Title Slide

Slide 2
Title: Two Main Methods of Measuring GDP

Slide Content:
- Expenditure Approach
  - Computing GDP by adding up the dollar value at current market prices of all final goods and services
  - It is the sum of the categories of Consumption (C), Investment (I), Government Expenditures (G), and Net Exports
- Income Approach
  - Measuring GDP by adding up all components of national income, including wages, interest, rent, and profits

Narrator: Welcome to this presentation on measuring the economy’s performance. There are two main methods to measuring our nation’s gross domestic product. One method is the Expenditure Approach. The Expenditure Approach computes GDP by adding up the dollar value (at current market prices) of all final goods and services.

It is the sum of the categories of Consumption (C), Investment (I), Government Expenditures (G), and Net Exports.

The second method to measuring our nation’s GDP is the Income Approach. The Income Approach measures GDP by adding up all the components of national income, including wages, interest, rent, and profits.

Slide 3
Title: Consumption Expenditure (C)

Slide Content:
- Durable Consumer Goods
  - Items that last more than three years (automobiles, furniture)
- Nondurable Consumer Goods
  - Items that are used up in three years (gasoline, food)
- Services
  - Mental or physical help

Narrator: Deriving GDP by the expenditure approach includes totaling up all production done for consumption purposes. Consumption Expenditure includes Durable Consumer Goods, which are items that last more than three years (such as automobiles and furniture), Nondurable Consumer Goods, which are items that are used up within three years (such as gasoline or food), and Services, which include all mental or physical help provided.
Gross Private Domestic Investment (I)

The creation of capital goods, such as factories and machines, that can yield production and hence consumption in the future. Also includes changes in business inventories and repairs made to machines, buildings, etc.

Government Expenditures (G)

State, local, and federal purchases. No transfer payments.

Net Exports (Foreign Expenditures)

Net exports \( X \) = Total exports – Total imports

Presenting the Expenditure Approach

GDP = \( C + I + G + X \)

\( C \) = consumption expenditures
\( I \) = investment expenditures
\( G \) = government expenditures
\( X \) = net exports
Narrator: We can represent the Expenditures Approach to GDP as the sum of Consumption Expenditures, Investment Expenditures, Government Expenditures, and Net Exports.

Slide 8
Title: Net Domestic Product (NDP)

Slide Content:
- Allowing for depreciation (capital consumption allowance)
  - The amount that businesses would have to save in order to take care of deteriorating machines and other equipment

NDP = GDP - Depreciation

Narrator: Once GDP is calculated, we can then subtract depreciation and arrive at Net Domestic Product. Depreciation is also known as capital consumption allowance. This is the amount that businesses would have to save in order to take care of deteriorating machines and other equipment. Looking at NDP rather than GDP allows us to consider only new additions to Investment, or the change in the nation’s capital stock over a one-year period.

Slide 9
Title: Gross Domestic Income (GDI)

Slide Content:
- The sum of all income (wages, rent, interest, and profits) paid to the four factors of production
  - Wages: salaries and labor income
  - Rent: farms, houses, stores
  - Interest: savings accounts
  - Profits: sole proprietorships, partnerships, corporations

Narrator: The other method to calculating GDP is through the Income Approach. We can calculate Gross Domestic Income as the sum of all income, which includes all wages, rents, interest income, and profits.

The key is that this is income earned for productive services to the four factors of production: Labor, Land, Capital, and Entrepreneurs.

Slide 10
Slide Content:
Whether using the expenditures approach or the income approach, we should arrive at the same total.

Gross domestic product = gross domestic income + [indirect business taxes and depreciation (non income expenses)]

Narrator: No matter how we calculate our nation’s GDP, whether through the Expenditures Approach or the Income Approach, we should arrive at the same total. The reason is that we are measuring all the income received from all the production that was made during the year. No matter where we start, we should end up at the same place.
Therefore, Gross Domestic Product equals Gross Domestic Income, so long as we adjust Gross Domestic Income for indirect business taxes (like the sales tax or any business taxes) and depreciation. These two items together are known as “non-income expense items”.

Slide 11

Title: Figure 8.3. Gross Domestic Product and Gross Domestic Income, 2013 (in billions of 2005 dollars per year)

Slide Content:
Panel (a)
Household sector 68.6%
Government 22.8%
Business 12.4 %
Foreign -3.8

Panel (b)
Wages 54.8%
Nonincome expense 18.5 %
Profit 18.6%
Interest 5.2%
Rent 2.9%

Narrator: In Figure 8-3 you can see the equality of the Expenditure and Income Approaches.

For the pie chart on the left, notice that the largest component of GDP is Consumption, or the Household sector. Also interesting to note is that for 2013, the size of the government component of GDP exceeded the size of the private sector, or Investment component of GDP. Finally, note that the foreign sector, or Net Exports, is negative. This indicates that, in dollar terms, we import more than we export.

For the pie chart on the right, notice that the largest component of Gross Domestic Income is wages. Profits, which includes the profits of sole proprietorships, partnerships, and corporations, account for 18.6% of total income.
### Slides 12

**Title:** Figure 8.3. Gross Domestic Product and Gross Domestic Income, 2013 (in billions of 2005 dollars per year) (cont’d)

**Slide Content:**

<table>
<thead>
<tr>
<th>Expenditure point of View—Product Flow</th>
<th>Income point of View—Cost Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenditure by Different Sections</strong></td>
<td><strong>Domestic Income (at Factors Cost)</strong></td>
</tr>
<tr>
<td><strong>Household Sector</strong></td>
<td><strong>Wages</strong></td>
</tr>
<tr>
<td>Personal consumption expenses</td>
<td>$11,211.5</td>
</tr>
<tr>
<td>All wages, salaries, and supplemental employee compensation</td>
<td>$8,955.8</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td><strong>Rent</strong></td>
</tr>
<tr>
<td>Purchase of goods and services</td>
<td>3,726.60</td>
</tr>
<tr>
<td>All rental income of individuals plus implicit rent on owner-occupied dwellings</td>
<td>474.3</td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td><strong>Interest</strong></td>
</tr>
<tr>
<td>Gross private domestic investment (including depreciation)</td>
<td>2,033.30</td>
</tr>
<tr>
<td>Net interest paid by business</td>
<td>849.0</td>
</tr>
<tr>
<td><strong>Foreign</strong></td>
<td><strong>Profit</strong></td>
</tr>
<tr>
<td>Net exports of goods and services</td>
<td>-626.7</td>
</tr>
<tr>
<td>Proprietorial income</td>
<td>1,411.30</td>
</tr>
<tr>
<td>Corporate profits before taxes deducted</td>
<td>1,621.90</td>
</tr>
<tr>
<td><strong>Nonincome expense</strong></td>
<td></td>
</tr>
<tr>
<td>Indirect business taxes</td>
<td>842.3</td>
</tr>
<tr>
<td>Depreciation</td>
<td>2,116</td>
</tr>
<tr>
<td>Statistical discrepancy</td>
<td>96.5</td>
</tr>
<tr>
<td><strong>Gross domestic product</strong></td>
<td>$16,344.7</td>
</tr>
<tr>
<td>Gross domestic income</td>
<td>$16,344.7</td>
</tr>
</tbody>
</table>

**Narrator:** The same information shown in the pie charts can be seen in this table, with a side by side comparison of the Expenditure and Income Approaches. Notice the total for Gross Domestic Product on the left hand side and the total for Gross Domestic Income on the right hand side. They are equal at $16.3 trillion. Regardless of the approach you use, total production equals total income earned in our economy.

**Slide 13**

End of Presentation