# **International Banking Crises (12/7/2010)** Econ 310-004

## **Definitions**

- exchange rate crisis (aka balance of payments crisis) big depreciation in the currency; drain of foreign reserves forcing a devaluation or switch to float
- banking crisis bank panics leading to massive bank failures; when banks and other institutions face losses, insolvency, and bankruptcy
- **default crisis** government default on sovereign debt; when governments are unwilling or unable to honor principal/interest payments on their debt
- twin crisis 2/3 of exchange rate, banking, and default crises
- triple crisis 3/3 of exchange rate, banking, and default crises
- **currency premium** exchange rate risk premium; higher interest rate that must be paid to compensate for possibility of fluctuations in the exchange rate (i.e., the peg is not credible)
- **country premium** default risk premium; higher interest rate that must be paid to compensate for possibility of government expropriation of private investment or default on sovereign debt
- sovereign default repudiation of debt; country government default on its bonds
- *partial repudiation* declaration by government that it won't pay back part of its debt (or will pay pennies on the dollar)

#### **Equations**

•  $Y - (1 + r_L)L > Y - cY$  sovereign default equation (repay if true; default if false)

#### **Variables**

- $Y \equiv nominal output$
- L ≡ amount of loan (bonds)
- $r_L \equiv loan rate of interest$
- $c \equiv \%$  of output lost in default

#### **Principles**

- Often these crises occur together (twin or triple crises).
- In general countries that default on their sovereign debt get hit with a 4-5% country risk premium for the next 3-10 years.
- Argentina suffered a triple crisis (2001-2002): exchange rate, banking, and default.
- Government policies of taxes, regulation, and uncertainty cause lower growth rates in the U.S.
- Lack of a sound money as well as disrespect for property rights and the rule of law cause low growth rates in developing countries.
- Many economists are afraid of deflation.
- George Selgin wrote Less Than Zero: The Case for a Falling Price Level in a Growing Economy, which advocates letting prices fall at the rate of productivity growth.
- As productivity increases, goods can be produced cheaper (e.g., computers). That savings is passed on to consumers through lower prices.
- Selgin believes policies attempting to stabilize the price level can cause asset bubbles.

### Types of international crises

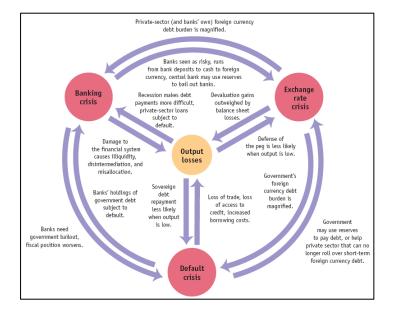
- exchange rate crisis
- banking crisis
- default crisis

# **Costs of defaulting**

- financial market penalties
  - o can't borrow until resolved
  - o downgrade in credit ratings
    - higher country risk premium
  - can't borrow in own currency
- broader macroeconomic costs
  - bank panics
    - financial disintermediation
  - lost investment, trade, output

#### **Growth rates example**

- begin w/ \$3,000 average income
- country A
  - o 6% growth rate
  - o 50 years later: \$55,260 income
- country B
  - o 2% growth rate
  - o 50 years later: \$8,075 income
- 6.8x higher standard of living in A vs. B



#### Argentina (2001-2002)

- fixed exchange rate
  - o 1:1 peg (peso to dollar)
- · current account deficit
  - o imports > exports
  - ↓ foreign exchange reserves
- future devaluation feared
  - o bank runs began
    - convert pesos to dollars
    - withdraw money
- government devalues peso
  - o 1.4:1 new peg (pesos to dollars)
  - force converts bank accounts
    - dollar accounts to pesos
    - 30% of wealth seized
- devaluation ramifications
  - o more bank panics
  - o foreign investors avoid bonds
    - don't roll over debt
  - o macroeconomic consequences
    - tax revenue declines
    - social welfare spending up
  - government debt unsustainable
- government repudiates debt
  - o only default on foreign held debt
    - arbitrage opportunity
    - people buy foreign held debt at discount
    - so default on all debt
  - o partial repudiation
    - pennies on dollar for most
    - IMF paid in full
- effects
  - triple crisis
    - exchange rate
    - banking
    - default
  - o unemployment hit 25%
  - o inflation peaked at 10%/month
  - o all bank accounts frozen for 1 year
  - o massive exchange rate devaluation
    - from 1:1 to 4:1 (pesos to dollars)