

For the 2nd EEG Meeting

Foreign Currency Accounting

19 December 2011

*Presented by FX Research Team
Korea Accounting Standards Board*

The views expressed in this presentation are those of the FX research team of KASB, not necessarily those of the KASB

Background

- **Recurring requests from entities in emerging economies**
 - ✓ Translating foreign currency monetary items at **the closing rate** **might not** reflect the economic substance **in rare circumstances such as financial crises**
 - ✓ **Exchange rates** that have significantly fluctuated during the financial crises **tend to recover** after a certain period of time

Paragraph 23 of IAS 21

- ✓ *At the end of each reporting period:*
 - (a) *foreign currency monetary items shall be translated using the closing rate*

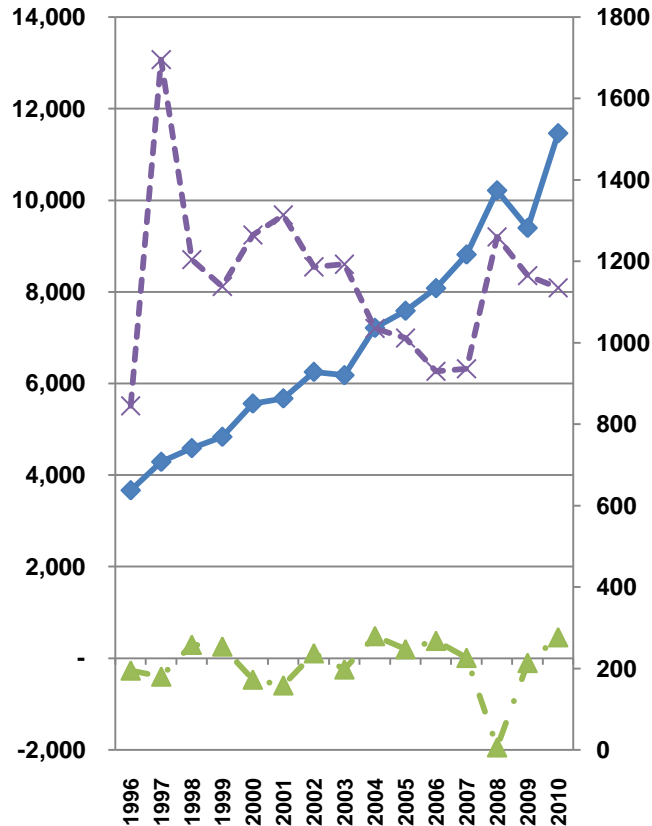
Background

● Example: Company A

(Sales/profit or loss,
Unit:10billion won)

Sales & profit or loss*

(FX rate,
Unit:KRW/USD)

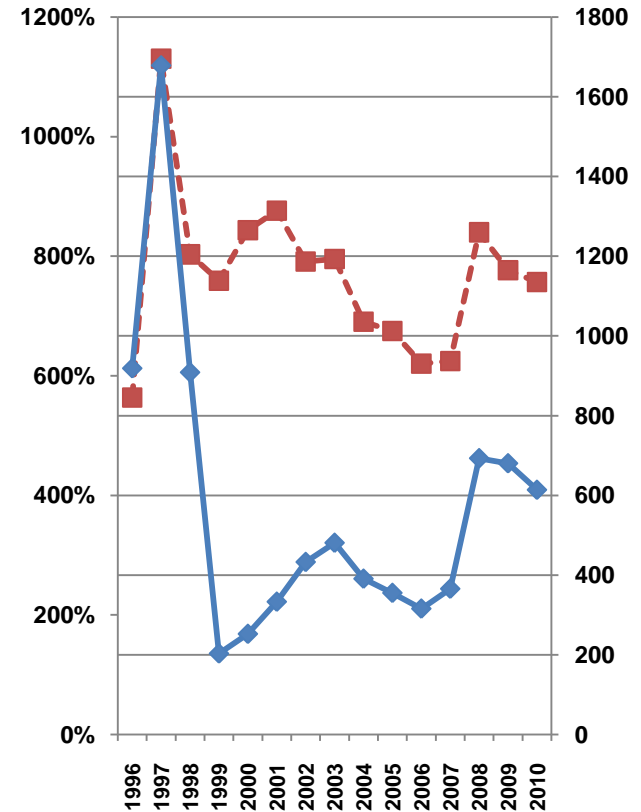


—◆— Sales —▲— Profit or loss —×— FX rate

(Debt to equity
ratio,
Unit: %)

Debt to equity ratio*

(FX rate,
Unit:KRW/USD)

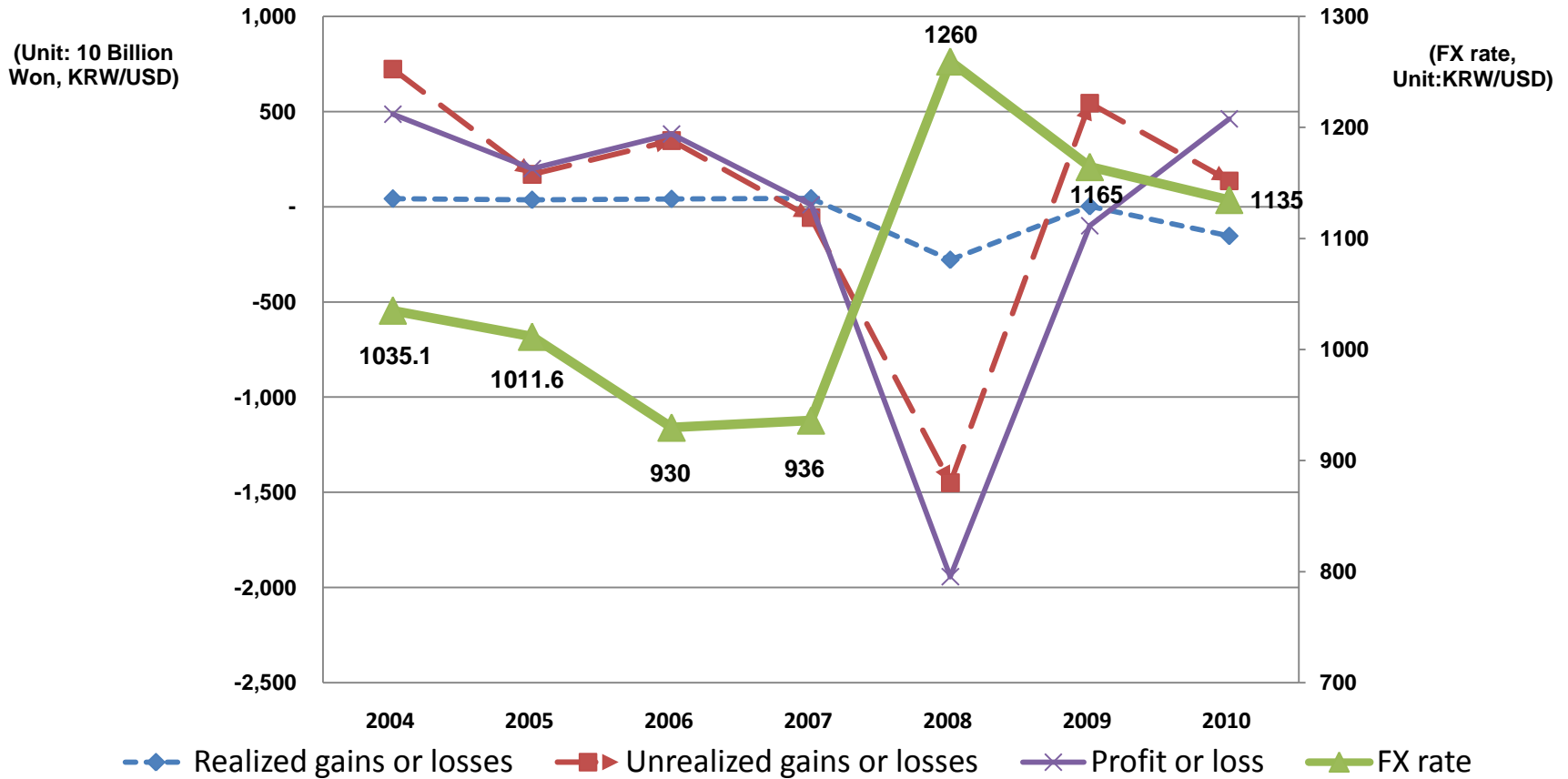


—■— FX rate —◆— Debt to equity ratio

* The above graphs are showing the sales, profit or loss and debt to equity ratio of Company A between 1996 and 2010

Background

Gains or losses related to foreign currency*



* The above graph is showing the gains or losses related to the translation of foreign currency transaction of Company A between 2004 and 2010

Pondering over using the closing rate

- **Naïve reasoning:**

Question:

Why do we use the closing rate for translation of the monetary items?



The closing rate shows **“current value”** in local currency at the reporting date



However, we need more **analytical and reasonable answer** based on certain principles in IFRS

Pondering over using the closing rate

Example

- Foreign currency denominated loan with 3-year maturity
- Measured at amortised cost
- Effective interest rate is 10%
- X_i denotes exchange rate at i^{th} year end

- **Situation under certainty: Ideal world**

$$PV_0 = \frac{FC_1 \cdot X_1}{(1 + 10\%)^1} + \frac{FC_2 \cdot X_2}{(1 + 10\%)^2} + \frac{FC_3 \cdot X_3}{(1 + 10\%)^3}$$

- In an ideal world, future exchange rates are known
- Future cash flows each year (FC_1 , FC_2 , and FC_3) are translated at the corresponding future exchange rates (X_1 , X_2 , and X_3)

Pondering over using the closing rate

- **Situation under uncertainty: Real world**

$$PV_0 = \frac{FC_1 \cdot ?}{(1 + 10\%)^1} + \frac{FC_2 \cdot ?}{(1 + 10\%)^2} + \frac{FC_3 \cdot ?}{(1 + 10\%)^3}$$
$$\doteq \left[\frac{FC_1}{(1 + 10\%)^1} + \frac{FC_2}{(1 + 10\%)^2} + \frac{FC_3}{(1 + 10\%)^3} \right] \cdot X_0$$

- In a real world, future exchange rates are unknown
- Future cash flows each year (FC_1 , FC_2 , and FC_3) are translated at **the closing rate (X_0)** in place of future exchange rates (X_1 , X_2 , and X_3)

Pondering over using the closing rate

- Using the closing rate is just **a means to an end**
 - ✓ The closing rate is used because it is assumed to be **the best estimate** of future exchange rates
- Hence, our answer to the question would be as follows:

Question:

Why do we use the closing rate for translation of the monetary items?



The closing rate **generally** represents **the best estimate** of future exchange rate

Pondering over using the closing rate

- **Our answer is supported by IAS 36, *Impairment of Asset***

BCZ46IAS 36 indicates that value in use in a foreign currency is translated into the reporting currency using the spot exchange rate at the balance sheet date.

BCZ47 If a currency is freely convertible and traded in an active market, the spot rate reflects the market's best estimate of future events that will affect that currency. Therefore, the only available unbiased estimate of a future exchange rate is the current spot rate,

Pondering over using the closing rate

- **Comparison of IAS 36 and IAS 21**

IAS 36, Impairment of Asset

Items	Measurement Basis	Applied Rate	Reason for using the rate
PPE	Present Value(*)	Spot rate	Market's best estimate

(*) Value in Use is defined as the present value of the future cash flows

IAS 21, The Effects of Changes in Foreign Exchange Rates

Items	Measurement Basis	Applied Rate	Reason for using the rate
Monetary items(*)	Present Value	Spot rate(**)	Market's best estimate

(*) Measured at amortised cost

(**) The closing rate is defined as the spot rate at the reporting date

Consideration of rare circumstances

- *Now, another question can be raised*

Question:
What if the closing rate does not represent the market's best estimate?

We may refer to some IFRS standards:

- **Conceptual Framework**
- **IAS 36, *Impairment of Asset***
- **IAS 19, *Employee Benefits***

Consideration of rare circumstances

- The Conceptual Framework

- ✓ Translated amount using the closing rate should be able to help users assess the amount, timing and uncertainty of future net cash inflows to the entity

OB3 ... Investors', lenders' and other creditors' expectations about returns depend on their assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity. Consequently, existing and potential investors, lenders and other creditors need information to help them assess the prospects for future net cash inflows to an entity

Consideration of rare circumstances

- In IAS 36, the **spot rate is still used** when the spot rate does not reflect the market's best estimate of future events

BCZ50 Even If a currency is not freely convertible or is not traded in an active market—with a consequence that it can no longer be assumed that the spot rate reflects the market's best estimate of future events that will affect that currency—IAS 36 indicates that an enterprise uses the spot exchange rate at the balance sheet date to translate value in use estimated in a foreign currency. This is because IASC believed that it is unlikely that an enterprise can make a more reliable estimate of future exchange rates than the current spot exchange rate.

Consideration of rare circumstances

- **Analogy to the concept of deep market in IAS 19**
 - ✓ The return of corporate bonds in a market that is *not deep (i.e. thin)* is unable to reflect the best estimate of the liability at the time of settling post-employment benefit payables in the future
 - ✓ Then, use another rate, that is, market yield on government bond



Analogy

If a foreign exchange rate market is not deep (i.e. thin), alternative rate to the closing rate can be permitted or required to be used

Consideration of rare circumstances

- **Analogy to the concept of deep market in IAS 19_[continued]**

78 The rate used to discount post-employment benefit obligation (both funded and unfunded) shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds shall be used. The currency and term of the corporate bonds or government bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations.

Consideration of rare circumstances

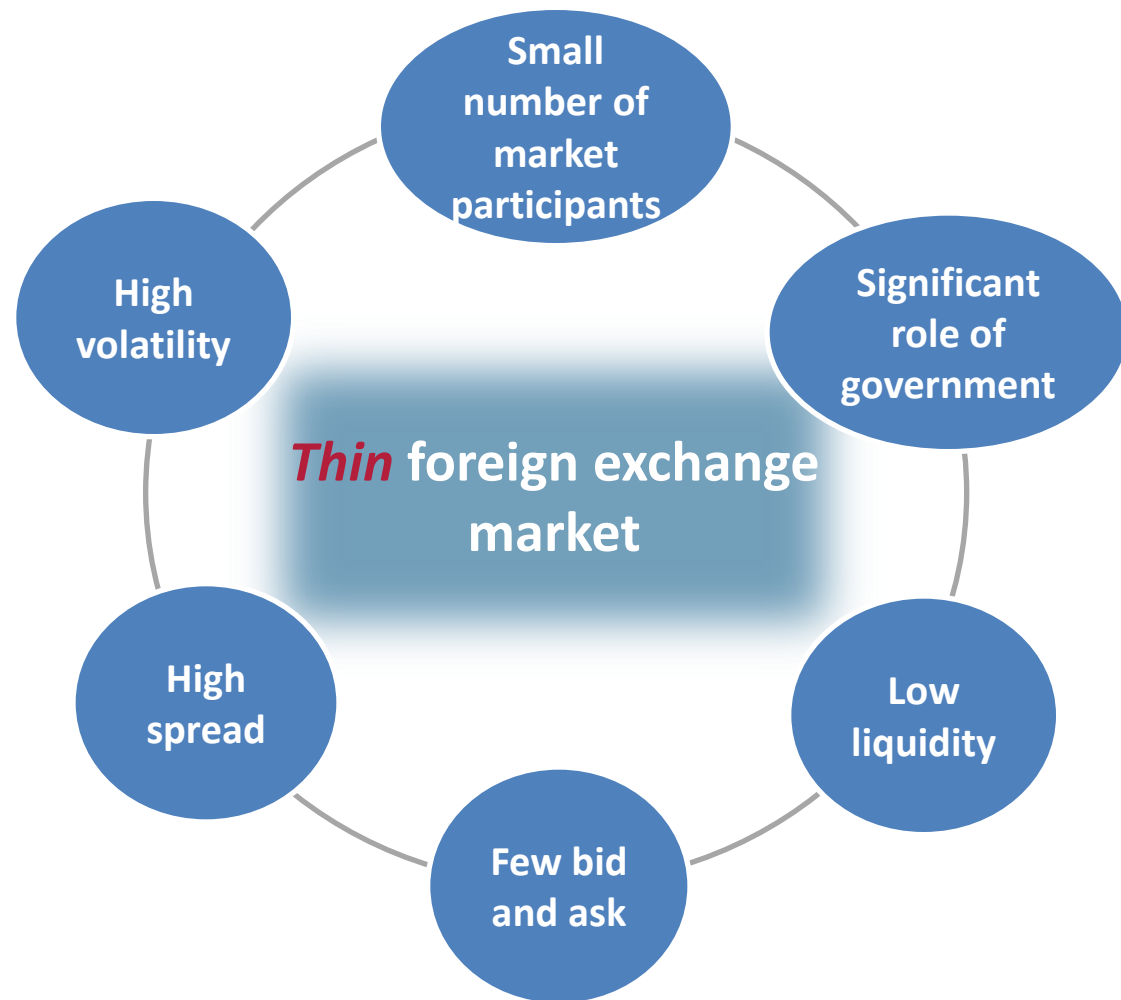
• Thin market and financial crisis

➤ *This extreme degree of foreign-exchange market thinness was an important factor that not only contributed to the crisis but is also constraining the ongoing adjustment to the crisis.*

[the World Bank, 1999]

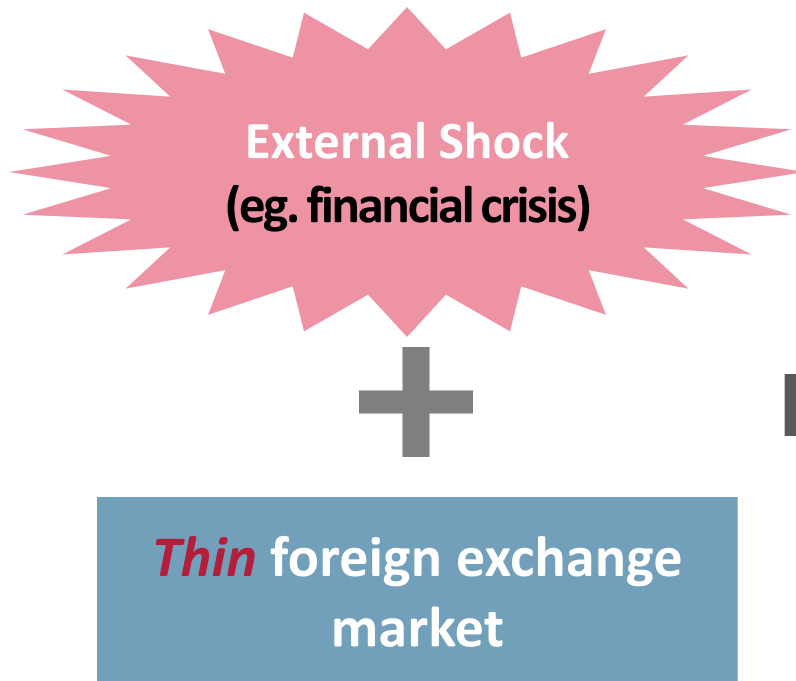
➤ *If the market is thin and controlled by a small number of operators, free float will inevitably lead to a large degree of volatility.*

[Economic and Social Commission for Asia and the Pacific, 2002]

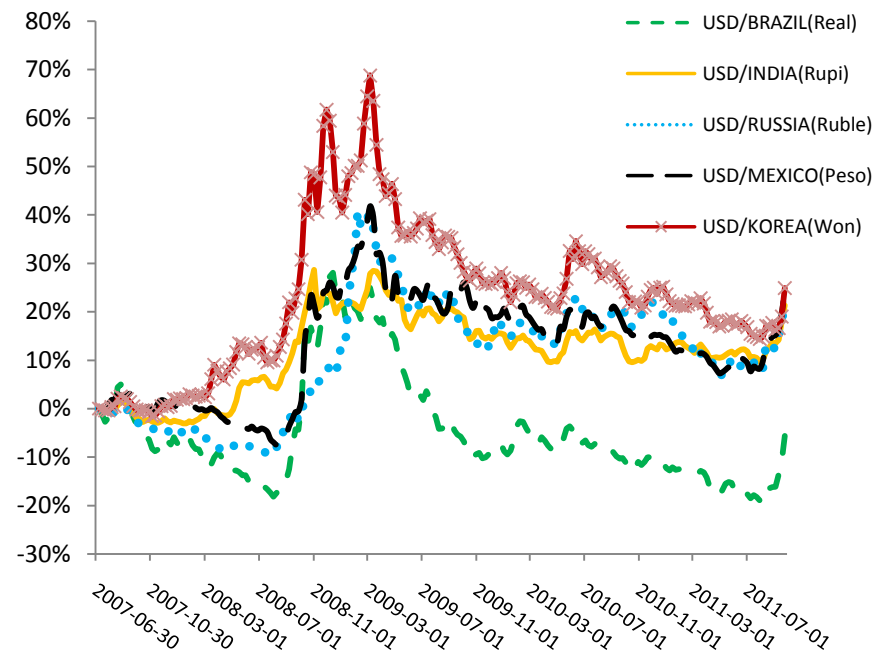


Consideration of rare circumstances

- The closing rate does not reflect the market's best estimate in rare circumstances

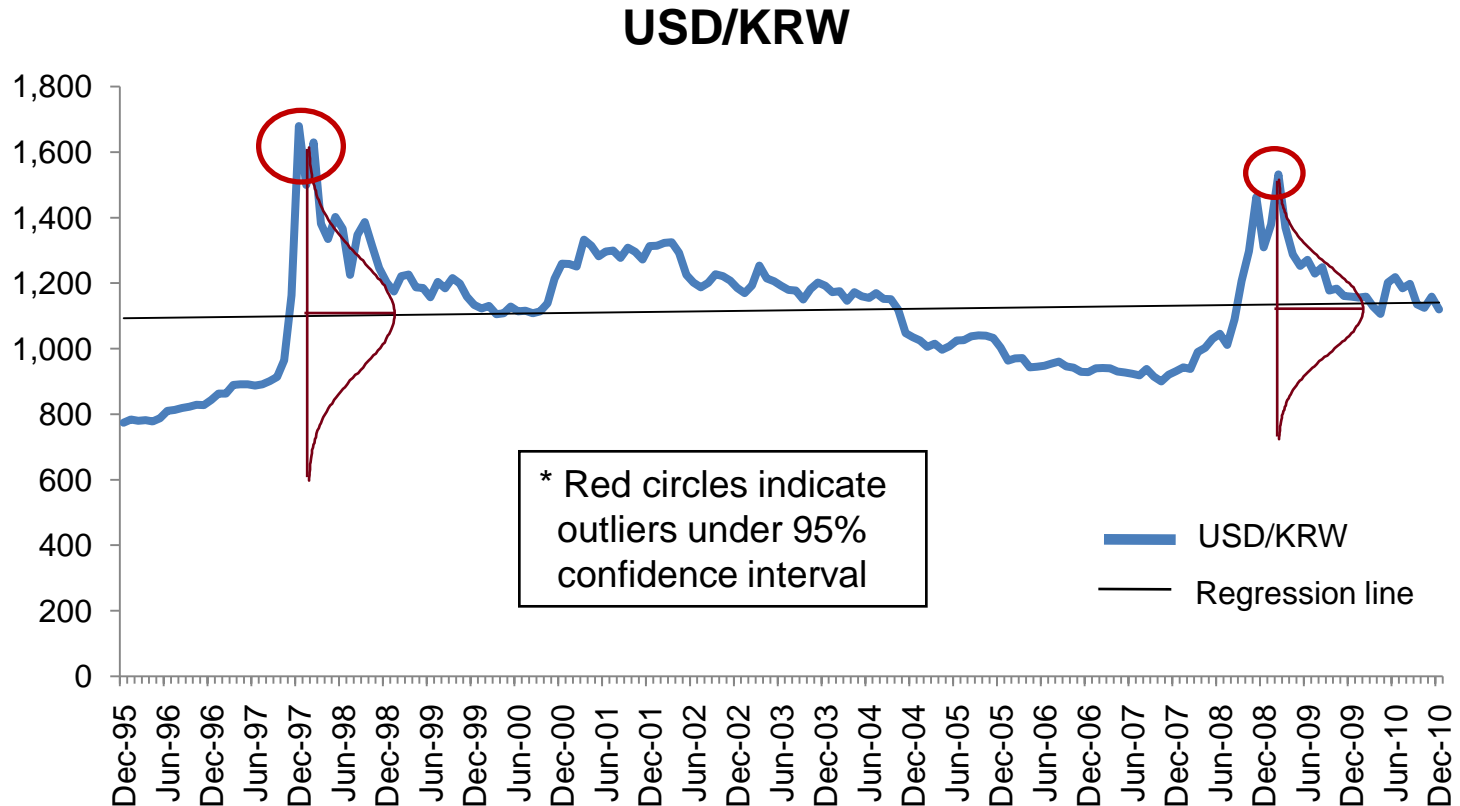


FX volatility in emerging economies



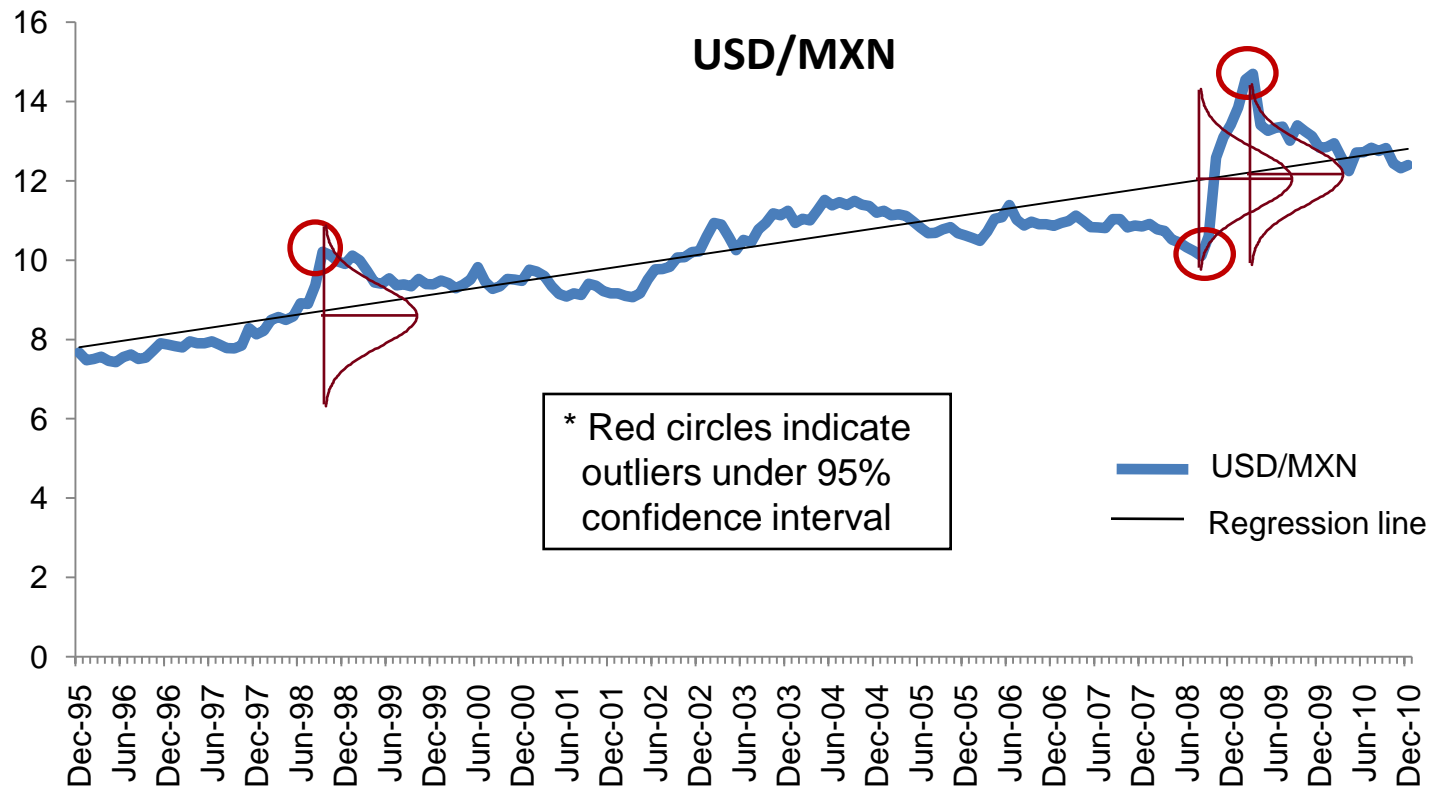
Consideration of rare circumstances

- Example: Korean Won against USD



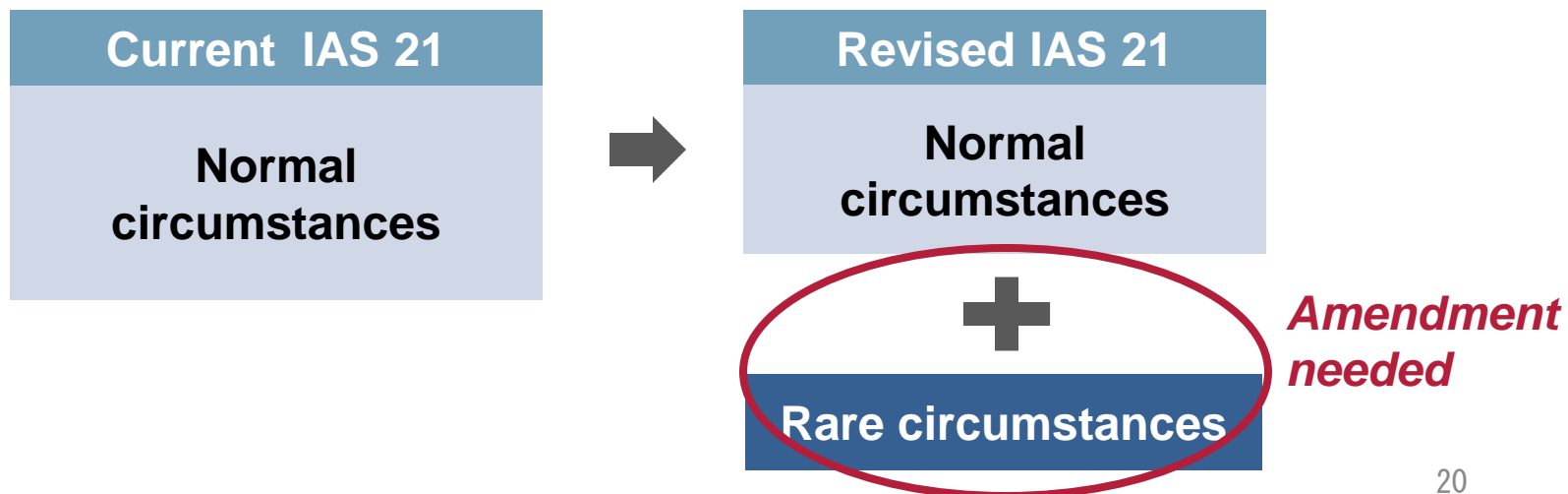
Consideration of rare circumstances

- Example: Mexican Peso against USD



Determining the scope of amendment

- The **principle inherent in IAS 21** is to use the rate that reflects the **market's best estimate** of future events
 - ✓ Using the closing rate cannot be the principle per se, but simply conforms to the principle in almost all cases
- This study focuses on **clarifying the principle** and **providing guidance on rare circumstances**



Determining the scope of amendment

- **What rate is better than the closing rate?**

	Market where the closing rate does represent the market's best estimate of future events (E.g. Deep market)	Market where the closing rate does not represent the market's best estimate of future events (E.g. Thin market)
Rare circumstances (e.g. financial crisis)	IAS 21 maintained	? (Long term item)
Normal circumstances	IAS 21 maintained	IAS 21 maintained ^(*)

Review required

(*) Although the closing rate does not represent the market's best estimate of future events, it is unlikely to obtain a more reliable rate than the closing rate; it is also in accord with Basis of conclusions in IAS 36

Proposal

- **Suggested alternative rates** to use in rare circumstances where the closing rate does not represent the best estimate

	Alternative 1	Alternative 2
Model	<ul style="list-style-type: none"> ▪ Adjusted historical rate model 	<ul style="list-style-type: none"> ▪ Expected rate model
How to calculate	<ul style="list-style-type: none"> ▪ Use a long term trend line based on historical data 	<ul style="list-style-type: none"> ▪ Use the expected exchange rate that reflects the best estimate at the time of settlement of each long-term monetary item
Examples	<ul style="list-style-type: none"> ▪ A historical rate adjusted by the long-term trend line ▪ A moving average rate (e.g. 3-yr moving average rate without the closing rate or 5-yr moving average rate) 	<ul style="list-style-type: none"> ▪ An econometrically forecasted rate at the B/S date using macroeconomic variables ▪ A rate calculated by extending the long-term trend line to the expected settlement date of each long-term item

Summary

- **Add a requirement addressing rare circumstances** where the closing rate does not represent the best estimate
- **Limit rare circumstances** to where all of the following conditions are met:
 - i) Foreign exchange market classified as a **“thin market”**,
 - ii) Significant exchange rate fluctuation due to exceptional and **temporary external shocks including financial crises**, and
 - iii) **Long-term** foreign currency items
- **Apply alternative rates** that better represent the economic substance than the closing rate in the above circumstance

To be discussed further

- In-depth **study on the microstructure of foreign exchange market** from the perspective of economics
- Develop concrete **indicators of determining a “thin market”**
- Further research as to what **characteristics are required of alternative exchange rates** to replace the closing rate

Future Plans

- **Request for adoption as an IASB post-2011 agenda**
 - ✓ Adoption as an official IASB project
 - ✓ With full support from IASB, further research will be effective
- **Cooperation with countries having the same problems**
 - ✓ Active discussion among constituents for alternative accounting treatments

Thank you!