David Youngberg
ECON 201—Montgomery College

# TOPIC 16: GDP II

I. What are the biggest economies?
   a. Naturally, more people mean more production. Simply comparing GDPs without adjusted for population is misleading.
   b. *GDP per capita* is GDP divided by the number of people in the economy ("per capita" is Latin for "for each head")
      i. This is useful to determine how wealthy an average person is in a country, or the average income.

II. Two equations
   a. There are two ways to break down GDP to help us understand what it includes. If you're really interested in what's included and what isn't check out the NIPA (National Income and Production Accounts) guidelines. (The document is over 400 pages.)
   b. The first is the *spending* approach. What did people spend their money on?

$$Y = C + I + G + NX$$

      i. Where Y is GDP;
      ii. C is consumption (like when you buy an ice cream bar);
      iii. I is investment (like when you buy an ice cream maker);
      iv. G is government spending (like when the government buys some ice cream);
         1. This does not include transfers, because nothing is produced. Including them would result in double-counting.
         2. Any production the government contributes is counted by cost because a lot production is given away for free (e.g. K-12 education). The same, by the way, is true for non-profits.
      v. NX is exports – imports: when ice cream is produced inside the country and sold abroad (exports) or produced outside of the country and brought in (imports). NX corrects for international trade.
         1. This is the ***only time*** intermediary goods and services are explicitly included in GDP, and they are there only to

correct for international trade. If a car's assembled in the U.S. but the tires are made in Mexico, the tires would be included in NX because we have to adjust for the fact that the entire value of the car was not made in the U.S..

c. Another way to think about GDP is the *income* approach. How did people get their money?

$$Y = wages + rent + interest + profit$$

   i. Where Y is still GDP;
   ii. Wages are all the salaries of everyone in a country;
   iii. Rent includes all the money people get from physical assets;
   iv. Interest is everyone's income from keeping money in a bank;
   v. Profit is the money business owners keep after they receive revenue and pay their costs.