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Working Paper

The entrepreneurship-philanthropy nexus: nonmarket source of American entrepreneurial capitalism

Jena Economic Research Papers, No. 2007,025

Provided in Cooperation with:
Max Planck Institute of Economics

Suggested Citation: Ács, Zoltán J.; Audretsch, David B.; Phillips, Ronnie J.; Desai, Sameeksha (2007) : The entrepreneurship-philanthropy nexus: nonmarket source of American entrepreneurial capitalism, Jena Economic Research Papers, No. 2007,025, Friedrich Schiller University Jena and Max Planck Institute of Economics, Jena

This Version is available at:
<https://hdl.handle.net/10419/25597>

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JENA ECONOMIC RESEARCH PAPERS



2007 – 025

The Entrepreneurship-Philanthropy Nexus: Nonmarket Source of American Entrepreneurial Capitalism

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www.jenecon.de

ISSN 1864-7057

The JENA ECONOMIC RESEARCH PAPERS is a joint publication of the Friedrich-Schiller-University and the Max Planck Institute of Economics, Jena, Germany. For editorial correspondence please contact m.pasche@wiwi.uni-jena.de.

Impressum:

Friedrich-Schiller-University Jena
Carl-Zeiß-Str. 3
D-07743 Jena
www.uni-jena.de

Max-Planck-Institute of Economics
Kahlaische Str. 10
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June 2007

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Abstract

What differentiates American capitalism from all other forms of industrial capitalism is a historical focus on both the creation of wealth (entrepreneurship) and the reconstitution of wealth (philanthropy). Philanthropy has been part of the implicit American social contract that continuously nurtures and revitalizes economic prosperity. Much of the new wealth created historically has been given back to the community to build many of the great social institutions that have paved the way for future economic growth. This entrepreneurship-philanthropy nexus has not been fully explored by either economists or the general public. The purpose of this paper is to suggest that American philanthropists-particularly those who have made their own fortunes-create foundations that, in turn, contribute to greater and more widespread economic prosperity through knowledge creation. Analyzing philanthropy sheds light on our current understanding of how economic development has occurred, as well as the roots of American economic dominance.

JEL-classification: D64 - Altruism; M13 - Entrepreneurship;
M14 – Social Responsibility.

Keywords: entrepreneurship, philanthropy, capitalism, knowledge

I. Introduction

The success of the American economy over time has been linked to its entrepreneurial spirit. Individual initiative and creativity, along with small business and wealth creation, are indelible parts of the American spirit. The recent technological revolution and resulting economic restructuring have made both the general public and government officials keenly aware of the entrepreneur's role in job and wealth creation (Hebert and Link, 1989). This critical role in economic development has fostered efforts by all levels of government to promote entrepreneurship (Hart, 2001).

However, another crucial component of American economic, political and social stability is increasingly recognized: Philanthropy. Merle Curti in 1957 advanced the hypothesis that "philanthropy has been one of the major aspects of and keys to American social and cultural development" (Curti, 1957: 353). To this we would add that philanthropy has also been crucial in economic development. Further, when combined with entrepreneurship, the entrepreneurship-philanthropy nexus (Acs and Phillips, 2002) becomes a potent force in explaining the long-run dominance of the American economy.

A major difference between American capitalism and many other forms of capitalism¹ (Japanese, French, German and Scandinavian) is a historic focus on both the creation of wealth (*entrepreneurship*) and the reconstitution of wealth (*philanthropy*). Philanthropy is imbedded within an implicit social contract that stipulates wealth beyond a certain point should revert to society (Chernow, 1999). Although individuals are free to accumulate wealth, it must be invested back into society to expand opportunity (Acs and

¹ For a statement on the nature and logic of capitalism see Robert L. Heilbroner (1985). Of course it is precisely the institutional framework that differs from country to country and not necessarily the logic of the system. For a discussion of the different institutional frameworks see Michael Porter (2000) on Japan,

Dana, 2001). In this paper, we cast the United States as the unique product of a certain type of human character and social role, one which produced the English Revolution and modern American civilization. In this character type, the agent possessed unprecedented new powers of discretion and self-reliance, yet was bound to collective ends by novel emerging forms of institutional authority and internal restraint (Dewey, 1998)². Much of the new wealth in the U.S. has historically been given back to the community to build up the great social institutions that, in turn, pave the way for future economic growth³.

Though it is recognized that the philanthropists of the nineteenth century enabled the foundation for wealth creation and social stability, this has not been quantified within the framework of private and social costs and benefits (America, 1995). Take, for example, the challenge of calculating the *ex post* benefits of the establishment of the University of Chicago by the Rockefeller family. Certainly, there was no immediate private benefit to the donor family and contributions occurred several generations later. The number of Nobel Prize winners at the university is perhaps just one measure of social benefits that emerge from the original investment. The complexity of measuring (and even identifying) *ex post* benefits demonstrates that the entrepreneurship-philanthropy nexus has not been fully understood – neither by either economists nor the general public. This is, in part, due to an intellectually restrictive view of self-interest as a (perhaps *the*) fundamental driver of capitalism.

The purpose of this chapter is to suggest that American philanthropists—especially those who have made their own fortunes—create foundations that, in turn,

Wolfgang Streech and Kozo Yamamura (2002), on France see Honah D. Levy (1999) and on Sweden see Karlsson and Acs (2002, special issue on Institutions, Entrepreneurship and Firm Growth.

² One could argue that the recent antitrust case against Microsoft was as much about anticompetitive behavior as about violating this social contract.

contribute to greater and more widespread economic prosperity through opportunity, knowledge creation and entrepreneurship. This was Andrew Carnegie's hope when he wrote about "the responsibility of wealth" more than 100 years ago, which has translated for today's entrepreneurs as "giving back." In the new global economy, philanthropy holds promise as a proponent of renewed growth and prosperity, as the new rich of the 21st century have the opportunity to shape American and global society. The founders of modern American philanthropy tried to provide answers to problems that were national in scope, at a time when national government was weak. Similarly, today's philanthropists have the chance to address problems that are global in scope, at a time when global institutions are even weaker (Soros, 1988). We suggest that by analyzing philanthropy, we are better able to understand both the process of economic development and an underlying reason for American economic dominance.

In the next section we examine the economics of philanthropy and altruism as individual behavior. In the third section, we provide a brief background on the origins of philanthropy in American history, and discuss some of its early contribution to economic prosperity. The fourth section outlines strengths of American capitalism - namely entrepreneurship, innovation, and wealth creation. The fifth section examines philanthropy in the new "Gilded Age" and asks how well the institutions of the philanthropic sector are meeting the goals of creating economic opportunity. We provide conclusions and implications for policymakers, foundations and the intellectual community in the final section.

³ For example, John D. Rockefeller gave back 95 per cent of his wealth before he died.

II. The Economics of Philanthropy and Altruism

The word philanthropy literally means “love of mankind” and philanthropic acts depend upon the generosity of the giver. Although we do not seek to define philanthropy or evaluate competing definitions, we would like to describe the concept. In this paper, we take philanthropy as: *Giving money or its equivalent to persons and institutions outside the family without a definite or immediate quid pro quo for purposes traditionally considered philanthropic.* Solomon Fabricant discussed the relationship of philanthropy to economic development (Dickinson, 1970: 8):

“...in this broad sense philanthropy is a necessary condition of social existence, and the extent to which it is developed influences an economy’s productiveness. For decent conduct pays large returns to society as a whole, partly in the form of a higher level of national income than would otherwise be possible. Underdeveloped countries are learning that, despite their hurry to reach desired levels of economic efficiency, time must be taken to develop the kind of business ethics, respect for the law, and treatment of strangers that keep a modern industrial society productive. Widening of the concepts of family loyalty and tribal brotherhood to include love a man “in general” is a necessary step in the process of economic development.”

Economists from Adam Smith (1937 (1776)) onwards have recognized the role of self-interest in the creation of wealth, through the assumption that self-interest is the underlying motivation behind human exchange. Critics of capitalism, notably Karl Marx, focused on negative effects, especially its resulting maldistribution of wealth. Indeed, although wealthy entrepreneurs of the nineteenth century certainly provided the impetus for Thorstein Veblen's (1899) "leisure class," they were, at the same time, also great philanthropists (Sugden, 1982).

When economists confront philanthropic behavior, they seek the *quid pro quo* behind the act. They conclude that although behavior appears to be altruistic, it is

fundamentally consistent with self-interest. Contemporary economic theory has largely ignored the possibility of purely altruistic behavior (though with notable exceptions – see Margolis, 1982; Sugden, 1982),⁴ and this habit of explaining all behavior as inherently and ultimately self-interested leaves much to be clarified, specifically with respect to philanthropy.

We argue that altruism is different from⁵ - and more than - enlightened self-interest. Although Adam Smith noted the centrality of self-interest in *The Wealth of Nations*⁶ (1937 (1776)), he indicates a larger motivation in *The Theory of Moral Sentiments* (1969(1759), which predates *The Wealth of Nations* by nearly two decades. Smith suggests (1969 (1759), 47):

How selfish soever man may be supposed, there are evidently some principles of his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it.

The behavior described by above appears consistent with modern economics, specifically the premise that "utility" is derived from the choices on which one's income may be spent. Starting from this, economists have generated interdependent utility functions, so that the utility ("happiness" or "satisfaction") one person receives is dependent upon that of another (Ireland, 1969; Kaufman, 1993; Sugden, 1982; Danielsen, 1975).

However, Kenneth Boulding suggests that although "it is tempting for the economist to argue that there are really no gifts and that all transactions involve some kind of exchange, that is, some kind of *quid pro quo* (Boulding, 1962: 57-58)," such an

⁴ In contrast to this, a survey of theory and research on altruism by sociologists concluded that evidence points to the existence of altruism as a part of human nature (Pilavin and Charng, 1990).

⁵ Also see Coase (1976).

⁶ "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest" (Smith, 1937 (1776): 14).

approach seriously misleads us because there is nothing in utility theory that requires all motivations to be alike. Indeed, in Boulding's view, the motivation leading to philanthropic behavior--where there is no *quid pro quo* -- "may be very different from that which leads us to build up a personal estate or to purchase consumption goods for our own use" (Boulding, 1962: 61). Boulding develops this further by drawing a parallel between the self-interested orientation of modern economics with its development of a theory of the firm (collection of individuals) and with individual philanthropic behavior and a theory of philanthropic foundations. There are two basic approaches of the foundations. One, like the Ford Foundation, is to give money to a variety of individuals (a large number of grantees) and projects and presumably allocates dollars so the marginal benefit is equal across all units. The other is behavior that Boulding speculates may have done more for higher education – such as the Rockefellers' establishment of a single strong University of Chicago (Boulding, 1962: 65).

Further, the neo-classical assumption of utility maximization neglects to specify *what* utility actually is, making it impossible to separate altruism from selfishness (Simon, 1983: 158). Simon defines altruism as "sacrifice of fitness" It is then possible (in principle) to determine which choices are selfish or altruistic by examining the effect of a million dollar gift, for example, on the number of progeny of the donor (Simon, 1993: 158). Simon concludes that economic theory has treated economic gain as the primary human motive, but an empirically grounded theory would assign comparable weight to other motives, including altruism and the organizational identification associated with it (Simon, 1993: 160).

Is philanthropic behavior always self-interest motivated, i.e., is there always a *quid pro quo*? Or is there also behavior, as Boulding argues, where there is no *quid pro quo*? We argue that the vitality of American capitalism is testament to the importance of non-self-interest motivated behavior, and also that altruism is superior to enlightened self-interest. Hence, an economic theory that adequately explains the real world must explicitly introduce altruistic behavior into its models of individual behavior (Simon, 1993; Budd, 1956; Giddings, 1893). We consider U.S. history an example of the superiority of altruism over enlightened self-interest, and this has been crucial to economic prosperity over time.

III. The Contributions of the Nineteenth Century Philanthropists

Studying philanthropy in the context of economic prosperity is not a new idea. In *Corruption and the Decline of Rome*, Ramsay MacMullen (1988) notes how charitable foundations were partly responsible for the flourishing of Rome, and that their decline coincided with the loss of the empire. The roots of American philanthropy begin in England, in the period 1480-1660. By the end of the Elizabethan period, "it was generally agreed that all men must somehow be sustained at the level of subsistence" (Jordan, 1961:401). Though charitable organizations at the beginning of this period were centered around religion, religious charities comprised only 7 per cent of all charities by the end of the sixteenth century (Jordan, 1961: 402).

How is this philanthropic behavior explained? According to Jordan, there existed a partly religious and partly secular sensitivity to human suffering in sixteenth-century England. (Jordan, 1961: 406). Another important motivating factor was Calvinism, which

taught that "the rich man is a trustee for wealth which he disposes for benefit of mankind, as a steward who lies under direct obligation to do Christ's will" (Jordan, 1961: 406-7).

The real founders of American philanthropy, then, were the English men and women who crossed the Atlantic to establish communities better than the ones at home⁷ (Owen, 1964). Beginning with the Puritans, who regarded excessive profit-making as both a crime and a sin⁸, there is a long tradition of Americans questioning the right of people to become rich. Puritan principles of industry, frugality and humility had an enduring impact on America (Tocqueville 1966 (1935)). In view of the popular prejudice against ostentatious enjoyment of riches, the *luxury of doing good* was almost the only extravagance the American rich of the first half of the nineteenth century could indulge in with good consciences (Tocqueville, 1966 (1835): 40; Veblen, 1899). To whatever extent this was true, things had certainly changed by the second half of the century when Carnegie, Mellon, Duke and others were making their fortunes.

Andrew Carnegie was the ideal Calvinist. Philanthropy was at the heart of his "gospel of wealth" (Hamer, 1998). For Carnegie, the question was not only, "How to gain wealth?" but, equally importantly, "What to do with it?" *The Gospel of Wealth* suggested that millionaires administer their wealth as a public trust during their lives, as opposed to bequeathing to heirs or making benevolent grants by will (Carnegie, 1889). Both Carnegie (at the time) and Jordan (as a historian) suggest that a key motive for philanthropy is social order and harmony⁹.

⁷ The Puritan leader John Winthrop forthrightly stated their purpose in the lay sermon, "A Model of Christian Charity," in which he preached on the ship "Arabella" to the great company of religious people voyaging from the old world to New England in the year 1630 (Bremner, 1960:7).

⁸ and punished it accordingly.

⁹ It is plausible that philanthropists like Carnegie took a longer term approach and realized that their interests necessitated assisting the worthy poor and disadvantaged: enlightened self interest as opposed to altruism.

In the past, the malefactors of great wealth were also benefactors of extraordinary generosity (Myers, 1907). In the U.S., much of the new wealth created historically has been given back to the community, and have built up the great social institutions *that have a positive feedback on future economic growth*. For example, many of the great private research universities (Stanford, MIT, Johns Hopkins, Carnegie-Mellon, Duke, University of Chicago) were created over a century ago by American philanthropy, and have played a critical role in recent American success (*The Economist*, October 4, 1997).

One of the greatest nineteenth-century philanthropists was George Peabody, who developed a philosophy of philanthropy that seemed to have two important considerations. One was a deep devotion to the communities in which he was reared or in which he made money. The other was a secular vision of the Puritan doctrine of the stewardship of riches: His desire, in the simplest terms, was to be useful to mankind. In his lifetime, he donated more than \$8 million to libraries, science, housing, education, exploration, historical societies, hospitals, churches and other charities (Parker, 1971: 209). Peabody's most enduring influence, however, lies in the precedents and policies formulated by the Peabody Education Fund Trustees. This fund paved the way for future foundation aid to the South after the Civil War. Perhaps more important, it also influenced operational patterns of subsequent major foundations, including John D. Rockefeller's Education Board, the Russell Sage Foundation and the Carnegie Foundation. In this way, George Peabody is considered the founder of modern educational foundations (*Christian Science Monitor*, as cited in Parker, 1971: 208).

George Peabody was in fact the originator of that system of endowed foundations for public purposes.... It is interesting to consider the many ways in which the example set by [George Peabody] has been followed by visioned men of means in the United States...In a sense the Peabody Fund

was not the only monument to George Peabody, for the example he set has been followed by a host of other Americans.

In 1867, Peabody explained his philanthropy to Johns Hopkins, a Baltimore merchant and financier: “To place the millions I had accumulated, so as to accomplish the greatest good for humanity.” Hopkins donated his entire fortune of \$8 million (an extraordinary amount of money at the time) to found the Johns Hopkins University, Medical School and Hospital (Brody, 1998). Each institution, which would have separate but closely linked boards of trustees, was given \$3.5 million to establish itself. It was at the time the largest philanthropic bequest in U.S. history. Thus Peabody, apart from his own charities, may honorably stand in the shadow of what Hopkins achieved (Offit, 1995).

The nineteenth century American model of entrepreneurship and philanthropy was followed by a period of progressivism¹⁰ in the early twentieth-century and then by World War I. Though the 1920s was a period of technological change and prosperity, underlying economic problems resulted in the collapse of the world economy into the Great Depression of the 1930s. This period, along with World War II, changed the role of government and the philanthropic activities of the entrepreneur. It is not our point here to argue that the role of philanthropy was to provide social welfare—health insurance, social security, unemployment insurance. Indeed, the rise of the state in the twentieth century was in some ways a rise of social welfare provided by government.

This function, however, is distinct from the *pure function of philanthropy* that arises from issues of wealth accumulation. The rise of the welfare state (with its high marginal taxes, high inheritance taxes, anti-trust laws, and the abolition of private

¹⁰ Increasing role of government.

property in some societies) tried to eliminate the role of private wealth altogether. In fact, the only role for philanthropy in a socialist state might be religious giving. Interestingly, the rise of the welfare state in the United States did not coincide with a decline in philanthropy, as might be expected. In fact, according to a study by the National Bureau of Economic Research (Dickinson, 1970), total private domestic philanthropy as a percentage of Gross National Product between 1929 and 1959 increased from 1.7 per cent to 2.3 per cent. According to the Johns Hopkins nonprofit sector project, this figure is the highest in the world, followed by Spain, Britain and Hungary¹¹. In the United States, almost 80 per cent of donations are made by individuals. Why did Americans continue to fund philanthropy, at least at a constant level, even as federal government stepped into the business of social security? The answer, at least in part, lies in the shared roots of philanthropy and the entrepreneurial system: American *individualism* (*Newsweek*, September 29, 1997: 34)¹². However, as we will see in the next section, the elimination of opportunities for wealth creation has social consequences that go far beyond philanthropy.

IV. The Strengths of American Capitalism

¹¹ See Salamon and Ahheier (1999).

¹² “There’s no escaping the brutal truth: the nation famous for capitalism red in tooth and claw, the epicenter of the heartless marketplace, is also the land of the handout. It’s not really such a paradox. Both our entrepreneurial economic system and our philanthropic tradition spring from the same root: *American individualism*. Other countries may be content to let the government run most of their schools and universities, pay for their hospitals, subsidize their museums and orchestras, even in some cases support religious sects. Americans tend to think most of these institutions are best kept in private hands, and they have been willing to cough up the money to pay for them.” (*Newsweek*, September 29, 1997: 34)

Joseph A. Schumpeter proposed his concept of the entrepreneur against the backdrop of economic development in *The Theory of Economic Development* (1934 (1911)). The function of the entrepreneur is to reform or revolutionize the patterns of production by exploiting an invention or more generally, an untried technological possibility for producing a new commodity or producing an old line in a new way.

Six decades after this initial contribution, it is the large corporation that draws attention to Schumpeter's gloomy prospects for economic progress in *Capitalism, Socialism and Democracy* (1950 (1942)). The large corporation, by taking over the entrepreneurial function, not only makes the entrepreneur obsolete but also undermines the sociological and ideological functions of capitalist society. As Schumpeter himself wrote in a classic passage (1950 (1942): 134):

Since capitalist enterprise, by its very achievements, tends to automatize progress, we conclude that it tends to make itself superfluous – to break to pieces under the pressure of its own success. The perfectly bureaucratized giant industrial unit not only ousts the small or medium-sized firms and expropriates the bourgeoisie as a class which in the process stands to lose not only its income but also what is infinitely more important, *its function*.

As the large firm replaces the small and medium sized enterprise, economic concentration starts to have a negative feedback effect on entrepreneurial values, innovation and technological change. Technology - the means by which new markets are created - may die out, leading to a stationary state. This view of the future capitalist society was held by Keynes (1963), Schumpeter (1942 (1950)) and much of the 1960s intellectual left (Heilbroner, 1985)¹³.

Schumpeter was nearly right in Sweden (Henriksen and Jakobsson, 2000), and his prognoses about economic consequences of firm-size appear true for former socialist

countries, where industrial concentration has left its mark (Stiglitz, 1994). However, Schumpeter was wrong about the future of American capitalism. He erred by underestimating its deeply-rooted entrepreneurial spirit (Acs, 1984: 172):

While for Marx and Heilbroner the principle struggle is between privileged and underprivileged, for Schumpeter, as in the transition from feudalism to capitalism, the quintessential struggle is between elites and elites: That is merchants and aristocrats, entrepreneurs and bureaucrats. Schumpeter did not see—partly because of his aristocratic European background—that the entrepreneurial spirit would emerge from the nation's past and rise to challenge, engage and extinguish the embers of bureaucratic hegemony, bringing to an end the era of monopoly capitalism, heralding a new dawn.

When the Berlin Wall fell in 1989, international order shifted from issues of East versus West (Capitalism versus Socialism) to questions of global competition (Acs, 2000; Acs and Audretsch, 2001) and comparative advantage. The perceived wisdom at the time was that the United States might not be able to compete in the new global economy¹⁴ (Garten, 1992)¹⁵. However, after a quarter century of ups and downs since 1976, the U.S. economy appears to be doing extraordinarily well¹⁶. Unemployment in 1999 was just under five percent, the economy was growing at four percent a year, inflation was at bay, manufacturing productivity was rising, the dollar was strong and the stock market was consistently breaking records. It appears that the U. S. economy has restructured itself, moving from an industrial base to a knowledge base, and transitioned to the next century.

¹³ For an alternative view see Ayn Rand, *Return of the Primitive: The Anti-Industrial Revolution*, (New York: A Meridian Book, 1999).

¹⁴ Jeffrey E. Garten, Under Secretary of Commerce, summed up this view at the beginning of the first Clinton administration (1992: 15): "Relative to Japan and Germany, our economic prospects are poor and our political influence is waning. Their economic underpinnings – trends in investment, productivity, market share in high technology, education and training – are stronger. Their banks and industry are in better shape; their social problems are far less severe than ours."

¹⁵ Also see Tyson (1992) and Thurow (1992).

¹⁶ According to Lawrence H. Summers, former deputy Treasury Secretary: "The economy seems better balanced than at any time in my professional lifetime" (*Washington Post* December 2, 1996: 1)

Entrepreneurs—*individuals who take risk and start something new*—are indispensable to economic growth and prosperity. Entrepreneurship—*the process of creating a new venture and assuming the risks and rewards*—has been essential in the renewal of prosperity in the U.S. in the past two decades, just as it was at the turn of the twentieth century. There is little doubt that the dramatic increase in the number of entrepreneurial businesses in the late 1970s and early 1980s (then maintained at a high level in the 1990s) has contributed significantly to the relatively vigorous U.S. economy in recent years¹⁷. And it is important to connect entrepreneurship to innovation because of their important joint contributions to creativity, growth, productivity and job creation (U.K. Secretary of State for Trade and Industry, 1998).

The direction of technological development is equally important because it is the way resources are channeled into industries. Each of the last three industrial revolutions was characterized by a revolution that made possible the transportation both of raw materials and finished commodities to market. During the first industrial revolution (1780-1830), a system of canals in England enabled transportation of goods at a fraction of the previous cost. During the second industrial revolution (1830-1850), the railways provided cheap transportation in England, Germany, and the U.S. During the third industrial revolution (1920-40), the automobile, truck, and airplane made the transportation of goods and people inexpensive. The fourth industrial revolution, now taking place (1984-?), also has a transportation revolution. However, it is a revolution in the *transportation of information*, not goods. Like technologies of history - the steam

¹⁷ While Americans allow entrepreneurs continually to change the economic system, the French, for example, “are fighting to preserve what is to them one of the most successful societies and most agreeable ways of life in the world – one that other Europeans esteem and Americans still flock to, admire and even envy.” *The Washington Post*, April 14, 1997, A1.

engine and internal combustion engine - the microprocessor does not operate within the confines of existing structures but enables a new one: The Information Age.

Much of the entrepreneurial investment to finance America's information infrastructure was made during the 1980s. According to the *Wall Street Journal* (March 2, 1993) Michael Milken invested \$21 billion in the information industry. His largest commitments were to MCI, Tele-communications Inc, McGraw Cellular Communications Inc, Turner Broadcasting, Time Warner Inc, and Metromedia Broadcasting. Virtually devoid of conventional sources of collateral, none of these companies could have raised comparable sums elsewhere. An original investment of \$10 billion in these companies had a market value of \$62 billion in 1993. This web of glass and light is today an essential resource for America's information economy. A second wave of entrepreneurial start up companies, financed in part by venture capital, is now completing the infrastructure for the information age: America On Line, Cisco Systems, Amazon.Com, Oracle, Sun Microsystems, Netscape, and Yahoo.

The re-emergence of entrepreneurship in the United States during the 1980s, and the positive channeling of it, must be seen as a triumph of American capitalism¹⁸. A clear manifestation of this entrepreneurial success is the increase in job wealth creation in the U.S. The accumulation of wealth in private hands is a function of the freedom that we

¹⁸ An enormous amount of wealth has been created in the U.S. since the Great Depression of the 1930s. Between 1950 and 2000, household net worth in the United States increased from \$130,000 to \$400,000 in 2001 inflation adjusted dollars. The addition to real measured by additions to gross domestic product by decade increased by \$56.2 billion in the 1980s and by \$75.6 billion in the 1990s. In 1950 eighty percent of wealth on the Forbes list of the richest people in America was inherited by 1990 it has fallen too only 20 percent.¹⁸ Between 1998 and 2001, four trillion dollars of new wealth was created in the stock market. The number of billionaires had increased from 13 in 1982 to 170 today; the number of deca-millionaires stands at 250,000 and millionaires at 4.8 million (*Economist*, May 30, 1998: 19). The impressive performance of the U. S. in the last few years may be contrasted with the rather lackluster performance in both Europe and Japan, where GDP has grown at less than 1.5% per annum in the last five years. In the European Union (EU) the unemployment rate has remained stubbornly in double digits, and in Japan the stock market has

allow individuals in an entrepreneurial society. If it is taxed away, wealth creation will cease. However, with that right is responsibility. Private wealth that was created in a community needs to be reinvested in the future growth of society, and this is as true now as it was for early American philanthropists. In fact, as enormous new wealth has been created, the role of philanthropy has similarly grown. The contribution to philanthropy in the U.S. rose to around two per cent of GDP. The number of active private and community foundations has more than doubled since 1980. About three-fifths of the largest foundations have been created since 1980.

It has only been in the last two decades, since 1982, that a combination of political changes (Reagan Revolution), massive technological advances and the collapse of communism have enabled a return to American roots of individualism, entrepreneurship and philanthropy. However, while entrepreneurship is a *necessary* condition for the shift from industrial capitalism to an entrepreneurial society, it is not by itself *sufficient* for economic prosperity, opportunity and social progress.

been stagnant since the early 1992 at half its previous level (Audretsch and Thurik, 1998; Wennekers and Thurik, 1999; Acs, Carlsson and Karlsson, 1999; Acs and Armington, 2001; Carree et al, 2001).

V. Philanthropy in the “New Gilded Age”

At the beginning of this chapter, we suggested that American philanthropists created foundations that, in turn, enabled greater and more widespread economic prosperity (by investing in the future of America). However, such views are not fashionable among scholars of philanthropy and more than a few professionals that staff foundations. For example, a book published by MIT Press on American foundations argues that they serve largely as vehicles for advancing the interests of their benefactors (Dowie, 2001). At an American Assembly meeting a few years ago, the participants (most were professionals from foundations and non-profit groups) produced a statement calling on philanthropists to do more to redistribute their wealth from the “haves” to the “have nots.” Carnegie would have been appalled since he thought that by fostering greater economic opportunities, philanthropists could prevent such redistributive schemes.

It is important to reiterate the argument. We need to distinguish redistribution of wealth from the creation of opportunity, both intellectually in academy and operationally in foundations. This distinction is similar to that between small business and entrepreneurship: Small business is about lifestyle and entrepreneurship is about wealth creation. In the same sense, charity is about redistribution while philanthropy in the American tradition is about investing wealth to create opportunity. The first question is: How do we evaluate what should be done and what has gone before? What is needed is a benchmark against which to evaluate the role of philanthropy today. This clearly does not exist. However, Jeffrey Sachs articulated a position by which to judge our philanthropic activities based on past accomplishments: Creating opportunity for future generations means creating knowledge today¹⁹, and the model to study is the Rockefeller Foundation²⁰ (*The Economist*, June 24, 2000). Schramm suggests that ideas and personnel

¹⁹ For a theory of knowledge in economic growth, see Arrow (1962) and Romer (1990). For an application to the regional and global economy see Acs (2000).

²⁰ Sachs writes: “The model to emulate is the Rockefeller Foundation, the pre-eminent development institution of the 20th century, which showed what grant aid targeted on knowledge could accomplish. Rockefeller funds supported the eradication of hookworm in the American South; the discovery of the Yellow Fever vaccine; the development of penicillin; the

(i.e. internal human capital) enable foundations to work through intellectual influence (Schramm, forthcoming). While it is beyond the scope of this paper to identify all wealthy entrepreneurs and to study their relative philanthropic engagement, we will briefly address four that set the standard: George Soros, Ted Turner, Bill Gates and Warren Buffett.

Soros, the financier, pledged \$2 billion dollars to a global network of foundations to promote an open society²¹. The Soros Foundation supports education, children's programs, public health initiatives, contemporary art and culture programs and small-enterprise development. He has contribute to creative and unusual methods, taking great care over how the money is spent in transforming the former socialist countries. He donated \$500 million to fund health and civic programs in Russia (*The Washington Post*, October 21, 1997: A3.) and another \$25 million to fund after-school programs in Baltimore²².

Another large gift was the donation of \$1 billion to the United Nations by Ted Turner, from the wealth created by his shares in the Time Warner media empire. With that gift, Turner challenged the extremely rich to give away more money²³. The Turner Foundation is dedicated to making the earth more environment-friendly – protecting clean water and air quality, alternative forms of transportation and fuels, strategies for infill development, etc. Goals of the foundation also include slowing population growth

establishment of public-health schools (today's undisputed leaders in their fields) all over the world; the establishment of medical facilities in all parts of the world; the creation and funding of great research centers such as the University of Chicago, the Brookings Institution, Rockefeller university, and the National Bureau of Economic Research; the control of malaria in Brazil; the founding of the research centers that accomplished the green revolution in Asia; and more." (*The Economist*, June 24, 2000: 83)

²¹ For treatment of the Soros perception of the global problem, see Soros (1998).

²² He described Baltimore as a miniature version of the world with much of the world's bounty, problems and promise (*The Baltimore Sun*, December 16, 1998: C1).

and preserving wildlife. The foundation has an endowment of about \$350 million, but its annual giving (\$50 million) is more in line with a \$1 billion foundation (Maria Saporta The Atlanta Journal and Constitution October 8, 2001).

Bill Gates - who had previously promised \$100 million to fight childhood disease in developing countries and \$200 million for computers for libraries - created the largest philanthropic foundation in the U.S.: The Bill and Melinda Gates Foundation, endowed with \$22 billion²⁴. The recent announcement that Warren Buffett will give the bulk of his \$44 billion fortune to the Gates Foundation creates the largest philanthropic foundation in history (*The Economist*, 2006). To put this into perspective, the contribution is about four times as large as that created by Carnegie or Rockefeller in constant dollars. The foundation focuses on third world health issues, and will give away one billion dollars annually.

VI. Conclusion

From an American perspective, the current model of entrepreneurial capitalism, with its sharp focus on entrepreneurship and philanthropy, offers continued potential to create and strengthen important institutions that seek to equalize unequal distribution of wealth. There are important implications for a range of stakeholders in the economy, and we will outline those specific to policymakers, foundation professionals and the intellectual community.

²³ Ted Turner was awarded the 2001 Albert Schweitzer Gold Medal for Humanitarianism given by the Johns Hopkins University.

²⁴ *New York Times*, December 2, 1998: A10 and *Newsweek*, August 30, 1999: 50.

Public Policy Implications

Policy issues arise at many levels – federal, state, local – and across a range of decision-making bodies and policy arenas – taxation, small business support, education, welfare and social assistance programs, etc. The increase in high profile philanthropic activities is occurring at a time when Americans in general are increasing their philanthropic contributions. A recent study by the Newtithing.org suggests that those areas of the country without amenities such as mountains, beaches and museums are reinventing themselves through philanthropic efforts to invest in the community. States that rank the highest are those from the Rockies through the Plains and in the Southeastern states: “The middle of the country has developed a culture of philanthropy that the coasts and the Southwest, for all their wealth, do not have” (Leonhardt 2006). Such philanthropy is yet another manifestation of the entrepreneurship-philanthropy nexus in American society.

Government policies should be designed to support, or at least not hinder, the flow of money into the philanthropic sector. Legal and regulatory policy affects both the demand and supply conditions in this sector. For example, rather than constraining the rich through taxes, they may be more effective at creating social change by creating opportunity²⁵. Foundations operate under complex regulatory frameworks, facing tighter restrictions than public charities – such as excise taxes on net investment income - and have gone through periods of restricted independence and operational scrutiny (Schramm,

²⁵ In the past, the fight against slavery had some very wealthy backers. If we shut off the opportunities for wealthy individuals to give back their wealth we will also shut off the creation of wealth which has far greater consequences for an entrepreneurial society. It is the *channeling* of this wealth to socially useful and constructive activities that may offer the greatest possibility for social change.

forthcoming). The idea of donor intent²⁶ is threatened by a move to blanket foundations within the realm of “public, quasi-governmental institutions,” where the notion of public purpose is mistaken for public money (Schramm, forthcoming).

The very strength of the American foundation is its conceptualization as an *out-market institution* (Schramm, forthcoming). Driven by a renewed spirit of philanthropy among the new rich, the foundation has the potential to strengthen future American economic prosperity. In addition to domestic implications, the entrepreneurship-philanthropy nexus has significant global application. Sustaining global capitalism will require vision and investment from and a spread of the ideas that indeed make American capitalism successful. The projects for philanthropy are as broad today as they were one hundred years ago: Health, education, infrastructure and social values. If the new rich rise to the occasion, then prosperity will continue well into the next century as the coming “Golden Age of Philanthropy” creates investments that will have a positive feedback on the economy.

Two realities stand out in the global economy. First, the world is getting wealthier. Second - and this counts perhaps as the greatest negative externality of market economies - the unequal distribution of wealth is growing. We have suggested in this essay that the American model of entrepreneurial capitalism may be the only sustainable model for global development. Entrepreneurial capitalism is different from other forms of capitalism because of its historical focus on both the creation of wealth (entrepreneurship) and reconstitution of wealth (philanthropy). Both stem from what may be uniquely American constructs of individualism, agency and human nature.

²⁶ And therefore, potentially the ultimate mission for which the foundation was established.

In industrial capitalist wealth creation, wealth ownership and wealth distribution were, in part, left to the state. However, in an entrepreneurial society, individual initiative plays a vital role in propelling the system forward. Entrepreneurial leadership is the mechanism by which new combinations are created, new markets are opened and new technologies are commercialized. In the entrepreneurial society, entrepreneurship plays a vital role in wealth creation and philanthropy plays a crucial role in its distribution. The execution of this, as we argued earlier, was based on a new character type with unprecedented new powers of discretion but yet bound to collective ends. From a global perspective, the American model of entrepreneurial capitalism offers a sustainable and self-reinforcing means through which to encourage prosperity and advancement.

Implications for Foundations

From the perspective of those working in philanthropy, particularly those in grantmaking and mission-based foundations, the pressing question may well be: How well is the philanthropic sector meeting its obligations? Is the sector, in fact, challenging the new rich to use their wealth to "find permanent solutions to what seem like intractable problems?" (*The Wall Street Journal*, Milken, 1999).

As with most organizations, operational efficiency is a concern²⁷ and it may now be time for market mechanisms to be applied to the philanthropic sector²⁸. Organizational capacity may be improved by expanding beyond merely program innovation (Letts, et. al, 1997). The challenge is not just to create solutions (Morino Institute, 2000; W. K.

²⁷ John Doerr, who leads the \$20 million dollar New Schools Ventures Fund, argues that one of the major problems with the nonprofit sector is that there is not a mechanism to weed out inefficient organizations (*Time*, 2000: 55).

Kellogg Foundation; Reis, 1999) but to make them affordable, sustainable, replicable and scaleable to fulfill organizational mission. Lessons from the for-profit world²⁹, such as performance-based compensation, entry and exit strategies, and financial sustainability may be useful for foundations.

Research agendas

In addition to the immediate public policy implications and the considerations for foundation professionals, there are a number of research agendas that emerge from the new topic of the Entrepreneurship-Philanthropy nexus (Acs and Phillips, 2000). For economists and other scholars of the interaction between economic activity and its social effects, the relationship between entrepreneurship and philanthropy has at least six major paths. First, identifying wealthy entrepreneurs and measuring their philanthropic contributions. Second, identifying the extent to which wealthy entrepreneurs engage in philanthropic activities. Third, when measured by size and societal impact, how do philanthropic activities of today's entrepreneurs compare with those in the late 19th and early 20th century? Fourth, how do these activities vary across countries or communities?

²⁸ This is consistent with the emergence of focus on “hybrid” management in business schools, social enterprising for nonprofits, and the “double bottom line.”

²⁹ The founders of Google, Larry Page and Sergey Brin, have established a *for profit* charitable foundation. This is a new model and one that will allow the foundation to fund start-up companies, form partnerships with venture capitalists and even to lobby Congress. Unlike other foundations, the Google Foundation is not being established for tax reasons (Hafner 2006).

The remaining two questions are related to the fundamental assumptions of economics with relation to human behavior. Self-interest and altruism, though very different motives for human activity, are in fact fundamental traits of human nature that are especially crucial in maintaining economic vitality. Fifth, *why* do wealthy entrepreneurs engage in philanthropy: Is it self-interest or is it altruism? If the answer is the latter, then economic theory should alter its underlying premise of a self-interest motivation for human activity. This leads to final research question: Are returns to society are greater when the philanthropic behavior requires no *quid pro quo*?

References

- Acs, Zoltan J., 2000, ed., *Regional Innovation, Knowledge and Global Change*, London: Pinter.
- Acs, Zoltan J., 1984, *The Changing Structure of the U. S. Economy*, New York: Praeger.
- Acs, Zoltan J. and David B. Audretsch, 2001, "The Emergence of the Entrepreneurial Society", *Swedish Foundation for Small Business*, Stockholm, Sweden, May 2001.
- Acs, Zoltan J. and Leo P. Dana, 2001, "Two Views of Wealth Creation", *Small Business Economics* **16**(2), 63-74.
- Acs, Zoltan J. and Ronnie, J. Phillips, 2000, "Entrepreneurship and Philanthropy in the new Gilded Age: A Research Agenda," Working Paper, Department of Economics, Colorado State University.
- Acs, Zoltan J and Charlie Karlsson, 2002, *Institutions, Entrepreneurship and Firm Growth: The Case of Sweden*, special issue of *Small Business Economics*.
- Acs, Zoltan J., B. Carlsson, and C. Karlsson, 1999, "The Linkages Among Entrepreneurship, SMEs and the Macroeconomy," in Acs, Carlsson and Karlsson, eds., *Entrepreneurship, Small & Medium-Sized Enterprises and the Macro Economy*, Cambridge: Cambridge University Press, 3-44.
- America, Richard, F., 1995, *Philanthropy and Economic Development*, Westport: Greenwood Press.
- Armington, Catherine, and Zoltan J. Acs, 2002, "The Determinants of Regional Variation in New Firm Formation", *Regional Studies* **36**, 33-45.
- Arrow, K. J., 1962, "Economic Welfare and the Allocation of Resources for Invention," in Richard Nelson, editor, *The Rate and Direction of Inventive Activity*, Princeton: Princeton University Press, 609-626
- Audretsch, David B., and Roy Turik, 1998, *The Knowledge Society, Entrepreneurship and Unemployment*, Zoetermeer: EIM.
- The Baltimore Sun*, "A Gift for All Ages" December 16th 1998, C1.

- Becker, Gary S., 1974, "A Theory of Social Interactions", *Journal of Political Economy* **82**, 1095-1117.
- Boulding, Kenneth, 1962, "Notes on a Theory of Philanthropy", in Frank G. Dickinson, ed., *Philanthropy and Public Policy*, Boston: NBER, 57-72.
- Bremner, Robert, H., 1960, *American Philanthropy*, Chicago: University of Chicago Press.
- Budd, Louis, J., 1956, "Altruism Arrives in America", *American Quarterly* **891**, 40-52.
- Carree, Martin, Andre van Stel, Roy Thurik, Sander Wennekers, 2001, "Economic Development and Business Ownership: An Analysis Using Data of 23 OECD Countries in the Period 1976-1996", *Small Business Economics*, this issue.
- Carnegie, Andrew, 1889, "Wealth", *North American Review*, June.
- Coase, Ronald H, 1976, "Adam Smith's View of Man", *Journal of Law and Economics* **19**, 529-546.
- Chernow, Ron, 1999, *Titan: The Life of John D. Rockefeller Sr.*, New York: Oxford University Press.
- Collard, David, 1978, *Altruism and Economy*, New York: Oxford University Press.
- Curti, Merle, 1957, "The History of American Philanthropy as a Field of Research", *The American Historical Review* **62** (2), 352-363.
- Danielsen, Albert L., 1975, "A Theory of Exchange, Philanthropy and Appropriation", *Public Choice* **24**, 13-26.
- Dickinson, Frank, G., 1970, *The Changing Position of Philanthropy in the American Economy*, National Bureau of Economic Research, Distributed by Columbia University Press, New York.
- Dowie, Mark, 2001, *American Foundations*, Cambridge: The MIT Press.
- The Economist*, "The Knowledge Factory," October 4th 1997, 1-22.
- The Economist*, "The Gospel of Wealth", May 30th 1998, 19.
- The Economist*, "Sachs on Globalization", June 24th 2000, 81-83.
- The Economist*, "The new powers in giving." July 1, 2006, pp. 63-65.
- Fortune*, "Most Generous Americans", February 2nd 1998, 88.
- Garten, Jeffery E., 1992, *A Cold Peace: America, Japan and Germany, and the Struggle for Supremacy*, New York: Times Books.
- Giddings, Franklin H., 1893, "The Ethics of Social Progress", *International Journal of Ethics* **3** (1), 137-164.
- Hafner, Katie. 2006. "Philanthropy Google's Way: Not the Usual." *New York Times*. September 14.
- Hamer, J. H., 1998, "Money and the Moral Order in Late Nineteenth and Early Twentieth-Century American Capitalism", *Anthropological Quarterly* **71**, 138-150.
- David Hart, 2001, *The Emergence of Entrepreneurship Policy: Governance, Start-ups, and Growth in the Knowledge Economy*, manuscript Center for Business and Government, Kennedy School of Government, Harvard University.
- Hebert, Robert F. and Albert N. Link, 1989, "In Search of the Meaning of Entrepreneurship," *Small Business Economics* **1** (43).
- Heilbroner, Robert, 1985, *The Nature and Logic of Capitalism*, New York: Harper and Row.
- Henriksen, Magnus, and Ulf Jakonsson, 2000, "Where Schumpeter was Nearly Right – the Swedish Model and Capitalism, Socialism and Democracy," Working Paper no. 370, Stockholm School of Economics.

- Hickman, Larry, A., 1998, *Reading Dewey: Interpretations for a Postmodern Generation*, Indianapolis: Indiana University Press.
- Ireland, Thomas R., 1969, "The Calculus of Philanthropy", *Public Choice* **7**, 23-31.
- Jordan, W. K., 1961, "The English Background of Modern Philanthropy", *The American Historical Review* **66** (2), 401-408.
- Keynes, John M., 1963, *Essays in Persuasion*, New York: W. W. Norton.
- Kaufman, Dennis A., 1993, "Self-Serving Philanthropy and Pareto Optimality", *The Nonprofit Sector in the Mixed Economy*, edited by Avner Ben-Ner and Benedetto Gui, Ann Arbor: University of Michigan Press.
- Leonhardt, David. 2006. "Philanthropy from the Heart of America," *New York Times*, October 11.
- Letts, Christine W., William Ryan, and Allen Grossman, 1997, "Virtuous Capital: What Foundations Can Learn From Venture Capitalists", *Harvard Business Review* **75** (2), 36-44.
- Levy, Jonah D., 1999, *Tocqueville's Revenge: State, Society and Economics in Contemporary France*, Boston: Harvard University Press.
- MacMullen, Ramsay, *Corruption and the Decline of Rome*, New Haven: Yale University Press.
- Margolis, Howard, 1982, *Selfishness, Altruism, and Rationality: A Theory of Social Choice*, Cambridge: Cambridge University Press.
- Morck, Randal K., David A. Stangeland and Bernard Yeung, 1998, "Inherited Wealth, Corporate Control and Economic Growth," in *Concentrated Corporate Ownership*, Randal Morck, ed., Chicago: The University of Chicago Press, 319-369.
- Morino Institute, 2000, *Venture Philanthropy*, Produced for the Morino Institute youth social Ventures by Community Wealth Ventures, Inc.
- Myers, Gustavus, 1907, *History of Great American Fortunes*, New York: The Modern Library.
- NewTithing Group. 2006. *Wealth & Generosity by State*.
http://www.newtithing.org/content/sept06_tables.html
The New York Times, December 2nd 1998, A10.
- Newsweek*, "The Land of the Handout", September 29th 1997, 34-36.
- Newsweek*, August 30th 1999, 50.
- Offit, M. S., 1995, *Benchmark: 1990-1995*, The Johns Hopkins University, Baltimore, MD.
- Owen, David, 1964, *English Philanthropy 1660-1960*, Cambridge: The Belknap Press of Harvard University.
- Parker, George F., 1971, *Peabody*, Vanderbilt: Vanderbilt University Press.
- Piliavin, Jane Allyn and Hong-Wen Charng. 1990, "Altruism: A Review of Recent Theory and Research", *Annual Review of Sociology* **16**, 27-65.
- Porter, E. Michael, 2000, *Can Japan Compete?*, London: McMillan Press Ltd.
- Porter, Michael E. and Mark R. Kramer, 1999, "Philanthropy's New Agenda: Creating Value," *Harvard Business Review*, November December, 121-130.
- Rand, Ayn, 1999, *Return of the Primitive: The Anti-Industrial Revolution*, New York: A Meridian Book.
- Romer, Paul, 1990, "Increasing Returns and Long Run Growth", *Journal of Political Economy* **94**, 1002-1037.

- Reis, Tom, 1999, *Unleashing New Resources and Entrepreneurship for the Common Good*, W. K. Kellogg Foundation, Battle Creek, Michigan.
- Salamon, Lester M., Helmut K. Anheier and Associates, 1999, "The Emerging Sector Revisited", *The Johns Hopkins University Institute for Policy Studies Center for Civil Society Studies*.
- Schramm, Carl J. (forthcoming, 2007) "Law Outside The Market: The Social Utility of the Private Foundation."
- Schumpeter, Joseph A., 1950 (1942), *Capitalism, Socialism and Democracy*, New York: Harper; and Row.
- Schumpeter Joseph A., 1934 (1911), *The Theory of Economic Development*, Cambridge: Harvard University Press.
- Simon, Herbert A. 1993, "Altruism and Economics," *American Economic Review* **83** (2), 156-161.
- Slate Magazine*, "The Slate 60 Huffington Virtue Remix", March 2000.
- Smith, Adam, 1937 (1776), *The Wealth of Nations*, New York: Modern Library.
- Smith, Adam, 1969 (1759), *The Theory of Moral Sentiments*, Indianapolis: Liberty Classics,
- Soros, George, 1998, *The Crisis of Global Capitalism*, New York: Public Affairs.
- Stiglitz, George, 1994, *Wither Socialism*, Cambridge: MIT Press.
- Sugden, Robert, 1982, "On the Economics of Philanthropy," *The Economic Journal* **92**, 341-350.
- Thurow, Lester, 1992, *Head to Head: The Coming Battle Among Japan, Europe, and America*, New York: William Morrow and Company.
- Time*, "The Century's Greatest Minds", March 29th 1999.
- Time*, "The New Philanthropists", July 24th 2000.
- Tocqueville, Alexis de, 1996 (1835), *Democracy in America*, New York: Harper and Row.
- Tyson, Laura d' Andrea, 1992, *Who's Bashing Whom? Trade Conflict in High Technology Industries*, Washington, D. C.: Institute for International Economics.
- Veblen, Thorstein, 1899, *The Theory of the Leisure Class*, New York: The MacMillan Company.
- Wall Street Journal*, "Follow Your Passions" October 4th 1999.
- The Washington Post*, "U. S. Sails on Tranquil Economic Seas", December 2nd 1996, 1.
- The Washington Post*, April 14th 1997, A1.
- The Washington Post*, October 21st 1997, A3.
- U. K Secretary of State for Trade and Industry, 1998, *Our competitive Future: Building the Knowledge Driven Economy*. London, U. K.
- Weber, Max, 1958, *The Protestant Ethic and the Spirit of Capitalism*, New York: Charles Schribner's Sons.
- Wennekers, Sander and Roy Thurik, 1999, "Linking Entrepreneurship and Economic Growth," *Small Business Economics* **13** (1), 27-55.