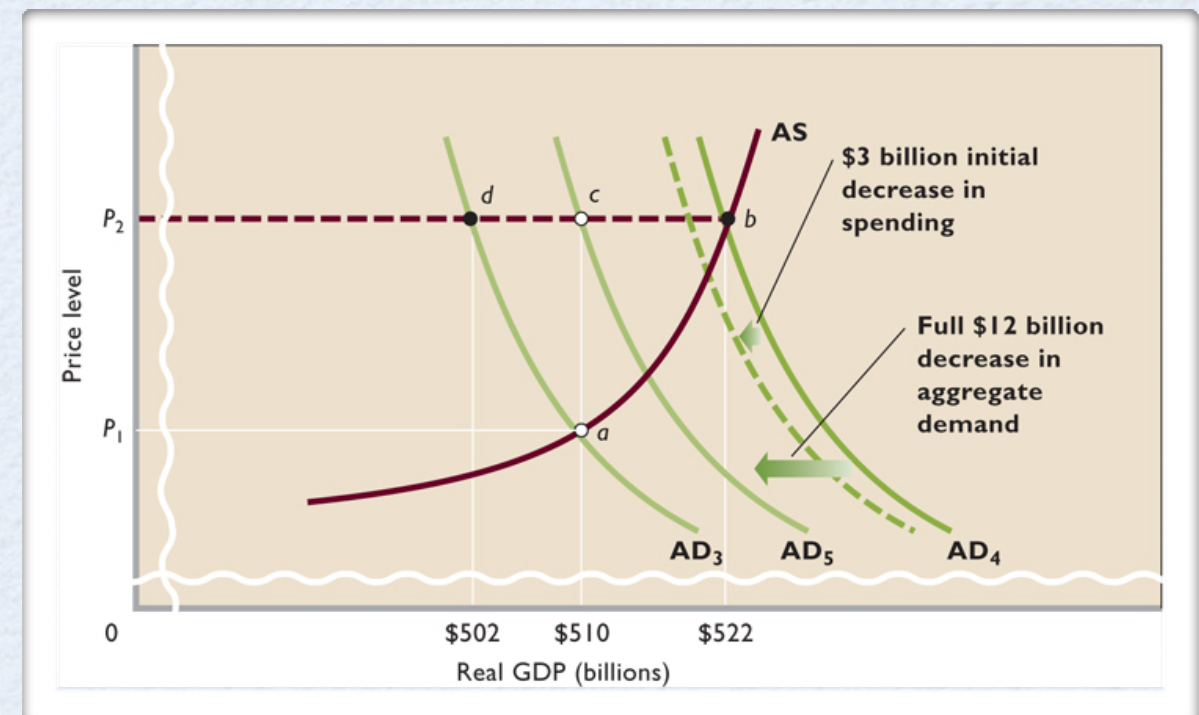
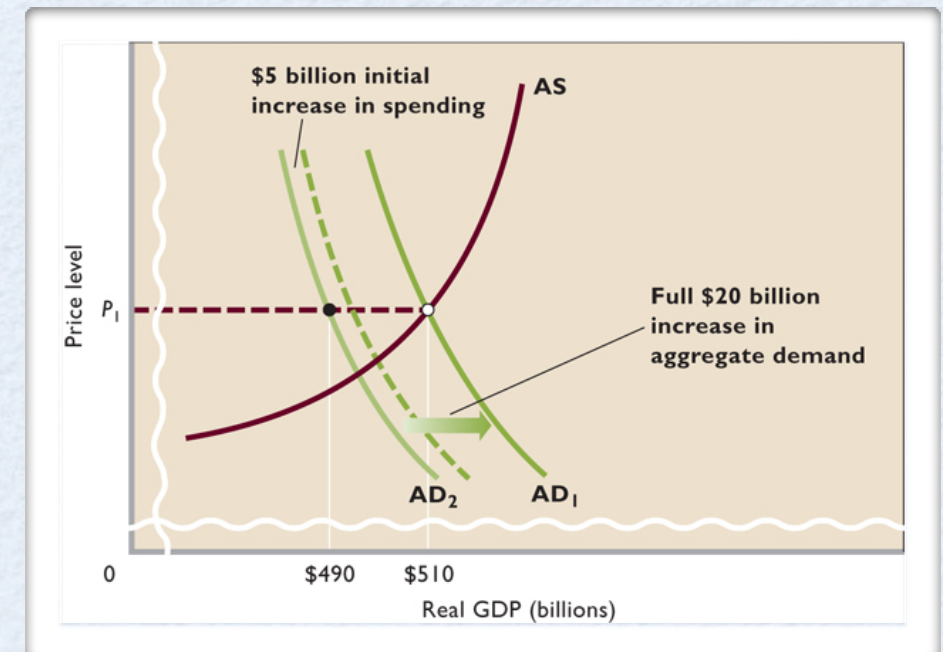


CHAPTER 15

Expansionary Fiscal Policy

- **Expansionary fiscal policy**
 1. Increased government spending
 2. Decreased taxes
 3. Combined government spending increases and tax reductions
- **Contractionary fiscal policy**
 1. Decreased government spending
 2. Increased taxes
 3. Combined government spending decreases and increased taxes



The Multiplier Effect

The relationship between changes in spending and changes in real GDP

- More spending results in a higher GDP
- A change in spending, changes output by more than the initial change in spending - the result is called **the multiplier effect**
- **The multiplier** determines how much larger the change in the GDP will be
- **Multiplier** = $\frac{\text{change in real GDP}}{\text{initial change in spending}}$
- **Change in GDP = multiplier * initial change in spending** $\Rightarrow m * \Delta C = \Delta GDP$
 $\Delta I = +\$30B, m = 3 \Rightarrow \Delta GDP = ? \Rightarrow \Delta GDP = +\$90B$

The Multiplier Effect

The multiplier and the marginal propensities

- $MPC = \Delta C / \Delta Y$
- $Multiplier = \frac{1}{1 - MPC}$
- Example: $MPC = 0.8 \Rightarrow m = ?$
- If $MPC = 0.8 \Rightarrow \frac{1}{1 - MPC}$
- $m = \frac{1}{1 - MPC} \Rightarrow \frac{1}{1 - 0.8} \Rightarrow 1 / 0.2 = 5$

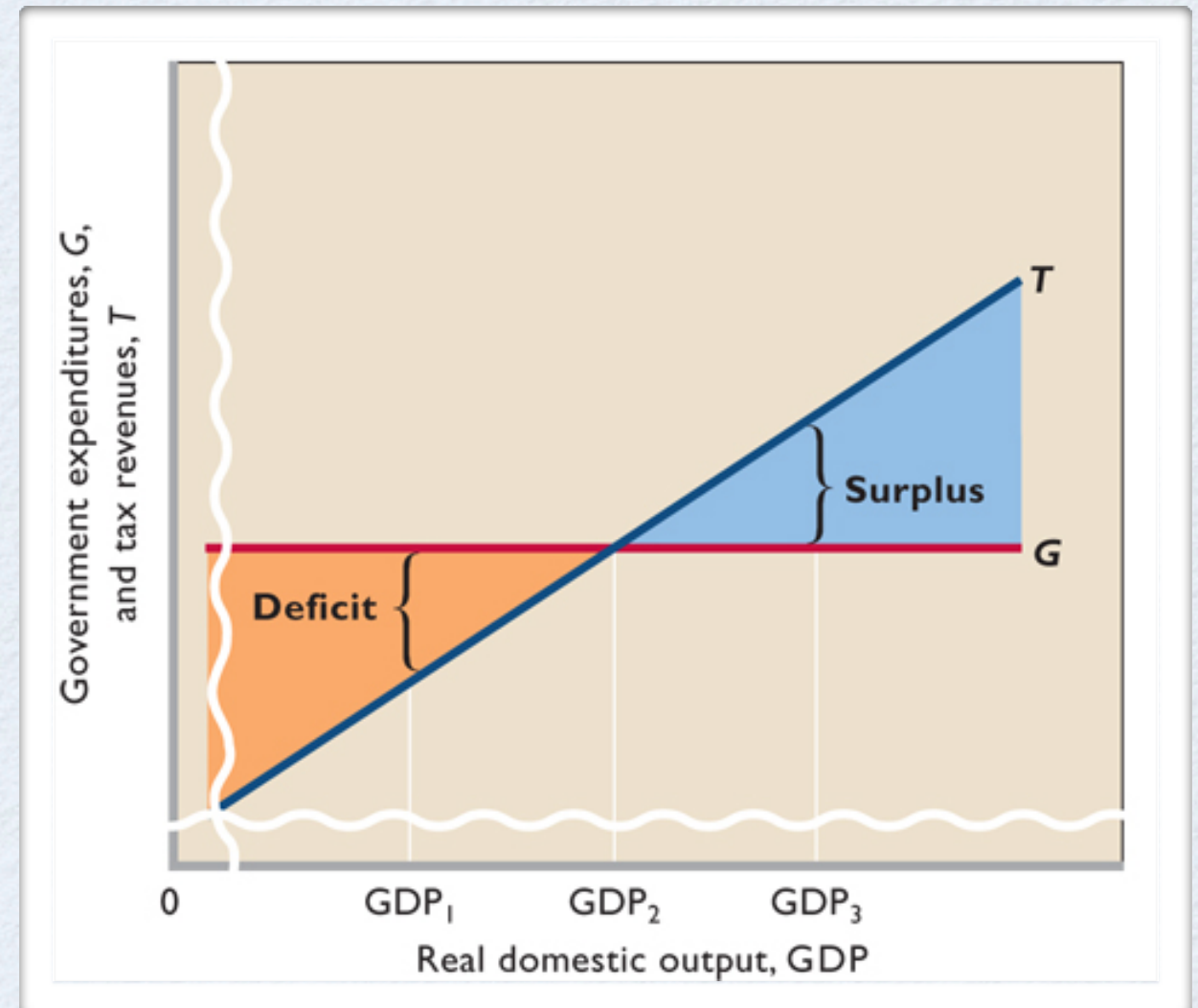
The Multiplier Effect

The tax multiplier

- If $MPC = 0.5 \implies \frac{1}{1 - MPC}$
- $m = \frac{1}{1 - MPC} \implies \frac{1}{1 - 0.5} \implies 1 / 0.5 = 2$
- **Tax multiplier** = $1 - \text{spending multiplier} = 1 - 2 = -1$
- $\Delta T * T_m = \Delta AD = - \$1 \text{ Trillion} * -1 = \1 Trillion
- $\Delta G * S_m = \Delta AD = \Delta G * 2 = \$1 \text{ Trillion} \implies \Delta G = \500 Billion

Built-In Stability

- Automatic or built-in stabilizers - tax revenue varies directly with GDP
- G is assumed to be independent of GDP



Problems, Criticisms, and Complications

- **Problems of timing**
 1. **Recognition lag** - the time between the beginning of recession or inflation and the certain awareness that it is actually happening
 2. **Administrative lag** - the time the need for fiscal action is recognized and the time action is taken
 3. **Operational lag** - the time fiscal action is taken and the time that action affects output, employment, or the price level
- **Crowding-out effect** - an expansionary fiscal policy may increase the interest rate and reduce investment spending, thereby weakening or canceling the stimulus of the expansionary policy