Components of GDP

$$GDP = C + I + G + (X – M)$$

Personal Consumption Expenditures (C) – goods and services purchased by persons residing in the US. Most personal consumption expenditures consists of purchases of new goods and of services by individuals from business (new hats, coats, yo-yos, hair cuts, etc.) However, also included are household purchases of new goods and services from nonprofit agencies (e.g., cookies from the Girl Scouts) and from governmental agencies. Examples of this latter area would include household spending for electricity from governmentally owned energy plants, the purchase of water from municipally owned water enterprises and household spending for transportation on publicly owned mass transit systems. Consumption also includes purchases of certain services where the government provides the funding. This area primarily consists of tuition payments for higher education and medical care for the elderly and poor (Medicare & Medicaid.) Even though they are paid for by the government, they are not considered as a "purchase" by the government; instead, they are considered a "purchase" of education or medical services by households. A portion of C also includes payments to cover the interest on the typical existing mortgage and home improvement loan, but not interest on consumer debt or the purchase of new homes. The purchase of new homes is considered a capital investment and therefore included in Gross Private Domestic Income (I).

Gross Private Domestic Income (I) – consists of Nonresidential Fixed Investment, Residential Fixed Investment and Changes in Business Inventories. Nonresidential Fixed Investment consists of both Structures (new plants & buildings) and Producers' Durable Equipment (new machines.) It covers all investment by business and nonprofit institutions in the US, regardless of whether the investment is owned by US residents. It excludes investment by US residents in other countries. Residential Fixed Investment primarily consists of newly constructed houses. Government purchases of equipment and structures are not included in I; rather they are included in the government purchases account. Expenditures, such as for raw materials, energy, intermediate goods (e.g., the Goodyear tires that Chrysler places on a new Jeep,) labor, advertising and other variable costs are excluded. This is done to avoid double counting. For example, as the value of the tires are included in the value of the Jeep when purchased by the consumer, if we also included their value when they were purchased by Chrysler, we would be counting them twice.

Government Purchases (G) – purchases of goods and services from business, the purchases of services from government employees (i.e., the wages paid to teachers, firefighters, police officers, government workers, Congress people, Senators, judges, doctors in public hospitals, etc.) and the purchases by government of goods and services from the rest of the world. The changes in inventories and purchases of structures and equipment by government enterprises are included. Several expenditures made by the government are excluded from Government Purchases. Transfer Payments, such as government expenditures for Social Security, Aid for Dependent Children, Food Stamps, direct farm subsidies are not considered part of G since they are not the purchase of something new. However when recipients of these transfers of income purchase new goods and services these are included in Household Consumption. Expenditures for interest on government borrowings are excluded from government purchases, as are transactions in financial assets and land.

Net Exports of Goods and Services (X – M) – is exports less imports of goods and services. In attempting to account for the market value of our nation's new productivity, we want to include new goods and services no matter who purchases them. Some of our new productivity is purchased by foreigners. Hence we include our nation's exports. The reason for subtracting our nation's imports is not so obvious. For example, a household purchases a new iMac computer for home use and paid $1,500. Obviously not all of this computer represents American productivity; however, neither the consumer nor the surveyor knows the portion that represents American productivity and the portion that represents foreign productivity. Rather, the entire $1,500 is listed in household consumption. Similarly, gross private domestic income and government purchases overstate expenditures for American productivity. At some point, we need to subtract that portion of these expenditures that represents spending for foreign productivity. Rather than do so in each individual sector, all imports are subtracted in one location, the Foreign Sector. Hence, Imports represent an estimate of the dollar value by which C, I and G overstate spending on American productivity.

$$GDP = C + I + G + (X - M)$$