"What is a business cycle and how can we measure this at the local level?"

by Sarah Rummery, Ph.D.

In economics the term business cycle is used to refer to the cyclical fluctuations in real gross domestic product (hereafter GDP). GDP is a monetary measure of the economy's production, valued using the prices from a selected base year. For example, the economy's production for each year will be evaluated using the prices from 1996. This ensures that the prices used for evaluation are held constant and the only reason for an increase in the calculated value of GDP would be higher production from the nation's businesses. The health of the economy at the national, state and local level is reflected in the rate of change in GDP (known as economic growth). As a matter of course the economy's growth rate varies over time, from periods of strong growth (observed from 1991 through the end of 2000) to periods of economic slow down, as observed during the first three quarters of 2001. If economic growth decreases for two consecutive quarters, the economy is officially in a recession. These fluctuations in GDP are termed the "business cycle".

A business cycle has four phases; expansion, peak, recession and trough. Each phase is of an undetermined length of time, varying from weeks to years. However when looking at historical data, the economy seems to move from one phase to another in a somewhat cyclical manner, hence the term business cycle.

The states that make up the national economy also have their own measure of production, known as Gross State Product (GSP). According to the Bureau of Economic Analysis, the GSP for Texas was $742.27 billion in June 2002, behind only California and New York.

There are many observable characteristics or indicators of the economy that are measured and reported on by different government departments, such as the Bureau of Labor Statistics (BLS), the Bureau of Economic Analysis (BEA) and the Federal Reserve Bank (FRB).

At the national, state and local levels there are economic indicators that vary either directly or indirectly with the business cycle, and which are observable at the local level. For example, as the rate of economic growth picks up, businesses produce more, which requires more resources, and employment rises. As employment rises, consumer incomes and more importantly expenditures rise, fueling more growth. According to the BEA, the national savings rate in the United States is only 3.1%. This tells us that consumers spend most of their incomes. As such consumer expenditure is a key determinant of economic growth, in fact it is the largest single component of GDP. Expenditure and employment vary directly with the business cycle. At the local level, businesses would observe higher sales and business revenues would be increasing.

Unemployment varies indirectly with the business cycle. This means that when the economy grows, unemployment falls and visa versa. During a recession, businesses may lay workers off, for example IBM announced a layoff of 15,000 employees on the sixteenth of August 2002. Some businesses may even close permanently. Unemployment rates at the local level will be a reflection of unemployment at the national level. Local unemployment rates can vary considerably by region and state, depending on the industries that exist and how vulnerable their product demand is to an economic slow down. According to the BLS, the unemployment rate for Texas in June 2002 was 5.8%. This means that 5.8% of the Texas labor force is actively seeking employment. This unemployment rate of 5.8% placed Texas 37th in a ranking of all states (including the District of Columbia). In Texas, the industry that employs the largest number of people is "Services". This industry category includes restaurants, hotels and all businesses that provide a service as opposed to a tangible product. Employment in this industry is sensitive to fluctuations in economic growth. Unemployment rates are published monthly by the BLS and are widely reported in the press.

Another economic variable that varies directly with the business cycle and would be observed at the national, state and local level is the inflation rate. Inflation is the increase in the general price level and is measured by both the consumer and producer price indexes. Changes in both indexes are calculated and reported monthly by the BLS. One theory that explains why inflation may accompany economic growth focuses on the labor market. As economic growth accelerates, employment levels rise, and possibly labor shortages arise in some industries, again this will vary across states and regions. To attract workers, wage levels in these industries will rise, which in turn may be passed on to consumers in the form of higher prices. Higher wages are a higher cost to businesses. Profit maximizing businesses will attempt to recover this additional cost by raising prices. Another explanation for higher price levels during periods of strong economic growth is that higher levels of consumer demand put upward pressure on prices. The reverse scenario would explain why price levels do not increase as much during recessions. The BLS reports that for the twelve months prior to June 2002, the percentage change in the national urban consumer price index was 1.1%. There is considerable variation by state and by metropolitan areas within states. For example, in Houston, Texas, the consumer price index for the same period changed by minus 0.8%. This was primarily attributed to lower gas and electricity prices.

Another indicator of the business cycle, observable at the local level is interest rates. Interest rates have historically varied directly with the business cycle, increasing in periods of expansion and decreasing in recessions. Currently we have observed interest rates falling. For example, you may notice the 0% financing offers on many vehicles, and many credit card companies offering 0% balance transfer opportunities. Fifteen-year mortgage rates are at a many-year low of 5.6%. The prime-lending rate is 4.75%, the lowest since 1972. The Federal Open Market Committee (which has eight scheduled meetings for 2002), composed of Alan Greenspan (FRB chairman), the seven Federal Reserve Bank board members, the New York Federal Reserve Bank president and four other members, has decreased the federal funds rate to 1.75%, which is the lowest rate in 40 years. These rate decreases are designed to increase consumer spending. The vehicle and housing markets are particularly sensitive to interest rate changes. If consumer spending can be stimulated, economic growth will be recharged. The eight scheduled meetings of the FOMC are widely anticipated and reported in the press.

Bankruptcies, for both businesses and consumers, increase during recessions and decrease during expansions. Bankruptcies are often widely reported in the media, especially when they involve prominent businesses such as US Air, WorldCom and Enron.

To conclude, we are not immune to the business cycle at the local level, and indicators of the business cycle are numerous and widely reported. Local economies are made up of households, workers, businesses, banks and government agencies. They are a microcosm of the national economy, and as such are a reflection of what is happening at the national level. You may notice changes in the level of employment and unemployment in your local area. You may notice changes in interest rates offered at local banks and on your flexible rate mortgage or credit cards. You may notice changes in the price levels of gasoline, electricity and other consumer goods. Such economic indicators are reported in both local and national media and will help inform all citizens of the state of the economy and where the economy is in relation to the business cycle.

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