

## Financial Crisis II: Consequences & Strategy

- Ukraine Example & Global Crisis Today
- Consequences of a Financial Crisis
- Problems & Opportunities for Firms



## Ukraine: Becoming Less Competitive

- Inflation much greater in Ukraine than U.S.
- Recall that inflation + fixed exchange rate = problem!

Our #1 warning sign! {

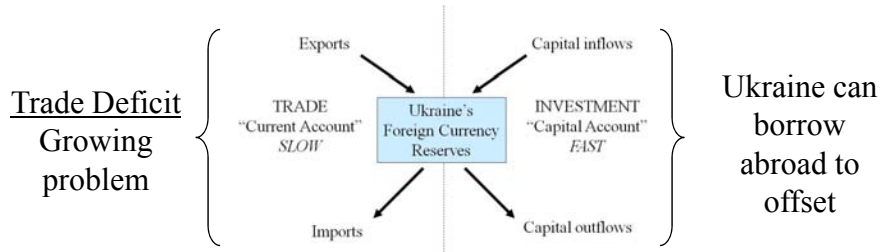
- ⇒ Exchange rate become over-valued
- ⇒ Trade deficit

	2005	2006	2007	
Exchange rate (HRN:US\$, end-period)	5.05	5.05	5.05	?
Consumer prices (end-period; %)	10.3	11.6	16.6	
Trade balance (US \$Million)	-1,135	-5,194	-10,572	

*Source: EIU / IMF*

- If trade deficit then...
  - ⇒ Reserves decline, or
  - ⇒ Must attract capital inflow to offset

## Ukraine: Borrowing Abroad



- In fact, Ukraine borrowing a lot – offsetting trade deficit

External Debt (US \$Million)	2005	2006	2007	2008
Debt stock	33,297	49,887	68,788	73,222
Debt service paid	5,890	9,389	16,304	21,316

*Source: EIU / IMF*

Our #2, #3 warning signs! {

- Can they continue to attract debt? Roll it over?
- Worse: Much of debt is denominated in \$

## Digging Deeper: Is Steel Sustainable?



	2005	2006	2007	2008
Trade balance (US \$Million)	-1,135	-5,194	-10,572	-15,497
Goods: exports	35,024	38,949	49,840	62,900
Goods: imports	-36,159	-44,143	-60,412	-78,397

Source: EIU / IMF

- Trade balance is worsening, as expected with currency over-valuation

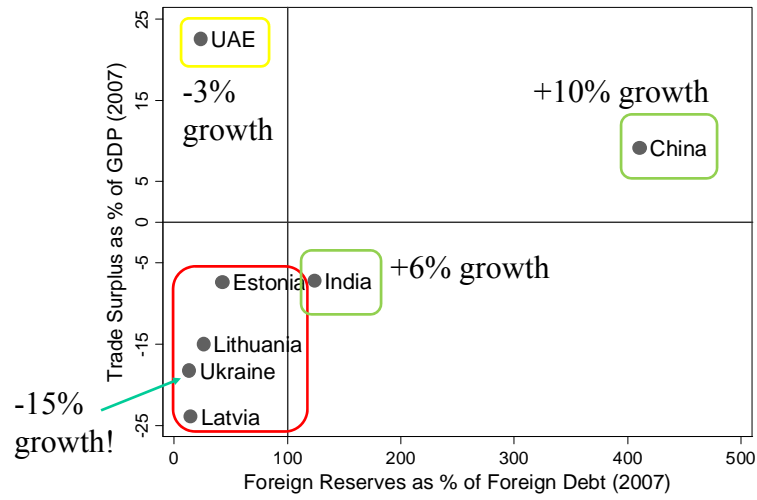
- Imports ↑ as currency becomes too valuable (normal)
- Exports ↑ too! (abnormal)
  - Massive surge in steel prices, supporting export receipts
  - Provokes borrowing (“party while you’re rich” Dutch Disease)
- Trade balance worsening, but not as bad as it would be
- Could rising steel prices last?

## Ukraine: Crisis Strikes

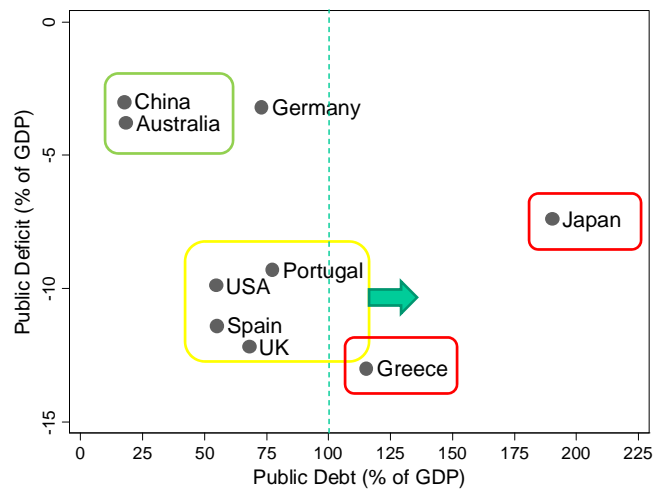


- Triggers
  - World economic outlook worsens
  - Steel price ↓↓
  - Capital generally exits emerging mkts
- Panic
  - Reserves bleed quickly
  - Exchange rate goes into freefall
  - IMF to the rescue
- Outcome
  - 2009 growth: -15% !
  - Leadership change (two weeks ago)

## Global Crisis: Where Does it Strike?



## Global Crisis? Debt Risks Ahead



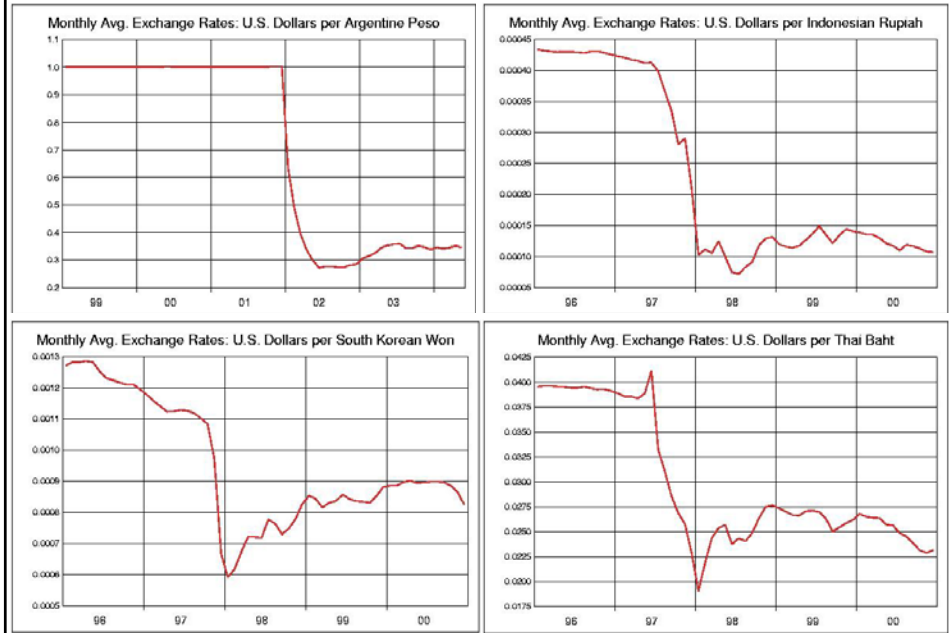
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## Consequences of a Financial Crisis

- |                 |   |  |
|-----------------|---|--|
| Devaluation     | { | <ul style="list-style-type: none"><li>• Imports become very expensive</li><li>• Exports become very cheap</li></ul>  |
| Capital flight  | { | <ul style="list-style-type: none"><li>• Equity market collapses</li><li>• Banks/firms face financing crunch &amp; may collapse</li></ul>                     |
| General turmoil | { | <ul style="list-style-type: none"><li>• Sharp fall in local demand</li><li>• Political change likely</li><li>• Corruption &amp; rule of law worsen</li></ul> |

## Devaluations: Currency value falls to 50-80%



## Equity Markets Collapse

- Crisis countries see their stock indices drop 50-75%



- Countries that escape massive devaluations may still experience large equity collapses

### Economies (and Demand) Contract

- Compare growth rates before and after Asian financial crisis

	Growth Rate (%)		
	1996	1998	Change
Thailand	4.7	-11.4	-16.1%
Indonesia	6.6	-12.4	-19.0%
S. Korea	5.5	-9.6	-15.1%
Malaysia	5.2	-0.7	-5.9%
Russia	-0.9	-2.9	-2.0%
Brazil	1.7	-4.1	-5.8%
Average	3.8	-6.8	-10.6%

### Corruption Tends to Increase

- Compare corruption levels before and after Asian financial crisis
  - Data Source: Political Risk Services

	Corruption		
	1996	1999	Change
Thailand	0.50	0.50	0
Indonesia	0.50	0.83	+ 0.33
S. Korea	0.17	0.50	+ 0.33
Malaysia	0.33	0.50	+ 0.17
Russia	0.67	0.83	+ 0.17
Brazil	0.50	0.50	0
Average	0.44	0.61	+ 0.17

World Mean: 0.41 World Standard Deviation: 0.21

### The Rule of Law Tends to Worsen

- Compare measure for rule of law before and after Asian crisis
  - Data Source: Political Risk Services

	Rule of Law		Change
	1996	1999	
Thailand	0.83	0.83	0
Indonesia	0.83	0.33	- 0.50
S. Korea	0.83	0.67	- 0.17
Malaysia	0.83	0.50	- 0.33
Russia	0.67	0.50	- 0.17
Brazil	0.50	0.33	- 0.17
Average	0.75	0.53	- 0.22

World Mean: 0.73 World Standard Deviation: 0.22

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## Financial Crisis II: Consequences & Strategy

- Problems & Opportunities for Firms
  - When does crisis particularly hurt (or help)?
  - Strategic Realignment
  - Strategic Flexibility
  - Investment Opportunities

### Problems & Opportunities

- Principle #1: Fall in demand
  - Selling in crisis country becomes hard
  - Consumer durables (TVs, cars) will become especially hard to sell

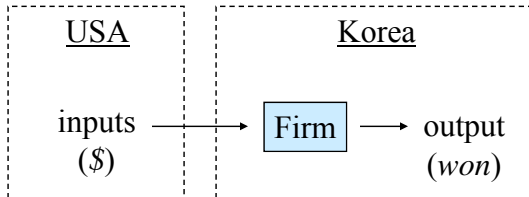
} Problem
- Principle #2: Devaluation affects production chain
  - Want costs in (devalued) local currency and revenues in (strong) foreign currency
  - Sharp devaluations dramatically affect comparative advantage in short and medium run

} Problem & Opportunity
- Principle #3: Risks of renegotiation, default rise
  - Realign/strengthen political strategy, if possible

} Problem

## Acute Problems: Imports to Crisis Country

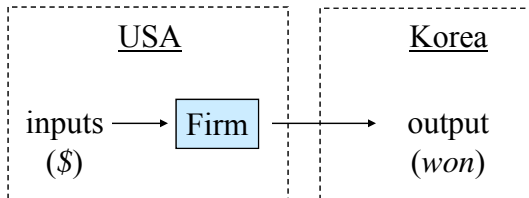
- Case 1 (e.g. Korean importer)



### Problems

- Devaluation
- Local demand ↓
- Non-mkt risk ↑

- Case 2 (e.g. US Firm targeting sales to Korea)

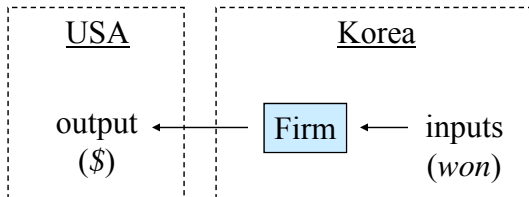


### Problems

- Devaluation
- Local demand ↓
- Non-mkt risk ↑

## Possible Opportunities: Exports from Crisis Country

- Case 3 (e.g. Korean producer)



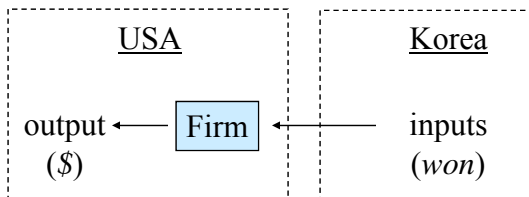
### Opportunity

- Devaluation

### Problems

- Financing operations
- Non-mkt risk ↑

- Case 4 (e.g. US importer; business service outsourcing)



### Opportunity

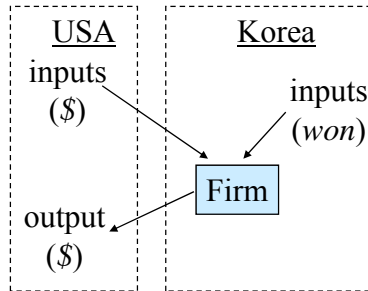
- Devaluation

### Problems

- Financing suppliers

## Global Production Chains

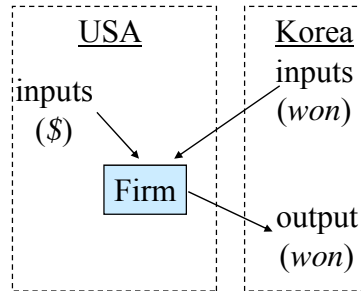
- Case 5 (intl production)



(devaluation helps)

*Net exporter from crisis country*

- Case 6 (intl production)



(devaluation hurts)

*Net importer to crisis country*

- Can you switch location of suppliers/production or sales to take advantage of change in prices?

## Strategic Realignment (After Crisis Strikes)

- For most firms, a financial crisis will create problems, but a firm can *realign strategy* to moderate the damage
- Example: GM invests in auto plant in Thailand in 1996
  - Plans to produce 4-door sedan for Thai market
  - Thai financial crisis strikes in July 1997
  - Big drop in local demand
  - Inputs from other countries become very expensive
- GM realigns strategy
  - Alter plant to produce minivan for European market
  - Starts buying from local suppliers

Shift output sales to high value currency,  
input costs to low value currency

## Strategic Flexibility (Before Crisis Strikes)

- If you are doing business in crisis prone countries....
- Ex-ante *flexibility* to adjust sales to other markets is key
  - *Common components* in manufacturing across markets
  - *Location* near ports / low cost transportation links  
= easily re-tailor sales away from crisis market
- A macroeconomic financial crisis is like a “hold-up” problem
  - Entire economy renegotiates on you...
  - Solution: make investment less specific to market
- Example: Toyota, GM, Ford, etc.
  - ↑ common components and ↑ location flexibility
  - Lessons learned from Asian financial crisis

## Investment Opportunities

- Herd mentality of financial crises leads to over-reaction
  - Stock prices drop
    - Herd behavior of capital flight leads to massive sell-off
    - Sharp drops in stock prices and other assets
  - Firms need outside investors
    - Financing crunch as local banks collapse and local interest rates soar
    - Difficult for local firms to survive or expand
  - Principle #4: Crises create bargain investments
- } Opportunity
- Firms/assets available at low prices,  
though risks remain high

### Example: Warburg buys Jinwoong

- Jinwoong: Korean camping goods manufacturer
  - Largest tent producer in world
  - Outsourced manufacturing to China, Sri Lanka, etc
  - Borrowed from Korean banks to expand operations
- Crisis strikes
  - Financing crunch (high interest rates) makes it impossible for Jinwoong to roll over its debt payments to local banks
  - Actively seeks investor to save company
- Warburg Pincus sees a bargain
  - Buys 85% stake for \$50 million, renames firm “NorthPole”
  - NorthPole market value is \$230 million 4 years later

### Last Word: The IMF and You

- Does the IMF want to help your business during crisis?
- The IMF wants economy to improve rapidly
  - In this sense, it wants your business to survive
- *But* the IMF is sensitive to moral hazard arguments / view that foreign investors “get off easy”
  - In this sense, it wants you to fail, especially if you are a speculator
- The IMF wants its *conditions* to be honored by host country
  - May help in non-market situations
  - e.g. Manulife