

Sustainable Development: Coverage in Principles of Economics Texts

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Published in the Refereed Proceedings of the 40th Annual
Mountain Plains Management Conference, pp. 107-113.
Denver, CO
October 14-17, 1998

Abstract: In the 1990s sustainable development has moved from a fringe issue to a major topic of concern to environmentalists, business people, and economists. Sustainable development is economic growth that meets the needs of the present without compromising the ability of future generations to meet their own needs. The goal of sustainability challenges many of the standard assumptions regarding the benefits and costs of increasing material production. The goal of this paper is to assess the coverage of sustainable development in principles of economics texts.

JEL Code: A20

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SUSTAINABLE DEVELOPMENT: COVERAGE IN PRINCIPLES OF ECONOMICS TEXTS

Introduction

At many universities, the majority of students in economics classes are business majors, and most business majors do not take more than two principles of economics courses. The principles courses are economists' opportunity to challenge the ideas, values and assumptions of future business managers.

In *Lean and Green Management* (1994, p. 114), Joseph Romm lists Business-Environment Myths including:

- Increasing production and profits requires increasing energy and resource use.
- Pollution is a natural result of business operations.
- Efforts to reduce either resource use or pollution can only hurt the bottom line.
- Environmentalism is a fad best dealt with through better public relations.
- The workplace environment has no important impact on worker productivity.

These myths should concern economists and engender discussion of sustainable development. In the last six years sustainable development moved from a fringe issue discussed mostly among ecologists in small-circulation environmental magazines, to a major topic of interest and concern to environmentalists, business people, and economists. The 1992 Earth Summit Rio de Janeiro, *Sustainable America: A New Consensus* report, and Vice President Al Gore's book, *Earth in Balance* all contributed to raising the visibility of this issue.

International trade, the expansion of GATT, and NAFTA also contributed to increased awareness and concern about economic growth. To some local community, labor, and environmental groups, increased economic output and global competition are perceived as threats and have led to questioning about environmental capacity and potential global disasters. Critics make analogies between today's sustainability advocates and Thomas Malthus' ill-fated predictions. One writer suggested that "although simplicity and less materialism may be virtues, this neo-Luddite vision of Nirvana holds little attraction for most people" (Esty, 1994). Like almost every economic issue, there are many "sides" to this debate.

What is Sustainable Development?

The most frequently cited definition of sustainable development is the 1987 Brundtland Commission report where sustainable development is described as economic growth that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission, 1987). "It [sustainable development] can also be expressed in the simple terms of an economic golden rule for the restorative economy: Leave the world better than you found it, take no more than you need, try not to harm life or other environment, make amends if you do so" (Hawken,

1993). Others have defined sustainability as “eco-efficiency” (Schmidheiny, 1992), and “the foresighted utilization, preservation, and/or renewal of forests, waters, lands, and minerals, for the greatest good of the greatest numbers for the longest time” (Pinchot, 1987).

The different definitions of sustainable development infer, or refer to, a number of economic concepts and issues including, efficiency, pollution, externalities, resources and well-being. The goal of this paper is to address the questions of:

- Is sustainability covered in principles of economics texts?
- How much coverage is given to sustainable development?
- What are authors saying about it and related topics?

Sustainable Development Coverage in Principles Texts ¹

While most authors discuss issues related to sustainable development, only two authors directly refer to the subject. Lipsey and Courant (1996, pp. 688-689) provide the greatest amount of coverage including a two-page summary of the Brundtland Commission report, and a two-page debate of “Growth is Good” versus “Growth is Bad.” Presented in the form of open letters to “ordinary citizens,” the authors’ pro-growth argument is,

“... it is only through further growth that the average citizen can enjoy consumption standards now available only to people in the top 25 percent of income distribution.”

while the anti-growth argument is stated as,

“... now is the time to stop this madness. We must stabilize production, reduce pollution, conserve our natural resources, and seek justice through a more equitable distribution of existing total income ... If we do not halt growth voluntarily, the halt will be imposed on us by a disastrous increase in pollution and a rapid exhaustion of natural resources.”

McConnell and Brue (1996, pp. 393-394) are less dramatic, providing a several page discussion of “Doomsday Models,” comparing resources, population, food, pollution, and industrial output. They conclude that, “the world must make hard decisions to achieve a sustainable society — one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support ... The debate also emphasizes that growth is not an unmitigated good. The impact of an ever-expanding output on the environment and on lifestyles must be taken into account in any evaluation of future growth.”

Related Topics

While most economics texts surveyed here did not directly discuss sustainable development, they do address many related issues including:

- Economic growth as a desired goal

- Economic growth versus development
- Weaknesses of GDP as a measure of economic well-being
- The impact of economic growth on the environment
- Environment and externalities
- Renewable versus nonrenewable resources
- Economic growth through recycling and conservation

Although few of the authors address sustainable development, all authors discuss economic growth. Most authors present economic growth as a desirable goal and some writers correlate economic growth with economic development. McConnell and Brue (p. 380) state that “a growing economy can take on new programs to alleviate poverty and clean up the environment without impairing existing levels of consumption, investment, and public goods production.” But they also provide a short discussion “Is Growth Desirable?” (p. 396). Hall and Lieberman (1998, p. 560) write that “the faster the rate of technological change, the greater the growth rate of productivity, and the faster the rise in living standards.” Furthermore, they state that “when output grows faster than the population, GDP per capita — which we call the average standard of living — will rise” (p. 544). Surprisingly, most authors did not clearly differentiate increases in output from increases in economic well-being. In contrast, E. F. Schumacher, in *Small is Beautiful: Economics As if People Mattered*, a “classic” book on sustainable development, wrote that “the aim should be to obtain the maximum of well-being with the minimum of consumption” (p. 57).

In economic development chapters, many authors present to students the fact that there are other measures of the well-being of people in any society. Most authors note the importance of infant mortality, life expectancy and literacy as additional measures of the quality of life. Baumol and Blinder (1998, p. 523) state that “GDP is not a measure of the nation’s economic well-being.” But all-in-all authors conclude like Mankiv (1997, p. 210): “Earlier in this chapter, GDP was called the best single measure of economic well-being of a society.”

Although most authors did not differentiate economic output from development, they all included a discussion of the weaknesses of GDP as a measure of economic well-being. Each writer provided a discussion of “limitations of,” “what GDP omits,” or “activities not included in” GDP. Included in these discussions is the fact that environmental pollution, to the degree that it is not incorporated in market prices, is not included in GDP. McEachern (1997, p. 699) and others discuss the environmental problems in relation to the lack of enforceable property rights, present the Coase Theorem, and common-pool problem. “Negative externalities are unpriced by-products of production or consumption that impose costs on other consumers or other firms.” A few economists (Arnold, McEachern, and Baumol and Blinder) note that the U.S. Commerce department is developing an alternative GDP measure known as “green accounting.” “GDP as conventionally measured does not net out costs of pollution or the depletion of renewable resources like forests, nor does it ‘charge’ for using up nonrenewable resources” (Baumol and Blinder, p. 526).

All authors discuss the problem of externalities and the environment. The usual topics include water pollution, air pollution and sometimes global warming. Examples used include Chernobyl, acid rain from coal-burning electrical power plants, and the air in Los Angeles. Authors then discuss possible economic solutions including regulation, taxation, and assigning property rights. Parkin

(1998, p. 436) introduces students to the unpopular topic of carbon taxes. Baumol and Blinder (p. 511) provide an interesting summary of the “Virtue of Rising Prices,” which:

1. Discourage consumption and waste and provide an inducement for conservation
2. Stimulate more efficient use of the resource by industry
3. Encourage innovation

Surprisingly, no economist in this survey directly discussed Romm’s first “myth”: increasing production and profits requires increasing energy and resource use. Arnold (1998, p. 693) presents an “Economics of Recycling,” suggesting that “if we want different behavior — on recycling, or anything else that for matter — we must change the benefits and costs of certain behavior.” Romm, Amory Lovins, originator of the concept of “negawatts”², and others have for years suggested the possibility of increasing economic efficiency and improving the environment through conservation.

Conclusion

While sustainable development-related issues are discussed in principles of economics texts, relatively few authors are directly addressing this issue. Most authors continue to portray environmental issues as a negative constraint on the otherwise desirable goal of increased output. For example, O’Sullivan and Sheffrin state that “when a substantial fraction of investment is devoted to fighting pollution, less is available for adding to our regular stock of capital ... the net result is that potential output for the economy is reduced.” Hall and Lieberman write “we can achieve greater worker safety, a cleaner environment and other social goals, but we may have to sacrifice some economic growth along the way” (p. 566). But McConnell and Brue note that “a rising GDP means more garbage, and may mean more pollution and a greater divergence between GDP and economic well-being” (p. 138). The ideas that economic growth can result from conservation and recycling, and indeed that economics is part of ecology, is not adequately addressed in principles of economics texts.

Endnotes

1. *Books in Print* was used to create a list of principles of economics textbooks. All of the major publishers were contacted and asked to supply copies of their texts. A list of texts included in this survey is included in *Appendix A*.
2. In a 1976 *Foreign Affairs* article, Amory Lovins first suggested that utilities be allowed to profit from the sale of energy conservation equipment and other efforts, “essentially selling the absence of energy — thus the term ‘negawatt’ — turning a profit, and improving the environment all while saving their customers money.” Lovins, “Ecology of Commerce,” p. 192.

References

- Arnold, Roger, *Economics*, Southwestern, fourth edition, 1998.
- Baumol, William and Alan Blinder, *Economic Principles and Policy*, HBJ, seventh edition, 1998.
- Esty, Daniel, *Greening the GATT*, Institute for International Economics, 1994.
- Gore, Al, *Earth in Balance*, Houghton Mifflin, 1992.
- Hall, Robert and Marc Lieberman, *Economics: Principles and Applications*, Southwestern, first, 1998.
- Lipsey, Richard and Paul Courant, *Economics*, Harper Collins, eleventh edition, 1996.
- Mankiv, N. Gregory, *Principles of Economics*, Dryden, first edition, 1997.
- Mansfield, Edwin, *Essential Microeconomics and Essential Macroeconomics*, Norton, first edition, 1998.
- McConnell, Campbell and Stanley Brue, *Economics*, McGraw-Hill, thirteenth edition, 1996.
- McEachern, William, *Economics: A Contemporary Introduction*, Southwestern, fourth edition, 1997.
- O'Sullivan, Arthur, and Steven Sheffrin, *Economics: Principles and Tools*, Prentice Hall, first edition, 1998.
- Parkin, Michael, *Economics*, Addison Wesley, fourth edition, 1998.
- President's Council on Sustainable Development, *Sustainable America: A New Consensus*, 1996.
- Romm, Joseph, *Lean and Green Management*, Kodansha, 1994.
- Schumacher, E. F., *Small Is Beautiful*, Harper & Row, 1973.
- World Commission on the Environment and Development, *Our Common Future*, University Press, 1987.

Appendix A

Principles of Economics Textbooks Reviewed

1. Arnold, Roger, Economics, Southwestern, fourth edition, 1998.
2. Baumol, William and Alan Blinder, Economic Principles and Policy, HBJ, seventh edition, 1998.
3. Hall, Robert and Marc Lieberman, Economics: Principles and Applications, Southwestern, first, 1998
4. Lipsey, Richard and Paul Courant, Economics, Harper Collins, eleventh edition, 1996.
5. Mankiv, N. Gregory, Principles of Economics, Dryden, first edition, 1997.
6. Mansfield, Edwin, Essential Microeconomics and Essential Macroeconomics, Norton, first edition, 1998.
7. McConnell, Campbell and Stanley Brue, Economics, McGraw-Hill, thirteenth edition, 1996.
8. McEachern, William, Economics: A Contemporary Introduction, Southwestern, fourth edition, 1997.
9. O'Sullivan, Arthur, and Steven Sheffrin, Economics: Principles and Tools, Prentice Hall, first edition, 1998.
10. Parkin, Michael, Economics, Addison Wesley, fourth edition, 1998.

Appendix B

Some Sources of Information About Sustainable Development

Sustainable Development by David G. Abler

A well-written undergraduate lecture on sustainable development. An excellent starting point for developing an economics and sustainable development class presentation.

<http://host.fptoday.com/abler/sustdev.htm>

Redefining Progress

Redefining Progress (RP) was founded in 1994 as an independent, non-partisan center of research and advocacy to advance the nation's long-term well-being. RP first gained national recognition for its work on indicators in October, 1995, with the publication of a cover story in the *Atlantic Monthly*, "If the GDP is Up, Why is America Down?" written by Clifford Cobb, Ted Halstead and Jonathan Rowe. The article explored the disconnect between "the economy" as measured by economists and reported in the media, and the economy that Americans actually experience. It proposed an alternative to the GDP, called the *Genuine Progress Indicator* (GPI). The GPI was a revised version of the *Index of Sustainable Economic Welfare* (ISEW), which appeared in the book *For the Common Good*, by Herman Daly and John Cobb. Clifford Cobb, who produced the ISEW, also did the principal work on the GPI as a member of the RP staff. The article received a considerable amount of media attention, including appearances on ABC's Nightline and on CNN.

www.rprogress.org/index.html

Affluenza

Affluenza is a one-hour PBS special about materialism, consumption and commercialization. “The program explores how the epidemic that some call *Affluenza* is straining our personal lives and families, eroding our communities and destroying the environment.” The film is highly opinionated and sure to generate classroom debate. Available from Bullfrog Films, www.bullfrog.com.

Schumacher Society

“The Schumacher Society was founded in 1977 in memory of the economist Dr. E. F. Schumacher who is widely acknowledged as one of the foremost thinkers of our age. His works include *Small is Beautiful*, *Good Work* and a *Guide for the Perplexed*. Together with his deep spiritual vision and his rejection of Western materialism and economic exploitation, Schumacher saw the need to give societies, communities and individuals tools for change. The Schumacher Society is at the heart of a network of allied organizations and activities that encourage the spread of ecological and spiritual values.

Tangible expression of the Society's work include *Resurgence* magazine, a bi-monthly ecological journal; a mail order Book service and Green Books publishing house; the international Schumacher College at Dartington, South Devon; and the Small School at Hartland, north Devon. At the centre of the Society's activities are the annual Schumacher Lectures in Bristol.”

The Schumacher Lectures

“The Schumacher Lectures have been held each year in Bristol since 1978 and attended by up to a thousand people. Distinguished speakers have included Wangari Mathaai, Ivan Illich, R.D.Laing, Sir James Goldsmith, Anita Roddick, Vandana Shiva, Hazel Henderson, Fritjof Capra, James Lovelock and Kathleen Raine.”

www.sosig.esrc.bris.ac.uk/schumacher/schusoc.html

Sustainable Universities Project

The three major universities in South Carolina have initiated a sustainable universities demonstration project. Project efforts and many links to other sources of information are available at:

www.sc.edu/sustainableu

Second Nature

Second nature is a nonprofit organization promoting a wide-range of sustainable development efforts. Of particular interest to economists is a list of economics/ecology/environment course syllabi.

www.2nature.org

Environmental Defense Fund (EDF)

EDF is actively involved in environmental, economic and legal issues. Their web site provides reports, practical actions, and a variety of information related to sustainable development.

www.edf.org