

# MSU CIBER - International Business Institute

**BROAD**  
COLLEGE OF BUSINESS  
MICHIGAN STATE UNIVERSITY

**MSU/CIBER International Business Institute for Community College Faculty - International Finance**  
by Kirt C. Butler  
MSU Department of Finance

- ✓ International finance
  - International markets
  - Market entry & corp governance
- ✓ International economics
  - Exchange rate systems
  - Models of comparative advantage
  - IMF and the World Bank

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## Vivé la difference

International business is necessarily **interdisciplinary** because business is affected by cross-border differences in:

- Language & culture
- Accounting
- Distribution
- Financial markets
- Other business conventions (legal, accounting, taxation, regulation, etc.)
- Human resource mgmt
- Marketing
- Logistics
- Corporate governance

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

## Where the art resides...

The notes I handle no better than many pianists, but the pauses between the notes – ah, that is where the art resides.

Arthur Schnabel

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

## Int'l finance topics appropriate for CCs

- > International finance
  - International markets – debt, equity, FX
  - Corporate governance and M&A
- > International economics
  - Exchange rate systems
  - Models of comparative advantage
  - The IMF and the World Bank

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

## Web resource

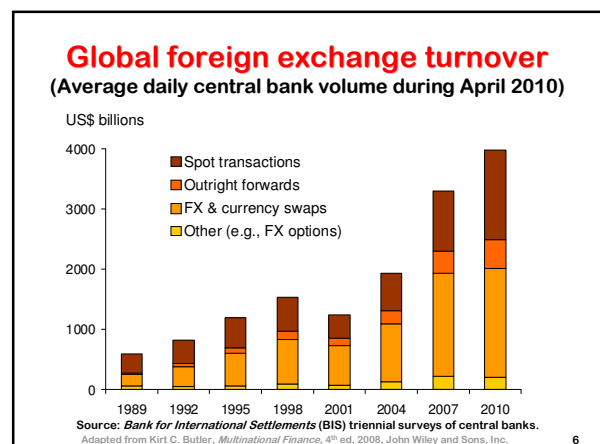
[www.bis.org](http://www.bis.org)

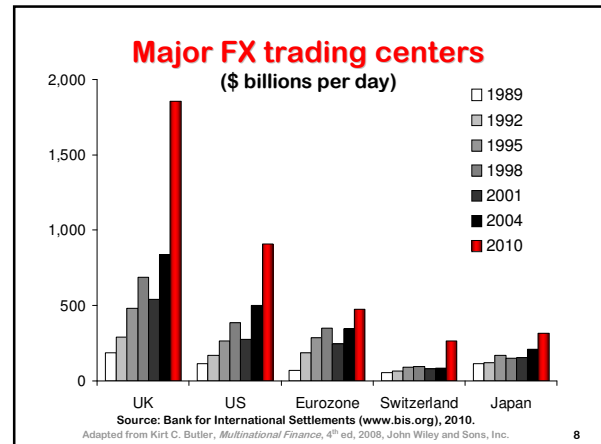
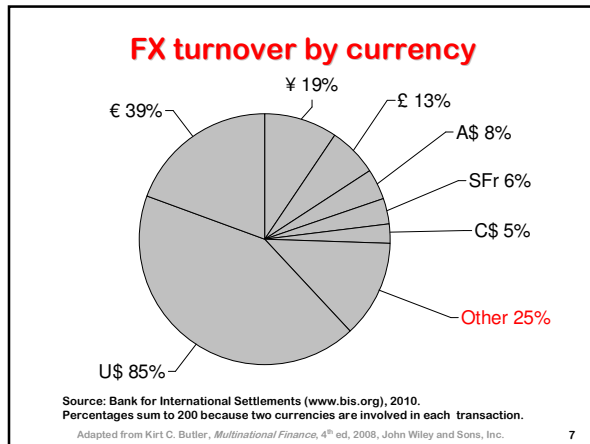
### Bank for International Settlements

Click on:

- Statistics (Pubs & research)
- Foreign exchange (International financial statistics)

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.





### Web resource

[www.oanda.com](http://www.oanda.com)

### Spot exchange rate quotations and data series

Click on:

- Currency Tools
- FXHistory

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

### A classroom exercise to simulate the fx market

[www.msu.edu/~butler/](http://www.msu.edu/~butler/)

- > Learning objectives
  - To develop practice in dealing with foreign exchange
  - To develop intuition regarding market forces, including arbitrage
- > Market participants
  - Dealers: make a market in foreign currency; that is, quote bid and offer (or ask) prices
  - Traders: trade for their own acct

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

### Rules of the game

“Buy low and sell high”

- > One contract  $\equiv$  One billion ringgits
- > Trades can be for up to 10 contracts
- > Record each transaction as a purchase or sale
- > Maximum bid-offer spread is 1 basis point (1 bp = 0.01¢/Rg = \$0.0001/Rg)
- > Dealer quotes are good for 2 minutes

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

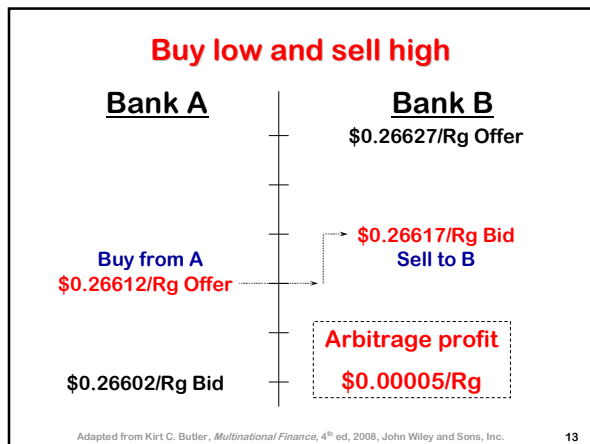
### Arbitrage profit in the fx market

An example

Bank A:  
“\$0.26602/Rg bid and \$0.26612/Rg offer”

Bank B:  
“\$0.26617/Rg bid and \$0.26627/Rg offer”

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.



### Riskless arbitrage profit

- Buy Rg1 billion from Bank A at their \$0.26612/Rg offer price
- Sells Rg1 billion to Bank B at their \$0.26617/Rg bid price

**Arbitrage Profit**  
=  $(\$0.00005/Rg)(Rg1 \text{ billion})$   
= \$50,000 with

**NO NET INVESTMENT**  
**NO RISK**

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 14

### Sample foreign exchange ledger

| Counterparty  | Rg 1 billion contracts | \$/Rg price | Cumulative balance |
|---------------|------------------------|-------------|--------------------|
| 1 Penn Square | BUY 1                  | 0.22004     | +1                 |
| 2 Citicorp    | BUY 3                  | 0.22010     | +4                 |
| 3 Bk of Tokyo | SELL 2                 | 0.22016     | +2                 |
| 4 Bk of Tokyo | SELL 4                 | 0.22020     | -2                 |
| 5 . . .       |                        |             |                    |

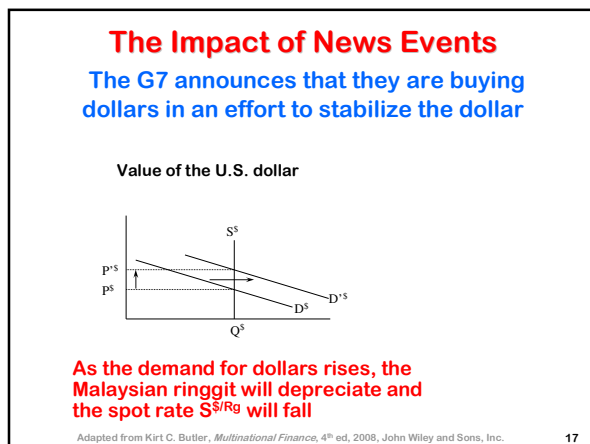
Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 15

### Opening prices: \$0.21945/Rg BID & \$0.21950/Rg OFFER

**News announcements**

- The member nations of the G7 have announced that they are buying dollars in an effort to stabilize the dollar
- The U.S. Federal Reserve announces that in an effort to stimulate economic activity it is lowering the discount rate on overnight loans to commercial banks
- The U.S. government reports that the U.S. money supply M1 increased by \$1 billion more than expected in the most recent quarter

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 16



### The Impact of News Events

The U.S. Federal Reserve announces that it is lowering the fed funds rate in an effort to stimulate economic activity

This makes it easier for U.S. businesses to borrow and increases economic activity. If this also increases U.S. inflation, then the value of the U.S. dollar should fall. This will result in **an appreciation of the ringgit against the dollar.**

Increases in the domestic discount rate usually, but not always, lead to increases in the value of the domestic currency.

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 18

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## The Impact of News Events

The U.S. government reports that U.S. money supply M1 increased by \$1 billion more than expected in the most recent quarter

This would appear to result in a larger supply of dollars and hence a lower value for the dollar. However, the increase in the money supply has already occurred and should already be reflected in the market price of the dollar.

On the other hand, if the U.S. Federal Reserve is likely to increase the discount rate to slow down the economy, **then the dollar could rise in anticipation of Fed policy.**

**If the dollar rises against the ringgit, then the ringgit will fall against the dollar.**

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Hints

- > **Getting started:** Set an example by jumping in and making a few trades yourself.
- > **Market segmentation:** Separate large classes into two markets that trade independently. Later, allow trade in either market. Cross-market arbitrage can yield big profits.
- > **Fixed fx rates:** Quietly ask one bank to serve as the Malaysian central bank and “defend its currency” with artificially high bid and offer quotes. This bank will soon run out of fx reserves as the bank is forced to buy ringgits with its foreign currency reserves.

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Int'l finance topics appropriate for CCs

- > **International finance**
  - International markets
  - **Corporate governance and M&A**
- > **International economics**
  - Exchange rate systems
  - Models of comparative advantage
  - The IMF and the World Bank

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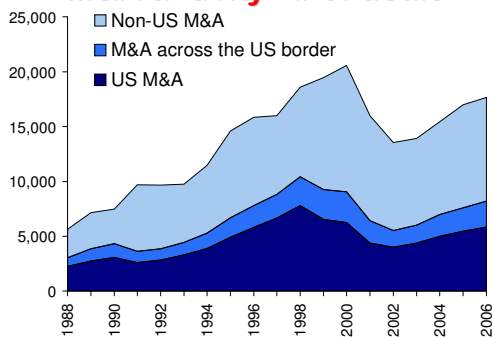
## Corporate governance

- > **Corporate governance** refers to the way in which **stakeholders** exert control over the corporation
- > There are 3 ways to obtain control over another firm's assets
  - acquisition of another firm's assets
  - acquisition of another firm's stock
  - merger or consolidation
- > **Mergers and acquisitions** are becoming increasingly important

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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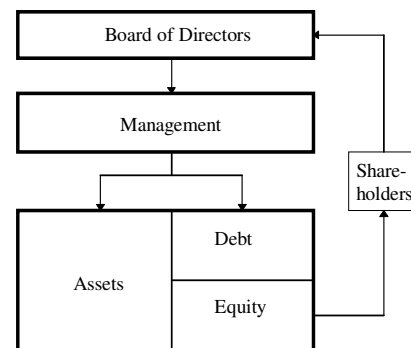
## M&A activity - # of deals



Compiled from *Mergers and Acquisitions*. Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Governance of the MNC



Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Corporate governance systems

> **Families or the State**

|              |           |          |              |
|--------------|-----------|----------|--------------|
| State        | China     | N. Korea | Singapore    |
| Family       | Mexico    | Italy    | Spain        |
| Family-State | Indonesia | S. Korea | Saudi Arabia |

> **Bank-based**

|         |       |
|---------|-------|
| Germany | Japan |
|---------|-------|

> **Market-based**

|           |        |         |
|-----------|--------|---------|
| Australia | Canada | Ireland |
| U.K.      | U.S.A. |         |

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 25

## Corporate governance systems

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 26

The gentle reader will never,  
never know what a consummate  
ass he can become,  
until he goes abroad.

Mark Twain

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 27

## Topics of international finance

- > **International finance**
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- > **International economics**
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Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 28

## Exchange rate systems

- > **Pegged or fixed exchange rate systems**
  - Forges a direct link between inflation differentials and employment levels
  - Can result in large adjustments
- > **Floating exchange rate systems**
  - Allows exchange rates to adjust for inflation differences
  - Allows employment levels and wages to equalize through the exchange rate mechanism

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 29

## Recent exchange rate arrangements

| IMF Classifications of Exchange Rate Regimes |  |   |                                   |  |                                     |
|--|--|---|-----------------------------------|--|-------------------------------------|
|  | Arrangements with no separate legal tender | Currency board or fixed peg arrangements      | Crawling pegs or horizontal bands | Managed floating with no pre-determined path | Independent float                   |
| <b>Africa</b>                                | WAEMU & CAEMC                              | Egypt, Ethiopia, Rwanda, Zimbabwe             | Botswana                          | Kenya, Nigeria, Sudan                        | Congo, Somalia, S. Africa, Uganda   |
| <b>Asia &amp; Pacific</b>                    | Kiribati, Marshall Islands                 | China, Pakistan, Vietnam                      | Tonga                             | Afghanistan, India, Singapore, Thailand      | Australia, Indonesia, Japan, Korea  |
| <b>Europe</b>                                | <i>Eurozone:</i><br>Austria, Belgium       | Bosnia-Herzegovina, Latvia, Ukraine           | Denmark, Hungary, Slovak Rep.     | Czech Rep, Russia, Romania, Serbia           | Norway, Sweden, U.K., Switzerland   |
| <b>Middle East</b>                           |  | Iraq, Kuwait, Qatar, Saudi Arabia, Syria, UAE | Iran                              | Yemen  | Israel, Turkey                      |
| <b>Americas</b>                              | Ecuador, El Salvador, Panama, ECCU         | Bahamas, Bolivia, Honduras, Venezuela         | Costa Rica, Nicaragua             | Argentina, Colombia, Jamaica, Peru           | Brazil, Canada, Chile, Mexico, U.S. |

Abbreviations: CAEMC = Central African Economic and Monetary Community. ECCU = Eastern Caribbean Currency Union. WAEMU = West African Economic and Monetary Union.  
Source: Based on *International Financial Statistics*, a publication of the International Monetary Fund ([www.imf.org](http://www.imf.org)), December 2006 issue.

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 30

## The international monetary system

### 1946 The Bretton Woods Conference

- US dollar convertible into gold at \$35/oz; other currencies are pegged to the dollar
- Created the IMF and the World Bank

### 1971 Collapse of Bretton Woods

### 1979 European Monetary System created

### 1991 The Treaty of Maastricht

### 1999 Introduction of the euro (€)

- Emu-zone currencies pegged
- European bonds converted

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Currency crises

### > Currency crises during the 1990s

- Mexican peso crisis of 1995
- Asian contagion of 1997
- Russian ruble crisis in 1998
- Argentinian peso crisis of 1998

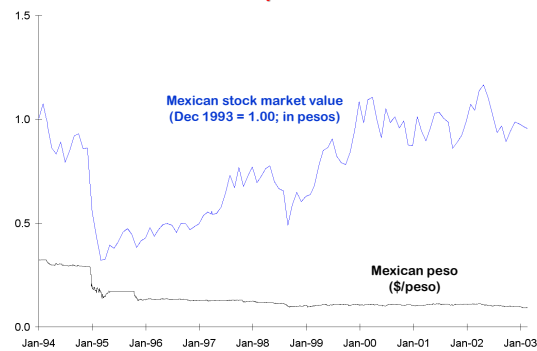
### > In each crisis, contributing factors included:

- A fixed or pegged exchange rate system that overvalued the local currency
- A large amount of foreign currency debt

Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Mexican peso crisis



Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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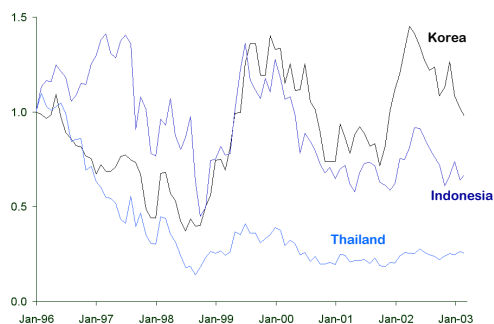
## The Asian contagion (Dec 1996 = 1.00)



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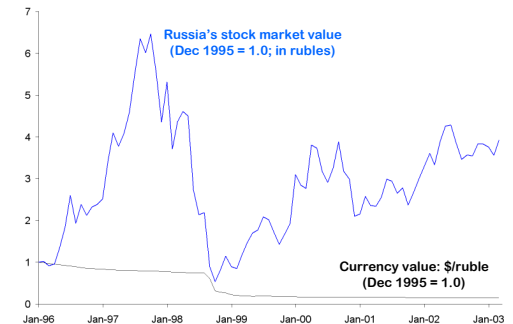
## The Asian contagion (Dec 1996 = 1.00; in local currency)



Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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## Russia's currency crisis



Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc.

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- ## The debate over IMF lending
- > **Proponents of IMF lending policies believe**
    - Short term loans help countries overcome temporary crises
  - > **Critics of IMF lending believe**
    - Belt-tightening is counterproductive
    - Capital market liberalizations increase risks
    - Loans are often spent supporting unsustainable exchange rates
    - IMF loans last for decades
    - IMF remedies benefit developed countries
- Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 38

- ## IMF lending and moral hazard
- > **Moral hazard**
    - The existence of a contract can change the behaviors of parties to the contract
  - > **The IMF's challenge**
    - is to develop policies that promote economic stability
    - and ensure that the consequences of poor investment decisions are borne by investors and not taxpayers
- Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 39

- ## Foreign exchange markets
- > **Spot market**
    - Cash market with delivery in two business days
  - > **Forward market**
    - Trade on a pre-arranged date and at a pre-arranged price
  - > **Volume**
    - More than \$3.2 trillion trades each day
    - 75% of trade is in the interbank market
- Adapted from Kirt C. Butler, *Multinational Finance*, 4<sup>th</sup> ed, 2008, John Wiley and Sons, Inc. 40

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