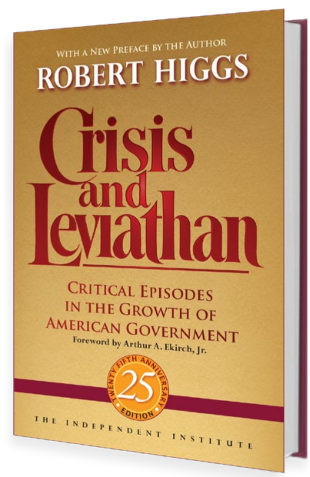
SUBSCRIBE NOW AND RECEIVE A FREE BOOK!

"***The Independent Review*** does not accept pronouncements of government officials nor the conventional wisdom at face value."
—**JOHN R. MACARTHUR**, Publisher, *Harper's*

"***The Independent Review*** is excellent."
—**GARY BECKER**, Noble Laureate in Economic Sciences

Subscribe to ***The Independent Review*** and receive a free book of your choice such as the 25th Anniversary Edition of ***Crisis and Leviathan****: Critical Episodes in the Growth of American Government,* by founding editor Robert Higgs.



Thought-provoking and educational, ***The Independent Review*** is blazing the way toward informed debate. This quarterly journal offers leading-edge insights on today's most critical issues in economics, healthcare, education, the environment, energy, defense, law, history, political science, philosophy, and sociology.

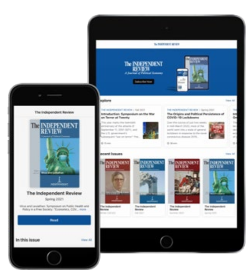
Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!

Order today for more *FREE* book options

SUBSCRIBE

Perfect for anyone on the go! ***The Independent Review*** is now available on mobile devices or tablets on the Apple App Store, Google Play, or Magzter. **Learn More.**

Download on the App Store | GET IT ON Google Play | Available on MAGZTER



Editor
Robert M. Whaples

Co-Editors
Christopher J. Coyne
Michael C. Munger
Gregory J. Robson
Diana W. Thomas

INDEPENDENT INSTITUTE, 100 SWAN WAY, OAKLAND, CA 94621 • 1-800-927-8733 • REVIEW@INDEPENDENT.ORG

FUTUROLOGY

Collapse? The "Dismal" Science Doesn't Think So

Economists' Views of the Future

ROBERT WHAPLES

In the best-seller *Collapse: How Societies Choose to Fail or Succeed* (2005), Jared Diamond confronts the reader with stories of the collapse and even extinction of past societies. He claims ultimately to be a "cautious optimist" (521) about the future, but he still sees a strong likelihood that we are headed globally into decline.

Are we likely to live out such a scenario? After briefly reviewing the history of American economists' thinking about the future, I confront the pessimism of the prophets of decline with the findings of a survey of economists about what the future will bring and the most important economic challenges looming before us. As this essay's title suggests, economists do not credit neo-Malthusian predictions of decline. The economists are instead *very* optimistic about the future. Their worries gravitate more toward problems with governmental programs rather than toward problems with the environment and depletion of resources.

Diamond identifies eight environmental threats that undermined societies in the past, bringing calamity to our ancestors, and he warns that modern societies have added four additional problems, including global climate change and energy

Robert Whaples is a professor of economics at Wake Forest University.

The Independent Review, v. XI, n. 2, Fall 2006, ISSN 1086–1653, Copyright © 2006, pp. 275–281.

shortages.[1] As he puts it, "[m]ost of the twelve threats, it is claimed, will become globally critical within the next few decades: either we solve the problems by then, or the problems will undermine . . . First World societies. Much more likely than a doomsday scenario involving human extinction or an apocalyptic collapse of industrial civilization would be 'just' a future of significantly lower living standards" (2005, 7).

If the history of the economics profession were a sufficient guide, Diamond would have been swiftly inducted into Omicron Delta Epsilon (the economics honors society) and solemnly welcomed to the professional fraternity. After all, economists have been historically a fairly pessimistic group. The moniker "the dismal science" surely stuck for such a long time because so many economists followed the lead of Thomas Malthus ([1798] 1976) in predicting that population growth in the face of resource constraints would inevitably squelch hopes for a broad-based rise in standards of living.[2] Most of the world's economic history up to the time of Malthus *was* fairly gloomy. Discoveries and institutional adaptations brought slow population growth, but the long-term growth rate of income per capita was essentially zero (Easterlin 1996).

Moreover, the economists' pessimism continued even after modern economic growth began, bringing unmistakable evidence of rising incomes to people in Europe and North America by the middle of the 1800s, at latest. As Nobel Laureate Simon Kuznets pointed out to his students, throughout the 1800s most American economists continued this unwarranted gloom: "The economists in 1850 wrote that the progress of the last decade had been so great that it could not possibly continue. And economists at the end of the nineteenth century wrote that the progress of the last half century has been so great that it could not possibly continue during the twentieth century" (quoted in Fogel 2005, 9).

The nay saying continued well into the twentieth century. Robert Fogel (2005) shows that forecasts of economic growth from World War II through the 1950s were too pessimistic as well. Amid a flurry of academic worries about "secular stagnation," however, the U.S. economy charged ahead, with gross domestic product (GDP) eventually expanding more than fivefold between 1950 and the end of the century.

Today, however, there are strong indications that the gloom among economists has evaporated. The evidence of more than two centuries of burgeoning economic growth is difficult to disregard or deny, and economists seem to have revised their

1. The eight traditional threats are "deforestation and habitat destruction, soil problems (erosion, salinization and soil fertility losses), water management problems, overhunting, overfishing, effects of introduced species on native species, human population growth, and increased per capita impact of people" (Diamond 2005, 6); the two additional threats in modern times are buildup of toxic chemicals in the environment and full human utilization of the earth's photosynthetic capacity.

2. In fact, as Levy (2001) shows, the "dismal science" claim was originally part of an attack by traditionalists who derided nineteenth-century political economists' espousal of liberty and opposition to slavery.

expectations and models in the light of these facts. Economic histories now bear titles such as *Growth Triumphant* (Easterlin 1996); a history of global investment in the twentieth century is titled *Triumph of the Optimists* (Dimson, Marsh, and Stanton 2002); and introductory textbooks work through Paul Romer's New Growth Theory, forecasting unchecked economic growth and likening the economy to a perpetual motion machine (see, for example, Parkin 2005).

Do today's economists think this economic growth will continue and spread in the future? Is it time to rename economics the "cheerful science"? The answer to these questions requires a broad-based assessment of economists rather than a collection of supporting anecdotes. Accordingly, in this article, I analyze responses to a questionnaire sent to members of the American Economic Association (AEA) in late October 2005.[3] In the summary and analysis that follow, I assume that this group is representative of the broader group of professional economists. The key findings are italicized.

Economists are very optimistic about the future growth of the American economy. As table 1 indicates, the largest group (48.6 percent) expects income per capita in the United States to grow in the next ten years by slightly less than the rate over the past ten years, and almost as many (40.3 percent) expect it to grow at about the same pace as over the past decade. No respondent expects economic decline. Over the past ten years, the U.S. economy has grown at an unusually rapid pace. In the forty quarters from October 1995 to September 2005 (the ten years preceding the period in which the survey was completed), U.S. real income per capita grew by approximately 2.4 to 2.5 percent per year, which is noticeably higher than the average for the past thirty years or so and higher than the rate for the past sixty years. These economists collectively project the growth rate in the next ten years to be slightly less than in the past ten years. Even if we suppose that the real growth rate falls to 2.0 percent per year,[4] this rate implies that average incomes will rise by approximately 22 percent in the next decade.

Economists predict that strong economic growth will continue into the foreseeable future. As table 2 shows, again the median prediction is for U.S. income per capita to grow at slightly less than the rate at which it has grown over the past sixty years. Almost half (48.7 percent) forecast a growth rate equal to or greater than that in the past sixty years. Over the past sixty years, real income per capita has increased by about

3. The survey was mailed to 210 randomly selected Ph.D.-holding members of the AEA. Because it focuses mainly on the U.S. economy, the survey population was limited to individuals whose undergraduate and graduate degrees are from institutions in the United States. The response rate was 35.2 percent—similar to the response to previous surveys of general AEA membership. Response rates among AEA members in recent surveys range from 26.6 percent to 40.0 percent. See Whaples forthcoming for complete details. Among the survey's respondents, 13.9 percent are female, and 8.3 percent were born outside the United States. As judged on the basis of first names, women made up 18.1 percent of the sample to whom the surveys were mailed. The median year of birth is 1949, with one-quarter born before 1942 and one-quarter after 1960.

4. The survey does not distinguish between nominal and real growth rates, but it is assumed that professional economists would refer to real (that is, inflation-adjusted) growth rates.

Table 1
Predicted Growth in the U.S. Economy (Income per Capita) over the Next Ten Years

Response Choice	Percentage of Respondents
a. negative	0.0
b. zero	1.4
c. positive but considerably less than the rate over the past ten years	8.3
d. positive but slightly less than the rate over the past ten years	48.6
e. about the same as over the past ten years	40.3
f. somewhat higher than over the past ten years	1.4
g. considerably higher than over the past ten years	0.0

Note: Number of respondents = 72.

2.0 percent per year.[5] If real income per capita continues to grow at this rate, incomes will grow more than threefold in the next sixty years, and average income will equal approximately $123,445 in today's dollars. If the growth rate dips slightly to 1.8 percent per year, average income will almost triple, rising to *only* $109,732. Roughly a quarter of the economists predict that growth rates will be considerably less than in the past, but even if we cut the historical growth rate in half, the growth yields an 82 percent increase in the average income sixty years hence.[6] Only a single economist among the respondents predicts decline over the next sixty years.

Economists believe that the United States will continue to be one of the richest countries in the world sixty years from now. Among the respondents, 27.8 percent predict that the

5. Using data from EH.NET's "How Much Is That?" calculator and adding in official estimates for the first three quarters of 2005, the annual growth rate from 1945 to 2005 is calculated to have been 1.82 percent. The measured drop at the end of World War II was unusually large, so the annual growth rate from 1946 to 2005 was 2.07 percent. It is likely that these estimates *understate* real growth, however, because they overstate inflation (Costa 2001).

6. Economists know the amazing power of compound growth. As one respondent to the survey put it, "Sixty years is a long time, countries with half our current real income will reach our income in sixty years if they have annual growth rates of merely 1.2%. Countries that have growth rates of 2.0% per year can reach our current income in sixty years even if they start as low as 30 percent of our current income."

Table 2
Predicted Growth in the U.S. Economy (Income per Capita) over the Next Sixty Years

Response Choice	Percentage of Respondents
a. negative	1.4
b. zero	0.0
c. positive but considerably less than the rate over the past sixty years	22.2
d. positive but slightly less than the rate over the past sixty years	27.8
e. about the same as over the past sixty years	29.2
f. somewhat higher than over the past sixty years	16.7
g. considerably higher than over the past sixty years	2.8

Note: Number of respondents = 72.

United States will have the *highest* income per capita in the world in 2065. The largest group, 70.8 percent, expect the United States to be "not the highest, but in the top tier." Only a single pessimist predicts that this country will fall from the top tier of countries.

Economists expect that within the next couple of generations, many (perhaps most) countries and regions that are currently poor and economically underdeveloped will achieve standards of living equaling or surpassing today's level in the richest countries. The survey asked: "Sixty years from now what countries or regions (if any) will have joined the group of developed nations with an income per capita approximately equaling or surpassing *today's* level in the U.S., Canada, Japan, Australia, and western Europe?" Approximately 14.9 percent left the question blank, and it was easy for respondents to leave countries off the list. Of those who answered the question, 61.9 percent put China on the list (with another 4.8 percent rating it as a "maybe"). Two-thirds mentioned other places in East Asia, with South Korea mentioned by name by nearly half and with frequent mentions of Taiwan, Malaysia, and Thailand; 32.5 percent mentioned India; 39.7 percent put all or parts of Latin America on the list, with Chile mentioned most frequently, followed by Brazil and Mexico; 36.5 percent listed all or parts of eastern Europe. Only 4.8 percent said that no other countries would join the list of developed countries.

However, most economists expect all or most of sub-Saharan Africa to remain poor. The survey asked: “Sixty years from now what countries or regions (if any) will have high levels of absolute poverty—i.e., 20 percent or more of the population living on an income of $2 per day or less (in real 2005 dollars)?” According to Sala-i-Martin, in 1998 the percentage of people living on $2 or less per day (in 1996 dollars) was 63.6 percent in Africa, 15.6 percent in Asia, and 10.5 percent in Latin America. Greater than 20 percent of the population in most African countries listed—except for Mauritius (0 percent), Botswana (9 percent), Gabon (9 percent), Guinea (18 percent), and South Africa (19 percent)—lived on $2 per day or less. The figure reached 89 percent in Tanzania, 82 percent in Ethiopia, 70 percent in Nigeria, and 63 percent in Kenya, for example. Among Asian countries, the fraction was 19 percent in China, 23 percent in Pakistan, 34 percent in Bangladesh, and 49 percent in Nepal; among Latin American countries the fraction was 47 percent in Honduras and Nicaragua, 40 percent in Bolivia, 25 percent in Guatemala, and 22 percent in Paraguay (2002, 38–42).

Among those who answered the survey question, 94.1 percent believe that all or parts of Africa, especially sub-Saharan Africa, will continue to have high rates of absolute poverty (20 percent or more living on $2 per day or less) sixty years from now. A few specifically exempted South Africa from the list. No other country or region was mentioned by more than 10 percent of the respondents, although Haiti was listed by 8.8 percent. Only 5.9 percent said “none.”

The upshot is that although most economists see a poor future for most of Africa, they are very optimistic about the economic future of almost every other part of the world. Economics indeed seems to have become the cheerful science.

The final two questions of the survey ask: “What will be the three most important economic challenges facing the United States over the next ten years?” and “What will be the three most important economic challenges facing the United States over the next sixty years?”

Most respondents gave very short answers, which I have attempted to group meaningfully. According to these economists, the most important economic challenges the U.S. economy is likely to face in the next decade are tied to aging, Social Security, and pensions (44.6 percent); health care and health insurance, including Medicare and Medicaid (41.9 percent); trade imbalances and globalization (39.2 percent); federal budget deficits and debt (32.4 percent); educational inadequacies (21.6 percent); energy (also 21.6 percent); government regulation (13.5 percent); and terrorism, war, and military spending (13.5 percent). Other challenges mentioned by more than three respondents pertain to (in order of frequency of mention) low savings, infrastructure, immigration, and inequality.

The most important challenges foreseen over the next sixty years are tied to aging, Social Security, and pensions (50 percent); health care and insurance (34.3 percent);

education (24.3 percent); trade, globalization, and maintaining competitiveness (also 24.3 percent); energy (21.4 percent), terrorism, war, and military spending (18.6 percent); the environment (17.1 percent) (three respondents specifically mentioned global warming); government regulation (14.3 percent); and inequality and sustaining productivity growth (both 12.9 percent). Other issues mentioned by more than three people include (in order of frequency) federal budget deficits and debt, immigration, low savings, and infrastructure.

Thus, most economists are not worried that we will run out of resources or hopelessly wreck the environment, crippling economic growth in a Malthusian fashion. I developed the survey in anticipation of teaching, with two colleagues from biology, a seminar modestly titled "The Future of Humanity." What struck us and our students is the paucity of references to concerns about the environment and resources, as emphasized in books such as Diamond's *Collapse*. Instead, many (most?) of the challenges listed by these economists concern dimensions of the economy where government programs play a large role (for example, pensions, medical care, and education) or where government actions are identified as the source of difficulty (for example, budget deficits and misregulation).

References

Costa, Dora L. 2001. Estimating Real Income in the United States from 1888 to 1994: Correcting CPI Bias Using Engel Curves. *Journal of Political Economy* 109, no. 6: 1288–310.

Diamond, Jared. 2005. *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking.

Dimson, Elroy, Paul Marsh and Mike Staunton, 2002. *Triumph of the Optimists: 101 Years of Global Investment Returns*. Princeton, N.J.: Princeton University Press.

Easterlin, Richard. 1996. *Growth Triumphant: The Twenty-first Century in Historical Perspective*. Ann Arbor: University of Michigan Press.

Fogel, Robert W. 2005. Reconsidering Expectations of Economic Growth after World War II from the Perspective of 2004. National Bureau of Economic Research (NBER) Working Paper no. 11125 (February). Cambridge, Mass.: NBER.

Levy, David M. 2001. *How the Dismal Science Got Its Name: Classical Economics and the Ur-Text of Racial Politics*. Ann Arbor: University of Michigan Press.

Malthus, Thomas R. [1798] 1976. *An Essay on the Principle of Population*. New York: W. W. Norton.

Parkin, Michael. 2005. *Economics*. 7th ed. Boston: Addison Wesley.

Sala-i-Martin, Xavier. 2002. The World Distribution of Income (Estimated from Individual Country Distributions). National Bureau of Economic Research (NBER) Working Paper no. 8933. Cambridge, Mass.: NBER.

Whaples, Robert. Forthcoming. Economists' Voices: Where Is There Consensus on Policy Debates? *The Economists' Voice*.