

1. Closed Economy

Multitplier	$I = I_a$ $T = T_a$	$I = I_a$ $T = T_a + t.Y$	$I = I_a + dY$ $T = T_a$	$I = I_a + dY$ $T = T_a + t.Y$
C, I, G	$\frac{1}{1-b}$	$\frac{1}{1-b+bt}$	$\frac{1}{1-b-d}$	$\frac{1}{1-b+bt-d}$
T	$\frac{-b}{1-b}$	$\frac{-b}{1-b+bt}$	$\frac{-b}{1-b-d}$	$\frac{-b}{1-b+bt-d}$
Balanced Budget Multiplier ($G = T$)	1			

2. Open Economy

Multitplier	$I = I_a$ $T = T_a$	$I = I_a$ $T = T_a + t.Y$	$I = I_a + dY$ $T = T_a$	$I = I_a + dY$ $T = T_a + t.Y$
C, I, G, X	$\frac{1}{1-b+m}$	$\frac{1}{1-b+bt+m}$	$\frac{1}{1-b-d+m}$	$\frac{1}{1-b+bt-d+m}$
T	$\frac{-b}{1-b+m}$	$\frac{-b}{1-b+bt+m}$	$\frac{-b}{1-b-d+m}$	$\frac{-b}{1-b+bt-d+m}$
M	$\frac{-1}{1-b+m}$	$\frac{-1}{1-b+bt+m}$	$\frac{-1}{1-b-d+m}$	$\frac{-1}{1-b+bt-d+m}$

Balance Budget Multiplier = Tax Multiplier + Government Expenditure Multiplier

Balance Budget Multiplier is not always equal to 1. It is equal to one for closed economy without induced investment or income tax.

- t is income tax rate
- b is marginal propensity to consume (MPC)
- d is marginal propensity to invest (MPI)
- m is marginal propensity to import (MPM)

1. Closed Economy

Multitplier	$I = I_a$ $T = T_a$	$I = I_a$ $T = T_a + t.Y$	$I = I_a + cY$ $T = T_a$	$I = I_a + cY$ $T = T_a + t.Y$
C, I, G	$\frac{1}{1-c}$	$\frac{1}{1-c+ct}$	$\frac{1}{1-c-i}$	$\frac{1}{1-c+ct-i}$
T	$\frac{-c}{1-c}$	$\frac{-c}{1-c+ct}$	$\frac{-c}{1-c-i}$	$\frac{-c}{1-c+ct-i}$
Balanced Budget Multiplier ($G = T$)	1			

2. Open Economy

Multitplier	$I = I_a$ $T = T_a$	$I = I_a$ $T = T_a + t.Y$	$I = I_a + iY$ $T = T_a$	$I = I_a + iY$ $T = T_a + t.Y$
C, I, G, X	$\frac{1}{1-c+m}$	$\frac{1}{1-c+ct+m}$	$\frac{1}{1-c-i+m}$	$\frac{1}{1-c+ct-i+m}$
T	$\frac{-c}{1-c+m}$	$\frac{-c}{1-c+ct+m}$	$\frac{-c}{1-c-i+m}$	$\frac{-c}{1-c+ct-i+m}$
M	$\frac{-1}{1-c+m}$	$\frac{-1}{1-c+ct+m}$	$\frac{-1}{1-c-i+m}$	$\frac{-1}{1-c+ct-i+m}$

Balance Budget Multiplier = Tax Multiplier + Government Expenditure Multiplier

Balance Budget Multiplier is not always equal to 1. It is equal to one for closed economy without induced investment or income tax.

- t is income tax rate
- c is marginal propensity to consume (MPC)
- i is marginal propensity to invest (MPI)
- m is marginal propensity to import (MPM)