

## **CONSEQUENCES OF MARKET CHANGE FOR HUMAN DEVELOPMENT AND GLOBAL LIFE SUPPORT SYSTEMS**

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### **Summary**

There is enough evidence that the changes in markets have negative and positive consequences for human development and global life support systems. In some communities these changes have created wealth and individual opportunities. In industrialized countries living standards have improved and some of their citizens are able to participate better in the global market system. At the same time the world has experienced the widening gap between the rich and the poor with some countries experiencing declines in per capita incomes.

What are the consequences of market change for human development? And how have market changes affected the ecology and life support systems upon which humanity depends? Those are the two principal interrelated questions explored here. The answers vary according to the academic disciplines, premises or research strategies employed. This article takes an interdisciplinary perspective exploring some key economic issues, environmental trends and market changes in historical context.

Adequately understanding or explaining the market's or globalization's complex effects on humanity, ecosystems and nation-states, and the precise degree to which global life support systems have been threatened and will continue to be in peril, is difficult. The implications of this preliminary review, however, are that market-influenced activity has

become a distinctive threat to economic security, food security and health security negatively contributing to human development while continuing in a feedback cycle to further threaten the environment. Despite a few recent and clearly positive business and government initiatives, without serious reforms in policies and laws as well as global economics and the free market system, negative trends will continue.

## **1. Introduction**

The study of markets is often viewed as a handmaiden of business and commerce linked to economic theory with key assumptions such as scarcity in available goods or resources and the need for individual or collective choice among restricted alternatives. Research about markets also examines “supply and demand” behavior often premised on how best to increase wealth or maximize profit for individuals, corporations and governments within an increasingly competitive and globalized economic environment. For a broader assessment of market change on human development, however, one needs to look at economics as a social science asking: “Who controls those markets and in whose interest?” Market change also has implications for the biological and life sciences concerning economic activity’s effects on the environment. An emerging field of ecological economics seeks to measure environmental values better while proposing alternative modeling, pricing and taxation systems. This article provides a brief introduction to examining markets, human development and ecology as a complex set of interrelated phenomena drawing from themes in history, sociology, and political economy, highlighting trends and data from recent United Nations reports.

The most fundamental market change over the last century has been economic globalization, corresponding with an ideological shift embracing market economy principles in many nations. Industrialized countries have also dominated the design, building and control of the world financial markets and trading system. Western capitalist market concepts, actors and structures have largely triumphed over socialist-style economic systems, especially in the 1990s, with the Soviet Union’s collapse. Globalization and Western markets enhanced by free trade have also challenged the viability of purely local, traditional and community-based market systems. Powerful nation-states have promoted those markets through the Bretton Woods system after World War Two and reinforced them in the World Trade Organization (WTO). Regional market systems and trading blocs in Europe, North America, Asia Pacific and Latin America have also emerged to protect national systems through regional or ideological based alliances among countries sharing similar values. Global market-driven consumption increased dramatically in the twentieth century raising living standards in many countries but with increased poverty and serious negative consequences for others and corresponding environmental damage threatening global life support systems.

## **2. Conceptual Issues and Challenges**

Scholarship on human development covers a range of academic disciplines and professional fields. Human development concepts and theories vary widely from the perspectives of philosopher, sociologist, anthropologist, historian, psychologist, biologist, political scientist, geographer, economist or other disciplines. Professional

fields such as education, business and commerce, public administration and management, psychiatry and medicine also tend to view human development in terms of how best to improve human effectiveness and quality of life. They sometimes draw from more critical academic thinking but often with a normative perspective to apply theory and useful research results. Those from interdisciplinary fields such as environmental, sustainable development, or international development studies blend analytical, normative and applied approaches. Analytical perspectives and theories explain what human development is and why and how it occurs. Normative perspectives suggest ways and means to improve the human condition.

Economists and business people have had the most impact on the way markets are studied. Economists sometimes view themselves as social or empirical scientists who try to explain and predict market behavior. Scholarship among economists and those who study business and commerce, however, also aims to maximize human development by understanding and manipulating human response to markets. Growth, development and progress, using biological and natural analogies to describe processes, are powerful notions underpinning economic theory and practice. Human psychological and biological development occurs naturally if the physical body receives sufficient nourishment. The human mind can “grow” through education, culture and social interaction. Societies and nations also grow and develop their economies from industrialization and technical progress or to new social systems allowing more rights and direct benefits to its citizens.

Human development can also imply a positive qualitative change or improvement in human welfare or bettering the overall quality of personal, social and economic life. This can be measured through non-mutually exclusive indicators from: psychological or spiritual fulfillment; to meeting basic personal survival needs for water, food and shelter; to ensuring one’s surrounding environment supports optimum physical health with clean air to breathe and personal safety ensured; to adequate personal incomes and bank account savings; to gross domestic product (GDP or GNP) analyses of marketplace activity noting consumption patterns or economic exchanges; to creating surplus economic wealth and social security through businesses, investments, taxation and voluntary associations which can further community and national development. Optimum human development should, at least, ensure that the species continues and basic needs are met allowing comfort for all in a healthy environment. Whether markets alone can provide this is a matter for debate.

A market refers to a form of human economic exchange. Markets can be clearly defined economic or social institutions or physical places where people can buy essentials such as food and clothing; own or rent their shelter; purchase recreational items such as stereos, televisions or books; buy or rent transportation from owning personal vehicles to purchasing bus rides allowing one to travel freely to and from school or work. Markets can also be virtual places such as money markets, commodity markets, futures markets or stock markets where people can invest in goods, companies or non-essentials and use the Internet or computer terminals in their home or office to do so. Markets have always existed but the open or free “market economy” is associated with Western history and democratic political systems in contrast to a closed or “planned economy” of socialist or communist societies. A “mixed economy” describes qualities of both

systems together. A “traditional” or “primitive” economy in anthropological studies refers to socio-economic exchange in prehistoric societies or in living indigenous or tribal groups practicing ancient customs or traditional forms of exchange. Markets today are strongly influenced by the phenomenon of economic globalization, referring to a process of global economic integration through trade agreements, the power and concentration of multinational corporations, media linkages, labor movements, and free-flow of capital and ideas across borders.

The idea of life support systems is a biological and ecological concept. Humanity needs clean air and water and sufficient food for basic survival. Humans extract these from their natural environments but biological life and cycles dictate that through breath, excretion, death and decay of the human form humanity is returned to the earth and basic building blocks of life. Economic systems and markets have allowed parts of humanity not only to survive, but also to “develop,” grow and prosper. Market systems have also exacerbated ecological impacts, favored a small number of human population in doing so, marginalized opportunities for others, and threatened the very life support systems upon which humanity depends. Humans collectively now exert substantial negative influence on the Earth’s carrying capacity due to sheer numbers, now some six billion people. Humans have been permanently altering ecosystems at alarming rates through consumption, increased market activity and industry-led habitat destruction, deforestation, over-fishing, pollution, genetic engineering replacing or altering traditional agriculture practices, and climate change, as well as other human processes. Scientists, the public, government, politicians and business people debate the degree to which such changes have been helpful or harmful to human development and the environment but it is hard to dispute the facts of dramatic ecological and economic change over the past century.

### **3. Global Markets, Rise of the West, Imperialism and Industrialization**

Anthropologists and historians describing humanity’s biological and cultural evolution over several million years acknowledge the importance of economic exchange through markets as integral to human social interaction. Economics, market relations and control over resources have been fundamental to national development as well as building and sustaining empires throughout history. Scholarship is divided on whether all societies must pass through identical stages to reach the same levels of social and economic development found in Western industrialized societies, and whether in doing so have become more “advanced” or “developed.” Typical of this economic literature, reflecting Cold War themes, was Rostow’s classic 1960 study *The Stages of Economic Growth: a Non-Communist Manifesto*. Many scholars have discredited such “stage” theories of development that suggest all peoples or nations are expected to pass through the same experiences. However, most ideas of progress still imply “advancement” towards industrialization or post-industrial activities, democratic political systems and to open and free societies where individual human rights are respected.

The most significant world market shift still affecting twenty-first century global humanity was Europe’s movement out of the Middle Ages into a “modernization” period characterized by exploration, mercantilism, technology development, trade and colonization beginning in the early 1400s. Prior to that centuries of empires rose and

fell, often disconnected but shifting power from Roman, Byzantine, Chinese, Mongol, and Islamic Centers in the Old World and among Mayas, Aztecs, Incas and others in the New World. Despite vast territories these civilizations, however, remained regional. In Europe a Catholic empire dominated for centuries controlling finance and public affairs, but after 1500 a new economic system arose, paralleling secular scientific developments and a more individualist society linked to the Protestant Reformation. The early 1800s also marked another transition from feudalism to capitalism with new European nation states and the rise of private finance capital supporting colonialist acquisitions, wars and standing armies to defend states and their possessions. This period, from the sixteenth century on, can be characterized as the “Rise of the West” when white Europeans sowed seeds of the present international political and economic system. That system initiated market forces benefiting Europeans and colonists but entrenched injustices and inequities inherent in current global human development and ecological problems.

From the early 1400s onwards, the British, Dutch, French, Portuguese and Spanish began to explore, settle and ultimately conquer many parts of Asia, Africa and the Americas. They carved up the world into spheres of political and economic influence the many effects of which are still apparent today. In doing so Europeans subjugated and destroyed local native populations, while establishing colonies and making territorial claims for their home countries. The European concept of human development then was narrow in social, political, religious, gender and racial terms. Many people had no citizenship or voting rights and had little economic or political power. Natives in the colonies were often not considered human, but animals or subhuman species, at times bought and sold as slaves. The slave market was huge and the demographic movement so large and of such profound impact that Africans captured and shipped to the Caribbean and North America to work in the sugar, tobacco and other plantations contributed substantially to the economic success of emerging empires, the British in particular. Today Africa is still the least developed continent economically with some of the poorest countries. Many communities where African slaves were forcibly settled still remain poor and both class and race continue to divide populations.

Human development in the colonizing era was particularly skewed to the advantage of white Europeans, but especially upper classes or business people. Development favored an emerging mercantilist class or capitalist elites with new corporate structures or companies benefiting the state and individuals. No longer was economic or social advancement or privilege linked only to the church but to individual entrepreneurial initiative. Capitalism grew amidst wars and violent political crisis often driven by republicanism with intellectual and citizen-based movements calling for freedom from imperial and aristocratic rule. Free market capitalism, ironically, however, was also effectively born amidst European economic, social and intellectual hegemony over other cultures, languages and peoples many of whom were subjugated or extinguished through colonial economic and educational policies.

Different schools of thought have debated the reasons for and implications of this major shift. Conservative scholars see capitalism’s founding as positive leading to improved economic growth and social advancement for all. Critical, left-leaning scholarship, however, points to this period as the beginning of a still fundamentally flawed

international economic system. Immanuel Wallerstein and Andre Gunder Frank, among others, pioneered theories about the origins of the modern world system and historical “development of underdevelopment” describing a process of how poorer nations were kept poor through a global economic system dominated by major powers. One factor that furthered the emergence of a world capitalist system was new economic theory building on Adam Smith’s classic 1776 work, *An Inquiry into the Nature and Causes of the Wealth of Nations*. Smith advocated freer trade not dominated by imperial mercantilists, and not restricted by customs duties or import-export quotas.

The rise of the West coincided with significant changes including the Renaissance, the Protestant Reformation, the Scientific Revolution and the democratizing and republican forces of the French and American Revolutions. New scientific ideas in seventeenth century Europe, advanced by Francis Bacon and others, helped further a religious and secular world-view separating humanity from nature and asserting its “dominion” over nature. Some studies in environmental history, ecological thought, and the history of science point to this as the beginning of a modern anti-ecological world-view. It differentiated humans from, and claimed mastery over, nature, an outlook still embraced by many governments, business leaders and scientists today. Among the most significant ecological effects linked to new capitalist markets and trade development was the exploitation of the colonies for minerals and natural resources especially gold and silver, spices, furs, fish and forests. Europeans also established huge sugar, coffee, tobacco, and cotton plantations creating products for sale, trade and use in the home countries.

Not only did European colonists use mostly slave labor on plantations, further encouraging a market that exploited other humans, but radically altered the soil, landscapes, climate and ecological systems in doing so. By focusing on export cash crops through clearing large tracts of land they discouraged local or self-sufficient agricultural production. They also adversely affected local ecology and micro-climates in certain areas encouraging flooding, soil loss and desertification while raising temperatures where larger trees no longer provided protection to the soil or shade for vegetation and animals. Economic policies that controlled imports and promoted exports of finished products from Britain reinforced capitalist wealth in the home country. Raw materials from the colonies for processing manufactured goods fueled the Industrial Revolution. Colonial economic policies implied a strong navy to prevent piracy and protect its overseas interests. Wars over colonies were in large part economic and trade wars. Clearing forests for shipbuilding to support the growing merchant navies and military defense or mining coal, as well as gold and silver often to pay for increased military expenses, substantially altered ecological conditions with economic wealth.

Research on such issues is relatively recent. The climatic and other environmental effects of such an economic market are just beginning to be understood through the new field of environmental history. Mineral and natural resource extraction as well as plantation-related market activity linked to colonization and the beginnings of the world trade system have had profound effects on subsequent patterns in human development and planetary life support systems. Historians have also begun to uncover the beginnings of conservation ideas, scientists and movements that questioned

colonialism's harmful effects on the ecology. These led to the founding of special parks and conservation areas in some colonies that tempered the effects of economic activity. However, these initiatives had a small effect compared to the massive deforestation and resource extraction that fueled the Industrial Revolution and military production.

By the beginning of the nineteenth century most major wars between European states had subsided and Britain had become the world's singular economic power buttressed by its navy and colonies. By 1815 a modern international economic system had been established, industrialization had increased productivity to fuel this new economy, and a "Concert of Europe" assured relative peace among the Great Powers while Great Britain led the Industrial Revolution. Imperialist trade policies and colonial possessions made Britain the world's richest nation and furthest-reaching empire but during the nineteenth century the world's balance of power shifted partly due to global market changes. Although Britain continued to acquire and promote settlement in new colonies, the United States grew, as a powerful and independent industrial nation after the American Revolution, and Germany became a world leader and military power feared by others. By the early twentieth century other nations measured progress, and especially their levels of military preparedness as well as technical training and expertise for industrial development, against Germany's.

Industrialization led to profound changes for human development, especially in its heartland, Britain. A labor movement promoting unionism and socialist ideas attempted to improve working conditions and wages inspired by Karl Marx, Frederick Engels and others' writings. This was a radical response to industrialism's exploitative and capitalist market excesses and one of the most significant nineteenth century wars over market change was between the interests of Capital and Labor. This tension fueled the Russian Revolution, ultimately the two Great Powers that later dominated the Cold War, and remains significant in labor conflicts today. The British Empire had reached its zenith by Queen Victoria's death in 1901 and declined amidst the rising industrial and military might of Germany and the United States. War marked the beginning of the twentieth century, from the South African Boer War and Russian-Japanese war, to World War One. Sustaining empires became a financial burden rather than a market boon and the First World War was substantially expensive in financial and human costs. It led to the weakening of many imperial ambitions, huge national debts and a League of Nations system that initiated a decolonization process through a trustee mandates system.

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## Biographical Sketch

**Wayne Nelles** is a Senior Associate with the Sustainable Development Research Institute (SDRI) at the University of British Columbia (UBC). He has a Ph.D. from the University of British Columbia (UBC) in Comparative and International Education Policy Studies. His research has included work on sustainable development in youth labor policies and programs, higher education trends in sustainable development, as



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