#### Replies to Memo Questions, 10/26/03

Dear Students,

The answer to my question (at what exchange rate – historical or current – would the common stock be translated using <u>the temporal method</u>?) is that the common stock is translated at the <u>historical rate</u>. Here are the answers to your questions.

From the class example, if the spot rates appreciates to Yen 130/\$, why does risk sharing favor Mazda? Doesn't Mazda receive Yen 25,000,000 from Ford no matter what? That's what Ford owes them.

Here is the slide from class.

#### **<u>Risk-sharing</u>** Currency Clauses

- Contractual arrangement: buyer & seller agree to "share" (split) currency movement impacts on payments
  - E.g.: Ford has to pay Mazda **¥ 25,000,000**.
  - Ford purchases from Mazda in Yen @ current spot if spot \$ is b/n ¥115 & ¥125.
  - If spot rate falls outside range, Ford & Mazda share difference.
  - So, if spot ¥110/\$, Mazda gets payment of

$$\left[\frac{\underbrace{\$25,000,00\ 0}}{\underbrace{\$115.00/\$} - \frac{\underbrace{\$5.00/\$}}{2}}\right] = \frac{\underbrace{\$25,000,00\ 0}}{\underbrace{\$112.50/\$} = \$222,222.22$$

Okey, indeed risk sharing would not favor Mazda <u>directly</u>, but it would allow them to get more US\$ for the same Yen 25,000,000, which they can eventually use in the spot market to get more Yen.

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#### Were all of the hedging methods rare during the Bretton Woods or just risksharing?

Actually forex risk exposure methods were rare during the Bretton Woods years. I never thought of that before, but actually Bretton Woods break-up led to the development of all these financial techniques.

#### Is there a revised syllabus?

Yes, I have revised the syllabus, and distributed it on Tue 10/28 the revised part II of it.

## What other benefits are there to using currency swap other than transaction not appearing on the balance sheet?

First, indeed, the currency swap shows only in the footnotes of the financial statement (down there it shows under the <u>other comprehensive income</u> account, or OCI in short). The currency swap is cheaper as compared to taking a loan. Why? Because defaulting on such a transaction is less costly as compared to defaulting on a corporate bond. In addition, while a regular debt would require collateral and impose covenants (and so might lead to bankruptcy), that is not required in a swap transaction.

## What are the explicit differences between the temporal and current rate method? (both say you use historical prices in the slides)

The main difference b/n temporal method & current rate method of translation is the way they treat assets & liabilities. Assets & liabilities under the current rate method are translated at current rates, while some assets & liabilities (e.g. mom-monetary line items) under the temporal method are re-measured using the historical rate.

### In deciding which currency is functional, how do you weight the factors if it is not a discretionary decision?

I don't know, but I will check w/ some of my friends in the accounting department ©.

### For a quiz questions regarding the operating exposure, are we be expected to make those drawings showing who borrows where, when, etc??

No, I am not going to expect you to draw the cross-currency swap or back-to-back loan schemes. You have to understand the way they work, though. Fair game rule ©.

# Sorry, but could you once again explain the difference between Money Market Hedge and Matching Cash Flows?

Basically money market hedge is the same as matching cash flows. Why bother then to come with two different names for the same thing? Because the money market hedge refers to hedging a specific cash flow that is contracted already (i.e. company is facing a specific <u>transaction exposure</u>), while *the process* of using money market hedges is, in essence, matching of cash flows. Notice that we

#### Why would Japan subsidiary use Singapore \$ as a functional currency?

For example, because most of its revenues, or most of its costs are denominated in Singapore \$. You must be thinking then, why not move the subsidiary to Singapore then? Well, for example a Japanese manufacturer of car seats might import its main components from Singapore supplier.

# How does the swap dealer make money through commissions in a cross-currency swap? What is the spread?

The dealer can make money on both sides through the commission.

#### What happens if you default on a swap?

Suppose one of the parties (also referred to as *legs*) in the swap defaults, that is fails to return the initially exchanged currency (for currency swaps) or interest rate payment (for interest rate swaps). This is not so severe a problem, as in the case of the debt default. Why? Because the other party keeps its side of the payment (remember they swap currencies in the case of the currency swap and interest rate payments in the case of interest rate swap) until the default party meets its obligation under the swap arrangement. So the default risk exists, but it not so costly. What happens in case of default? The party who suffered damages can sue the default party for the value of the damages. Needless to say, they would likely not do business again.

If defaulting on a swap is less costly then defaulting on corporate bonds (debt), why don't we see more often defaults on swaps? Because of the damage such an event would bring on the good will (reputation) of the potentially defaulting party.

## I didn't do a good job explaining the cross-currency swap last time, so here is a detailed description.



#### **<u>Cross-Currency</u>** Swaps

Suppose that Honda Japan is receiving US\$ on A/R from US customers. At the same time, since Honda Japan wishes to offset this exposure by creating a matching outflow

(e.g. debt in US\$). However, if Honda Japan borrows in the US, the cost of debt would be higher as compared to the case when they borrow in Japan.

Similar situation exists for Boeing US. The company might have an inflow of yen from A/R w/ a Japanese customer. Boeing also wishes to hedge the forex exposure. How? By creating a matching outflow of yen (e.g. yen debt). However, Boeing is better off in borrowing in the US, rather than in Japan (there is less asymmetry of information for Boeing in US, than in Japan). So, the two parties, Honda Japan and Boeing US, can borrow in their local market (or, in general, in the markets, where they would have a cost advantage) and then swap their debts. So, in the above example, Honda would give the Yen debt proceeds to Boeing US, while Boeing US would give Honda Japan its US\$ debt proceeds.