

> In your opinion, do you believe billionaires are ethical/unethical?

It depends on the ethical system. There are two to choose from. One, referred to as rights-based, posits that there are basic, if not universal, rights and wrongs. For example, killing another human being is never justified. Another system, the consequentialist tradition, believes that ethics should be based on cost benefit analysis. For example, killing somebody might be justified if doing so saves many more lives. There are many sub-schools of thought under the latter approach. Let's focus on just one for the moment: the utilitarian argument that policies and behaviors that make consumers better off are more desirable than those that do not and, thus, if a cost benefit analysis yields appreciable gains in consumer welfare, then those policies and behaviors are morally justifiable. If we adhere to the utilitarian view I just outlined above, then the answer is a qualified yes. By the way, what makes consumers better off can also make workers and citizens who do not work better off too, both directly and indirectly. In fact, it can make citizens better off as a whole if it helps create a more valuable economy that the government can tax to finance public goods, solve market failures, and provide social insurance. In the rest of my thoughts, below, I draw out some of those linkages.

> Does it depend, and if it depends, what does it depend on?

It depends on how the wealth was acquired. If it was acquired by politically favored insiders who capture the state to erect barriers to entry and create long lasting monopolies, and the billionaires are a byproduct of the profits generated by rationing quantity and charging higher prices than what would obtain in a competitive market, then this is bad for consumers overall. Therefore, it is morally wrong. However, if the wealth was generated by entrepreneurs who innovate to introduce a new process or product into the market that creates considerable value for consumers because it generates new markets, or improves them, or reduces the price of existing goods and services while increasing their quality, then it is ethically desirable. What the billionaire's wealth reflects in this case is the ability to improve the allocation and production of scarce resources towards their higher value use. Investors reward this by bidding up the shares of their companies, signaling the future profits expected from innovators who improve consumer welfare. This may even be the case if the entrepreneurs in question monopolizes a new good or service after introducing an invention, for example, since the new good or service might not exist but for the expectation that it will generate monopoly profits.

> Any thoughts on how billionaires may acquire their wealth?

Please see my answer above.

> Capitalism versus other economic systems, are some more ethical than others?

Capitalism moderated by a generous welfare state is the most ethical economic system ever devised by human beings according to the perspective I outlined above. Capitalism underpinned the first industrial revolution and several others after that. The advent of general-purpose technologies (GPT) transformed the scale of production and put productivity on an exponential growth path for the first time in human history. This ended the Malthusian Trap whereby increased economic productivity engendered bigger populations that then outstripped the ability of the land to feed them—and, in turn, represented a

perennial regression to the mean when it comes to living standards.

The first generation of innovations include the steam engine and the modern production of cheap and plentiful steel. Next came electricity and the internal combustion engine. Then came the transistor, integrated circuit and microprocessors, as well as personal computers and user-friendly software. Plus, the internet.

Legal innovations have also mattered, including limited liability corporations with modern corporate governance structures, modern securities markets, and specialized investment banks that financed things such as railroad expansions and the infrastructure that made international trade at long distances possible. Swashbuckling multinational firms now stride the world doing business in diverse markets; they are characterized by global supply chains bankrolled by big banks, corporate bonds, and stock markets that represent trillions of dollars in value. Tech startups nurtured by venture capital and so-called Angel Investors are yet another example of the financial plumbing that makes modern capitalism work.

Indeed, capitalism is now driven by a digital revolution in which multi-sided platforms that did not exist 25 years ago have disrupted everything from currency and banking to transportation, hospitality, advertising, and communication. The automation of automation, in which computers and robots will communicate with each other and make their own “decisions”, which in turn will be made possible by impressive improvements in AI and the anticipated advent of the internet of things, is capitalism’s next big thing.

On balance, the results have been ethically desirable. Supremely so. This includes vast and almost impossible to express improvements in living standards. We are much, much more prosperous than our ancestors could ever dream of being. Plus, there are many, many more of us alive today and most of us enjoy more and better food, higher-quality clothing at a fraction of the price, cheaper and safer travel, medical devices that detect and treat almost every malady known to humans, and supercomputers in our pockets with more processing power than the machines who put men on the moon. Though poverty persists, poverty levels both nationally and globally are much lower than they were just 50 years ago. Through the dissemination of information facilitated by capitalism, most countries have also eliminated or greatly reduce humankind's worst social ills, including slavery, caste systems, and child labor.

Capitalism unleashed specialization and innovation that allowed for an unprecedented escape from the Malthusian cycle of diminishing returns and immiseration experienced by our ancestors. In per capita terms, we now produce and consume much, much more with fewer resources.

As reported by Deirdre McCloskey and many others, between 1820 (the consolidation of the first industrial revolution) and today, capitalism and its spread are associated with about a 30-fold increase (2,990%) in average living standards for the average developed country. That means for an individual living in Sweden, for example, going from earning \$3 dollars a day to \$100 dollars a day. For middle-income countries, such as Brazil, it means going from earning \$3 dollars to \$70 dollars a day. And these are lower-bound estimates that do not adequately address flaws in consumer prices indexes or quality-

adjusted prices (see Gordon 2017). Nor do they measure consumer surplus, which means the difference between what consumers pay for things and what they are willing to pay for them—which means that many “free” digital services such as Google are completely omitted from these figures.

Consider, also, the Asian Tigers (Taiwan, South Korea, Singapore): capitalism was put on warp speed there—and consequently, so were its astounding results. These countries have experienced 20+ fold increases in living standards since the 1960s/70s. Or, think about the Eastern European countries since the fall of the Berlin Wall as freer markets took root there. In Poland, Hungary, the Czech Republic, improvements in average living standards have been five-fold, six-fold and eight-fold, respectively. Finally, over 1 billion people have been lifted from poverty in China and India in the wake of market liberalizing reforms in those countries that integrated them more closely with the global economy in terms of international investment flows and trade.

Why does this matter? Higher income per capita is highly correlated with increases in consumption, higher caloric intake, and better health and longer life expectancies, among several other things. The relationship is not perfectly linear – but it’s quite strong nonetheless.

Moreover, on the back of the global spread of markets, the global rate of poverty has been cut in half since the 1960s, from over 50 percent of the world’s population to less than 10 percent today (2 dollars a day adjusted for inflation and purchasing power differences between countries). The jury is still out on whether the Covid-19 pandemic might reverse this progress.

Now, consider what has happened to countries that have abandoned or severely distorted markets. Venezuela has experienced an unprecedented catastrophe under its self-styled experiment in populist socialism. The short of it is: Hugo Chavez and Nicolas Maduro expropriated land, oil fields, mines and factories, imposed price controls, and ran the printing presses to pay for checks the country could not cash.

Therefore: It went from being the most prosperous country in Latin America to one of the poorest. Almost 5 million people (1/6 of the population) have fled; yes, the wealthy have decamped to Miami, but the lion’s share of economic and political refugees are from the middle class and the poor, who have left for Colombia, Peru, and Brazil.

The reason? They no longer had access to food, medicine, diapers, baby formula, or toilet paper. The average Venezuelan lost 19 pounds of body weight in 2016. Millions of Venezuelans resorted to scrounging the streets for food. Babies died of diarrhea because they could not get access to Pedialyte. Diabetics died in droves because they could no longer import insulin. Oil fields, factories, and farms were abandoned and/or pillaged. Cuba is a similar story under Communism, as is North Korea.

Here is another way to think about the benefits of capitalism versus other economic systems: migrants who move from poor countries marred by dysfunctional or non-existent markets to developed countries with better institutions, the rule of law, and well-functioning markets make three to six times as much money as they did at home when they perform the exact same job, simple findings described by Mancur Olson during the 1990s and corroborated by other economists for future periods. And they often send a significant share of the money back home in the form of remittances. Let me add: this really helps their

families who are left behind, including assisting with basic things such as clean drinking water and basic sanitation. Not to mention education.

> In a perfect “world” (US world), what do you believe distribution of wealth in its most ethical form would look like?

If you follow the ethical view I espoused at the beginning of my answers to you, the distribution of wealth does not really matter. What matters is the absolute standard of living. If your objective is to improve the material living standards of individuals, then it really does not matter if Bill Gates or Elon Musk have wealth that is orders of magnitude greater than the poorest of the poor. As long as these billionaires are not stealing from those at the bottom of the income distribution, or blocking their ability to improve their standard of living, then the gap between the rich and poor is beside the point. In fact, one could argue that it's the opposite: the introduction of new processes and products creates new markets that folks with fewer means benefit from (think, the ability of poor farmers to purchase smartphones that help them better forecast the weather, borrow money at more favorable interest rates via fintech and use apps that help them improve their crops' yields) and reduces the costs of goods and services consumed by the poor. For example, the real (inflation adjusted) price of wheat has decreased six-fold since 1920 due to improvements in global supply chains, international trade, and the introduction of new technologies such as farm machinery. In other words, capitalism.

> What kind of changes can be made, if any, to properly distribute wealth in the US specifically? Or if you don't believe any changes could/should be made in US wealth distribution, why is that?

If one wanted to both improve the standard of living for those at the bottom of the income distribution and perhaps reduce the gap between the rich and poor, the number one tool is education. That is because the US is oriented towards the type of technology that requires high levels of skill, which is highly correlated with basic literacy in writing, reading, math, science, and computers. What's more: unlike markets where increases in the supply of a good or service lead to a reduction in its price, in the case of education, more educated workers actually leads, over the long term, to higher wages. That's because educated folks who have access to technology are more productive, which drives down the costs of making goods and services and drives higher demand for goods and services or helps create entire new markets where educated workers are hired and compensated well. This explains why there is a college premium, for example, by which college educated workers keep experiencing increased wages despite the fact that the college educated labor pool keeps expanding.

There are other policies that may help this objective too. Consider Sweden. Contrary to popular belief, it is quite capitalist. It boasts strong property rights and allows big profits for several internationally competitive firms. In fact, Sweden has the most billionaires per capita. This is because it allows goods and services to be allocated via prices. The state does not own firms or banks and, in fact, did not bail out banks during the early 1990s banking crisis or Saab motors when it went bankrupt. Moreover, unlike the United States, Sweden does not put restrictions on the foreign acquisition of companies and let China buy both Saab and Volvo. Indeed, Sweden is completely open to international trade and Foreign Direct Investment.

These policies allow Sweden to boast top companies such as Ikea and Ericsson. It allows it to have lots of entrepreneurship—again, more than the United States—and provide plentiful venture capital to finance it.

Yet, Sweden has strong unions, a very strong safety net, and robust redistribution. There does not seem to be a contradiction between markets and greater equality there. Sweden is home to aggressive social insurance and redistribution based on social spending and direct transfers such as old-age pensions, family allowances, health insurance, and housing subsidies.

This has allowed Sweden to achieve a high standard of living but also relatively equal distribution of assets and income. Sweden's Per Capita Income is comparable to that of the US and It has achieved greater improvements for the middle class than other OECD countries. It has virtually eliminated poverty. Also, Sweden boasts very high upward mobility—much higher than the United States—due to high spending on education across all levels and strong social safety net.

> Taxing billionaires? Lots of people believe this idea is a dead end, do you have any thoughts on whether you think this is possible, or if this should even happen? If you have an opinion of whether or not billionaires should be taxed more, why or why not?

I think it's a bad idea. That's for several reasons. First, consider the case of Sweden I outlined above. To fund its generous safety net, it raises broad based taxes that are relatively regressive and based on consumption (Value Added Taxes). This is because these taxes are not distortive and, if anything, they encourage savings, which help finance capital accumulation and innovation. Conversely, taxes on income and capital gains are distortive, in that they discourage (at the margin) work effort and behaviors that spur investments in capital, education, and technology. A billionaire's tax centered on capital gains would be especially harmful because venture capital and similar financing vehicles are the key to mitigating the risk-averse behaviors that lead to the under provision of research and development that, in turn, depresses innovation and future prosperity. While there are many things governments can do to subsidize research and development beyond the tax code, including helping to create an educated workforce and diffusing basic science and technology, there is no reason for it to harm incentives around capital that funds R&D. Since there are alternative uses of capital and agreeable rates of return on those investments (think about the interest rate you obtain from owning a government bond), in order for investors to take the risks involved in allocating their capital to R&D they must be adequately compensated. Forswearing high rates of taxation on capital gains is one way in which that occurs.

> Do you have any critiques for what billionaires could be doing better, or perhaps any credit to billionaires for what you think they have done that should be applauded?

I don't think they need to be excoriated or applauded. Like everybody else who works for a living or invests or does something productive, they add value, help workers be more productive, and lubricate the wheels of commerce for others by reducing the costs of accessing and using markets. They are compensated accordingly. The often reflect social investments made by the government, and thus taxpayers, in the legal system that enforces intellectual property rights, an education system that gives

them the skills to succeed, infrastructure that helps them access markets and the prudential regulation and evidence based tax code that underpins the financial plumbing that channels scarce capital to firms that produce new processes, goods, and services.

> One of the many arguments for people who are in favor of billionaires is this concept of generational wealth, keeping it for generations to come — do you have any thoughts on this?

Not really. As long as generational wealth does not block access of opportunity for others, I don't really care about billionaires passing on their wealth to their children. Remember my argument above: the reason these billions of dollars exist in the first place is because of the new value created by the billionaires. Absent the billionaire's ingenuity or acuity, these billions don't come into existence: they are the product of new markets and new goods and services or higher quality goods and services. If, however, someone redistributed wealth from somebody else to give to the billionaires (because, for example, they've captured the government and rigged the system to create a monopoly), instead of the billionaires creating new economic value through innovation or improving markets or whatnot, then it is not ethical for them to pass it on to their heirs according to the definition I provided above. Indeed, it is not ethical for them to possess that wealth in the first place: they are making consumers worse off and perhaps workers and others as well.

> This is less of an interview question, but just thought I would add that what prompted us to write this story was the recent talk that Elon Musk is on track to become the first “trillionaire” due to SpaceX. So, if you have anything to say about Elon Musk and the concept of trillionaires existing, feel free to add any thoughts on this as well.

The same logic I outlined above applies to trillionaires. Why is Musk approaching this status? Because investors are plowing money into his ventures in the expectation of future profits. Why are these ventures anticipated to be so profitable? Because they create value for consumers by creating new markets or improving existing ones.