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# Moral Capital
## in the Twenty-First Century

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# Moral

# Capital

## in the Twenty-First Century

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**Abstract:** This paper recasts Piketty's *Capital in the Twenty-First Century* in light of Acs' *Why Philanthropy Matters: How the Wealthy Give and What It Means for Our Economic Well-Being*. Philanthropy matters in this debate because, as moral capital, philanthropy offers an alternative solution to the Piketty conundrum, and it does so without relying exclusively on a wealth tax and government intervention. Moral capital over the centuries strengthened both capitalism and democracy by investing in opportunity (slavery, suffrage and civil rights), which in turn leads to long-term economic growth and greater equality. By focusing on university research—which is critical in promoting technological innovation, economic equality, and economic security—that creates a large, well-functioning middle class (*The Economist,* March 2015), moral capital represents the missing link in the theory of capitalism development.

**Keywords**: philanthropy, competition, education, opportunity, entrepreneurship, innovation, inequality, Piketty

**JEL**: L26, J24, O20, P16

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## Introduction

When I asked my publicist what makes a bestseller, she replied “four factors”: How well known is the author? How interesting is the subject matter? How broad is the book’s scope and reach? And what is the “X” factor? I applied this logic to Thomas Piketty’s book, *Capital in the Twenty-First Century,* and found the following: the author was not well known, the subject was marginally interesting, and the book did have a broad reach. Most importantly, however, the X factor was *huge,* and the book became an international sensation.

So what is the X factor that catapulted *Capital* onto the bestseller list? The book feeds into the growing global debate about the long-term evolution of capitalism, inequality, the concentration of wealth, and prospects for future social stability. Piketty puts the distribution of wealth front and center in this debate and opens a window onto a future that is both brilliantly illuminating and deeply alarming for any person concerned with human rights, equality, and social justice. He asks the critical question, “Where is the capitalist system going in the long run?” The answer, according to Derber (2015): “If we do not pursue that conversation, we may lose our hope to solve urgent problems of extreme inequality, dynastic wealth and democratic collapse” (p. xi).

*Capital* has been the subject of much debate. Soskice (2014), for example, argues that Piketty’s central analysis of the current rise in inequality makes little sense because he bases it purely on neoclassical mathematical analysis. Acemoglu and Robinson (2015) state “that general economic laws are unhelpful as a guide to understand the past or predict the future, because they ignore the central role of political and economic institutions…in shaping the distribution of resources in society.” However, these critics seem to have missed the essential point about capitalism, which, as Marx and Schumpeter both suggested, is an evolutionary process. If this is true, then surely some general laws and institutions are needed to explain its evolution; for example, what are the dynamics that propel the system forward? More to the point as Hopkins (2014) argues that by leaving out government we have an incomplete story about Capital, "Even if the fact of capital accumulation may respond to an economic logic, the process is embedded in a very political logic, as is the reconstitution of capital."

Because they do not understand the function of giving (Clinton, 2012), Piketty and others dismiss moral capital—defined as "the resources that sustain a moral community" (Haidt, 2012, p. 292)—as a hoax. Thus this paper aims to recast the great debate about *Capital in the Twenty-First Century* through the eyes of philanthropy, the art of putting wealth to work for the common good (Acs and Phillips, 2002; Acs and Braunerhjelm, 2005; Acs, 2013). The common good is carefully described as a capitalist venture in social betterment. This is distinctly different from the "acts of kindness" of the Great Society, or helping the poor in Victorian England, which were not philanthropy but a form of charity. Why this critical distinction? Because when moral capital is absent, wealth remains concentrated, rent-seeking flourishes, and innovation and entrepreneurship and democracy suffer (Baumol, Litan, and Schramm, 2007). Philanthropy propels the dynamics of capitalism in two primary ways. First, it lays the groundwork for new cycles of enterprise by strengthening institutions that promote opportunity, innovation, and entrepreneurship. Second, it provides a mechanism for dismantling accumulated wealth that is made in the past and reinvesting it in ways that will strengthen future equality of opportunity.

This paper builds on the general laws of capitalism laid down by Piketty and shows how moral capital, while not altering the general laws of capitalism, can move the system toward long-run stability and growth. It does so by redirecting the flow of rents from individuals' capital to produce moral outcomes in the form of opportunity. The next section examines the last great book on capitalism by Joseph Schumpeter. The third section recasts Schumpeter's *Capitalism, **Socialism,** and Democracy (CSD)* as capitalism, ***philanthropy***, and democracy, thus setting the stage for 21st-century dynamics. The forth section provides a framework for the understanding the ecosystem of moral capital in the theory of capitalist development. Section five offers evidence on the financial size of moral capital in the 21st century as applied to the American experience, suggesting that philanthropy provided much of the fuel that propelled American capitalism to triumph in the 20th century and is now spreading around the world in the 21st century (Solamon, 2014).

## Capitalism, Socialism, and Democracy

*Capitalism, Socialism, and Democracy* (1942) sits midway between Marx's *Capital* (1851) and Piketty's *Capital in the Twenty-First Century* (2014). Published in 1942 as World War II raged, the bestseller *CSD* fed into the growing debate about economics, specifically the long-term evolution of capitalism, inequality, the concentration of wealth, and the prospects for social stability. Although the news was filled with reports on the battles of Stalingrad and Midway, the world also was looking ahead to what the world would look like after the bombs stopped falling. In *CSD,* Schumpeter provided a chilling and sober account of the great debate between capitalism and socialism, making three predictions. First, he asked the obvious: "Can capitalism survive?" followed by his response, "I do not think so." He then asked, "Can socialism work?" replying, "Of course." Finally, on the question "Will socialism be democratic?" he punted. In other words, he was hopeful that socialism would be democratic but was unsure of the final outcome. Schumpeter turned out to be wrong on all three counts: capitalism did survive and flourish, while socialism not only failed, it turned out to be authoritarian and undemocratic.

Let's start by explaining precisely what we mean by capitalism, and then examine why Schumpeter did not believe it would survive. Capitalism, or bourgeois society, is a cultural phenomenon that arose out of the success of business. Entrepreneurs and industrialists are not born into the bourgeoisie like a feudal lord. Its foundation—the cement, steel, and glass of capitalism—all consist of economic material. The entire focus of a bourgeois society is on the economic side of life, and success is measured in terms of money. Capitalist society is defined by an institutional pattern of which three elements are of key importance: *private property, regulation of the production process through contracts, and finance.* In this world, economic decisions are made in the privately owned and privately managed firms that lead to the accumulation of capital.

Advanced capitalism is an evolutionary process in which the system relies on entrepreneurship and innovation. "Evolutionary" refers to the fact that the system is constantly changing as entrepreneurs create new firms that kill things: firms, products, processes and existing jobs and thus is never stationary. New technologies and innovations created by the capitalist enterprise are what keeps the engine going—just think of what happened to the typewriter, the radio, even television! This process of change revolutionizes the economic structure from within, continually breaking down the old models and creating new ones. "This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists of and what every capitalist concern has got to live with...This evolutionary process is not about how entrepreneurs administer existing organizations but in how they build and destroy them."

However, at some point in the not too distant future, this process of change could come to an end, if all needs are met and no new goods are needed, while at the same time production has achieved a state of perfection. Economic growth would come to a halt and a stagnant state with no growth would ensue. There would be nothing left for entrepreneurs to do and capitalism could not survive.

Let's next turn to the meaning of socialism. A socialist society refers to one with an institutional pattern whereby control over the means of production and over production itself is vested with a central authority. In other words, the economics of society belong to the public rather than the private sphere. A socialist system replaces markets with planning, the entrepreneur with the manager, and private property is replaced by state ownership. What happens to private property under this model obviously depends on how each country chooses to apply it. Historically, in some countries the state simply confiscated private property, in others it redistributed wealth. But capital as we know it disappears along with capital markets.

The central tenet of socialism is that the economy is centralized. The state controls production, and decisions on how and what to produce, and on who is to receive what goods, are made by public authority rather than by privately owned and managed firms. Schumpeter refers to the "march into Socialism," by which he means the migration of people's economic affairs from the private to the public sphere.

According to Schumpeter, this process was accelerated by the catastrophic events of the twentieth century—two world wars and the Great Depression, along with hyper-inflation in Europe. What stands out in an analysis of capitalism is the role of the bourgeoisie,. Since the bourgeoisie exists only as an economic force, its social function is not as easily defensible as was the position of the nobility under feudalism, who were born into it. The capitalism social system turns on private property, thus under capitalism the bourgeois fortress is politically defenseless, leaving it vulnerable to aggression, by the working class especially if there is rich booty to be gained. As Schumpeter said, "It is possible to buy the working class off for a time, but this last resort fails as soon as the aggressors discover that they can have it all. Faced with increasing hostility of the environment and by the legislative, administrative and judicial practice born of that hostility in the 20th century the world lost patience in the Enlightenment**."** The Age of **Enlightenment** (or simply the **Enlightenment**, or Age of Reason) is an era from the 1620s to the 1780s in which cultural and intellectual forces in Western Europe emphasized reason, analysis, and individualism rather than traditional lines of authority.

By the early 20$^{th}$ century Socialism and its variants spread to most parts of the world. Capitalism (entrepreneurship and innovation), democracy (economic freedom), and philanthropy were rejected by nationalizing capital, replacing the market with central planning, and exchanging democracy for totalitarianism. In effect, a new world order was put in place. There was great sympathy for the socialists, even in the United Kingdom, especially during the Great Depression and WWII. Only a few countries stood against this Orwellian future.

It is interesting to examine what was happening in the United States during this period of expanding socialism in the 1930s and 1940s. While the private sector in the Soviet Union was essentially taken over by the state, there was a more nuanced reaction in the United States. Nevertheless, taxation and wage policies during the 1930s made it possible to expropriate the bulk of the income from the upper brackets. The total national income in the United States paid out in 1929 was $80.6 billion; the income bracket above $50,000 retained $5.2 billion after paying taxes. In 1936, just seven years later after Herbert Hoover raised marginal taxes rates on the rich the total national income paid out was estimated at $64.2 billion as the depression spread around the country. The amount going to the rich was down to $1.2 billion**.** And this does not include the inheritance taxes that were also raised significantly. The point is that a tremendous transfer of wealth took place in the United States even during the Depression? The transfer of wealth from those in the upper income brackets to the lower income brackets in the United States is quantitatively comparable with that affected by Lenin in the Soviet Union who confiscated almost all of the wealth of the upper income classes.

That brings us to democracy, "a system of government in which all the people of a state or polity...are involved in making decisions about its affairs, typically by voting to elect representatives to a parliament or similar assembly."[1] Democracy consists of four key elements: (1) a political system for choosing and replacing the government through free and fair elections; (2) the active participation of the people, as citizens, in political and civic life; (3) the protection of the human rights of all citizens; and (4) the rule of law, whereby all laws and procedures apply equally to all citizens.

In 1942, the question of whether socialism would be democratic was a major concern, as it was clear by that time that the Communist Party in the USSR was not democratic. British socialism was expected to be more or less so, but what about the rest of the world? What would happen in Eastern and Central Europe and in China? Schumpeter was not clear on these questions, but as it turned out, socialism is not a democratic system.

While not democratic, socialism has a certain amount of political legitimacy. Since the British enlightenment, in the nineteenth century political legitimacy has derived from the popular consent of the governed, both explicit and implicit, and any government that lacks the consent of the governed is not legitimate. In other words, a system need not be democratic to be considered legitimate, a condition that can be established by having codified laws, customs, and cultural principles. The legitimacy of a state derives from having won a civil war, as in China; a revolution, as in Russia; or an election, as in Chile after the election of Salvador Allende to the presidency. Thus the actions of a communist government are considered legitimate, providing they are endorsed by the people. In a democracy, however, legitimacy derives from the popular perception that the elected government abides by democratic principles in governing and thus is legally accountable to its people.

Was Schumpeter aware of any solution to the dynamics of the capitalist system other than a socialist system? Schumpeter alluded to this problem in the "lost Chapter 7" of the *Theory of Economic Development* (1937/1911). Chapter seven was published in the original 1911 German version but not included in the first American version in 1937. In this lost chapter Schumpeter wrote of the economy as a whole. He understood that the entrepreneur was involved in both an economic and a social process that seeks to change society through innovation. Schumpeter wrote, "His position as entrepreneur is essentially only a temporary one, namely, it cannot also be transmitted by inheritance: *a successor will be unable to hold onto that social position, unless he inherits the lion's claws along with the prey*" (as quoted in Acs, 2009 p. 320). In other words, a mechanism is needed to hold the legitimacy of the social pyramid together when the offspring only inherit money as opposed to money and the entrepreneurial skill. If the children are not entrepreneurs, that social position needs to be reinvented with each new generation. Schumpeter was never able to fully close the circle on this story and instead veered off in the direction of the great Marxian drama of the 20$^{th}$ century—socialism.

## Capitalism, Philanthropy, and Democracy

By the end of the 20$^{th}$ century, socialism had collapsed. The system simply could not keep pace with the economic output of its competitors. Capitalism (entrepreneurship and innovation) has had a fresh start, socialism has been relegated to the dustbin of history, and democracy is flourishing in a majority of countries around the world. The fall of the Berlin Wall, as interpreted by Fukuyama's (1989) book *The End of History and the Last Man* drove the final nail into the coffin of *Capitalism, Socialism, and Democracy* and the views presented by Schumpeter. However, no new blueprint has emerged along the lines of *CSD* for the world to follow. What would a new blueprint look like? Part of the answer is found in Alexis de Tocqueville who wrote, that while both socialism and democracy appeal to our better side, socialism is about equality via servitude and restraint, whereas democracy seeks equality of opportunity. So we should start our search by seeking answers to the question of how we create equality of opportunity for all and promote democracy.

Schumpeter was wrong in his prognosis, at least in the short run, and he missed an essential aspect of capitalism. The answer to the turnaround question is to be found, I believe, in the role played by moral capital and the part philanthropy plays in promoting equality of opportunity in the capitalist system, especially in the United States. Through philanthropy, private individuals create public goods, rather than relying on the state to do it all. Philanthropy gives legitimacy to the bourgeoisie (entrepreneurs and capitalists) by reconstituting private wealth to create public goods. We are not arguing that government does not create opportunity, but, rather, that philanthropy gives opportunity an extra push without political or market constraints.

Schumpeter and many others missed the importance of this great 19th-century invention: the redirection of capital from private ends to public goals, including the private creation of public goods—in short, philanthropy. According to Oliver Zunz, "American philanthropy today expands knowledge, champions social movements, defines active citizenship, influences policymaking and addresses humanitarian crisis. How did philanthropy become such a powerful and integral force in American Society?" (Zunz, 2012).   At the heart of this drama is the entrepreneur, who sets the capitalist system in motion through innovation and then uses his wealth and skills for the public good (West, 2014). The bilateral relationship between entrepreneurship and institutions is the hallmark of capitalism: our institutions determine the type of entrepreneurship we will have, just as entrepreneurs determine the type of institutions we will have (Henrekson and Sanandaji, 2010).

The tension in advanced capitalism is therefore not between the winners and losers who are sorted out by creative destruction as Piketty suggests (uber destroying the jobs of drivers who bought a permit vs those that do not need a license). But between enabling the creation of vast wealth by those who innovate and protecting opportunity for those who do not—the great sea saw of civilization. Philanthropy has the potential to mitigate inequality as it softens the hard edges of the free market. Recycling wealth reduces income inequality and contributes to a more just and prosperous society.

So the issue is what to do with wealth?: keep it, tax it away, give it away. If you leave only money to the next generation, you leave them poor. They will squander it. This was true in the past, and it still pertains to systems that protect the nobility—the major difference between the American experiment and the class systems of old Europe and much of the world**.** Cornelius Vanderbilt made a fortune in the railroad and left a huge fortune to his children. Much of the fortune disappeared over time. At the last family reunion in 1973 we failed to find one millionaire among the 120 present. Today in the United States parents are leaving their children less and less money. It does the children little good and it does society even less. Today we are starting to return to a world where wealth is used to create a better future for all.

In the 21st century, the world is returning to its 19th-century roots of liberal democracy and capitalism is flourishing across the globe. However, the world has not yet come to understand and appreciate the fact that these two forces cannot survive and prosper without philanthropy. While capitalism is a cultural phenomenon and democracy has institutional underpinnings, philanthropy is a natural force that has existed in all societies and has taken different forms historically, but it was never used to create opportunity. Nevertheless, the need to look after each other is part of humans' DNA. In this debate we need to understand the dynamics of socioeconomic formations, and recognize that philanthropy matters because it offers an alternative solution to the Piketty conundrum without relying exclusively on a wealth tax.

The question today, as in 1942, is what will our future society look like—the X factor that catapulted Piketty's *Capital in the Twenty-First Century* to the bestseller list. Piketty (p.1:

> The distribution of wealth is one of today's most widely discussed and controversial issues. But what do we really know about its evolution over the long term? Do the dynamics of private capital accumulation inevitably lead to the concentration of wealth in even fewer hands, as Karl Marx believed in the nineteenth century? Or do the balancing forces of growth, competition, and technologic progress lead in later stages of development to deduced inequality and greater harmony among the classes, as Simo Kuznets thought in the twentieth century? What do we really know about how wealth and income have evolved since the eighteenth century, and what lessons can we derive from that knowledge for the century now under way?

According to Piketty, the main driver of inequality is the tendency of return on capital to exceed the rate of economic growth, $r > g$, where $r$ historically is close to 5 percent and growth in Organization for Economic Co-operation and Development member countries $g$ is below 2 percent. I believe, however, that the real X factor was the policy prescription—a global tax on capital—that was embraced by the Left and lamented by the Right. Therefore, the real issue is whether capitalism can be both economically and morally robust.

To understand the question, "How does inequality matter in terms of our economic well-being?" we need to examine the laws of capitalism. Here Piketty was brilliant. The first fundamental law of capitalism links the stock of capital to the flow of income from capital: $\alpha = r \times \beta$, where $\beta$ is the capital/income ratio, $r$ is the rate of return on capital, and $\alpha$ is the share of national income from capital. Piketty examined this accounting identity over the past two centuries in great detail.

The second fundamental law of capitalism is $\beta = s/g$, where $s$ is the savings rate and $g$ is the growth rate. In the long run, the capital-income ratio is related in a simple and transparent way to the savings rate, $s$, and the growth rate of national income, $g$. Fundamentally, a country that saves a lot and grows a little will accumulate an enormous store of capital relative to income. The law is asymptotic, meaning that it is valid only in the long run. The difference between the first and second laws is that the first is an accounting identity, whereas the second is the result of a dynamic process the economy tends toward, given the savings rate, $s$, and growth rate, $g$.

Piketty's analysis, however, is not without his critics. For example, Soskice (2014) argues that Piketty's purely neoclassical and mathematical analysis of the growth of contemporary inequality makes little sense. Soskice recommends "a more realistic model in which businesses determine investment growth based on their expectations of output growth, with monetary policy bringing savings into line with business determined investment; the implication of this model is that $\beta$ does not change at all. And in fact as other recent empirical work which I reference has noted, $\beta$ has not changed significantly over these recent decades."

Piketty has lots of critics. For example, Rognlie (2015) starts his discussion of Piketty by looking at the data on inequality over the past 70 years. He argues that, although both gross and net measures are important, the net viewpoint—which is much rarer in the recent literature—is more directly applicable to the discussion of distribution and inequality because it reflects the resources individuals are ultimately able to consume. This measure reveals a striking discrepancy in the long-term behavior of gross and net shares, showing that the net capital share generally fell from the beginning of the sample through the mid-1970s, at which point the trend reversed. There is a moderate increase over the long run in the aggregate net capital share, but this is due entirely to the housing sector. Acemoglu and Robinson (2015) state:

> General economic laws are unhelpful as a guide to understand the past or predict the future, because they ignore the central role of political and economic institutions, as well as the endogenous evolution of technology, in shaping the distribution of resources in society….the main economic force emphasized in Piketty's book, the gap between the interest rate and the growth rate, does not appear to explain historical patterns of inequality.

The critics' views aside, to understand why Piketty is right about the laws of capitalism we must go back to the building blocks of modern society. Capitalism, philanthropy, and democracy are the fundamental pillars of modern civilization. Democracy goes back to the 5th century BC in the Greek city state of Athens. In the 17th century, the West invented capitalism, which brought the Industrial Revolution, jobs, and opportunity to millions. However, the institutional structure that sustained this development was much broader and had roots that go back much farther. Philanthropy is older than Rome itself. The concept of moral capital emerged only in the 19th century. While capitalism is governed primarily by the market system and democracy by the political process, philanthropy is to a large degree independent of both forces. Nevertheless, it also reinforces and nourishes both by relying on the better side of human nature.

Philanthropy as an institution directly alters the ownership of capital and the allocation of income in the capitalism system. It can do this in partnership with government, and in fact it works best when government and philanthropy work hand in hand. So how does philanthropy solve the Piketty conundrum? The answer is rather simple: by increasing the growth rate of the economy, $g$, to mitigate the difference between $r$ and $g$ and reduce the share of income going to the owner of capital. Thinking of the two laws together, the aim is to maintain the dynamism of the system (efficiency) while solving rising income inequality (equity). This is done in part by increasing growth, $g$, and reducing the share of capital income going to the rich while maintaining a high $r$. The focus is on the capital/income ratio. Philanthropy focuses on the stock of capital (wealth) and not the flow of income, and it does not affect the stock of capital but redirects the flow of income to opportunity-creating activities. In other words, by turning a share of capital into moral capital, philanthropy reduces the size of $r$ and increases the growth rate of the economy, $g$, and thus the Piketty conundrum is solved, $r \approx g$.

A few years ago, as I was trying to get a better understanding of advanced capitalism, I wrote in the *American Interest* that the essence of advanced capitalism today is not a static "iron triangle" that balances the interests of large corporations and organized labor with the active intervention of government. Nor is it a free-for-all in which the interests of the many are readily subsumed by the acquisitive appetites of the few. Rather, advanced capitalism is a dynamic process that balances wealth and opportunity—the great seesaw of civilization. It follows that the success of advanced capitalism must turn not on its transient ability to generate macroeconomic growth but on its sustained ability to generate microeconomic opportunity.

The forces of capitalism, philanthropy, and democracy need to be woven together institutionally into a global system of opportunity and prosperity for all. The central mission of globalization is to help make this a reality. We need to establish a dialogue among the wealthy, the research institutions, and the education institutions. We need to bring the cultural, natural, and institutional aspects of humanity together to ensure our social survival throughout and beyond the 21st century. While many look to government as the solution to our conundrum and others espouse the free market, I suggest that philanthropy holds the key to our future because it is a key to competition and the key that unlocks regional competitiveness.

Philanthropy has long been a distinctive feature of American culture, but its crucial role is the economic well-being of the nation—and the world—which remains largely unexplored (Zunz, 2012). Philanthropy achieves three crucial aims: it deals with the question of what to do with capital—keep it, tax it, or give it away. By investing part of your capital in a foundation that works for the public good, you maintain the stock of capital and the capital/income ratio while income flows to a privately created public good, which complements government creation of public goods. Moreover, by focusing on education, science, and medicine, philanthropy has a positive effect on long-run economic growth.

For wealth to invigorate the capitalism system, it needs to be kept in rotation like the planets round the sun. Philanthropy strengthens capitalism in two ways: first, when targeted toward universities, research, and other productive uses, philanthropy lays the groundwork for new cycles of innovation and enterprise. Second, it strengthens capitalism by providing a mechanism for dismantling wealth accumulated in the past and reinvesting it in the entrepreneurial potential of the future. When philanthropy is absent, capital remains concentrated, rent-seeking flourishes, and innovation and entrepreneurship suffer. In other words, monopoly spreads (Acs, 2013).

But how can philanthropy be a part of capitalism? Capitalism, as Max Weber (1958) showed, is a relatively orderly system of institutions and incentives governed by the tractable logic of supply and demand. Philanthropy, by contrast, lacks a set of laws to explain its ebb and flow. Philanthropy is subject to the whims of the wealthy, like the royal art patrons from European history. Furthermore, philanthropy is not only largely ungoverned by economic principles, it is also relatively free of the checks and balances found in democracy, such as elections and referendums (Acs, 2013).

The answer to this puzzle is found in the writings of moral philosopher Adam Smith, who wrote, "There are evidently some principles of [man's] nature, which interest him in the fortune of others and renders their happiness necessary to him." Philanthropy is governed by natural principles and embedded altruism, while capitalism is governed by culture and institutions (Acs, 2013, pp. 143-144). While philanthropy has been loyal to the institutions of capitalism, is it rarely considered intertwined with capitalism, even though it both emanated from and continually nurtured the capitalist system. This invisible, underappreciated force for progress within advanced capitalism is the secret ingredient that fails to get mentioned in economic accounts of capitalism, like Piketty's *Capital*.

Philanthropy does not interfere with the dynamics of capitalism. Individuals are free to accumulate capital, and because the growth rate of the economy is not compromised with taxes, the capital/income ratio can rise in the long run. I have argued that philanthropy propels the basic machinery of capitalism, along with government and taxes. Therefore, in addition to well-functioning markets, property rights, contract law, capital markets, and the like, philanthropy—a little understood economic force—provides an institutional element that promotes the vital nonmonetary institutional forces needed to achieve growth through technological innovation, thereby promoting economic equality and cultivating economic security (Acs, 2013).

## The Ecosystem of Moral Capital

This paper has described advanced capitalism as interplay between innovators and entrepreneurs on the one hand, and the vast system of universities, foundations, and research institutions they have created on the other. This back-and-forth has helped society navigate the dual obligation to create both wealth and opportunity—the critical balancing act that determines the true strength of any civilization. By opportunity in this case I mean the extent to which individuals can particpate in the economic sysem, which is perhaps how the term is most commonly used, as well as the ability of new firms and new ideas to enter the economy.

Prosperity is often defined in terms of easily expressed statistics such as GDP, which allow easy comparisons between countries and provide a stable quantitative assessment of how an economy has performed. My goal is to get people to think about prosperity not just in terms of GDP but also in terms of some key features of the economy that, in my view, underpin its strengths and weaknesses.

The ecosystem of advanced capitalism is organized around four characteristics: opportunity, entrepreneurship and innovation, wealth creation, and philanthropy. I define these characteristics as currents, like those in the ocean, which shift over time and space with the changing contours of the ocean floor and the shoreline. In the context of the political economy, none of the four "currents" I have described is a necessary or sufficient condition for economic prosperity. Rather, each has played a vital role in shaping the unique prosperity of the economy during certain periods in history, often but not necessarily assisted by the strength of other currents.

During the 1990s the current of innovation was larger than life, as entrepreneurs invented and commercialized the products of the digital age, primarily in information technology and telecommunications. It was the age of personal computers, the Internet and smart phones. The digital revolution and globalization created not only new products and services but also large amounts of wealth in country after country, as entrepreneurs and venture capitalists created a new economic landscape. Today the current has shifted and the focus is on wealth and opportunity, which loom large as these waves of innovation crash ashore in country after country.

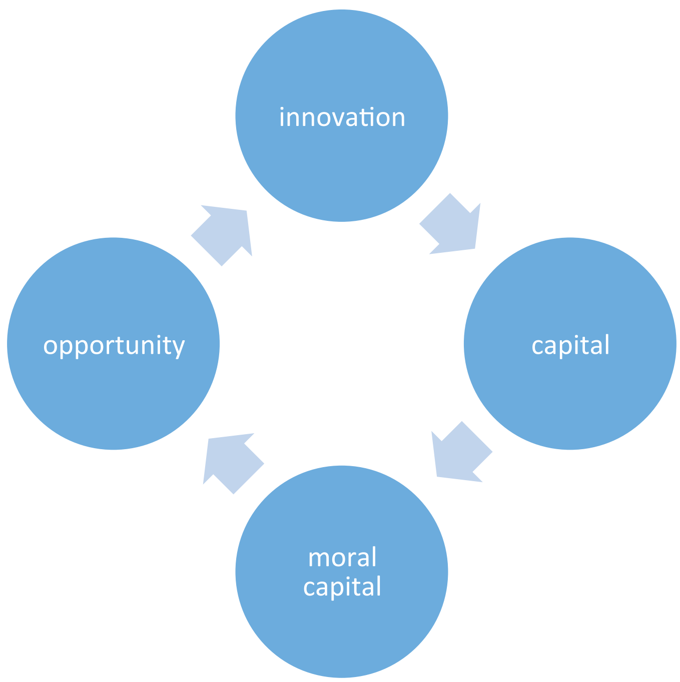


**Figure 1: The Currents of Prosperity**

The current our story centers on is philanthropy, or moral capital, which as we have argued will be increasingly important globally as the currents of wealth and opportunity come into sharp relief. Over the coming decades, these currents will alter the content of our political economy.

At the heart of advanced capitalism—and the ability to attract and sustain entrepreneurial activity—is acceptance of the cycle of creative destruction. To some, this is a double-edged sword. On the one hand, creative destruction enables superior innovations to displace old companies and products. However, this process can also be damaging, as the losers are put out of work and, in some cases, entire towns or regional economies suffer. The governments of some countries play an active role in holding creative destruction at bay, whereas others support a system that allows creative destruction to do its work despite the uncertainty it can bring. This nurtures dynamism and, perhaps most importantly, fuels the entrepreneurial spirit of advanced capitalism.

Advanced capitalism has created the world's largest system of knowledge-creating universities and research centers, some of which are private and all of which have benefited from a vast allocation of philanthropic capital, which itself is tied to capitalism. Furthermore, foundations developed during the 19th century explicitly to recycle wealth have sustained and challenged existing ways of creating opportunity for millions of people, which is itself the fundamental benchmark by which advanced capitalism should be judged.

These efforts have contributed to the creation of opportunity much more than are often acknowledged. It is easy to point out that income inequality and persistent poverty are the result of a heartless and individualistic system of capitalism, and this may cause some people to conclude that advanced capitalism is a failure. However, this ignores the fact that advanced capitalism has stayed true to opportunity creation throughout much of its long history. The scope of philanthropy in modern civilization is unmatched by any other time in history. Therefore, the tension in advanced capitalism is not between the winners and losers that are sorted out by creative destruction but between enabling vast amounts of wealth creation for those who innovate while protecting opportunity for all. The clash of these two currents is the greatest challenge for the ecosystem of advanced capitalism.

What is missing from this story is the role of government. The government is an actor. The collective will of the people and how it impacts our lives is a very real and important part of this debate. For most of the 20$^{th}$ century the citizenry looked to government to solve most of its problems, thus a large and growing government was viewed as crucial to the working of the entrepreneurial ecosystem.

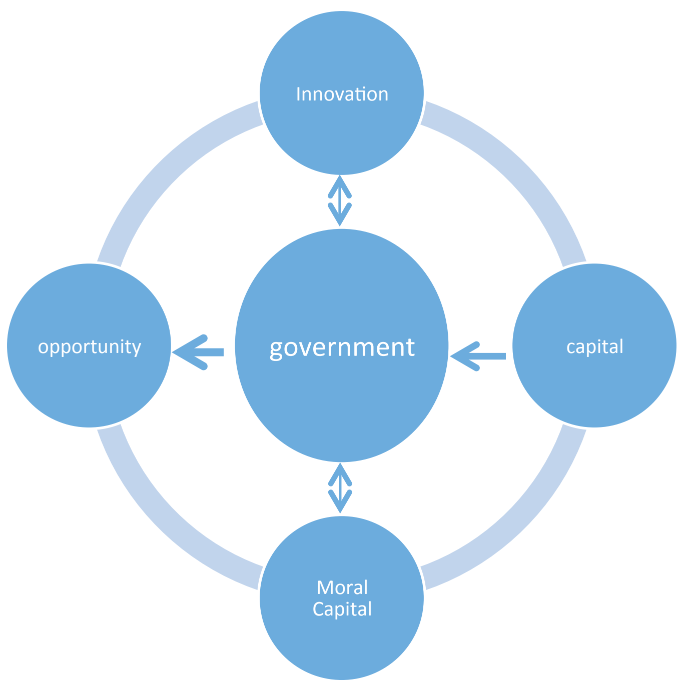


**Figure 2: The Ecosystem of Moral Capital**

Figure 2 places government front and center in our story. The center ball is bigger than the others because many people consider government more important than the other currents. Moreover, not only the size but the role of government is a central issue, as it is seen as playing an important role in all four currents. First, government plays a direct and important role in opportunity by providing education, equal opportunity, and decent wages. Of course government may not do any of this. Second, while it does not play a direct role in innovation, government is seen as a facilitator that supports innovation with research and development grants, financing, regulation, and technology transfer. Third, government plays an important role in wealth. It is supposed to get the rich to pay their fair share through progressive income taxes, the capital gains tax, and inheritance taxes. Finally, the government interacts with philanthropy and charity. Over the years especially since the Second World War the government has taken over many functions once provided by charities in, education, health care, medical research and the arts. If government put too much pressure on the system, the balance of advanced capitalism would shift in fundamental ways.

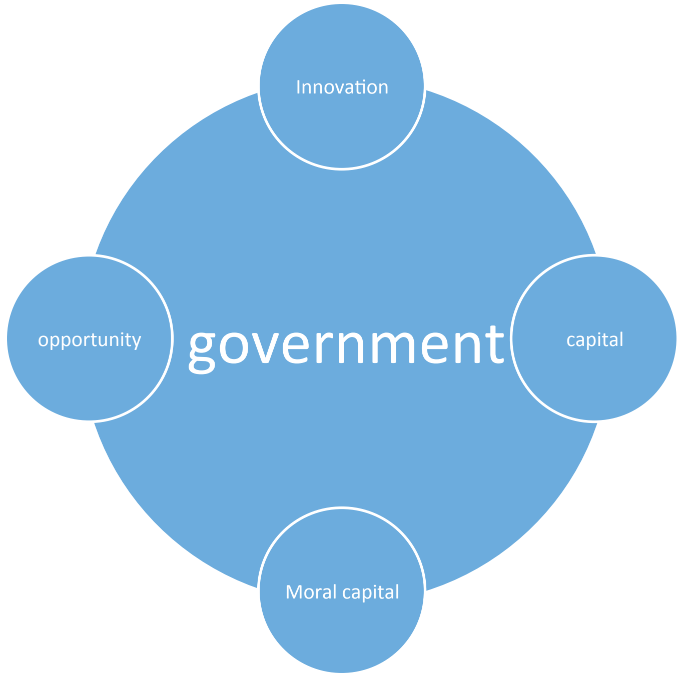


**Figure 3: The Ecosystem of Socialism**

This leads to a very interesting question, “How large should the government be?” And, “What should it do?” This is one of society’s most debated questions, both today and in the past, and is at the heart of almost all discussions about opportunity, innovation, wealth, and philanthropy. Figure 3 shows a more or less socialist model, as envisioned by Schumpeter and most socialists, in which the government is pervasive, large, and intrusive. It intervenes into opportunity, innovation, wealth, and moral capital and tries to manage the four currents, although it does leave some things to the private sector. History has shown us that it is as hard to manage the currents of the political ecosystem as to change the course of a mighty river; the effort may succeed for a while, but in time the river will once again find its own way.

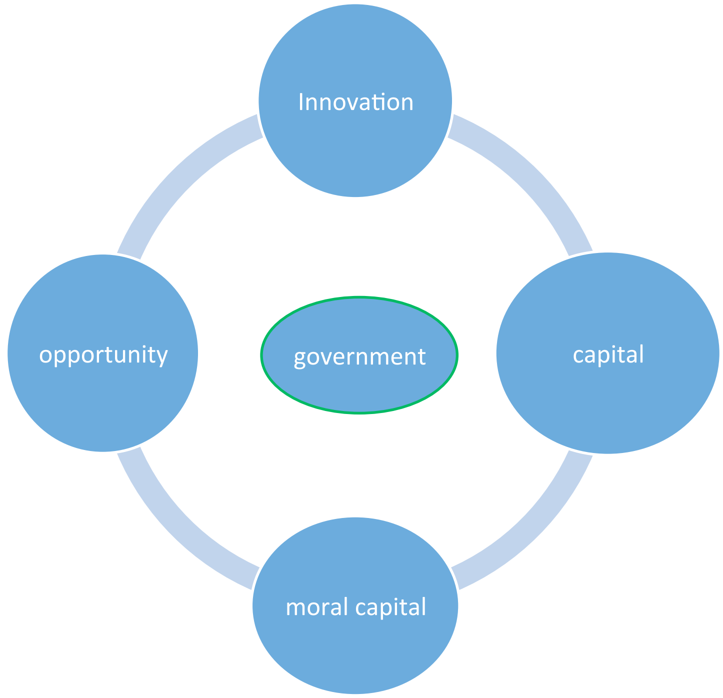


**Figure 4: The Ecosystem of Limited Government**

Figure 4 represents the currents of prosperity with the government playing a limited role. The idea of a small government suggests that the currents of the political economy are so strong and changeable that no government can control its outcome. Therefore, government is most effective when it sets the rules of the game with respect to how we navigate the economic currents, both nationally and internationally.

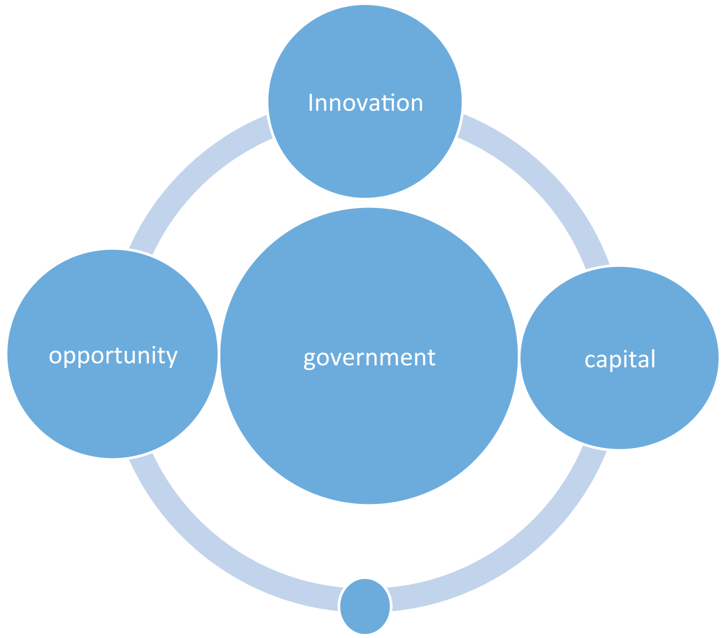


**Figure 5: The Ecosystem of Moral Capital with limited philanthropy**

Figure 5 depicts the world as seen by Piketty, and most liberals and social democrats today who would have us believe that moral capital does not play a significant role in advanced capitalist countries. In Piketty's model, government is large and moral capital is very small. In this view, markets don't function without the state as partner, nurturer, and regulator. The state can also play the role of innovator and provide social cohesion by producing and redistributing public goods. In this sense, the state is the ultimate philanthropist; where there is a just tax system, it acts in a democratic fashion.

In the figure, the line from wealth goes through government to opportunity and then to innovation, with the state playing an active role in creating wealth. This leads to interesting questions: "Is government more effective than philanthropy in creating opportunity?" Does Philanthropy help? and "What are the limits of the welfare state?"

## Moral Capital in the 21st Century

To answer these questions, in this next section, we present some of the first data on moral capital. While internationally comparable data on the Ecosystem of Moral Capital opportunity (education), entrepreneurship (startup rates), wealth (Billionaires), has been around for a while. Such data are now available in some form in most countries; for example, we know which countries are the most entrepreneurial, which have the most billionaires, and which offer its citizens the most opportunity. However, data on moral capital in any of its dimensions has not been available even at the country level. We start by looking at contributions from the wealthy that have transferred ownership of capital to moral capital. Next we present data on the size of moral capital in the US and around the world as data allows. Based on this information, we can start to consider just how important moral capital is in today's global society.

As we have previously pointed out, philanthropy strengthens capitalism by introducing new institutions, which in turn create opportunity for agents that leads to entrepreneurship and innovation. Innovation leads to increased productivity and regional competitiveness, for which it is often overlooked. In the founding document of the Marshall Institute for Philanthropy and Social Entrepreneurship at the London School of Economics, Sir Tom Hughes-Hallett wrote, "Private contributions to the public good of time, talent and treasure will be the crucial ingredients of a successful society and a new, more responsible model of capitalism." Paul Marshall, who donated $50 million to establish the institute, added that "London is the most exciting city in the world, a crossroads for global commerce, learning and creativity, and it is fitting that our new Institute will be situated at the heart of this great city."[2]

If philanthropy introduces new institutions into the capitalist model, it is the investment in place that leads to a better world. By place we mean where the investment was made, the city the region the organization (Acs, 2015). The Marshall Institute will enrich LSE, London and the UK. Perhaps the most visible aspects of this are the moral investment made in education. Education in America started out by following the English model's focus on the classics, religion, and language. However, it took an interesting turn in the 18th century when it broke from the continental approach and shifted to a more practical model led by Benjamin Franklin and Thomas Jefferson. King's College, which became Columbia University, announced in 1754 that its curriculum would emphasize surveying, navigation, geography, and history.

Ben Franklin's College of Philadelphia, later the University of Pennsylvania, made even greater strides in this direction. In 1756, the college's president proposed that "economic abundance" would require forming a succession of sober, virtuous, industrious citizens and checking the trend of growing luxury. To carry out his vision, the president designed a course of study approved by Franklin and the college's trustees that increased the emphasis on practical studies and science.

As historian Frederick Rudolph (1990) put it in his history of American colleges, "The King's College prospectus of 1754 and the College of Philadelphia's curriculum of 1756 may not have been the first shots in an exchange heard around the world, but they were nonetheless certain indications that the English colonies of North America were beginning to respond not to English needs but to American aspirations" (p. 33). This experiment was made possible by the growing largess of the bourgeoisie's new wealth.

However, this was not the only shift to set the stage for innovation, as the federal government also moved into high gear. The land-grant universities were so called because of the Morrill Federal Land-Grant Act of 1862, sponsored by Congressman Justin Smith Morrill to support agricultural education. Morrill suggested that colleges in America should "top off a portion of the studies established centuries ago as the mark of European Scholarship and replace the vacancy—if it is a vacancy—by those of a less antique and more practical value" (Lucas, 1994, p. 147).

Wisconsin's public university system is a prominent example. Like many of the universities emerging at the beginning of the 20th century, Wisconsin was experimenting with new methods of productivity that would benefit society. Under the leadership of Charles Van Hise, its president from 1903 to 1918, the university set about innovating and expanding with the ultimate goal of serving the state's entire population.

While the federal government was funding and experimenting with higher education, a comparable effort was underway that was funded by the private wealth of the new land. Johns Hopkins, John Rockefeller, and Leland Stanford all founded new research universities modeled after Humboldt University in Germany. These institutions funded with American fortunes created three of the world's greatest universities. Stanford University, for example, was founded in the fall of 1885 with Stanford's grant of $8 million and 10,000 acres of land. Today the university has an $18 billion endowment, enrolls roughly 15,000 students, and is ranked at the top in several fields, including engineering and technology, life and physical sciences, and health sciences. In creating Stanford University, Leland envisioned ways to provide a "practical education" that still guide the university more than 100 years later.

The world today is witnessing the evolution of this tradition of giving, but with a new twist. On September 8, 2014, Harvard University announced that it had received the single largest gift in its 378-year history. This gift was not from an American billionaire but from brothers Gerald Lok-chung Chan and Ronnie Chi-chung Chan of Hong Kong, who made the $350 million unrestricted contribution through their education-focused charity, the Morningside

Foundation. Morningside is the philanthropic unit of the Chan's private equity and venture capital firm, the Morningside Group. The money was given to the Harvard School of Public Health, which has been rebranded as the T. H. Chan School of Public Health. This is the first time Harvard has named one of its schools to recognize a gift and the only second of its schools to bear the name of an individual; the John F. Kennedy School of Government was so named in 1966.

On January 27, 2014, former New York City mayor Michael Bloomberg announced his latest donation to Johns Hopkins University, a $350 million gift that was the largest in the university's history. Bloomberg has given $1.1 billion dollars to his alma mater over the last four decades, a staggering amount of money that makes him the most generous donor to any educational institution in the United Sates. Bloomberg's Giving Pledge letter sheds light on what he hopes to accomplish by giving money away: "If you want to fully enjoy life—give. And if you want to do something for your children and show how much you love them, the single best thing—by far—is to support organizations that will create a better world for them and their children" (www.thegivingpledge.org).

However, the most spectacular development in creating a better world for our children's children, to echo Mayor Bloomberg, was made by American billionaire Stephen A. Schwartzman, the founder of Blackstone Capital, who donated $100 million to build a world-class college in China. Schwartzman College is a state-of-the art facility at Tsinghua University in Beijing, which will house the new college. Originally established in 1911 by an agreement between the Qing Emperor and the U.S. government to prepare Chinese students to study in the U.S., Tsinghua University has long served as a bridge between the East and the West. The new college will house Schwartzman scholars, which are modeled after the Rhodes scholars. Each new cohort of Schwartzman scholars will join a global network of the world's most talented young leaders, who will help to build strong links between China and a rapidly changing world. Each year, 200 exceptional men and women will be accepted to the program: 45 percent from the U.S., 20 percent from China, and 34 percent from the rest of the world. Designed to prepare the next generation of global leaders, the Schwartzman scholarship is the first to respond specifically to the geopolitical landscape of the 21$^{st}$ century. "Whether it's politics, business or science, the success of future leaders around the world will depend upon an understanding of China's role in global trends" (http://schwarzmanscholars.org/about).

We present some evidence on the rise of moral capital to provide a better sense of these global trends. First, we estimate the size of moral capital measured in dollars for a segment of the U.S. education establishment in the 20$^{th}$ century. Using balance sheet data, Table 1 presents the estimated size of the moral capital of the largest 25 universities in the United States and lists their total assets. It also lists real assets, which measures buildings and land. The top 25 universities have moral capital of $484,663,000, or almost half a trillion dollars. However, endowments alone do not paint an adequate picture of the size of universities' moral capital and they greatly underestimate the size of moral capital, which is over a trillion dollars for the top 1,000 colleges and universities in the United States.[3]

**Table 1: Moral Capital for the Top 25 Universities in the U.S.**

| University | Total Assets | Real Assets | Endowment |
|---|---|---|---|
| | ($Millions) | ($Millions) | ($Millions) |
| Harvard University | 74209.807 | 5793.371 | 30435.375 |
| Yale University | 31265.211 | 4347.257 | 19345 |
| University of Texas System(15) | 54112.7 | 13144.6 | 18263.85 |
| Princeton University | 22754.06 | 3227.763 | 18200 |
| Stanford University | 37987.903 | 5994.616 | 17035.804 |

| | | | |
|---|---|---|---|
| MIT | 17719.84 | 2516.264 | 10149.564 |
| University of Michigan, Ann Arbor | 16435.216 | 5369.4 | 7691.042 |
| Columbia University | 14728.942 | 3068.544 | 7654.152 |
| Texas A&M University System | 9078.661 | 9078.661 | 7638.555 |
| Northwestern University | 10917.16 | 1683.639 | 7118.595 |
| U Pennsylvania | 16017.853 | 4369.373 | 6754.658 |
| University of Chicago | 12525.477 | 3733.388 | 6570.875 |
| University of Notre Dame | 10329.366 | 1350.192 | 6329.866 |
| University of California System(10) | 53356.279 | 26179.885 | 5962.906 |
| Emory University | 11456.053 | 2777.055 | 5816 |
| Duke University | 15536.933 | 3276.533 | 5555.196 |
| Washington University in Saint Louis | 9807.33 | 1901.786 | 5225.992 |
| Cornell University | 11505.819 | 3544.465 | 4946.954 |
| University of Virginia | 8978.546 | 3097.929 | 4788.852 |
| Rice University | 6686.951 | 1183.159 | 4418.595 |
| University of Southern California | 8790.257 | 2537.902 | 3488.933 |
| Dartmouth College | 6182.484 | 944.327 | 3486.383 |
| Vanderbilt University | 7605.896 | 1781.293 | 3399.293 |
| New York University | 12258.579 | 5481.727 | 2755 |
| Brown University | 4415.343 | 1019.875 | 2624.332 |
| Totals | 484,662,666 | 117,403,004 | 215,655,772 |

*Source:* Compiled by the author

The list includes both public and private schools, and it shows that Americans have funded private universities at a level that is on par with or surpasses the state institutions. This creates a competition for faculty, research, and students, which leads to a healthy and innovative system. Harvard tops the list with an endowment of $30 billion, followed by Yale with $20 billion, the Texas system with $20 billion, and Stanford University with $18 billion. However, the sum of the total moral capital, including endowment and real assets, is much larger.

The top 1,000 universities have a total endowment of half a trillion dollars, with an average endowment each of $500 million. Most of these institutions are private, but even small colleges like Smith College, with 2,000 undergraduates, have an endowment of more than $1 billion. Without this inflow of funds that generates over $50 billion a year in income, these universities would not be able to compete with one another. These figures understate these institutions' wealth because they do not include the value of land and buildings, which can run into the billions in urban areas.

Table 2 lists the European universities by endowment; the top 50 present an interesting comparison to the United States, as moral capital in European universities is far less than in the United States. While Oxford and Cambridge lead the field with close to 5 billion euros, the next entry falls off rapidly, at around 1 billion euros. Each country seems to have one well-endowed institution, such as the University of Lund in Sweden, the University of Helsinki in Finland, and Heidelberg University in Germany. But the fact remains that, while Europe is in some ways similar to the United States, for example, it is a liberal democracy, Europe's investment in moral capital is far short of what it should be.

**Table 2: List of European Universities by Endowment**

| Institution | Country | Endowment 2010 (€m) | Endowment 2009 (€m) |
|---|---|---|---|
| University of Cambridge | UK | | 5,354.6 |
| University of Oxford | UK | 4,284.0 | |
| Swiss Federal Institute of Technology Zurich | Switzerland | 1,100.6 | 1,058.5 |
| University of Copenhagen | Denmark | 1,003.8 | |
| University of Zurich | Switzerland | 960.4 | 941.5 |
| Utrecht University | Netherlands | 749.0 | |
| Lund University | Sweden | 724.5 | |
| Central European University | Hungary | 656.62 | |
| University of Oslo | Norway | 652.8 | |
| University of Helsinki | Finland | | 624.0 |
| University of Amsterdam | Netherlands | 613.5 | 597.9 |
| University of Bern | Switzerland | 584.3 | |
| École Polytechnique Fédérale de Lausanne | Switzerland | 595.5 | 600.4 |
| Ruprecht Karls University of Heidelberg | Germany | 579.2 | |

| | | | |
|---|---|---|---|
| Karolinska Institutet | Sweden | 576.1 | 535.2 |
| University of Groningen | Netherlands | 576.0 | |
| Uppsala University | Sweden | 549.6 | |
| Technical University of Munich | Germany | | 548.0 |
| Technical University of Denmark | Denmark | 546.7 | |
| University of Vienna | Austria | 493.6 | |
| Ludwig Maximilians University of Munich | Germany | | 485.4 |
| University of the Basque Country | Spain | 483.4 | |
| Radboud University Nijmegen | Netherlands | 482.3 | 461.7 |
| Aarhus University | Denmark | | 480.3 |
| University of Tübingen | Germany | 479.0 | |
| Leiden University | Netherlands | | 477.8 |
| Erasmus University Rotterdam | Netherlands | | 470.0 |
| Vrije Universiteit | Netherlands | 433.6 | 420.1 |
| University of Strasbourg | France | 432.0 | |
| Stockholm University | Sweden | 417.7 | |
| Ghent University | Belgium | 410.0 | |
| Royal Institute of Technology | Sweden | 403.8 | |
| Pierre and Marie Curie University (Paris 6) | France | 400.0 | |
| Delft University of Technology | Netherlands | | 382.7 |
| Free University of Berlin (excl. Charité) | Germany | 380.0 | |
| University of Barcelona | Spain | 379.3 | |
| Université Catholique de Louvain | Belgium | 370.0 | |
| Humboldt University of Berlin (excl. Charité) | Germany | 352.0 | |
| University of Basel | Switzerland | 351.4 | |
| University of Geneva | Switzerland | 349.1 | 292.3 |
| University of Milan | Italy | | 341.0 |
| University of Lausanne | Switzerland | 323.9 | |
| Maastricht University | Netherlands | 323.0 | 322.1 |
| Eindhoven University of Technology | Netherlands | | 293.7 |
| Albert Ludwigs University of Freiburg | Germany | | 268.3 |

*Source*: http://en.wikipedia.org/wiki/List_of_European_universities_by_endowment

If moral capital is in fact a part of the institutional structure of advanced capitalism, we should see evidence of this both across countries and over time. Table 3 lists the largest charitable foundations in the world. The most interesting observation is that most of these foundations are a rather recent phenomenon. The oldest is the Kamahameha Schools, founded in

1887, The Rockefeller Foundation, created in 1913, followed by the Knut and Alice Wallenberg Foundation in 1917, and the Kresge Foundation in 1924. W. K. Kellogg, Welcome, and the Lilly Endowment were founded in the 1930s, and 20 were founded after 1950. So in fact philanthropy is in fact primarily a development of the 20th century, and the pace is accelerating. The second observation is that the United States is no longer such an outlier in philanthropy, as fully one-third of the foundations are outside the U.S., as are three of the seven largest. The largest foundation is the Stichting INGKA Foundation in the Netherlands; founded in 1982, it has $36 billion in assets. The Welcome Trust is the third largest, with $22 billion in assets in the UK in 1936. The Mohammed bin Rashid Al Maktoum Foundation, founded in 2007 in the United Arab Emirates, has $37 billion in assets.

**Table 3: List of Wealthiest Charitable Foundations in the World**

| Rank | Organization | Country | Headquarters | Endowment (USD) | Endowment (home currency) | Founded |
|---|---|---|---|---|---|---|
| 22 | Andrew W. Mellon Foundation | United States | New York City, New York | $5.26 billion | | 1969 |
| 2 | Bill & Melinda Gates Foundation | United States | Seattle, Washington | $34.6 billion | | 1994 |
| 30 | Calouste Gulbenkian Foundation | Portugal | Lisbon | $3.5 billion | €2.8 billion (EUR) | 1956 |
| 17 | David and Lucile Packard Foundation | United States | Los Altos, California | $5.8 billion | | 1964 |
| 5 | Ford Foundation | United States | New York City, New York | $11.0 billion | | 1936 |
| 16 | Garfield Weston Foundation | United Kingdom | London | $6.5 billion | £4.2 billion (GBP) | 1958 |
| 20 | Gordon and Betty Moore Foundation | United States | Palo Alto, California | $5.4 billion | | 2000 |
| 4 | Howard Hughes Medical Institute | United States | Chevy Chase, Maryland | $16.1 billion | | 1953 |
| 6 | J. Paul Getty Trust | United States | Los Angeles, California | $10.5 billion | | 1982 |
| 18 | John D. and | United States | Chicago, Illinois | $5.7 billion | | 1975 |

| Rank | Organization | Country | Headquarters | Endowment (USD) | Endowment (home currency) | Founded |
|---|---|---|---|---|---|---|
| | Catherine T. MacArthur Foundation | | | | | |
| 2 | Kamehameha Schools | United States | Honolulu, Hawaii | $7.3 billion | | 1887 |
| 21 | Knut and Alice Wallenberg Foundation | Sweden | Stockholm | $5.3 billion | kr 32.7 billion (SEK) | 1917 |
| 9 | Li Ka Shing Foundation | Hong Kong | Hong Kong | $8.3 billion | $64.4 billion (HKD) | 1980 |
| 13 | Lilly Endowment | United States | Indianapolis, Indiana | $7.28 billion | | 1937 |
| 7 | Mohammed bin Rashid Al Maktoum Foundation | United Arab Emirates | Dubai | $10.0 billion | $36.7 billion (AED) | 2007 |
| 29 | Realdania | Denmark | Copenhagen | $3.5 billion | €2.8 billion (EUR) | 2000 |
| 15 | Robert Bosch Foundation | Germany | Stuttgart | $6.9 billion | €4.5 billion (EUR) | 1964 |
| 8 | Robert Wood Johnson Foundation | United States | Princeton, New Jersey | $9.0 billion | | 1972 |
| 28 | Rockefeller Foundation | United States | New York City | $3.51 billion | | 1913 |
| 1 | Stichting INGKA Foundation | Netherlands | Leiden, Netherlands | $36.0 billion | | 1982 |
| 27 | The California Endowment | United States | Los Angeles | $3.7 billion | | 1996 |
| 10 | The Church Commissioners for England | United Kingdom | London | $8.1 billion | £5.2 billion (GBP) | 1948 |
| 31 | The Kresge Foundation | United States | Troy, Michigan | $3.0 billion | | 1924 |
| 25 | The Leona M. and Harry B. Helmsley Charitable Trust | United States | New York City | $4.1 billion | | 1999 |
| 23 | The MasterCard Foundation | Canada | Toronto, Canada | $4.9 billion | | 2006 |
| 19 | The Pew Charitable Trusts | United States | Philadelphia | $5.6 billion | | 1948 |
| 26 | Tulsa Community Foundation | United States | Tulsa, Oklahoma | $3.8 billion | | 1998 |
| 14 | W. K. Kellogg Foundation | United States | Battle Creek, Michigan | $7.26 billion | | 1930 |

| Rank | Organization | Country | Headquarters | Endowment (USD) | Endowment (home currency) | Founded |
|---|---|---|---|---|---|---|
| 3 | Welcome Trust | United Kingdom | London | $22.1 billion | £14.2 billion (GBP) | 1936 |
| 11 | William and Flora Hewlett Foundation | United States | Menlo Park, California | $7.4 billion | | 1967 |
| 24 | William Penn Foundation | United States | Philadelphia | $4.4 billion | | |

*Source*: http://en.wikipedia.org/wiki/List_of_wealthiest_charitable_foundations

What is the size of moral capital in the United States? While the figures are open to interpretation, we estimate that moral capital in the United States in the 20th century at about $5 trillion. One trillion dollars in the Universities, one trillion dollars in large foundations and one trillion dollars in other institutions and two trillion dollars in the churches (not measured here). If the total capital stock of the United States is around $50 trillion moral capital is about 10% in the United States. It is certainly more than 5% and most likely not over 10% so better data and more careful measurement might help hone the figure.

What we see here is that moral capital in the 21st century seems to be emerging as an international force. The evidence supports our theoretical story that philanthropy is necessary for social progress and that this form of social organization seems to be spreading around the world. The ecosystem of moral capital provides a unique lens through which to view the emerging globalization that is characterizing the world today. We can view this system today from six regions of the world: North America, Europe, Asia, Africa, the MENA countries, and Latin America. Each region approaches the currents of advanced capitalism differently, but all participate in at least some of its currents.

Table 4 offers preliminary insight into the ecosystem of moral capital for seven countries: the United States, Sweden, China, India, Saudi Arabia, Nigeria, and Brazil. We measure the four currents of prosperity: opportunity with education; entrepreneurship with the Global Entrepreneurship Index; wealth with the number of billionaires; and philanthropy with the global giving rank. Of the seven countries, Sweden ranks second and China ranks fourth. It is interesting that both countries exhibit weakness in giving relative to the other currents; in fact, Sweden ranks below Nigeria and is almost at the level of Saudi Arabia. Perhaps Sweden's socialist orientation has altered the nation's character, as it had a strong tradition of entrepreneurship and philanthropy dating back to Alfred Nobel, who is remembered as one of the world's greatest philanthropists and entrepreneurs.

Today that entrepreneurial spirit is struggling to foster a startup culture, as country after country in Europe becomes increasingly risk averse. This is particularly true of high-tech startups: Europe has yet to produce a single Internet company valued at more than $10 billion. Meanwhile, there are six privately owned startups in the U.S. worth $10 billion or more, and two in Asia. Of course this affects wealth creation too, so moral capital is affected by cultural malaise. As we see in Table 4 below, Sweden is lower in giving than in the other currents of advanced capitalism. If the country could resurrect the spirit of an era when giving was in the blood of the nation, the Swedish model might once again become a shining beacon that leads the world through dangerous currents.

**Table 4: Global Ranking of the Ecosystem of Moral Capital**

| Country | | Innovation | Opportunity | Moral Capital | Wealth | |
|---|---|---|---|---|---|---|
| **Measure** | **GDP (PPP)** | **GEI Ranking** | **Education Rank** | **Volunteering** | **Billionaires Rank** | **Score** |
| United States | $45,336 | 1 | 5 | 1 | 1 | 2 |
| **Sweden** | **$34,926** | **5** | **12** | **40** | **23** | **20** |
| Saudi Arabia | $27,346 | 31 | 34 | 47 | 29 | 35 |
| China | $7,958 | 61 | 91 | 128 | 2 | 70 |
| India | $3,390 | 104 | 135 | 69 | 4 | 78 |
| Nigeria | $2,295 | 84 | 152 | 21 | 60 | 79 |
| Brazil | $10,264 | 100 | 79 | 90 | 7 | 80 |

- The U.S.—good ecosystem, weak on opportunity
- Europe—good ecosystem, weak on moral capital and entrepreneurship
- Saudi Arabia—average ecosystem, weak moral capital
- China—average ecosystem, weak moral capital and entrepreneurship
- Brazil—weak ecosystem, weak moral capital, opportunity, and entrepreneurship
- India—weak ecosystem, weak moral capital, opportunity, and entrepreneurship
- Nigeria—weak ecosystem, limited opportunity and moral capital

While global figures on moral capital are not available the global stock of capital is around $200 trillion (Economist, June 2015, p. 93). What is the size of Moral Capital in the World? If we use the United States, as an example, 10% moral capital, then the world should have moral capital of $20 trillion dollars. If we count non US countries we have $150 trillion dollars in capital and moral capital should be around $15 trillion. About half of this is in the hands of the 0.01percent. If we have 2,000 billionaires, a conservative estimate, they hold ten billion dollars each then moral capital if given away would be at the U.S. average in the 21st century. However, actual moral capital in the world is closer to 1.5% today. Three quarters of the global capital is outside of the United States while three quarters of the philanthropy is inside the United States. This is the challenge for the 21st Century.

## Summary

We recast Piketty's *Capital in the 21st Century* in light of Acs' *Why Philanthropy Matters: How the Wealthy Give and What It Means for Our Economic Well-Being*. Philanthropy matters in this debate because philanthropy as moral capital offers an alternative solution to the Piketty conundrum without relying exclusively on a wealth tax and government intervention. While both socialism and philanthropy appeal to our better side, socialism is about equality in servitude and restraint, while democracy seeks equality in opportunity. Moral capital strengthens both advanced capitalism (innovation and entrepreneurship) and democracy (economic freedom) by creating competition through investment in opportunity, which in turn leads to long-run economic growth. By focusing on university research that creates a large, well-functioning middle class (*Economist,* March 2015), which is necessary for technological innovation, economic equality, and economic security, moral capital is the missing link in the theory of capitalism development.

In these early years of the 21st century, the world is at the dawn of its rebuilding, while it also faces two great moral challenges. The first is to figure out the institutional structure of advanced capitalism in a globalized world—call this the great social sustainability challenge. As Richard Florida suggests, removing trade barriers and capital flows creates efficient markets, but the results are what economists call a zipf distribution: there are big winners and lots of losers. Economic opportunity tends to concentrate in the hands of a few. Losers get mad. Religion or some facsimile thereof becomes the default. People tend to think of the system as unfair. Crime spreads and societies fragment. This is true in the developed and developing worlds. Both Marx and Keynes knew this and suggested that institutions need to be rigged. Tax and wage policies were suggested by Keynes and nationalization of the means of production by Marx.

Social sustainability has three broad solutions: get the losers above a minimum level of mass consumption (illusions of fame trumps economics); restore order (or, as Cheney suggests, ram it down their throats) at home and abroad; and create structures that enable the full use of the people's talent, self-expression, and entrepreneurship. In a nutshell, the solution is to create opportunity for all. This is a global issue.

The second great challenge is ecological sustainability. Global warming has been at the forefront of global discussions for years, with conflicting views and different ideological positions in an ongoing debate. The preponderance of the evidence supports the view that average global temperatures are rising, the polar ice caps are melting, and weather patterns are becoming more erratic. The result will be—and already is—wide scale flooding, spreading desserts, and increased human suffering. The various sustainability challenges are linked to one another, thus the more we create social sustainability—opportunity for all—the easier it will be to find solutions to our environmental problems through entrepreneurship and innovation. These two great moral challenges, like slavery in the 19$^{th}$ century and the creation of the middle class (women's suffrage, equal opportunity, discrimination, gay rights) in the 20$^{th}$ century, need to be addressed.

This paper takes a long-term view of the institutional structure of modern society, arguing that the institutions of advanced capitalism have evolved from socialism and totalitarianism to philanthropy and democracy, and that the key to the sustainability of the system is moral capital. The global forces of capitalism, philanthropy, and democracy need to be woven into a global system of opportunity and prosperity for all. The central mission of globalization is to help make this a reality. We need to bring the cultural, natural, and institutional aspects of humanity together to ensure that our society prospers throughout the 21$^{st}$ century. While many look to government as the solution to our conundrum and others espouse a free market, it is philanthropy that holds the key to our future, as it introduces both efficiency and equity into the system.

Aristotle wrote, “To give away money is an easy matter and in any man’s power. But to decide to whom to give it, and how large and when, and for what purpose and how, is neither in every man’s power nor an easy matter.” The success of the 21$^{st}$ century will be judged not at the beginning of the century, not today, but down the road. The real question is not, “What is the future of Capitalism?” the real question is “How will the currents of capitalism shape the 21$^{st}$ century?” How will the currents of capitalism wash ashore in the next decade or two? The simple answer to this question, Is that moral capital will continue to shape the world. Why, because that is what human nature is about. And it is human nature that will shape the course of history.

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[1] See http://en.wikipedia.org/wiki/Democracy#cite_note-.

[2] Marshall is chairman and chief investment officer of Marshall Wace LLP, one of Europe's leading hedge fund groups.

[3] Some comments on moral capital: Assets devoted to the "production of higher education" ought rightfully to be included as portions of moral capital. At minimum, the long term assets, or in particular, the capital assets are directly devoted to the production of education--for the long term. In the same vein, the returns to university endowment funds, independent of how the money is actually invested, are utilized to fund the investments and other activities that are directly related to the production of education. Both of these long term investments are inputs into the production of education process and are properly included in moral capital. It could be argued that short term assets and the other remaining long term assets of universities are also part of the moral capital. Consider for example working capital. If the university is to be productive in the education enterprise, it is necessary to fund the short term or day to day activities of that enterprise which means the working capital is a necessary investment in the enterprise. Consider some of the other assets: Even if those assets are not directly related to the current education activities, those investments generate returns which are used in the production of education process, just as real assets are used. Taken together, the combined investments in real assets and endowed funds are a lower limit of any estimate of moral capital contributed by universities. Furthermore, the table states accounting values, which are likely to be below current market values. Consequently, if we accept the argument that ALL assets of a university are moral capital, even the total assets value may be an understatement of the value of that moral capital.

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The value of real estate may be especially understated when using book values given the physical location of many universities in urban centres' where land has appreciated substantially in value. As a general accounting principle, there is an objective to state conservative values.

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