

Quest for New Paradigm in Economics and framework for addressing interrelated challenges

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Abstract

The interrelated global challenges and crises faced by humanity today require a serious examination into existing methods and concepts. There is a need for fresh rethinking at various levels. The recent global financial crisis is one such indicator that was also seen in the past, which clearly is a hint for us to articulate a new paradigm in economics. But the new paradigm in economics must retain the statics and dynamics of the market for the socio economic benefit of the people with wellbeing and welfare as central focus and value to humanity with inclusive growth and development agenda.

This paper, a compilation of excerpts from articles published in Cadmus Journal on the need for a new paradigm in economic theory, also features the author's commentary on the need for a new paradigm in economic theory.

I. Introductory Paper for a Programme on the Wealth of Nations Revisited by Orio Giarini, Garry Jacobs, Bernard Lietaer and Ivo Šlaus¹

1. Introduction

Civilization is an instrument fashioned by human beings to improve the welfare and well-being of our race through a wide range of institutions — political, social, economic, educational, scientific and cultural. When Adam Smith published the Wealth of Nations at the onset of the Industrial Revolution, it appeared as if a solution had finally been found to the age-old problem of scarcity. This was also a time when physical science began to uncover the laws governing the marvels of nature. It was natural and, perhaps, inevitable that early economic thinkers looked for similar laws governing society and gave inordinate importance to the system of industrial economy, since it appeared to offer enormous promise at that time. In the process they lost sight of the greater truth that, unlike the systems governing the physical universe, social systems are created by human beings for the benefit of humanity and their validity must be judged solely on the basis of their contribution to human welfare and well-being.

Current economic theory has been constructed on a foundation laid more than 200 years ago. Since then, and especially in the past half century, monumental changes have radically altered the structure and functioning of economies, to such an extent that they call into question many of the valid premises on which earlier theory was based. Among these, the evolution from a production to a service-based economic system, the growing predominance of public policy in economy, the globalization of production and markets, dramatic changes in the nature and role of money and financial markets, and fundamental

changes in social aspirations and social values are especially relevant. It is now evident that economic theory cannot be separated or divorced from other aspects of human existence — political, social, ecological, technological, cultural, etc. — and that none can be validly considered without giving central importance to their impact on human welfare and well-being.

In recognition of these facts, the idea of rethinking economics has been gaining support. Late last year, a small, multidisciplinary group of individuals with membership in the World Academy of Art & Science and the Club of Rome began a fresh examination of current economic theory to examine why the basic premises of classical theory were adopted in the first place, to understand where and why they have failed or are no longer adequate to meet the needs of the 21st century, and to consider the feasibility of evolving a more effective theoretical basis for the future.

This paper sets forth the rationale and justification for a re-evaluation of the fundamental concepts and premises of modern economic theory with the goal of evolving a truly human centered theory and practice.

2. Theoretical Discontent

The recent global financial crisis is only the latest in a host of significant factors that call in to question the efficacy and sufficiency of contemporary economic theory. That so many distinguished economists, central bankers and policy-makers wielding sophisticated concepts and models failed to anticipate impending catastrophe is characteristic of mass hypnosis. How else to explain such a broad-based failure to comprehend issues so vital to the security, stability and progress of human civilization?

A single crisis might be an error or statistical aberration, but the events of the past few years are part of a larger trend. Since the early 1970s, national and global markets have become increasingly unstable. Beginning in Latin America, an accelerating succession of financial crises have plagued developing countries (1982), Mexico (1984), the USA (1985), Japan (1988), Western Europe (1992), Asia (1987), Russia (1998), and now the entire global system.

Nor is financial instability the only problem. Simultaneously, the world economy has been unable to generate sufficient employment opportunities to meet the needs of a burgeoning population, leaving a record 212 million people without jobs according to official ILO figures*, which grossly underestimate actual unemployment and underemployment worldwide. During the same period, growth rates in OECD countries have declined dramatically. Meanwhile, in spite of decades of economic development, today the poorest 40% of the world's population accounts for a mere 5% of global income, while the richest 20% accounts for three-quarters of world income.† More than three billion people live on incomes of less than \$2.50 a day. More than 80% of the world's population lives in countries where income differentials are widening.‡ Global financial assets of the wealthy have multiplied exponentially, from \$12 trillion in 1980 to \$167 trillion in 2006. Income

*ILO, *Global Employment Trends 2010*, p. 10.

†United Nations Development Program, *2007 Human Development Report*, November 27, 2007, p.25 . <http://hdr.undp.org/en/reports/global/hdr2007-2008/>.

‡Ibid.

inequality continues to grow, frustrating the rising expectations of the world's poor, and increasing the propensity for social unrest, crime and violence.

Why blame economic theory for the world's myriad disorders? The very purpose of social theory is to provide us with the knowledge and capacity to solve problems and optimize the well-being of the human race. A theory that fails to predict or provide a clear path for meeting human needs has to be considered either inadequate or failed.

There are other reasons for positing the need for new economic theory. Economic science has evolved since the time of Adam Smith, but it is still largely predicated on concepts and assumptions more relevant to 1776, the year *Wealth of Nations* was first published, than today. Smith wrote at the very onset of the Industrial Revolution, when scarcity and limited production capacity were still the dominant characteristics of human life and increasing of nations. When Smith wrote, 80% of the world's population lived at subsistence levels.

Agriculture was still the dominant sector of the economy, providing employment to at least 80% of workers globally. It was also a time when money itself played a far less significant role. At least two-thirds of the work was done in self-production systems and almost all work was remunerated in kind.[§]

The economic theory and measures of value posited by classical and neo-classical economists were bound to the premise that manufacturing systems would be the dominant source of future wealth creation. Measuring increases in the monetary value of output was deemed an adequate measure of increasing wealth. Since then there has been a fundamental change in the way wealth is produced. In the 20th century the manufacture of tools and products was gradually supplanted by an economic system increasingly dependent on scientific research, technological advancement and education, giving rise eventually to the modern service economy in which services account for 64% of global output and more than 70% of employment in OECD countries.** These figures underestimate the contribution of services since in many cases they fail to take into account service functions and employment within manufacturing industries, because of the explosion of services required to raise productivity, such as storage, distribution, publicity, logistics, marketing, organization, financial systems, and recycling. For example, the cost of producing a banana represents only five percent of its sale price. For an automobile, it represents 20 to 25%. This shift to a service economy necessitates a fundamental change in the way value is measured. In addition, today the world suffers from excess production capacity backed by insufficient purchasing power. Increasing production capacity is no longer a sufficient premise for wealth generation.

Smith wrote in an age of nationalism and his economic conception is based on a competitive model of how one nation can gain advantage and dominance over others. The nation-state is only a part of global society. What works for the part does not necessarily work for the world economy as a whole, e.g. the export-driven strategy of East Asian economies and now China cannot be replicated by all nations globally. In spite of the fact that we live in an increasingly globalized economy where exports represent 20-25% of global world product, modern economic theory is still modeled on the premise of the

§Giarini, Orio and Patrick Liedtke, *The Employment Dilemma: The Future of Work*, Report of the Club Of Rome, 1996, p.114.

**OECD, *Enhancing the Performance of the Services Sector*, http://www.oecd.org/document/2/0,3343,en_2649_33703_35026178_1_1_1_1,00.html.

nation-state as the basic unit and on concepts designed to maintain competitive advantage over other nations, to maximize domestic rather than global employment and domestic rather than global prosperity. Yet, according to the US intelligence community, by 2025 a single international community composed of nation-states will no longer exist.^{††} Larger agglomerations are in the offing. We urgently require an inclusive theory that is valid for the whole world economy and will maximize benefits for all humanity. No longer can we justify economic principles that support the success of the few over the many. There is need for new theory that achieves maximum economic security, wealth and welfare for all.

Economy exists on a substratum of ecology and as an integral part of a wider social context. The failure of contemporary economics to adequately account for ecological factors is well known. Current measures of wealth creation such as gross national product fail to distinguish between activities that drastically deplete natural capital and those which protect or enhance the environment. In addition, recent actions of national governments to stem the global financial crisis reinforce the obvious fact that economics is inseparable from politics and that both are inseparable from social and psychological processes. Political Economy, which was born as a subset of Political Science, acquired its present shape during a century in which social science was compartmentalized and fragmented into so many different airtight compartments that are inadequate to accurately represent the complex interactions and integration which constitutes the united social life of humanity. New economic theory in particular and social theory in general are needed to bridge these gaps and arrive at a more synthetic conception.

In view of these various factors, it is not surprising to find an increasing number of economists and others calling for radically new thinking in economics. Last year Nobel laureates Joseph Stiglitz and George Akerlof published an article calling for “A New Economics in an Imperfect World”.^{†††} Dr. F.J. Radermacher & Naveen Madishetty of Club of Rome released a report in 2013 on markets and sustainability for growth and Development. George Soros established an Initiative for New Economic Thinking (INET) at the Central European University in Budapest. David Korten of the Club of Rome published a book entitled *Agenda for a New Economy: From Phantom Wealth to Real Wealth*^{§§} and founded a new economy working group. Physicist J. P. Bouchaud challenged dogma regarding the efficacy of free markets, calling for a scientific revolution in Economics^{***} Of course, fundamental challenges to the principles and perspectives of modern economics are not new. In the 1970s, Nicholas Georgescu-Roegen, a Romanian-born economist, began to remodel economy as a living system.^{†††} Even prior to the Great Crash and Depression, Nobel laureate chemist Frederick Soddy roundly criticized prevailing theory and called for a radical restructuring of global monetary relationships.^{†††} In this article, the authors examine some of the central issues in economics which require rethinking and pose a number of fundamental questions for further consideration.

^{††} Although states will not disappear from the international scene, the relative power of various non-state actors—including businesses, tribes, religious organizations, and even criminal networks—will grow as these groups influence decisions on a widening range of social, economic, and political issues.” *National Intelligence Council, Global Trends 2025: A Transformed World*, US Government, 2008, p.10. http://www.dni.gov/nic/PDF_2025_2025_Global_Trends_Final_Report.pdf

^{†††} Stiglitz, Joseph and George Akerlof, “A New Economics in an Imperfect World”, *Guardian*, October 28, 2009

^{§§} *Global Sustainable Development through ecosocial market economy*, <http://www.faw-neu-ulm.de/GSD-India-Perspective>

^{***} Bouchaud, J.P., “Economics needs a scientific revolution”, *Real-World Economic Review*, issue no. 48, Dec 2008, pp. 290-291, <http://www.paecon.net/PAEReview/issue48/Bouchaud48.pdf>.

^{†††} Georgescu-Roegen, Nicholas (1970) “The Entropy Law and the Economic Problem”. *Distinguished Lecture Series No. 1*, University of Alabama, p.7-8.

^{†††} Zencey, Eric, “Mr. Soddy’s Ecological Economy”, *New York Times*, April 11, 2009, <http://www.nytimes.com/2009/04/12/opinion/12zencey.html>

3. From Newtonian to Human-Centered Economics

Natural scientists since the age of Newton have sought to discover the underlying laws that govern the physical universe. Their phenomenal success over the past few centuries ignited a similar hope among social thinkers of identifying similar principles underlying the governance of human society as well. In doing so, science overlooked an obvious difference between human and physical systems. We may never fully understand how or why the physical universe and its laws came into being, but when it comes to human systems there is no mystery about their origin. Physical nature may be governed by impersonal, immutable formulas and physical constants, but human systems are the product of ideas, aspirations, values, understanding, opinions, decisions, and attitudes which evolve over time. The life of humanity is a product of the social organizations and institutions we have fashioned in the course of social evolution, which in turn have been determined by our limited understanding (ignorance), egoistic attitudes and insufficient will to arrive at a more adequate solution. It is the result of human choices made in the past, choices that can be altered at any time. They are intended to promote human welfare and well-being, whether of a small dominant minority or of humanity as a whole.

As distinct from physical systems, social systems are man-made and purposeful. They are capable of conscious adaptation and evolution. As the Nobel laureate physicist Ilya Prigogine has noted, “to try to combine classical mechanics with human sciences was to attempt an unnatural marriage. Classical science described a static world, while human sciences deal with an ever-changing situation, where the idea of reaching an equilibrium is meaningless.”^{§§§}

Perhaps because of the uncentralized complexity of economic systems and the myths and mystery surrounding the creation of money, all too often economists have lost sight of the obvious fact that economic systems are created by human beings for the sake of human beings, and sought instead to discover universal, impersonal laws that determine how economic systems function. Today’s economy moves at the speed of thought, but our thoughts about economy are still mired in concepts of a Newtonian world view. A report to the Club of Rome entitled *The Employment Dilemma: The Future of Work* challenges the classical conception of economics: as a “system of models in the deterministic tradition of Newton’s world as autonomous, closed, self-regulating universe, running according to predetermined laws, culminating in a static equilibrium...”.^{****} They argue, classical and neo-classical economic theory incorrectly focus on the central importance of supply and demand, rather than on the central importance of human welfare. In an effort to imitate the impartiality and objectivity of the physical sciences, social scientists have generally chosen to study existing social systems as they are, rather than formulate theories describing what they should be. There may be no place for ethics in physical nature, but a sense of right, truth and justice is the very essence of what makes us human.

The divorce between traditional economic knowledge and evolving human values lies at the heart of the problem with contemporary economic models which regard financial markets as a law unto themselves, without considering their appropriate role in the economic welfare of society. Consequently, financial markets, which were originally

^{§§§} Giarini, Orio and Walter Stahel, *The Limits to Certainty*, Kluwer Academic Publishers, Dordrecht/Boston, 1993, xv.

^{****} Giarini, Orio and Patrick Liedtke, *The Employment Dilemma: The Future of Work*, Club of Rome, 1997, p.60-61.

<http://eng.newwelfare.org/2006/10/21/abstracts-from-the-employment-dilemma-and-the-future-of-work/>

established to serve as a stimulus to economic development, have now acquired an independent status of their own and function in a manner that jeopardizes the very economy they were intended to support. They have opened the door to the possibility of indiscriminate money and debt creation unrelated to either the economy or human welfare.

The same error applies to economy. Society is the whole of which economy is a part. Economy is the whole of which money, markets and employment are parts. Economics is one aspect of human life, one contributing factor to human welfare and well-being. When monetary systems are regarded as things in themselves and ends in themselves, they produce aberrations that not only threaten the underlying economy which they are intended to serve, but the entire society of which economy is merely a part.

The need for new theory is self-evident when we recognize that neither classical nor contemporary theory provides an adequate solution to the most central issue of economics. The goal of economic systems is the generation of wealth to promote human welfare, not financial speculation. The assertion that the laws of economics make it necessary for some people to remain unemployed in order to ensure employment for the majority or that gross inequalities in the distribution of incomes and wealth are natural and inevitable is to mistake historical injustice for eternal truth. Just as the world has discarded the exclusive, discriminatory political principles of monarchy and colonialism in favor of democratic principles of freedom and equality, economic systems can and must evolve in conformity with universal human values to meet the needs of the entire human community. We human beings make the laws that govern economy as well as polity. If we do not like them, we have the power to change them. We are in an era in which the challenge is to find the best optimal and complementary combination of private and public. For instance, state intervention in the Swiss pension system, arguably the best in the world, makes possible an active role for complementary private institutions. New theory needs to address fundamental questions. *What theoretical framework will lead to a system that optimizes the generation of real wealth? How will its principles reflect the primacy of human choice and human welfare? How will it effectively and justly reconcile the rights of the individual with the overall welfare of the social collective and humanity as a whole?*

II. Crises and Opportunities: A Manifesto for Change by Ian Johnson and Garry Jacobs²

1. Need for New Theory

Adoption of new values compels us to reject the Newtonian conception of economic theory based on intractable laws of nature. The first economists were moral philosophers seeking to design a better social system to meet human needs, not scientists in search of some immutable laws of economy. Economy is a human activity intended for a specific purpose. Production of things, application of technology, multiplying money, and even growth itself are merely means to an end, not ends in themselves. There can be only one legitimate aim of economic activity to promote the maximum welfare of all human beings over time. We need to re-examine current economic theory to see where it fails to promote optimal human welfare and how it can be altered to better suit human needs.

The laws of economics are governed by human values, choices, policies and institutions which can and do evolve continuously over time. Current economic concepts and theories date back to the beginning of the Industrial Revolution and were serviceable during a period when increasing production was the primary means for overcoming scarcity and human want. Continued reliance on outmoded ideas poses a serious threat to the future of humankind.

A triple divorce has disconnected economy from the fundamental role it is intended to serve. First is the widening rift between production and employment. The aim of raising labor productivity has given place to the obsession with eliminating labor altogether from the production process, creating a world with ever growing production capacity, while severely limiting the number of people with the purchasing power necessary to avail of it. Second is the rift between finance and economy, a divorce of financial markets from the real economy, which they were originally intended to serve. The consequences of this separation have been growing for decades.

Over the past forty years, the world has been wracked by more than 400 financial crises, destabilizing economies and impoverishing people around the world. Money and financial markets have become ends in themselves, channeling capital into speculative investments and depriving the real economy of vital resources. We need to recall that the fundamental purpose of financial markets is to support the real economy and promote human welfare.

Third is the rift between economy and ecology. The blind pursuit of unbridled growth, more production and consumption without regard for the consequences is like a cancer, rapidly destroying the ecological foundations on which human life depends.

New economics must be founded on rational thought rather than fundamentalist dogma. The neoliberal philosophy that underlies efficient market theory is just another name for the law of the jungle. Our aim is not mathematical accuracy but human welfare. The validity of economic axioms must be judged solely in terms of their capacity to promote real-world benefits for human beings. How far economics has strayed from its original and valid purpose is indicated by the fact that two Nobel prizes have been awarded for theories applied in computerized trading programs responsible for destabilizing financial markets and disrupting the entire world economy. The only meaningful measure of efficiency is that which most effectively utilizes available material and social resources to meet the needs of all human beings, present and future.

Economics is presently based on a false system of accounting that assumes all growth is good and all forms of growth are equally good. Current measures regard the economic benefits of war, pollution, crime, rising oil prices, terrorism, epidemics, natural calamities, water scarcity and deforestation as equivalent to activities that promote better nutrition, housing, education, healthcare, physical comforts and conveniences, social harmony, recreation and enjoyment. Nations today are blindly groping, as the medieval traders of Europe did before the invention of double-entry bookkeeping enabled them to clearly distinguish credit vs. debit transactions. Is the world truly richer today because it spends \$60 billion a year on bottled water, largely as a result of increasing concern regarding the availability of good-quality drinking water? By that logic, pricing clean air as a result of growing air pollution would make us richer still.

Newton's laws of motion may be divorced from human notions of value, but the laws of economy are firmly based on the notion of value and the process of valuation. Prices reflect the perceived value of materials, time, people, products, leisure, knowledge, power, status, convenience and enjoyment. Here too, we are employing false measures. It is highway robbery to price water, oil and other non-renewable resources at the financial cost of extracting them, to price forest timber at the cost of cutting it down, unmindful of the consequences; or to price nuclear energy without regard for the full risks of catastrophic events such as Fukushima, and the full cycle investment costs to society of managing decommissioning and waste disposal. The concept of public and private goods is based on the idea that the individual and the collective have different terms of reference and standards of value which need to be balanced and reconciled. What serves the one may be to the detriment of the other. Maximizing technology and minimizing labor or diverting financial resources from the real economy into speculative monetary instruments may appear to be of good value to the businessman, but may generate high costs to society in terms of unemployment, income inequality, social welfare expenditure, crime and social alienation. Depleting non-renewable, fossil fuel energy resources may appear to be of good value to industry, but may generate high environmental costs to global society and future generations.

Equally important is the need for a reassessment of the role of money as a social organization and of monetary policy as an instrument for economic regulation. Money is a unique human invention, which like language and the Internet, facilitates exchange, interrelationships and productive collaboration between human beings. But current monetary policy and monetary regulation are veiled by esoteric doctrines, sacred principles and opaque decision-making that obscure real world analysis and open debate regarding their medium and long term impact on human welfare. Econometric models based on mathematical algorithms cannot be relied on to choose what is best for humanity. The validity of the oft cited tradeoff between price stability and employment must be open to discussion and empirical assessment. The need for new values and new thinking must also penetrate this shadowy domain.

A major shift is needed to re-engineer our economies: questioning the assumptions that underlie current economics; altering the system of metrics by which we assess progress to ensure that our valuations reflect the real contribution to human welfare and embed the full costs, direct, indirect and inter-temporal; eliminating the irrational, unsustainable, inequitable and often uneconomic ways in which we deploy, utilize and consume resources; and changing the policies by which we establish the relative prices of various forms of capital – natural and social. We need to review our concept of growth and revamp growth models to ensure they meet the needs of both present and future generations, with particular attention to the future of work and the maintenance of our high-value natural systems.

Most important of all, we need to dispel the misguided belief that we have run out of options and are truly helpless against the intractable laws of nature. The limitations we face today are limits imposed by our values and concepts, not the limits of human potential for accomplishment. A careful analysis of present assumptions supports the view that new theory can lead to the development of far more effective systems for meeting human needs. The criticality of circumstances will compel us to implement radical changes sooner rather than later – the sooner the better.

2. Employment: An Urgent Priority

Nowhere is the need for new values and new theory more apparent than with regard to the growing problem of unemployment. Broadly defined, employment and jobs encompass all forms of meaningful, remunerative work – formal and informal, full and part-time, whether engaged by others or self-employed. Similarly, unemployment, underemployment and marginal subsistence activities encompass all forms in which precious and perishable human resources in both developing and economically advanced countries remain idle or underutilized for want of opportunities for gainful work. Human resources are a perishable commodity, which degenerate rapidly when left unutilized. Underutilization of human resources represents a huge social cost and poses a serious threat to peace and social stability, nationally and globally. It is only by addressing this issue promptly and effectively that we can hope to attract public attention to the serious environmental issues confronting humanity.

While the consequences of financial instability are more visibly reflected in the media and urgently debated by politicians, and while the consequences of climate change may be far more catastrophic to humanity and life on earth, rising levels of unemployment pose the greatest near term danger to the welfare of humanity and the stability of global society. According to ILO, more than 200 million people are unemployed globally, including 75 million youth. This figure grossly underestimates the real level of unemployment and underemployment which probably exceeds one billion or a third of the global workforce. Official figures for youth unemployment range between 20% and 30% in most OECD countries and are over 50% in Greece and Spain. These figures will continue to rise as deficit reduction strategies cause economic contraction in many countries. Over the next decade, the working-age population of G20 countries will increase by 440 million. In order to generate global full employment, the world would need to create 600 million new jobs within a decade.

Recent trends tell us this is improbable. A pessimistic mindset tells us it is impossible. Yet, the evidence of history contradicts these conclusions. We must reject the false notion that full employment is not feasible. The past sixty years have been the period of the most rapid population growth in world history. During this period 4.2 billion people were added to world population, a growth of 164%. Yet, during the same period total global employment increased by 175% and average levels of unemployment remained relatively constant. The gloom and doom are real to our minds, but they are not an inevitable reality. At present, there is no coherent theory of employment that adequately explains this remarkable achievement. Thus, new theory is essential. A permanent solution to the global employment challenge demands a radical change in ideas and values. We must recognize that people — human capital — are the most precious of all resources which must be preserved and enhanced at all cost.

People are not only the source of all the ideas, products, technologies and discoveries that have directed human development; they also constitute the ultimate purpose of that development. A human-centered theory of economics must place people first, while fully recognizing that humanity forms an integral part of the natural system.

Employment occupies a unique role in a market economic system. As the right to vote is the principal means by which people exercise their political rights in democracy,

employment is the principal means by which people exercise economic rights in a democratic market economy. Employment is the economic equivalent of the right to vote. People can survive without voting, but not without a means for their sustenance. The right to employment must be constitutionally safeguarded. As Indian Prime Minister Indira Gandhi told during the first conference on Environment and Development in 1972, poverty is the worst form of pollution. And poverty is inextricably linked to the absence of remunerative employment opportunities. Moreover, employment is also essential for social stability. The unemployed are the main source of new recruits for social unrest, organized crime, fundamentalist groups and terrorism.

Recognizing the urgent need to address the global employment challenge, ample means are available to accelerate job growth once we are willing to challenge and reject outmoded assumptions and policies. Policies must be reversed which tax employment and subsidize unemployment needs, incentivize blind adoption of labor-saving technologies and energy-intensive processes, and subsidize fossil fuel and water extraction by wrong pricing. Banning speculation can redirect trillions of dollars into job-creating investments in the real economy. Raising the mandatory minimum level of education globally is a wise investment to upgrade the quality of human resources, while creating new jobs in education and reducing the flow of youth into the workforce. Revising the system of higher education to combine education and work over an extended period and drastically revising curriculum to enhance the quality and relevance of education are also essential measures. These and many other initiatives illustrate the fact that full employment is an achievable goal provided we are committed to achieving it.

3. Rights, Social Equity & Fairness

Economic progress for all was a basic tenet of the post-war decades. But over the past quarter century, we find an increasing proportion of income and wealth being concentrated among a smaller and smaller proportion of the population. The top 20% of the world's population possessed 33 times more income than the poorest 20% in 1970, 45 times more in 1980, and 74 times more in 1997. The financial assets held by the top 0.1% of humanity are equivalent to the entire world's GDP. The level of inequality is rising in two out of every three countries. This trend is clearly unsustainable and contrary to all rational conceptions of justice and social equity. Where is the rationality or even the efficiency in such a grotesquely lopsided arrangement? What sort of a society are we heading for?

At the same time, rising social aspirations fueled by education and the media are increasing the demands and raising the frustration level of those who are left out, creating a structural weakness in the very foundations of social stability. Changes in average income levels tell us little. The tail ends tell the story. A \$1000 increment in income for the wealthy becomes a further stimulus to speculation, while a similar increment for the poor translates into real economic growth and job growth. As a difference in voltage propels the flow of electrons through a wire, differences in level of achievement can serve as a positive impetus to social development; but beyond an optimal level, the As a difference in voltage propels the flow of electrons through a wire, differences in level of achievement can serve as a positive impetus to social development; but beyond an optimal level, widening gap between rich and poor becomes a growing source of alienation, social unrest, fundamentalism and violence, acting like a short circuit that sparks a conflagration. The insatiable quest for unlimited acquisition and ludicrous indulgence in extravagant consumption cannot be

allowed to endanger the future generations of humanity and the well-being of our planet. We must learn how to balance the constructive role of inequality as a motive power for progress with the growing demand of the aspiring masses for a fair share in the benefits of technological development and in the use of the global commons.

Those who clamor that higher taxes for the rich rob the competent of the just rewards for their superior capacity and hard work overlook the completely arbitrary norms by which society presently allocates the profits of enterprise. No achievement stands on its own strength. Every further advance in technology and enterprise is based on a foundation of past discoveries, inventions and innovations built up over decades or centuries. This cumulative knowledge rightly belongs to all humanity, like the global commons on which we all live. It is right that the distribution of rewards is proportionate to the real relative contribution. Our values must evolve to keep pace with the enormous power unleashed by humanity's cumulative achievements. Greater power for accomplishment brings with it greater responsibility to disseminate the fruits of that power wisely and fairly.

4. Institutions

We need also to examine the social institutions by which ideas and values are translated into actions for human accomplishment. Institutions are the means by which society organizes itself. Institutions are the channels by which human energies are directed by ideas and values to achieve goals. Institutions include not only the formal and visible organizations we utilize for defense, education, production, social welfare and enjoyment. They also encompass a wide array of intangible and invisible arrangements – customs, laws, rules, systems and habitual ways of life – that determine how activities are carried out, coordinated and integrated with one another. Society may best be conceived as a richly woven fabric of interrelationships linking people, places, activities, organizations, sectors and nations with one another in space and time. Over millennia, this fabric has evolved very gradually, one thread at a time, layer upon layer, physically, socially, mentally and culturally. Taken in totality, they represent the collective know-how of society, the technology of social organization. The history of technology reveals a virtually unlimited progression of discoveries and developments, each becoming the foundation and bedrock for constructing higher level capabilities. So too, the technology of social organization has the potential for unlimited innovation and development. Central among these institutions are property and property rights which date back to Roman times and have failed to keep pace with the radical evolution in social values, technology and resource consumption over the past half century. New concepts and forms of ownership are needed that protect communal and global ownership of resources, spatially and over time, while simultaneously ensuring that returns are shared in an efficient and fair manner reflecting the nature of ownership.

Society is an integrated organization of human activities, which does not respect the arbitrary divisions and boundary lines imposed by our minds or theories. Finance and employment are subsets of economics; economics is a subset of society, and society exists and thrives in harmonious relationship with nature. The efficacy of any social organization depends on its capacity to release and channel human energy for productive purposes. That is only possible when sufficient freedom and opportunity are provided to all members of society to help them develop and express their innate potential within a structured framework that harmonizes private self-interest with public good. Freedom for initiative

and regulation to ensure cooperation and fairness go hand in hand. A century ago, capitalism acquired a social conscience to meet the perceived threat of socialism and arrived at a balance between public and private good that resulted in unprecedented prosperity in OECD countries. The collapse of communism symbolized by the fall of the Berlin Wall in 1989 coincided with a resurgence of neo-liberal conceptions that have become a root cause of the current crises. New theory must restore the balance that optimizes the welfare and economic security of all, while giving scope for the creative contributions of each. There is a need to develop a whole range of hybrid goods which, like insurance, serve simultaneously the interests of both the private citizen and society-at-large.

If economics is off-mark, then the institutions it has spawned, supported and protected must also be placed under scrutiny. We have already noted that the divorce between finance and economy is a notable characteristic of the current crisis, one which has severely eroded public trust in our economic institutions. Urgent efforts are needed to reverse the trust deficit arising from the functioning of markets, particularly in the financial sector. The philosophy enshrined in the Washington consensus has promoted unfettered and unregulated markets, at a time when the public good component of economic activities has never been larger or more obvious. Our inquiry needs to examine the options for new institutions and new rules that can better reflect the public good nature of economics, as well as provide the longer term protection of those assets humanity will need to rely upon for generations to come.

5. Governance

New institutions will, in turn, require more enlightened and effective forms of governance, new rules to play by and public policy systems that are far more credible than they are today. At the national level, we cannot build a stable foundation for the future based on nominally democratic institutions that serve the vested special interests of the elite. That is plutocracy, not democracy. At the international level, the failure of the United Nations system to deliver in many areas exposes the inherent insufficiency of a nation-centric system dominated by a few privileged, powerful nations in the name of democracy, at the expense of other nations and the global community. These failures compel us to think through new paradigms, new alliances and new modes of securing the legitimate rights of nations, individuals and collective humanity.

The issue of democratic governance is complicated by several factors. First is the ideological confusion between freedom and the unfettered pursuit of self-interest, which regards all forms of regulation as an infringement on democratic rights. In both politics and economy, freedom can only exist when safeguards are in place to protect the whole society against the misuse of power, all forms of power – monetary and social power as much as political and military power, the power of the majority as well as that of an elite minority. Second is the tendency of parliamentary democracies to address the narrow, short-term, self-interested concerns of voters at the expense of wider, longer term issues. Democracies will have to find ways to more fairly represent the interests of future generations. Third is the challenge of instituting a democratic system of global governance, when nations that most loudly proclaim their commitment to democracy at the national level have serious misgivings about extending the same principles to the global level, as illustrated by the resistance of the five permanent members of the UN Security Council to democratize the UN's most powerful organ. Fourth is the recognition that national governments represent

only one of the groups of actors that make up the global community. Even in so-called democracies, national governments are often more representative of money power than the real interests of their own citizens. Therefore, the evolution of global governance will need to find ways to represent the interests of other important constituencies. These challenges can and must be overcome in order to fully address the common problems facing humanity.

The process of globalization has reached a critical juncture. All of the crises referred to in this paper are essentially global in nature and cannot be effectively addressed by each nation in isolation from the rest. This is obviously true of the financial and ecological crises, but it is also true of the crisis in employment which is increasingly subject to factors beyond control by national governments. Today's multidimensional crisis is a result of the fact that global society has expanded far more rapidly than the institutions required to govern it. Today's financial and economic crisis is not a repeat of the national level crisis of the 1930s, but rather a playing out of a similar scenario at the global level. Yet, we still cling to outmoded concepts and models which are increasingly irrelevant, such as a narrow interpretation of sovereignty founded on the right of nation-states to self-determination, disregarding the equally legitimate rights of lateral communities made possible by technological advances and of the global human community that is so rapidly coalescing. A strictly state-centric system of governance is no longer viable in a world with so many legitimate voices and cross-currents of relationship. These changes necessitate evolution of new systems for global governance and new principles of global public policy.

III. Quest for a New Paradigm– Editor's comments and conclusion

Characteristics:

What the world most urgently needs is fresh thinking to formulate a new intellectual paradigm with the following characteristics:

- The interrelationships and interdependence of all dimensions of global society and social development.
- It must optimize human welfare and well-being for all human beings.
- The universal human values are not merely inspiring ideals and so these values are the only basis on which foundation for sustainable progress of humanity is achievable.
- To give central importance to the full development and utilization of Human Capital as the driving force and Social Capital as the most essential enabling technology for paradigm social evolution.

Employment needs to be recognized as a fundamental right, the economic equivalent of the right to vote in democracy. The new paradigm needs to recognize that the shift from a scarcity based industrial economy to a knowledge-based service economy with untold productive power requires reconceptualization of economic value and new measures of economic performance. It needs to understand money as a social organization that capitalizes trust capable of multiplying the prosperity of all, rather than as a scarce material resource or power to be hoarded and applied for the benefit of a few.³

WAAS Fellow Kishore Mehbubani says:⁴

Technology can be utilized for generating global convergence. The global explosion of cell phones, and soon of smartphones, will take the Internet, and the information it conveys, to all corners of the globe. A small solar-powered battery and a tiny computer have already done this for remote African and Indian villages. This “big bang” of information—and education as well—is also improving human lives. As more people learned about vaccinations, the proportion of the world’s infants vaccinated against diphtheria, pertussis, and tetanus—via the DPT shot—climbed from one-fifth to nearly four-fifths between 1970 and 2006. And other ideas that save lives—such as washing one’s hands, or not defecating in the fields one eats from—have made their way around the world and are increasingly accepted. Connectivity saves lives. Technology also allows people to cross borders in greater numbers. In 1950, barely 25 million people traveled internationally; by 2020, that figure is expected to reach 1.6 billion. In short, 1 in 5 inhabitants of Planet Earth will cross an international boundary—a previously unthinkable level of connection. With global interconnectivity growing by leaps and bounds, the spread of information and ideas means our moral compasses will expand beyond national borders. It is only a matter of time before all of us look beyond the horizon and become citizens of both our own country and of our planet. The world will be a better place when we unite to strengthen our global village.

Driving forces

In our search for New Paradigm it would be significant to raise relevant questions and observe the potential elements as well as driving forces of a New Paradigm.

In his book “IN SEARCH OF NEW PARADIGMS”, Antoni Kukliński talks about similar set of points, “TODAY WE MUST EMBARK UPON A QUEST FOR A NEW PARADIGM”. His paper gives a basic definition of a New Paradigm as “a set of questions addressed to the objective reality and a set of answers formulated in response to those questions”.⁵

“A paradigm which supports our inclination to provide old answers to old questions must be rejected, or at least deeply transformed. we have to look for a new paradigm, one which demands 1) new answers to old questions, and 2) new answers to new questions.”

It is worthwhile to observe that a New Paradigm must be discussed within an INTELLECTUAL FRAMEWORK.

Antoni also indicated the available key driving forces of the 20th century as a product of globalization which will play a significant role in 21st century in the creation of a New Paradigm. The three major driving forces of the 21st century will be:

1. *Technological progress and especially the breakthroughs in the field of Information and Telecommunication Technologies(I.C.T.).*

2. *Huge growth of the scale and importance of Finances which, following the processes of deregulation and liberalization, will be transformed into the most important domain of global economy.*
3. *Market as the main manager of the global scene.*

The three driving forces of the classical paradigm– the world of technology, the world of finances and the world of the market –were in the past and will be in the future very important factors in global development and in the globalization of economies, society and governance.⁵

Systemic elements

The current global challenges –**Economic, energy, ecological, educational, food, health, security and governances**–are interrelated and part of the larger system is driven by dynamic forces, and by static forces under equilibrium. A New Paradigm will occur only when static forces are deviated and disrupted by systemic drivers and elements, serving similar economic interests but different purposes like human wellbeing instead of focusing exclusively on profits or GDP. Since all the current global challenges are influenced by market forces it is worthwhile to **envision and work towards a New Paradigm in Economics.**

Karl Wagner in his paper “Addressing systemic issues” suggests points of entry along with committed investment and thinks systemic issues can be seen as a matrix of layers and economics can be seen as “**point of entry**” into this matrix. He also talks about raising basic questions and at the same time promoting answers, to establish an alternative to the GDP for ‘measuring’ an economy and the growth of nation states. And the indication is to look at the different levels. It seems smart to choose “economics” as an entry point into the matrix as it is the one issue which affects every person in the world, usually on a daily basis.⁶

The interrelated challenges we face today are process-linked with systemic issues at various points, considering economics today involves many transactions in the market stage and globe scene. A flawed and crisis-based economic scenario causes friction and loss of trust in every transaction and triggers various challenges interrelated within the system –**energy, ecological, educational, food, health, security and governance.**

Editor’s Conclusion

To have a tipping point in New Paradigm, we have to raise relevant questions and key points so as to find answers for creating a New Paradigm in Economics and a new framework for addressing global challenges. Some of them are:

1. What is the objective and goal of the economy?
2. What are the foundations, driving forces, elements of a new paradigm?
3. Through what values can economic wellbeing be measured?
4. How do we integrate Sustainability and resource conservation?
5. What is the relationship between human wellbeing and planetary ecology & environment?
6. What forms the basis of economic activity and progress?

7. What standards do we use to measure an economy's growth? How do we measure it?
8. What are the key regulations for market instruments?
9. How can we finance the economy?
10. How do we manage risk management factors like pricing, inflation, deficit etc.?
11. What cooperative and intellectual framework should be evolved to comply with the global and regional economies?

There are many more questions to be raised to take initiatives and programs in the direction of a new paradigm in Economics and human wellbeing.

Notes

¹ Orio Giarini, Garry Jacobs, Bernard Lietaer and Ivo Slaus, "Introductory Paper for a Programme on The Wealth of Nations Revisited," *Cadmus* 1, no. 1 (2010): 9-27.

² Ian Johnson and Garry Jacobs, "Crises and Opportunities: A Manifesto for Change," *Cadmus* 1, no.5 (2013): 11-25.

³ Ivo Šlaus and Garry Jacobs, "Opportunities & Challenges for the 21st Century: Need for a New Paradigm," *World Academy of Art and Science* <http://www.worldacademy.org/content/ottawa-concept-note>

⁴ Kishore Mehribani, "The global village has arrived" 49, no.3 *International Monetary Fund* September 2012 <https://www.imf.org/external/pubs/ft/fandd/2012/09/mahbuban.htm>

⁵ Antoni Kukliński, "In Search Of New Paradigms (Selected papers 2001–2011)," *Polish Economic Society Warsaw* 2013.

⁶ Karl Wagner, "Addressing systemic issues- a Mava and Oak project," 3 December, 2013.