

## Monetary Policy Rules

$$\frac{\Delta M}{M} = f(\eta, U)$$

## Monetary Policy Rules

- Announce Monetary Policy as a function of conditions.

$$\frac{\Delta M}{M} = f(\eta, U)$$

- Thus people know what you are doing.

## The Taylor Rule

$$\eta = \frac{\Delta P}{P} \cong \frac{\Delta M}{M} - \frac{\Delta Y}{Y} + \frac{\Delta V}{V}$$
$$U - U_n \approx \eta_e - \eta$$

## Tradeoffs

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$$U - U_n \approx \eta_e - \eta$$

Unemployment too high? We need to raise  $\eta$ , which we do by increasing money growth.

BUT if we overdo that, we will get inflation

## Tradeoffs

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$$U - U_n \approx \eta_e - \eta$$

Inflation too high? We cut it by decreasing money growth.

BUT if we overdo that, we will get unemployment

## Publicity

$$\eta = \frac{\Delta P}{P} \cong \frac{\Delta M}{M} - \frac{\Delta Y}{Y} + \frac{\Delta V}{V}$$
$$U - U_n \approx \eta_e - \eta$$

And, no matter what we do, there are a number of people nervously looking over our shoulder. We can create anxiety and uncertainty.

### A Possible Rule

$$\frac{\Delta M}{M} = 4\% - 0.5(\eta - 2\%) + 1.5(U - U_n)$$

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Make it Public!

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What happens if you don't stick to the rule?

## Changing Conditions

$$\frac{\Delta M}{M} = 4\% - 0.5(\eta - 2\%) + 1.5(U - U_n)$$

What happens if conditions change?

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What happens if conditions change?

$$\frac{\Delta M}{M} = 4\% - 0.7(\eta - 2\%) + 1.5(U - U_n)$$

## The Friedman Rule

$$\frac{\Delta M}{M} = 4\%$$

Make it Public!

## Why the Friedman Rule?

Interventions	10
Made the situation better (narrowed the gap between $\eta$ and $\eta^*$ )	7
Made the situation worse (increased the gap between $\eta$ and $\eta^*$ )	3

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## Why the Friedman Rule?

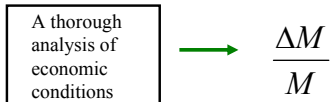
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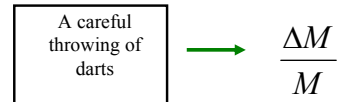
## The Greenspan Rule



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## Velocity

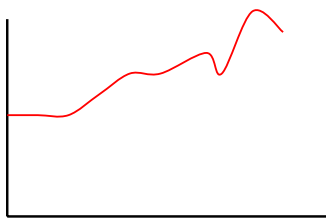
$$\frac{\Delta P}{P} \cong \frac{\Delta M}{M} - \frac{\Delta Y}{Y} + \frac{\Delta V}{V}$$
$$\frac{\Delta V}{V} = 0$$

## Velocity

$$\frac{\Delta V}{V} = \varepsilon$$

$\frac{\Delta V}{V}$  Initially Declines with  $\frac{\Delta M}{M}$

## Velocity



End

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