

Introduction to Economic Accounting Practices

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In this accounting note I discuss a framework for understanding the different economic accounting practices that are used in the economics profession, such as Economic Impact, Benefit-Cost, Industry Contribution, and Cost-Effectiveness. I distinguish between Indicator/Investment accounting and Managerial/Stakeholder accounting to help clarify the purpose and approach for each commonly used accounting practice.

Issue

People working in industry, government, and interest groups often come across economic accounting practices, such as Benefit-Cost Analysis, Economic Impact Analysis, and national economic accounting series such as Gross National Product. Given that economic accounting is often not part of professional curriculums in finance and public policy, this encounter with economic accounting often leads to questions as to why one type of accounting is used over another, and if economic accounting follows generally accepted accounting principles like financial accounting.

Generally speaking, economic accounting practices use a double-entry bookkeeping system in which the corresponding entries are supply and demand (also presented as production and income). In reference to the familiar financial bookkeeping, though, you may hear economists refer to economic accounting as quadruple-entry bookkeeping, meaning that economic accounting keeps track of both sides of the transaction in comparison to financial accounting that keeps track of debits and credits on one side only - either supply or demand - but not both. As with financial accounting, this system of double-entry bookkeeping supports management decision-making, pro forma planning and budgeting, and performance reporting.

In this accounting note I discuss some of the economic accounting practices that are most frequently encountered by people working in economic development.

Discussion

When discussing economic accounting, I find it helpful to differentiate Economic Indicator Accounting from Economic Investment Accounting. Economic Indicator Accounting is used to track and report on the performance, or the future projected performance, of an economy. Economic Investment Accounting is used to analyze the return on a proposed investment and to view different aspects of a portfolio of investments.

Borrowing from the business accounting discipline, I also separate economic accounting into managerial accounting practices and those that follow generally-accepted accounting principles. Managerial accounting practices are specific to an organization and their production process, while practices that follow generally-accepted accounting principles apply across all organizations and economies. Managerial practices are internally used, while practices that follow generally-accepted accounting principles are used both internally and by external stakeholders.

Let's use National Income and Product Accounting as an example. This accounting practice uses generally-accepted principles to account for production and income in an economy during specific time periods. Reports for Gross National Product and other indicators of the performance of an economy are generated from the keeping of these accounts. Using our categories discussed above, National Income and Product Accounting is an example of Economic Indicator Accounting that follows generally-accepted accounting principles. With this type of accounting, for example, we are assured that reported Gross Local Product numbers are consistently defined across all local economies within a nation, and that Gross National Product is consistently defined across nations. This information is important for those who are responsible for managing an economy through fiscal and monetary policy and through investments that increase economic productivity.

Gross National Product and other economic indicators are often used by private organizations as well. Having a set of consistently-defined indicators over time and geography allows businesses to develop their own managerial economic indicator accounting. For example, businesses develop their own forecasts for revenue and market demand using these time series of economic indicators. These market forecasts are an example of managerial Economic Indicator Accounting that is specific to an organization. I often see industry associations produce industry forecasts, and then member organizations use these forecasts to prepare revenue forecasts for their own business. As in this example, often these managerial practices rely on economic

indicators that are developed using generally-accepted accounting principles, such as the National Income and Product Accounts.

Turning now to Economic Investment Accounting, the practice of Benefit-Cost Analysis is often required by federal agencies to evaluate economic return on investments. Benefit-Cost Analysis is an example of an Economic Investment Accounting practice that follows generally-accepted accounting principles. A Benefit-Cost Ratio for an investment is a standard measure of the return on investment that can be used to compare investments across organizations and geographies and time. This standardization allows decision-makers to know that they are comparing apples with apples, so to speak, when considering funding of investment opportunities.

Cost Effectiveness Analysis is an example of managerial Economic Investment Accounting. Unlike Benefit-Cost Analysis, an organization accounts for its cost effectiveness in a manner that is specific to its process of delivering a program. That is, an organization may create a managerial accounting system to help improve its process of delivering its program, thereby improving its return on investment in the program. While Benefit-Cost Analysis provides a standardized accounting of the return on investment for a program, Cost Effectiveness Analysis provides managerial accounting to improve operations and the return on investment. Economists sometimes refer to impact and process analysis to differentiate between accounting for the return on investment (measuring benefits given the cost of the program) versus accounting to improve program operations which, in turn, increases return on investment.

When working with clients, I find that using these distinctions between Indicator/Investment Accounting and Managerial/Stakeholder Accounting helps clarify the purpose and approach that is being used for analysis and reporting. The first step is to identify which quadrant the issue falls in. Then we can choose the appropriate accounting practice and define the scope for the analysis.

In the figure below, I list the commonly used accounting practices that fall within each quadrant. A practice is listed in the Economic Indicator column or the Economic Investment column based on its primary purpose: Economic Indicator practices primarily track or project performance indicators, while Economic Investment practices primarily report on return on investment. A practice is listed in the Managerial or Stakeholder row based on its audience: Managerial practices are for internal staff to manage and improve performance specific to their operations, while Stakeholder practices are for both internal and external parties using generally-accepted principles to allow for comparisons across geographies and organizations.

Common Economic Accounting Practices

Managerial Accounting (operation-specific principles)	Portfolio Accounting Market Analysis Multi-Criteria Decision Analysis	Portfolio Accounting Factor Cost Analysis Cost Effectiveness Analysis
Stakeholder Accounting (generally-accepted principles)	Economic Impact Analysis Industry Contribution Analysis National Income and Product Accounts Industry Economic Accounts	Benefit-Cost Analysis
	Economic Indicator	Economic Investment

Portfolio accounting is listed in both columns, since organizations use portfolios to track and project economic indicators for their portfolio of investments, but also to analyze return on investment for potential portfolios, crossing the boundary between Economic Indicator and Economic Investment accounting. Other practices may blur the lines as well, as when Cost Effectiveness Analysis is used to manage a program but also to improve program processes to increase return on investment.

Guidance

I list the purpose for and description of commonly used economic accounting practices in the table below. This list is meant to guide the selection of an economic accounting practice for the purpose at hand. For more detailed guidance on each accounting practice, you can find papers, guides, and notes on our website, on government websites, and at university research centers.

Accounting Practice	Purpose	Description
National Income and Product Accounts	Record and report data on macroeconomic indicators, allowing public and private decision-makers to track performance and adjust near-term resources and plans accordingly.	These economic indicator data are collected and reported following generally-accepted principles, allowing for comparison of income, employment, earnings, and other indicators over time and across local, state, and national economies.
Industry and Regional Economic Accounts	Record and report data on structural economic indicators, allowing public and private decision-makers to track and adapt to changes in industry requirements and life cycles.	These economic indicator data are collected and reported following generally-accepted principles. These data form the basis of economic impact and contribution analyses through the use of industry input-output matrices, industry-occupation matrices, and other data on the structure and scale of regional industry output at a point in time.
Economic Impact Analysis	Project changes to economic indicators caused by an event, investment, or policy, allowing decision-makers to understand how an event, investment, or policy affects performance goals.	This practice follows generally-accepted principles to project pro forma changes to economic indicators back through the supply chain and forward through the spending of wages that result from a change in industry production. The projected changes are based on the structural form of the economy as reported in the national Industry Economic Accounts. Projections may differ from realized impacts due to differences between national and local industry structures.
Industry Contribution Analysis	Project the contribution of an industry's production to economic indicators, allowing decision-makers to understand the importance of an industry to the performance of an economy.	This practice follows generally-accepted principles to calculate pro forma contribution to economic indicators back through the supply chain and forward through the spending of wages that result from the current level of industry production. The contribution is based on the structural form of the economy as reported in the national Industry Economic Accounts. To the extent that

Accounting Practice	Purpose	Description
Benefit-Cost Analysis	Estimate the net public and private benefits of an investment or program, allowing decision-makers to compare the return on investment for alternative uses of scarce resources.	local structures differ from this national structure, the pro forma contribution will differ from the realized contribution in a local economy. This practice follows generally-accepted principles to estimate net private and public benefits and return on investment, taking into account inflation and the time value of money. Benefits are changes to economic productivity that result in savings to industry and households. These changes to economic productivity are a cause behind economic development. The effects of these changes to productivity are accounted for through Economic Indicator accounting.
Cost Effectiveness Analysis	Analyze program operations and participation to help managers improve return on investment.	This managerial accounting practice analyzes and reports on operation processes to identify changes that management can make to improve cost effectiveness. This accounting practice is typically performed as a study for a specific program, with appropriate methods and reporting based on the program design and implementation. The results are specifically not transferable to other programs, although this accounting practice does identify best practices that can be applied across programs and organizations.
Portfolio Analysis	Analyze industry and investment portfolios to help managers track and achieve performance goals for the economy and adapt to structural economic changes.	This managerial accounting practice organizes economic indicator and investment accounting records into portfolios of industries and investments. Through this organization of records into portfolios, managers gain insights into how to improve return on investment and economic performance by changing their industry and investment mix. This

Accounting Practice	Purpose	Description
		accounting does allow for peer performance comparison across locations and time and is useful for creating performance benchmarks.
Multi-Criteria Decision Analysis	Project the impact of changes to an industry portfolio on economic indicators, allowing managers to understand the effect of alternative plans on achieving multiple performance goals.	This managerial accounting practice projects the impact on economic performance from changes to industry portfolios, using weights for each economic indicator to calculate performance scores. Managers use this accounting practice to identify changes that will result in hitting performance goals across multiple criteria, which is increasingly important given the many dimensions of sustainable development.
Factor Cost Analysis	Analyze the comparative advantage of locations on factor and industry productivity, allowing managers to develop plans based on industry productivity and development.	This managerial accounting practice analyzes factor costs at different locations, identifying places that provide a competitive advantage for industry by increasing productivity. This practice is typically performed as a study, and is specific to a time period, current industry structure, and current local investment in infrastructure that affects economic productivity.
Market Analysis	Analyze industry markets to identify opportunities and threats, allowing managers to adapt their portfolios to market changes.	This managerial accounting practice reports on economic indicator trends related to an industry's or organization's market demand and supply. These analyses can be specific to an organization and its competitive situation, or to the industry situation as a whole. This accounting practice may be implemented as an ongoing process to support revenue and resource

Accounting Practice	Purpose	Description
		forecasting, or as a periodic process or study to support planning and budgeting.