Dear Students,

Here are the replies to your questions. As for the answer to my question (What is the difference between targeted public share issue and Euro equity public issues?) the answer is that targeted public share issue is offered in a single country, while Euro equity public issues are offered in multiple overseas equity markets.

Is there any way possible to move the final forward perhaps to the last day of class on the reading day? It’s so late as it is and would alleviate the study burden.

I will try to do so to accommodate your schedules ☺. To start with, I would distribute a memo asking for preferred final dates. However, I have already tried once to do it (remember in the initial syllabus I had a very early date 12/12), but the NYU administration told me that this is not possible to do (time conflicts with other exams at Stern). I’ll try again 😊.

Why turnover ratio is so important for investors? Does it clearly inform investors about market liquidity level? For example, consider two markets, 1st market: $100m (turnover) / $1,000m (market cap) and 2nd market: $5b (turnover) / $50b (market cap). Do these two #s tell us the same idea? Any difference between these two markets?

Good point. I agree that the turnover ratio might not be very precise indicator for market liquidity from an international investor’s view. Why?

### International Equity Markets Liquidity

<table>
<thead>
<tr>
<th>Country</th>
<th>Turnover Ratio, 2000</th>
<th>Country</th>
<th>Turnover Ratio, 2000</th>
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<tbody>
<tr>
<td>France</td>
<td>74</td>
<td>Argentina</td>
<td>5</td>
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<tr>
<td>Germany</td>
<td>79</td>
<td>Brazil</td>
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<td>Italy</td>
<td>104</td>
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<td>Spain</td>
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<td>US</td>
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<td>Russia</td>
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Source: Emerging Stock Markets Factbook
First, it aggregates across many stocks, so, if you have a high concentration in an emerging market, even though the turnover ratio is high, it effectively is high only for a few large stocks, and it is not very informative for small-cap or mid-cap stocks, so for them we might actually have a very illiquid market. Second, your example illustrates the idea that from the international investors point of view (e.g. the one coming from the $50b market cap market, who is willing to invest in the $1b cap market) the turnover ratio is not very informative. Third, the turnover ration does not well capture the impact of trading volume on prices (the definition we gave in class for liquidity). Suppose we are in illiquid market, in other words, high volumes of trade could generate substantial impact on prices. This is not well captured by the turnover ratio since prices would be both in the denominator and numerator of this ratio, and in a sense, cancel out.

A teaser question: what other indicators could you come with to measure international market liquidity?

**Korea and China have extremely high liquidity, more than the developed countries. That contradicts with what you said about emerging markets on the previous slide. Can you explain?**

Very true, very high turnover ratios for both markets. Does this contradict the statement on the previous slide that developed countries tend to have higher liquidity? Well, only partially 😊. Notice that Korea is an OECD (Organization of Economic Cooperation and Development) member country (which means that it is among the 30 most developed countries in the world), so in my understanding Korean financial market is a very developed one.

For China, the reason for the high turnover could be the limited outside opportunities set for investments (i.e. good, positive NPV, investments) coupled with the excess liquidity of domestic funds (due to regulatory restrictions to export capital overseas).

So, in general, one reason for seeing these high turnover ratios for Korea and China could be the growing domestic wealth in both countries. If we believe that indeed Chinese and Korean investors would stay in their domestic markets (the Chinese investors because of regulation, Korean investors, perhaps because of home bias), then the rapid increase in domestic wealth could lead to the higher turnover in the local asset market. I invite you to suggest other explanations of this phenomenon 😊.

**Can you explain ADR foreign exchange risk again? When (in what situation) you would be exposed & when you would not?**

The ADR price is quoted in US$, so there is no foreign exchange risk involved. However, this is subject to a caveat. Suppose that the ADR is fungible. In words, you can exchange it for the underlying shares in the local market. So, if there is a depreciation of the local currency, that will result in initial drop in the price of the underlying stock. However, this creates an arbitrage… short the ADR, buy the local stock (can do that since the ADR is fungible). So, if everyone shorts (or liquidates their long position) the ADR, you know its
US price will drop. By how much? As much as it is needed to arbitrage any difference, that is as much as the depreciation (assuming nothing else changes). So, in a sense, there is an indirect “exchange rate risk” to ADR that are fungible. If they are not fungible, then arbitrage can not take place directly, so perhaps the impact of depreciation of the local market will not be as direct as for fungible ADRs.

**What would be some clues or things to look at to determine if the market is heading to a time period of good diversification for international investment or bad diversification internationally, & should invest in home market?**

My take on it, the reason why international diversification wasn’t a good idea in the mid-1990s, was the “irrational exuberance” in the US stock market. Clearly, staying in such a market might have been a good idea as long as one could time the exit a little bit before the reversal of the upward trend. But, how can you predict such a thing? As Warren Buffett once said “…wide diversification in only required when investors do not understand what they are doing…” So, still a good idea to stay with the international tangency portfolio 😊.

So, suppose you were in 1994 and had the graph in the left side of the table above. What would you think of international diversification? It might be a good idea. How could you predict that there would be an asset market bubble in the US coming in the next six years? So, the rationale is, if you have private information (or special knowledge) of what might happen in the international stock markets, then you need not diversify your position internationally.

**Can you clarify what Regulation S is exactly?**

Regulation S lays down the rules for “the offers and sales made outside the United States without registration under the Securities Act of 1933”¹. In the mod 90s this regulation was somewhat abused, since companies would issue stock overseas w/out the registration required under the Securities Act of 1933, and then these “offshore” shares would flow

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¹ Securities Act, 1933.
back to the US market. So, in 1998, the SEC tightened substantially the Regulation S. Now, basically, if a US company wants to issue stock overseas it needs the approval and registration of the SEC as well as of the corresponding stock market authority in the overseas market. So, this is very expensive, and we rarely see it happening. However, in 1999, EASDAQ (the European, screen-based, stock market) developed procedures, that were approved by SEC, which made issuing U.S. stock overseas easier (basically EASDAQ tried to satisfy in an easier way, taking advantage of better technology, the requirements of Regulation S).

Just to give you an idea what exactly are the requirements of Regulation S, here is a sample of them. Under these regulations, when a US stock is issued overseas, the purchaser cannot be US citizen. Or, the issued US securities have to contain a short “fine print” describing the Regulation S restrictions themselves, etc.

Want to read more on Regulation S? Check this one out:  
http://www.sec.gov/divisions/corpfin/forms/regs.htm

You said investors can achieve homemade int’l diversification based on the time period. Can you explain that again? Time sensitivity?

I was referring to the results of a recent study\(^2\) that found that based on date for the period 1973-1993, for seven developed and nine emerging markets, one could come with a portfolio of domestically traded assets (including ADRs, MNE stock, and others) can “mimic” the returns from international portfolio diversification. This was the important thing to take out of it – you can replicate the internationally diversified portfolio domestically.

Then, I linked the discussion to the benefits/costs of international diversification. This “mimicking portfolio” can replicate not only the gains but also the losses resulting from international diversification. In other words, in periods when international diversification is desirable, like 1990-1994, such a “homemade” mimicking portfolio would have superior returns as compared to the domestic market portfolio. However, in periods like 1995-2000, this mimicking portfolio would have performed inferior to the domestic (US) market portfolio.

How so multinational companies shift income from different countries?

An MNE can use transfer-pricing techniques to shift income across borders. For example, the Indian subsidiary of a Swiss pharmaceutical company can be buying overpriced (as compared to the market price) ingredient substances from the parent company in Switzerland. This would result in shifting profits from the subsidiary to the parent.