Aggregate Demand

Aggregate demand is the total amount that all consumers, business firms, and government agencies and foreigners spend on our final goods and services.
Aggregate Demand

- **Consumer expenditure** is the total amount spent by consumers on newly produced goods and services.
  - Symbolized by $C$, it is also called consumption.

- **Investment spending** is the sum of the expenditures of business firms on new plant and equipment, inventories and residential construction.
  - It is symbolized by $I$.
  - Financial "investments" and resales of existing physical assets are NOT included.
Aggregate Demand

- Government purchases refer to the goods and services published by all levels of government.
  - It is symbolized by $G$.

- Net exports is the difference between what we sell to foreigners and what we buy from them.
  - Symbolized by $(X-IM)$, it is the difference between U.S. exports and U.S. imports.
Aggregate demand is the sum of

- Consumption + Investment + Government Purchases + Net Exports
- $C + I + G + (X-IM)$
Disposable Income

- Gross National Income = Gross Domestic Product = Aggregate Demand
- Disposable income is the sum of the incomes of all the individuals in the economy after all taxes have been paid and all transfers have been received.

\[ DI = Y - T \]
The Circular Flow
Consumption

Consumer Spending and Income: The Important Relationship

U.S. historical data shows that real disposable income and real consumer spending are related.
Consumption and Disposable Income

![Graph showing consumption and disposable income over time. The graph includes a timeline from 1930 to 1990 with specific events like The Great Depression and World War II highlighted. The y-axis represents billions of 1992 dollars, and the x-axis represents years. The graph distinguishes between real disposable income and real consumer spending.]
Consumption and Disposable Income
Consumption

When the data are converted into a consumption function diagram, the relationship is seen to be positively sloped. The slope is about 0.9.
Consumption

[Graph showing the relationship between Real Consumer Spending (billions of 1992 dollars) and Real Disposable Income (billions of 1992 dollars). The graph includes points for years 1947, 1950, 1960, 1963, and 1965, with annotations for $90 billion and $100 billion.]
The MPC

The **marginal propensity to consume** is the change in consumption divided by the change in disposable income.

\[
MPC = \frac{\text{Change in } C}{\text{Change DI that produces the change in } C}
\]
## Income and Spending: The Powerful Consumer

### Consumption and Income in Macroland

<table>
<thead>
<tr>
<th>Year</th>
<th>C</th>
<th>DI</th>
<th>MPC</th>
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<tbody>
<tr>
<td>1989</td>
<td>2,700</td>
<td>3,200</td>
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<tr>
<td>1990</td>
<td>3,000</td>
<td>3,600</td>
<td>0.75</td>
</tr>
<tr>
<td>1991</td>
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</tr>
<tr>
<td>1992</td>
<td>3,600</td>
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<td>0.75</td>
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<tr>
<td>1993</td>
<td>3,900</td>
<td>4,800</td>
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<tr>
<td>1994</td>
<td>4,200</td>
<td>5,200</td>
<td>0.75</td>
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</table>
Income and Spending: The Powerful Consumer

![Graph of Real Consumer Spending vs. Real Disposable Income]

- Real Consumer Spending, $C$, (billions of dollars per year)
- Real Disposable Income, $DI$, (billions of dollars per year)

Key points:
- $C$ increases with $DI$.
- Change in $C$: $300$ billion
- Change in $DI$: $400$ billion
C and DI

Movements Along Versus Shifts of the Consumption Function

A change in disposable income results in a movement along a consumption function.
Other Determinants of Consumer Spending

- Consumption is probably affected by wealth, the price level and expectations of future income.
- It appears to be not much affected by the inflation rate or by interest rates.
Temporary vs. Permanent Changes in Income

Why Tax Policy Failed in 1975
- The 1975 tax cut failed to stimulate consumption very much because it was announced as only temporary
- People figured out that it would not make much difference to their long-term well being
Income and Spending: The Powerful Consumer

Incomes of Three Consumers

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>No Change</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>400</td>
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<tr>
<td>Temporary Rise</td>
<td>100</td>
<td>120</td>
<td>100</td>
<td>100</td>
<td>420</td>
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<tr>
<td>Permanent Rise</td>
<td>100</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>460</td>
</tr>
</tbody>
</table>
Income and Spending: The Powerful Consumer

GDP As the Sum of Final Goods and Services

\[ Y = C + I + G + (X - IM) \]
GDP As the Sum of All Factor Payments

GDP can be calculated as the sum of wages, interest, rents and profits.

Sales - Intermediate goods = Wages + Interest + Rent + Profits

Sales of final goods = Wages + Interest + Rent + Profits

GDP = Wages + Interest + Rent + Profits