



21st Century Strategies for Sustainability - Part 3

By Hazel Henderson

Editor's Note:

It is often remarked that "what you measure is what you get."

Well, not any more, at least in global macroeconomics. In this concluding installment of her *21st Century Strategies* essay, Academy Fellow **Hazel Henderson** makes the point that while traditional economics pursues mostly the wrong metrics, the underlying world is so busily transforming itself that it condemns the Establishment's dismal science to irrelevance. She concludes by offering a hopeful vision and many tangible signs of progress toward a more sustainable and just world. -- DZ

Today, all economies are still mixtures of public and private sectors, two sides of the same coin with markets created by human rules and laws – a major social innovation. The two top layers of the "cake" of total productivity, the private and public sectors, rest on two lower layers ignored by economists: the Love Economy of unpaid work and Nature's Productivity (See Figure 7, Total Productive System of an Industrial Society).

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Mass communications and the Internet enlarged the new Third Sector: the

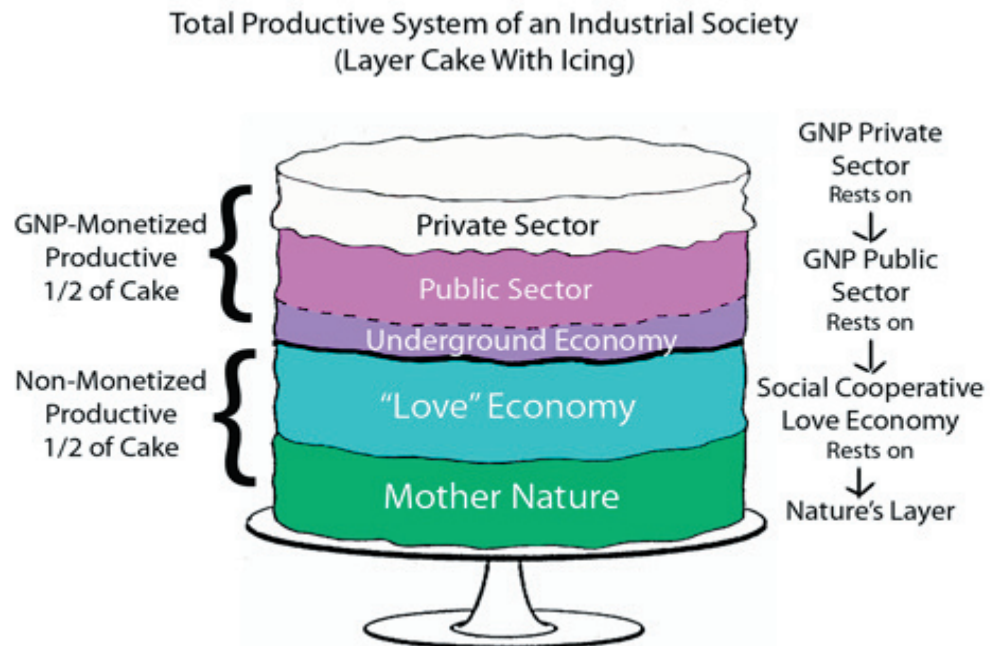


Figure 7

citizen non-profit groups, charities and foundations of global civic society. The World Social Forum, launched in Porto Alegre in 2000, has focused the global debate around new paths to sustainable human development. The "cultural DNA" of societies always determines the size and scope of public, private and civic society sectors based on their unique history, values, goals and beliefs that energize their people. The one-size-fits-all economic theories of development such as the "Washington Consensus" have been discredited as they encountered the realities of the unpaid Love Economy, informal sectors, diverse cultures, topography, climate, agriculture and the basic productivity of ecosystems.

Cultural DNA still drives development in all societies – even though these human, social and cultural assets (and sometimes liabilities) are overlooked in economic textbooks, theories and the statistics they generate. Economic models still based on the Newtonian "clockwork" ideas of general equilibrium are now over a hundred years out of date. Thus, they are also blind even to the dynamic change and technological evolution engendered by the very markets and industrialism on which economists claim to focus and interpret. These dynamic changes are now mapped by other disciplines: chaos theory, system dynamics, physical and behavioral sciences, and game theory. Today,



economists are beginning to focus on this colossal error and awaking to the fact that general equilibrium economic models cannot be used to guide macro-economic policy in rapidly-evolving technological societies. Chaos models, such as those created by two "Nobel Memorial" prize winning economists for the collapsed hedge fund, Long Term Capital Management, as well as others used by firms trying to beat stock markets, fail because they rely too much on historic trends and patterns.

Economists' colonizing tendencies expanded to "capture for our profession" (as a UK-based economics society put it) (Henderson, 1996) the issues of global warming and climate change. Economists trump other disciplines in academia because their departments and business schools receive the lion's share of funds, research contracts, power and prestige. Economics is politics in disguise. Cost-benefit analysis or a carefully crafted economic impact statement can squelch any government reform or new social or environmental initiative. Such analyses emphasize the costs of change to existing interests, while ignoring or downplaying the current costs of the status quo on other actors, the environment or future generations. Examples include the 2005 energy, transportation and drug subsidy laws in the USA. Cost-benefit analyses fail to estimate the future benefits of alternative policies and average out costs and benefits so as to obscure who are the winners and who the losers of a proposed policy. All this confuses the general public into believing that the issues are "technical" rather than political, documented in the book, *Priceless*, analyzing recent policies in the USA (Ackerman/Heinzerling, 2004).

Today, the chinks in economists' armor are becoming widely evident – including the game of preempting the work in other disciplines. Psychologists won recent Bank of Sweden Memorial Prizes in Economics for challenging simplistic economic models of human behavior. Even Harvard University may soon allow a new course in its economics department that challenges the orthodoxies still undergirding the policies of the IMF and the decisions of Wall Street and the world's bourses. A few economists borrowing from psychologists and real world observation now admit that we humans are not always competitively maximizing our own self-interest – the standard economic view of homo economicus. Many people enjoy giving as well as receiving, care about what kind of world we are leaving our children – "irrational" behavior to an economist. No wonder economics is called "dismal." This re-think undermines orthodoxy in such major policy areas as free trade, taxes, school vouchers, as well as globalization and the environment.

Journalist Robert Lee Hotz, "Anatomy of Give and Take" in the *Los Angeles Times* (March 18, 2005), describes a recent experiment at Baylor College of Medicine in Houston, Texas, where two women were observed with the use of a \$2.5 million brain scanner as they interacted in a game involving financial and investing behavior. The brain researcher's goal was to test and hopefully discover the secret of trust, the crucial human behavior that makes markets possible and the variable missing from the mathematics used by economists in their models. Neuroscientist Paul Glimcher of New York University explained that "we have started looking for pieces of economic theory in the brain." After monitoring the many moves between the two

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young women, it turned out that, contrary to economic theory and many game theorists, these two female players trusted each other. Economics and traditional game theory predict that lack of trust on the part of both players would cause both to lose (the Prisoner's Dilemma). The outcome of the women's game was that both won. Such optimal outcomes are termed "win-win" games as opposed to the "win-lose" games of economic theory and the "lose-lose" outcome of the Prisoner's Dilemma game.

This outcome also challenges game theorist John Nash's famous equilibrium (for which he won a Bank of Sweden Prize in Economics) that "predicts" that in economic transactions between strangers predicting each other's responses – the optimal level of trust is zero! Economics is based on patriarchal values – devaluing the work of women in child rearing, caring for the old, community volunteering as "uneconomic" in GNP. Economics did not predict the rise of socially-responsible investing (now at \$2.2 trillion in the USA alone, www.socialinvst.org), and textbooks still imply that trusting, caring, sharing, volunteering and cooperating are irrational unless self-serving.

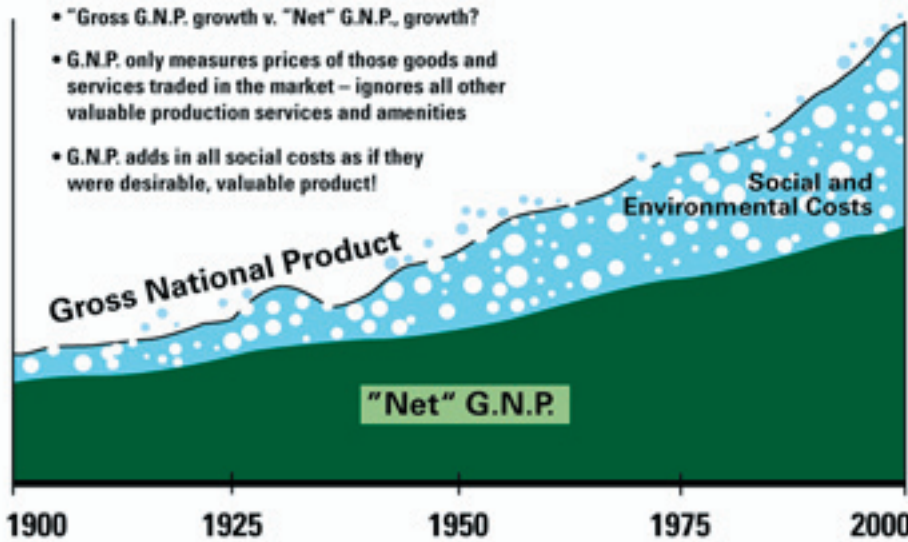
MIT-trained economist, John B. Perkins, author of *Confessions of an Economic Hit Man* (Perkins, 2004), documents the misuse of economics to over-estimate GDP-growth projections to justify the huge World Bank and IMF loans to many developing countries in the 1980s, which ensnared them into unrepayable debt. The best-known economists in the USA are admitting these and other errors, including Paul Krugman, Joseph Stiglitz and Jeffrey Sachs. Unsung women economists revealed the patriarchal bias of economic theories and led the way in pinpointing these and other errors. They devised more realistic models – from Sweden's Alva Myrdal, India's Devaki Jain, Denmark's Esther Boserup, to Argentina's Graciela Chichilnisky, Brasil's Aspasia Camargo and futurist Rosa Alegria, Germany's Inge Kaul, New Zealand's Marilyn Waring, myself and many others in the USA and other countries.

Statistical revisions, including those to overhaul GNP and GDP national accounts, were pledged by 170 governments at the Rio de Janeiro Earth Summit in 1992. (See Figure 8, Gross National Product Problems). They were also recommended by the largest-ever global convening of statisticians of sustainable development and Quality of Life (ICONS) in Curitiba, Brasil October 2003¹¹. Such statisticians have also repeatedly recommended that GNP and GDP record national assets: the value of public infrastructure investments in roads, public health facilities, sewage-treatment, ports, airports, schools and universities that underpin the productivity of modern economies. In too many countries, these asset accounts, which properly balance the public debts undertaken to construct such vital infrastructure, are not recorded. Such public works, buildings and facilities are immensely valuable and should be amortized over their lifetime of use – often over a hundred years. Try running a company like this, where your balance sheet could not include the value of your factories and capital assets! The USA made some of these needed corrections in January 1996, and these "stroke of the pen" corrections accounted for one-third of the budget surplus of the Clinton administration. Canada followed suit in 1999 and went from a deficit to a \$50 billion budget surplus (Henderson, 1999). The investments called for in the Millennium Development Goals, the Monterrey Consensus and other



Figure 8

Gross National Product Problems



©1978 Hazel Henderson • Source: *Creating Alternative Futures*, 1978, 1996, Kumarian Press, West Hartford, CT, USA

Figure 8

proposals, such as the *Global Marshall Plan*, must be properly accounted as assets, since they will also produce dividends for societies as they transition to sustainability.

Today, in our Information Age, we acknowledge the value of investments in Research and Development, management education and employee training programs. Accountants are learning to account for intangible assets, goodwill, brands and other reputational risks and benefits (Allee, 2003). Risk-analysis models, such as those of Innovest Strategic Value Advisors, Inc. (New York, London, Toronto, Hong Kong), now calculate social and environmental risks overhanging a company's balance sheet, which if not recorded, can be overlooked and lead to sudden loss of shareholder value. Multi-billion dollar US public pension funds now require companies in their portfolios to disclose their plans to mitigate risks of climate change. Similar disclosures are mandatory in the European Union. Another area is corporate advertising, which is coming under increasing public criticism. I founded the non-profit EthicMark Institute, which will be based at Case Western University at the Center for Business As Agent of World Benefit, founded by David Cooperider and Judy Rodgers. The EthicMark Institute will recognize advertising campaigns that inspire and enhance the human spirit with the "EthicMark" certification.

The World Bank was catching up with all these statistical innovations – beyond macroeconomic models to multi-disciplinary systems approaches – using all the multiple metrics beyond money to map these diverse aspects of human development and progress. This progress may easily revert to the neoconservative agenda and laissez-faire models of the past. I and my partner, The Calvert Group of socially-responsible mutual funds use the

This malfunctioning source code underlying economics focused on money circulation is still replicating behaviors and organizational structures that imperil human survival under 21st century conditions.

Now, the World Bank is shifting its focus to that 60% of human capital with more health and education investments – recently citing the education of girls as a country's best investment.

multi-discipline approach in our Calvert-Henderson Quality of Life Indicators, which are updated regularly at www.calvert-henderson.com (Figure 9).



Figure 9

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Yet the Bank has not, so far, campaigned to add even public asset accounts to GNP/GDP. Neither the Bank nor the International Monetary Fund (IMF) require the addition of asset accounts, even for infrastructure assets, let alone for education and health – the most vital investments to maintain that 60% of the human capital comprising the wealth of nations. These accounting corrections will shift statistical focus to longer-term and sustainable investments. Brazil is helping the IMF to correct its GNP/GDP accounting. In April 2004, the IMF agreed with Brazil that its vital backlog of infrastructure investments in rapidly-growing urban areas for basic sanitation and other public facilities should not be accounted for in ways that would increase the public debt. However, the IMF only agreed to the correct accounting for these public assets as a "pilot project," an intellectually absurd position. The IMF is still resisting adoption of these corrections due to pressure from Wall Street bond holders, banks and other financial special interests that benefit from high interest rates. This issue can be advanced at the WTO by the Group of 20 and the G-77. The recent appointment by President Bush of neoconservative John Bolton to serve as US Ambassador to the UN may impede such overhauls of GNP/GDP national accounts.

I and other critics of the IMF's many mistakes over the past decades are now calling for the permanent overhaul of their GNP/GDP and all other macroeconomic models. The IMF should not only set up proper accrual accounting of assets for all investments in public infrastructure – but should re-categorize education and public health from "consumption" to "investment" in hu-

The World Bank staffing was also going multi-disciplinary, replacing some of its macroeconomists with sociologists, anthropologists, epidemiologists, educators, and even civic society representatives. Under the neoconservative management of President Paul Wolfowitz, these policy innovations may be reversed. In its 1995 report on the Wealth of Nations, the Bank acknowledged that 60% of this wealth is comprised of human capital and 20% ecological capital. Financial and built capital (factories and monetary assets) represented only 20%. For 50 years the Bank focused most of its attention on "economic" growth of this 20% of countries' wealth. Now, the Bank is shifting its focus to that 60% of human capital with more health and



man capital. The World Bank and the UN System of National Accounts (UN-SNA) should make similar corrections and add nations' public investments in education and public health to these asset accounts and amortize them over 20 years – the time it takes to raise a child to a healthy, well educated, productive adult. It is these accounting corrections that can reveal the opportunities for long-term financial and social returns in the Millennium Development Goals, as Jeffrey Sachs shows in *The End of Poverty*. (Sachs, 2005)

As these statistical innovations reflect the technological changes in our information-based societies and are reported in mass media, citizens in all democratic societies will align with these evolving values. New business school curricula now cover all these new issues and indicators. Pre-eminent is Brasil's Amana-Key Desenvolvimento & Educação in Sao Paulo. Others include [Presidio World College](#) in San Francisco, which offers an MBA in sustainable business, and the Center for Business as Agent of World Benefit at Case Western University, Cleveland, Ohio. Citizens will understand and place education and self-development as the best investment individuals, companies and societies can make in a better future for all. Even neoconservative economics recognizes that education is a "public good," a "positive externality" in economic jargon, i.e., an activity that individuals and private business are unlikely to fund adequately since they cannot capture the full returns to such private investments. Economists still need to clarify the difference between markets ruled by competition and commons – which require coopera-

Economists still need to clarify the difference between markets ruled by competition and commons – which require cooperative rules.

DIFFERING VIEWS OF MARKETS & COMMONS <small>Figure 10</small>	
<small>All such schematizations are, at best, approximations and often culturally arbitrary</small>	
ECONOMISTS	FUTURISTS/SYSTEMS
<p><i>Markets</i></p> <p>Private Sector</p> <ul style="list-style-type: none"> • Individual decisions • Competition • "Invisible Hand" • Anti-trust 	<p><i>Open Systems</i></p> <ul style="list-style-type: none"> • Divisible resources • Win-lose rules • (Adam Smith's rules)
<p><i>Commons</i></p> <p>Private Sector</p> <ul style="list-style-type: none"> • Property of all - Privatization • Monopoly under regulation • Consortia 	<p><i>Closed systems</i></p> <ul style="list-style-type: none"> • Indivisible resources • Win-win rules • Cooperation • Agreements

© Henderson (1995) UN Policy and Financing Alternatives

Figure 10

tive rules. (Figure 10, Differing Views of Markets and Commons), as I argued (Henderson, 1995).

Educators and public health professionals and the majority of citizens can support adequate taxes so crucial to their children's futures. In light of the new brain research, the current practices in US public schools of commercial sponsorship of TV news, sports and events, product advertising, junk-food vending machines and curricula prepared by corporate PR departments – all



As new scorecards of real wealth and human progress are implemented, societies and companies can steer themselves on sounder paths toward order and prosperity.

to supplement budgets – may be ruled illegal. Research shows that children and adolescents have not yet developed forebrain capabilities to override such influences. Teachers can be better paid, and schools will no longer have to fight in annual government budgeting with other expenditures for needed police, fire protection and other public services, and in national budgets, even military weapons.

As all such new scorecards of real wealth and human progress are implemented, societies and companies can steer themselves on sounder paths toward order and prosperity. Companies can hire firms like Truecost to identify avoided costs in full-cost pricing, life-cycle costing and, like Innovest, to perform social and environmental risk-analyses – while fully crediting their intangible assets and investments in R&D. For big companies, these changes are less arduous than for smaller companies, so it is important to also recognize the efforts of small and medium-size enterprises and encourage their progress.

The new GNP/GDP asset accounts will end today's egregious over-stating of public debts and the excuses it offered for excessive interest rates, sovereign bond yields and currency speculation. Developing countries in the HIPIC group are already being relieved of unrepayable, often odious debt under formulas agreed at the July 2005 G-8 Summit in Scotland. Former IMF chief economist Kenneth Rogoff suggested many reforms in his article in *The Economist*, July 24, 2004. I moderated five TV debates on "Reforming International Finance" between Kenneth Rogoff, John B. Perkins, author of best seller *Confessions of an Economic Hitman*, and Sakiko Fukuda-Parr, lead author of the UN's Human Development Report.¹² Even before the G-8 Summit, the IMF's new President, Rodrigo Rato, accepted the need to change many of its socially disastrous policies and to write off more unrepayable debt – largely due to global civic society and public opinion.

In this new century, long-held ideas are changing. The European Union is a new model of integration of formerly warring countries. Despite the "No" votes in France and Holland over the proposed EU Constitution and recent budget squabbles, negotiation, cooperation and multi-lateral agreements are the way forward. The wars in Afghanistan and Iraq have revealed the many problems that, even politicians and military leaders now admit, require diplomatic solutions. New approaches to terrorism now favor funding education and building schools in countries where poor parents have no choice but to send their children to fundamentalist "madrassahs" where they are taught the ways of "jihad" and suicidal "martyrdom" to kill others in the name of God. Societies that pandered excessively to individual immigrants' rights to retain their own culture and language (multiculturalism) are re-balancing toward the needs of societies for inclusive, shared values, languages and the "melting pot." Meanwhile, the search for balance between the rights of individuals and society continues.

In our age of weapons of mass destruction, wars are the most dangerous and ineffective options. We see already in our 21st century that the new weapons of choice are currencies, as well as better diplomacy, intelligence and widely shared information. Investments geared toward the Global Marshall



Plan can help guide the re-prioritizing needed to steer societies toward equitable resource-use and reduction of conflicts (Radermacher, 2004). Insurance policies for peace-keeping forces can reduce military budgets for countries wishing to follow Costa Rica, which abolished its army in 1947. The proposed United Nations Security Insurance Agency (UNSI¹³), a partnership of the Security Council with insurance companies, would assess country risks and collect premiums that would be pooled to train standing UN peace-keeping and humanitarian forces (Henderson, 1995). Reforming and expanding the Security Council is now on the UN's agenda. The UN General Assembly should take up all the alternative financing mechanisms, including those of the 2002 UN Monterrey Consensus and the Global Marshall Plan, so as to implement the Millennium Development Goals. The time has come for global taxes on arms sales, currency trading, airline tickets and e-mail to provide global public goods: education, health care, sounder international financial architecture and peace-keeping.

These human skills now have laid before us a rich array of potentials for astounding, widespread, shared prosperity, peace, and restoring our planet's ecosystems. These new visions and values underlie the United Nations Millennium Development Goals in the UN Global Compact; in the Prague Declaration on Humanizing Globalization; the Global Marshall Plan; the ILO's Report of the Commission on the Human Dimensions of Globalization; and the 16 principles of the Earth Charter, now ratified by hundreds of municipalities, companies and thousands of NGOs in over one hundred countries. The way forward and transition to peaceful sustainable societies is possible.

About the author: Dr. Hazel Henderson is a world renowned futurist, evolutionary economist, a worldwide syndicated columnist, consultant on sustainable development, and author of *Beyond Globalization* and seven other books. Her editorials appear in 27 languages and more than 400 newspapers syndicated by InterPress Service, Rome, New York, and Washington DC. Her articles have appeared in over 250 journals, including (in USA) *Harvard Business Review*, *New York Times*, *Christian Science Monitor*, and *Challenge*, Mainichi (Japan), *El Diario* (Venezuela), *World Economic Herald* (China), and *Australian Financial Review*. Her books have been translated into German, Spanish, Japanese, Dutch, Swedish, Korean, Portuguese, and Chinese.

She sits on several editorial boards, including Futures Research Quarterly, The State of the Future Report, and E/The Environmental Magazine (USA), Resurgence and Futures (UK), and WorldPaper (a Boston-based monthly insert in 25 major newspapers in Europe, Asia, Africa, and Latin America). She is a Fellow of the World Business Academy and co-edited, with Harlan Cleveland and Inge Kaul, the Report of the Global Commission to Fund the United Nations. She also serves on several boards, including Worldwatch Institute (1975-2001), Calvert Social Investment Fund, Cousteau Society, The New Economics Foundation (London, UK), and WETV (Ottawa, Canada). The first version of her Country Futures Indicators (CFI), an alternative to the Gross National Product (GNP), is a co-venture with Calvert Group, Inc.: the Calvert-Henderson Quality-of-Life Indicators.

In addition, she has been Regent's Lecturer at the University of California (Santa

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Barbara), held the Horace Albright Chair in Conservation at the University of California (Berkeley), and advised the U.S. Office of Technology Assessment and the National Science Foundation from 1974 to 1980. She is an active member of the National Press Club (Washington DC), the Social Venture Network, and the World Futures Society (USA). Henderson also shared the 1996 Global Citizen Award with Nobelist A. Perez Esquivel of Argentina.

Footnotes

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- 8) Op-Ed in Sweden's main newspaper, *Dagens Nyheter*, Dec.10, 2004
- 9) Henderson, Hazel (1981) *Politics of the Solar Age*; Doubleday: NY. Henderson co-created the Calvert-Henderson Quality of Life Indicators; see <http://www.calvert-henderson.com>. She is Executive Producer of the new financial TV series, "Ethical Marketplace", airing on PBS stations from March 2005.
- 10) See Ben Cohen's animation video for True Majority at <http://ww11.e-tractions.com/truemajority/run/oreo>
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