



Bilkent University
Department of Economics

Cyclical Facts and Goods Market Equilibrium: Aggregate Expenditure and Output

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Aggregate Expenditure vs. Actual Output

▶ **Aggregate Expenditure (AE):**

$$AE = C + I^P + G (+NX)$$

- ▶ Intended spending by households, firms, and government.

▶ **Actual Output (Y):**

$$Y = C + \underbrace{I^P + \Delta\text{Inventories}}_{\text{Actual investment}} + G$$

- ▶ What is actually produced and sold.

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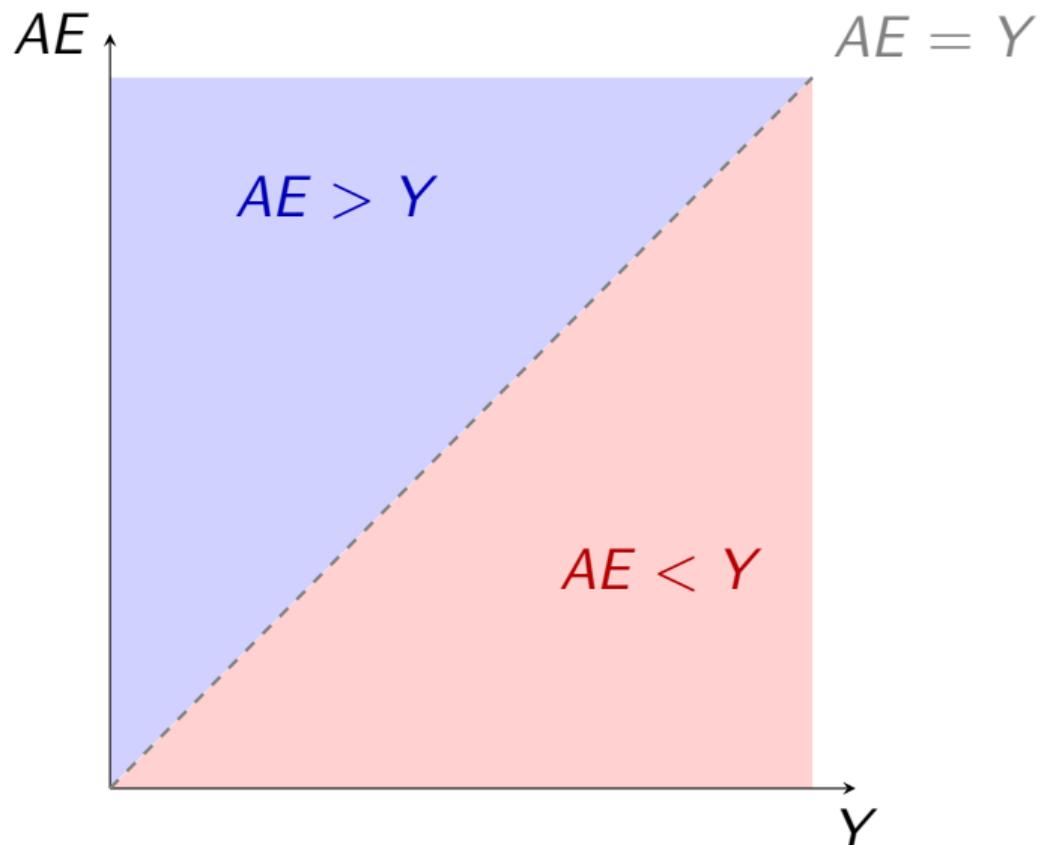
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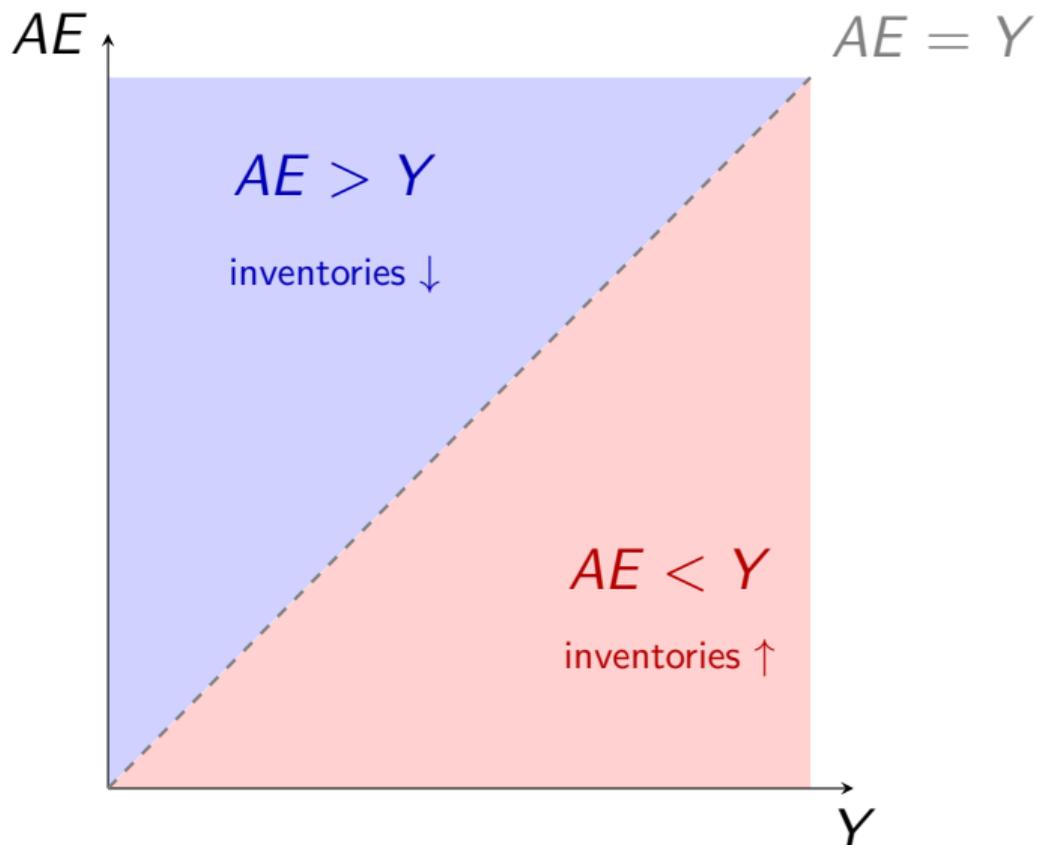
▶ Equilibrium condition:

$$AE = Y \Rightarrow \Delta\text{Inventories} = 0$$

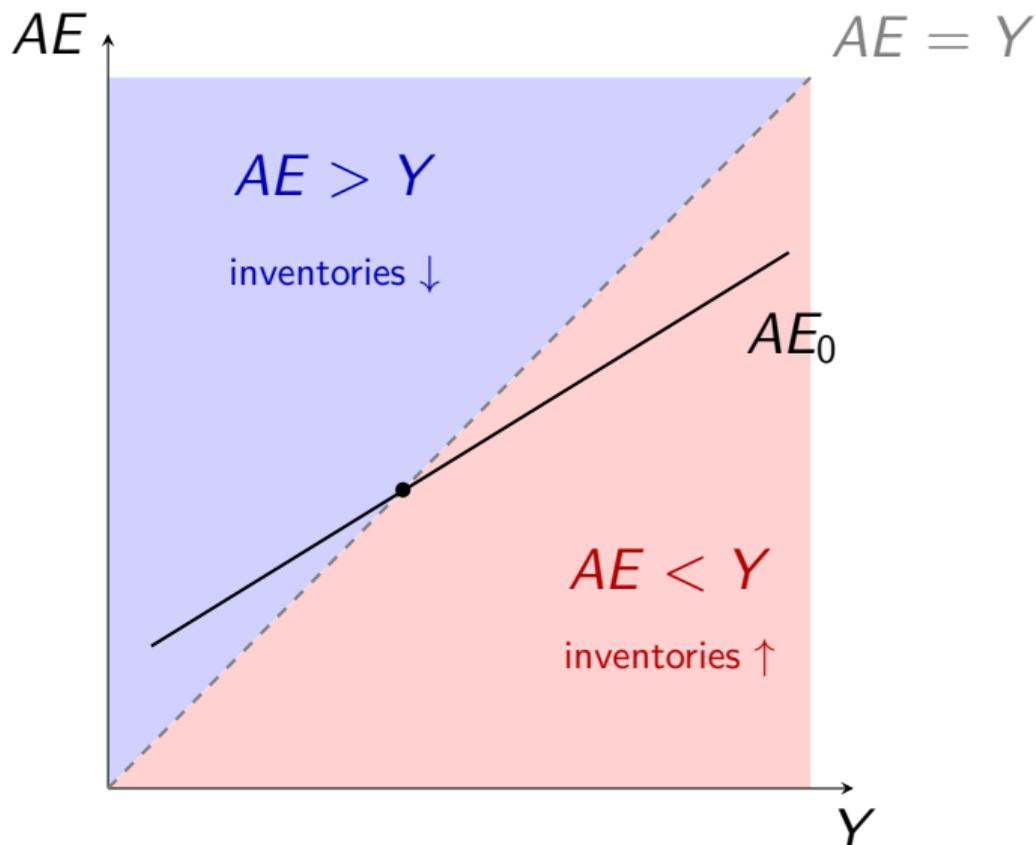
Aggregate expenditure versus aggregate income



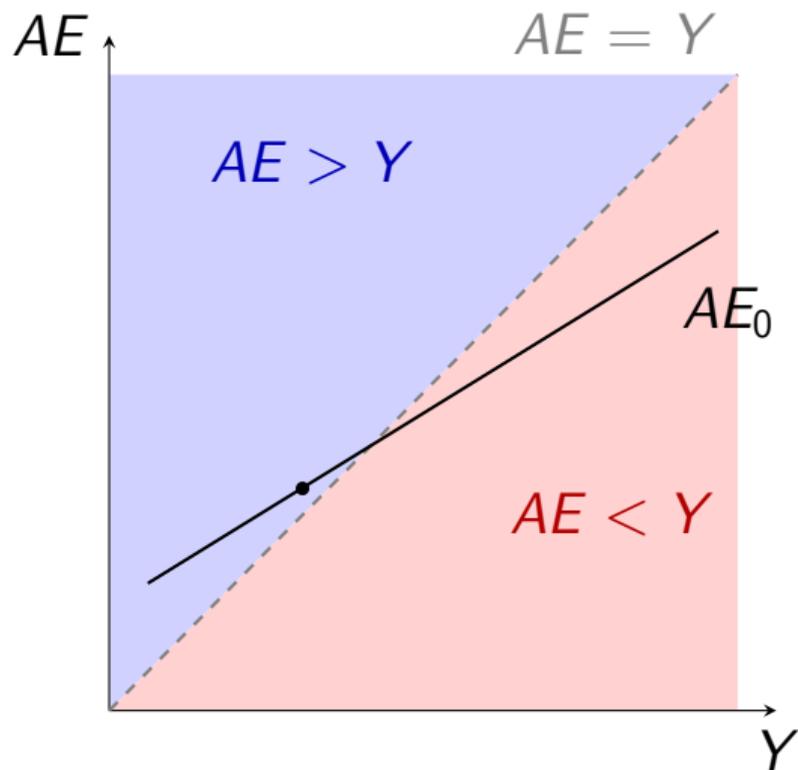
Aggregate expenditure: Inventories



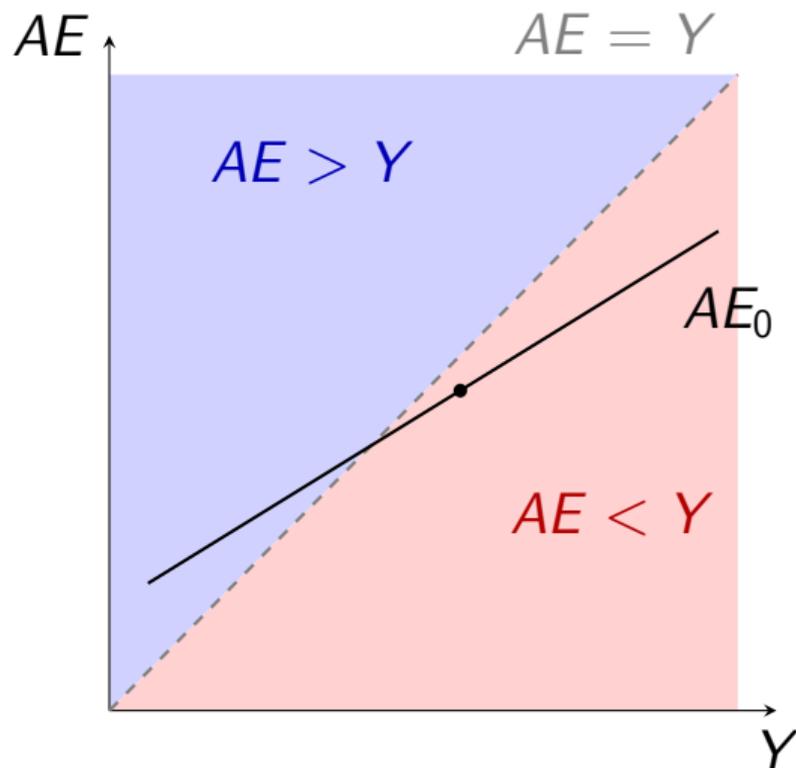
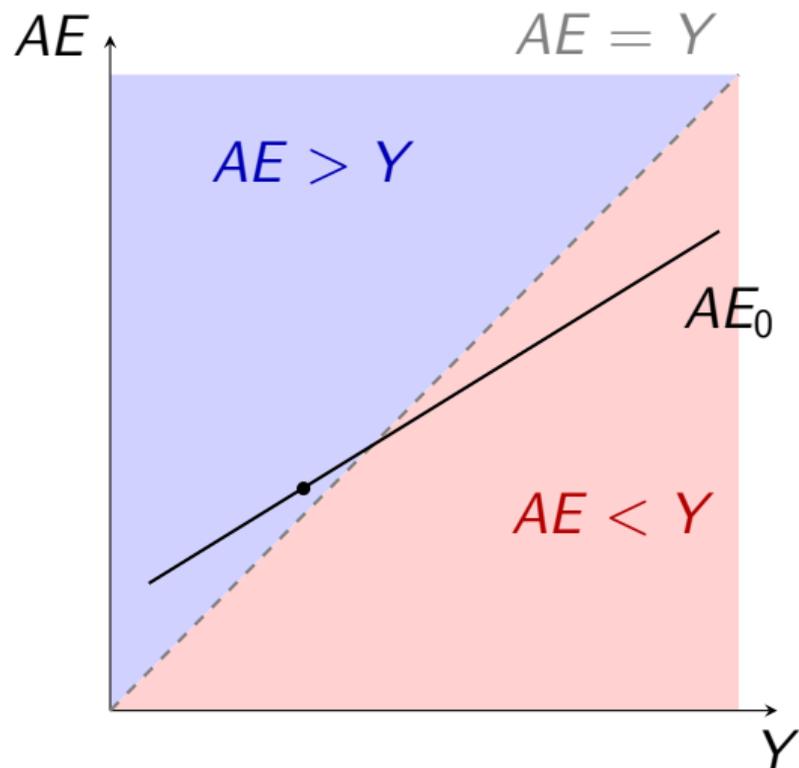
Aggregate expenditure: Equilibrium ($AE=Y$)



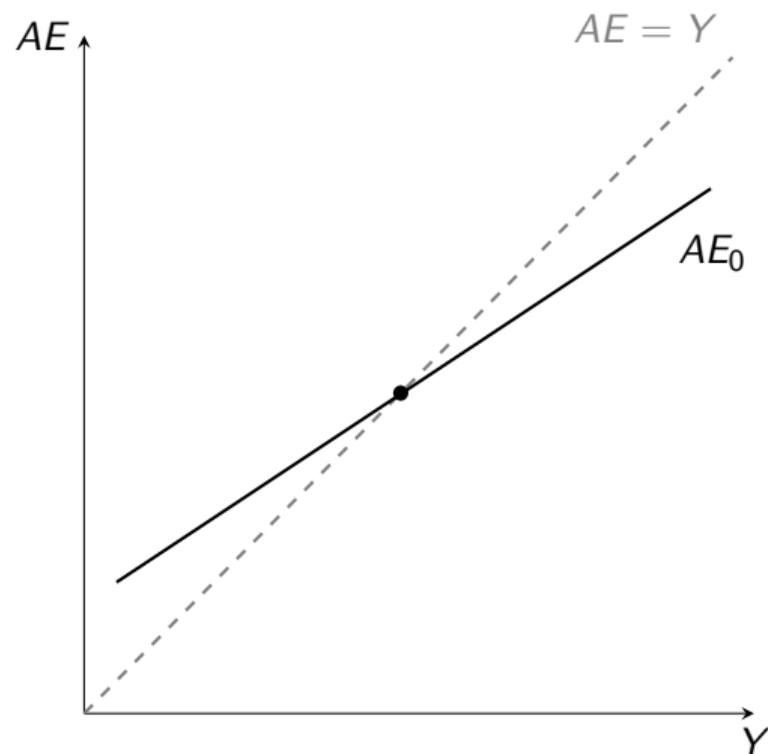
Aggregate expenditure: Disequilibrium



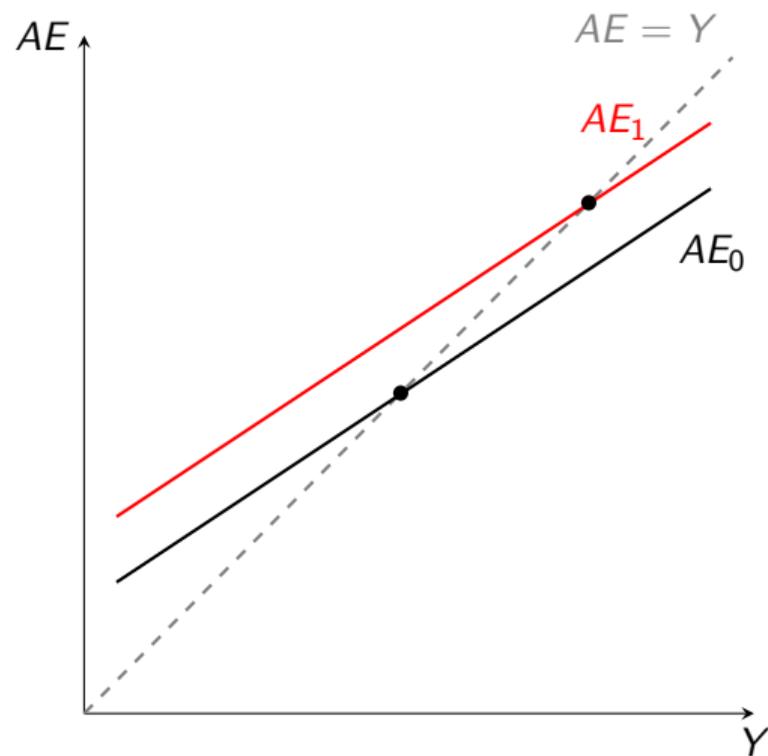
Aggregate expenditure: Disequilibrium



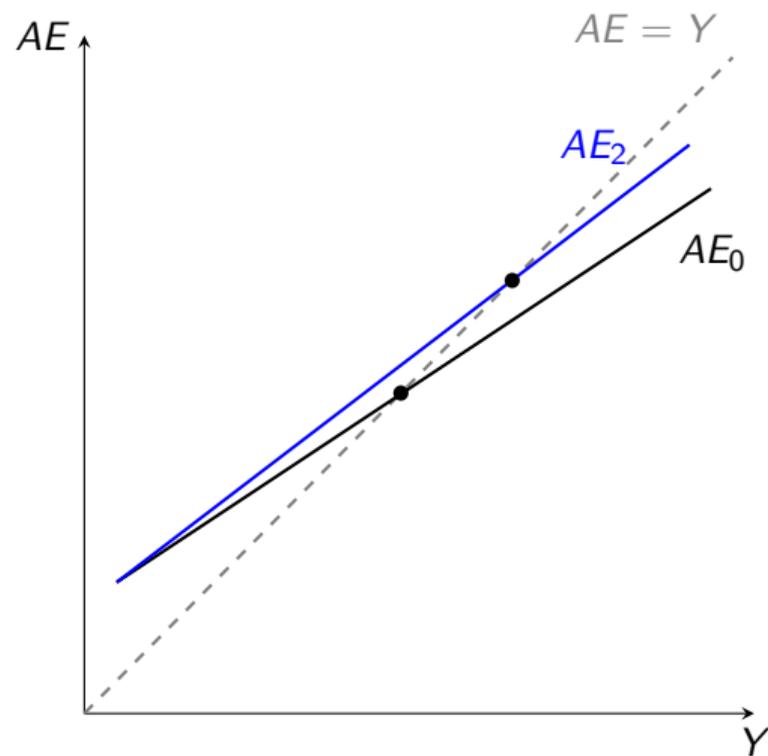
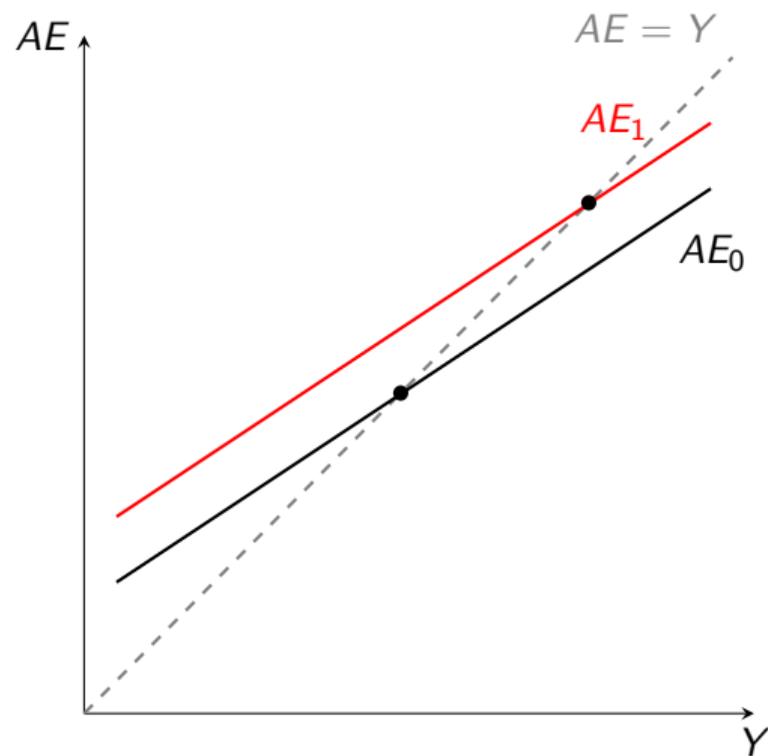
AE model: equilibrium (baseline)



AE model: changes



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Aggregate Expenditure Government Spending Multiplier Simulator

Tax Reduction vs. Government Spending

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▶ **Comparison:**

- ▶ Government spending has a larger effect on output than a tax cut of the same size.
- ▶ Reason: part of a tax cut is saved, while government spending enters AE one-for-one.

