

## Output Multiplier Explained

The output multiplier represents the total output produced by all industries in response to a dollar increase in final demand for an industry's output. There are two types of output multipliers: i) simple and ii) total.

The simple output multiplier consists of the direct and indirect effects, while the total output multiplier includes the consumption-induced effects.

Using the computer and peripheral equipment industry as an illustration, an initial \$1 million increase in final demand will increase output in the economy by \$1.44 million. If consumption-induced effects are included, output will increase by \$1.60 million.

Description	Amount
Direct Effects	\$1.00m
+ Indirect Effects	\$0.44m
+ Consumption-Induced Effects	\$0.16m
<b>Total</b>	<b>\$1.60m</b>

Simple Multiplier = 1.44

Total Multiplier = 1.60

### 1 2 3 4

#### Change in Final Demand



Exports



Government Spending



Household Spending



Gross Capital Formation

A change in final demand for an industry's output creates an economic impact that is greater than the initial change. Let's assume that there is a \$1 million increase in final demand for computers.

### 1 2 3 4

#### Direct Effects



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#### Indirect Effects

The increase in computer production creates a ripple effect along the supply chain:

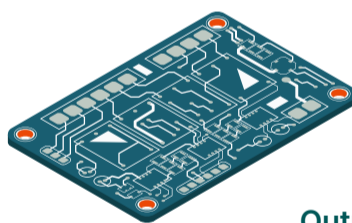
##### 1st Round



Output +\$0.30m

The increase in computer production raises demand for computer parts (e.g., hard drives) and spurs suppliers to raise production.

##### 2nd Round



Output +\$0.09m

As suppliers (e.g., circuit board manufacturers) raise production, they require more inputs. Hence, the demand for other inputs also increases.

##### Subsequent Rounds



Output +\$0.05m

This ripple effect continues along the entire supply chain until production needs are met.

### 1 2 3 4

#### Consumption-Induced Effects

##### Increased Employment



Industries hire more workers to produce additional output. Hence, employment and income levels rise.

##### Increased Household Spending



Output +\$0.16m

This spurs increased purchases of goods and services by households, thereby creating new final demand, which generates new output to meet demand.

## Other Impact Analysis

The economic impact per dollar increase in final demand for an industry's output can also be measured in terms of:



Value Added

The additional amount of value added generated.



Imports

The additional amount of imports required to support increased production.



Employment

The increase in number of jobs as a result of increased production.



Income

The increase in household income as a result of increased employment.