Riders on the Storm

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\( r^* \) has fallen over time in large economies
Kalman filter estimates of New Keynesian Model

![Graph showing changes in interest rates](image-url)

Legend:
- \( r^* \): real
- short rate, real
\(r^*\) has fallen over time in large economies
Kalman filter estimates of New Keynesian Model

Long-term bond term premiums are relatively stable
Kalman filter estimates of New Keynesian Model
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Kalman filter estimates of New Keynesian Model

$r^*$ reflects growth, demographic, and fiscal trends
Average $r^*$, growth, and other drivers
International synchronicity of $r^*$

(a) Global v local $r^*$

International synchronicity of growth

(c) Global v local g component
International synchronicity of other factors

(b) Global v local z component

$r^*$ intl. trends matter as much as domestic stance
Monetary Policy drivers: A decomposition

\[ r = (r - r^*) + (r^* - r^*_w) + r^*_w \]

- Domestic stance
- Neutral rate gap
- World neutral rate


- $r - r^*$
- $r^* - r^*_w$
- $r^*_w$
- Other
Notable international business cycle synchronicity
Output gap, stance, and inflation

(a) Gap levels

(b) Stance levels

(c) Inflation levels

(d) Gap dispersion

(e) Stance dispersion

(f) Inflation dispersion

Increasing business cycle synchronicity
International dispersion of output gap, stance, and inflation
Policy stance behaves as expected

(a) 1-year response of stance to gap

(b) 1-year response of gap to stance

International $r^*$ has expected effects
Output, inflation, stance, ex. rates, cnt. acc., saving, investment, and credit
Takeaways and caveats
The global perspective to central banking

Takeaways:
• Both global $r^*$ and domestic outlook matter for policy
• Large economies are increasingly synchronized
• Stance divergence well within historical norm
• Neutral rate divergence means international imbalances
• Smaller term premiums reduce LSAP policy space

Caveats
• Secular stagnation and low neutral rates
• Long-run effects of monetary policy (non-neutrality)