# Gross domestic product

Gross Domestic Product (GDP) Gross Domestic Product is the summary of the National Income and Product Account (NIPA) tables, which is provided by the U. S. Department of Commerce's Bureau of Economic Analysis (BEA). GDP estimates the market value of all final goods, services, and structures produced in a given period by labor and property located in the U. S. , regardless of who owns the resources. Calculation of GDP involves estimating the quantity of those commodities produced, assigning a dollar value to each quantity and aggregating the total dollar value to arrive at a final figure. GDP can be expressed in two ways, nominal and real.

Nominal GDP is the value of the final output measured in current prices, whereas real GDP is the value of output adjusted to remove distortions caused by price changes through the process of chain-weighting. GDP estimates are released quarterly [see appendix 2, slide 5]. Three estimates are made, one at the end of each month following a release: advance, preliminary, and final. On average, the final estimate falls within +/- 0. 7% of the advance estimate1. Over time GDP has become the most comprehensive measure of production, and almost every economic statistic is related to GDP in one way or another. However there are drawbacks to GDP.

It does not include nonmarket transactions or underground economies, it has frequent revisions and long compilation time and, GDP has income gaps/disparities. Although it generally correlates to standard of living, it does not inform us about quality of life. For instance, when a neighborhood park is replaced with a landfill. GDP is a massive compilation of data and analysis, yet it is still a gross tally. Because of the factors mentioned herein, the value of GDP does have limits. Perhaps the measure of its value is to the extent

that it provides a historical context in which to view, evaluate, and correlate other economic indicators.

Industrial Production Index (IPI) In relation to GDP, the Industrial Production Index measures the goods portion of overall GDP, which currently equates to nearly one-third of the total figure. The IPI is comprised of 295 individual series, and serves as an economic indicator released monthly by the Federal Reserve Board that measures the amount of output from manufacturing, mining, electric and gas industries. It also includes a measure of industrial capacity and how much of that capacity is currently being used (commonly known as capacity utilization).

The preliminary estimate of IPI is released around the 15th of the each month, and is subject to revision in each of the subsequent 3 months. An annual revision is released every fall for the previous 2 years and a benchmark review every 5 years. The current reference year for the index is 2002 at a level of 100 [see appendix 2, slide 7]. Production data is often received directly from the Bureau of Labor Statistics and trade associations, both on physical output and inputs used in the production process. As with real GDP, each individual index is chain-weighted using the 'Fisher Ideal' index formula2.

The IPI is compiled first as a total index and then subdivided by major markets and business sectors. Due to the delay in reporting of GDP, this quick reading on the overall health and activity of the manufacturing sector of the economy helps assist the Federal Reserve in its monetary policy decisions. Because of this close relationship with its core industries, the IPI is

a coincident index, contrasted with the Index of Leading Indicators, whose turning points occur prior to actual changes in the overall economy. Index of Leading Economic Indicators (LEI)

The Index of Leading Economic Indicators is a composite index consisting of multiple economic components, which currently encompasses ten indicators. The nature of these indicators is to report economic activity from the front lines and help investors and policymakers quickly foresee changes in aggregate demand. Therefore, accurate interpretation of the statistic should provide a reliable prediction of future economic conditions. Revisions of the monthly numbers of up to the preceding 6 months can blur the present state and creates frustrations among economists.

One of the most interesting facts about the LEI is that it has predicted every recession in our country since 1955, and has indicated 3 additional recessions that did not materialize4. Presently, the LEI has been increasing since May 20095, which historically would indicate the end of our current market contraction [see appendix 2, slide 9]. In summary, given this upward movement in the LEI combined with government incentive programs, the Federal Reserve's monetary strategy, strong rebounds in all the major US markets, a slight improvement in the IPI after 9 months of decline, and a arked decrease in the rate of GDP shrinkage, it appears we are heading out of our current recession. Appendix 1 1Clayton, Gary E. , and Martin Gerhard Giesbrecht. A Guide to Everyday Economic Statistics. Sixth Edition. New York. McGraw-Hill Irwin, 2004. p. 19, Fig. 2-1 2The ' Fisher Ideal' formula is the ' chain-weighting' calculation using the following formula: Index = 3 The formula is essentially the average of the two primary measures of the

change in volume for a specified period and is used as the basis for adjusting

for inflation by virtually every index used by economists. http://www2. stats.

govt. nz/domino/external/omni/omni. nsf/wwwglsry/fisher+ideal+index 4

Clayton, Gary E. , and Martin Gerhard Giesbrecht. A Guide to Everyday

Economic Statistics. Sixth Edition. New York. McGraw-Hill Irwin, 2004. p36. 5

" The Conference Board Leading Economic Index. " Global Business Cycle

Indicators. The Conference Board, August 2009 Report. http://www.

conference-board. org/economics/bci/pressRelease_output. cfm? cid= 1