

# Inside the black box

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1 Lags in the effects of monetary policy

2 The channels of transmission

# Monetary policy in practice

in a complex, ongoing process.

- lags in the effects of monetary policy on the economy
- uncertainty about the channels through which monetary policy works

## Unanticipated tightening of money

- the Fed funds rate increases within a month, but the effects is transitory
- Real GDP barely responds during the first four months, it then begins to drop sharply. It falls to the lowest level after 18 months
- The response of prices is even slower. The price level does not change during the first 12 months

# The long lags

- ... makes it very difficult to use the policy instrument with precision
- If FOMC forecast a future inflation, it will reduce current money supply
- but economic forecasts are often inaccurate

# Interest rate channel

- A reduction of  $M^s$  raises nominal interest rate
- When price level remains constant, **real interest rate** increases, and both consumption and investment decrease
- **exchange rate channel** works similarly

## credit channel

- A tightening of monetary policy also works by reducing both the supply and demand of credit
- Tight monetary policy reduces bank reserves, and leads to reduced lending by banks
- So, firms and consumers will reduce their spending

## credit channel

- On the other hand, when interest rate rises, firm's cost increases. So firm has troubles obtaining credit
- The rise in interest rate will reduce stock price. If firm and consumer use stocks as collateral for a bank loan, the lowering in stock price reduces their credit-worthiness
- Both of the above reduces spending by consumer and firm