Primer on capital stocks now available

The Bureau of Economic Analysis (BEA) has posted a primer on the methodologies used to estimate net capital stocks, the depreciation of capital stocks, and the value of capital services, authored by BEA economist Arnold J. Katz.

BEA’s net capital stock—a measure of wealth—is defined as the value of the stock of fixed assets after adjustment for depreciation. In principle, the current-price value of this wealth should equal the amount that it could be sold for in resale markets.

Fixed assets are produced nonfinancial assets that are used repeatedly, or continuously, in processes of production for more than 1 year.

Depreciation in turn is defined as the decline in the value of stocks of fixed assets due to wear and tear, obsolescence, accidental damage, and aging. It is often confused with the decline in the value of capital goods from the beginning to the end of a year. Actually, current-price depreciation is equal to this decline in market value less any capital gains on the value of the asset due to inflation in its price.

The cornerstone of BEA’s capital accounting framework is its perpetual inventory methodology. This method assumes that nearly all assets are fully depreciated at the end of their lives, at which point they have zero value and are discarded. Assets are not prematurely discarded; in other words, all discards have a value of zero. This treatment helps to ensure that over the lifetime of each asset, constant-price depreciation will sum up to the asset’s initial purchase price in constant prices.

As for depreciation, the primer gives numerical examples using both straight-line and geometric age-price profiles. Straight-line depreciation methods are detailed because they are common in business accounting and in official European statistics. Geometric-depreciation methods are also detailed, as they are currently BEA’s primary method.

The primer also discusses how capital services are related to capital stocks. It examines the problems that would be encountered in attempting to integrate the official estimates of capital services, which are published by the Bureau of Labor Statistics, with the official net stock and depreciation estimates published by BEA.

Capital services can be defined as the services that the capital stock generates continuously over its service life.

Assets such as houses or heavy equipment yield services that people often pay to obtain. By the opportunity cost principle, if the owners of these assets decide to forego this rent and use the assets themselves, they must place a value on their services that is greater than this rent. Even when assets cannot be rented out in practice, the principles of optimization over time can be used to obtain the same implicit rental value.

(This summary was prepared by the Survey of Current Business staff in conjunction with the author. The primer is available on the BEA Web site.)

New statistics on U.S. MNEs now available

Detailed statistics on the worldwide activities of U.S. multinational enterprises (MNEs) in 2013, including the finances and operations of U.S. parent companies and their foreign affiliates, are now available on BEA’s Web site.

These statistics cover balance sheet and income statement details; employment and employee compensation; sales; value added—a measure of the enterprise’s contribution to gross domestic product in the United States or in the other countries where it operates; capital expenditures; trade in goods; and spending on research and development. The statistics can be used to measure the scale of the global business activity of U.S. multinational enterprises, or MNEs, as well as their impact on the U.S. economy and on other countries’ economies.

The newly released statistics also include revised 2012 statistics on the activities of U.S. MNEs. BEA also produces statistics that cover U.S. affiliates of foreign MNEs, which will be released in November 2015.