

## **Incorporating the Study of Economic Indicators into the Accounting Curriculum**

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*Colleges and employers have long recognized the importance of requiring business majors to take liberal arts courses to strengthen their decision making ability. However, many employers find this ability lacking in recent graduates, which may be a result of educators not clearly linking liberal arts courses to business courses. In this paper, we propose a method to incorporate the study of economics, a social science, into the accounting curriculum to facilitate stronger decision making in business.*

### **INTRODUCTION**

For approximately half a century, business schools have recognized the importance of including a liberal arts component in the list of courses required by its graduates. The inclusion of these liberal arts courses is believed to emphasize skills that business graduates will need to become effective future leaders and decision makers. These skills include improved communication abilities, the application of ethical models to ambiguous circumstances, analytical ability and critical thinking skills, and a better understanding of the country and world as a whole. In fact, in order for a business school to be accredited by AACSB International (Association to Advance Collegiate Schools of Business), inclusion of these liberal arts classes is a must (see Eligibility Procedures and Accreditation Standards for Business Accreditation for AACSB International, Revised July 1, 2009).

Employers also recognize the value of including liberal arts courses in business curricula. For example, Roger Smith, the former CEO of General Motors (1987) stated, “Liberal Arts may ultimately prove to be the most relevant learning model. People trained in the Liberal Arts learn to tolerate ambiguity and to bring order out of apparent confusion. They have the kind of sideways thinking and cross-classifying habit of mind that comes from learning, among other things, the many different ways of looking at literary works, social systems, chemical processes, or languages.” According to Roberts T. Jones (2005, 35), the President of Education and Workforce Policy, LLC, “Employers do not want, and have not advocated for, students prepared for narrow workforce specialties.” Instead, Jones—as well as many other writers—pleads with colleges not to neglect liberal arts, social sciences, and humanities when developing curricula for the business schools (e.g., see Rabuzzi 2001, Durden 2003, Sharpe and Pritchett 2004, Jones 2005).

Even though many business schools include a liberal arts component, significant difficulties still exist. Roberts T. Jones (2005, 34) reports that businesses have been finding “...weaknesses amongst

recent graduate hires in the following basic academic areas: writing, math, science, information technology, and working knowledge of global integration. In addition...business reports a lack of knowledge of application and analysis. Finally, students often come to the workplace ill prepared in the areas of teamwork, diversity, ethics, and lifelong learning. As a result, employers spent more than \$40 million for remedial programming last year.”

One reason that might explain why the recent graduates discussed by Jones above are still ill-prepared despite being exposed to liberal arts courses is that students have difficulty bridging the gap between the general studies and business courses. Chew and McInnis-Bowers (2004) discuss a common attitude among professional students: “Liberal arts, or general education, classes are to be quickly checked off a list of graduation requirements” (59). The authors explain that students often view these courses as mere “filler” until they are able to focus on what are perceived to be the more relevant business courses. In addition, students are either unable or unwilling to see a link between their liberal arts requirements and their business classes. According to the Association of American Colleges and Universities (2003), “The fragmentation of the curriculum into a collection of independently ‘owned’ courses is itself an impediment to student accomplishment, because the different courses students take, even on the same campus, are not expected to engage or build on one another. Few maps exist to help students plan or integrate their learning as they move in and out of separately organized courses, programs, and campuses. In the absence of shared learning goals and clear expectations, a college degree more frequently certifies completion of disconnected fragments than of a coherent plan for student accomplishment.” While there may be many examples that could be used to illustrate a lack of connectivity between liberal arts and business courses, one specific example (and the focus of this paper) is the potential lack of a connection between economics (typically considered to be a social science) and accounting.

Typically, a business major is required to take two economics courses, microeconomics and macroeconomics, which address various economic indicators. Chapters in microeconomics textbooks frequently cover supply, demand, elasticity, and efficiency, while common topics covered in a macroeconomics course include GDP, inflation, prices, wages and unemployment, capital markets, aggregate supply and demand, and labor markets. In general, both of these required liberal arts courses explain how economic indicators work and their impact in the global economy, but they do not necessarily teach students how they can be used to make informed business decisions.

On the other hand, accounting courses teach students what to do once the business decisions have been made with respect to journal entries and financial statement disclosure (e.g., how to account for portfolio investments, or accounting for bonds whose interest rates are above or below the market rate). In effect, a crucial link is missing between the economics courses (understanding the economy in order to make decisions) and the accounting courses (what to do once the decisions are made); the missing link is how to use economic indicators to make intelligent business decisions. At one time accountants were not included in decision making, but were seen only as the professionals who recorded transactions once they had been completed. But the accounting profession has changed and accountants, especially controllers and accounting department managers, are frequently relied upon for input in the financial decision making process. Even if these accountants are not asked for input before decisions are made, many accountants eventually become the senior decision makers in organizations. Consequently, a strong understanding of the relationship between economic trends, financial decision making, and financial accounting is crucial. Using the backdrop of the book *The Secrets of Economic Indicators* by Bernard Baumohl (2005), the remainder of this paper will first discuss the most important economic indicators, followed by suggestions for how to incorporate a discussion of the indicators into the accounting curriculum, and conclude with a final overview.

## **IDENTIFYING THE MOST APPROPRIATE ECONOMIC INDICATORS**

Although the study of macroeconomics and microeconomics broadens student understanding of the interrelationship between societal factors and financial issues, the understanding is of a general nature, as opposed to predictive or applied. Taking the study of economics one step further and explaining how

economic indicators have predictive value for the movement of the equity, bond, and currency markets would be of substantial value to accounting students. For example, every accounting student learns about the amortization of bond premiums and discounts and that these differences in purchase price and par value arise from the difference between interest rates stated on the bond and those available in the marketplace. Students are also taught how to calculate the price of a bond once they know the interest rates and maturity dates. But they typically do not receive instruction on how to take what they know from their study of economics to predict interest rate fluctuations and subsequently to use that information to decide on the stated interest rate for a bond a company wishes to issue. As a second example, accounting students often receive instruction on how to account for holding gains and losses realized on investment portfolios, but they typically do not learn how to use various economic indicators to make decisions about what may happen in the security markets to make decisions about portfolio investments. Because of this gap between economic knowledge and accounting application, the study of economic indicators as they relate to accounting would be beneficial in 1) augmenting student understanding of the link between the social science of economics and the realities of financial markets, and more specifically, 2) increasing their understanding of the relevancy of economic indicators to business decisions and accounting for those decisions.

In order to incorporate economic indicators into the accounting curriculum, it is important to identify which indicators add the most value when making intelligent business decisions. In the book The Secrets of Economic Indicators the author, Bernard Baumohl, identifies and discusses the leading economic indicators that are most useful in predicting value changes in stocks, bonds, and the U.S. dollar. Of the numerous economic indicators Baumohl addresses, the following four have strong predictive value with respect to changes in equity, bond, and currency markets: Employment Situation Report, the ISM Report – Manufacturing, Weekly Claims for Unemployment, and the Consumer Price Index. Therefore, including a discussion of these four indicators in the accounting curriculum may provide useful information that future accountants can use to make sound business decisions.

## **OVERVIEW OF THE ECONOMIC INDICATORS**

Before learning the application of specific indicators, it is important for students to realize that the indicators vary on important characteristics such as accuracy, timeliness, relevancy to business cycle stage, and overall predictive ability. A brief discussion of these characteristics and how the four main indicators compare could be useful; a brief review of basic economic terms may also be appropriate. Once students are familiar with the constraints of economic indicators and the vocabulary associated with them, they are ready to engage in the study of how each indicator can be accessed and understood. The following charts outline key information for each indicator.

### **The Employment Situation Report**

This report is one of the most important economic indicators in the United States. Although most readers focus on unemployment statistics, the report is a treasure trove of employment information including information on the 1) latest count of the civilian workforce and how many are employed, 2) unemployment statistics accompanied by a demographic breakdown, 3) monthly changes in non-farm employment, 4) changes in the average number of hours worked in a week, and 5) average hourly and weekly earnings for the month. Information on classification of workers, full-time and part-time employment, and the duration of unemployment is also provided.

**TABLE 1**  
**EMPLOYMENT SITUATION REPORT**  
(Baumohl, 2005)

Timeliness	Announced on the first Friday of each month at 8:30 am ET and covers the preceding month.
Source of Information	Based on Household Surveys and Establishment (payroll) Surveys. Household Surveys are requested from 60,000 homes and have a 95% response rate. Establishment Surveys are requested from 400,000 companies and government agencies, representing 500 different industries. The response rate varies from 60% to 80%.
Significance	Considered to be very significant because it reports unemployment statistics and household spending accounts for 2/3 of the economy's total output.
Predictive Ability	Considered to be very high. Strong employment generally leads to higher stock prices and lower bond prices. It also drives interest rates up making investment in US Treasuries more appealing.

The ESM can be found at: <http://stats.bls.gov/news.release/empsit.toc.htm>

**The ISM Report – Manufacturing**

This report is generated by the Institute for Supply Management (ISM). Although this organization also distributes surveys that address the service industries, it is their manufacturing survey that generates the most interest among economists. The impetus for the survey occurred during the Great Depression of the 1930s under the administration of Herbert Hoover. He asked the ISM (then known as the National Association of Purchasing Agents) to devise a measure that would provide insights into the manufacturing component of the economy in hopes that the resulting insights would provide information on how to get the economy back on track (Baumohl, 2005).

Based on a list of weighted factors, the PMI score indicates the business cycle phase of the economy. A score of 50 indicates real Gross Domestic Product growth of 2.5% and each full point above 50 can indicate additional growth of 0.3%. A score above 50 indicates that the economy is expanding while scores between 43 and 50 indicate that while manufacturing is contracting, the economy may still be expanding. Scores below 43 indicate that the economy as a whole is in a recession. Consistent readings below 43 may spur the Federal officials to lower interest rates. (Baumohl, 2005)

**TABLE 2**  
**ISM REPORT – MANUFACTURING**  
(Baumohl, 2005)

Timeliness	Announced at 10 am ET on the first business day after the reporting month
Source of Information	Surveys distributed to 400 member companies representing 20 different industries
Significance	Calculates a Purchasing Managers Index (PMI) based on weighted factors: new orders (30%), manufacturing production (25%), employment (20%), supplier deliveries (15%), and inventories (10%).
Predictive Ability	Considered to be very high. Equity markets generally get stronger with a rising PMI. PMI scores consistently above 50 will push bond prices down while scores below 45 will push bond prices up. The US dollar value goes up with a PMI above 50.

The ISM Report can be found at: [www.ism.ws/ISMReport/index.cfm](http://www.ism.ws/ISMReport/index.cfm)

### Weekly Claims for Unemployment

This economic indicator is vital in its predictive value. Because it is reported on a weekly basis and depicts the number of newly opened unemployment insurance benefits claims, it provides a snapshot of the economic condition of the economy for that week. However, economists warn that focusing on a particular week can lead to distortions in interpreting the data, so they suggest looking at a four-week moving average for a clearer picture (Baumohl, 2005).

Although the Weekly Claims for Unemployment indicator provides a timely snapshot of the economy, there is some indication that first-time benefits claims can reach their highest levels two to three months before the economy reaches its nadir. Additionally, economists agree on some quantitative thresholds. Generally, the economy is in danger of slipping into a recession when the first-time claims for unemployment insurance benefits stay above 400,000 for several weeks in a row. A recovery may be underway when first time claims remain below 400,000; however, first-time claims must remain below 350,000 before economists will diagnose a meaningful improvement in employment (Baumohl, 2005).

**TABLE 3**  
**WEEKLY CLAIMS FOR UNEMPLOYMENT**  
(Baumohl, 2005)

Timeliness	Announced every Thursday at 8:30 am ET based on information for the week ending the preceding Saturday
Source of Information	Each state and the District of Columbia counts the number of first-time filers for unemployment insurance benefits in a given week. That information is forwarded to the Labor Department for compiling and reporting.
Significance	Considered to be very significant because it provides a current picture of the state of the economy.
Predictive Ability	Considered to be strong. Stock prices tend to go down when there is an ongoing increase in the number of jobless claims. Bond prices tend to go up when new filings for unemployment increase because a weaker economy diminishes inflation pressure and keeps market interest rates lower. Steady increases in unemployment claims indicate a sluggish economy and weaken the dollar's value in foreign exchange markets.

The weekly claims for unemployment can be found at: <http://www.ows.doleta.gov>

### The Consumer Price Index

The Consumer Price Index (CPI) is probably the most popular measure of price inflation. It is commonly reported in economic news broadcasts to convey the level of inflation in the economy. The average consumer pays attention to this indicator more than to any other, mostly because s/he feels it in the grocery store, the department store, and at the gas station. "Changes in the CPI also alter the benefits of 50 million Social Security recipients and 20 million people on food stamps. Landlords take inflation forecasts into account to lock in future hikes in rental contracts. Judges even refer to the CPI to compute alimony and child support payments. In short, the effects of inflation are ubiquitous. No one can escape its reach" (Baumohl, 2005, 245). Because it has such a strong impact on the economy, the Federal Reserve aims to control inflation, limiting it to 1% to 2% each year (Baumohl, 2005).

The base figure for the CPI is 100, established in the early 1980s. The weighting of the factors that make up the CPI basket are based on buying habit surveys collected from thousands of people and are revised every two years. The CPI can also be quoted for differing demographic units. For example, the core-CPI is quoted with the unstable elements such as food and energy costs removed. The CPI –W pertains especially to wage earners and clerical workers, a demographic group that makes up about 32% of the working US population. The CPI – U pertains to urban working populations. In fact, fourteen

specific metropolitan regions have their own quoted CPIs released bimonthly. Chicago, New York, and Los Angeles are important enough to have their CPIs released every month (Baumohl, 2005).

**TABLE 4**  
**CONSUMER PRICE INDEX**  
(Baumohl, 2005)

Timeliness	Announced at 8:30 am ET two or three weeks after the month analyzed
Source of Information	Bureau of Labor Statistics personnel collect information from 23,000 businesses located in 87 urban areas. Data reflect prices of 80,000 items and services.
Significance	CPI score is based on weighted factors (percentages rounded): housing (42%), food and beverages (15%), transportation (17%), medical care (6%), apparel (4%), recreation (6%), education and communication (6%), other (4%)
Predictive Ability	Considered to be very high. Increases in the CPI make it more expensive to borrow money. Additionally, increases in revenue may be due to increased prices rather than to increased volume. Consequently, lower CPIs make for stronger stock prices. Increases in CPI can also put downward pressure on bond prices as interest rates in the marketplace rise. The impact on the US dollar is less certain; it depends on the degree to which the federal reserve controls inflation.

The CPI can be found at: [www.bls.gov/cpi/](http://www.bls.gov/cpi/)

### **INCORPORATING ECONOMIC INDICATORS INTO THE ACCOUNTING CURRICULUM**

One of the best times to incorporate economic indicators into the accounting curriculum would be near the end of the intermediate financial accounting course(s). As intermediate accounting typically provides in-depth coverage of equity and debt financing and portfolio accounting, students completing intermediate accounting are academically prepared to study the predictive value of economic indicators affecting stocks, bonds, and currency.

For example, students could be asked to chart a history of the four indicators discussed above as reported over the previous 12 months. They could then record the movement of stock and bond indices and Treasury bill rates over the same period of time. This information could be analyzed visually on a line graph or statistically through regression and correlation, depending on the depth of analysis the instructor prefers. Students could then review what they learned in accounting with respect to holding gains and losses on portfolio investments, and see how gains and losses compared to changes in the economic indicators. Additionally, students could review bond premiums and discounts and track the pricing of specific bonds to see how they compared with changes in the economic indicators. Similarly, the interest rates on short-term excess cash investments in Treasury holdings or other short-term accounts could also be compared to movement of the indicators. In essence, students would not just learn, but also see, the impact of economic indicators on various assets and liabilities they have learned about in their accounting courses.

To apply this knowledge to business decision-making, various exercises could be developed. One exercise could ask students to review the economic indicators and then suggest how they would advise a company to invest excess cash that will not be needed for operations until later in the year. A second exercise could ask students how financial assets should be invested to fund future retirement benefits given the trend in economic indicators. A third exercise could ask students to recommend whether a large business expansion should be funded by issuing bonds or stock, and if bonds were recommended, at what interest rate. Although these questions are normally addressed by senior executives, teaching accounting

students the factors that go into these decisions is helpful as they prepare not only for their entry into the accounting profession but also for their eventual progression to high levels of responsibility.

## CONCLUSION

As discussed earlier, it is important for business schools to require their students to take liberal arts courses. While business courses allow students to learn important skills in a chosen discipline, liberal arts courses are crucial in that they help develop critical thinking skills necessary for making sound business decisions in an ever-changing economy.

The purpose of this paper was to provide an in-depth analysis of how concepts typically learned in liberal arts courses (economics) could be incorporated to add to knowledge, understanding, and application of material learned in business courses (in this case, accounting courses). Specifically, we explored and discussed various economic indicators and their predictive ability relative to the value change of stocks, bonds, and the U.S. dollar. Currently, traditional economics courses may discuss some of these indicators in general, and accounting courses may discuss what to do once a business makes a decision. However, an expansion of the coverage of these economic indicators in an accounting curriculum in order to teach how they may be used to make effective business decisions has the potential to be very valuable. Not only would students be better able to draw a connection between liberal arts and business courses, thereby increasing the value of their education, but they would also significantly increase their ability to make better decisions in the business world.

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