

# International Financial System (4/2/2012) Econ 390-001

## Definitions

- **fixed exchange rate** – a currency's value is matched to the value of another single currency or to a commodity (e.g., gold)
- **floating exchange rate** – a currency's value is allowed to fluctuate to the foreign exchange market
- **managed float (dirty float)** – floating ER: but government sometimes intervenes (buying or selling foreign assets to influence exchange rates)
- **crawling peg** – fixed ER: but allowed to fluctuate between a narrow band of rates
- **gold standard** – fixed ER: currencies pegged to gold
- **Bretton Woods** – (1944-1971) fixed ER: dollar pegged to gold, other currencies pegged to dollar
- **currency board** – fixed ER: domestic currency backed 100% by a foreign currency with a permanent peg
- **dollarization** – fixed ER: adoption of a foreign currency as the domestic currency (e.g., the dollar)
- **currency union** – fixed ER (inside): countries join together for a common currency, which operates like a fixed regime (dollarization) among member countries and either fixed or floating with rest of the world
- **capital controls** – restrictions on foreign investment; restrictions regulating the flow in and out of the capital account
- **perfect capital mobility** – no capital controls
- **impossible trinity** – a country cannot have all 3 of the following at the same time: fixed exchange rate, capital mobility, independent monetary policy
- **international reserves (foreign exchange reserves)** – central bank holdings of assets denominated in a foreign currency
- **foreign exchange interventions** – central bank international financial transactions made to influence foreign exchange rates
- **unsterilized foreign exchange intervention** – FEI that effects the monetary base
- **sterilized foreign exchange intervention** – FEI with an offsetting open market operation that leaves the monetary base unchanged
- **devaluation** – setting the exchange rate peg (e) to a higher level
- **revaluation** – setting the exchange rate peg (e) to a lower level
- **speculative attack** – the massive selling (shorting) of a country's currency assets, with the hope of a devaluation, which would net a huge profit
- **International Monetary Fund** – setup under Bretton Woods to help countries maintain fixed exchange rates (loans to countries with BoP problems); now acts as an international LOLR during financial crises
- **World Bank** – provides long-term loans to developing countries for economic development projects

## Principles

- Fixed exchange rates make trade and investment between two countries on the same peg easy (minimize exchange rate risk).
- Floating exchange rates have a more flexible monetary policy and don't have to waste resources defending the peg.
- The United States and most other countries were on a fixed exchange rate regime until 1971 (first the gold standard, then Bretton Woods).
- In order to defend a fixed exchange rate, the central bank must intervene when the exchange rate fluctuates.
- When the domestic currency depreciates ( $e \uparrow$ ), the central bank must sell foreign assets (international reserves) to restore the old exchange rate.
  - If it runs out of reserves, it must either devalue or switch to a floating regime.
- When the domestic currency appreciates ( $e \downarrow$ ), the central bank must buy foreign assets (international reserves) to restore the old exchange rate.
  - Central banks may accumulate a lot of international reserves (e.g., China has > \$2 trillion).

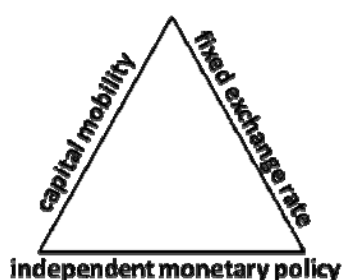
## Exchange rate regimes

- gold standard (fixed)
- currency union (fixed inside)
- dollarization (fixed)
- currency board (fixed)
- traditional fixed (fixed)
- crawling peg (fixed)
- managed float (floating)
- pure float (floating)

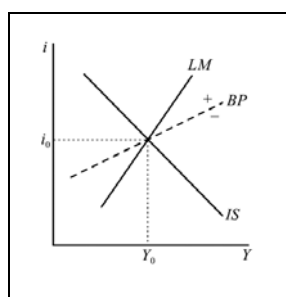
## Impossible trinity examples

- United states
  - ~~fixed exchange rate~~
  - independent monetary policy
  - capital mobility
- Euro (currency union)
  - ~~fixed exchange rate~~
  - ~~independent monetary policy~~
  - capital mobility

## Impossible trinity



## Mundell-Fleming



## perfect capital mobility

|    | float | fixed |
|----|-------|-------|
| FP | 0     | +     |
| MP | +     | 0     |

## no capital mobility

|    | float | fixed |
|----|-------|-------|
| FP | +     | 0     |
| MP | +     | 0     |

## unsterilized foreign exchange intervention

| Assets       |        | Liabilities |        |
|--------------|--------|-------------|--------|
| FEX reserves | -\$100 | currency    | -\$100 |

## sterilized foreign exchange intervention

| Assets       |        | Liabilities |      |
|--------------|--------|-------------|------|
| FEX reserves | -\$100 | currency    | +\$0 |
| bonds        | +\$100 |             |      |