economic Inquiry* **51**:3, 1696-1714. [[Crossref](#)]

219. Timothy Besley. 2013. What's the Good of the Market? An Essay on Michael Sandel's What Money Can't Buy. *Journal of Economic Literature* 51:2, 478-495. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
220. Yu Wang, Ernan Haruvy. 2013. Tiers in One-Sided Matching Markets: Theory and Experimental Investigation. *Management Science* 59:6, 1458-1477. [[Crossref](#)]
221. Nicola Lacetera, Mario Macis, Robert Slonim. 2013. Economic Rewards to Motivate Blood Donations. *Science* 340:6135, 927-928. [[Crossref](#)]
222. A. Falk, N. Szech. 2013. Morals and Markets. *Science* 340:6133, 707-711. [[Crossref](#)]
223. Robert J. Shiller. 2013. Reflections on Finance and the Good Society. *American Economic Review* 103:3, 402-405. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
224. Cléa Sambuc. 2013. Les relations familiales, apports à l'analyse économique des transplantations d'organes. *Revue Française de Socio-Économie* n° 11:1, 181-200. [[Crossref](#)]
225. Christian Bessy, Pierre-Marie Chauvin. 2013. The Power of Market Intermediaries: From Information to Valuation Processes. *Valuation Studies* 1:1, 83-117. [[Crossref](#)]
226. Eric Budish,, Yeon-Koo Che,, Fuhito Kojima,, Paul Milgrom. 2013. Designing Random Allocation Mechanisms: Theory and Applications. *American Economic Review* 103:2, 585-623. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
227. Philippe Steiner. 2013. Altruismus, Egoismus und Individualismus in der Durkheim-Schule. *Trivium* :13. . [[Crossref](#)]
228. Adrian Walsh. Commodification . [[Crossref](#)]
229. Haris Aziz, Felix Brandt, Paul Stursberg. On Popular Random Assignments 183-194. [[Crossref](#)]
230. Surajeet Chakravarty, Todd R. Kaplan. 2013. Optimal allocation without transfer payments. *Games and Economic Behavior* 77:1, 1-20. [[Crossref](#)]
231. J. Beckert, F. Wehinger. 2013. In the shadow: illegal markets and economic sociology. *Socio-Economic Review* 11:1, 5-30. [[Crossref](#)]
232. Aditya Bhave, Eric B. Budish. 2013. Primary-Market Auctions for Event Tickets: Eliminating the Rents of 'Bob the Broker'. *SSRN Electronic Journal* . [[Crossref](#)]
233. Robert J. Shiller. 2013. Reflections on Finance and the Good Society. *SSRN Electronic Journal* . [[Crossref](#)]
234. Erik O. Kimbrough, Alexander Vostroknutov. 2013. Norms Make Preferences Social. *SSRN Electronic Journal* 115. . [[Crossref](#)]
235. Roland Pongou, Roberto Serrano. 2013. Volume of Trade and Dynamic Network Formation in Two-Sided Economies. *SSRN Electronic Journal* [jou_vol\[1\].xml](#)Text. . [[Crossref](#)]
236. Victor Bennett, Robert Seamans, Feng Zhu. 2013. Search Frictions, Secondary Markets, and Value Appropriation. *SSRN Electronic Journal* . [[Crossref](#)]
237. Joshua T. McCabe. 2012. What can sociology teach us about the ideational origins of modernity? Comments on McCloskey's Bourgeois Dignity. *The Journal of Socio-Economics* 41:6, 772-775. [[Crossref](#)]
238. John Cawley, Johanna Catherine Maclean. 2012. UNFIT FOR SERVICE: THE IMPLICATIONS OF RISING OBESITY FOR US MILITARY RECRUITMENT. *Health Economics* 21:11, 1348-1366. [[Crossref](#)]
239. 2012. Games and Prizes in the Economic (and Geographical?) Performance of Markets: Nobel, Shapley, and Roth. *Environment and Planning A: Economy and Space* 44:11, 2542-2545. [[Crossref](#)]
240. Gareth Veal, Stefanos Mouzas. 2012. Market-Based Responses to Climate Change: CO 2 Market Design versus Operation. *Organization Studies* 33:11, 1589-1616. [[Crossref](#)]

241. Judd B. Kessler,, Alvin E. Roth. 2012. Organ Allocation Policy and the Decision to Donate. *American Economic Review* **102**:5, 2018-2047. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
242. Joseph Farrell, Timothy Simcoe. 2012. Choosing the rules for consensus standardization. *The RAND Journal of Economics* **43**:2, 235-252. [[Crossref](#)]
243. Ghaleb Rabab'ah, Ali M. Al-Qarni. 2012. Euphemism in Saudi Arabic and British English. *Journal of Pragmatics* **44**:6-7, 730-743. [[Crossref](#)]
244. Roger Lee Mendoza. 2012. Transplant Management from a Vendor's Perspective. *Journal of Health Management* **14**:1, 67-74. [[Crossref](#)]
245. Cléa Sambuc. 2012. L'efficacité du marché des organes. *Revue économique* **Vol. 63**:1, 51-67. [[Crossref](#)]
246. Stephen Chen. 2012. Creating sustainable international social ventures. *Thunderbird International Business Review* **54**:1, 131-142. [[Crossref](#)]
247. Farshad Fatemi. The Regulated Market for Kidneys in Iran 62-75. [[Crossref](#)]
248. Adrian Muller. Contributions of Economics and Ethics to an Assessment of Emissions Trading 133-166. [[Crossref](#)]
249. Robin Lindsey. 2011. State-dependent congestion pricing with reference-dependent preferences. *Transportation Research Part B: Methodological* **45**:10, 1501-1526. [[Crossref](#)]
250. Eric Budish. 2011. The Combinatorial Assignment Problem: Approximate Competitive Equilibrium from Equal Incomes. *Journal of Political Economy* **119**:6, 1061-1103. [[Crossref](#)]
251. Lucas C. Coffman. 2011. Intermediation Reduces Punishment (and Reward). *American Economic Journal: Microeconomics* **3**:4, 77-106. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
252. Stacy Dickert-Conlin, Todd Elder, Brian Moore. 2011. Donorcycles: Motorcycle Helmet Laws and the Supply of Organ Donors. *The Journal of Law and Economics* **54**:4, 907-935. [[Crossref](#)]
253. A. C. Santos. 2011. Behavioural and experimental economics: are they really transforming economics?. *Cambridge Journal of Economics* **35**:4, 705-728. [[Crossref](#)]
254. Chaim Fershtman,, Uri Gneezy,, Moshe Hoffman. 2011. Taboos and Identity: Considering the Unthinkable. *American Economic Journal: Microeconomics* **3**:2, 139-164. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
255. Roland Bénabou, Jean Tirole. 2011. Identity, Morals, and Taboos: Beliefs as Assets *. *The Quarterly Journal of Economics* **126**:2, 805-855. [[Crossref](#)]
256. R. L. Mendoza. 2011. Price deflation and the underground organ economy in the Philippines. *Journal of Public Health* **33**:1, 101-107. [[Crossref](#)]
257. ALISON J. WELLINGTON, EDWARD A. SAYRE. 2011. AN EVALUATION OF FINANCIAL INCENTIVE POLICIES FOR ORGAN DONATIONS IN THE UNITED STATES. *Contemporary Economic Policy* **29**:1, 1-13. [[Crossref](#)]
258. Joseph Farrell, Timothy S. Simcoe. 2011. Choosing the Rules for Consensus Standardization. *SSRN Electronic Journal* . [[Crossref](#)]
259. Peyton Ferrier. 2010. Irradiation as a quarantine treatment. *Food Policy* **35**:6, 548-555. [[Crossref](#)]
260. Sallie Yea. 2010. Trafficking in part(s): The commercial kidney market in a Manila slum, Philippines. *Global Social Policy* **10**:3, 358-376. [[Crossref](#)]
261. Peter Coles,, John Cawley,, Phillip B. Levine,, Muriel Niederle,, Alvin E. Roth,, John J. Siegfried. 2010. The Job Market for New Economists: A Market Design Perspective. *Journal of Economic Perspectives* **24**:4, 187-206. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
262. Roger Lee Mendoza. 2010. Colombia's organ trade: Evidence from Bogotá and Medellín. *Journal of Public Health* **18**:4, 375-384. [[Crossref](#)]

263. Johan Eyckmans, Snorre Kverndokk. 2010. Moral concerns on tradable pollution permits in international environmental agreements. *Ecological Economics* 69:9, 1814-1823. [[Crossref](#)]
264. Philippe Steiner. 2010. GIFT-GIVING OR MARKET?. *Journal of Cultural Economy* 3:2, 243-259. [[Crossref](#)]
265. S. Leider, A. E. Roth. 2010. Kidneys for Sale: Who Disapproves, and Why?. *American Journal of Transplantation* 10:5, 1221-1227. [[Crossref](#)]
266. Roger Lee Mendoza. 2010. Kidney black markets and legal transplants: Are they opposite sides of the same coin?. *Health Policy* 94:3, 255-265. [[Crossref](#)]
267. Theodore C. Bergstrom,, Rodney J. Garratt,, Damien Sheehan-Connor. 2009. One Chance in a Million: Altruism and the Bone Marrow Registry. *American Economic Review* 99:4, 1309-1334. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
268. Benjamin Edelman,. 2009. Priced and Unpriced Online Markets. *Journal of Economic Perspectives* 23:3, 21-36. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
269. Muriel Niederle,, Alvin E. Roth. 2009. Market Culture: How Rules Governing Exploding Offers Affect Market Performance. *American Economic Journal: Microeconomics* 1:2, 199-219. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
270. Maria L. Di Tommaso, Isilda Shima, Steinar Strøm, Francesca Bettio. 2009. As bad as it gets: Well-being deprivation of sexually exploited trafficked women. *European Journal of Political Economy* 25:2, 143-162. [[Crossref](#)]
271. Philippe Steiner. 2009. Altruisme, égoïsme et individualisme dans l'École durkheimienne. *European Journal of Sociology* 50:1, 35-59. [[Crossref](#)]
272. Matt Zwolinski. 2009. Dialogue on Price Gouging: Price Gouging, Non-Worseness, and Distributive Justice. *Business Ethics Quarterly* 19:2, 295-306. [[Crossref](#)]
273. Philippe Steiner. 2009. Who is right about the modern economy: Polanyi, Zelizer, or both?. *Theory and Society* 38:1, 97-110. [[Crossref](#)]
274. Alvin E. Roth. 2009. What Have We Learned from Market Design?. *Innovation Policy and the Economy* 9, 79-112. [[Crossref](#)]
275. Lucas C. Coffman. 2009. Intermediation Reduces Punishment (and Reward). *SSRN Electronic Journal* . [[Crossref](#)]
276. Johan Eyckmans, Snorre Kverndokk. 2009. Moral Concerns on Tradable Pollution Permits in International Environmental Agreements. *SSRN Electronic Journal* . [[Crossref](#)]
277. Stacy Dickert-Conlin, Todd E. Elder, Brian Moore. 2009. Donorcycles: Motorcycle Helmet Laws and the Supply of Organ Donors. *SSRN Electronic Journal* . [[Crossref](#)]
278. Ran Spiegler. 2008. COMMENTS ON THE POTENTIAL SIGNIFICANCE OF NEUROECONOMICS FOR ECONOMIC THEORY. *Economics and Philosophy* 24:3, 515-521. [[Crossref](#)]
279. Carolyn Dresler, Mark J. Cherry, Robert M. Sade. 2008. A Clash of Rights: Should Smoking Tobacco Products in Public Places be Legally Banned?. *The Annals of Thoracic Surgery* 86:3, 699-707. [[Crossref](#)]
280. Arthur J Matas, Benjamin Hippen, Sally Satel. 2008. In defense of a regulated system of compensation for living donation. *Current Opinion in Organ Transplantation* 13:4, 379-385. [[Crossref](#)]
281. Gabriel M Danovitch, Francis L Delmonico. 2008. The prohibition of kidney sales and organ markets should remain. *Current Opinion in Organ Transplantation* 13:4, 386-394. [[Crossref](#)]
282. Richard A. Epstein. 2008. The Human and Economic Dimensions of Altruism: The Case of Organ Transplantation. *The Journal of Legal Studies* 37:2, 459-501. [[Crossref](#)]

283. Alvin E. Roth. 2008. What Have We Learned from Market Design?. *The Economic Journal* **118**:527, 285-310. [[Crossref](#)]
284. Snorre Kverndokk, Adam Rose. 2008. Equity and Justice in Global Warming Policy. *SSRN Electronic Journal* **115**. . [[Crossref](#)]