

New economic and financial indicators of sustainability

James Pittman, Kevin Wilhelm

First published: 15 August 2007

<https://doi.org/10.1002/ir.213>

Citations: 4

Abstract

Financial accounting methods fall short of fully accounting for the relative sustainability of college and university operations. Management of social, environmental, and economic performance will be aided by changes to and new developments in financial accounting practices to complement other indicators of sustainability.

References

Alexander, J. R. *History of Accounting*. New York: Association of Chartered Accountants in the United States, 2002. Retrieved September 2, 2006, from http://www.acaus.org/acc_his.html.

[Google Scholar](#) 

Armstrong, K. "Economic Valuation of Duke Forest." Unpublished paper. 2006.

[Google Scholar](#) 

AWG. Sustainable Development Performance 2004. Retrieved June 2006, from http://www.awg.com/assets/sustainable_development/2004/sust_prof_data.htm.

[Google Scholar](#) 

Azar, C., and Holmberg, J. "Defining the Generational Environmental Debt." *Ecological Economics*, 1995, 14, 7-19.

[Web of Science®](#)  [Google Scholar](#) 

Bent, D., and Richardsen, J. *The SIGMA Guidelines Toolkit: Sustainability Accounting Guidelines*. London: SIGMA Project, 2003.

[Google Scholar](#) 

Bloomberg. Market Data Fact Sheets. 2007. Retrieved February 23, 2007, from <http://www.bloomberg.com>.

[Google Scholar](#) 

Brinkman, P. " The Economics of Higher Education: Focus on Cost." In M. Middaugh (ed.), *Analyzing Costs in Higher Education: What Institutional Researchers Need to Know*. New Directions for Institutional Research, no. 106. San Francisco: Jossey-Bass, 2000.

[Google Scholar](#) 

Costanza, R., and others. " The Value of the World's Ecosystem Services and Natural Capital." *Nature*, May 15, 1997, pp. 253-260.

[Google Scholar](#) 

Cropper, P., and Cook, R. " Activity-Based Costing in Universities: Five Years On." *Public Money and Management*, 2000, 20(2), 61-68.

[Web of Science®](#)  [Google Scholar](#) 

De Groot, R. S., Wilson, M. A., and Boumans, R.M.J. " A Typology for the Classification, Description, and Valuation of Ecosystem Functions, Goods, and Services." *Ecological Economics*, 2002, 41, 393-408.

[Web of Science®](#)  [Google Scholar](#) 

de la Torre, I., Batker, D., and Pittman, J. *Special Benefit from Ecosystem Services: An Economic Analysis of King Conservation District Activities*. Seattle, Wash.: Earth Economics, 2006.

[Google Scholar](#) 

Elkington, J. *Cannibals With Forks: The Triple Bottom Line of the 21st Century*. Gabriola Island, B.C.: New Society, 1998.

[Google Scholar](#) 

Forum for the Future. Ten Years of Transformation: Annual Report, 2006. London: Forum for the Future, 2006.

[Google Scholar](#) 

Global Reporting Initiative. Economic Performance Indicators, G3 Framework. 2006. Retrieved February 13, 2007, from <http://www.globalreporting.org/ReportingFramework/G3Online/PerformanceIndicators>.

[Google Scholar](#) 

Green Campus Initiative. Green Campus Initiative Loan Fund. Cambridge, Mass.: Harvard University Press, 2002. Retrieved September 2006, from <http://www.greencampus.harvard.edu/gclf>.

[Google Scholar](#) 

Hansen, D., and Mowen, M. *Management Accounting*. Cincinnati, Ohio: South-Western, 2000.

[Google Scholar](#) 

Johnson, T., and Kaplan, R. *Relevance Lost: The Rise and Fall of Management Accounting*. Boston: Harvard Business School Press, 1987.

[Google Scholar](#) 

LaMore, R. "The Role of Institutional Investment Policies in Creating a Sustainable World." Paper presented at the Association for the Advancement of Sustainability in Higher Education Conference, Tempe, Ariz., October 2006.

[Google Scholar](#) 

Lloyds of London. *360° Risk Project: Catastrophe Risk Project*. London: Lloyds of London Insurance, 2006.

[Google Scholar](#) 

O'Guin, Michael. *The Complete Guide to Activity-Based Costing*. Upper Saddle River, N.J.: Prentice Hall, 1991.

[Google Scholar](#) 

Orlowski, M. "Sustainable Endowments: Harnessing University Investment Power." Paper presented at the Association for the Advancement of Sustainability in Higher Education Conference, Tempe, Ariz., October 2006.

[Google Scholar](#) 

Packard Foundation. Building for Sustainability: The Sustainability Matrix. 2002. Retrieved February 7, 2007, from <http://www.bnim.com/fmi/xsl/research/packard/index.xsl>.

[Google Scholar](#) 

Pagani, Freda. Comments during the plenary session “ Rebuilding as We Sail: Creating New Norms for Sustainability” at the Association for the Advancement of Sustainability in Higher Education Conference, Tempe, Ariz., October 2006.

[Google Scholar](#) 

Pearce, D., and Atkinson, G. “ Capital Theory and the Measurement of Sustainable Development: An Indicator of Weak Sustainability.” *Ecological Economics*, 1993, 8, 103–108.

[Google Scholar](#) 

Pearce, D., Markandya, A., and Barbier, E. B. *Blueprint for a Green Economy*. London: EarthScan, 1989.

[Google Scholar](#) 

Pittman, J. “ Living Sustainability Through Higher Education: A Whole Systems Design Approach to Organizational Change.” In P. Corcoran and A. Wals (eds.), *Higher Education and the Challenge of Sustainability: Problematics, Promise and Practice*. Dordrecht, Netherlands: Kluwer Academic, 2005, pp. 199–212.

[Google Scholar](#) 

Pittman, J. “ Economic Model of Costs, Benefits, and Externalities of Prescott College Crossroads Center Solar Photovoltaic System.” Unpublished paper. 2006.

[Google Scholar](#) 

Pittman, J. “ Integrating Ecological Economics With System Dynamics Modeling.” Lecture and discussion from Systems Thinking in Action course, Bainbridge Graduate Institute M.B.A. Program, 2007.

[Google Scholar](#) 

Richardson, J. “ Accounting for Sustainability: Measuring Quantities or Enhancing Qualities?” In J. Richardson and A. Henriques (eds.), *The Triple Bottom Line: Does It All Add Up? Assessing the Sustainability of Business and CSR*. London: EarthScan, 2005, pp. 34–44.

[Google Scholar](#) 

Schwartz, P., and Randall, D. An Abrupt Climate Change Scenario and Its Implications for United States National Security. Risk Analysis Report to the U.S. Department of Defense. 2003. Emeryville, Calif.: Global Business Network, 2003.

[Google Scholar](#) 

Sofen, A., and Wirzbicki, A. "A Conflict Relationship: Harvard Supported South Africa Through Investments but Partially Divested Under Protest." In H. F. Vetter (ed.), *Harvard Honors Nelson Mandela*. Cambridge, Mass.: Cambridge Forum, n.d. Retrieved February 9, 2007, from http://www.harvardsquarelibrary.org/mandela/20_conflicted_relationship.html.

[Google Scholar](#) 

Swiss Re. *Opportunities and Risks of Climate Change*. Zurich: Swiss Re Insurance, 2006.

[Google Scholar](#) 

Tait, F. "Enterprise Process Engineering: A Template Tailored for Higher Education." *CAUSE/EFFECT*, 1999, 22(1). Retrieved February 9, 2007, from <http://www.educause.edu/ir/library/html/cem/cem99/cem9919.html>.

[Google Scholar](#) 

Taplin, J., Bent, D., and Aeron-Thomas, D. "Developing a Sustainability Accounting Framework to Inform Strategic Business Decisions: A Case Study from the Chemicals Industry." Unpublished paper, 2006.

[Google Scholar](#) 

Victor, P. "Indicators of Sustainable Development: Some Lessons From Capital Theory." *Ecological Economics*, 1991, 4, 191–213.

[Google Scholar](#) 

Wessex Water. Sustainability Indicators, 2005. Retrieved June 2006 from <http://www.wessexwater.co.uk/strikingthebalance2005/finances/index.aspx>.

[Google Scholar](#) 

World Commission on Environment and Development. *Our Common Future*. Oxford: Oxford University Press, 1987.

[Google Scholar](#) 

ABOUT WILEY ONLINE LIBRARY

[Privacy Policy](#)

[Terms of Use](#)

[About Cookies](#)

[Manage Cookies](#)

[Accessibility](#)

[Wiley Research DE&I Statement and Publishing Policies](#)

[Developing World Access](#)

HELP & SUPPORT

[Contact Us](#)

[Training and Support](#)

[DMCA & Reporting Piracy](#)

OPPORTUNITIES

[Subscription Agents](#)

[Advertisers & Corporate Partners](#)

CONNECT WITH WILEY

[The Wiley Network](#)

[Wiley Press Room](#)

Copyright © 1999-2025 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

WILEY