Institute for International Economic Policy Working Paper Series
Elliott School of International Affairs The
George Washington University

Distinguishing Self-interest from Greed: Ethical Constraints and Economic Efficiency

IIEP-WP-2019-17

Steven Suranovic
George Washington University

October 2019

Institute for International Economic Policy 1957 E St. NW, Suite 502 Voice:
(202) 994-5320 Fax:
(202) 994-5477 Email:
iiep@gwu.edu Web:
iiep.gwu.edu

Distinguishing Self-interest from Greed: Ethical Constraints and Economic Efficiency

Steven Suranovic[1]
The George Washington University
October 2019

1. Introduction

There is a lack of clarity in the public discussion about the role of the self-interest motive in the functioning of business activity and markets. Some discussants, in the tradition of Adam Smith, and on the basis of the neoclassical economic paradigm, argue that the human motive of self-interest is a reality of human nature, that it is necessary for the economic system to function, and that it is deserving of encouragement, especially by avoiding government interventions or controls that might serve to inhibit its action. Some others see self-interest as tantamount to greed, a sentiment that contradicts the moral virtues of generosity, altruism, and cooperation with others.[2] This group believes that unfettered self-interest may result in great inequalities between the rich and poor, and perhaps the exploitation of the majority by a small minority. This group is suspicious of business, especially big business, and believes in the need for government to mitigate the negative consequences of unfettered self-interest.[3]

Greed has long been proclaimed as an evil in society. In Christianity, greed is one of the seven deadly sins and according to some, it is considered the worst of them all. At the same time, economic models, prima facie, promote greed as the primary motivation for economic agents, whose sole purpose is assumed to be the maximization of individual utility, profit, or shareholder value even if it diminishes cooperative social outcomes. Greed as an economic necessity was epitomized during the heady economic times of the 1980s by the fictional character Gordon Gekko in the movie Wall Street when he proclaimed, "Greed … is good, Greed is right. Greed works!"[4] The fact that he goes to jail at the end of the movie seems to be

---

[1] Department of Economics, The George Washington University, 1957 E St NW, Suite 502, Washington DC 20052. Contact email: smsuran@gwu.edu.
[2] Hirschmann (2013) suggests that some perceive self-interest as "… degrading to the human spirit and as dangerously disruptive and corrosive of the foundations of society."
[3] See Walker (1992) for an example of the confusion that MBA students feel concerning the self-interest motive compared to the notion of greed.
[4] Stone, Oliver (Director). (1987). Wall Street [Motion Picture]. United States: Twentieth Century Fox.

overlooked by some proponents of free markets. Perhaps this is why after the global financial crisis hit in 2008, Gekko reappears in a Hollywood sequel to remind us that greed is dangerous after all.[5]

The public discussion could benefit from clarity on this issue. One key reason for confusion is that no one has a clear understanding of what it means to be greedy.[6] The purpose of this paper is to demonstrate that greed can be differentiated from self-interest with a clearly-defined boundary, at least in the context of economic decisionmaking.[7] This boundary can be identified using the neoclassical economic model of an economy and by highlighting the fact that economic efficiency in these models requires that self-interest be constrained by ethical behavior. In contrast, economic efficiency will NOT be optimal if self-interest is "unfettered," or otherwise unconstrained by ethics.[8] I will refer hereafter to self-interest under ethical constraints as "enlightened self-interest." These principles are typically overlooked by economists because they are rarely emphasized in economics courses at any level. The reason for this is largely because the economics discipline has prided itself on being scientific in its depiction of the way an economy functions. In contrast, ethics relates to non-scientific value judgements conducive to statements about how things ought to be (normative economics) rather than how things actually are (positive economics).[9]

Enlightened self-interest can be simply defined, then, as pursuit of self-interest while simultaneously adhering to the ethical principles required for economic efficiency.[10] In an economic system in which self-interest is appropriately constrained, outcomes beneficial to the larger community will prevail. However, whenever people pursue their self-interest, while simultaneously violating these ethical principles, pursuit which is therefore "unfettered," or

---

[5] Stone, Oliver (Director). (2010). Wall Street: Money Never Sleeps [Motion Picture]. United States: Twentieth Century Fox.
[6] See Kay (2011), Clements (2013) and Kirchgässner (2014) for three different suggested definitions.
[7] Wang and Murnighan, (2011; p283) point out, "A central issue, then, concerns when self-interest ends and when greed starts; its exact demarcation remains elusive" Also see Razen and Stefan (2016) for an experimental approach to identify the boundary between selfishness and greed.
[8] See Zak (2011) for a discussion of the role of morals in markets.
[9] Alvey (1999) makes the historical case that morality has always been a part of economic analysis but that modern economics has detached itself from moral issues in order to promote the scientific nature of the discipline.
[10] See Sen (1977) for a discussion of the importance of "commitment" in economic decisionmaking. Commitment is defined as actions taken that do not enhance one's self-interest.

without constraint, then markets perform inefficiently, or fail to prosper.[11] Unconstrained self-interest, then, is tantamount to greed.

The struggle between self-interest and greed is an old one. Many private and public institutions have evolved over a very long period of time that serve to constrain individual behavior in the direction of enlightened self-interest. These institutions include religion, community ethics, and government. These institutions work imperfectly, largely because greedy behavior, while socially detrimental, is often individually beneficial.[12] In addition, there are some complications because some ethical behaviors promote economic efficiency when applied in some circumstances, but promote inefficiencies in other circumstances. These complications can help to explain why a blanket application of ethical principles sometimes results in ethical dilemmas. It can also explain why substantial confusion remains.

2. Self Interest and the Economic Paradigm

Adam Smith famously argued that it is self-interest, rather than benevolence or altruism that is the driving force of economic and business activity. In one of his most famous passages from the Wealth of Nations (1776) he wrote,

> "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages." (Wealth of Nations, Book 1, Chapter 2)

Smith explained that people have a "natural propensity to exchange one thing for another" and that the desire to improve one's own well-being resulted in the specialization of labor into various occupations thereby enhancing overall productivity. He argued that,

> "this division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion." (Wealth of Nations, Book 1, Chapter 2)

In other words, the economic process operates like an "invisible hand" to generate a greater good that was never the intention of any self-interested producer or trader.

[11] Skaperdas (2003) referred to this as the "dark side of self-interest."
[12] The issue of how ethical behavior is promoted, or greedy behavior restrained, is an important one with a very large literature. The worthwhile discussion of how best to do this is beyond the scope of this paper.

In the subsequent centuries after Smith, the economics discipline developed models that introduced the maximization of utility and profit as the primary behavioral motivation of consumers and producers. This culminated in the development of the neoclassical paradigm of perfect competition; the paradigm of supply and demand, taught in every introductory economics class. This model of supply and demand shapes the economic and business understandings of most people today.[13] One of the important outcomes of the perfect competition model is that self-interested producers and consumers allocate scarce resources to their most economically valuable uses in a way that minimizes the cost of production while simultaneously maximizing the utility or welfare accruing to the consuming public. The approach is utilitarian, meaning that it achieves the maximum summation of well-being in a community, as derived from the consumption of goods and services, without regard to the distribution of that well-being.[14]

The neoclassical paradigm, that underpins modern understanding of market economies, was developed over more than a century and is sufficiently complex that it is challenging to understand and interpret properly. Some presume that economic models are meant to be accurate representations of the real world. This contention is consistent with the view of economics as a scientific discipline that intends to objectively explain the workings of the economic system; what is commonly referred to as "positive" economics.[15]

However, it is important to recognize that the neoclassical paradigm does not mimic the real world precisely, nor should we expect it to. Instead, it is a simplification that explains what would happen under a unique set of assumptions, some of which are included because they reflect various aspects of reality, while others are included to keep the analysis simple enough to be tractable. Despite a certain disconnect with actual reality, these models nonetheless provide meaningful insight into the conditions that could generate a truly efficient economic outcome.

---

[13] The neoclassical model may mean different things to different people. Here I mean it to be the model of perfect competition introduced to students of introductory microeconomics including extensions involving standard market imperfections such as monopoly, oligopoly, externalities, and public goods. All of these models involve rational optimizing behavior by market participants and an emphasis on marginal conditions to describe market equilibria.

[14] It is worth noting that in perfect competition pure economic profit is driven to zero, meaning that all resources, including workers of all types are paid the values of their marginal product; that is, wages are proportional to workers' marginal contribution to the economic outcome. Because the assumptions of a purely perfectly competitive model are rarely, if ever, realized, we do not see that outcome in real world markets. That means income distribution is most likely far less equal in real economies than it would be in a truly perfectly competitive economy.

[15] See Drakopoulos (1997; p16) and Rothschild (1993; p286).

Harold Demsetz (1969) referred to perfect competition as a kind of "economic nirvana." This reference to Buddhism provides a useful analogy. Nirvana, a Buddhist concept describing a state of personal enlightenment, is something to be sought by individuals but is very difficult to achieve. In achieving nirvana, one becomes Buddha. Similarly, perfect competition models are like nirvana because they describe an economic condition that, in reality, is all but impossible to achieve. Nevertheless, economic models, much like Buddhist teachings, can help us to understand conditions that can guarantee a more perfect or "enlightened" economy. To see how this can work we'll consider below the role that ethics plays in the functioning of an economic system.

3. The Ethics of Exchange

The fundamental building block of an economic system is simple trade, the exchange of one thing for another between two individuals. The simplest economic models seek to explain the motivation for trade. A typical story goes as follows. First, specialization leads to overproduction relative to the needs one has for one's own personal use of those goods. The principle of diminishing marginal utility means a farmer specializing in corn can only eat so much corn before it just becomes too much to consume. The same is true for the farmer's neighbor, the shepherd raising sheep. The shepherd can only eat so much lamb before it becomes too much for personal use. However, if the corn farmer and the shepherd trade their surplus production with each other, then they can both obtain the initial units of the other product, which will offer a much higher utility than the goods given up. As a result, both traders increase their own utility simultaneously and trade is win-win, meaning that both parties gain from trade.

These gains from trade multiply as each producer increases their specialized production and can trade for an ever greater variety of different products in the marketplace. Thus, the farmer and shepherd become even happier as they produce more corn and lamb and trade it for fruits, vegetables, clothing, tools, and eventually for cell phones, motion pictures, automobiles, and vacations. At the same time, the producers of fruits, vegetables, and other items also become happier by trading for corn and lamb, etc. Clearly, as was emphasized by Adam Smith and others before him, specialization and trade is an important reason behind the rise of living standards around the world.

Adam Smith emphasized that self-interest, the desire to make oneself and one's family better-off, motivates people to specialize and then come to the market to trade. However, it is not always recognized that there is an alternative to cooperative trade that could enhance one's individual utility even more; namely, arrive at the market with a big club and attempt to take everything that one desires.[16] The fact that market participants in economic models don't consider violence and theft means that there is an implicit assumption that traders will respect each other's property. They accept that what's mine is mine and what's yours is yours until or unless we both voluntarily agree to cooperate in trade. The implicit agreement not to use force, or the threat of force to confiscate the other's products, represents adherence to an ethical principle that we often express as the imperative, "thou shalt not steal." Theft, in contrast to trade, generates a win-lose outcome, meaning that one person gains while the other suffers a loss. If theft instead of market exchange were a regular occurrence, people would stop going to markets. In the extreme, people would give up specialization and be forced to produce everything for themselves. Economic efficiency would suffer because markets with voluntary exchange would diminish or disappear. Coleman (1987) referred to this situation in which markets would not develop, or could not thrive, as pre-market failure. The critical point here is that because the market model rules out theft as an allowable means to satisfy one's self interest, it implies that this ethical principle is an implicit assumption of the model.[17]

A second ethical principle implicit in trade is to refrain from violence against others especially as it may relate to market participation. Violence, or the threat of violence, might not only be used to facilitate outright theft, but it could also be used to intimidate others into offering a more favorable terms of trade. For example, the threat of violence might induce someone to give up many more bushels of corn in exchange for something than one would otherwise be willing to do. A coercive outcome, achieved through violence or threat, would also likely result in win-lose outcomes and would also inhibit participation in markets, thereby eliminating potential improvements in economic efficiency. Furthermore, people must feel safe and secure

[16] Francis Edgeworth (1881) wrote "The first principle of Economics is that every agent is actuated only by self-interest. The workings of this principle may be viewed under two aspects, according as the agent acts without, or with, the consent of others affected by his actions. In wide senses, the first species of action may be called war; the second, contract." Market exchange is cooperative since it requires the consent of others, whereas the club method is tantamount to war.

[17] Why market participants adhere to an ethical principle, whether due to moral and religious beliefs or because of the threat of penalty from the State, is an important question, but is not the purpose of this paper, which is merely to delineate the ethical principles that sustain an efficient and competitive economic system in an economic model.

in their possessions during production, in storage, and in transit to and from the markets. The possibility of violence or threats of violence would reduce the incentives to specialize and to travel to the market to trade. These conditions may seem obvious, but in many real world contexts the threat of violence clearly inhibits market activity, so we cannot take these conditions for granted.

A third ethical principle needed to assure efficient market activity is to refrain from lying, or otherwise misrepresenting one's products or one's intention to trade. Perfectly competitive models generally assume perfect information. This assumption is included because a person needs to know, accurately, what is being received in trade and must be able to judge how valuable the products are to him or her. More specifically a person must be able to determine precisely how much utility the consumption of a product acquired in trade will generate. In contrast, the possibility of deception enables one trader to fool another into a transaction they would otherwise not want to make given accurate information. Such an outcome is tantamount to theft and would result in an ex post win-lose situation. This is despite the fact that ex ante the trade may have been made voluntarily because the deceived party was expecting a favorable outcome. Regardless, a trade made with deception will be win-lose, will inhibit further market activity, and will therefore cause a subsequent reduction in economic efficiency.

One other ethical principle related to deception is a rule to keep one's promises. Frequently, trade extends over time with one side of the transaction occurring now and the other side occurring later. For example, a loan is a transaction in which money is given to another person now, but with a promise to repay a larger amount of money (principal plus interest) in the future. Alternatively, a supplier may promise to ship a specified quantity of an item at a certain level of quality. These promises, often written down, become a contract. Thus, another way to state this principle is that individuals agree to fulfill their promises and honor contracts. Failure to do so means that the quid pro quo of exchange is not honored and one party gains at the expense of the other. This is another win-lose outcome that, if perpetuated, will inhibit market activity and thereby result in economic inefficiencies.

In summary, market exchange, or trade, implicitly assumes that participants adhere to several ethical principles, namely imperatives not to steal, lie, or to commit or threaten violence against others. Stated in positive terms, market participants are expected to honor property rights, to be honest, and to be kind to others. These are all elements of cooperation. When these

principles are shared and adhered to by market participants, then markets can thrive and deliver the economic efficiency described in the models. However, when participants do not adhere to these ethical principles, we can say the market has imperfections, or instead, that there is market failure, the ultimate result being economic inefficiencies.

4. The Ethics of Competition

In a neoclassical model, perfect competition forces producers to minimize the costs of production thereby lowering prices and enabling higher levels of consumption. Economic profit for a business is low such that nobody makes more than the normal returns that are just sufficient to continue to operate the business. True competition requires that all input markets, including labor and natural resource markets, are also competitive. This means that no one company can control the price of resources used in the production of their product. As an example, perfect competition does not prevail when one company owns most of the diamond mines in the world, or when a firm is the sole supplier of electricity in a region.

Businesses invariably strive for monopoly power, which would involve anything that reduces competition with other firms, because that makes it possible to raise firm profit and increase the returns to the owners of the firms. There are numerous examples of monopolizing behavior that extend from the relatively benign to those that would be judged as criminal in many societies.

On the benign side of the spectrum there are firm actions like product differentiation. When merchants redesign their products to include unique colors, materials, or other features, they are simultaneously making their product one-of-a-kind and devoid of identical substitutes. Nonetheless, other merchants who sell other similarly “unique” versions of the product (eg, other brooms, autos, furniture, etc.) will remain close substitutes for the average consumer and thus a high degree of competition will remain in the industry. Such a market, labelled monopolistically competitive in economics, may actually improve the overall well-being of consumers by enabling them to choose a product with features that more closely conform to their distinct tastes. Thus, this type of mild monopolizing behavior is hardly cause for complaint.

On the opposite end of the spectrum is behavior preventing competition that is so egregious as to be criminal. For example, some firms establish a monopoly in a particular

product by virtue of strong-arm tactics and intimidation. This is often associated with mafia organizations controlling markets for illicit products. In these cases, competition by an external supplier (eg. imagine bootleggers in the alcohol prohibition era in the US in the 1920s) is typically met with fatal threats to the new entrant and his family members if competitive sales activity does not immediately cease (eg. imagine the drive-by machine gunners at the barbershop). Beyond the mafia members themselves, it is hard to imagine anyone defending this as acceptable market behavior.

Intermediate between these two extremes is a wide range of monopolizing behaviors that engender different levels of acceptability. These include mergers and acquisitions, intellectual property protections, trade secrets, professional licensing, exclusivity deals, non-compete clauses in contracts, unionization, nationalization of industries, and dissemination of false information. Each of these actions represents a method firms can use to acquire a larger degree of monopoly power in their market and thereby secure greater monopoly profit.

Economic models demonstrate that overall economic efficiency falls with movements towards monopoly. In other words, the losses to consumers are larger than the increased profits accruing to business owners. If the business owners are wealthier than the average consumer, as is likely, then movements towards more monopolies would also increase income and wealth inequality.

Social condemnation of these monopolizing actions is mixed. There is no moral or ethical principle that says, thou shall allow others to compete freely in your market, or, that you should share your ideas freely, or, that it is wrong to acquire a monopoly.[18] Both Josef Schumpeter and Friedrich Hayek, who were strong advocates of competitive markets, believed that some degree of monopoly is acceptable; that we should not consider all monopoly behavior as unjust.[19] However, there are certainly many concerns about such activities especially when the actions result in extreme inequalities.[20] Indeed, these concerns motivated the implementation of competition (or antitrust) policies in some countries earlier in the 20th century.[21]

[18] See Knight (1923) for an early account of the ethics of competition
[19] See DeMarco, C. W. (2001)
[20] DeGeorge (1995) and Velasquez (1998) argue that monopoly is both economically (efficiency-wise) and morally wrong.
[21] Nonetheless, Benson (1992), argues that the United States has not succeeded in establishing antitrust laws as a basic ethical value.

Nevertheless, many people do share a moral sentiment for freedom. The notion of freedom applied to a market means the ability for any firm or worker to participate in any market, as buyer or seller, and to engage in trade with whoever else is willing. Any form of restriction or discrimination that prevents some people from participating is often viewed as unfair or unjust because it restricts individual freedom. Restrictions that prevent equal access to markets, or discriminate between different market participants, is also generally considered unjust.

The standard neoclassical model of perfect competition that is used to demonstrate how self-interested behavior can lead to economically efficient outcomes assumes that monopoly power in markets is non-existent. Implicitly this means that individuals and firms are free to enter and exit any market they wish without any impediment. It also assumes that information about production techniques and costs is shared among all market participants. This implies that there are no trade secrets, no intellectual property rights, no non-compete clauses in contracts, no exclusivity deals, no horizontal mergers and acquisitions, no labor unions restricting freedom of entry in labor markets, and no occupational licensing requirements restricting access, and so on.[22] The fact that these actions and behaviors are pervasive in real world markets is a clear indication that the model of perfect competition does not perfectly mimic the functioning of real economies. Nevertheless, the model remains useful because it clearly displays the ideal conditions needed to achieve that highly efficient state of economic nirvana. Economic nirvana requires complete freedom for firms and consumers to participate in any market they wish and it requires the sharing of production information widely and completely among all market participants.

In terms of ethical principles, free and open competition would require that businesses refrain from activities that would prevent competitors from participating in the market and also to refrain from collusive arrangements that serve to enhance monopoly power in the market. It also requires that businesses not inhibit the flow of information or ideas, even to potential competitors. These ethical behaviors are clearly not promulgated to the same degree as

[22] It is worth pointing out that the economics discipline does not disregard these phenomena. Instead these issues have been studied by using models that deviate from the standard assumptions of a perfectly competitive market. These situations are often referred to as cases incorporating market imperfections, aka, market failures. A common result in a market that contains imperfections is that free unfettered market behavior is not economically efficient. In other words, government policy, or some type of private intervention, can often improve economic efficiency.

behaviors regarding violence, theft and deception. Nonetheless, many do believe that sharing information is a good thing. Indeed, the entire educational system in countries around the world is based on a premise that widespread education is a much needed public good. However, that same sentiment does not usually carry over to private businesses, who often work very hard to protect their processes, ideas, and innovations. Businesses also invariably strive, via numerous methods, to enhance their monopoly power in their markets because it is in their own individual interests to behave in this manner.

Some would argue that the allowance of some limited degree of monopoly power is needed in a real market setting. If markets were truly competitive, small shocks to a market, such as a sudden drop in demand, could cause many firms to quickly shut down leading to unemployment for many workers. A modest profit cushion created via some modest monopoly power might be necessary to enable businesses to survive occasional shocks and to reduce market anxiety both for the owners and their workers. This can be used to justify some behaviors, including product differentiation, some intellectual property protections, some mergers, and perhaps exclusivity deals. These types of firm protections could provide that profit cushion to enable more efficient markets to prevail in the long run, especially when an economy is dynamic and rapidly changing.

However, firm behaviors that are clearly more egregious lead some to decry the activities of business. Peter Thiel, co-founder of Paypal, has argued that it makes little sense to create a new business in a competitive market because it will be very difficult to be highly profitable. Instead, he argues that the big money is in any business that can create a monopoly, or something close to it.[23] This is sound advice from the perspective of an individual business, but it is not the path to an efficient economic system. Nobel laureate Joseph Stiglitz highlights the problem this way,

> "We used to think that high profits were a sign of the successful working of the American economy, a better product, a better service. But now we know that higher profits can arise from a better way of exploiting consumers, a better way of price discrimination, extracting consumer surplus, the main effect of which is to redistribute income from consumers to our new super-wealthy."[24]

---

[23] Thiel, Peter, "Competition is for Losers," The Wall Street Journal, September 12, 2014.
[24] Stiglitz Joseph, "America has a Monopoly Problem – and it's Huge," The Nation, October 23, 2017.

5. Ethics of Inequality

For most economists, mention of the term ethics applied to the economic system usually results in thoughts about income or wealth inequality. This is partly due to a long-running literature, mostly in the mid-20th century, regarding the tradeoff between equity and efficiency. The neoclassical economic system could be shown to deliver economic efficiency, but it could at the same time deliver a greatly unequal income distribution. For example, an equilibrium in which 1% of the population receives 99% of the income, due to an unequal initial distribution of resources, can still be economically efficient after trade. However, if there were a redistribution of resource endowments before competition and trade occurred, it would result in an outcome with a more equitable income distribution that would also be economically efficient. Thus, one could argue that governments should adjust endowments, perhaps with taxes and subsidies, to generate a more favorable income distribution. However, economists have mostly argued that the choice of an acceptable income distribution is a normative issue that lies outside the purview of the economics discipline. In this way, the discipline has distanced itself from this particular ethical issue.[25]

This has perhaps been a wise approach since identifying the ideal distribution of income is surely a highly contestable normative issue unlikely to ever have a broadly accepted solution. Poorer households would assuredly argue that redistributions from richer to poorer are warranted, whereas richer households may believe such redistributions are theft of their justly earned income. Nevertheless, as pointed out by Piketty (2014) the evaluation of any income distribution by the population will depend on the way in which that distribution was achieved. People may look more disparagingly upon inequality achieved via unequal initial distributions caused by, say, an accumulation of inherited wealth, as opposed to inequality achieved via a hyper-meritocratic system. In the former case of inherited wealth, unequal outcomes arise more out of luck, whereas in the hyper-meritocratic system, unequal outcomes arise out of differences in natural abilities. For the hyper-meritocratic argument to be valid though, the high incomes of corporate managers and CEOs in modern capitalist economies, for example, must arise because

[25] See Stigler (1980) for a discussion of how ethics in economics came to be about income distribution.

these individuals are extremely productive consistent with a perfectly competitive model. If instead, their high incomes arise due to the presence of monopoly power, then the meritocratic argument breaks down.

In the end, the issue of income and wealth inequality is closely related to that of monopoly-power and competition. Unequal income and wealth distributions result simultaneously from 1) the concentration of resource endowments in the hands of a small part of the population (i.e., inherited wealth and educational advantages), 2) the advantages of monopoly power in certain industries, and 3) from the distribution of natural talents (i.e., meritocracy). Although the wealthy may prefer to believe that inequalities arise solely due to the natural distribution of talents, the unease about the extent of inequality in modern society has often occurred due to beliefs that inequalities arise largely because of the luck of inheritance or the exploitation of monopoly power. In either of these cases, the acceptability of inequality is positively related to the extent to which the assumptions of the standard neoclassical model are fulfilled. In a truly perfectly competitive economy with a reasonable initial distribution of resources (i.e., no monopoly in resource allocations), the inequality that arises is completely meritocratic. In contrast, substantial monopoly power, either in resources or in production activities, would result in much greater inequality, than in perfect competition, and would contribute to growing concerns about the inequity of the income distribution.

6. The Ethics of Externalities and Public Goods

Economic activities sometimes have indirect, and often unintended, detrimental effects upon others in a community. Prime examples include water, air, and noise pollution caused by production or consumption activities. The problem is akin to dumping your garbage on your neighbor's lawn. Commonly known in economics as negative externalities, these effects generally cause the over-production or over-consumption of these goods relative to what would be best from a social point of view.

The standard neoclassical economic model that generates the efficiency of economic nirvana ignores the possibility of negative externalities. In other words, the model assumes externalities simply do not exist. Including them in a standard model reduces efficiency and opens up the possibility of government taxes or regulations to correct for the problem. An

alternative to government intervention can sometimes be found via negotiation and compromise among the affected parties. For example, the perpetrator causing the negative external effects could offer to compensate those negatively affected for their losses. Alternatively, those negatively affected could offer to pay the perpetrator to reduce or eliminate their damaging behavior. Who pays whom, according to a well-known economics result introduced by Nobel prize winner Ronald Coase, depends on the property rights over the resource being damaged.

Regardless of which mechanism is used, correction of the problem for society's benefit requires participants to behave in a cooperative manner and that implies ethical behavior. One could invoke the well-known golden rule as the ethical principle at work here and argue that one should not do anything with an effect on others that you would not wish to have done to you. For example, don't dump your garbage on someone else's property, if you don't want others to dump their garbage on yours.

A strict application of the golden rule may imply, though, that the optimal policy would always be to not pollute. After all, I would certainly prefer never to suffer any negative effects caused by others' behavior. However, we know from economics models that when the benefits of production activity are high and the pollution costs are relatively low, then the optimal production level, and therefore pollution level, is not zero. To determine an acceptable outcome requires measurement of all the costs and benefits together with a willingness to cooperate and compromise. A polluting business may of course prefer to pollute freely since this would maximize its profit, assuming it is not run by environmentally-concerned owners. The disaffected public would of course prefer to have zero pollution since this would maximize their utility. The optimal solution is usually somewhere between these two extremes.

Another way to state the ethical principle here is that the correction of externalities requires consideration for others, or, good neighborliness. Being a good neighbor means recognizing when your activities pose harm to others and being willing to work towards a mutually acceptable compromise. Of course solving these problems, even with cooperative participants, can be very difficult. Measuring the costs and benefits is often contentious. The polluters will be inclined to look for measurements that minimize the cost estimates, whereas those affected by pollution will seek measurements that exaggerate the estimates. For this reason, government taxation or regulation may be necessary because it can force stakeholders to accept a kind of mediated solution.

Additionally, sometimes external benefits of economic activities are positive, not negative. Education of the population provides skilled workers to the market and can enhance the overall standard of living of a community. Similarly, products such as roads, bridges, parks, national security, and an effective legal system can all be shared widely and freely once these are produced and will contribute to the efficiency of the economic system. Provision of these "public goods" by private markets faces the difficult problem of free-riding and generally results in inefficient levels of supply. Thus, to make these products and services available at the optimal level may require either government intervention via public provision or subsidization, or, a high level of cooperation within a community.[26] People need to have a sense of community for the private contribution and provision of these items, or, be willing to accept a social contract enabling government to provide these items while taxing its citizens for the means to do so. Again, good neighborliness and a willingness to be cooperative by sacrificing something for the sake of the larger community is a necessary behavior to assure economically efficient outcomes in the presence of externalities.

7. Loyalty, Courage, and Respect for Authority

There are several additional ethical principles, widely expressed within society that are worth discussing; among these are loyalty, courage and respect for authority. Loyalty is the avowed support or allegiance to another person or institution. It involves behavior that works to consistently improve the well-being of another person or institution sometimes at the expense of the welfare of the loyalist. As such, it is a cooperative, rather than purely self-serving behavior. A person might be loyal to a friend, a spouse, the family household, a community, a club, a firm or business, a government or country, and even to a set of principles or ideals. In an economic system, loyalty can work to either increase economic efficiency or to reduce it, depending on the situation in which it is applied. Hence, loyalty as a general principle is problematic.

For example, economic institutions such as households, firms, and governments require its members to cooperate in certain ways in order to achieve their objectives. Each needs to split

[26] The best corrective method is a topic worthy of public discussion. Theory alone cannot provide an answer. It is worth noting that Elinor Ostrom won the Nobel prize in economics for work highlighting the ways private communities have fashioned cooperative arrangements to solve public goods and common resources problems.

up responsibilities and have its members assume particular roles. This often means accepting some level of hierarchy in decision-making. Institutions like these are not democratic because some individuals take on greater degrees of authority. Such institutions can allocate resources based on inherent advantages and increase productivity to serve all of its members. Thus, fostering loyalty, together with a respect for authority to the hierarchy and structure of the organization, can improve everyone's well-being. In this case, loyalty and respect for authority works to improve outcomes for all even though it requires group members to give up some degree of freedom.

Loyalty to a country is known as patriotism. A simple economic argument for this is that throughout history a country has always been in danger of invasion, or raids, from external groups, or from other countries. These raids could result in the destruction or takeover of productive resources and the death or possible enslavement of the people. To prevent this, countries have needed to establish a military force that can defend and secure the country. A larger military force that has a hierarchical command and control structure is more effective in defense than if individuals were responsible only for the self-protection of their own persons and properties. However, participation in the military will often mean the sacrifice of individual lives for the good of the larger group. For this reason, fostering loyalty or patriotism to king and country, or to its democratically elected leaders, could induce a voluntary participation in the military forces necessary to protect that country. As such, loyalty can help to promote the provision of the public good known as national security.

Loyalty in the face of extreme danger is often required of individuals in military or defense forces. These forces will be more successful in defeating an attacking force if participants in the battle behave with courage and valor. That means there is a clear benefit to the group if individuals are inspired to act courageously. In contrast, cowardly behavior would often be the better response to protect individual self-interest. The coward who runs away from a battle and hides may survive to live another day. However, cowardly behavior does not preserve the interest of the group. The group will be more successful when individuals give up their freedom and conform to the hierarchical command structure. It will be more successful when individuals go courageously into battle. Thus, promotion of this trait within a population will also help promote the provision of the public good, national security.

Sometimes however, loyalty, courage, and respect for authority can be misdirected to support gross inefficiencies. For example, employee loyalty to a firm could result in activities designed to thwart competition and secure a monopoly position. Some employees may be motivated to lie, steal, and threaten others, to promote the well-being of their company. Similarly, patriotism to a country can be justly used to rally community members to defend against an attacker, or it can be rallied to support the offensive pursuits of an autocratic leader bent on controlling and enslaving neighbors. Courage and respect for hierarchy is as useful for a purely defensive organization as it is for an offensive group. For this reason, people who develop a strong moral conviction for courage and loyalty often face moral dilemmas when asked to support others who appear to be violating other ethical principles. For example, should you turn in a family member to the police when you know they have committed a crime, or does family loyalty dictate otherwise? Or, do you join the armed forces to fight for your country when its leader is pursuing an expansionist military campaign that you do not believe in?

On the other hand, loyalty to a set of honorable principles has sometimes been regarded as the most important moral value. One of the strengths of democratic societies is the commitment its citizens have to its constitutional principles and the rule of law. Adherence, or loyalty, to these principles is what can assure outcomes such as "Equal Justice under the Law." However, loyalty suffers the same potential problem in this situation as well. For what if the set of principles one is loyal to is not so "honorable?" What if one's blind loyalty is to the principles of a fascist dictator or a radical jihadist? Can we continue to accept that loyalty is the most important moral value?[27]

8. Enlightened Self-Interest vs. Greed

We can now use the ethical behaviors embodied in the assumptions of the neoclassical model of markets to define enlightened self-interest. Table 1 shows a list of ethical behaviors (stated positively and negatively, i.e., both what to do and what to avoid) that serve to promote economic efficiency. All of these are implicit in the standard model of perfect competition even though the neoclassical model is often portrayed as being devoid of ethical content. In reality, the neoclassical model, while it clearly displays the self-interest motivation of producers and

[27] See Royce (1908) for an early description of this argument.

consumers to maximize profit and utility, does not as clearly highlight these implicit ethical constraints on self-interest needed to assure maximum efficiency.

TABLE 1
Ethical Principles Important for Economic Efficiency

Do's	Don'ts
Be kind to others	No violence; No coercion
Respect the property rights of others	No theft or stealing
Be honest. Keep promises. Fulfill contracts	No deception, No lying, No cheating
Allow market freedom	No monopolization; No trade restraint; no discrimination
Share information	No secrecy, No intellectual property
Be a good neighbor	Control secondary external harm
Be loyal to family, community and country (in support of efficiency)	No betrayal to your groups
Be courageous (in support of efficiency)	No cowardice
Respect authority (in support of efficiency)	No insubordination

Enlightened self-interest is defined in this paper as the behavior of individuals or businesses who pursue profit and utility while adhering to these ethical principles. This behavior, when adopted by everyone in the economy, promotes economic efficiency. At the same time, income and wealth would be more equal since differences would be based solely on differences in economic contribution. Resources would be allocated so that the resource costs of production were minimized. Externalities would be compensated for under cooperative agreements. Information would be widely shared, accurate, and made available to everyone who desires it. Individuals would be loyal to others in their families, businesses, and countries, but only to facilitate the efficient operation of these units, not to take advantage of, or exploit other groups. When in need of self-defense, individuals would courageously sacrifice themselves for the good of the group or country.[28]

[28] Gauthier (1985) describes this situation as a "moral free zone," suggesting that once all of the assumptions of a perfectly competitive economy have been realized, there is no longer any need for moral behavior. What critics of this viewpoint have also suggested is that the constraints contained within a perfectly competitive system are themselves moral principles. (see Hausman (1989) and Coleman (1987))

In contrast, greed can now be defined as the behavior of individuals or businesses who violate any of these ethical principles to gain greater individual profit or reward. In other words, greed is the equivalent of "unfettered" or unconstrained self-interest. Profit made by violating these ethical principles reduces economic efficiency relative to the case when all pursue enlightened self-interest. Thus, greedy market participants benefit at the expense of the larger group.[29] If the greedy merchant is originally wealthier than those who lose from his actions, then the actions will also increase inequality. Thus, unequal income and wealth distributions may result from greedy behavior on the part of market participants. It is worth highlighting, though, that the presence of inequality alone does not automatically imply greed since inequality of income and wealth is also driven by differences in natural productive abilities even in the absence of greedy behavior.

This definition of greed captures the complaint that many economics critics have about the stereotypical description of homo economicus; namely that the unfettered pursuit of self-interest will result in socially unacceptable outcomes. Indeed, it will! However, unfettered self-interest is not the behavior that is being described in the extended neoclassical model. Suggestions by economists or others that the homo economicus assumption means that individuals can do anything at all they perceive to be in their own best interest is a misunderstanding of the neoclassical paradigm. Unfortunately, this misunderstanding has been enabled by the economics discipline's unwillingness in recent decades to emphasize the role of ethical behavior in promoting economic efficiency especially when teaching economics principles.

9. Examples Distinguishing Enlightened Self-Interest from Greed

Consider a few of the best-known examples in recent economic history that are often used to demonstrate the failure of the behavioral assumption of homo economicus in the standard neoclassical economic paradigm. Perhaps there is no better example of a business organization

[29] Wang and Murninghan (2011) argue similarly by saying "… greed creates a sharp, direct conflict between self-interest and others' well-being; we suggest that this inevitable tension is the basis for the common view of greedy action – i.e., that it is socially reprehensible."

that attempted to implement the principles of unfettered self-interest and competition than the Enron Corporation in the latter part of the past century. Enron was an energy and commodities service company that was named as the most innovative firm by Fortune magazine for six straight years in the 1990s. It was a colossal success, until it wasn't. The company collapsed in the largest bankruptcy in American history in 2001. Its success was built on innovative financial service offerings and accounting practices. Its corporate philosophy initiated a Darwinian system in which the lowest-rated 15% of employees were automatically fired each year, rather than advancing the principles of loyalty necessary to make a large hierarchical organization effective.[30] A consequence of this intense competition among very smart people turned out to be incredibly effective methods of covering up the fact that the company was losing an enormous amount of money. This continued for many years before the truth became known and the company failed in a firestorm leaving many lifetime employees with nothing in their retirement accounts. However, this catastrophic business failure was not the result of a company adhering to the assumptions of the neoclassical economic system. Instead, their success was perpetrated on fraud and deception. Their behavior was greedy as defined herein; the company's behavior was not a case of enlightened self-interest.

A similar tale applies to the Bernie Madoff investment securities firm which also failed catastrophically in 2008. In this case, Madoff, successfully deceived his many clients that he had invested their money in a collection of stocks that consistently beat the market. However, he never actually made these investments, because he only knew ex post but not ex ante, which portfolio would generate the extranormal returns. He was able to maintain this fraud for many years because the inflows of new investments were always sufficient to cover any requests for withdrawals. This Ponzi scheme came crashing down when the financial crisis of 2008 led to substantial withdrawals by his investors and he was no longer able to cover his deception. Just like with Enron, this too represents a case of greedy behavior (as defined here) rather than the enlightened self-interest necessary in the standard neoclassical system.

A more complex and less well-known situation is the high frequency stock trading (HFT) described by Michael Lewis in the 2014 book Flash Boys. Lewis describes a profitable market activity made possible by the acquisition of information slightly earlier than one's competitors

[30] See Bethany McLean and Peter Elkind, Enron: The Smartest Guys in the Room, 2003

(where earlier is measured in microseconds). By trading quickly and frequently on this advance market info, HFT firms were able to earn upwards of $7 billion annually at its peak in 2009 while never actually holding onto any stock positions even overnight.[31] In other words, these firms never actually invested their money, but rather stepped in between other traders as intermediaries, making very small profits on each trade. Intermediaries can often provide a valuable service as when they facilitate the matching of buyers and sellers more cheaply than the participants themselves can achieve. Indeed, this is the argument that HFT firms use when they argue that their activity boosts market "liquidity." Perhaps, some of what HFT firms do conforms to this example. However, a less charitable interpretation is offered by Lewis. Rather than providing a valuable service, HFT firms were engaging in a kind of "electronic stock front-running" scheme that makes their activity tantamount to sophisticated, albeit legal, theft. By stepping in front of a trade that would have occurred regardless of their presence, HFT firms imposed a small transaction cost on other trading firms that went virtually unnoticed until it began to be recognized by the protagonists in Lewis' book among others. A clear indication that these "services" were undesired is that substantial efforts have subsequently been made to protect trading firms from the losses imposed on them by HFT schemes. The impact of these protection efforts has been the reduction in HFT profits to only $1 billion as of 2017. This case provides another example of greed in the financial sector. HFT firms' pursuit of self-interest was unfettered, arguably, because it did not improve economic efficiency but instead forced other businesses to devote resources to protect themselves from the so-called "liquidity services" of HFT firms.

A slightly different situation arose recently when hedge fund manager Martin Shkreli received enormous attention and condemnation after he raised the price of a pharmaceutical drug his company sold from $13.50 per dose to $750 per dose. The drug, first developed in the 1950s, was needed by only a small group of people and was no longer under patent protection. However, the small market meant that only one firm sold the drug at a slight markup over production cost. When Shkreli's firm acquired the drug it used its monopoly power to raise the price and its own profitability arguing that this was an acceptable market practice. No close

[31] Gregory Meyer, Nicole Bullock and Joe Rennison, How High Frequency Trading Hit a Speed Bump, Financial Times, January 1, 2018.

alternatives to the drug existed and production of a generic version of the drug by another company would take time and require expensive FDA approval. Shkreli was ultimately imprisoned for other unrelated business activities, namely securities fraud. His career in business consisted of a series of sometimes very profitable schemes based on deceptions, lies, and the creative use of monopoly power. Most notably though, his behavior was not an example of the inconsistencies of the free market system and the failure of the homo economicus assumption. Shkreli's behavior on several counts was greedy as it served to benefit himself at the direct expense of others and did not serve to increase market efficiency. His behavior did not fulfill the requirements of enlightened self-interest necessary for the efficient functioning of a market economy.

In the US there is a television documentary series that has run for over ten years titled American Greed, subtitled, "Some People will do Anything for Money." The series profiles recent cases of Ponzi schemes, investment frauds, bank robberies, identity thefts, and other dealings, all of which offer a bleak viewpoint on business activities. However, the one thing that characterizes greed in these episodes is that they all involve one or more violations of the ethical principles listed above. Nowhere in the series are there any episodes of a highly self-interested entrepreneur, inventing a new useful product and selling it to millions of people and thereby attaining great wealth. In other words, no episodes on the greed of a young Bill Gates or Steve Jobs. There are no episodes highlighting how careful research and long term investments in good companies can yield billions in wealth. No episodes about the fortunes of Warren Buffet.

There have been many Hollywood movies with a business as its primary villain. Consider just a few. Typical is the science fiction movie Avatar (2009), in which a resource hungry company is willing to destroy sacred indigenous lands and its people in order to acquire its profitable product. In Erin Brockovich (2000), based on a true story, the title character wins a legal battle against a gas and electric company that has knowingly dumped a chemical into the local water supply and poisoned a community. The movie The Insider (1999) is based on the true story of the cigarette industry's attempts to cover up the health dangers of smoking so they could sell more cigarettes and make more money.[32] These cases suggest that businesses are evil because they unscrupulously destroy others sacred property or put others in danger in order to satisfy their craving for profit. In these cases, the questionable business behavior is correctly

[32] See Ribstein (2009) for a thorough compilation of anti-business movies.

vilified and classified as greedy because the businesses are unwilling to act cooperatively and responsibly in reaching an agreement concerning their negative externality effects.

The negative portrayals of business activity captured in TV and movies are typical of anti-business views that extend as far back as the writings of Aristotle.[33] The prevalence of these views in the literature has generated a popular stereotype of business and business people as suspicious, in its mildest form, and downright evil, in its most severe form. It has even led some to condemn the entire capitalist system. But if one examines carefully what aspects of business are condemned, it is precisely the violations of the ethical principles, that have been defined herein as greed. Businesspeople are evil when they care exclusively about the bottom line, when they steal from others or use deception, when they dominate an industry and thereby exclude others, or when they carelessly threaten others' health and safety in order to make more money. Business people redeem themselves only when they are willing to look beyond the bottom line to the general well-being of employees, their consumers and the general public. In other words, positive portrayals of business have the actors adhering to the principles of enlightened self-interest.

That these simple ideas distinguishing good from bad business behavior are not more widely recognized as obvious by the general population is somewhat perplexing especially since proponents of free markets should be well aware of them. For example, in writing about self-interest, Adam Smith (WoN Book 4, ix.51) writes, "Every man, as long as he does not violate the laws of justice is left perfectly free to pursue his own interest in his own way." Similarly, Milton Friedman (1962; p.133) said, "The only social responsibility of business is to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game." 'Laws of justice' and 'rules of the game' are both referring to the ethical constraints noted here. These ethical constraints have been a part of the economic paradigm since its beginning, but for some reason the economics discipline simply stopped mentioning them.

As suggested earlier, one reason for their absence may be because the introduction of ethical assumptions seems to violate the intention that economic analysis be value-free so that it can thereby maintain scientific integrity. After all, science is the study of what is, not what should or shouldn't be. However, this concern is mistaken. First of all, in this paper I do not begin with the neoclassical model and suggest that we introduce ethical principles in addition to what is

[33] See the many examples in Heath and Kaldis (2017).

already there. Rather, I am merely highlighting the fact that the ethical principles are already implicitly included in the neoclassical model by virtue of the things we imagine participants do not do. Market participants cannot steal from each other, deceive each other, foster their monopoly power, or thoughtlessly impinge on other's property without it causing a reduction in market efficiency. That means it is mistaken to think we can keep ethics out of the economic model when it is already in there. Second, the neoclassical model should not be viewed as a model that perfectly mimics economic behavior. People often do not conform to the ethical principles listed here. Other model assumptions are also regularly violated in real world markets. Probably most economists gave up on this notion that the neoclassical model closely mimics reality long ago, if ever they held it, since current models are almost exclusively cast with elements of imperfect competition within them. Nevertheless, the neoclassical model continues to provide an enormous amount of insight into the key features that are needed to generate market efficiency, including the role that ethics plays. Finally, in noting that ethical principles are a part of the necessary assumptions in the standard neoclassical model, the model is not transformed from positive to normative. The neoclassical model does not imply that people should behave according to these ethical principles. Instead, the interpretation is that if market participants so behave, then economic efficiency is promoted. Whether society should pursue market efficiency remains a contestable normative question. Many people have argued that market efficiency isn't everything and there are other moral virtues worth striving for.[34] On the other hand, it is worth noting here that market efficiency isn't a bad thing to strive for. One reason many critics have argued against it is precisely because of the misperception about homo economicus and the inaccurate belief that it meant that market participants could do anything at all to pursue profit. Clearing away this misperception makes market efficiency a more laudable goal and one that is consistent with other virtues such as duty, dignity and charity.

10. Conclusion

This paper uses an economic rationale to define a boundary between what is commonly known as greed in popular discussions from what is known as self-interest in the neoclassical economic paradigm. Because this boundary has not been previously well-defined or articulated,

[34] See for example, Burbidge (2016).

it has caused pervasive confusion about the central premise of the neoclassical economic paradigm, namely the self-interest motivation often described as homo economicus. The boundary suggested here is that any individual or business behavior that serves one's own interest to the detriment of overall economic efficiency be classified as greedy, whereas any individual or business behavior that satisfies self-interest while simultaneously enhancing economic efficiency be classified as enlightened self-interest. This implies that market behavior that involves theft, coercion, threats, violence, deception, dishonesty, irresponsibility, collusion, resource concentration, discrimination, secrecy, cowardice, insubordination or disloyalty, be classified as greedy. In contrast, market behavior that involves kindness, respect, honesty, sharing, freedom, competition, non-discrimination, voluntariness, responsibility, bravery, respect, and loyalty, be considered enlightened self-interest.[35] The standard neoclassical model requires market participants to act with enlightened self-interest in order to attain economic efficiency. When participants act greedily, economic efficiency is either directly reduced or market participation is sufficiently discouraged to reduce potential gains from exchange. These behavioral rules needed for economic efficiency correspond to ethical principles, which means that ethical behavior is an important element in the efficient functioning of an economic system. In other words, economic efficiency requires markets participants to constrain their self-interest and follow these ethical rules. Self-interest pursuit with these constraints is enlightened, self-interest pursuit without them is greed. This means that the behavior of homo economicus is enlightened self-interest, not greed.

Clearly human societies have long recognized that these ethical behaviors are important and have developed numerous distinct mechanisms that help to promote cooperative and ethical behavior. Children are taught by their parents worldwide, don't hurt others, don't steal, and don't lie. Teaching of these moral principles are reinforced by organized religions which offer a spiritual justification for pursuing moral behaviors. However, because these social pressures are insufficient, societies have also used the power of the State to implement rules of just conduct, that not only prohibit certain behaviors, such as violence, theft and dishonesty, but also issues penalties to those found guilty of such violations. The State also provides for the local and national defense against external pillage and plunder. More recently the State has extended its

[35] With the previously noted caveats concerning bravery, respect, and loyalty noted.

coverage to include sanctions against monopolizing practices of business and the regulation of negative externalities.

Adam Smith, the father of modern economics, is well-known for having popularized the notion that individual self-interest alone could lead, as if by an invisible hand, to outcomes benefiting all of society. His most famous book, the Wealth of Nations, sought to demonstrate why it was that 18th century Britain had managed to attain so much wealth. Key to the smooth functioning of modern economies, in his eyes, was the ethical and moral behavior that he discussed in his less famous earlier work, the Theory of Moral Sentiments. More recently McCloskey (2010) attempts to answer the more modern version of Smith's original question, not just what causes the Wealth of Nations circa 1776, but what has caused the phenomenal great economic enrichment during the past two centuries? McCloskey's thesis is that the rapid economic development in the advanced countries after the industrial revolution was due to an ethical and rhetorical change that occurred primarily in Northern Europe and Britain in the late 17th century, around the time of Adam Smith. This paper highlights a simpler proposition, namely that specific ethical behavior is needed for an economy to achieve economic efficiency. McCloskey goes further by arguing that widespread acceptance of these principles within the bourgeois merchant classes in Europe enabled the innovative surge that has occurred over the past few centuries.[36]

In summary, ethical behavior is critical to achieve both economic efficiency and dynamic growth and prosperity. It seems likely that if greedy behavior is too pervasive, if there is too much theft, deception, dishonesty, and monopoly, then people will retreat into the self-sufficiency of their own households and communities and the advantages of trade and the potential for innovation and growth will be low. However, if greed subsides, and if a sufficient number of people act with enlightened self-interest, respecting property, fulfilling promises, transmitting honest information, and limiting monopolization, then markets can expand well beyond the household and local community and people can begin to trade with strangers and to reap the rewards that come from the extension and development of one's comparative advantage. It was the spread of enlightened self-interest that contributed to the wealth of nations and it is the resurgence of greed that continues to interrupt its progress.

---

[36] For a different look at the importance of ethical behavior in markets and a plan for the future of capitalism see Paul Collier's new book, The Future of Capitalism.

I'll conclude with a modest normative proposal. The economic discipline needs to change the way it teaches economics to the next generation. It needs to introduce students to, and be more explicit about, the ethical behaviors that help to sustain efficient economic activity and economic growth. It needs to explain the boundaries between greed and enlightened self-interest highlighted here. Failure to do so during the past century or so has resulted in gross misunderstandings about the functioning of a free market. Indeed, behavioral studies have demonstrated that students of economics are more likely to believe that greed is good and to act in non-cooperative ways.[37] Many critics of economics believe that the discipline is founded on an assumption that the representative agent is a heartless psychopath that cares about nothing other than his or her own self-interest and is justified in doing anything necessary to secure his own happiness.[38] However, these impressions are simply not accurate. Homo economicus can be lauded and praised once it is recognized that he or she must act with enlightened self-interest in order to secure the standard benefits of market efficiency and economic growth and to share those benefits most widely. Unfettered self-interest, or greed, are the characteristics that led some to think of homo economicus as a monster, and can rightfully be condemned. Greed is not good, or more precisely, greed does not promote economic efficiency.

Most importantly though, this change in approach to teaching economics does not require a new economic paradigm. The neoclassical model provides many important insights into the workings of the economic system and there is no need to stop teaching any of it. However, we do need to remember that models have limitations in applicability because they are simplifications of the world. We should not expect models to be precise representations of the economy. Failure to recognize this leads some critics of economics to decry the entire capitalistic system and fuels animosity between right-leaning and left-leaning ideologies. The neoclassical economic paradigm is not defunct as some people seem to believe. Instead we merely need to recognize once again, as early thinkers in economics did long ago, that ethical considerations are extremely important to the smooth functioning of the economic system and then teach students to understand how and why.

[37] See Wang, Malhotra, and Murnighan (2011), Frank, et.al. (1993), and Ghoshal (2005).
[38] See Ubel (2014).

11. References

Alvey, James E (1999), A Short History of Economics As a Moral Science, Journal of Markets & Morality 2, no. 1(Spring 1999), 53-73.

Benson, George C. S. (1992), Business Ethics in America (D.C. Heath).

Burbidge, Dominic (2016). "Space for virtue in the economics of Kenneth J. Arrow, Amartya Sen and Elinor Ostrom," Journal of Economic Methodology, Taylor & Francis Journals, 23(4), 396-412.

Clements MT (2013) Self-Interest vs. greed and the limitations of the invisible hand. American Journal of Economics and Sociology, 72:949–965.

Collier, P. (2018). *The Future of Capitalism: Facing the New Anxieties*. Penguin UK.

Coleman, J. L. (1987) Competition and Cooperation, Ethics, 98(1), 76-90.

DeGeorge, Richard T. (1995), Business Ethics, 4th ed. (Prentice Hall, Englewood Cliffs, NJ).

DeMarco, C. W. (2001), “Knee Deep in Technique: The Ethics of Monopoly Capital,” Journal of Business Ethics, (31) 2 (May), pp. 151-164.

Demsetz, Harold (1969), “Information and Efficiency: Another Viewpoint,” Journal of Law and Economics, 12, 1-22.

Drakopoulos, S. A. (1997), “Origins and Development of the Trend Towards Value-Free Economics,” Journal of the History of Economic Thought 19, (2) 286.

Edgeworth F.Y., (1881), Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences, C. Kegan Paul and Co., London.

Frank, R.H., Gilovich, T., & Regan, D.T. (1993). Does studying economics inhibit cooperation? Journal of Economic Perspectives, 7(2), 159–171.

Friedman, M. 1962. Capitalism and Freedom. Chicago: University of Chicago Press.

Gauthier, David (1985), Morals by Agreement, Oxford University Press, Oxford.

Ghoshal, S. (2005), Bad management theories are destroying good management practices. Academy of Management Learning and Education, 4, 75–91.

Hausman, Daniel M., (1989), Are Markets Morally Free Zones?, Philosophy and Public Affairs, 18(4) 317-333.

Heath, Eugene and Byron Kaldis (eds) (2017), Wealth, Commerce & Philosophy: Foundational Thinkers and Business Ethics, University of Chicago Press, Chicago.

Hirschman, Albert O. (2013), The Essential Hirschman, Jeremy Adelman (ed), Princeton University Press, Princeton and Oxford, pp. XVII–384.

Kay J (2009) The rationale of the market economy: a European perspective. Capitalism and Society vol 4, issue 3, Article 1.

Kirchgässner, G. On Self-Interest and Greed, Journal of Business Economics (2014) 84: 1191.

Knight, Frank (1923), The Ethics of Competition, Quarterly Journal of Economics; reprinted in The Ethics of Competition (Chicago: University of Chicago Press, 1976)

McCloskey, D. N. (2010), Bourgeois dignity: Why economics can't explain the modern world, University of Chicago Press.

Ng, I. C., & Tseng, L. M. (2008). Learning to be sociable: the evolution of homo economicus. American Journal of Economics and Sociology, 67(2), 265-286.

Razen, M., & Stefan, M. (2016). Greed: Taking a deadly sin to the lab (No. 2016-27). Working Papers in Economics and Statistics.

Ribstein, Larry E. (2009), Wall Street and Vine: Hollywood's View of Business,"

Robinson, Joan (1933), The Economics of Imperfect Competition.

Rothschild, Kurt W. (1993), Ethics and Economic Theory, Aldershot, UK: Edward Elgar Publishing Company.

Royce, Josiah (1995). The philosophy of loyalty. Vanderbilt University Press.

Sen, Amartya (1977), Rational Fools: A Critique of the Behavioral Foundations of Economic Theory, Philosophy & Public Affairs, 6 (4), pp. 317-344

Sen, Amartya (1987), On Ethics and Economics, Oxford: Basil Blackwell, p7. the nature of economics "has been substantially impoverished by the distance that has grown between economics and ethics."

Skaperdas, S. (2003). Restraining the genuine homo economicus: Why the economy cannot be divorced from its governance. Economics & Politics, 15(2), 135-162.

Snower, Dennis (2014), The Looming Death of Homo Economicus, Project Syndicate, http://www.project-syndicate.org/commentary/dennis-j--snower-insists-that-humans--economic-self-interest-cannot-be-separated-from-their-capacity-for-care

Stigler, G. (1981). Economics or ethics?. *The Tanner lectures on human values*, *2*, 143-191.

Ubel, Peter (2014), Is Homo Economicus A Psychopath?, Forbes, http://www.forbes.com/sites/peterubel/2014/12/15/is-homo-economicus-a-psychopath/

Velasquez, Manuel G. (1998), "Business Ethics: Concepts and Cases," 4th ed. (Prentice-Hall, Upper Saddle River, NJ).

Walker, J. S. (1992). "Greed is good"... or is it? Economic ideology and moral tension in a graduate school of business. Journal of Business Ethics, 11(4), 273-283.

Wang, Long, Deepak Malhotra, and J. Keith Murnighan. "Economics Education and Greed." *Academy of Management Learning & Education* 10, no. 4 (December 2011): 643–660.

Wang, L., & Murnighan, J. K. (2011). On greed. Academy of Management Annals, 5(1), 279-316.

Zak, P. J. (2011). Moral markets. Journal of Economic Behavior & Organization, 77(2), 212-233.