

Lecture 9: Brunnermeier and Reis, Ch. 9-12

ECON 43370: Financial Crises

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Fall 2026

Exchange Rates

Let ϵ be the nominal exchange rate, e.g., $\epsilon = \frac{\text{€}}{\text{\$}}$

- From US perspective, $\uparrow \epsilon$: appreciation (i.e., the dollar is stronger)

Let e be the real exchange rate, e.g., $e = \frac{\text{European goods}}{\text{US goods}}$

- Let P_e be the (euro) price of European goods and P_u be the (dollar) price of US goods
- Then $e = \epsilon \frac{P_u}{P_e}$

Law of One Price (Purchasing Power Parity, PPP): $e = 1$

Saving, Investment, and the Real Exchange Rate

$$Y = C + I + G + NX$$

$$\Rightarrow$$

$$Y - T - C + T - G - NX = I$$

$$\Rightarrow$$

$$S = I$$

- Private saving: $Y - T - C$
- Public saving: $T - G$
- Foreign saving: $-NX$

Ch. 9: Terms and Applications

- Original sin
- Phoenix recovery
- Mexican Tequila crisis
- Teso-bonos
- Empirical evidence on depth/persistence of recessions with (and without) a financial crisis

Ch. 10: Ample vs. Scarce Reserves

Pre-2008: scarce reserves

- Fed funds rate managed via open-market operations (shift supply)

Post-2008: ample reserves

- Fed funds rate equal to interest rate on reserves

Ch. 10: Terms and applications

- Forward guidance
- Quantitative easing
- Friedman rule
- Qualitative easing
- Yield curve control

Ch. 11: Terms and applications

- r^* (“r-star”)
- Cyclicalitity of deficits
- Automatic stabilizers
- Effective lower bound
- Reversal rate
- New Deal