Household and firm behavior in the macroeconomy: a further look on the product market

Econ 202 Lecture 3

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Outline

What types of decisions the households take?

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1. Consumption

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1. Consumption
2. Labor supply / Leisure

These two decisions affect the macro behavior.

The Keynesian Theory of Consumption

1. Average propensity to consume: the proportion of income Y that the household spends on consumption C.

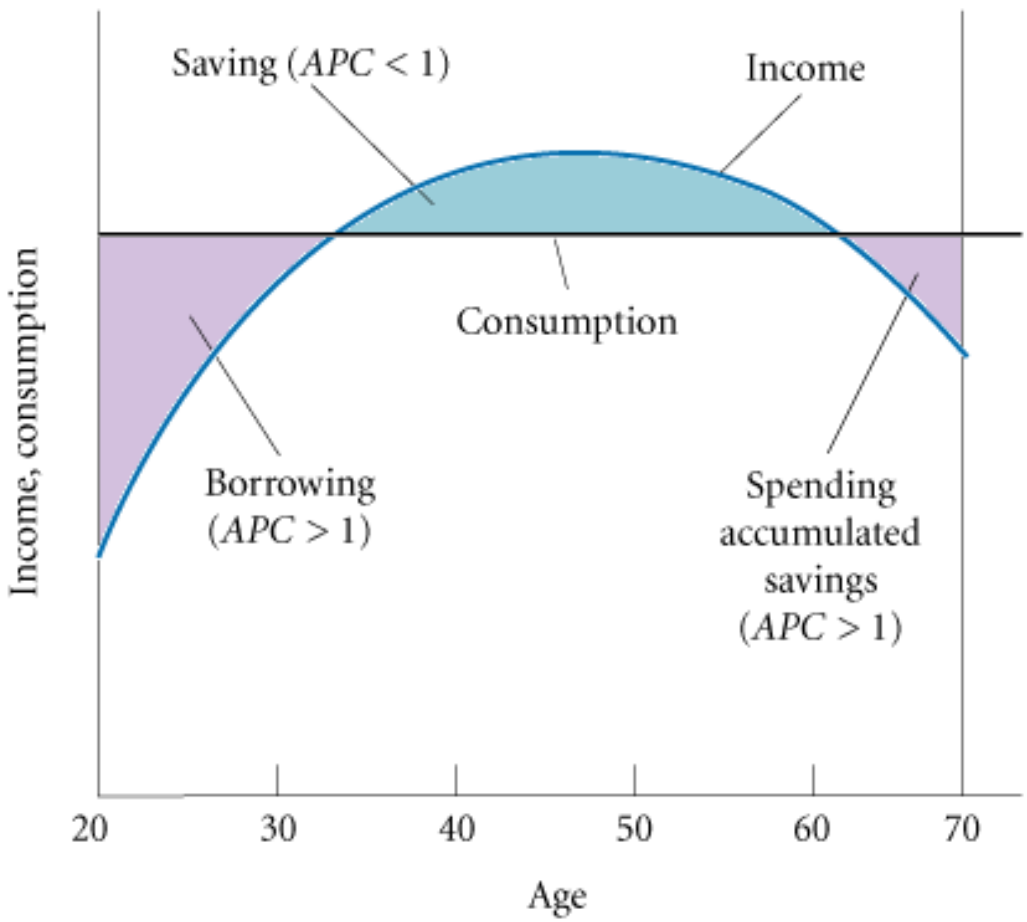
$$APC_t = \frac{C_t}{Y_t} \tag{1}$$

2. The more income, the more consumption.
3. APC declining with income.

Keynesian theory insufficient to explain modern consumption, borrowing, and labor supply decisions.

Life-cycle theory of consumption

1. The life-cycle theory of C demonstrates people make lifetime C plans based on their *expected lifetime income*.
2. People prefer to maintain constant level of C over long periods of time.
   - if they have higher income this period, they *save*
   - if they have lower income this period, they *borrow*



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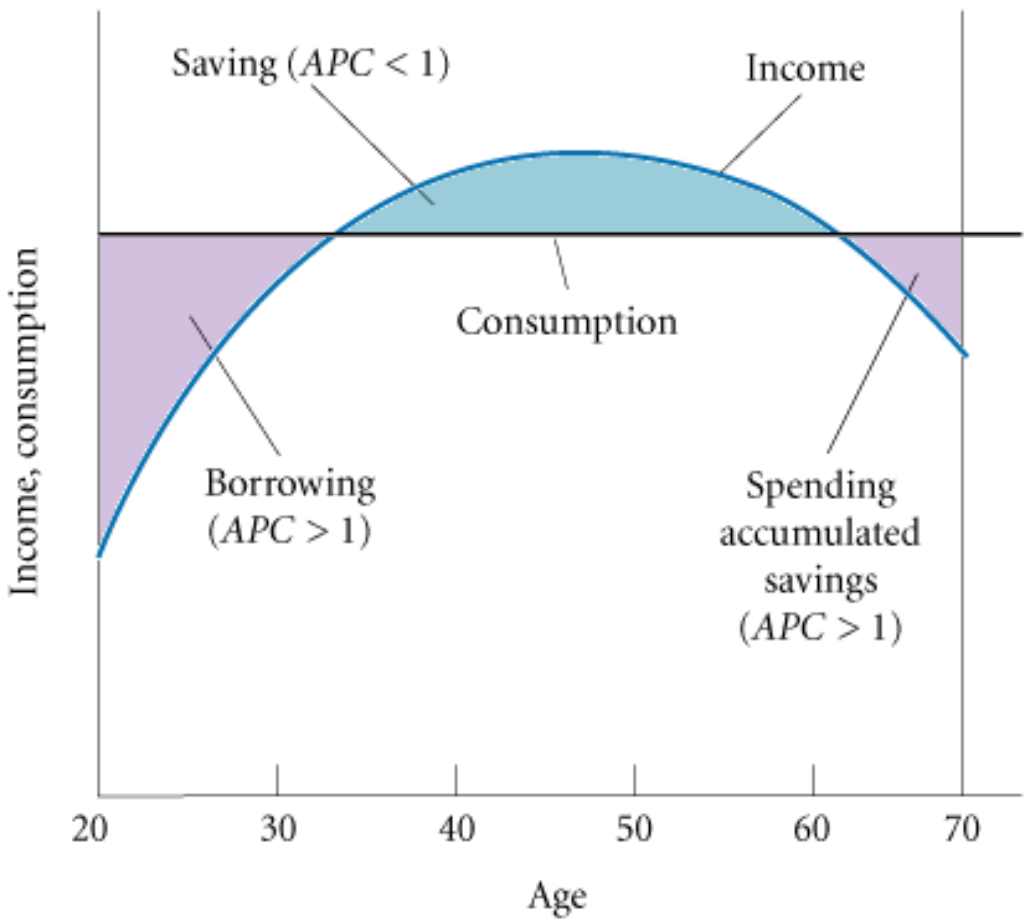

Can this model of reality explain macro behavior?

The labor supply / leisure decision

Households make decisions on:

1. whether to work
2. how much to work

Once they have decided to work, they have to choose the quantity of labor supplied. How to choose?

How to choose how much to work?

Factors determining the quantity of labor supply:

1. The wage (w). What happens when w increases?
   - if w is low, you may choose to work more
   - if w is high, you may choose to work less
2. The prices (P). What happens when P increases?
3. Non-labor income (NLI): income from investments in deposits, stocks and bonds. The key factor here is the interest rate (i):
   - $i \uparrow$, $NLI \uparrow$, Leisure $\uparrow$, Labor supply $\downarrow$.

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Can i have effects on consumption as well?

Government policy effects on consumption and labor supply

The Effects of Government on Household Consumption and Labor Supply

	Income Tax Rates		Transfer Payments	
	INCREASE	DECREASE	INCREASE	DECREASE
Effect on consumption	Negative	Positive	Positive	Negative
Effect on labor supply	Negative*	Positive*	Negative	Positive

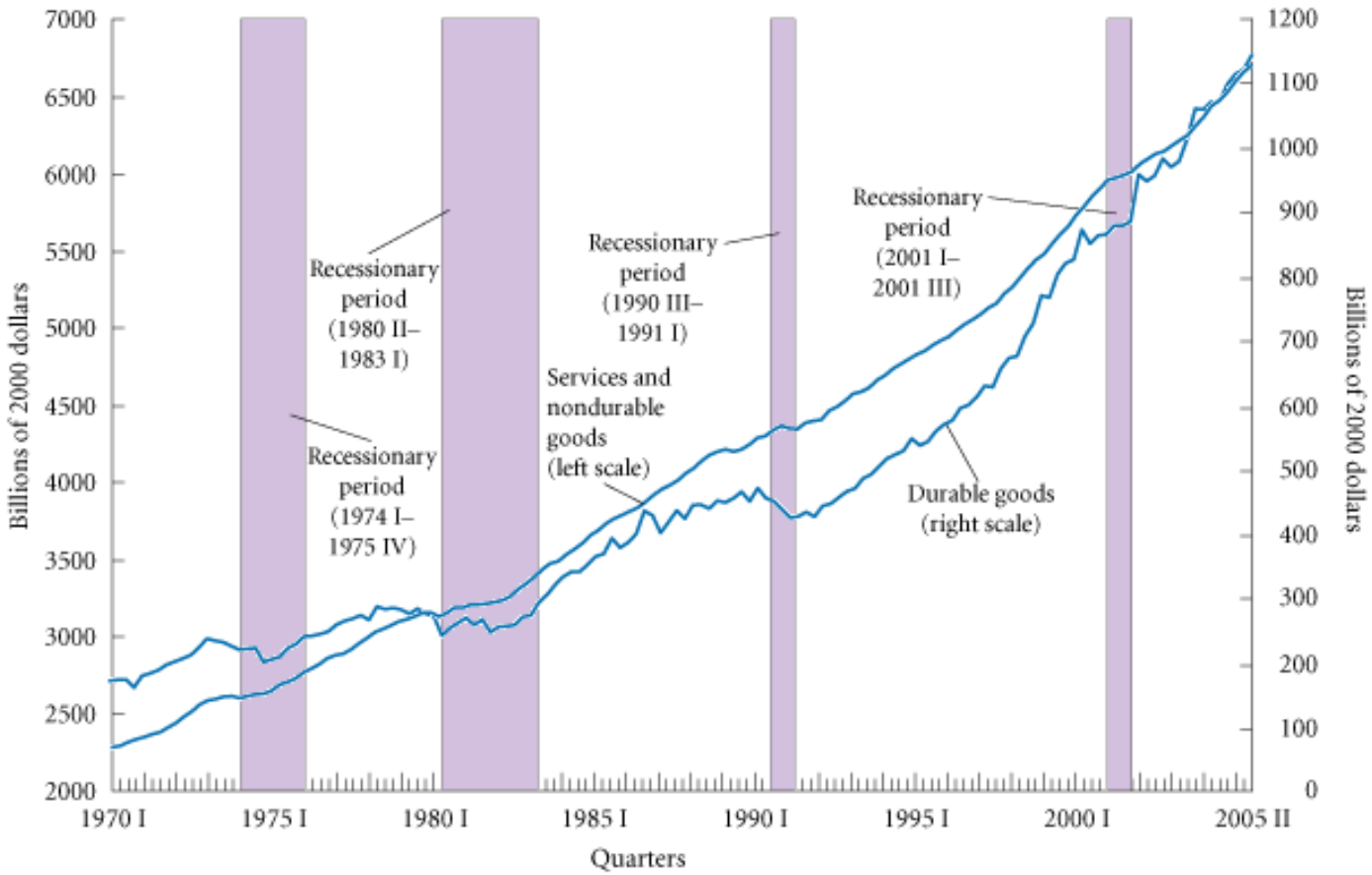
*If the substitution effect dominates.

The role of household constraints on employment and consumption

1. *Employment constraint*: people want to work but there are no jobs for them
2. *Liquidity constraint*: people want to spend but cannot borrow against future income

The household sector since the 1970s

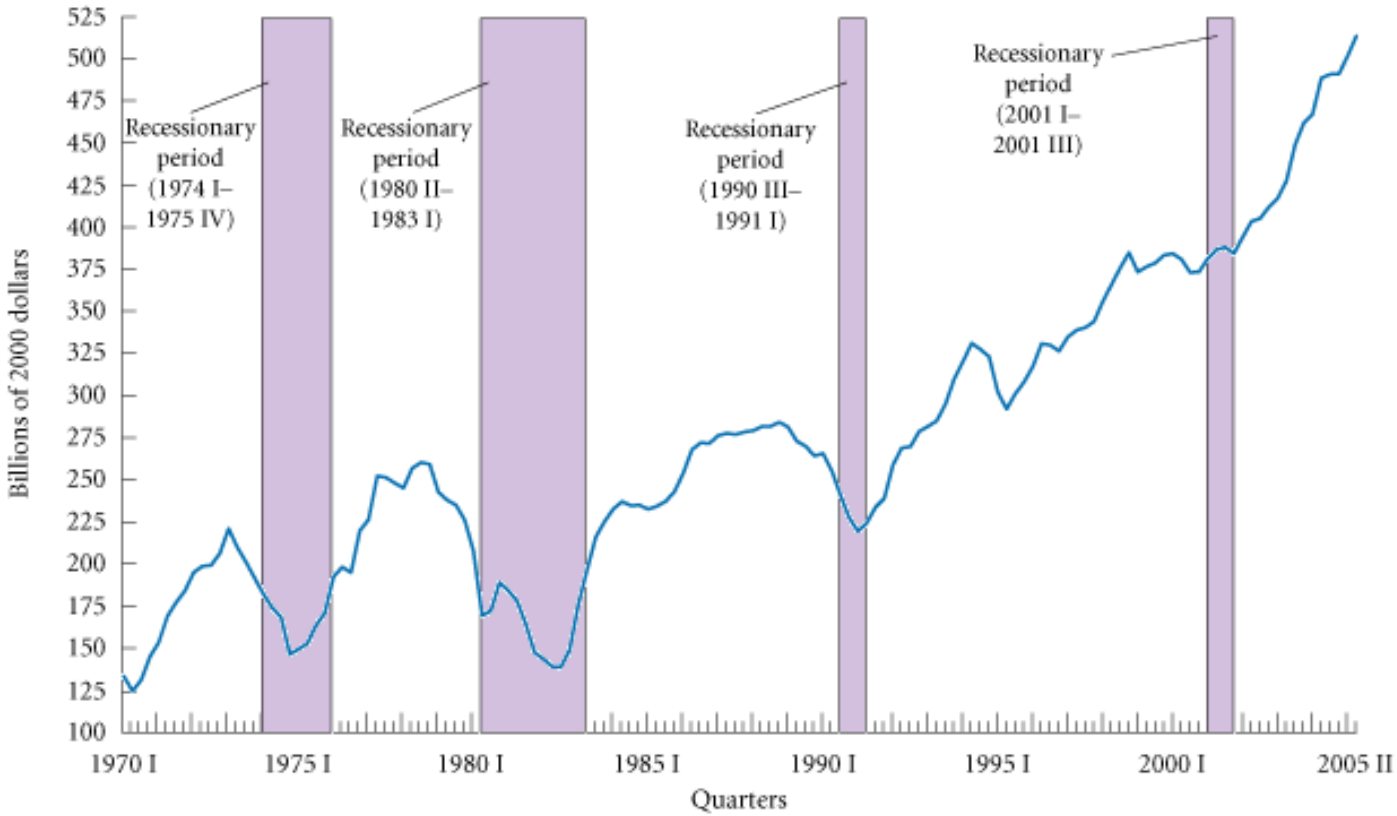
Consumption



Pay close attention to the difference in the path of *durable goods* and *non-durable goods*.

The household sector since the 1970s (2)

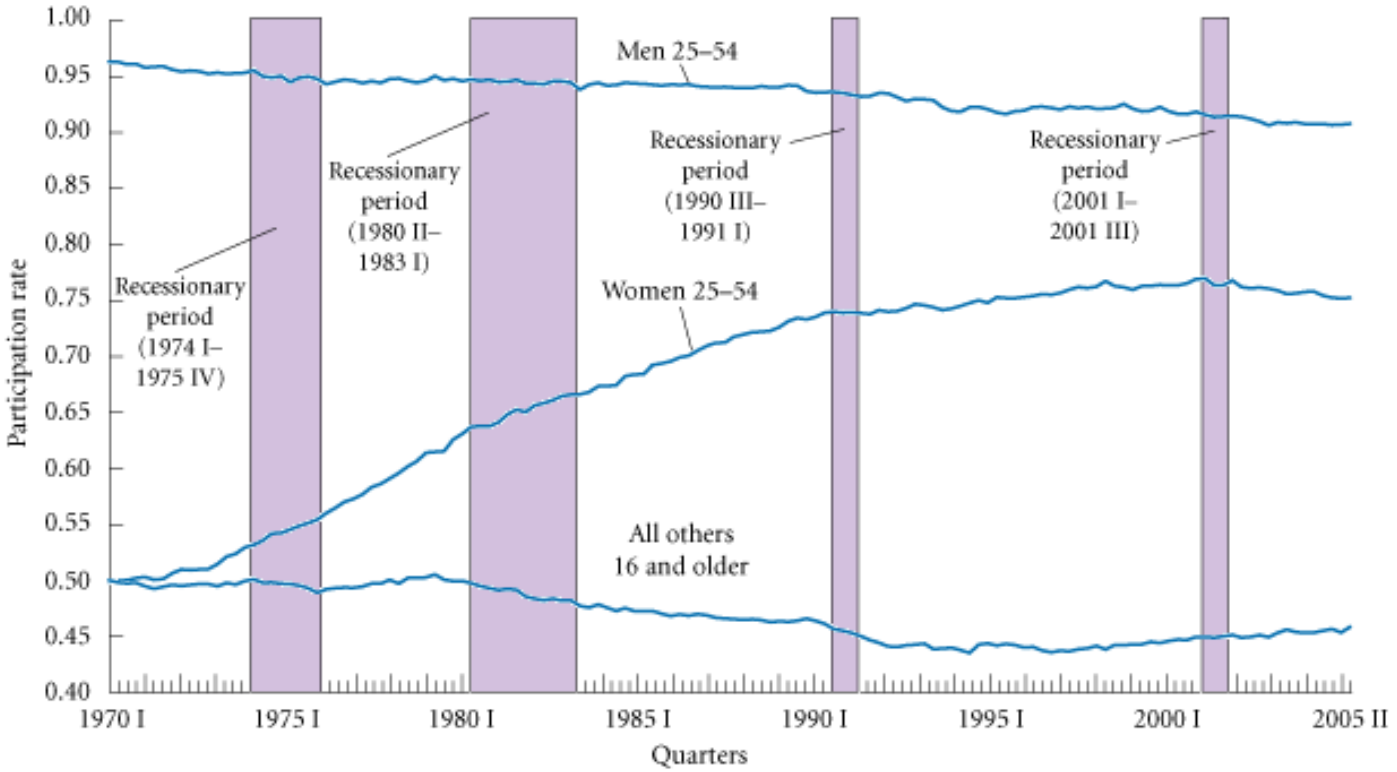
Housing Investment



Pay close attention to what happens with housing spending *before* each recession.

The household sector since the 1970s (3)

Labor Supply



- men are working *less*
- women are working *more*

What is a firm?

The decisions of the firm

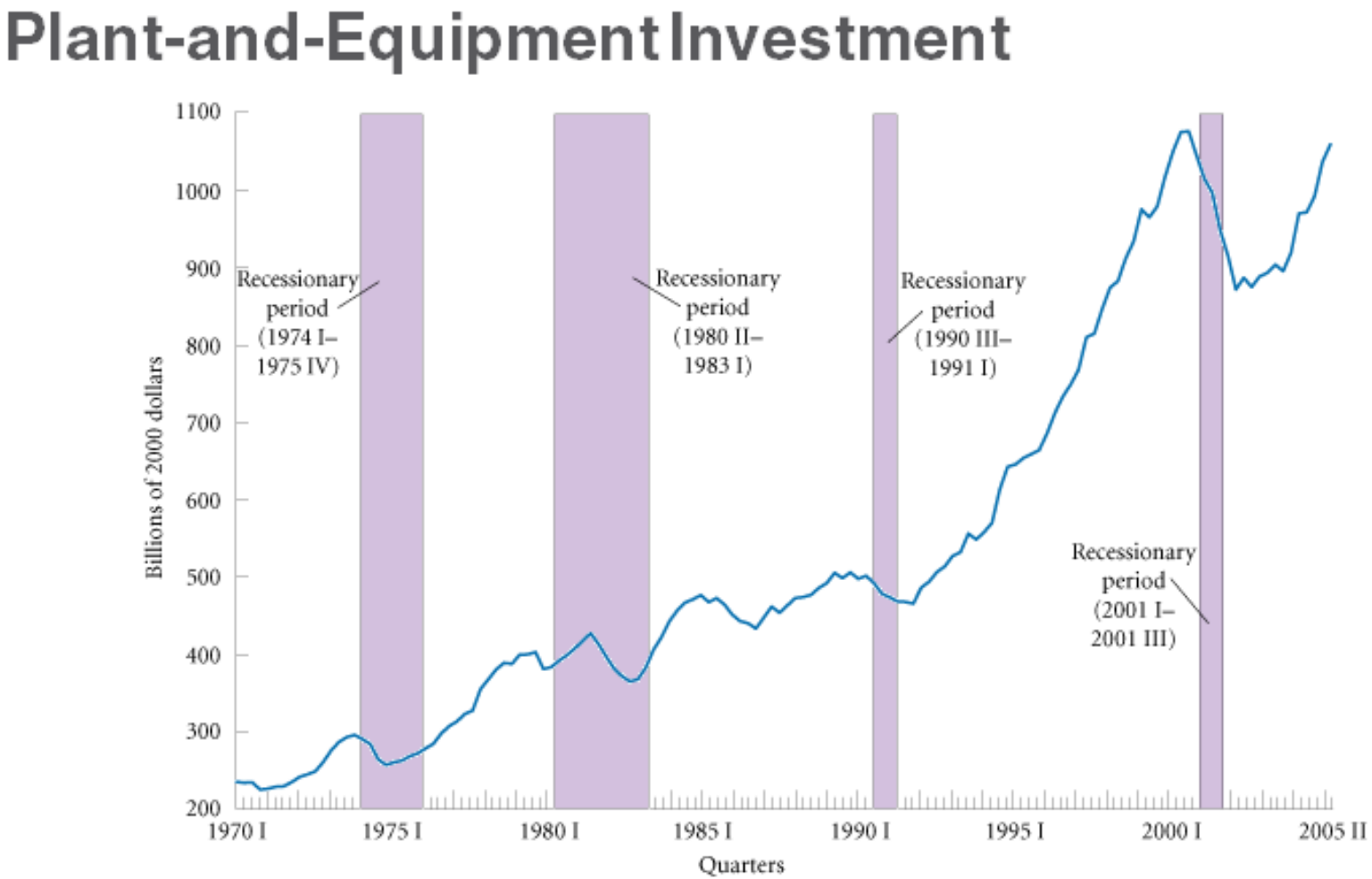
The profit:

$$\pi = pQ - wL - rK \tag{2}$$

What decisions are the firms making?

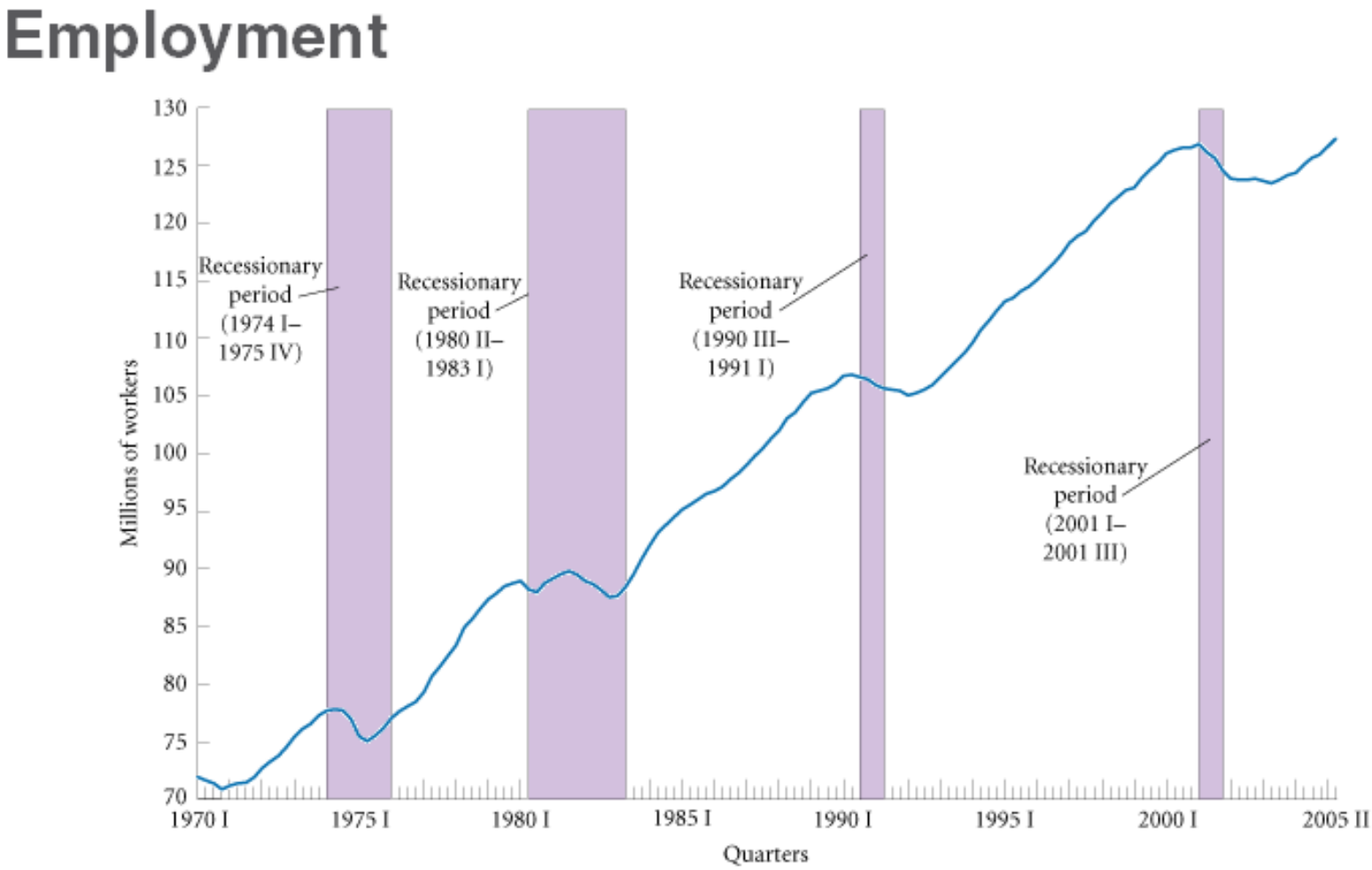
1. how much to produce (Q): output
2. how much labor (L) to hire: employment
3. how much capital (K) to hire: investment

Investment since the 1970s



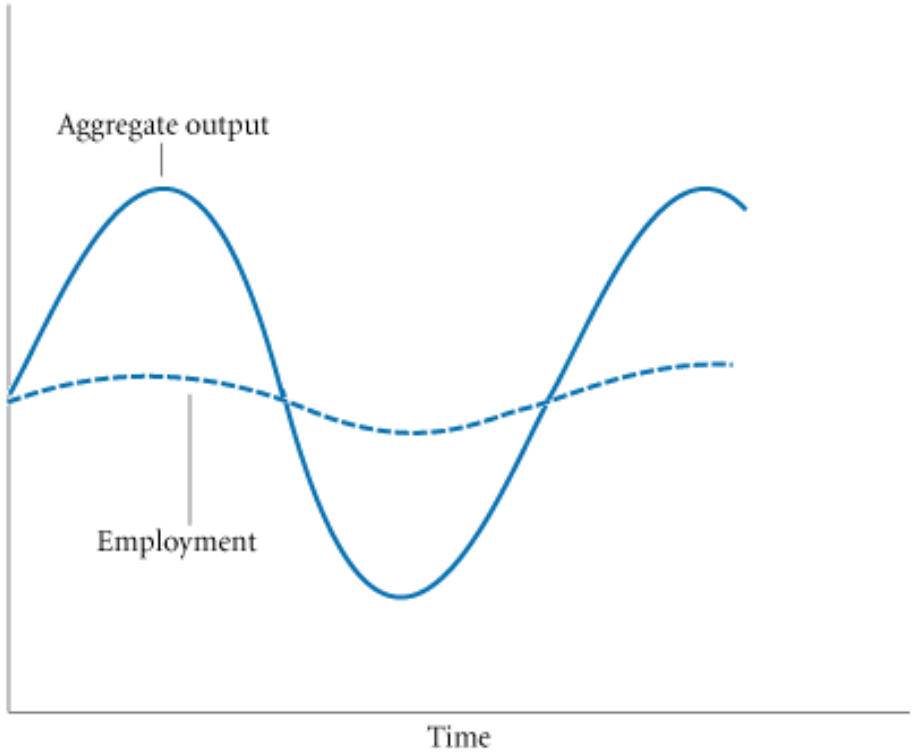
Before recessions, *I* slows down.

Employment since the 1970s



In recessions, employment goes down.

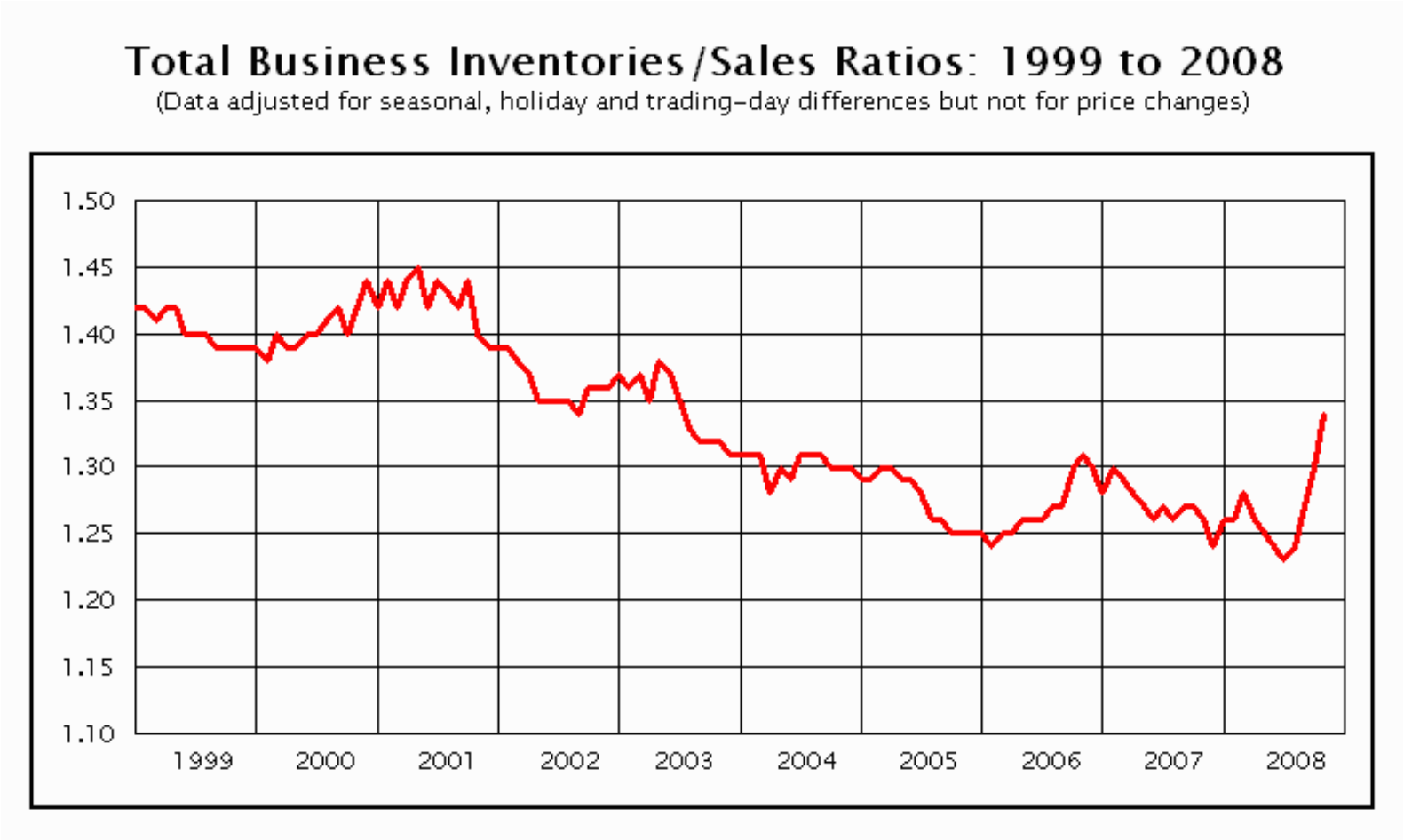
Employment and output relationship



Okun's Law: the unemployment rate decreases about 1 percentage point for every 3 percent increase in real GDP. Later research and data have shown that the relationship between output and unemployment is not as stable as Okun's "Law" predicts.

The role of inventories

What are inventories?
Why are they important?



In recessions, inventories go up.