

# Evaluating the costs of growth

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## Abstract

The twentieth century has been extremely unusual in that economic growth rates have been extraordinarily high. At the same time, costs of this growth have also been extremely high. These have been in the form of environmental degradation, depletion of planetary resources and species, climate change, and adverse social change. Since many of the effects of growth go outside the marketplace, evaluating costs and benefits involves value judgments of types which economists are not well-equipped to make. This article sketches some issues which have not received sufficient attention in the discourse about current policy options which bear importantly on our future.

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## Introduction

Many dimensions of economic growth are qualitative and create changes in social, institutional as well as environmental and geographic structures. Evaluating the costs and benefits of these changes necessarily involves subjective value judgments. Because these changes are not marketed and priced, many economists have under-estimated their importance. Resistance by economists is also due to the idea that science is concerned purely with the objective and the positive. Even though it was widely believed throughout the twentieth century, the idea that the positive and the normative can be clearly and sharply separated has been decisively rejected. For instance, Hilary Putnam (2002) has shown that facts and values can be inextricably entangled; see also, Zaman (2012), who shows the normative assumptions embedded in the fundamental economic concept of “scarcity”. Thus, economic theories which consider only observable marketed quantities and prices, and ignore intangibles and non-market assets are seriously deficient. The first section below shows how a single minded focus on economic growth has led to our ignoring many other vital dimensions of development. Subsequently we argue that evaluating costs and benefits of growth requires the introduction of values into the development discourse. An explicit consideration of values leads to many types of policies not currently within the ambit of development planners. This creates out-of-the-box solutions, which are desperately needed in current times.

## The unusual twentieth century

According to Weber (1930, Chapter 2), the spirit of capitalism is the pursuit of wealth as a goal, to the point of being absolutely irrational<sup>3</sup>. For most of the twentieth century,

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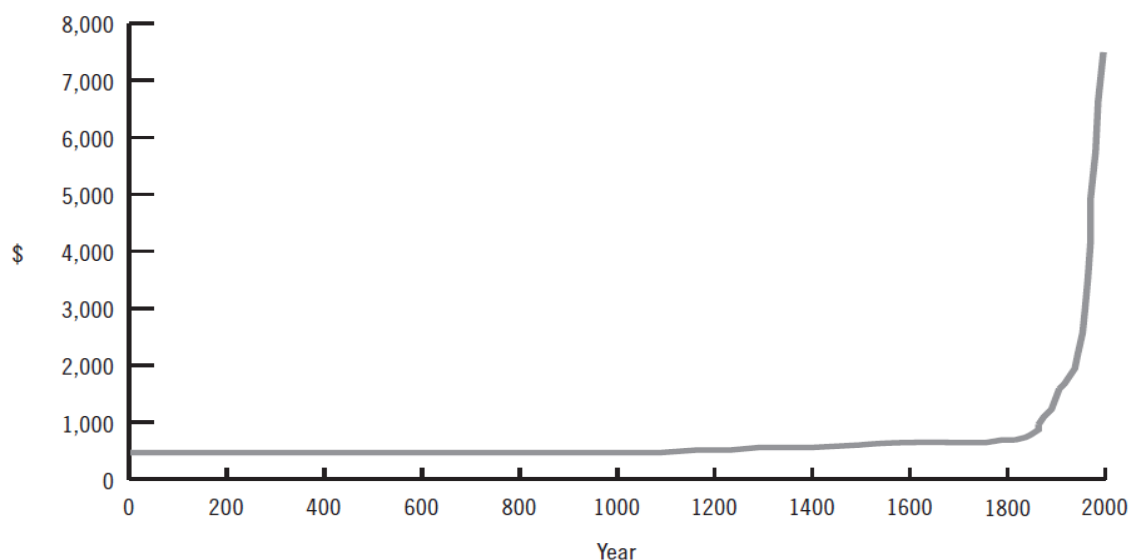
<sup>3</sup> In fact, the *summum bonum* of this ethic, the earning of more and more money, combined with the strict avoidance of all spontaneous enjoyment of life, is above all completely devoid of any eudæmonistic, not to say hedonistic, admixture. It is thought of so purely as an end in itself, that from the point of view of the happiness of, or utility to, the single individual, it appears entirely transcendental

development was defined as the accumulation of wealth. It was taken for granted that this was a desirable goal, and a central requirement for all possible development plans. Agreement on this proposition spanned the spectrum of thought from capitalism to communism. Ethics and values were not part of the development discourse, since there was agreement that economics was a science, and did not include subjective and normative ideas.

This proposition, in the form that the single most important measure of development is GNP per capita – the amount of wealth produced per person – continues to command an extraordinary amount of support. Governments rise and fall on the basis of this criterion, and ministries all over the planet as well as theoreticians, policy makers, and politicians devote tremendous efforts to devising strategies to increase the amount of wealth created within nations. Yet, a review of the results produced by more than half a century of concentrated efforts to achieve this result shows spectacular failure on many fronts. This assertion surprises many who are used to thinking of twentieth century as a spectacular success in wealth creation. Thus, it is first necessary to explain how the “Growth Illusion” – see Douthwaite (1995) – is created by shoddy accounting.

Conventional wisdom regarding economic growth is captured in the chart labelled as Figure 2 taken from Snowden (2006), who writes that “Economic growth, not redistribution, is the single most powerful mechanism for generating long-term increases in income per capita.” The growth illusion is so powerful that the trivial and trite nature of this truism – growth rate of any criterion is obviously the most powerful mechanism for increasing this same criterion – is not obvious to the learned author.

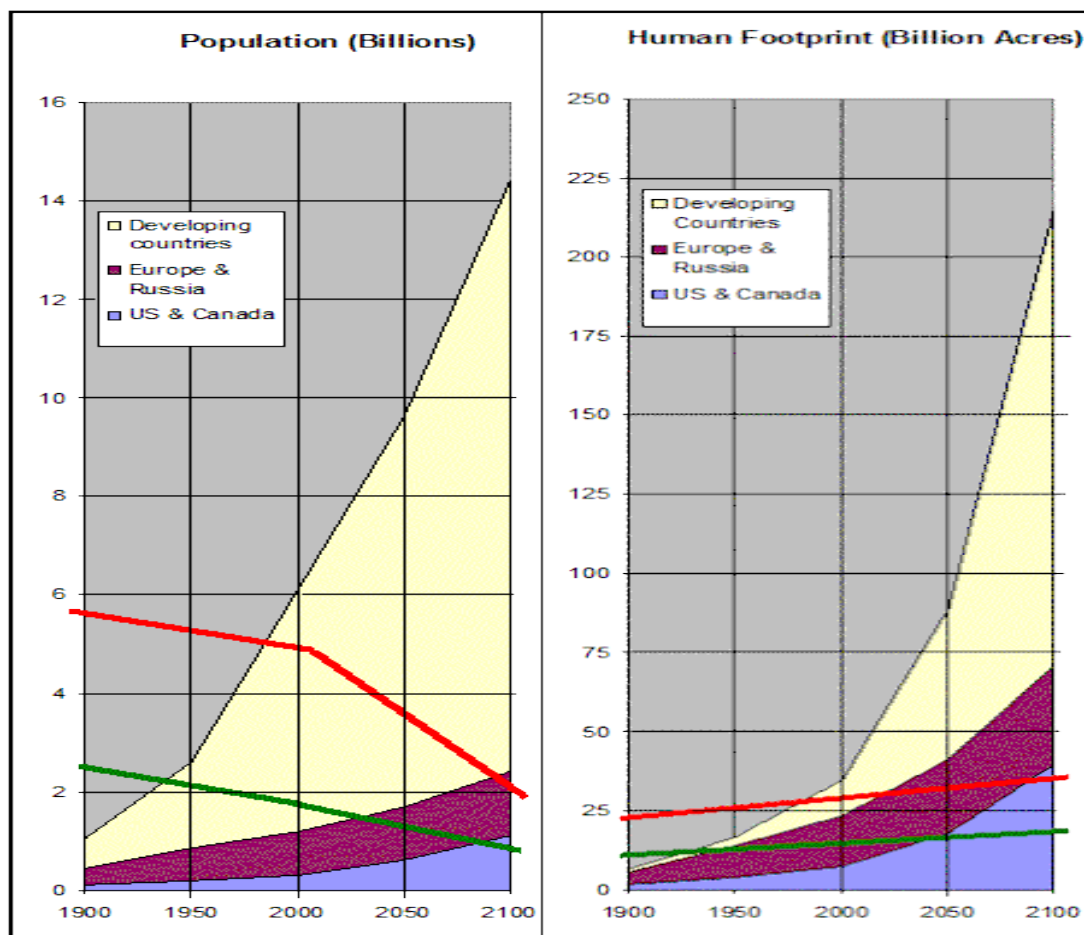
**Figure 2: World per capita GDP over time**



and absolutely irrational. Man is dominated by the making of money, by acquisition as the ultimate purpose of his life. Economic acquisition is no longer subordinated to man as the means for the satisfaction of his material needs. This reversal of what we should call the natural relationship, so irrational from a naive point of view, is evidently as definitely a leading principle of capitalism as it is foreign to all peoples not under capitalistic influence. – Weber (1930)

What escapes these authors, and many economists and policy-makers all over the planet, is the COST at which this growth has been purchased. The price of the spectacular growth has been equally spectacular and has been paid in many dimensions. One of these dimensions is illustrated in the figure below, which shows that the human footprint – the amount of land needed to support current per capita consumption levels – is far beyond levels which are sustainable in the long run.

Similar graphs can be produced of many indicators, such as depletion of topsoil, fresh water scarcity, loss of species. J. R. McNeill's (2000) *Environmental History of the Twentieth-Century World*, tells us how humans have altered the earth from the 1890's to the 1990's. World economic growth, up 120 times since 1500, has exacted an enormous toll on the earth's crust, atmosphere, water supply, plants, animals and finally on our own species: the human beings. The concern for sustainable development has been driven by this realization. The social and human cost of this economic growth can also be illustrated in many dimensions. Instead of the many statistics illustrating the rising rates of depression, loneliness, breakdown of communities, families and loss of trust, we just pick a single illustrative event. Since 1990, the national income of Ireland has grown by 50%. Unfortunately, the Irish suicide rate increased by 64% in the same period.



The red lines above show sustainable levels of population and consumption, with no provision for survival of any other living species. They show we are already living well beyond the Earth's sustainable capacity. The green lines show the sustainable levels of population and

consumption if we want to share a modest part of our planet with other species). Data for the chart comes from Angus Maddison webpages.<sup>4</sup>

So the burning question is: are the benefits of economic growth worth the cost which has been paid for it? No answer to this question can be given without implicitly or explicitly invoking values which allow us to judge and compare different dimensions of the rapid changes which have occurred in the previous century. According to some economists, "species come and go," so loss of biodiversity due to environmental damage and destruction of natural habitats is of no consequence. Similarly, others, like Solow (2009), say that "The world can, in effect, get along without natural resources, so exhaustion is just an event, not a catastrophe." On the other hand, one can find deeply pessimistic authors like Douthwaite (1995), McNeill (2000), and Diamond (2005) who warn of impending catastrophe due to our collective pursuit of non-sustainable life-styles.

Should we regard the past century of rapid economic growth as a spectacular success or as a spectacular failure? Answering this question involves blending subjective value judgments regarding the relative weight of different dimensions of progress, with a vast collection of objectively known facts, as well as collections of speculations, projections and estimates of varying levels of certainty. At the same time, we cannot afford to bypass this exercise of evaluating the record of economic growth, because appropriate policies to pursue for the future will be radically different depending on how we evaluate this past. Also, weighing the future, the environment, social changes, etc. will necessarily involve value judgments of many kinds.

A rather lengthy argument has been carried out to establish something which should be patently obvious. Throughout history, the idea of the "good life" has been defined in very different ways by different communities. Development is obviously about use of material growth to enable everyone to achieve his or her conception of the good life. Different goals will obviously necessitate different policies for the achievement of these goals. The choice of goals is necessarily value-laden, and requires explicit consideration of values. Many prominent economists like Mahbubul-Haq, Amartya Sen, Stiglitz, and others have realized that dimensions other than mere accumulation of wealth must be considered in formulating development policy. Nonetheless, it remains true that mainstream economic theory taught at leading universities throughout the world pays only peripheral attention to these concerns. Policies are driven by these theories, since economists and planners have most often received training embodying mainstream ideas of growth and development. In an earlier era, Mahbul-Haq (1976,p.24) characterized this problem as follows: "The most unforgivable sin of development planners is to become mesmerized by high growth rates in the Gross National Product and to forget the real objective of development". The way to atone for this sin is by taking explicit account of the goals of development. The determination of these goals is necessarily driven by values, which must therefore be a crucial part of the development discourse. We next turn to consideration of these goals, and how taking them into consideration affects development policy.

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<sup>4</sup> Graph taken from Dave Pollards website: <http://howtosavetheworld.ca/2005/02/15/>

## **Two fundamental flaws in growth theories**

Although an obsession with the pursuit of wealth for its own sake leads many to lose sight of the fact, it would become clear upon reflection that money is only a means to an end, and not an end in itself. Once we accumulate wealth as part of the development process, what should we do with it? More concretely, what are the ways of using wealth which are most conducive to human welfare? Perhaps paradoxically, this central question receives virtually no attention in conventional texts on growth and development. This is because economic theories of human behaviour make two wrong assumptions. Conventional microeconomic theory incorporates the assumption that maximizing consumption will automatically maximize human welfare. The second false assumption is that human beings optimize, and will always make welfare maximizing choices.

The Easterlin (1973) paradox shows that money does not buy happiness in the long run. We postpone a detailed discussion, and note only that it demonstrates that the first assumption is wrong. Maximization of consumption does not lead to maximum welfare in the long run. It is the conflict between the short run and the long run which creates the paradox. Because increased consumption does improve happiness in the short run, myopic individual decision making would encourage pursuit of wealth and increased consumption. The paradox that money cannot buy happiness only emerges when social implications and long run consequences are taken into account.

Behavioral economists have demonstrated that the second assumption is wrong. Human behaviour is governed by social norms, and heuristics are used instead of optimizing algorithms. Furthermore social norms can be created and changed. This leads to a dimension of development policy which is not recognized by conventional texts: what kind of social norms should be chosen, so as to maximize human welfare? Human behaviour and social norms are taken as exogenous, and out of the purview of the economist, when in fact they are central to design of policies for development and growth.

We now turn to the policy implications which emerge from correcting these mistakes.

## **Policy implications of the Easterlin paradox**

The goal of development is to improve human lives. Values determine what is to count as improvement. But there would be near universal agreement that improvements would entail greater satisfaction, contentment, and feelings of well-being and accomplishment. We will abuse the English language by loading all of these meanings into the word "happiness". The Easterlin paradox shows that there is no long-run relationship between GNP per capita and happiness. Thus if economic growth is not an end to be pursued for its own sake, it is not useful as a means to producing the desired end of improved human welfare.

Because the Easterlin paradox strikes at the heart of economic theory, and challenges the core belief the economic growth is the basis for all welfare improving measures, it has been rigorously contested. In a recent re-examination, Easterlin et. al. (2010) showed that all objections to his main findings were based on short-run correlations between wealth and welfare. Easterlin also affirms that short-run positive correlations exist; it is only in the long run that these positive correlations disappear, creating a paradox. It is a deeper examination of

the reasons for the paradox that leads to policy implications currently not on the books of planners. There are two main reasons: habituation and relativity. We explain and discuss these reasons separately below

**Habituation:** As we buy more creature comforts with our increased wealth, we get used to this higher level of comfort. After habituation, this additional level becomes necessary for us. Only increases above this level bring us happiness. Thus only a continuously increasing growth process can create long run happiness; however such an eternal growth process is not sustainable and not possible for the vast majority of human beings on our finite and limited planet. Once this is understood, there are many techniques which can be used to improve welfare of human beings which do not involve economic growth. Habituation occurs in both directions: up and down. If we develop habits of simple living in Spartan conditions, low standards of living will not lead to unhappiness. At the same time, occasional and temporary increases in this standard will be easily achieved and will bring much greater happiness than habituation to high standards of living. This makes clear the wisdom of a formula which has been recommended by many sages across many cultures: the education of our youth should also include habituating them to hardships. In China, adults from all classes provide a year of service to the nation working on projects of social value. Programs of this type which engage large portions of the population in community service would create many positive externalities. We mention two beneficial aspects. Firstly, all members of the nation experience a common, simple lifestyle which creates a habituation to simplicity. This allows for much greater appreciation and enjoyment of simple enhancements which are treated as luxuries. This leads to greater welfare and happiness for the nation as a whole. A second aspect, which is also essential, is that selfless service to society creates social bonds between all members of the society. This creates trust and also serves as an equalizer. These invisibles are essential components of successful development policies, though they do not receive any mention in economic textbooks on growth and development. Implementing creative ideas in this direction by utilizing labor for social services in lieu of taxes can have many beneficial side effects. This may also be beneficial in countering liberal policies for cuts in taxes for the rich and in social services for the poor.

**Relativity:** The welfare and satisfaction that people feel from a given level of consumption is based on comparing this level with the average level in some reference social class. As consumption increases, happiness increases in the short run, as people feel that they have gained relative standing. However, these reference levels also rise as the average consumption levels rise throughout the society. Thus these short-run gains are wiped out in the long run. Thus, in this rat race, everyone struggles hard to get ahead, but there is no gain in welfare to the society as a whole. This has many policy implications.

A key implication is the economic growth is completely irrelevant to human welfare. This proposition is also empirically supported by the Easterlin paradox. In fact, additional research shows that fulfilment of basic needs contributes substantially to human welfare. The argument for economic growth is often based on the idea that growth will contribute to the fulfilment of basic needs via the famous trickle-down effect. However, empirical studies over the past few decades, for instance Saez (2103) and Stiglitz (2013), document the operation of a “vacuum cleaner effect,” which sucks wealth from the poor and concentrates them in the banks of the rich. Thus growth has no automatic implications for improved welfare.

This has radical and far reaching policy implications. Both Madison Avenue and Hollywood make rich and luxurious lifestyles appear far more attractive than they actually are. The

widespread global media network and the internet, combined with extremely smooth and professional packaging of these messages have spread them to all corners of the planet. The display of luxury and ostentatious consumption leads the vast majority to feel discontent with what they currently have. Such messages must be moderated, and counteracted by other messages which are of social value. Ads which encourage readers to “Make your neighbours green with envy” must be replaced by those which encourage compassion for the less fortunate. Any strategy to help improve welfare of human beings, as opposed to a blind pursuit of wealth for its own sake, must take this into account.

### **Human agency and the choice of social norms**

As Mirowski (1991, p.3) has documented, the prestige of Physics led economists to self-consciously imitate the methodology of Physics: “the progenitors of neoclassical economic theory boldly copied reigning physical theories in the 1870’s. (they) did not imitate physics in a ... superficial manner; no, they copied their models mostly term for term and symbol for symbol, and said so.”

One aspect of this imitation was the use of highly simplified models of human behaviour. Over the past few decades, an overwhelming amount of empirical evidence has emerged which contradicts these models. Karacuka and Zaman (2012) “The Empirical Evidence Against Neoclassical Utility Theory: A Review of the Literature” provide a survey of this evidence from a wide variety of sources. Although there are many dimensions of conflict, we will focus on only one idea here: that of human agency. There is a fundamental tension between a scientific approach, which requires predictable and law-like behaviour, and the human freedom to choose in ways that do not conform to any past pattern. The scientific methodology favoured by economists functions to deny agency to human beings, and makes their actions mathematically predictable and deterministic.

While being far more complex than simple economic models suggest, human behaviour does follow certain predictable patterns which can be recognized as social norms. However, these social norms are taught to members of communities and can be changed by various types of social interventions. Recognition that human behaviour is shaped by social norms, and that societies have some freedom to shape these norms leads to consideration of issues which are not currently part of the development discourse. What type of norms should we choose for our society? Are certain types of norms more conducive to human welfare than others? Because values and social norms are neglected topics in development, these issues of central importance have received virtually no attention in the literature. Since a full discussion would easily encompass a book, we confine attention to one illustrative topic.

Economists consider free markets as the ideal form of economic organization. This is characterized by the norms of selfishness at the individual level, and competition at the social level. There is a huge amount of evidence that encouraging selfish behaviour has led to a substantial decline in social capital, as represented by breakup of communities, dissolution of families, increased loneliness and depression, and decline in trust. At the group level, Harvard MBA Professor Zuboff (2009) who taught the virtues of competition for more than 25 years testifies that: “I have come to believe that much of what my colleagues and I taught has caused real suffering, suppressed wealth creation, destabilized the world

economy, and accelerated the demise of the 20th century capitalism in which the U.S. played the leading role.”

As a thought experiment, consider the effects of promoting generosity and cooperation, instead of greed and competition. Akin et. al (2010) provide empirical evidence that generous behaviour leads to substantial welfare increases both at the individual and at the social level. Similarly norms of cooperation lead to substantial increases in trust, which has now been recognized as an essential lubricant in the process of development.

Economists have not paid attention to these issues because of the idea that norms are fixed and unchangeable. In fact, there is substantial evidence that norms vary substantially across societies, and these norms can be shaped by suitably designed policies. For example, active promotion of the ethic of returning lost items led to remarkable results in Tokyo lost and found. There is a wide spectrum of stands on the normative notion that society is collectively responsible for health and education of all its members. This norm is strong in Europe and Canada, which provide substantially superior health and employment benefits. In contrast, this norm is much weaker in USA; correspondingly, there is much less social provision of health, education and unemployment benefits. The question is: which of these options is better at promoting social welfare? As a society, we face a choice – we can train our children to be generous and cooperative, or we can train them to be selfish and competitive. Development theories are not well equipped to answer these crucial questions. Recent research provides answers which are surprising to modern mindsets but familiar to the ancients. Many studies of long-run happiness – for example, Friedman and Martin (2012), Seligman (2012), Vaillant (2012), Ware (2012) – have found that social relationships, and particularly caring for and helping others, leads to longevity and happiness. These are exactly the opposite of lessons currently being taught in Microeconomics, which state it is rational to maximize lifetime consumption utility.

### **Human-centered development**

Long-term experience with development led Mahbubul Haq to the following fundamental insight: “... after many decades of development, we are rediscovering the obvious—that people are both the means and the end of economic development.” (cited in Bari, 2011). Conventional economic theories of growth reverse these priorities. Human beings are viewed as inputs to the production of wealth, which is the defining characteristic of growth. Instead of focusing on using humans to produce wealth, we must focus on producing wealth to create better human lives. Even though it seems trite, focusing on humans as the means and ends of economic development leads to radically different conceptions of economic policy. We list three such differences as illustrative.

**Character building:** Economists study corruption, labelled rent-seeking behaviour, in terms of its impacts on productivity and growth. However, if we consider human lives as central, corruption is a character flaw, while integrity is desirable character trait. Creating integrity is desirable as an end in itself, regardless of how it affects production. From a secular point of view, it has been shown that the classical character virtues are strong determinants of long run welfare of individual. Empirical evidence of the dramatic impact of character is furnished by one of the most remarkable developmental episodes of human history: the rise of the Arabs after the introduction of Islam. The ignorant and backwards Arabs rose to dominate



world history, overtaking long established civilizations of Rome, Persia, India and China, purely on the strength of the teachings of Islam. Many other illustration can be added to show how character building plays a crucial role in the development process. This idea is reflected in the writings of Sen (1993), who talks of about development in terms of human capabilities.

**Free trade:** The doctrine of free trade argues that we should allow inefficient industries to collapse – the unemployed labourers will automatically find work in industries with greater comparative advantage, which will lead to increased wealth for the society as a whole. This is a wealth-centered as opposed to a human-centered idea. Suppose that stable jobs lead to stable families which are the single most important determinant of human welfare. Disrupting families by destroying jobs, even temporarily, may not be compensated by the additional wealth generated by comparative advantage. For instance, Michael Moore (1989) has graphically documented the destruction of Flint, Michigan, as a consequence of profit maximization by General Motors. Are cheaper cars sufficient to compensate for destruction of human lives and society caused by massive job losses due to closure of factories? Evaluation of such changes requires a much better understanding of the nature of human lives than economists currently have. Values and determinants of human welfare play a much stronger role than is allowed for in current development theories and policies.

**Social responsibility:** An increasing emphasis on individualism and hedonism has replaced the traditional civics courses in college. Julie Reuben (1996) has documented this change in higher education in her remarkable book entitled “The Making of the Modern University: Intellectual Transformation and the Marginalization of Morality.” Recent surveys show that 71% of Americans did not have basic knowledge of civics, and that college education does not add anything to this knowledge (Intercollegiate Studies Institute, 2013). Furthermore civics knowledge was significantly correlated with active citizenship. Education plays an important role in shaping our attitudes to the world and the society we live in. The marginalization of morality has left a vacuum in this education which has been filled by Hollywood and the Internet, to our collective loss. Changes in social norms could be created by movies honouring traditional virtues of sacrifice, compassion, caring and responsibility, instead of the current crop which glorifies assassins, thieves, and the pursuit of individual pleasures without regard to social responsibility. Celebrating individuality and vilifying the collective mentality of the “Borg” creates allergic reactions against cooperation and social responsibility. As an example, media-conditioned responses to the words “socialized medicine” are enough to prevent an intelligent discussion of relevant issues. Because such choices are not even on the table for discussion, they are made for us in the marketplace for ideas subject to Gresham’s law. After all, how many people would watch a movie on St. Francis of Assisi when there is a block-buster action movie playing next door?

The point is that families, educational institutions, and media are the factories which manufacture the humans who will be our next generation. It is vital to understand the messages and training being imparted by these, as this will shape our future.

## **Conclusions**

There are two basic tensions which must be resolved at several levels – individual, communal, national and global. One is the tension between personal gains versus social gains which is characteristic of the Prisoner’s Dilemma. If everyone makes personal sacrifice

for the sake of the social good, solutions which are beneficial for all result. Current deadlock on environmental issues which imperil the globe, are the result of countries preferring their national interests to that of humanity as a whole. The second tension arises between short term gains versus long term gains. If I exercise and diet today, I will be healthier tomorrow. Just as most people fail to make wise choices in this matter, so unregulated market forces lead to massive exploitation of natural resources without any regards to the price to be paid by future generations.

Jared Diamond (2005) has provided examples of many societies which collapsed because they failed to consider these trade-offs. Our current situation is precarious because these issues which are central to our future are not even under discussion. A complex constellation of circumstances has led to this situation. One of the important factors in this constellation was logical positivism. This philosophy confined knowledge to scientific knowledge, and scientific knowledge to the quantifiable and measurable. Morality was equated to meaningless noise – it was not part of human knowledge; see Zaman (2012) for a more detailed discussion. This has led to an increasing ignorance about values, ethics, and justice. Moral and ethical considerations are central to the problems that we need to solve collectively. It is the need of the hour to bring these to the foreground, instead of treating them as peripheral, as is currently being done.

## References

- Aknin, L.B., C. Barrington-Leigh, E.W. Dunn, J.F. Helliwell, R. Biswas-Diener, I. Kemeza, P. Nyende, C. Ashton-James, and M.I. Norton (2010) Prosocial Spending and Well-Being: Cross-Cultural Evidence for a Psychological Universal. *NBER Working Paper 16415* [online] <http://www.nber.org/papers/w16415> (accessed 13 June 2011).
- Bari, F. (2011) "From Economic Growth to Human Development: The Journey with Dr. Mahbub ul Haq." *Lahore Journal of Policy Studies*. vol 4, No 1.
- Diamond, Jared (2005) *Collapse: how societies choose to fail or succeed: revised edition*. Penguin, New York.
- Douthwaite, R. J. (1995) *The Growth Illusion: How Economic Growth has Enriched the Few, Impoverished the Many, and Endangered the Planet*. Tulsa: Council Oak Books.
- Easterlin, R.A., L.A. McVey, M. Switek, O. Sawangfa, and J.S. Zweig (2010) The Happiness Income Paradox Revisited. *Proceedings of the National Academy of Sciences*. 107:52, 22463–22468.
- Easterlin, R. (1973) Does Money Buy Happiness? *The Public Interest*. 30:3, pp. 3–10.
- Friedman, Howard S and Martin, Leslie R. (2012) *The Longevity Project: Surprising Discoveries for Health and Long Life from the Landmark Eight-Decade Study*.
- Haq, Mahbub ul (1976) *The Poverty Curtain: Choices for the Third World*. New York: Columbia University Press.
- Intercollegiate Studies Institute (2013) *The Shaping of the American Mind: The Diverging Influences of the College Degree & Civic Learning on American Beliefs*. American Civic Literacy Program.
- Karacuka, M. and A. Zaman (2012) The Empirical Evidence Against Neoclassical Utility Theory: A Review of the Literature. *Int. J. Pluralism and Economics Education*. 3:4, pp. 366–414.

McNeill, John Robert (2000) *Something New under the Sun: an Environmental History of the Twentieth-Century World*. New York: W.W. Norton & Co.

Mirowski, Phillips (1991) *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics*. Cambridge: Cambridge University Press.

Moore, Michael (1989) *Roger & Me*, documentary about destruction of Flint by GM.

Nussbaum, Martha Craven, and Amartya Sen (1996) *The Quality of Life*. Oxford: Clarendon Press.

Putnam, Hilary (2002). *The Collapse of the Fact/Value Distinction and Other Essays*. Harvard University Press.

Saez, Emmanuel (2013) "Striking it richer: the evolution of top incomes in the United States" *Real World Economics Review*, issue no. 65, 2013, p.120

Seligman, Martin E. P. (2012) *Flourish: A Visionary New Understanding of Happiness and Well-being*, Atria Books, New York.

Sen, Amartya (1993) Capability and Well-being. In M. Nussbaum and A. Sen (eds.) *The Quality of Life*, pp. 30–53. New York: Oxford Clarendon Press.

Snowdon, Brian (2006) The Enduring Elixir of Economic Growth. *World Economics* 7:1, pp. 73-130.

Solow, Robert M. (2009) The Economics of Resources or the Resources of Economics. *Journal of Natural Resources Policy Research*. 1:1, pp. 69-82.

Stiglitz, Joseph E. (2013) *The Price of Inequality*. London [u.a.]: Penguin.

Vaillant, George E. (2012) *Triumphs of Experience: The Men of the Harvard Grant Study*, Harvard University Press. Harvard.

Ware, Bronnie (2012) *The Top Five Regrets of the Dying: A Life Transformed by the Dearly Departing*, Hay House, New York.

Weber, Max (1930) *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner's Press.

Zaman, A. (2102) "The Normative Foundations of Scarcity," *Real-World Economics Review*, issue no. 61, 26 September 2012, pp. 22-39

Zuboff, S. (2009) The Old Solutions have Become the New Problems. *Bloomberg Business Week*, July 2. Available at:  
[http://www.businessweek.com/managing/content/jul2009/ca2009072\\_489734.htm](http://www.businessweek.com/managing/content/jul2009/ca2009072_489734.htm)

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