

Measuring Markets and Morality

GINNY SEUNG CHOI

Mercatus Center, George Mason University

VIRGIL HENRY STORR

Mercatus Center, George Mason University

INTRODUCTION

We wrote *Do Markets Corrupt Our Morals? (DMCOM?)* because there appeared to be a largely undisputed agreement amongst scholars and lay people that markets can and do generate material wealth and improve overall welfare but that they do so at the expense of our morality. There is, in fact, a long-standing critique of markets, i.e. that markets corrupt our morals. Engaging in market activity, says this view, places us in a kind of moral jeopardy; there is a grave and inevitable moral risk in engaging in the buying and selling of goods and services in the marketplace because the market rewards our worst traits. As a result, the repeated interactions in and with the market and its expansion crowd out and erode our morality and foster vice. As Marx (quoted on 19) vividly described it, the market transforms man into “an abstract being, an automaton, and [...] a spiritual and physical monster”. In response, with a few exceptions, those who would defend markets tended to advance one of three sorts of argument: (1) private (market) vices generate public benefits; (2) markets are mere tools of coordination and/or distribution and thus are neither moral nor immoral; and (3) markets achieve superior moral outcomes than other economic settings/systems and so the overall benefits outweigh the moral cost (that is, nonmarket systems put us into even worse moral situations). In our perspective, these defenses sidestepped the moral corruption critique or, more alarmingly, implicitly or explicitly embraced it; these defenses, we felt, inadequately addressed the central moral criticism leveled by critics of the market.

AUTHORS' NOTE: We are extremely thankful to the *Erasmus Journal for Philosophy and Economics*, and especially to Erwin Dekker, for organizing this symposium on our book, *Do Markets Corrupt Our Morals?* (2019). We are equally grateful to those who participated in the symposium—Ben Ferguson, Roberto Fumagalli, Arjo Klamer, and Maria Pia Paganelli.

Our strategy in *DMCOM?* was to attempt to answer theoretically and empirically a question that almost everyone, many critics of markets and defenders of markets alike, assumed already had a settled answer. We wondered if the most plausible theories about how markets do work and the convincing empirical evidence about how markets have worked would support or cast doubt on the view that markets corrupt our morals.

Admittedly, the answer we found, while countering the dominant view, was not an altogether surprising one. Indeed, our everyday commercial interactions (with large companies such as Amazon, Target, Starbucks, and Whole Foods, and local companies such as Clare and Don's Beach Shack, Bangkok Golden Thai Restaurant, and Northside Social in Northern Virginia in the United States) seemed to be at odds with the belief that markets corrupt our morals. The people we encountered in market spaces tended to be honest not dishonest, tolerant not intolerant, giving not greedy. The empirical evidence we discuss in *DMCOM?* suggests that markets are not associated with more vice and less virtue. In fact, the reverse is true. This casts considerable doubt on the claim that markets corrupt our morals. If markets do in fact corrupt our morals, we should have found the opposite pattern of the one we did. Additionally, the empirical evidence suggests (1) that market participants can learn virtue and vice in the market and (2) that there are mechanisms within markets that encourage virtue and discourage vice. Markets, the evidence suggests, are moral training grounds where we can learn to be better people.

Although we believe that there is a compelling case that markets do not corrupt our morals, we did not expect that *DMCOM?* would be the final word on the subject. In fact, we hoped it would inspire criticism. With *DMCOM?*, we hoped to re-ignite what we thought was a much-needed conversation in the academy as well as in contemporary political discourse about the morality of markets and to learn from that conversation.¹ We are thrilled by the responses in this symposium, as we think they demonstrate that we have been successful in this endeavor.

While all of the contributors to this symposium said kind things about *DMCOM?*, they all advanced important questions and criticisms. Ferguson, for instance, expressed concerns about our justification for elevating

¹ It is, of course, an exaggeration to say that no one had taken up the question of whether or not markets corrupt our morals before we did. See, of course, McCloskey (2006). But, we maintain that our approach to answering this question is a unique one. And, to our knowledge, we are the first to attempt to answer this particular question head-on using the most plausible economic theories about how markets do work and the most compelling evidence about how markets have worked.

certain virtues and not others. He also pointed to several instances where the way we think about and discuss virtues is at odds with the way virtue ethicists think about and discuss virtues. Similarly, Fumagalli argued that whether or not markets were morally corrupting was “not easily resolved on purely empirical grounds and that philosophical considerations play a crucial role in adequately addressing such an issue” (32). Additionally, Klamer worried that in focusing on aggregate measures of morality in market and nonmarket societies we ended up with a one-sided picture of the economy that largely ignored culture as well as the social interactions that are always occurring within an economy. As such, he questioned how much of the positive outcomes on various measures of morality that we found in market societies can really be attributed to the functioning of markets. Also, Paganelli suggested an alternative reading of Smith—different from the one we deployed—to support her argument that markets corrupt some of the morals in nonmarket societies but replace them with different morals. According to Paganelli, “it is not that markets crowd out virtues, leaving a vacuum, but that markets substitute a set of virtues with another set of *different* virtues” (2).

There is a sense in which each of the contributors is exactly right and that the only response we should offer is a *mea culpa*. The careful attention and engagement with *DMCOM?* offered by the contributors, however, deserve a more extensive response. Although the comments from each contributor highlighted different themes, we see three common threads in their comments. Interestingly, each of these threads relates to how we chose to measure markets and morality. The first thread relates to how we formed our market society variable, i.e. how we decided whether a country is a market society or a nonmarket society. The second thread relates to how we defined and measured morality (including our collection of individual moral traits/virtues). The third thread relates to why we deployed correlations of aggregates. We address these threads in turn.

DETERMINING WHAT IS A MARKET SOCIETY

There seems to be a general concern about how we categorized countries into market and nonmarket societies. Indeed, one of the first challenges that we encountered in writing *DMCOM?* was coming up with a strategy for deciding whether or not a society is a market society which did not rely in any way on our personal judgements/opinions about which countries are market societies and which are nonmarket societies. Additionally, we wanted to avoid any strategy for classifying market and

nonmarket societies that relied on market outcomes. For example, we did not want to divide countries into market and nonmarket societies based on how wealthy they are, or how well they did on various measures of economic wellbeing.

To avoid these potential pitfalls, we first defined a market society as a space that offers the greatest scope for market activities. In many ways, our project fails if our readers are not convinced that we can meaningfully distinguish between market societies and nonmarket societies. As we explained, “in determining whether or not market activity is morally corrupting, it is important to know which countries allow for the greatest scope and support for market activities, and which countries do not” (252). Features of a well-functioning market include “clear and respected property rights, reliable contract enforcement, and mechanisms for resolving disputes” (9). As such, we described market societies as “areas, countries, or regions where markets are permitted to thrive, that is, spaces where property rights are respected, contracts are enforced, and the rule of law exists” (*ibid.*). Using this definition of markets, we identified indices that said something about the scope and support for market activities in different countries. For instance, we chose the Fraser Institute’s Economic Freedom of the World (EFW) index, which assesses economic freedom across various countries, because greater economic freedom tends to denote greater scope for market activity. Likewise, we chose a subset of the measures in the World Justice Project’s Rule of Law index that looks at constraints on government powers, fundamental rights and regulatory enforcement because of how these features are likely to impact the scope for market activities. Similar rationales informed our choice of the other three indices we selected. We chose to utilize multiple indices because we worried about giving a single index too much weight/power in deciding whether a country is a market society. Once we assessed these indices for appropriateness, we used them to classify countries as market or nonmarket societies with the help of a threshold value. Specifically, we defined a country as a market society if its score was in the top two-fifths of the range of possible scores in each of the indices for which a score was available for that country.

As we wrote in the Appendix to *DMCOM?*:

Our strategy for classifying market and nonmarket societies was chosen because we wanted a basis for sorting countries into their respective categories *before looking at how they performed materially and morally*. Stated another way, we wanted to know whether a society

was a market or nonmarket society before looking at the wealth or virtuousness of its members. (251-252; emphasis added)

Our formulation of the market society variable, and hence the list of market and nonmarket societies, *is independent from* the empirical results and comparisons that we reported on throughout the book.

To reiterate, we were careful to not describe (both theoretically and empirically) the market or a market society by the outcomes it produces or its tendencies. For example, market societies tend to be wealthier than nonmarket societies. But we avoided using wealth as a proxy for how market oriented a society is. Market societies also tend to be democracies (not authoritarian states) and tend to have good criminal justice systems. But the democratic nature of a country or the state of its criminal justice system likely only has an indirect, tangential effect (if not no effect) on the extent to which the country permits markets to thrive and operate freely. We deliberately took care to define markets and market societies (and, subsequently, our market society variable) by only those features that enhance or hinder the operation of market mechanisms (that is, buying, selling, profit and loss, entrepreneurship, etc.).

Despite our justification above, one may continue to have concerns about the validity of our market society variable, which would deem our specific combination of five indices unsuitable. Table 1 presents results on how market and nonmarket societies compare for a number of virtues and vices we investigated in *DMCOM?* across different combinations of indices that make up our market society variable. In particular, for Table 1, we used different combinations of four out of five indices we used in the book to classify countries as market and nonmarket societies. This generated a total of 15 different combinations of indices. As the heat table shows, our results and conclusions would have remained robust across any combination of indices that we may have used to form our market society variable.

Had our results in fact been sensitive to how we formulated our market society variable, we should have observed—across various combinations of indices—more sign reversals of the differences in sample means between market and nonmarket societies (for example, a lot more switches from green to red and vice versa), not merely some loss or gain in statistical significance as depicted in Table 1. That our results would still hold even if we were to vary how we determine which countries are market societies and which are nonmarket societies explains our confidence in the conclusions we drew from the empirical evidence. It is clear

Table 1: How market and nonmarket societies compare on a number of virtues across different combinations of indices.

Combination of indices	High life satisfaction	Average life satisfaction	Religious organization	Recreational organization	Social capital (Legatum Prosperity Index)	Gini Coefficient	Donations	Materialism (Being rich is important)	Materialism (Being successful is important)	Competition is harmful	Competition is good	Corruption Perceptions Index (Transparency International)	Justifiable unethical actions (Avoiding fare on pub. trans.)	Justifiable unethical actions (Cheating taxes)	Justifiable unethical actions (Stealing property)	Justifiable unethical actions (Bribery)	Discrimination as neighbors (Different race)	Discrimination as neighbors (Foreign workers)	Discrimination as neighbors (Homosexuals)	Discrimination as neighbors (Different religion)	Discrimination as neighbors (Cohabiting unmarried couples)	Discrimination as neighbors (Different language)	Female-oriented views (Jobs should be given to men)	Female-oriented views (Successful wives are a problem)	Female-oriented views (Uni. edu. is more imp. for boys)	Accepting of violence (Domestic violence)	Accepting of violence (Corporal pun. of children)	Accepting of homosexuality	Trust (Family)	Trust (Neighbors)	Trust (Known associates)	Trust (People met for the first time)	Generalized trust			
	Results as reported in DMCOM?																																			
F, H, D, R																																				
F																																				
H																																				
D																																				
R																																				
F, H																																				
F, D																																				
F, R																																				
H, R																																				
H, D																																				
R, W																																				
F, H, D																																				
F, H, R																																				
F, D, R																																				
H, D, R																																				
Corresponding figure in DMCOM?	Fig. 4.11	Fig. 4.12	Fig. 4.13	Fig. 4.13	Fig. 4.14	Fig. 4.16	Fig. 5.1	Fig. 5.2	Fig. 5.2	Fig. 5.3	Fig. 5.3	Fig. 5.4	Fig. 5.5	Fig. 5.5	Fig. 5.5	Fig. 5.5	Fig. 5.6	Fig. 5.6	Fig. 5.6	Fig. 5.6	Fig. 5.6	Fig. 5.6	Fig. 5.7	Fig. 5.7	Fig. 5.7	Fig. 5.8	Fig. 5.8	Fig. 5.9	Fig. 5.10	Fig. 5.10	Fig. 5.10	Fig. 5.10	Fig. 5.10	Fig. 5.11		
Legend																																				
<p>F denotes Fraser Institute’s 2011 Economic Freedom of the World. H denotes Heritage Foundation and The Wall Street Journal’s 2011 Index of Economic Freedom. D denotes World Bank’s Doing Business project’s 2011 Distance to Frontier. R denotes our modified World Justice Project’s 2012–2013 Rule of Law index.</p>															<p>Green cells denote comparisons where sample mean or median of market societies is greater than that of nonmarket societies and $p \leq 0.10$. Red cells denote comparisons where sample mean or median of market societies is less than that of nonmarket societies and $p \leq 0.10$. Yellow cells denote comparisons where the sample means or medians of market and nonmarket societies were statistically no different (i.e. where sample mean or median of market societies is larger than that of nonmarket societies and $p > 0.10$).</p>																					

that market societies are not associated with moral corruption across a range of ways of measuring moral corruption. And so, given the greater scope for markets in market societies compared to that in nonmarket societies, on this evidence, it appears unlikely that markets are morally corrupting. Of course, as several of the contributors to this symposium highlight, our measures of morality and immorality are imperfect at best and fatally flawed at worse.

DEFINING AND MEASURING MORALITY

There is a sense in which morality cannot be measured at an individual or societal level. If being moral means doing the right things at the right time for the right reasons, it would seem impossible to assess whether any particular person in some particular situation and some particular time is behaving morally, and hopelessly impossible to determine if people in a particular context are more or less likely to behave morally or not. Stated another way, it would seem to be impossible to assess the robustness of virtues, or the true motives behind virtuous-seeming behavior, in specific individuals or within specific societies. If we wish to look at morality empirically, we are forced to look at consequences and are left with simply looking at artefacts. These artefacts (for example, whether or not someone gives money to charity), we hope, can serve as proxies for true morality. This is not to privilege consequences over other considerations in some substantive sense but to acknowledge that social science is about consequences. As we discussed in our Appendix, our empirical strategy “necessarily relies on assessing the existence of various virtue-like traits, the prevalence of various virtue-like behaviors, and expressions of values and beliefs that are consistent with various virtues” (250); our empirical strategy forces us to necessarily rely on people’s past actions (or their demonstrated preferences, as Austrian economists would say, or their revealed preferences, as neoclassical economists would say).

Arguably, when critics and defenders of markets argue that markets are morally corrupting, they sometimes do not limit themselves to deontological claims or to, say, assessments of how robust virtues remain in market settings versus nonmarket settings. Instead, they often have certain particular negative moral consequences in mind. It is those consequences that we explored in *DMCOM?* Moreover, while we can never know with absolute certainty, we do not find it extremely controversial to claim

that being genuinely virtuous and appearing to behave virtuously are connected; “genuinely virtuous people [...] are likely to consistently act virtuously and to consistently express values and beliefs that are consistent with various virtues” (250).

In any event, we hoped that, if all the empirical indications point in one direction, we might be able to say something about the underlying phenomenon. Every measure of virtue that we reported in *DMCOM?* is higher, on average, in market societies than it is in nonmarket societies. On the other hand, every measure of vice that we reported in *DMCOM?* is lower, on average, in market societies than it is in nonmarket societies. This may, of course, say nothing about the relationship between the actual levels of true virtue and true vice in market societies. But (1) if it is true that there is some relationship between measures of virtue and vice and actual levels of virtue and vice, and (2) if the question of how markets and morality are related is in fact a question that might be assessed empirically, then the questions become: did we select the right measures of morality? Should we have selected better proxies?

In *DMCOM?*, we emphasized the relationship between markets and a series of virtues and vices. In particular, our list includes the four classical virtues (courage, justice, prudence, and temperance), the three Christian virtues (faith, hope, and love), altruism, materialism/corruption (that is, material greed), cosmopolitanism, and trust. In all these cases, we found at least weak and almost always strong indications that levels of those virtues were higher in market societies. We argue that, if Hayek (1945, 1976, 1948), Kirzner (1973) and Lavoie (1986) were correct about the market being an entrepreneurial process for the discovery of local, tacit, and inarticulate knowledge concerning goods and services as well as available but undiscovered profit opportunities, the market would likely also help people discover the morality of their potential trading partners. Additionally, the market offers people a mechanism for rewarding virtue and punishing vice, as people tend to prefer exchanging and interacting with genuinely moral trading partners. Knowing this, people would adopt some habits of genuinely moral individuals and, at least some of them, would likely internalize these habits sufficiently enough to grow as moral individuals. As such, we claim, the market can teach people through the profit and loss mechanism to not only behave morally but also to become moral beings. Societies where there are restrictions on the free operation of markets are missing out on opportunities for their members to learn virtues and to grow morally.

Of the virtues we discussed, trust got a particularly huge emphasis in *DMCOM?*. After all, not only does trust share a well-established (positive) relationship with economic development, trust also seems to be quickly emerging as an essential ingredient for the development of a successful market economy. Furthermore, trust is important for business as it reduces all sorts of transaction costs. Writing contracts, for example, that protect contractors from all sorts of potential fraud and wrongdoing by their contracting partners is very (if not prohibitively) costly. In addition, trust can facilitate cooperation (e.g. Fukuyama 1995; Putnam 1995) and hence ease an exchange of confidential or proprietary information and ideas. Indeed, trust is ubiquitous in almost all market interactions. And, in fact, the relationship between trust and markets is such an important question for us that it is the subject of our next major project. (See chapter 5 in *DMCOM?*, and Choi and Storr 2020 for references to various texts in the broader trust literature.)

Our empirical investigation of trust corroborated what the existing literature on trust and economic development has already showed—people in market societies display more trust than those in nonmarket societies. However, our investigation revealed a deeper nuance to this result. Our data revealed that people in both market and nonmarket societies appear to equally trust others at a short social distance (that is, interpersonal trust in the family and among neighbors). Although (interpersonal) trust deteriorates as the social distance grows in both market and nonmarket societies (that is, trust in known associates/acquaintances and people met for the first time), trust deteriorates at a faster rate in nonmarket societies than in market societies. Moreover, generalized trust (that is, trust in strangers) is higher in market societies than in nonmarket societies. In short, “people around the world seem to have equally strong core networks, but those living in market societies seem to have stronger periphery networks” (179).

The economic experiment in *DMCOM?* employed a version of a personal market game followed by a trust game.² Our experiment

² For those who are unfamiliar with the trust game, the trust game, designed by Berg, Dickhaut, and McCabe (1995), is the most popular tool in experimental economics for measuring trust. It is a two-player economic game where the players make decisions sequentially (i.e. one by one). The game simplistically portrays a situation where a person must take a risk in trusting a partner without knowing with certainty whether or not the partner would repay the trust she was shown and whether or not she is worthy of said trust. This game quantifies trust and repaid trust (commonly interpreted as trustworthiness and reciprocity in experimental economics) using monetary exchanges or transfers. It is said that the trustor (i.e. the person making the decision to trust) and the trustee

demonstrated that subjects treated those with whom they shared good (i.e. positive) relationships significantly better than those with whom they did not share good relationships. (In the context of our experiment, by better treatment we mean showing more trust and trustworthiness.) More specifically, in the trust game, both the trustor and the trustees tended to send larger transfers to those partners with whom they developed positive relationships in the previous market game than to those with whom they developed negative relationships. The difference is rather stark: trustors, on average, transferred over 50% more tokens to their positive relationships than to their negative relationships and trustees, on average, transferred about 33% more tokens to their positive relationships than to their negative relationships. Moreover, only those trustors who shared positive relationships with their respective trustees received, on average, more tokens than the number of tokens they transferred to the said trustees; in other words, only those relationships in which the trustors and the trustees shared positive relationships ever achieved gains from trade (i.e. profited) in the trust game. Our experimental results showed (1) that people are capable of learning something about their trading partners through the market,³ and (2) that people may be rewarding market friends and punishing market enemies.

At this point, please permit us a tangent. The personal market game we employed in our experiment in *DMCOM?* (henceforth called the control market) differed from popularly used experimental markets (like the double auction) on two major margins. First, unlike many markets in experimental economics where, for example, the computer randomly or automatically matches buyers with sellers, our buyers and sellers had the autonomy to choose with whom they would like to negotiate and trade in the market. Our subjects, subsequently, could express (albeit in a limited way) their preference in trading partners in the control market. Second, our market allowed those who entered into an agreement to defect on the said agreement, thereby allowing subjects to discover with certainty who

(i.e. the person making the decision to repay trust) show more trust and trustworthiness respectively as the size of their transfers grows.

³ While we never reported on the information we collected in the post-experiment survey in any of our published work (that is, information beyond subjects' demographic information), we asked subjects to provide some details on how they made their decisions in the market and trust games. Here, a number of subjects explained that they came to trust or not to trust certain trading partners based on the latter's executions of and defections from agreements in the market game. These subjects further explained that they used this information (about executions and defections) to make decisions in the trust game.

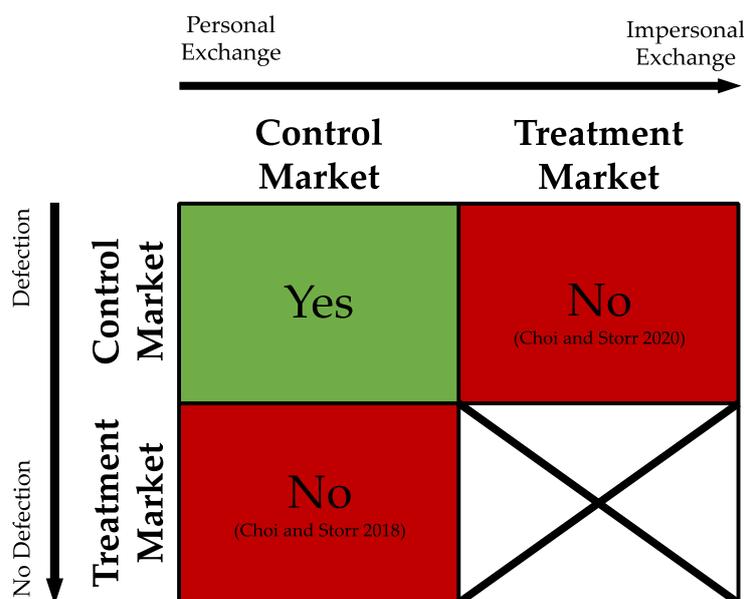


Figure 1: Did people learn about whom to trust in this market?

Note: In order to assess whether people learn whom to trust, we examined how trust game transfers in positive relationships compared to those in negative relationships. The control market refers to the economic experiment described in Storr and Choi (2019, chap. 6). Treatment markets refer to variations of the control market described in Choi and Storr (2018, 2020).

defected (i.e. cheated) on agreements. Further experimental investigation suggested that these two market features may be critical in permitting individuals to learn about their trading partners in a market setting.

At this point, we turn to Choi and Storr (2018, 2020) which built on the experimental design described in our book (chapter 6). These two studies tested experimentally whether or not the market continues to permit subjects to learn about whom to trust in the absence of one of these market features. Our results indicated that the market may only function as a discovery process for trust and as a learning process for whom to trust only when these two features are present in the market (Figure 1).

Choi and Storr (2020) reported that past market dealings (that is, defections from and executions of agreements) may only affect the trusting and reciprocating behavior of subjects who participated in a market where exchanges were personal, but not the trusting and reciprocating behavior of subjects who participated in an experimental market where exchanges were impersonal. Specifically, in our control market where exchanges are personal, people exhibited higher levels of trust and trustworthiness in trading partners with whom they shared positive

relationships than in those with whom they shared negative relationships. In contrast, we found that, in the market treatment where exchanges are more impersonal, people exhibited the same levels of trust and trustworthiness in trading partners regardless of the nature of their relationships (see Choi and Storr 2020 for details). Likewise, Choi and Storr (2018) revealed that people cannot learn to differentiate between the trustworthy and untrustworthy trading partners without the ability to defect on agreements in the market (that is, an opportunity for people to demonstrate their character or the type of person they are). In addition to our control market, we also employed a market treatment where the market fully and automatically enforced all agreements the moment these agreements were reached. We found that a type of culture where people treated one another more or less equally and indiscriminately emerged in the market treatment, while a culture where people differentiated between the trustworthy partners and the untrustworthy partners emerged in the control market. More specifically, while generalized trust (i.e. trust in strangers) remained the same across both markets, interpersonal trust emerged only in the treatment market where agreements were not being automatically enforced (see Choi and Storr 2018 for more details).

Taking these experiments together, our results suggest that the type of learning we saw in our control market (where people learnt whom to trust) may only occur in markets where (1) exchanges are more personal (and not in markets where exchanges are more impersonal), and (2) there are distinct opportunities for trading partners to exhibit what types of people they are. Our experimental results seem to lend further support to a claim we made in *DMCOM?*: restrictions on the free operation of markets represent missed opportunities for people to learn virtues and to grow morally (244).

Admittedly, trust, altruism, the absence of greed, and other virtues we emphasize in *DMCOM?* are bourgeois sentiments (that is, sentiments that were historically exercised and valued in commercial societies). In fact, we stopped short of saying that ‘markets make us more moral’ in some generic sense precisely because we recognized that people in market societies are more moral than people in nonmarket societies, but *only on a particular definition of morality*. As such, we preferred to stress the potential for moral development within markets and to highlight the relationship between markets and a particular range of virtues and vices. We do not deny that we may not have observed such strong associations between markets and virtue/vice had we emphasized other virtues and

vices. And, it is very possible that market societies undermine, not promote, these other virtues that we might have highlighted. For instance, had we chosen instead to investigate the compatibility of the market with Ancient Roman virtues we might not have found the strong associations between markets and morality that we found. The Ancient Romans distinguished between the private and the public spheres of life, and consequently assigned different virtues to the private sphere (i.e. family life) and to the public sphere (i.e. citizen's or soldier's life). It is possible that market societies would undermine the virtues related to the good military habits/traits such as *constantia* (perseverance) and *disciplina* (discipline). *Pietas*, one of the chief virtues for the Ancient Romans, extended beyond mere religious piety and captured the sense of duty a Roman owes his country, his family, and his fellow men. Like the militaristic virtues, it is unclear whether the market would promote or undermine *pietas*. But if we were to evaluate whether the market promotes or undermines *pietas*, we could compare, say, annual religious service attendance, the number of those who enlist in the military, emigration from market and nonmarket societies, and the number of those who are primary caretakers of their elderly family members in market and nonmarket societies. On these measures of morality, we might expect that the market's track record would be more mixed compared to what we reported in *DMCOM?*.

But the critics and defenders of the morality of markets that we engage in *DMCOM?* seem to have in mind the very virtues and vices that we discuss. While they sometimes point to the ways that markets make us less courageous in the martial sense, or undermine traditional (parochial) values, when they claim that markets corrupt our virtues, they more often seem to expect that markets would make us untrustworthy, or greedy, or materialistic, or uncharitable, or intolerant. They would likely have been surprised if people in market societies proved to be more altruistic, less likely to be materialistic or corrupt, and more likely to be cosmopolitan as well as trusting and trustworthy. They are likely surprised that the proxies we chose for the various virtues and vices we discussed turned out to be related to markets in the ways that the evidence suggests. And, they are likely surprised that markets have mechanisms that encourage moral development, meaning here the development of these particular dispositions.

ON CORRELATIONS OF AGGREGATES

We spend a great deal of space in *DMCOM?* describing the micro foundations that underpin our discussion of the relationship between markets and morality. Indeed, much of the latter half of the book describes how individual actors might become more virtuous by engaging in market activity; the discussion of the possibility of moral development within markets, the market experiment concerning the possibility of discovering whom to trust and of rewarding trustworthiness, and the market mechanisms that promote the discovery and rewarding of moral behavior are all micro phenomena. That said, it is understandable how one might read *DMCOM?* as relying largely on correlations of aggregate measures of morality.

Throughout *DMCOM?*, we focused on empirical evidence that speaks in favour of the correlation between markets and measures of virtues and vices. To understand why we did this, it is important to keep in mind (1) what (empirical) propositions would have to be true if markets did in fact corrupt our morals, and (2) what correlations reveal about causations. Recall, if markets corrupt our morals then the following propositions must hold (44):

Proposition 1: “Vice is more prevalent in market societies than in non market societies and virtue is less prevalent in market societies than in nonmarket societies.”

Proposition 2: “As a society becomes more market-oriented and as the scope of the market in a society expands, more vice and less virtue will exist in that society.”

Proposition 3: “The more a person engages in market activity, the less virtuous they are likely to be.”

Note how Proposition 1 proposes a *correlation* between market societies and various measures of virtue and vice, while Propositions 2 and 3 put forth a *causal relationship* between market societies (or participation in market activities) and various measures of virtue and vice. Correlations, however, have implications for the presence and the direction/sign of causal relationships. For example, suppose we hypothesized that a decrease in daily temperature causes an increase in book sales. This hypothesis makes two claims about the relationship between temperature and

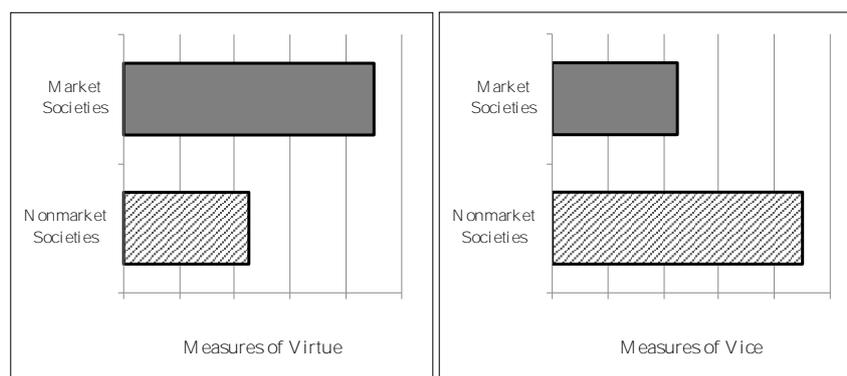
book sales: (1) there exists a negative correlation between temperature and book sales; and (2) a decrease in temperature causes an increase in book sales. If someone were to provide evidence showing that there is no correlation (or a positive correlation) between temperature and book sales, then there would be good reasons to doubt that decreases in temperature cause increases in book sales. This is the empirical approach we chose to adopt to evaluate the three propositions.⁴

The evidence suggests that Proposition 1 does not hold (Figure 2). Instead, we found that people living in market societies are wealthier, healthier, happier, and better connected than people living in nonmarket societies. We also found that people living in market societies are more likely to be moral, on a certain definition of morality. Admittedly, this last point could have been stated differently. We could have stressed that people in market societies are not more moral than people in nonmarket societies, on a certain definition of morality. Rather, we could have said that people in market societies have a different morality from that of people in nonmarket societies. It is hard to see what this rhetorical move would have added, and it is possible that it might have obscured the extent to which multiple moral systems valorize the range of virtues that we discussed (for example, self-restraint is important in Platonic, Christian and Hindu ethical systems).

WHAT *DO MARKETS CORRUPT OUR MORALS?* IS NOT ABOUT

The central moral criticism of markets (i.e. that markets corrupt our morals) is not correct. If markets are really morally corrupting, then we should expect the social scientific models and concepts which (best) explain how markets function to allow for the likelihood of moral corruption. If markets really do crowd out virtue and corrupt the virtuous, this should be borne out in the evidence. Our theoretical understanding of how markets can and should work, however, points in the opposite direction. Moreover, the evidence suggests that markets are not the *immoralizing* spaces that some

⁴ Since, as those with familiarity with statistics and econometrics know, causations/causal relationships can also affect correlations, we could have alternatively attempted to develop a continuous measure/variable of the 'market-society-ness' of a country instead of using a binary variable as our main variable of interest. See also Teague, Storr, and Fike (2020) who found that countries with more economic freedom (i.e. those countries that embrace markets to a greater extent) and countries with a higher GDP per capita are correlated with less materialism, and that countries with higher GDP per capita are correlated with less materialism.



Market societies are positively associated with: Market societies are negatively associated with:

- Income per capita
 - Adult literacy rate
 - Access to clean drinking water
 - Extensiveness of railway networks
 - Number of broadband subscriptions
 - Number of telephone subscriptions
 - Life expectancy
 - Health expenditure per capita
 - Daily caloric intake per capita
 - Average life satisfaction
 - Active membership in religious organizations
 - Active membership in sport organizations
 - Social capital
 - Earnings of poorest 10% of society
 - Social mobility
 - Charitable donations
 - Pro-female oriented views
 - Acceptance of homosexuality
 - Trust in known associates
 - Trust in people met for the first time
 - Generalized trust
- Infant morality rate
 - Maternal morality rate
 - Economic inequality
 - Materialistic views
 - Critical views of competition
 - Corruption
 - Proportion of people who find unethical acts justifiable
 - Prejudice against those unlike themselves
 - Acceptance of domestic violence
 - Acceptance of corporal punishment of children

Figure 2: Markets are positively associated with things we value and negatively associated with things we do not.

have imagined them to be. People who live in market societies tend to be wealthier, healthier, happier, and better connected than people who live in nonmarket societies. Additionally, on average, people who live in market societies exhibit more virtue and less vice than people who live in nonmarket societies.

Markets, in fact, are *moralizing* spaces.

— Storr and Choi (2019, 234)

In assessing the charge against markets that markets are morally corrupting, we found that markets are not only compatible with morality but also support moral development. The arguments that we advanced in *DMCOM?*, consequently, are silent on the problem of noxious markets and the role of governments and government programs in promoting morality. We also did not attribute all the good stuff that we observe in market societies to the market mechanism. To say that markets do not

undermine but instead promote morality (of a certain sort) is not to say that only markets promote morality or that the market sphere does a better job at promoting morality than other spheres.

Indeed, we explicitly highlight the importance of other institutions, spheres, and factors in supporting and promoting a vibrant, wealthy, healthy, happy, better connected, and moral society. In particular, taking democracy as an example, we agree with Sen (1999) that political participation (in the form of democracy) plays a central role in living a flourishing life and in cultivating the values of citizenship, and that democracies give citizens the opportunity to express and pursue their political goals. We cannot discount the role a well-functioning democracy may have played in generating the 'good things' about market societies. But note how our argument that markets are not corrupting spaces in no way challenges democracy as an important source of economic, social, or moral development. In fact, we believe that a well-functioning, vibrant, and happy society requires the cooperation of its economic, political, and societal institutions. Had the market/capitalism and democracy (or any pairing of economic and political institutions) inherently been at odds, we highly doubt that those societies that are both market societies and democratic would have thrived. Relatedly (and perhaps unsurprisingly given our discussion about democracy), we do not attempt to single out which institution or factor caused the great leaps and bounds in economic development we have observed, or all the 'good things' we witness in developed countries.

To reiterate, our conclusion that markets do not corrupt our morals and that markets are moralizing spaces does not mean that we believe that nonmarket spaces are likely to be morally corrupting. Nor do we believe that markets are the most moralizing spaces that we might imagine. Instead, we simply maintain that markets should be viewed as moralizing spaces like other moralizing spaces (for example, religious spaces, or families, or civic organizations, or schools). Additionally, our conclusion that markets are moral training grounds does not mean that we believe that everyone in market societies is virtuous or that everyone in nonmarket societies is vicious. There are surely saints in nonmarket societies and there are surely monsters in market societies. But we do maintain that markets offer individuals an opportunity for moral development that would be closed off/inaccessible if markets were closed off.

Given the currently available data, *DMCOM?* represents our best attempt at empirically and theoretically assessing the central moral

criticism of markets—that is, that markets are morally corrupting. We hope our book invites scholars who are serious about the morality or immorality of markets to engage in open, critical conversation. We would have considered our endeavor a great success if we had inspired scholars to embark on empirical, philosophical, or theoretical projects on the market and morality that took up or challenged the approach we adopted. We are thrilled and very happy with this symposium, as the contributions exemplify the type of success we hoped to achieve. We are both very grateful to each of the contributors for their comments and the time they spent carefully reading and thoughtfully engaging our book. We are looking forward to continuing this conversation about the morality and immorality of markets with them and with others.

REFERENCES

- Berg, Joyce, John Dickhaut, and Kevin McCabe. 1995. "Trust, Reciprocity, and Social History." *Games and Economic Behavior* 10 (1): 122–142.
- Choi, Ginny Seung, and Virgil Henry Storr. 2018. "Market Institutions and the Evolution of Culture." *Evolutionary and Institutional Economics Review* 15 (2): 243–265.
- Choi, Ginny Seung, and Virgil Henry Storr. 2020. "Market Interactions, Trust and Reciprocity." *PLoS ONE* 15 (5): e0232704.
- Fukuyama, Francis. 1995. *Trust: The Social Virtues and The Creation of Prosperity*. New York, NY: Free Press.
- Hayek, Friedrich A. 1945. "The Use of Knowledge in Society." *The American Economic Review* 35 (4): 519–530.
- Hayek, Friedrich A. 1948. *Individualism and Economic Order*. Chicago, IL: University of Chicago Press.
- Hayek, Friedrich A. 1976. *Law, Legislation, and Liberty. Vol. 2: The Mirage of Social Justice*. Chicago, IL: University of Chicago Press.
- Kirzner, Israel M. 1973. *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.
- Lavoie, Don. 1986. "The Market as a Procedure for Discovery and Conveyance of Inarticulate Knowledge." *Comparative Economic Studies* 28 (1): 1–19.
- McCloskey, Deirdre N. 2006. *The Bourgeois Virtues: Ethics for an Age of Commerce*. Chicago, IL: University of Chicago Press.
- Putnam, Robert D. 1995. "Tuning In, Tuning Out: The Strange Disappearance of Social Capital in America." *PS: Political Science and Politics* 28 (4): 664–683.
- Sen, Amartya. 1999. "Democracy as a Universal Value." *Journal of Democracy* 10 (3): 3–17.
- Storr, Virgil Henry, and Ginny Seung Choi. 2019. *Do Markets Corrupt Our Morals?*. New York, NY: Palgrave MacMillan.
- Teague, Megan V., Virgil Henry Storr, and Rosemarie Fike. 2020. "Economic Freedom and Materialism: An Empirical Analysis." *Constitutional Political Economy* 31 (1): 1–44.

Ginny Seung Choi is a Senior Fellow in the F. A. Hayek Program in Philosophy, Politics and Economics, Mercatus Center, George Mason University. Her research focuses on the moral and social aspects of markets.

Contact e-mail: <gchoi@mercatus.gmu.edu>

Virgil Henry Storr is an Associate Professor of Economics in the Department of Economics, George Mason University, and the Don C. Lavoie Senior Fellow in the F. A. Hayek Program in Philosophy, Politics and Economics, Mercatus Center, George Mason University.

Contact e-mail: <vstorr@gmu.edu>