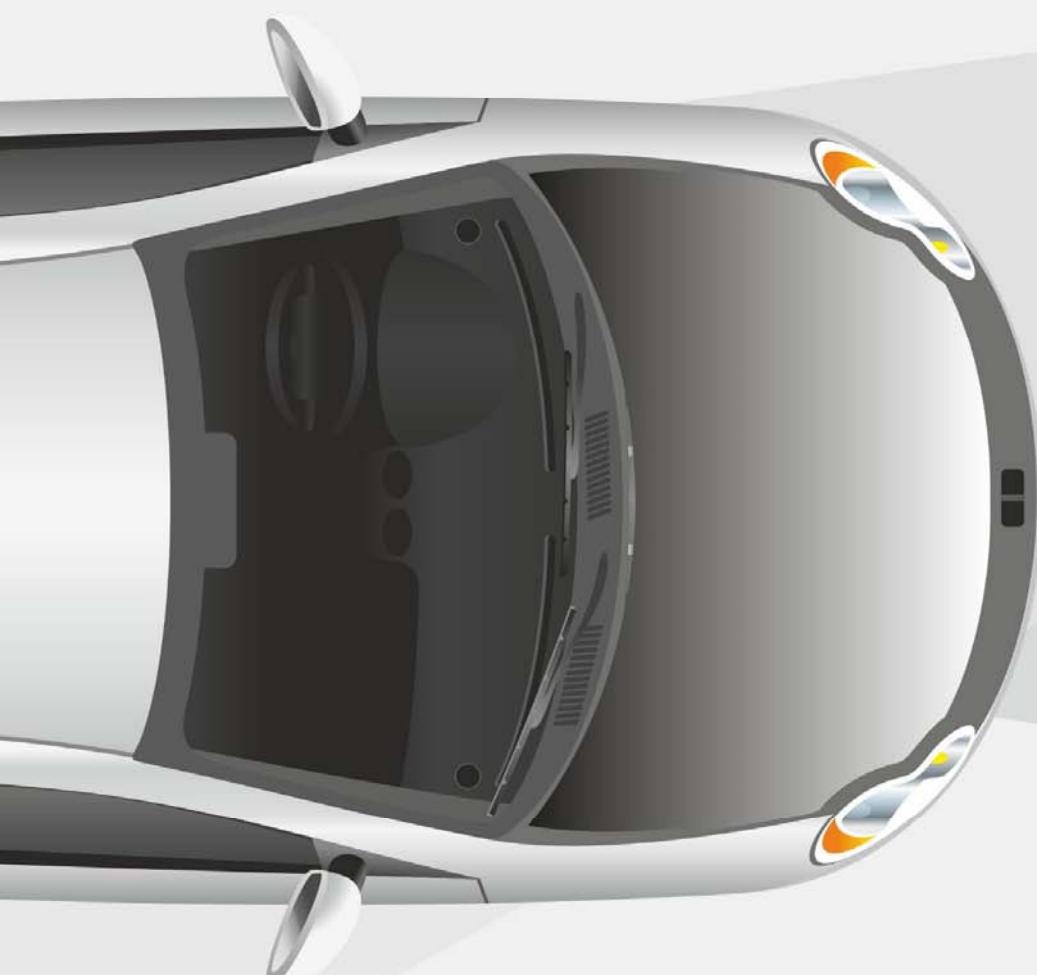


Inflation: a look under the hood

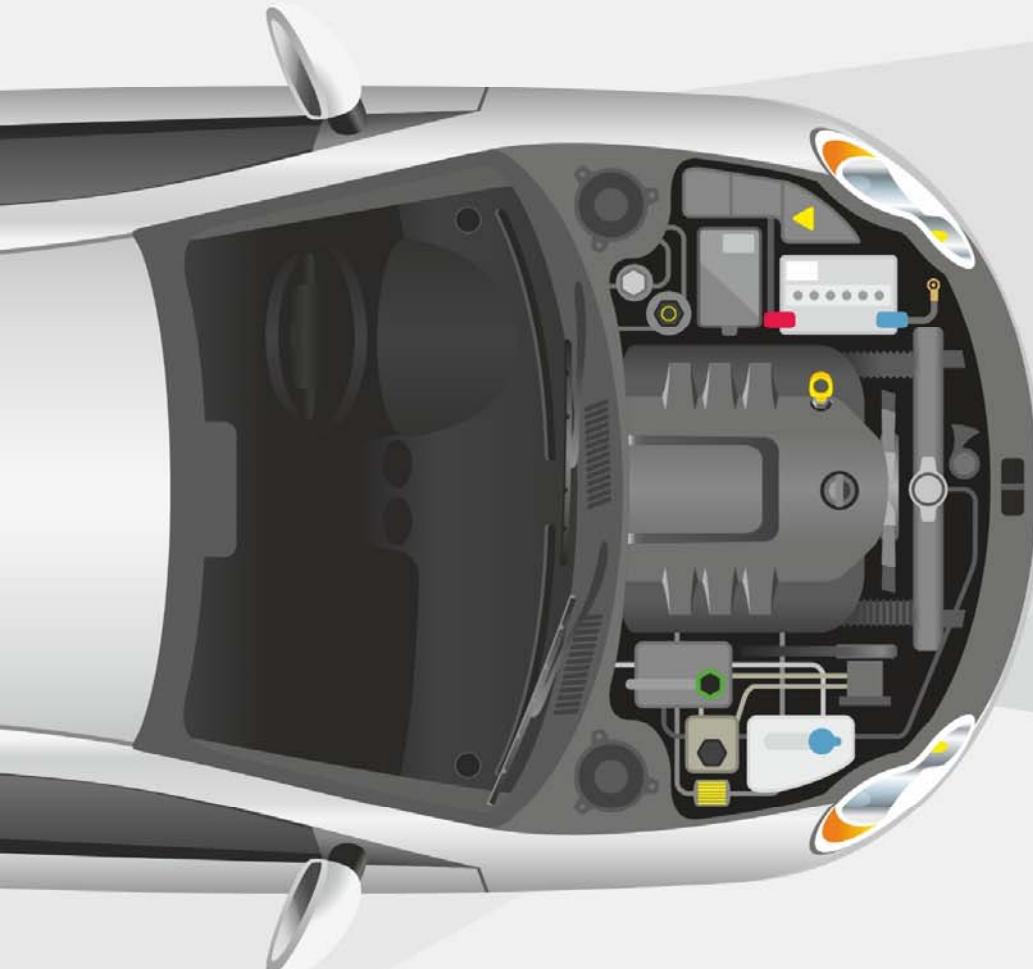
Claudio Borio
Head of the Monetary and Economic Department

Basel, Switzerland, 26 June 2022

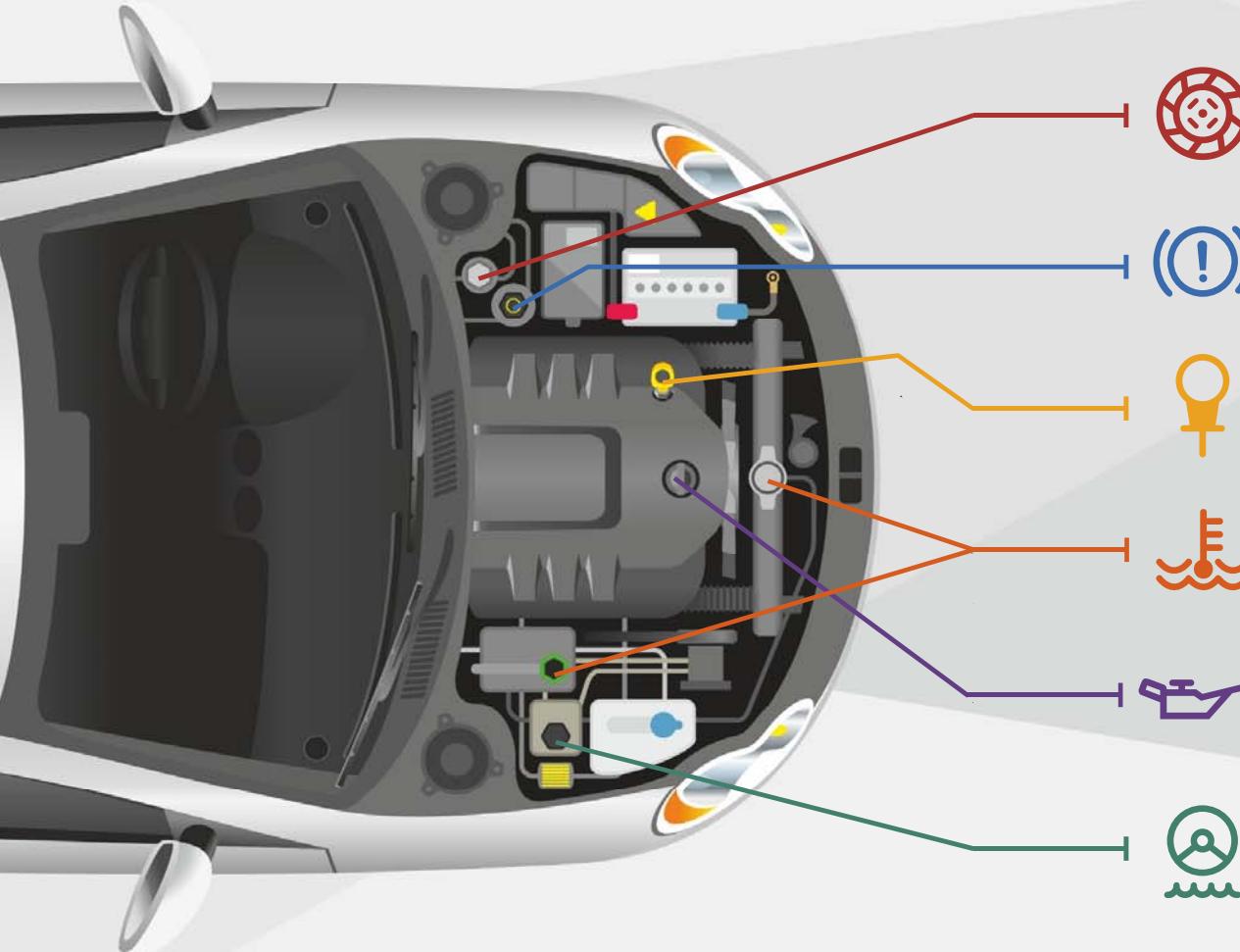
Opening the hood reveals the roles of:



Opening the hood reveals the roles of:



Opening the hood reveals the roles of:



Individual price changes



Aggregate price index



Wage- and price-setting affected by:



Cyclical factors

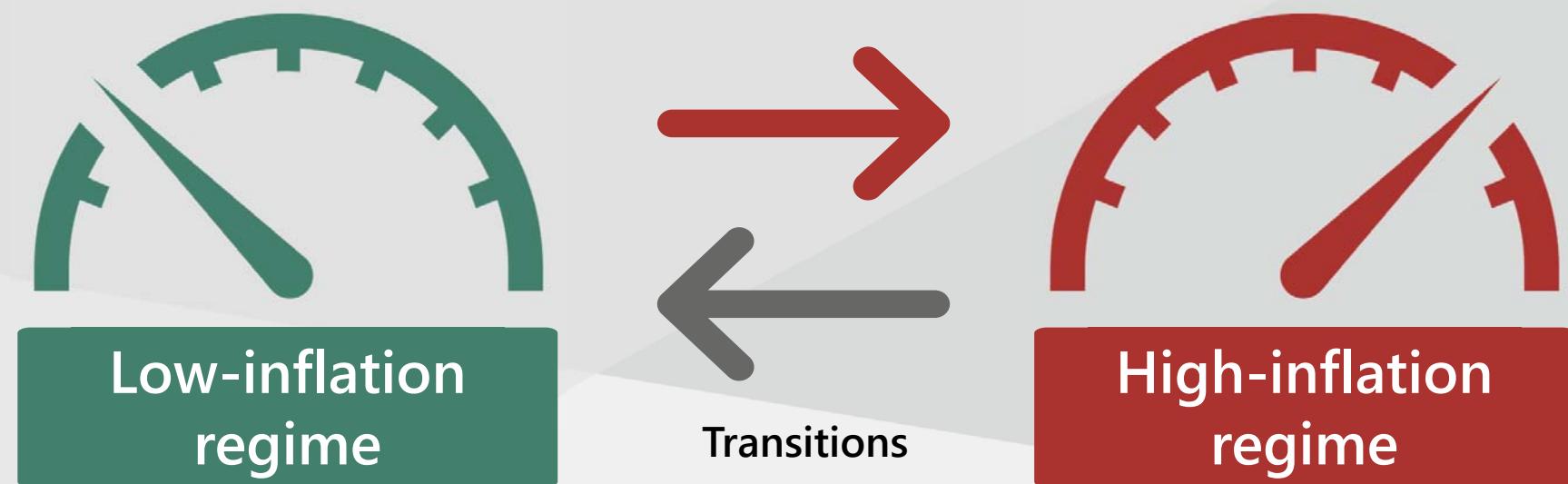


Structural factors



Level of inflation itself

Inflation = two regimes + transitions





Low- and high-inflation regimes are very different in their self-stabilising properties

Transitions from a low- to a high-inflation regime are self-reinforcing

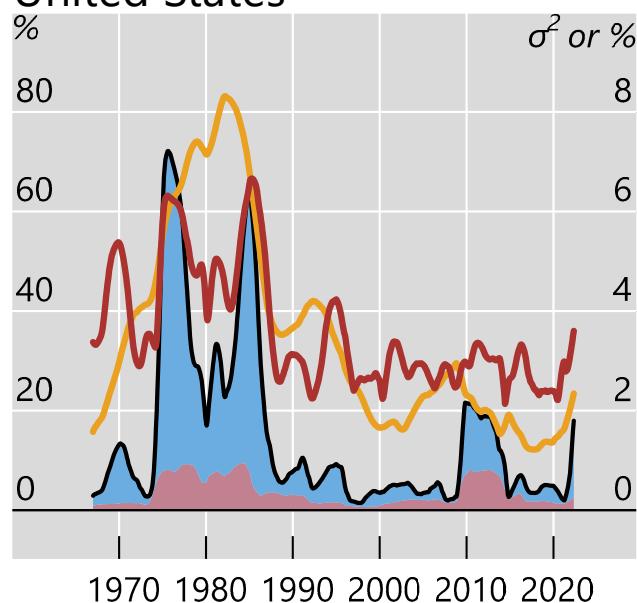
It is desirable for monetary policy to adapt to the two regimes and the transitions



Individual price changes and inflation

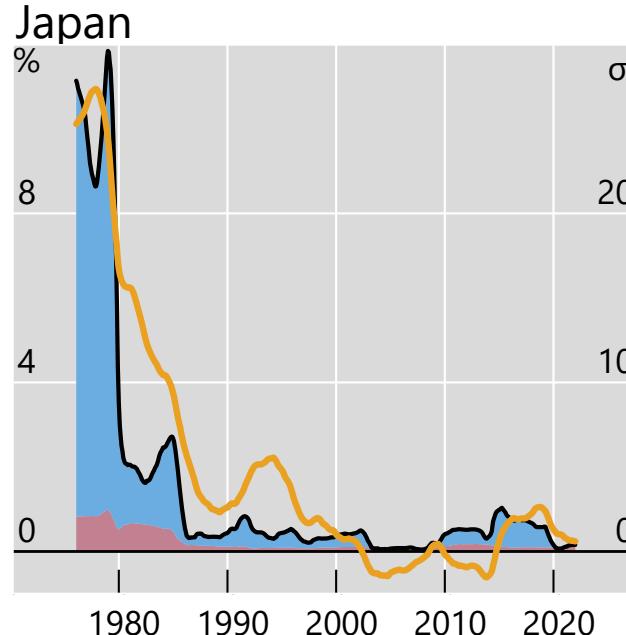
Low-inflation regimes: inflation volatility and price co-movement are lower

United States



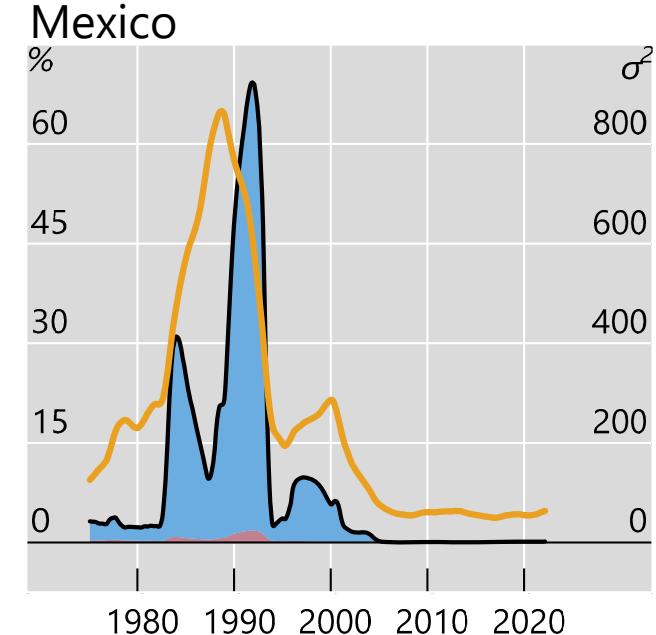
Lhs: — Yearly inflation (rhs for US)
— Common inflation component (US only)

Japan



Rhs: — Total variance

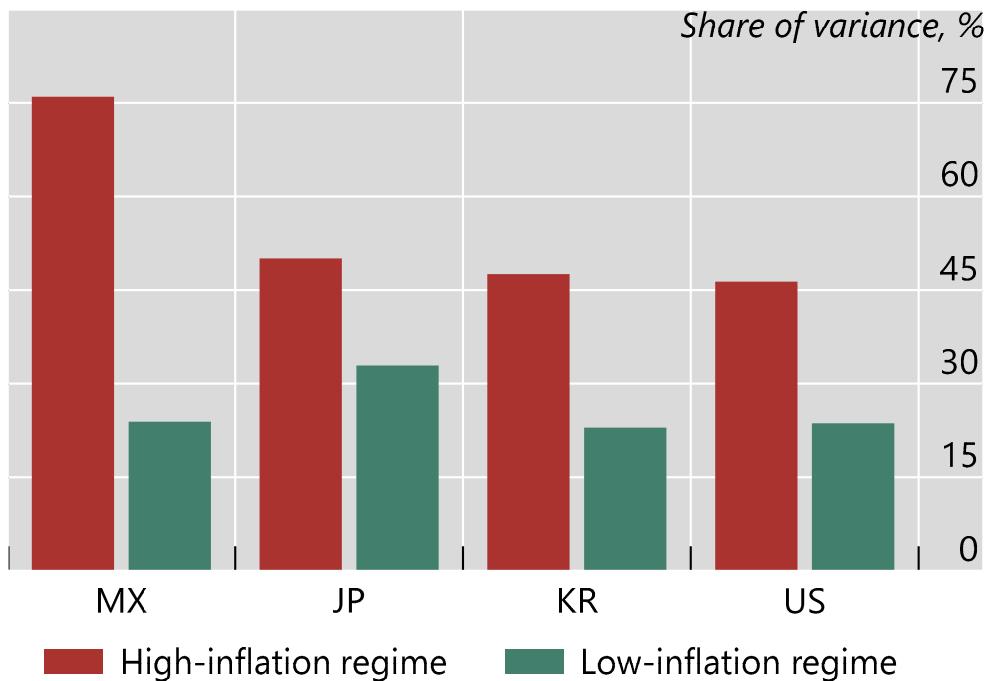
Mexico



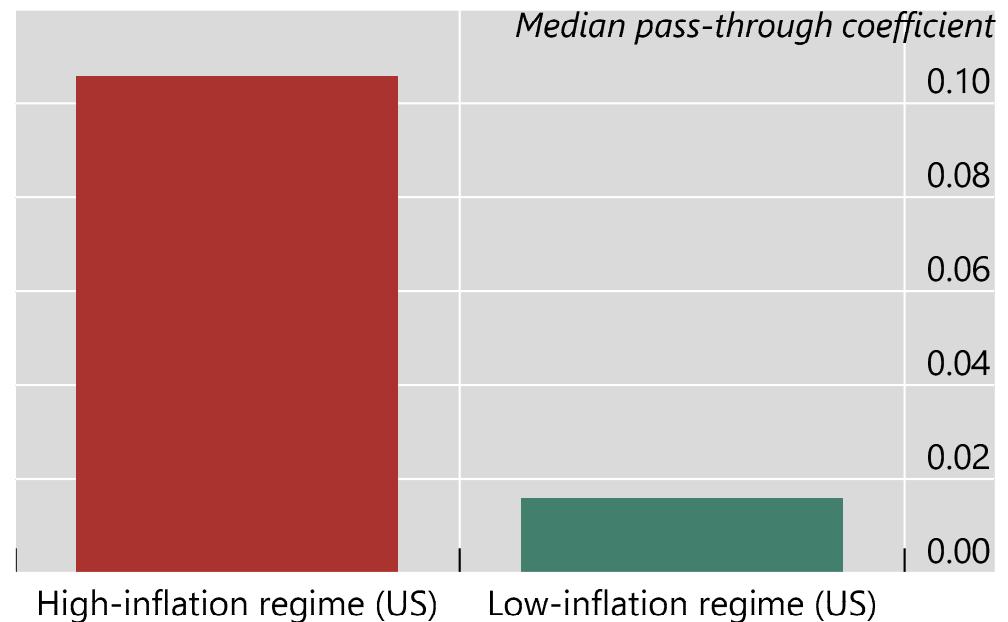
Contribution from:
— Variance in each sector
— Covariance between sectors

Low-inflation regimes: relative price changes have smaller repercussions

Price spillovers across sectors are more muted...

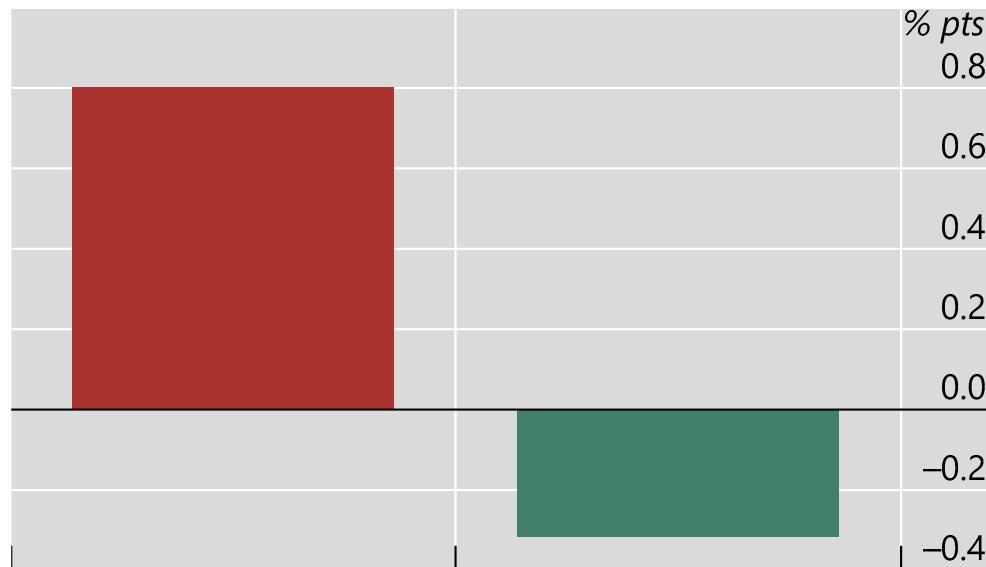


...and outsize price increases transmit less to core inflation



Low-inflation regimes: the pass-through to inflation is weaker...

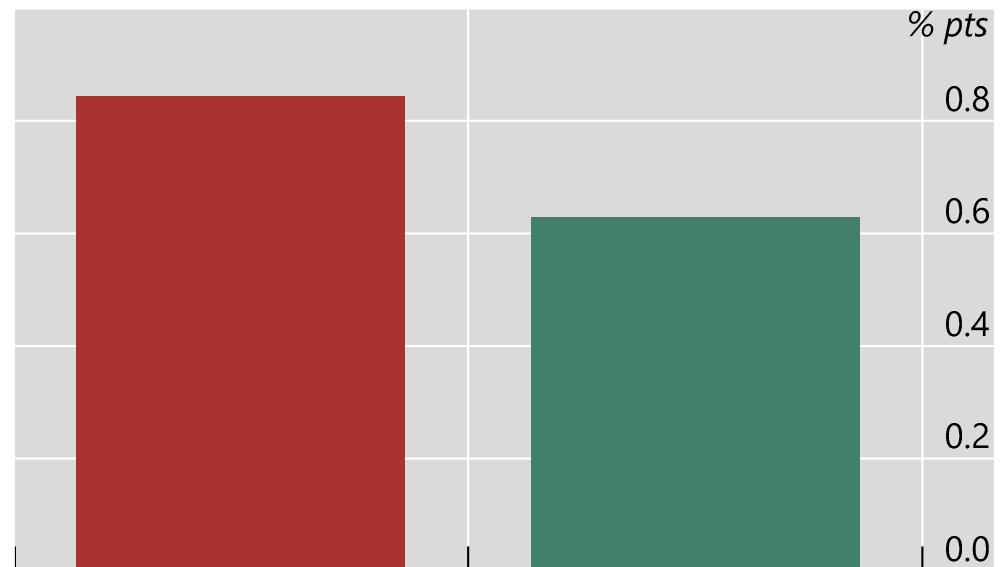
... from oil price changes ...



Response one year after
a negative oil supply shock:

High-inflation regime
Low-inflation regime

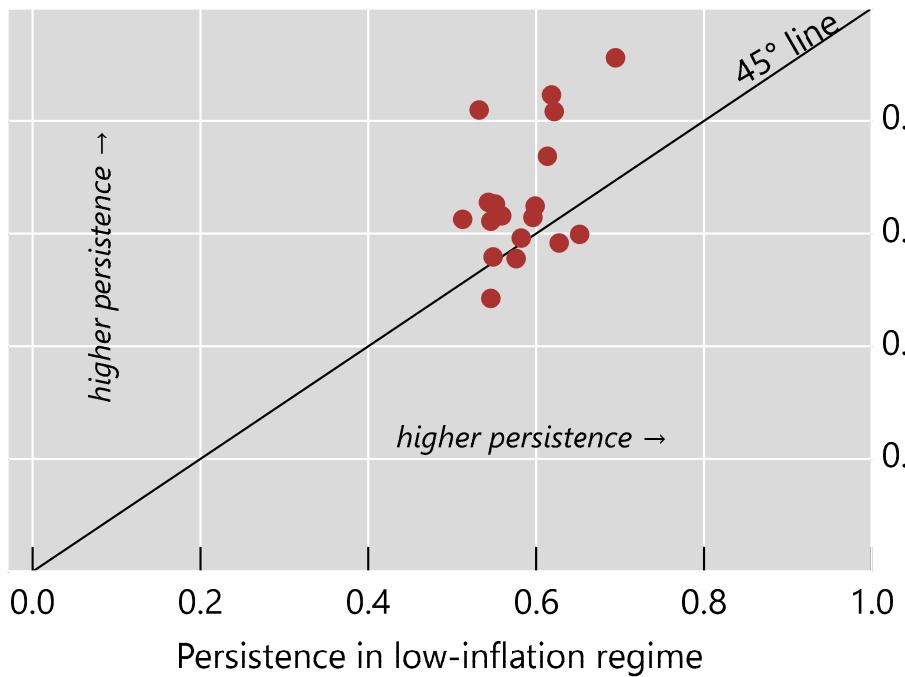
... and from exchange rate depreciations



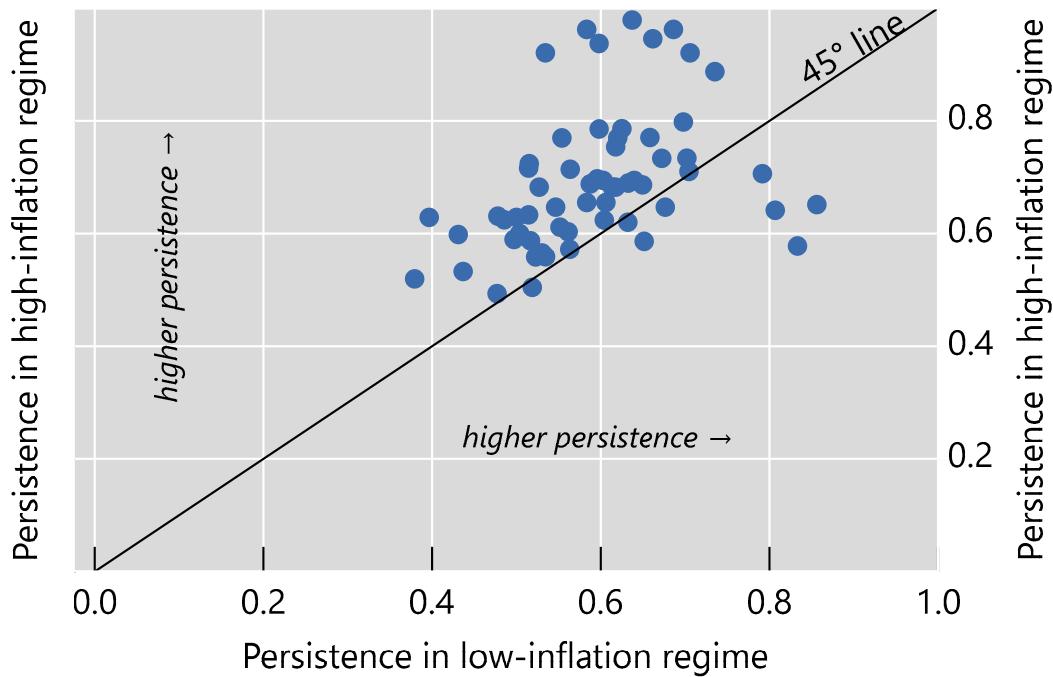
Estimate:
High-inflation regime
Low-inflation regime

Low-inflation regimes: price changes are less persistent

Persistence of aggregate inflation



Persistence of sectoral price changes



Low-inflation regimes: self-equilibrating



Low-inflation regime
Self-equilibrating

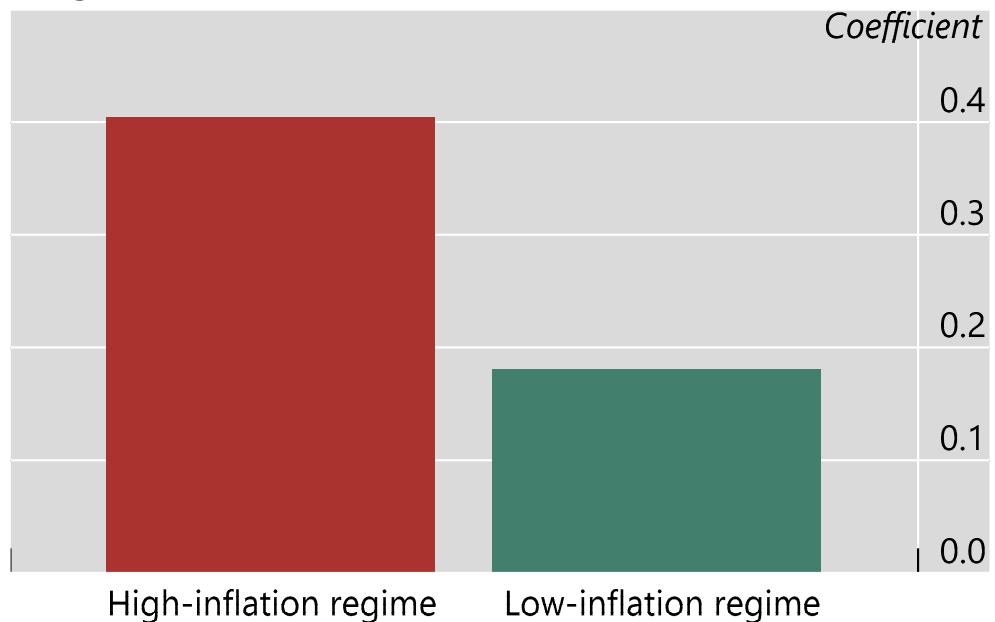
Individual prices hardly move together...
...and their imprint on inflation is temporary



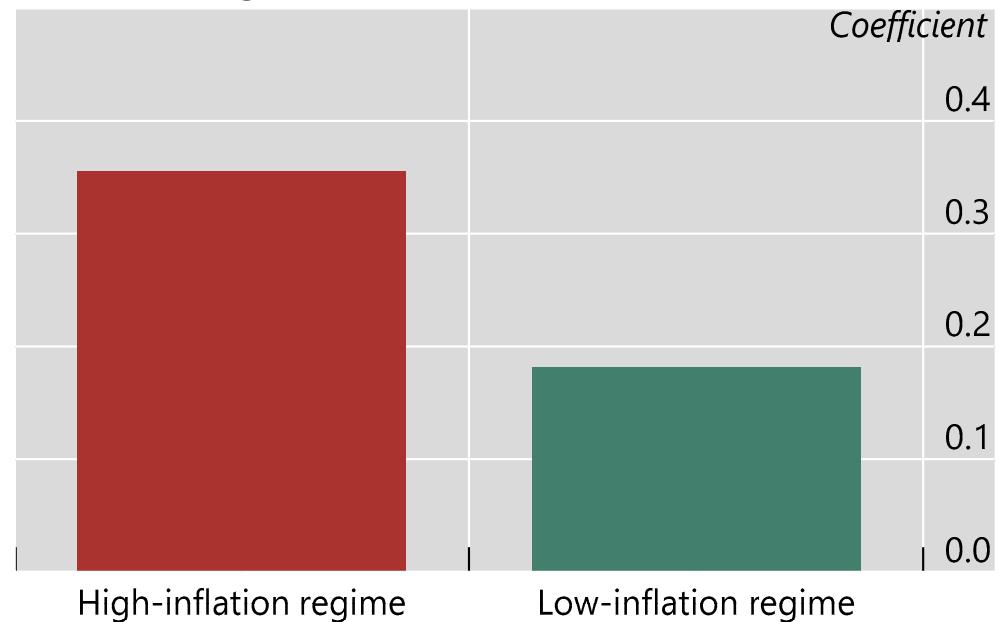
Wages and prices

Low-inflation regimes: the pass-through between wages and inflation is weaker

Wages to prices

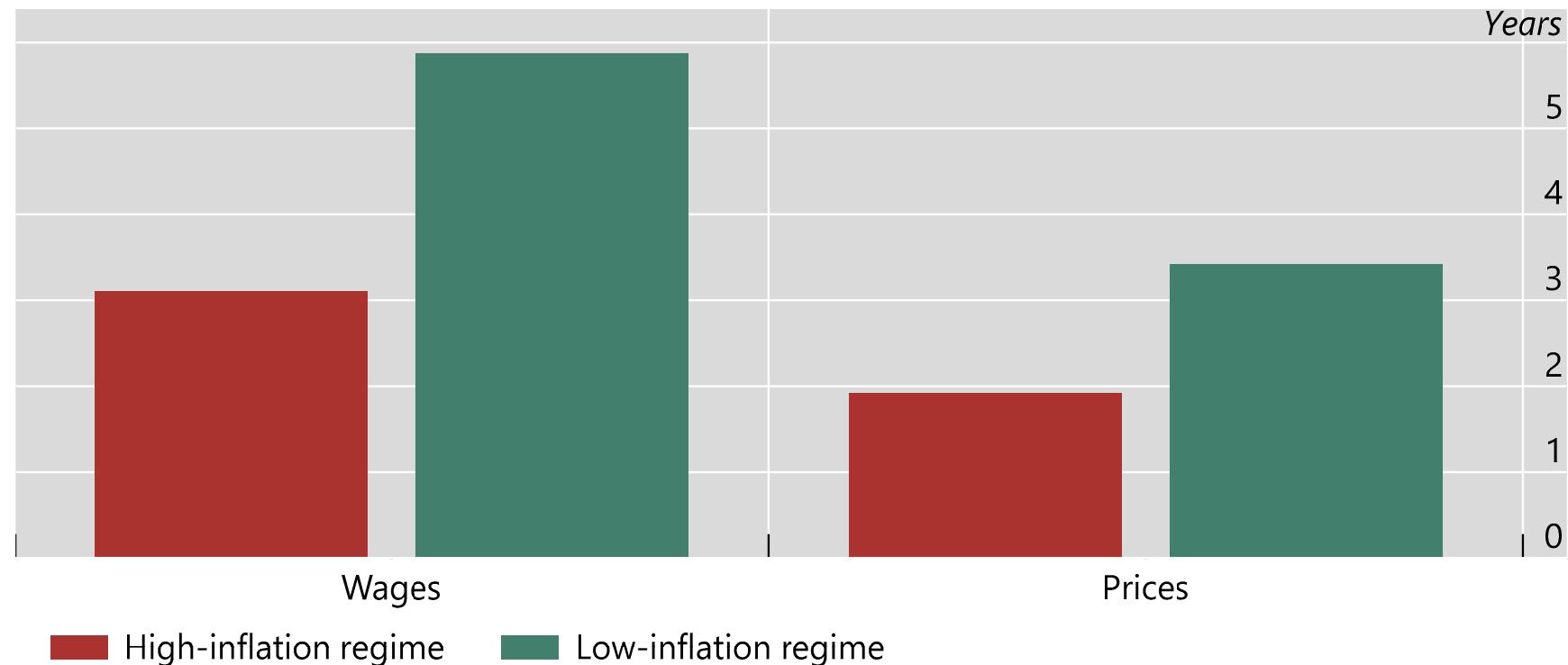


Prices to wages



Low-inflation regimes: wages and prices chase each other more slowly

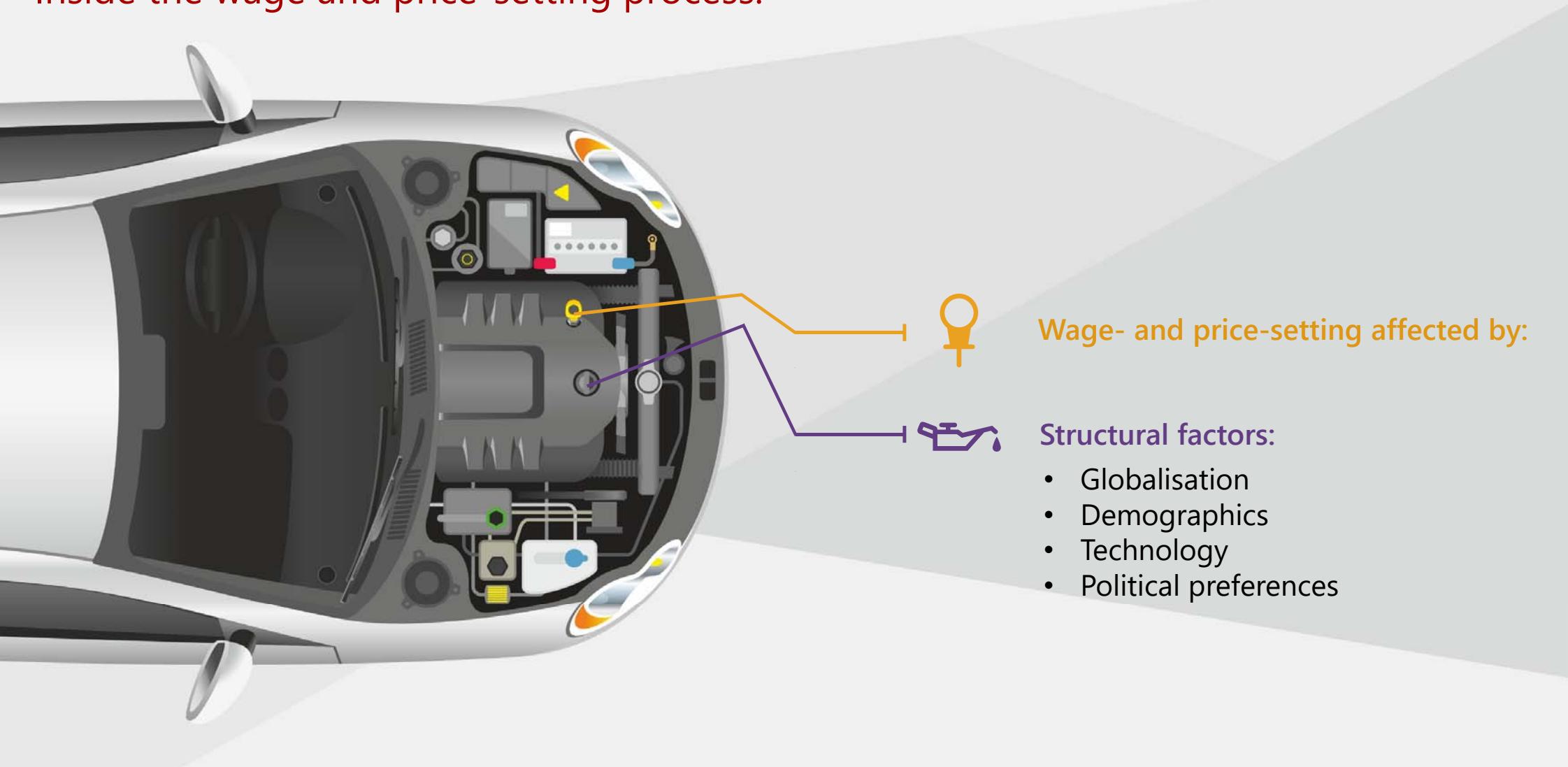
Time it takes to recoup half of the shortfall





Transitions from low- to high-inflation regimes

Inside the wage and price-setting process:



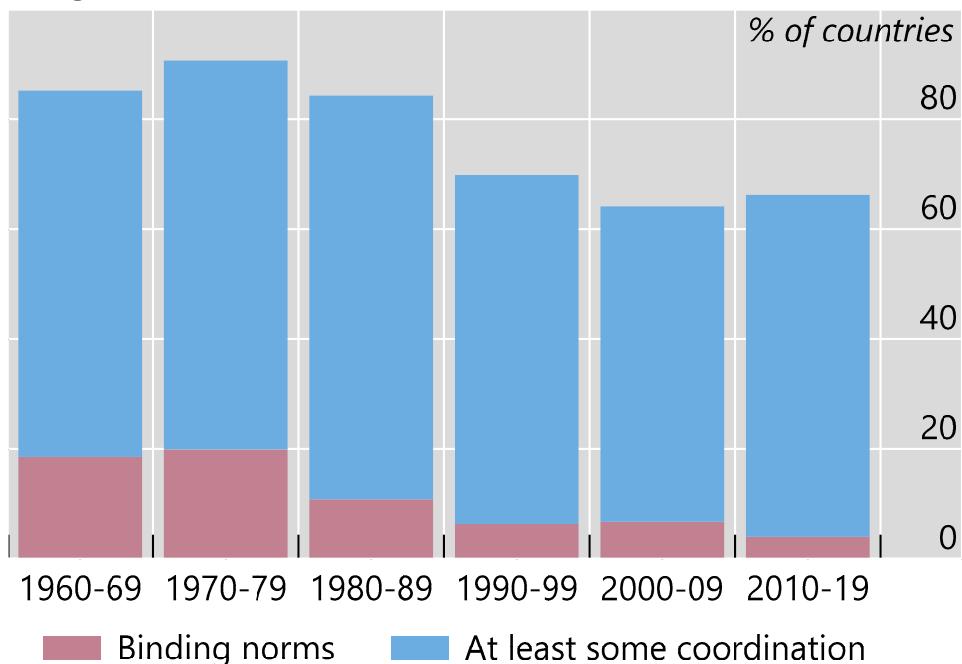
Wage- and price-setting affected by:

Structural factors:

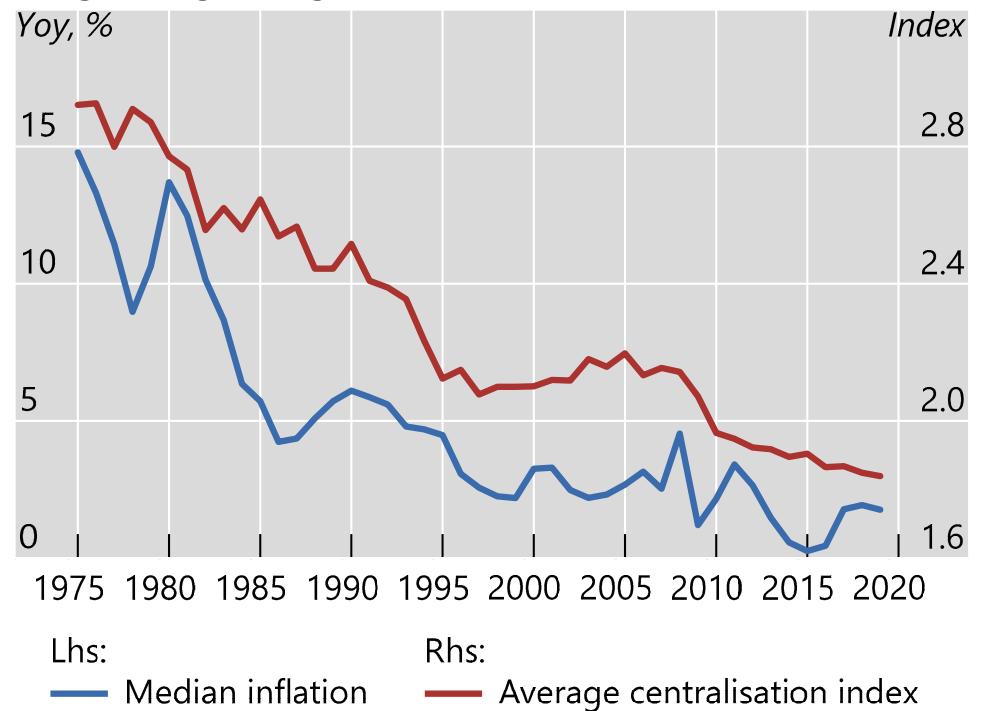
- Globalisation
- Demographics
- Technology
- Political preferences

Bargaining power has declined over time

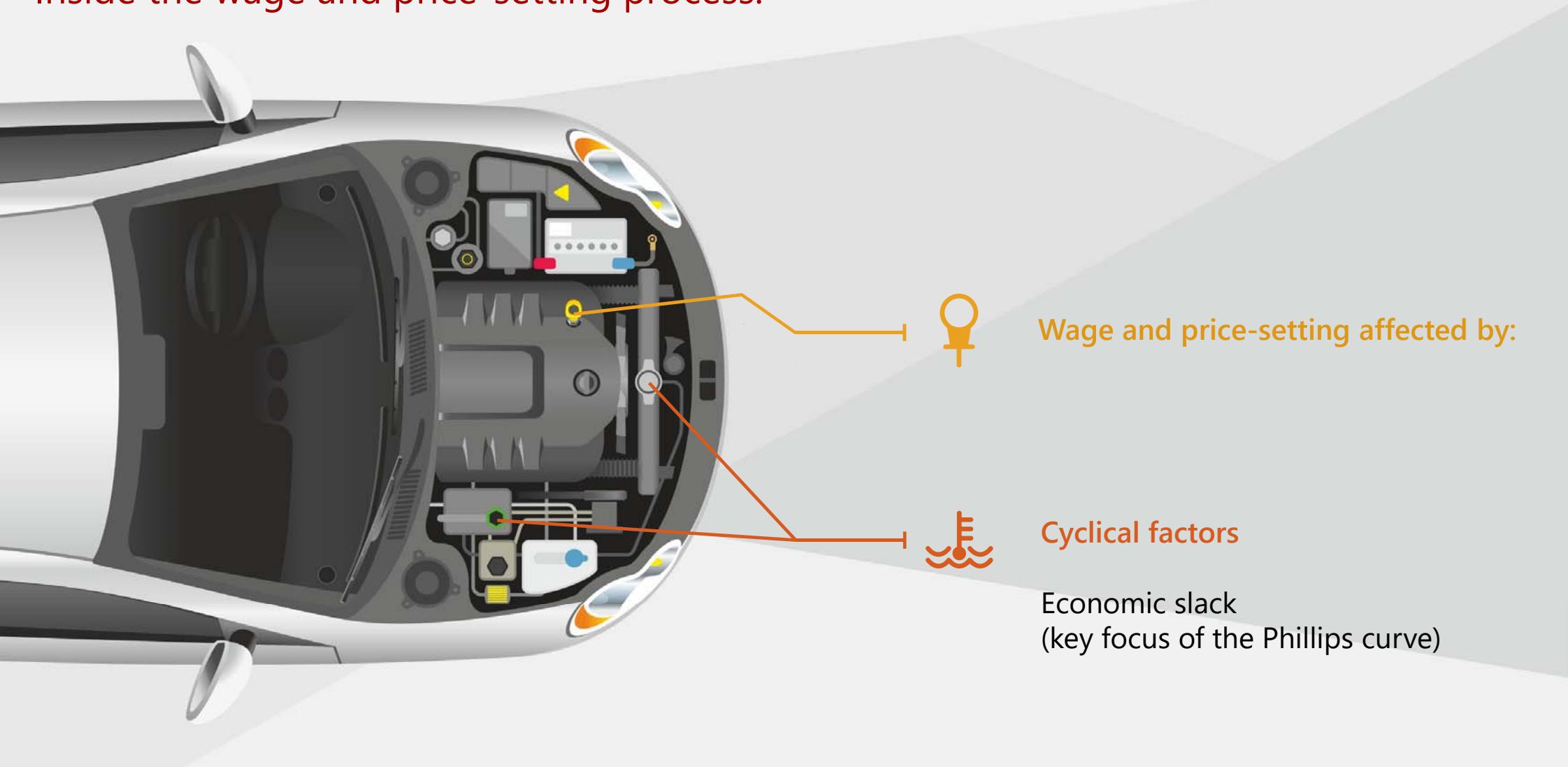
Wage coordination is less pervasive



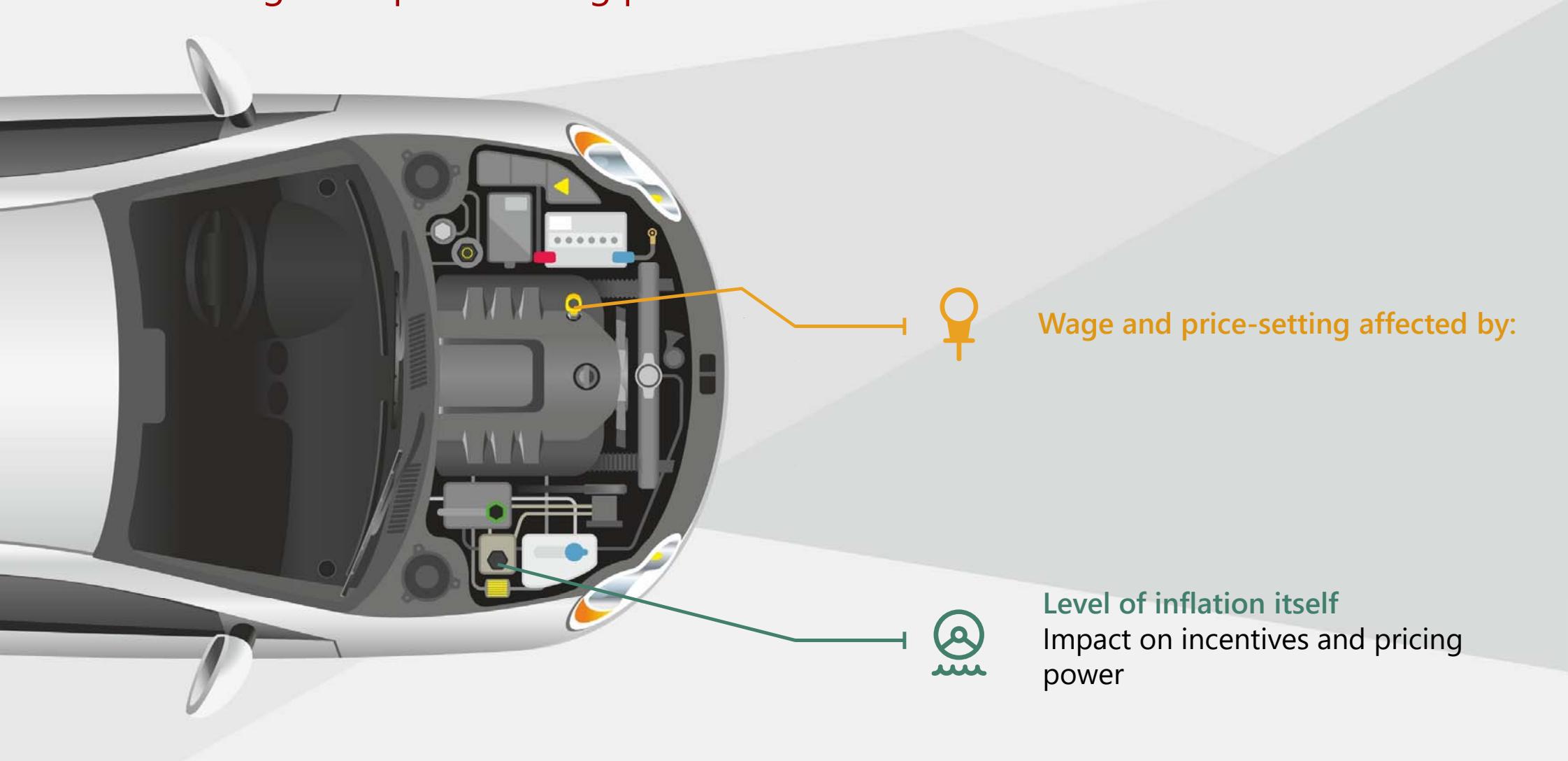
Wage bargaining is less centralised



Inside the wage and price-setting process:



Inside the wage and price-setting process:



Low-inflation regimes: agents are rationally inattentive



Low-inflation
regime

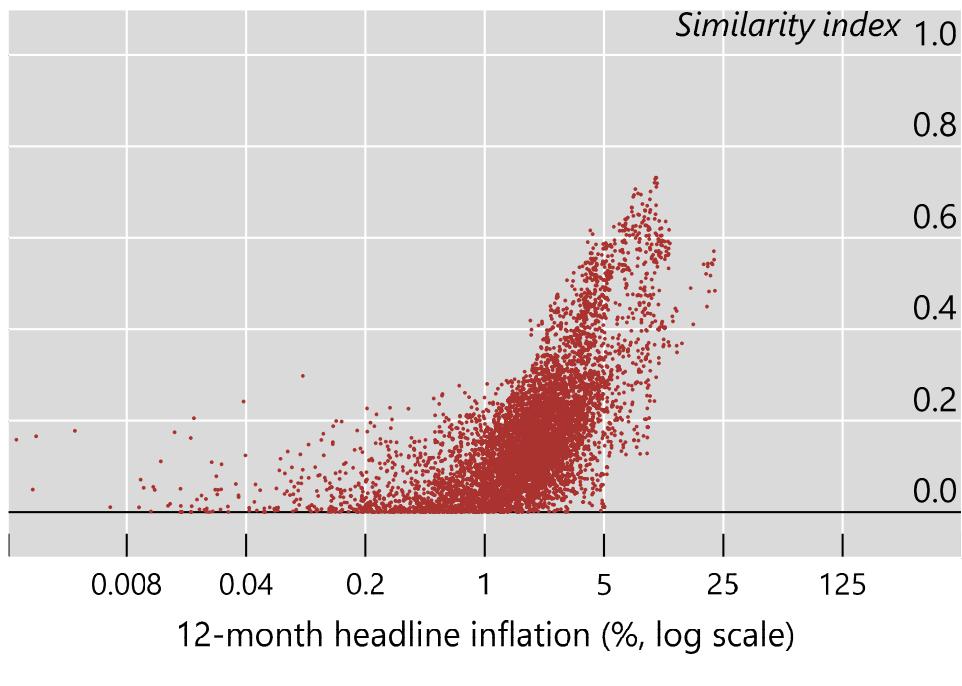


High-inflation
regime



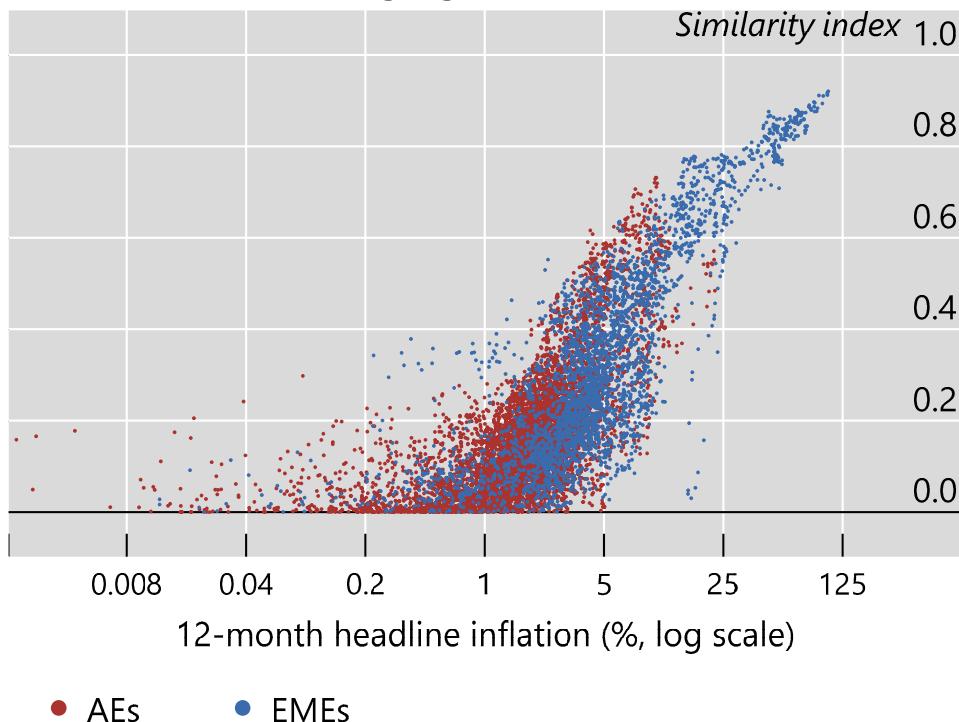
Higher inflation means more similar sectoral price changes

Advanced economies



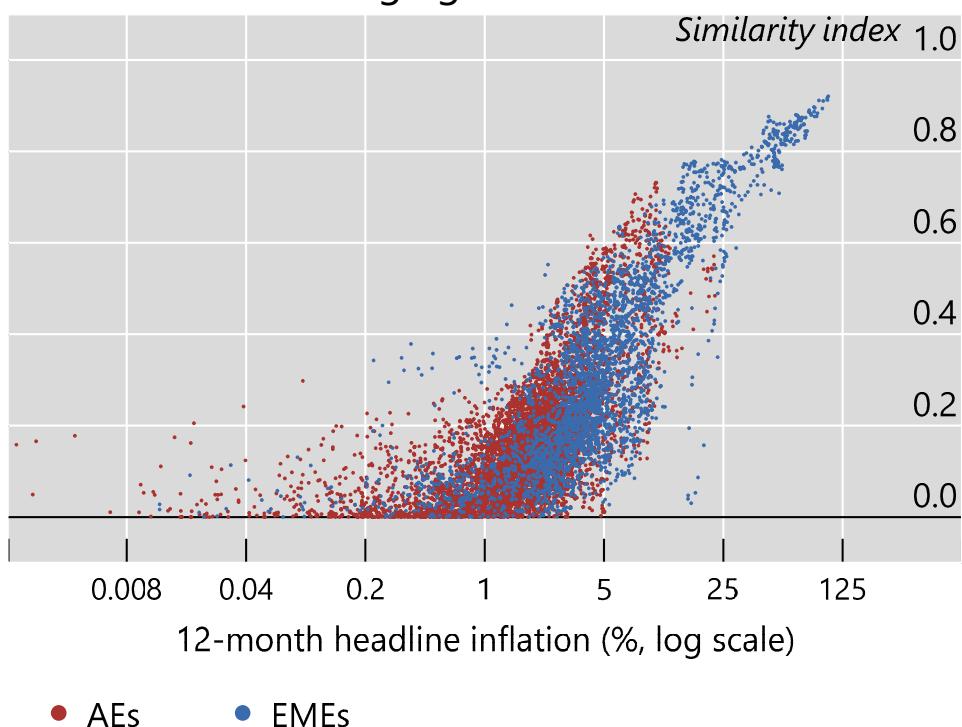
Higher inflation means more similar sectoral price changes

Advanced and emerging market economies

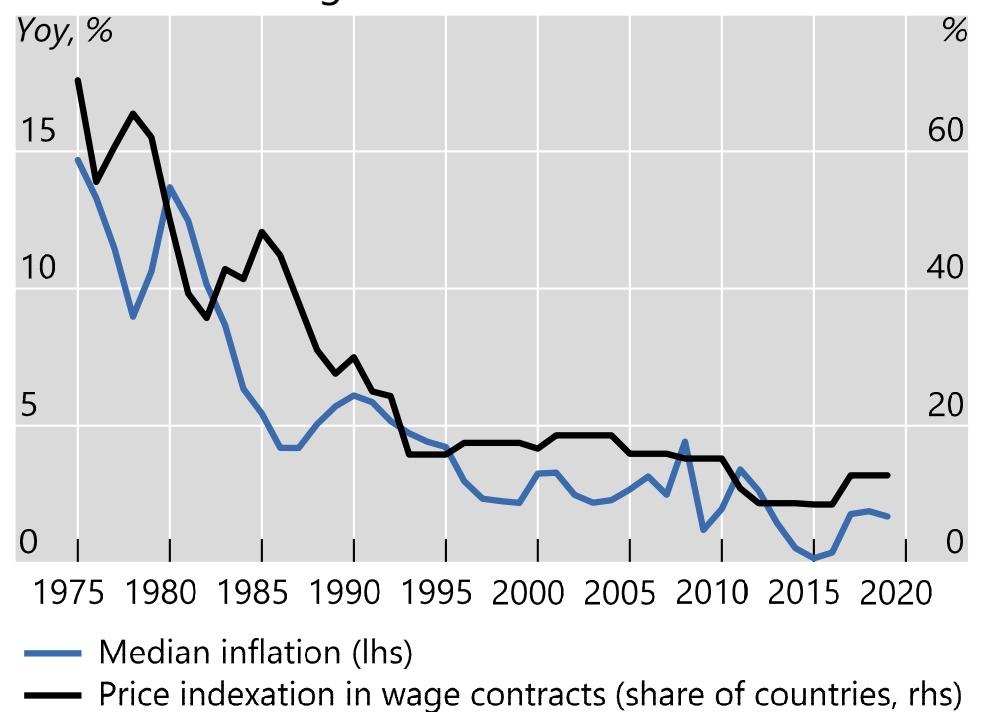


Higher inflation means more similar sectoral price changes and more indexation

Advanced and emerging market economies



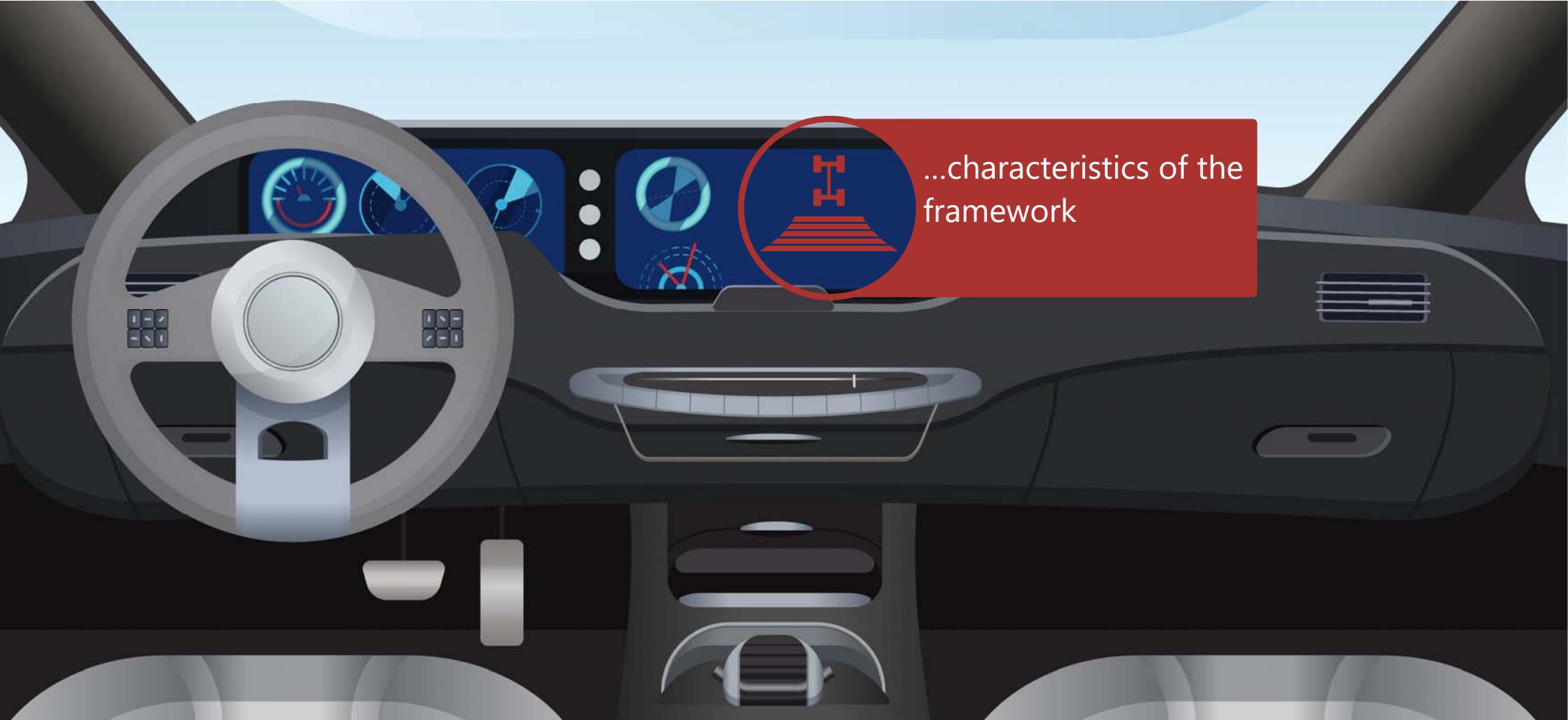
Indexation in wage contracts





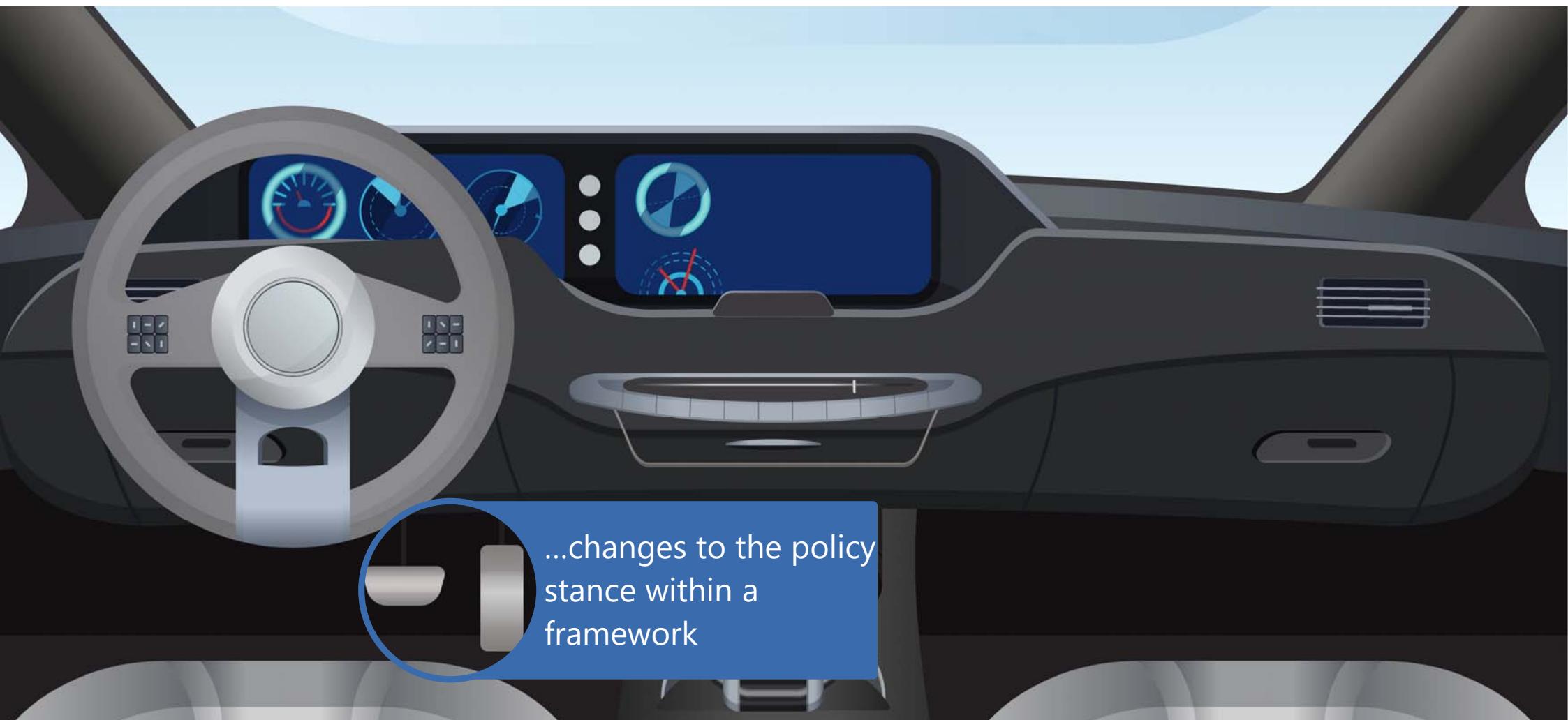
Monetary policy

Monetary policy affects inflation through...



...characteristics of the framework

Monetary policy affects inflation through...



Low-inflation regimes: monetary policy can be more flexible



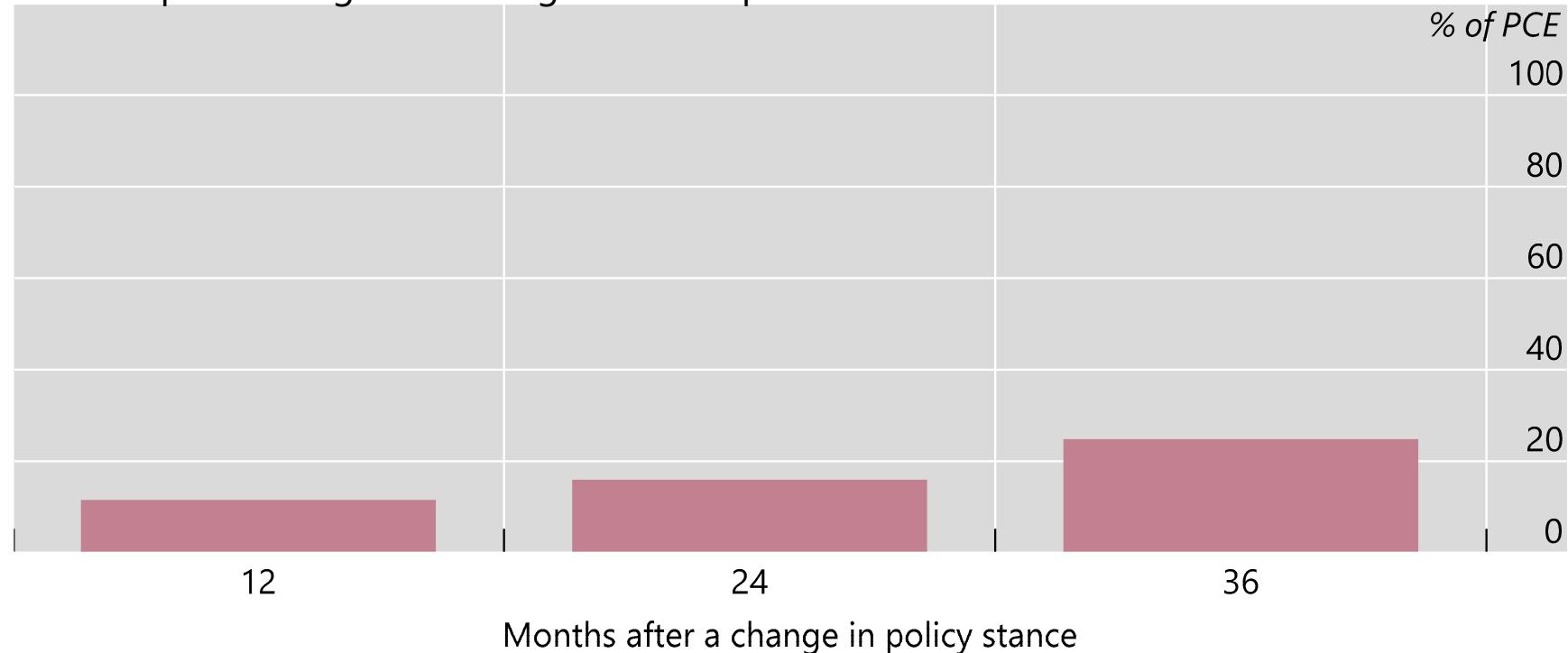
Since inflation is self-equilibrating...



...and monetary policy loses traction

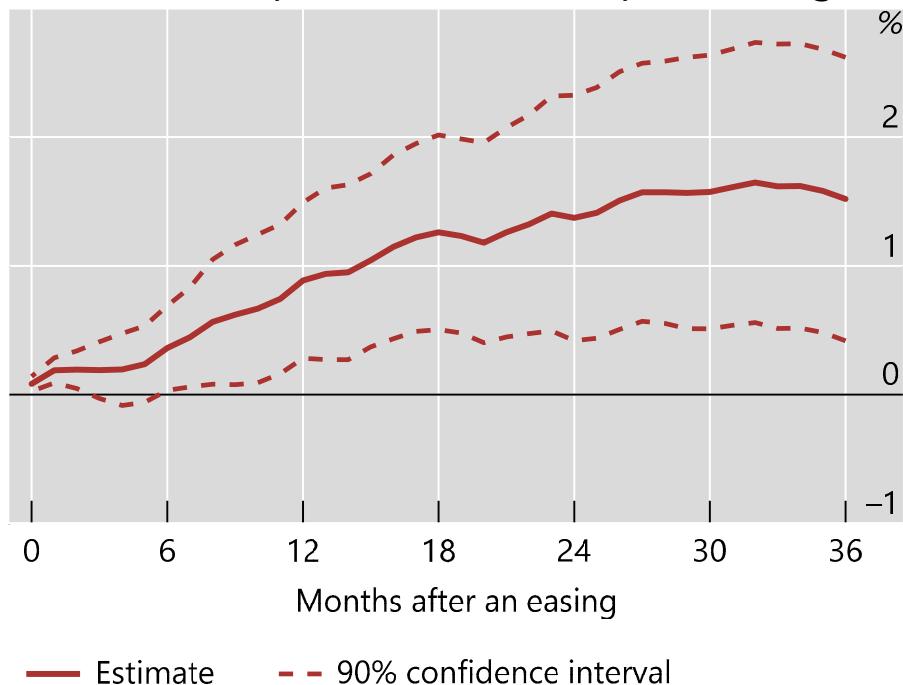
Monetary policy affects prices significantly only in a few sectors

Sectoral price changes with a significant response

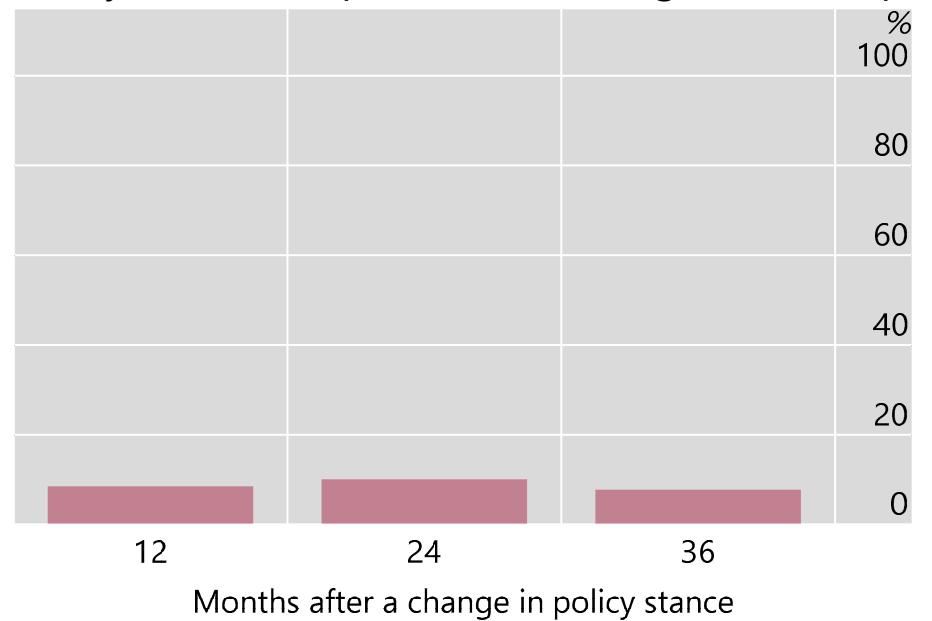


Monetary policy overwhelmingly affects the common component of price changes

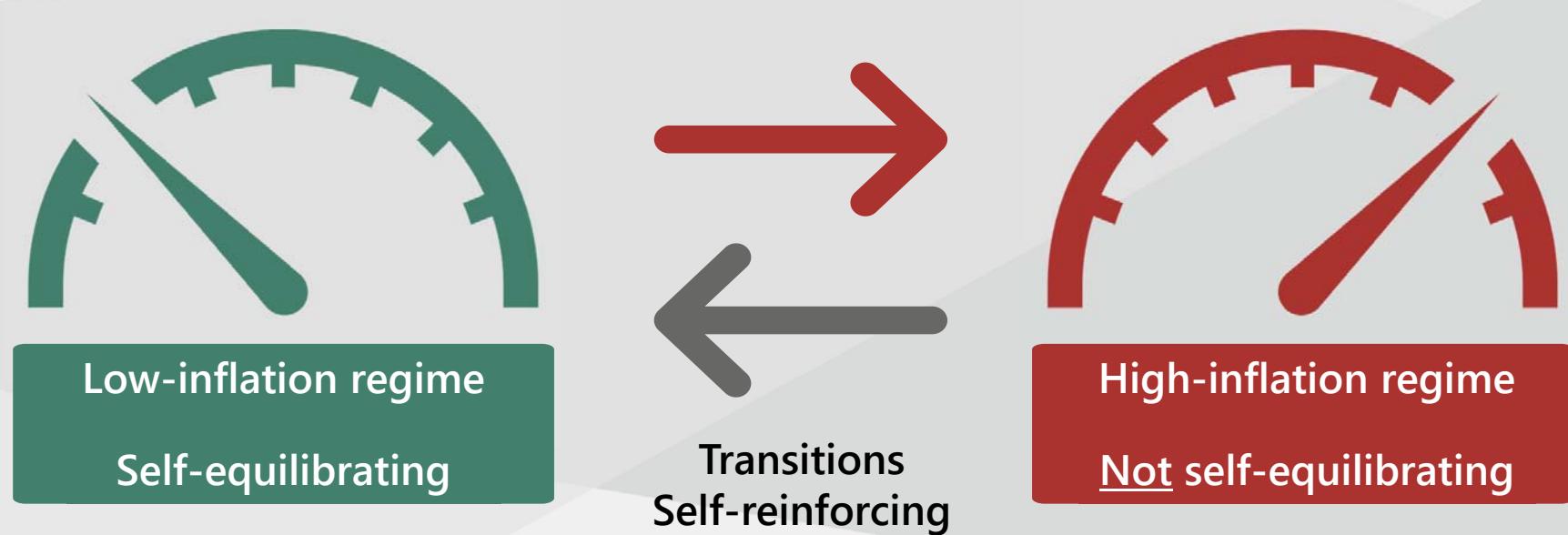
Common component of sectoral price changes



Idiosyncratic components with a significant response



Monetary policy when transitions threaten



Need for a timely and decisive response

Transitioning back is costly

Transitions are inherently uncertain

Conclusion

Looking UTH sees the inflation process as two regimes, plus transitions

It helps calibrate policy to them

The perspective is especially relevant today as a transition looms

