



PROMOTING LEADERSHIP IN THOUGHT
THAT LEADS TO ACTION

THE WEALTH OF NATIONS REVISITED

CADMUS

**A papers series of the South-East European Division
of the World Academy of Art and Science (SEED-WAAS)**

Volume I, Issue 2

April 2011

ISSN 2038-5242

SEED IDEAS

Call for United Action

– *Heitor Gurgulino de Souza*

Referendum

The Great Divorce: Economics & Philosophy

Policy for Full Employment

ARTICLES

The Perfect Storm

– *Ian Johnson*

Science and Economics

– *Orio Giarini*

Human Rights, Liberty & Socio-Economic Justice

– *Winston Nagan*

Capital Needs Labor

– *Patrick Liedtke*

Global Prospects for Full Employment

– *Garry Jacobs and Ivo Šlaus*

Grossly Distorted Picture: GDP Still Misleading

– *Hazel Henderson*

Biopolicy- Building a Green Society

– *Agni Vlavianos Arvanitis*

Towards a Global Democratic Revolution

– *Andreas Bummel*

Governance

– *T. Natarajan*

Revolution in Human Affairs

– *Jasjit Singh*

Universal Nuclear Disarmament

– *Manpreet Sethi*

NEWS & DOCUMENTS

EDITORIAL BOARD

Chairman: Ivo Šlaus, Member of the Board of Trustees of World Academy of Art & Science; President, South East European Division, World Academy of Art & Science, Zagreb, Croatia; and Member of Club of Rome.

Editor-in-Chief: Orio Giarini, Director of The Risk Institute (Geneva and Trieste, Publisher), Fellow of World Academy of Art & Science, and Member of Club of Rome.

Managing Editor: Garry Jacobs, Member of the Board of Trustees of World Academy of Art & Science and Vice-President, The Mother's Service Society, Pondicherry, India.

Members:

Walter Truett Anderson, Member of the Board of Trustees and former President, World Academy of Art & Science.

Ian Johnson, Secretary General, Club of Rome, and former Vice President, The World Bank.

Nese Kavak, Member of the Board of Trustees of World Academy of Art & Science and Deputy Secretary of Board of the World Association of Perinatal Medicine.

Winston Nagan, Member of the Board of Trustees of World Academy of Art & Science, Professor of Law & Director, Institute for Human Rights, Peace and Devel, University of Florida.

Francesco Stipo, President, Club of Rome, USA.

The CADMUS Journal

The acronym of the South-East European Division of The World Academy of Art and Science – SEED – prompted us to initiate a journal devoted to seed ideas - to leadership in thought that leads to action. Cadmus (or Kadmos in Greek and Phoenician mythology) was a son of King Agenor and Queen Telephassa of Tyre, and brother of Cilix, Phoenix and Europa. Cadmus is credited with introducing the original alphabet – the Phoenician alphabet, with “the invention” of agriculture, and with founding the city of Thebes. His marriage with Harmonia represents the symbolic coupling of Eastern learning and Western love of beauty. The youngest son of Cadmus and Harmonia is Illyrius. The city of Zagreb, which is the formal seat of SEED, was once a part of Illyria, a region including what is today referred to as the Western Balkans and even more. Cadmus will be a journal for fresh thinking and new perspectives that integrate knowledge from all fields of science, art and humanities to address real-life issues, inform policy and decision-making, and enhance our collective response to the challenges and opportunities facing the world today.

Copyright:

The Risk Institute - Istituto del Rischio

Via della Torretta, 10 - 34121 Trieste - Italy / 53 route de Malagnou - 1208 Geneva - Switzerland

Editorial Office: 5, Pudukuvai Sivam St., Venkata Nagar - Pondicherry 605011 - India

Published under Open Access policy guidelines. See Cadmus Editorial Policy for details.

Websites:

www.seed-ideas.org - www.cadmusjournal.org - www.newwelfare.org

E-mail:

editor@cadmusjournal.org

Printed by:

Akaram, Plot No.1, Nirmala Nagar, Thanjavur, India



The Perfect Storm: Economics, Finance and Socio-Ecology

A Commentary*

Ian Johnson, Secretary General, Club of Rome.

The world is at an inflection point. A convergence of themes – seemingly disconnected – is integral and urgent to our very survival. Our world is headed into a **Perfect Storm** of an interconnected financial, ecological and social crisis. Almost all forward-looking assessments demonstrate that business as usual and incremental improvements will not be sufficient to take us to a future world blessed by equitable prosperity, safety, security and contentment.

And time is not on our side. The decisions we take over the coming decade will shape our common future for us and for our children. There may be threats in the gathering clouds of our perfect storm, but we have opportunities to shape, reshape and move an agenda towards a better tomorrow.

The warning signs are for all to see. Within the first decade of this Millennium we have seen five crises:

One: We have witnessed the moral crisis of a Planet with plenty, yet shared with so few. It remains indefensible that more than one third of our fellow humans remain in dire and absolute poverty. At the turn of the Century our world leaders pledged to halve world poverty by 2015. These goals will not be met.

Two: We remain in the midst of a global financial crisis: one that has affected millions of people throughout the world. What started as a series of largely containable national and regional banking crises from the 1970s onwards has transformed itself into a global crisis in the real economies of the world. Improved management and oversight of our financial systems have started, but the pace is glacial and the efforts remain woefully weak and sporadic.

Three: We have witnessed a food crisis as a result of the rapid growth in food commodity prices, and their impact on poor countries and poor people in those countries has resulted in many being pushed below the poverty line. The food crisis was due to many reasons: historic low prices that couldn't continue; technological plateaus in productivity and competition for land use.

Four: We have witnessed a global ecological crisis that affects us now and well into the future. The consequences of not repairing and then effectively managing the Planet's stock of natural capital will lead to unknown but potentially very dangerous outcomes. Fortunately, climate change has now moved to centre stage: so much so that it is easy to ignore other ecological issues such as the loss of forests, fisheries and biodiversity: all being lost at historic

* Based on two speeches given at the University Of Liechtenstein at a conference on responsible investing in September 2010 and a conference on global finance given during the Annual Assembly of the Club of Rome in October 2010.

and unprecedented rates. To be sure, climate change will make matters worse, yet hopefully it also provides us with a greater sense of urgency.

Five: An unemployment crisis of global proportions is upon us now. There is uncertainty about the future levels of unemployment, currently estimated globally at over 200 million, with perhaps up to a billion people under-employed. Our inability to create jobs will consign many millions to poverty, induce social and political unrest, and will undermine any hopes for a more secure and sustainable world. Unemployment remains the single largest global failure.

1. The World We are Moving Towards

As we reflect upon the observations of this past decade it is worth considering for a moment the world of tomorrow. If we look forward to 2050: well within our children's lifetime we can envisage a number of significant changes:

- Population will likely grow from close to 7 billion to perhaps 9.5 billion (current estimates range from around 8 to 10.5 billion).
- Global GDP is currently about US \$60 trillion. Even at modest per capita growth rates in the emerging economies of the world to meet poverty targets we could easily see a world (as we conventionally measure it today) of closer to US \$200 trillion. Three worlds sitting on our present one world!
- The current 20:80 split (20% of population earning 80% of national income) that has been consistent for the past two decades is starting to shift. This year (2010) represents an interesting watershed in terms of aggregate wealth: on a global GDP / Power Purchasing Parity (PPP) basis, the emerging economies are roughly now equal to the rich world -- significant geo-economic shift and potentially an important geo-political shift.
- Demand for goods and services are set to increase dramatically driven by population, rising per capita income, and the shift from current low per capita income consumption patterns. Demand for food is likely to more than double by 2050 and energy needs to increase threefold.
- Demand for clean water will rise to meet the needs of the present one billion plus people who have no access to potable water or decent sanitation and to meet incremental demands from a growing population. Water resources will continue to be stretched, although globally water will not be scarce. However the costs of harnessing water will rise exponentially and discontinuously and place huge fiscal and economic burdens on countries to deliver water. Together with the provision of potable water, dramatic increases (fourfold or more) in water efficiency in the agricultural sector will be needed.
- It is estimated that 27% of the world's population is under the age of fifteen: for the future, a large, capable and ready work force in the making? Perhaps? Or a major source of social unrest? Possibly? Future numbers are unknown. However, what is known is that unemployment fuels discontent and social turbulence. A sustainable future is a Job-full future.

The wealth of our nations is changing dramatically; the shifts in wealth are reshaping our global body politic; those left behind are growing in numbers and strength; and the search for prosperity has all too easily become a search for economic growth on the assumptions that growth alone would solve our problems.

Clearly, all of us benefit from well functioning eco-systems; financially sound, well managed and regulated financial systems; and strong social and human capital that allow for safe, secure and content human communities. Most of us want to live in a happier, fairer and safer world. If we are to achieve this, we need to reset our planetary clock, assess the issues that will drive us towards greater contentment in an increasingly interconnected world, and re-calibrate the philosophies, metrics and design assumptions behind the changes we have recently observed. These issues belong to a broad-based dialogue with many disciplines: from engineers to economists, from health professionals to bankers; from activists to philosophers; from old to young; and from poor Africa to rich Europe.

2. The World We Need

This note focuses on a small yet important sub-set of the above issues: the need to respond to the demonstrated failures we have observed in our economics and their translation into markets for goods, services and labour.

2.1 Our Economics are in Need of an Urgent Overhaul

The foundations for modern economics rest on assumptions that may have been true for our distant past but are no longer valid for our immediate future. They are based on a time in history so fundamentally different from today: a world in which natural resources were plenty; a time when globalisation had not infiltrated into every aspect of our economic life; a time when physical capital was scarce and natural capital abundant; and a time when aspirations and expectations were fundamentally different from today.

Our understanding of economic growth and wealth creation has, all too easily, lulled us into a sense of complacency that, at best was illusory and, at worst, damaging. We have floundered on the assumptions that economic growth would produce wealth for all. It has not. Economics has become divorced from real values; and in doing so, relative prices of the various forms of capital and labour are seriously out of alignment.

Our measurement of wealth rarely takes into account the very things we truly value: safety, security, a clean environment, the strong social capital we enjoy. Neither does it measure the full economic costs of unemployment.

Our understanding of uncertainty is so rarely factored into our economic public policy-making, yet we live in a world with many unknowns and risks including the potential for non-linear events (such as in climate change). We need to assess and value the options we have for dealing with the risks we face.

Our economic measurements have managed to ignore the very form of capital we now recognize as being in short supply: natural capital. We value and account for the depletion of our natural capital at zero; a worse business decision is hard to imagine! As Herman Daly once noted “the current accounting system treats the earth as a business in liquidation”.

We need a new economics that measures real wealth and promotes real wealth creation and growth. Indices need to be created which reflect real values to society. Fortunately this issue is now occupying the time of a number of noteworthy economists such as Stiglitz, Sen, Daly, Constanza, Korten and others. We will see whether such thinking permeates the ministries of finance throughout the world and the global financial institutions they represent. So far rhetoric has been well ahead of reality.

2.2 Bad Economics Produces Unsound Markets

Markets have their role. They are the centre piece of neo-classical economic thinking; however, we require markets that do not reward avarice, speculation and destruction, but ones that increase employment opportunities, restore and repair our natural capital, and ones where equity and fairness dominate our actions. Financial markets require trust to operate, yet we now exist in a very real “trust deficit” due to the actions of a few in the private sector coupled with absentee government structures that did not provide oversight for the public good. Greater transparency and oversight are required at the national and international levels if public trust is to be regained.

Markets need to be re-oriented to:

- Moving wealth into productive and sustainable investment opportunities and measuring real gains.
- Developing new market mechanisms that can better realize the real value of all assets, including natural capital.
- Substituting opacity for transparency to reduce financial risks.
- Substituting prudence and predictability for the kind of “casino banking” that has produced such spectacular failings and human misery.

We must re-orient our markets so that real values are reflected in decisions. It is important to recall that the founding fathers of economics believed that markets would produce goods and services that would help people genuinely prosper and would do so at fair prices. We must now ensure that housing markets provide for homes and not property speculation; that carbon markets are built to reduce global pollution; that water markets are created to conserve a costly and all too often wasted commodity; and that commercial markets facilitate the creation of jobs.

2.3 Enlightened Public Policy is Required

As we move further into the future we will recognize that the public good content, whether at the national or international level, will increase. It is often the case that the “externality” is larger than the “internality”; that is to say the unintended and often unmeasured economic impacts are greater than the intended or internal impacts of investment or policy actions. These unintended impacts are often equated with the notion of the public good: the real value to society at large. Capturing the public good is not always easy and can lead to over-zealous regulation; but done well, it can provide the right risk-reward framework in which both private returns and public returns are maximised.

Indeed it is hard to imagine that decisions made by the private sector, in finance or in

investments, do not have a public or societal impact and vice versa. The market for public-private goods will increase. Indeed, the public sector has often underwritten the changes in corporate financial activities and trading: the internet, now so much part of nano-second decision-making in private currency markets, is the direct result of public investment and the creation of the internet as an accessible global good.

A role for the public sector includes:

- Lengthening the market for natural capital goods and services and other sustainability investments. Many goods and services such as forests, freshwater supplies, biological diversity that are essential for a sustainable world require decades and sometimes generations before benefits can be realized. Markets are often short term and, left alone, would not typically result in investments for long term returns. Fiscal or regulatory policies can help “lengthen” the term for such investments.
- Ensuring, at least for all public investments (and encouraging for private investments) the use of real values for natural resources. We now have the knowledge to calculate and estimate the real costs of natural resources that reflect their full value to society.
- Encouraging, through funding and fiscal incentives, innovation towards sustainability.
- Creating, through global co-operation, long-term markets for global public goods such as carbon emissions. A longer more ambitious target for greenhouse gas emissions together with an enhanced and efficient regulatory and institutional framework must be a high priority. “Issues without passports” are likely to grow: creative and responsible common goods market-makers will prosper.
- Ensuring that levels of transparency and accountability are established, agreed and adhered to.
- Ensuring that the greed and “tail-end” speculative gains are not able to undermine the resilience of the financial system.
- Partnering with the private sector to provide “patient capital” and capture positive externalities.

2.4 More Jobs are Needed for Social, Economic and Moral Reasons

Despite the high levels of people wanting jobs throughout the world, we are steadily producing more and more goods and services with less and less people. With one or two notable exceptions, capital continues to substitute for labour: and for as long as it does, and in the absence of remedial actions, we are on a planetary collision course. Unemployment strikes every country and fuels discontent, alienation and a sense of hopelessness. In poor developing countries the inability to earn a living wage has profound consequences on nutrition within families as not enough food can be purchased, as well as on health care and education, so important for human capital formation. This in turn transforms itself into unrest, social upheaval and migration.

Increasingly we need to view employment as a global public good: borders are more porous than most of us imagine. We need to embed employment concerns into our economic thinking and our market activities: never before has the issue of jobs been as urgent as it is

today. Economic systems based upon current and largely outmoded economic theory appear incapable of generating the levels of employment that will provide opportunity for those seeking work and, just as importantly, those coming into the labour market. A comprehensive review is now urgently required that identifies the key barriers, assesses modifications to economic theory and application, and promotes major opportunities for increasing employment.

2.5 We Cannot Continue with an Unequal World

Despite the world's great progress we now find ourselves in a more unequal world than ever. The poorest 40% of the world's population account for only 5% of global income. The global financial assets of the wealthy have multiplied exponentially, from \$ 12 trillion in 1980 to almost \$ 170 trillion in 2006. We need to ensure that the poorest parts of the world are brought into the mainstream of decent, real and lasting prosperity: this will require many actions, too numerous to outline here, but not only limited to meeting international agreements on trade, development aid and other resource transfers. Greater equality fosters greater social cohesion and greater trust within societies: whether developed or developing. A fairer world is a safer world. A safer world is a richer world.

3. Conclusion

There is little doubt in my mind that we will need to re-calibrate our assumptions of, and measurements for, economic growth and the measurement of wealth as well as the reconstruction of markets to meet future needs. We need to re-set our navigational instruments and direct them towards a new mission: that of real wealth creation, real prosperity for all; a more caring and safer world. This is, of course, a challenge and one that will require major shifts in how we manage our economic and social affairs. But we should treat it as just that: a challenge. A challenge for new technologies to play a role; a challenge for new and creative markets to deliver the goods and services humanity really needs; a challenge to move us in a more transparent marketplace and one where market prices reflect real values and real values produce real wealth. Responsible markets and responsible investment strategies will be a cornerstone of the major shifts we need to secure a healthier and happier future. The marketplace for innovation, ideas and the goods and services that align with the real needs of the 21st Century will grow dramatically. The largest challenge we face will be to create the opportunities for meaningful employment across the globe for the maximum people. We can do it, but only if we dramatically change our economic models and assumptions and increase our political will to make full employment a reality. To not take on this challenge is to turn our backs on the aspirations and needs of the bulk of humanity.

We have arrived at an important window in our recent economic and social history. With concerted actions, renewed commitment to sustainable development, and a desire to manage the "tail-end" excesses of extreme greed and extreme poverty, we can avoid the "**Perfect Storm**" and we can move towards a more enlightened period in our history. Several scientists have suggested that we are in a new geological age: "Anthropocene": the era where humankind is the most profound shaper of the geological age. We are in control of our destiny and the destiny of the Planet. We have choices and it is now time to exercise them.

Those who are engaged in building democracy in their countries and who are animated with a fresh spirit like in Egypt will have to ask themselves: What purpose does building a democratic nation have if it is embedded into an undemocratic and non-transparent international system? In a globalized world the confinement of democratic participation of citizens to the institutions of the nation-state is almost equivalent to disenfranchisement. True democratic emancipation cannot stop at national borders.

Andreas Bummel, Chair, Committee for a Democratic UN

Politics is the whole of which economics is a part and employment is a small part of the wider domain of economic life. Ushering in a global government generates the power of solving these minor problems. Government is the context that activates the politician. Politicians can cure the ills created by economists. A wider vision of economics solves the problems created by narrow inspiration.

T. Natarajan, President, The Mother's Service Society

The role of labour is crucial for the social cohesion and stability it provides. Threats to financial stability do not exclusively emanate out of capital markets. As the unrest in several Arab countries demonstrate yet again, without social stability there can be no financial stability.

Patrick Leidtke, Director, Geneva Association

Economic thinking is still very largely related to traditional Cartesian (and Newtonian) concepts of science. The notion of equilibrium is not really a concept or an explanation, but rather a tautology, which has been given the value or status of an axiom. Understanding this notion of equilibrium, where supply is equal to demand, is essential because it explains why economic theory has from the beginning always tended to be one-sided...Once we enter real time, uncertainty and disequilibrium become the reference criteria of reality. Introducing the notion of real time into the economics of supply and demand (in modern terms, service based production and consumption) is a radical alternative to the view of the economic process as being based on timeless (instant) equilibrium.

Orio Giarini, Director, The Risk Institute

According to Roosevelt, "necessitous men are not free." The narrow conception of individual freedom founded on private property rights advocated by neoliberalism neglects a much wider, more humane conception of social democracy, freedom from want and human security affirmed by the New Deal, the Atlantic Charter and the UN Charter.

Winston Nagan, Director, Inst. for Human Rights, Peace & Development

A human-centered theory of economy and employment needs to be founded on the realization that human beings – not impersonal principles, market mechanisms, money or technology – are the driving force and central determinants of economic development.

Garry Jacobs & Ivo Šlaus, World Academy of Art & Science Global Employment Project

CADMUS

Inside This Issue

Our world is headed into a Perfect Storm of an interconnected financial, ecological and social crisis. Almost all forward-looking assessments demonstrate that business as usual and incremental improvements will not be sufficient to take us to a future world blessed by equitable prosperity, safety, security and contentment.

Ian Johnson,
Secretary General of the Club of Rome

The three organizations – WAAS, Club of Rome and the Pugwash Movement – should sincerely join forces and act together, so that we can fully utilize use our collective experience, intellectual capacity and foresight. Together, we will have a much stronger voice to get our good messages out to the world and be listened to by policy makers, parliaments, governments, academics and all societies in general, in both the industrialized and developing economies.

Heitor Gurgulino de Souza,
Former Rector of United Nations University

Decisions on our common future should no longer rest solely on world leaders, who can evade or even obstruct meaningful change. A simultaneous electronic ballot on saving bios is a brilliant opportunity to demonstrate that, as citizens of the world, we can all agree on safeguarding the Earth for the generations to come. By giving priority to individual voices to be heard, the World Referendum can elicit the personal involvement of every citizen in the race to save the environment and help to bridge the gap between the rich and poor.

Agni Vlavianos Arvanitis,
President, Biopolitics International

The greatest global challenge that faces the international community today is that of the current trans-national revolution in human affairs, which in turn is triggered by the combination of three revolutions: a revolution of rising expectations, the information and communications revolution, and a broader industrial-technological revolution.

Jasjit Singh,
Director, Centre for Air Power Strategy

Continued . . .