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# Monetary Policy Strategies for the Federal Reserve

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Discussion of Practical Considerations

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# Conclusions of Lars Svensson's presentation

- Argues forecast targeting is a better general strategy
- Document defines specific strategies using loss functions
  - Clarifies difference between longer-term strategies and setting (the policy rate) to achieve objectives
- Among specific strategies: average inflation targeting and price-level targeting have some advantages if...
- Average inflation is a smaller change than price-level targeting, but still need to choose:
  - Averaging period for inflation
  - Temporary or permanent
  - Relative importance of inflation and employment objectives in loss

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Comments  
expand on LS,  
emphasizing  
practical  
considerations

- Focus on specific strategies on inflation within a dual mandate framework
- With a lower bound to interest rates—evaluate:
  - Robustness
  - Time consistency
  - Credibility
- Some advantages to temporary variants of price-level targeting and average inflation targeting



# Average inflation targeting (AIT) and price-level targeting (PLT)

## Good

- Have automatic stabilizing benefits in some models assuming expectations behave “appropriately”
- Achieve inflation close to target

## But

- Are not robust
  - Under some expectations assumptions, advantages of PLT decrease and can be worse than flexible IT
  - Whether PLT is better than FIT can depend on the model
- Are time inconsistent
  - Would policymakers want to tighten if inflation is below  $\pi^T$  and unemployment is rising, but prices are too high relative to target.

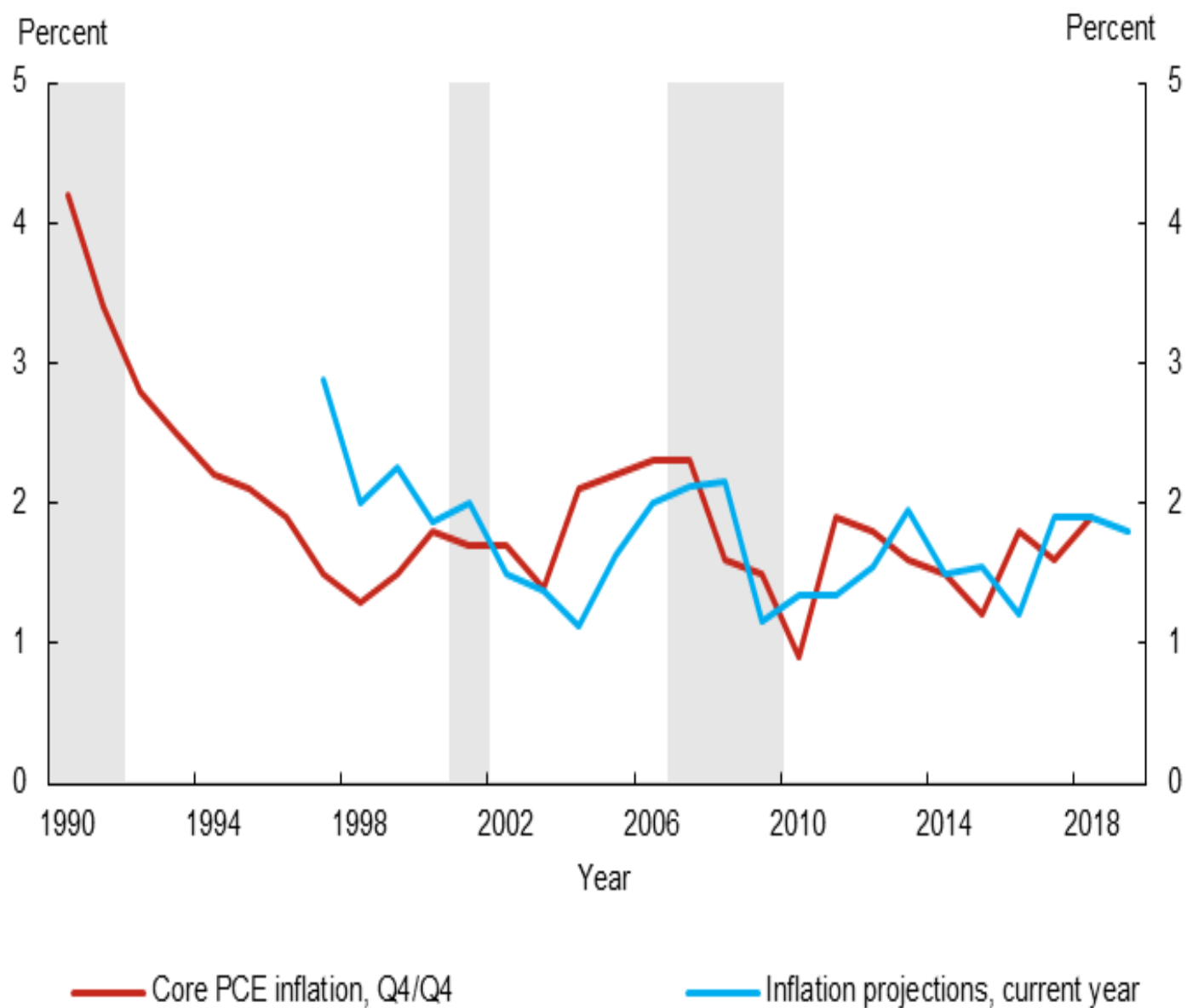
## Key questions: Can central banks

- engineer outcomes as in models given uncertainty?
- manage inflation expectations to behave like frequently assumed?

FOMC forecasts lag inflation

## Short-run expected and actual inflation

Percentage change



# Terminology

- Inflation ( $\pi$ )
- Inflation target ( $\pi^T$ )
- Long-run expected inflation ( $LRE\pi$ )
  - anchors inflation expectations
- Expected inflation ( $E\pi$ )
  - short-run expected inflation moves more if long-run expectations shift in the same direction
- Average inflation ( $A\pi$ )
  - An outcome—what has inflation been on average
- $\pi^*$ 
  - In technical documents, a term in policy functions that may represent the inflation target



## Temporary PLT/AIT means...

- Away from the lower bound to interest rates, the baseline framework remains in place
- Once constrained by the lower bound put some weight on reversing past misses—for example, don't increase policy rates until an average inflation measure is equal to or greater than  $\pi^T$ 
  - At least some of the specified period has to be in the past

## Reasons to consider temporary PLT/AIT

- Even if expectations don't behave "appropriately"…
  - More robust and less-likely time inconsistent than PLT/ALT
  - Achieve  $A\pi$  closer to  $\pi^T$ , helping accountability
  - Can help the public understand policy at the lower bound
  - May be a good risk management tool given uncertainty

Key issue:  
Will credibility  
be maintained  
if  $A\pi \neq \pi^T$ ?

Credibility:  $LRE\pi = \pi^T$

Theory: The lower bound to policy rates introduces an asymmetry

- $A\pi < \pi^T$  under FIT
- This could lead  $LRE\pi$  to drift downward away from  $\pi^T$

Practical considerations:

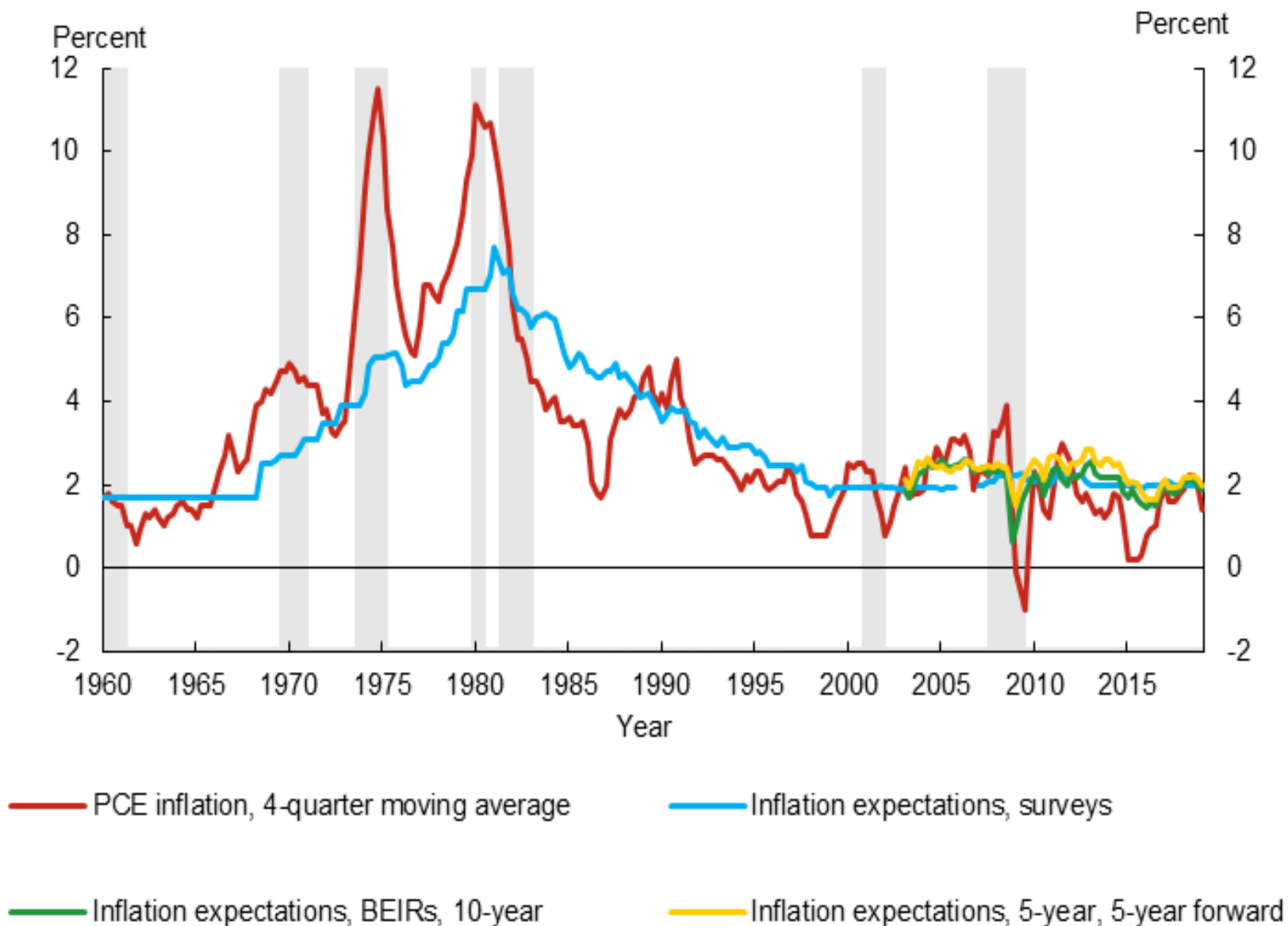
- $LRE\pi$  lags inflation and at longer horizons, the sensitivity to inflation gaps declines
- With an explicit  $\pi^T$  in place,  $LRE\pi$  may be less sensitive to  $\pi$  or  $A\pi$
- But, how to measure  $LRE\pi$ ?

The Federal Reserve has earned credibility...

$$\text{LRE}\pi = \pi^T$$

## Long-run expected and actual inflation

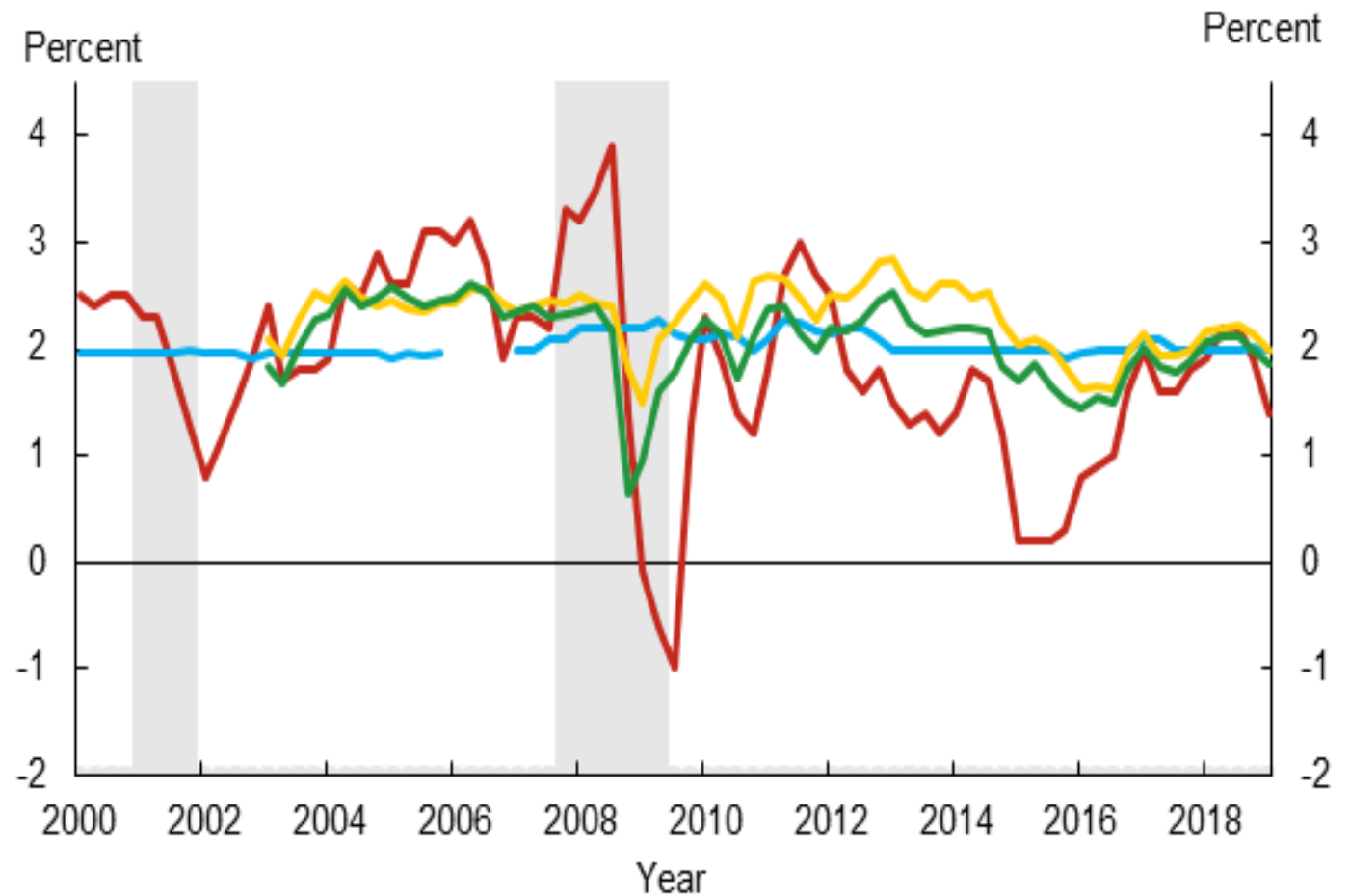
Percentage change



How to  
measure  
 $LRE\pi$ ?

## Long-run expected and actual inflation

Percentage change



- PCE inflation, 4-quarter moving average
- Inflation expectations, surveys
- Inflation expectations, 5-year, 5-year forward
- Inflation expectations, BEIRs, 10-year

Temporary  
PLT/AIT  
policies bring  
 $A\pi$  closer to  
 $\pi^T$ , improving  
credibility

- Temporary PLT/AIT delays raising the policy rate from the lower bound
  - ... increasing the likelihood that inflation would overshoot the target
  - Small overshoots not a large concern
    - would have to be quite large or persistent to lead to an outsized drift of  $LRE\pi$ .
    - policy can react
    - could contribute to bringing  $A\pi$  closer to  $\pi^T$
- Temporary PLT/AIT may increase the buildup of financial imbalances



# Temporary PLT/AIT as risk management under uncertainty

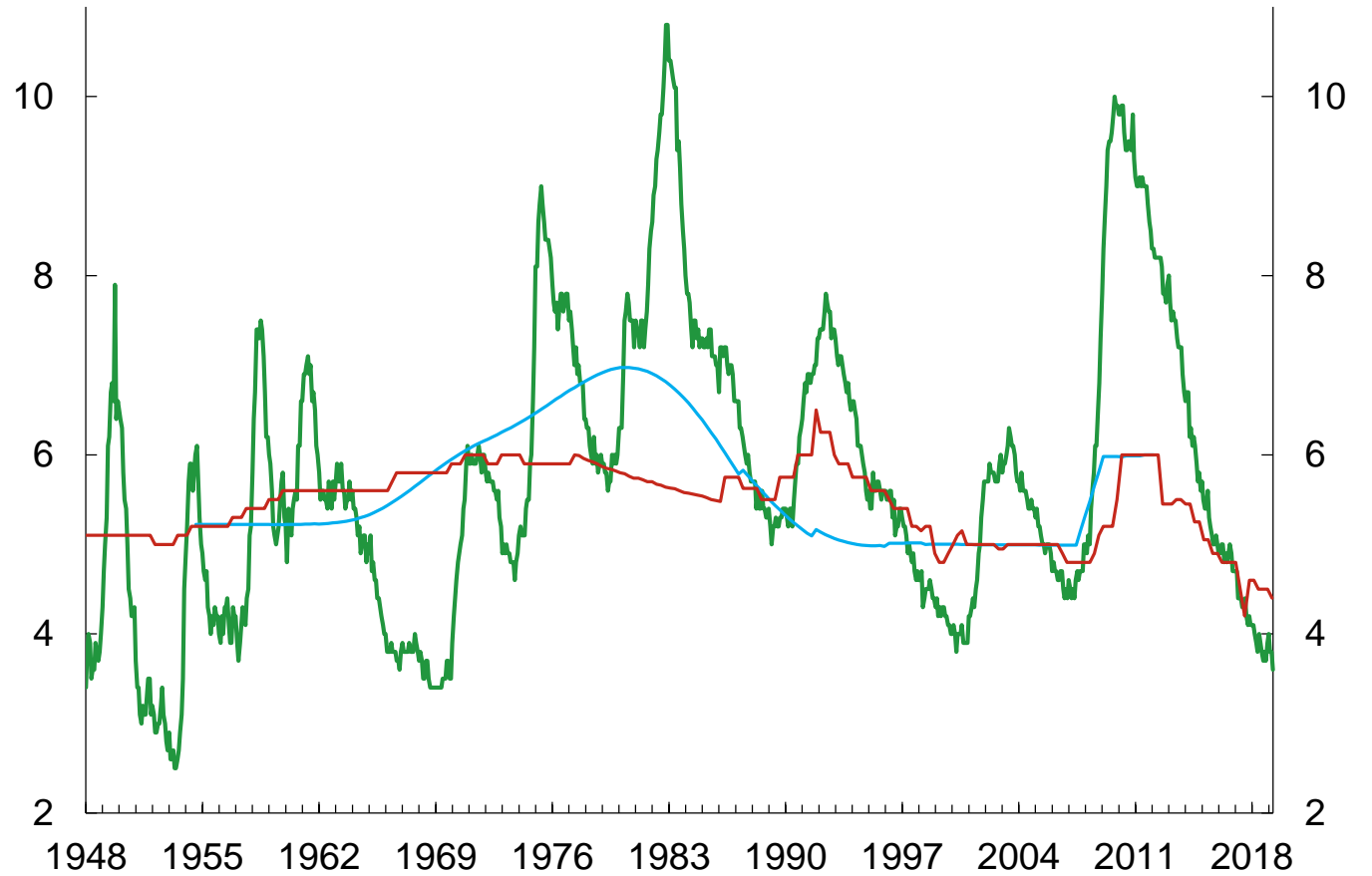
- May balance risks associated with changes in the relationship between unemployment and inflation
- At the lower bound it is better to accept risks of unexpectedly higher inflation than unexpectedly lower inflation

Estimates of the NAIRU move a lot over time, and are revised a lot

# NAIRU estimates and unemployment

Percentage change

Percent



— Unemployment, rate    — NAIRU, 2012 Board staff estimates    — NAIRU, real-time estimates

Temporary  
PLT/AIT can  
improve  
understanding  
of policy rate  
decisions

- At the lower bound, the policy rate appears to be insensitive to data
- Providing necessary conditions for policy rate increases improves transparency on data dependency
- Flexibility is necessary
  - Can consider generalizing concept
  - What if unemployment is high and inflation is temporarily above target (eg. UK experience)?
- Communications challenges—not a promise for action

# Addenda: $\pi^*$ as an operational guide in technical analysis

- In research, have  $LRE\pi = A\pi$ , but if this is true in temporary PLT/AIT, may need inflation to exceed the target in non-lower bound periods.
- In a model,  $\pi^*$  in a policy rule may differ from the target if a different value is required to achieve an outcome where long-run expectations are anchored on the target
  - Other adjustments to the rule could also work
    - Mertens and Williams 2019
    - Bernanke, Kiley, Roberts 2019
- While policy rules are useful in models to approximate behaviour of policy-makers, actual decisions are not determined by mathematical expressions
  - Model limitations and model uncertainty, data uncertainty, parameter uncertainty

THANK YOU