

Emerging Markets and New Frontiers*

Mark Mobius

It is interesting that the book *Trading with China* was mentioned in the introduction by Dr. Nam. I wrote that book in 1970, and in it I made a projection about what kind of trading China would do with the rest of the world. At that time I was heavily criticized for making a projection which some viewed as being much too optimistic. As it turned out, I was about 200% under what China actually achieved. So making projections can be very surprising because those projections can turn out to be very inaccurate. This is particularly true in Asia due to the kind of growth it has experienced. I remember how different Korea was when I was living here in the 1960s. I know many people in attendance today remember the difficult times Korea had. At that time, I loved to go to the Korean movies and cry because it was always a story about an orphan or somebody having a hard time. Now things have dramatically changed, and I am optimistic about what will happen going forward. However, today I would like to paint a picture of the global situation.

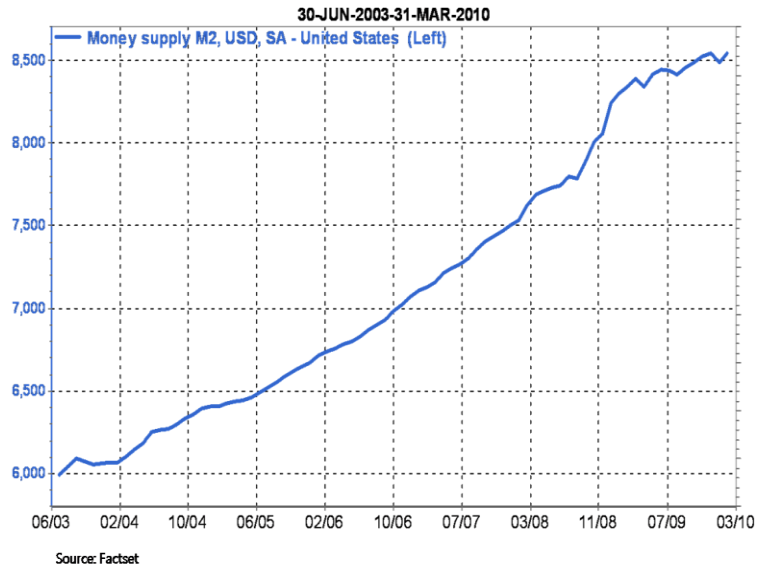
If we look at what is happening in the world today there are two elephants in the investment room. Recently I was in Africa, and I went on an elephant walk. These elephants can be very kind and gentle, but they can also be very fierce and dangerous. So there are two elephants in the investment room today, and they can be very good or very bad. One of those elephants is money supply.

Money supply has been rising at a very rapid rate. Figure 1 shows that M2 in America has been moving up very rapidly, and in the Euro zone money supply has been moving in the same direction. The Japanese have been printing yen and putting them in the bank with no effect. China, of course, has also been printing money at a very rapid rate. So there has been a tremendous flood of money going into the financial markets around the world.

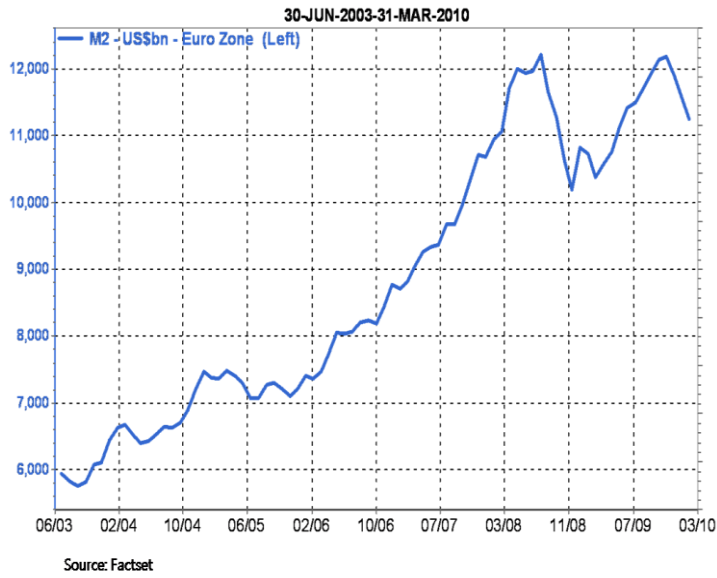
* Transcript of a speech given at the “IGE/Prudential International Finance Lecture” on Thursday, April 22, 2010.

<Figure 1>

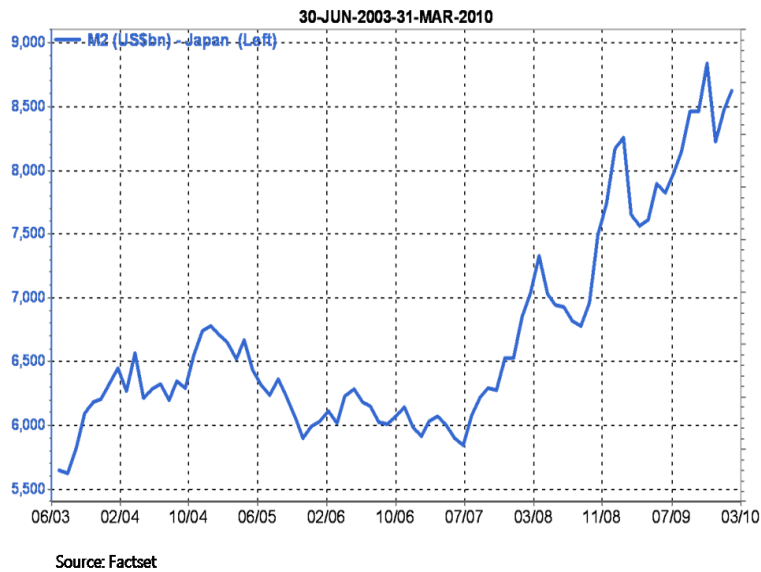
U.S. Money Supply : M2



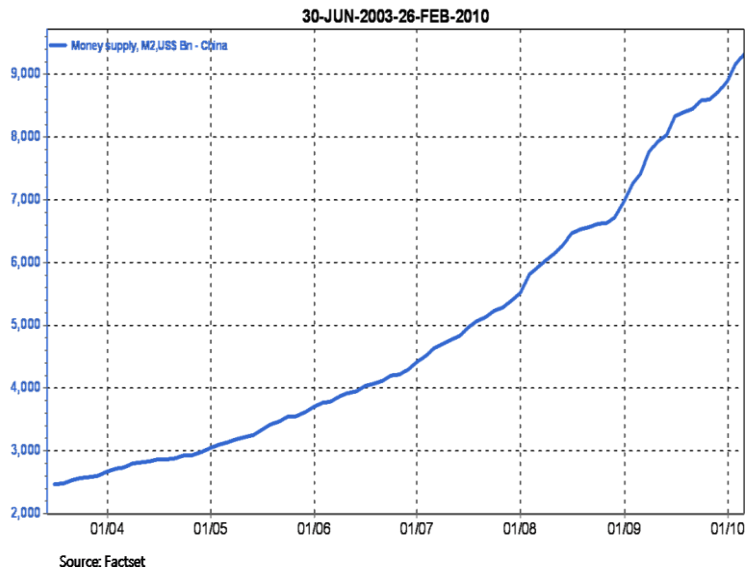
Euro Zone Money Supply : M2



Japan Money Supply : M2



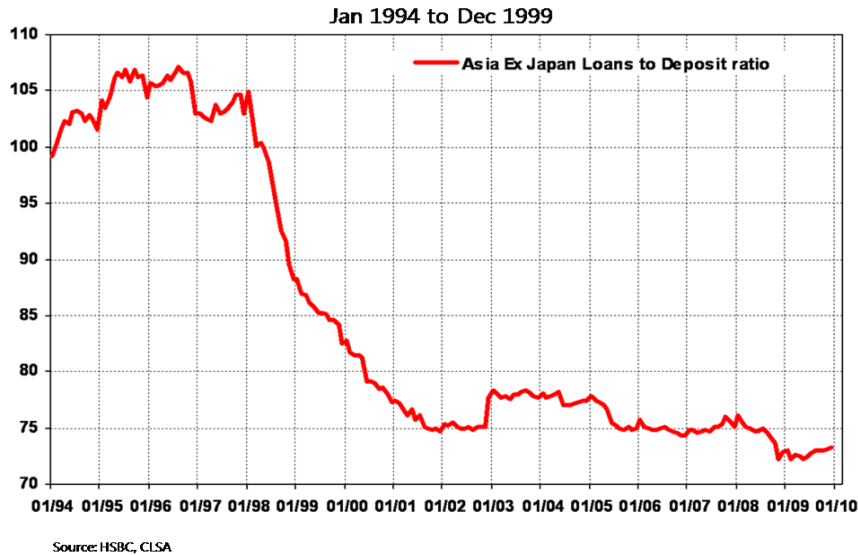
China Money Supply : M2



If we look at Figure 2—loan-to-deposit ratios in Asia ex Japan—we find that the banks are full of money because the loan-to-deposit ratio has gone down—not up—so there is a lot of money looking for a home. Of course, that has been wonderful for all of the equity and bond markets around the world and for the emerging markets as well.

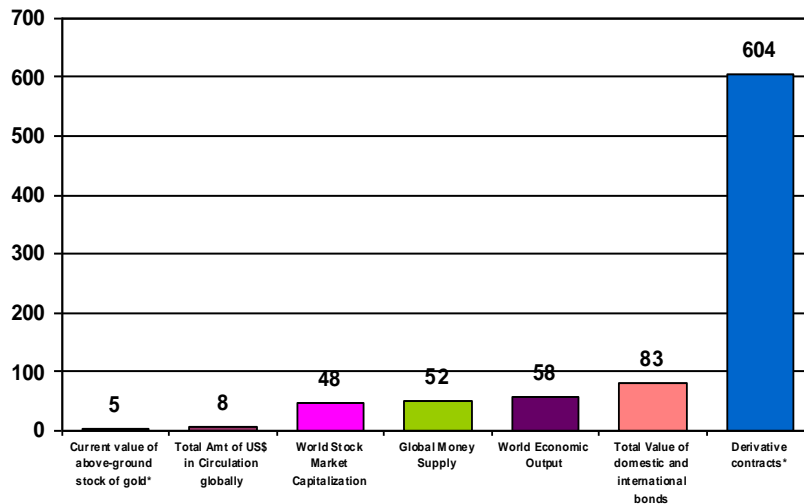
<Figure 2>

Asia ex Japan : Loans to Deposit Ratio



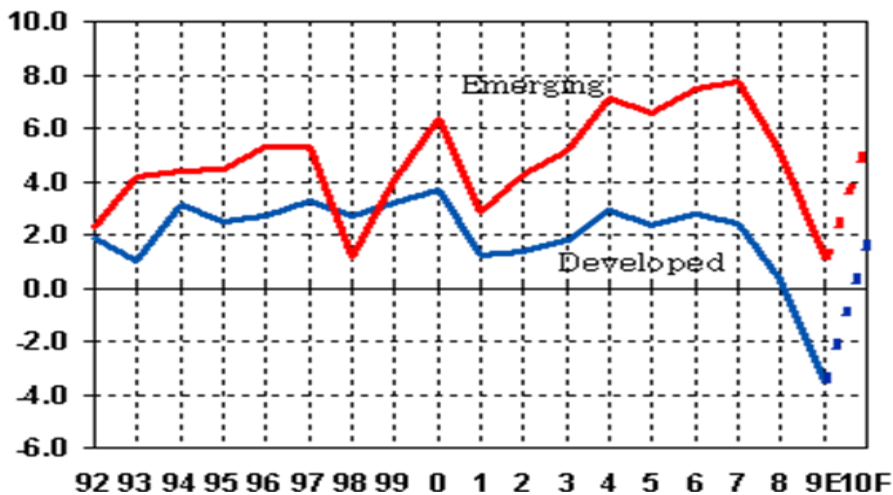
The second of those elephants is derivatives. Again, derivatives have been very nice to markets because many of these derivatives are sold as if they are risk control instruments. So people become very confident that they can control their risk, and therefore put more money into the market. However, they have become a huge gambling mechanism. Moreover, looking at the size of derivatives contracts, they have not decreased. Instead, they have increased—despite the fact that derivatives created this subprime mess. The total value of derivatives contracts, shown in Figure 3, is more than \$600 trillion. That is 10 times more than the total world economic output—far more than the total amount of bonds and equities around the world. Of course, this can be very dangerous and we have already seen that danger. By the way, whenever I visit companies around the world, I always ask them what derivatives they have. If they respond, ‘just plain vanilla’, I get very suspicious because we have seen tremendous losses in derivatives. Citic Pacific in Hong Kong lost \$2.4 billion. Aracruz Celulose, a company in Brazil, lost \$2 billion. KB Financial in Korea lost \$1 billion. Controladora Comercial Mexicana in Mexico went bankrupt with over \$1 billion in losses. Harvard University lost \$1 billion. Cemex, also in Mexico, lost almost \$1 billion. This will continue to be a major problem going forward, and it needs to be watched because it is not over. As for the regulation of derivatives—it will not happen. There is just too much money being made by investment banks with derivatives.

<Figure 3>
Global Assets & Securities



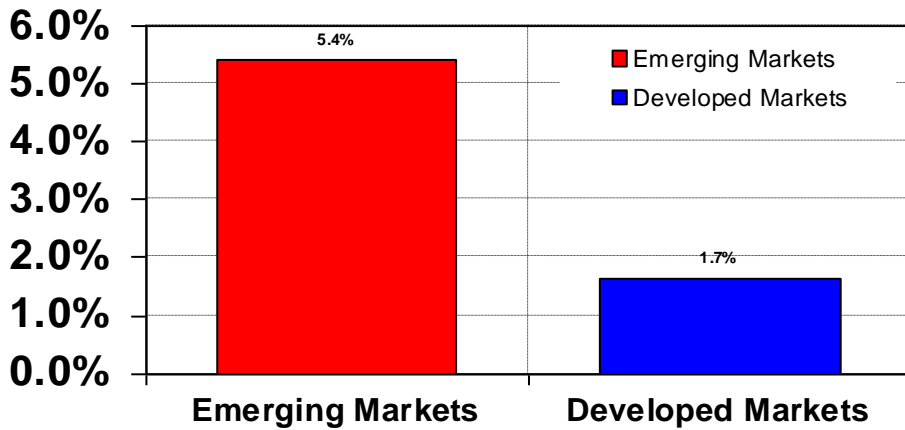
What is the situation in emerging markets? It can be summarized in one word: growth. That is really why we invest in emerging markets. Looking at the economic growth of emerging markets versus developed markets in Figure 4, we see that—with the exception of 1997 and 1998 during the Asian financial crisis—emerging markets have continued to outpace the developed markets. This year we expect the emerging markets to grow 4 times faster than the developed countries: 5.4% versus 1.7% for developed markets (Figure 5).

<Figure 4>
Emerging vs Developed Markets: GDP Growth



<Figure 5>

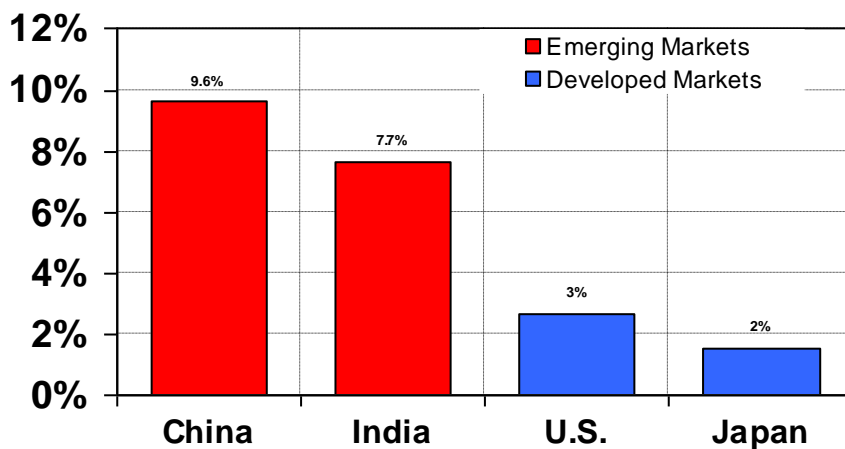
Emerging vs Developed Markets: GDP Growth



In China and India—and this is the most exciting thing that is happening—we have two countries with more than 1 billion people each that are growing between 7% and 10% in real terms (Figure 6). This is a wonderful thing for Korean manufacturers—or any Korean firm selling goods around the world. This will be a wonderful boom for Korea, for the United States, and for other countries around the world as well. The United States is only growing at 3% and Japan at 2%.

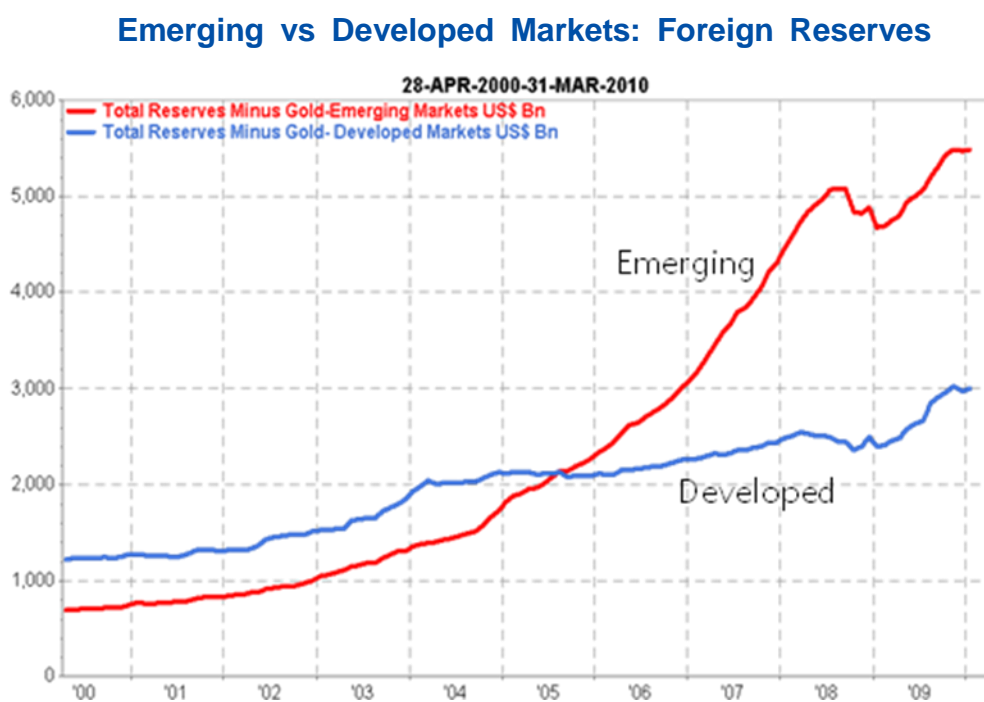
<Figure 6>

China & India vs U.S. & Japan: GDP Growth



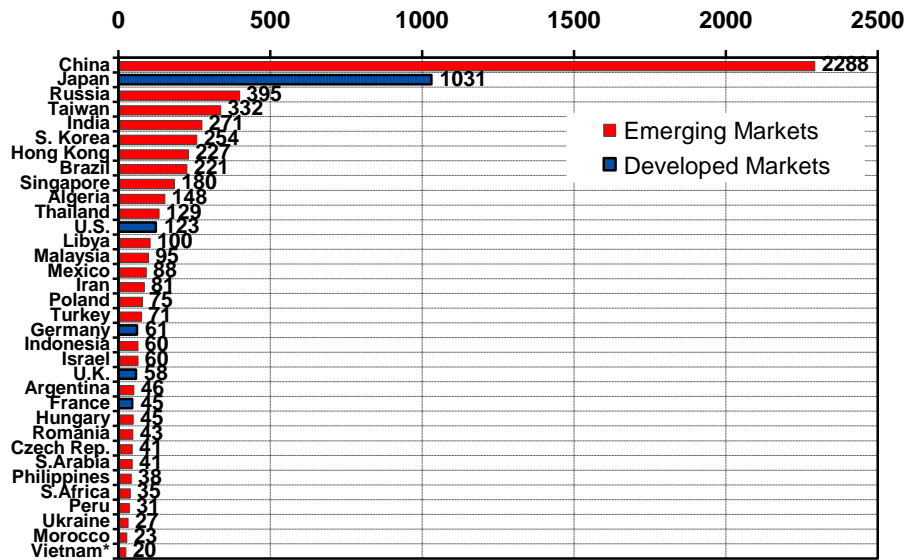
The other good thing that has happened since the Asian crisis is that Asian countries learned their lesson and they have begun to save and build up their foreign reserves. Since 2005, emerging market foreign reserves have far outpaced developed countries. China is now over \$2.2 trillion (Figure 7). Of course, a lot of that is going to U.S. Treasuries, but some of that is going to emerging countries and frontier markets. I was just in Africa, and while I was in Ghana I asked them to take me to a shopping mall. They asked me if I wanted to go to the local shopping center or the Chinese shopping center, and I chose the Chinese shopping mall. In that mall I found that there were all of the Chinese firms with shops selling Chinese consumer goods. Of course, on the way to the mall we passed the big stadium that China built, and we drove on the roads that China built. But let's return to foreign reserves. Japan used to be the biggest holder of reserves but is now second. Russia is now third with \$395 billion in reserves. Taiwan, India, Korea, Hong Kong, and Brazil all hold over \$200 billion in reserves (Figure 8). Of course, we have seen the effect in the appreciation of the countries' currencies.

<Figure 7>



<Figure 8>

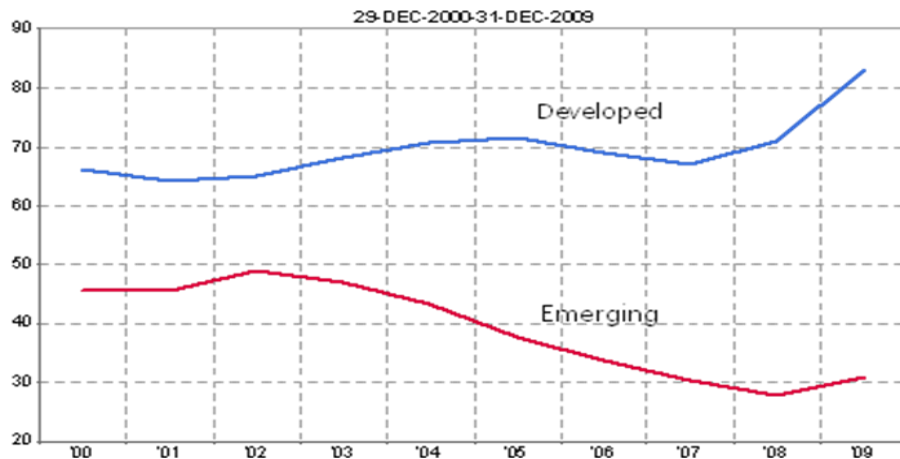
Emerging vs Developed Markets: Foreign Reserves



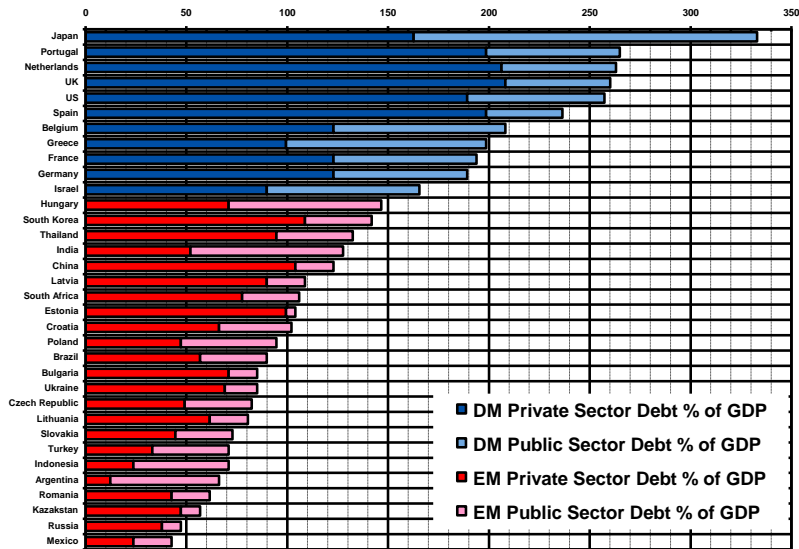
Next, let's look at debt in Figure 9. Debt in developed markets is going up, not down. In emerging markets, the trend was down but now it is beginning to go up again as people are gaining confidence in lending to emerging markets. However, if we look at the debt to GDP levels, emerging countries generally have less debt, as can be seen in Figure 10.

<Figure 9>

Emerging Markets Vs Developed Markets : Public Debt % of GDP

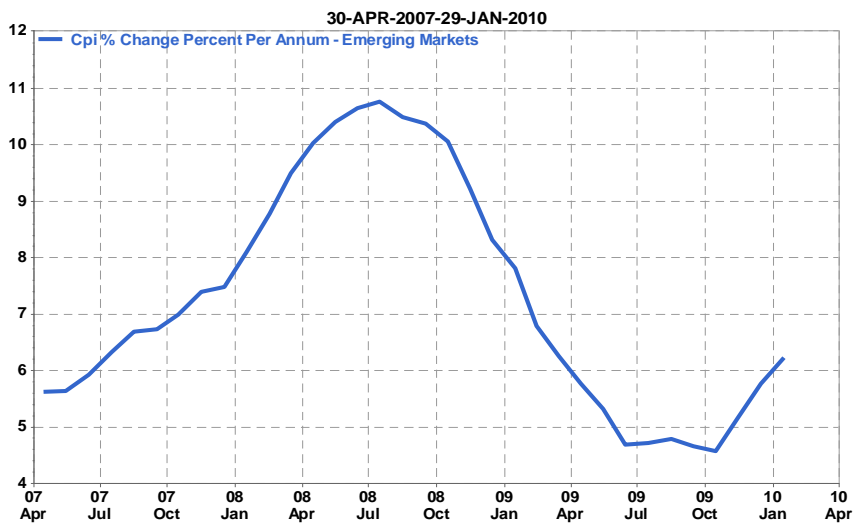


<Figure 10>
Total Debt % GDP
2008

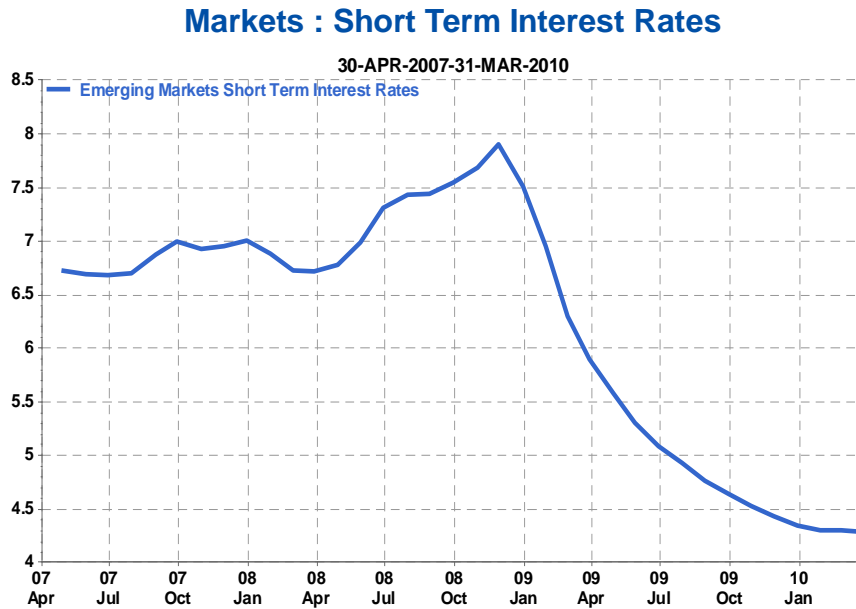


Inflation has come down dramatically in emerging markets since July of 2008 (Figure 11). Now it is beginning to creep up again, but is still far below where it was. Of course, interest rates have also come down. That has had a great impact on markets because people are not happy about getting such low interest rates in the banks and are willing to go into equities (figure 12).

<Figure 11>
Emerging Markets : Inflation



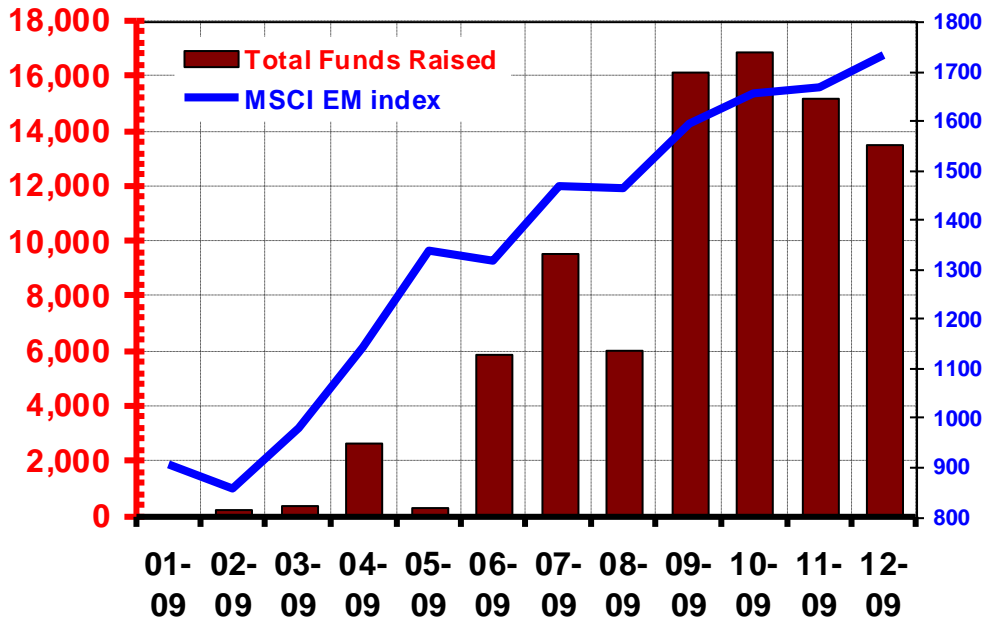
<Figure 12>



What is the supply and demand situation? One of the affects of a higher equity market is of course more expensive equities. That attracts more initial public offerings (IPOs) because people see an opportunity to raise money cheaply. Since January of 2009—as the emerging markets index went up—the number and value of IPOs went up with it. So we have seen a new supply of equities enter the market, illustrated in Figure 13. We are now handling \$38 billion in emerging markets and many people ask me how I find a home for all of the money. It is not difficult to invest because of the IPOS. Last year, a total of \$87 billion was raised in IPOs in emerging markets among 363 companies. This year we expect it to be \$238 billion among 359 companies. Typically, it is very unusual for a Russian company to make a lot of money via an IPO in Hong Kong, but this year a Russian company raised \$2 billion through an IPO there. That should paint a picture of the money flowing in the emerging markets. But what is the demand?

<Figure 13>

Emerging Markets : IPO Funds Raised & MSCI EM Index



In Figure 14, looking at emerging markets as a percent of the global market using the MSCI index—the standard index for various markets—it shows emerging markets as a percent of the global MSCI Index. It has fluctuated, but it has now gone up to 13%. However, MSCI does not count all of the stocks in the world. If all of the emerging market stocks and developed market stocks are included it is nearly 32%. Yet, American and European pension funds only have 3% to 8% of their portfolios in emerging markets. In other words, they are very underweight and are only now beginning to wake up to reality. They are beginning to see the growth of emerging markets and are now beginning to put money in to these markets. So it is expected that more and more money will go in. Of course, when things get tough, everyone runs for the hills—which is what happened in 2008.

<Figure 14>

Emerging Markets : Market Cap % of World

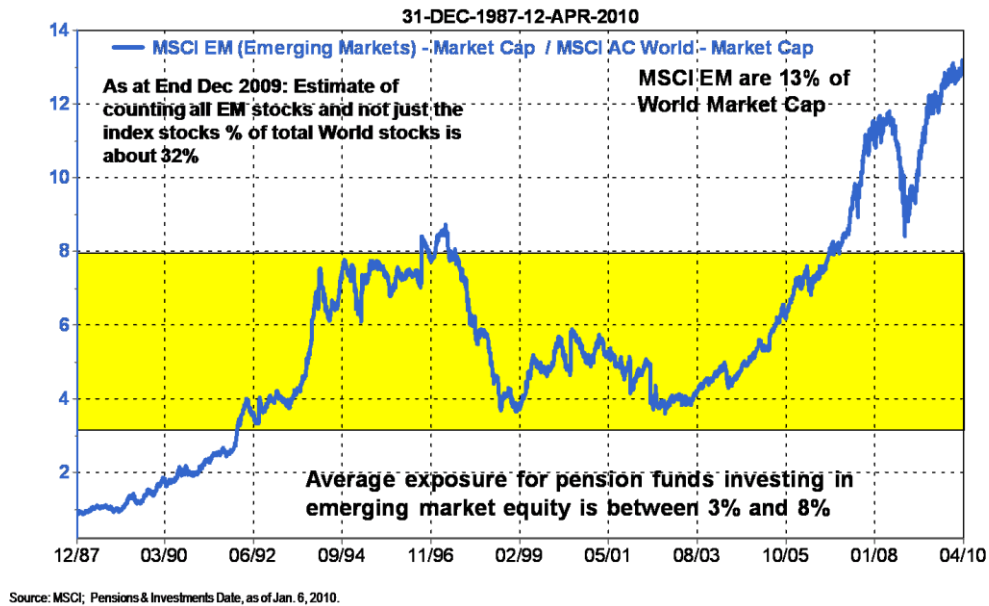
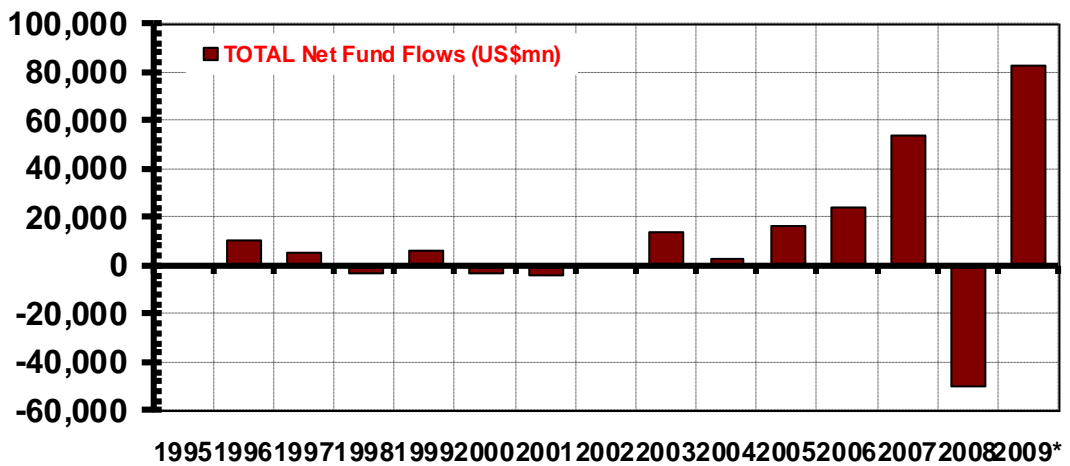


Figure 15 is the flow of funds going into emerging market funds. In 2007 we had a great year—and I had a big bonus—because we had a lot of money coming into our funds. Last year I was in trouble because all of the money was flowing out. Unfortunately, people get out at the worst time. They sell when the markets are down, and they buy when the markets are up. My sister-in-law is like that.

<Figure 15>

Emerging Markets : Net Annual Fund Flows



In 1993 my sister-in-law bought our emerging market funds while it was at the top of the market. The next year the market crashed, and I had to go visit my brother. I knocked on the door, my sister-in-law answered, and she asked who was at the door. I told her it was me, and she then said she would not open the door until I gave her back her money. I told her that if she opened the door I would tell her how to get her money back. So, she opened the door a little, but she left the chain on the door. I told her that the best thing she could do was to buy more, and she promptly slammed the door in my face. Of course, if she had bought more she would have made good money, but now the markets have turned. Now, we again see a big flow into emerging market funds. Why are people putting money in? Well, they are more confident, but how do we measure confidence?

We measure it by how much interest investors are willing to take lending money to emerging markets. Figure 16 is the spread between emerging market interest rates for sovereign bonds—in U.S. dollars—and U.S. Treasuries, supposedly the safest investment. Between 2005 and 2007 people got more confident and were willing to take a lower interest rate, but when subprime started to become a factor that spread spiked to 8%, and the stock market crashed. Now confidence is coming back, the interest rate is going down, and the stock market is going up. So this is a good measure of confidence.

<Figure 16>

Emerging Markets—: Yield Spreads vs Stock Market Index

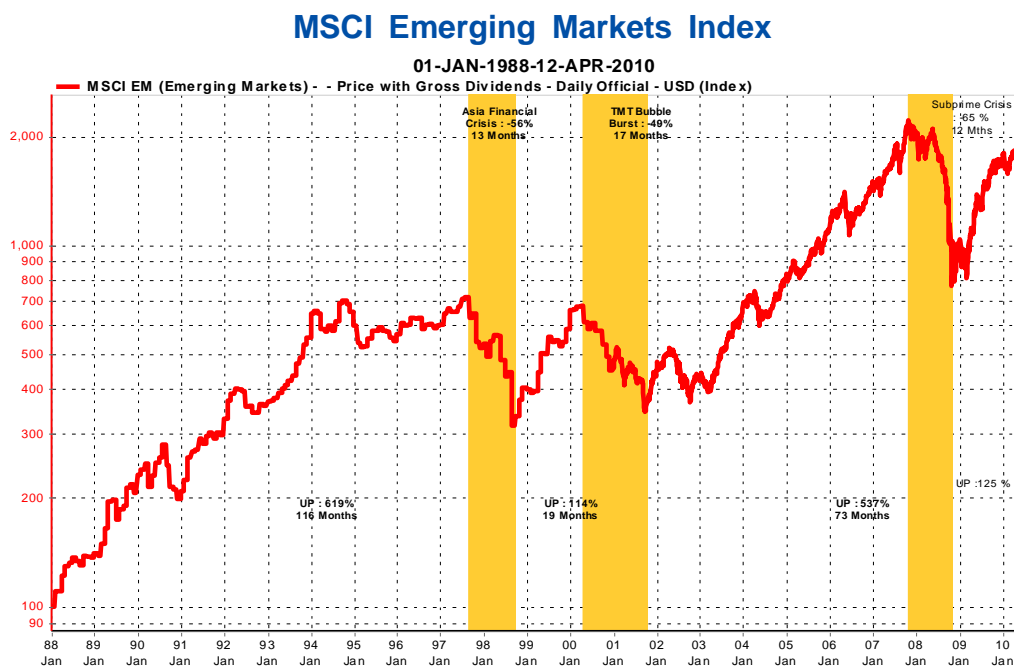
12-APR-2005-12-APR-2010



I was in Greece a few months ago, and already they were beginning to worry about problems. I told them not to worry because the Europeans would bail them out which will eventually happen I think. We use to have Greece as an emerging market, but when they joined the European Union they stated that they were developed. However, they have now been moved back to developing status. If you look at the credit default swaps (CDS) for Greece, you have to pay 350 basis points more, which is more than Russia, Brazil, or China. Portugal is also more than Russia. So we can see the change in attitude on the part of investors.

Now, let me talk about the bull and bear periods because I think it's important to talk about this. Figure 17 is the index, on a log scale, of emerging markets since 1988. We actually started our first fund in 1987, and at that time we raised \$100 million and I had real difficulty investing because we had only 5 markets in which to invest—Mexico, Singapore, the Philippines, Hong Kong, and Malaysia. All other countries were closed. Now we have \$38 billion, and there is no problem because we have more than 50 countries in which to invest. Clearly, things have really changed in that respect. During this whole period there were three major bear markets, as indicated by the grey bars in the chart. During the Asian financial crisis—in 1997 and 1998—the market dropped by more than 50%. After that we had the tech bubble, which was a true bubble.

<Figure 17>



I got into big trouble at that time because everyone was crazy about tech stocks. One of the indicators was not dividend yield, not price earning, not balance sheet strength, but burn ratio. The burn ratio was how fast the company was spending money. So, if a company raised money—but did not spend it fast enough—it was penalized. I was in Paris talking to a group of journalists about emerging markets, and one of the journalists asked me about tech stocks. I said that there would be a big crash, and the timing was just right because the next day the market did crash, dropping 5%. I got a call from my boss asking me to be quiet, as I was now being blamed for the crash as Reuters had carried my comments on the wire. In total, the market was down by over 48%. Now we have the subprime crisis and there was a 65% decline. So, things have become much more volatile, but the white areas of this chart (Figure 17) are much bigger than the grey areas which means that bull markets last longer than bear markets.

If you summarize this you see that on the average the bull markets, during the periods since 1987 and 1988, went up by an average of 423% and lasted on the average of 69 months while the bear markets went down by an average of 57% and averaged 14 months in length. The reason I find this chart to be very important is because of something that our founder, Sir John Templeton, once said. I was at a meeting for executives in Canada—and in those days hundreds of people would come and we would answer questions from the audience—when a young lady got up and said that she had just inherited some money and wanted to know when was the best time to invest. Sir Templeton replied that the best time to invest was when one had money. Now, I realize what he was saying—it is better to be in the market than to be out because the bull markets last longer than the bear markets. Moreover, if one is strong enough, the best thing to do is to buy more when the bear market comes because it is going to be very short in duration. We have just seen that. In November through February of last year I was urging people to get into the market. I was, of course, putting money into my own funds at that time. Now we are up 70%, 80%, 90%. In some cases we are up 100%. So, it is very short-lived and of course we will have more bear markets going forward, but the lesson is very clear. Thank you very much for your attention and I will be happy to take any questions.

Questions & Answers

Q Why are emerging markets like Vietnam not recovering? Korean fund companies stated that Vietnam would be a second China, so a lot of Korean investors have invested in Vietnam. However, Chinese funds have recovered about 20 to 25% of their value while Vietnamese funds have stayed down about 40 to 50%. They are still not recovering at all. What is the reason for that?

A I must say, Korean investors have been very daring in going into Vietnam and frontier markets, and fundamentally that is a wise decision. It will turn out ok. The problem with Vietnam is this—the regulatory system in Vietnam is very bad for foreign investors.

First, foreign investors must inform the stock exchange what they intend to buy, and how much they intend to buy, three days in advance. So it is not difficult to imagine what Vietnamese investors will do. They will front run the foreign investors. The second rule is that foreign investors must only use one broker. If they can only use one broker they are stuck. The broker knows what is going to be bought, he is going to front run, and the foreign investor is going to have to pay. The other problem in Vietnam is that liquidity is very poor. So, there should be some sympathy for the gentlemen who are running these Vietnam funds. Nevertheless, the prices in Vietnam are very low—it is one of the cheapest markets in the world. The price-earnings ratios are amazing. In fact, we have a long investment in Vietnam, a joint venture with the Vietnamese army on an apartment building in Hanoi. After ten years we are finally getting our money back. We are not making a lot of money but it is okay. We also have a joint venture with Vietcom Bank on an office there. We are finding a lot of bargains in Vietnam. My inclination is to say that it is better to be patient, and be sure to look at the average valuation of the portfolios. You want a portfolio manager who is not going to turn over a lot. That is, it is not a market where you want to trade in and out because traders get killed going in and out. However, if a trader or manager buys and holds—and if the stocks are good—he or she can do very well. Of course, you have to look at the portfolio to see if the good stocks are there.

Q You have been in the Asian market for 40 or 50 years and have also

covered Korea. I want to make a comparison on a 15 or 20 year time horizon. When I was a foreign banker, and I wanted to raise more money through the syndication of loans, I had to sell the safety of Korea. Watching what is happening these days, especially after the sinking of the South Korean naval vessel, nothing has happened. Moody's has raised Korea's credit rating, and top Korean corporations enjoy CDS ratings 60 basis points lower than the average. Foreign investment in the Korean stock market is still coming in. Yesterday alone almost \$300 million came in. Clearly, there is a huge difference between Korea today and Korea 20 years ago. The size of the economy is different as well as the fundamentals. How has the perception of Korea for foreign lenders and foreign investors changed?

A Of course, the foreign bond and equity investors do look at the fundamentals. They look at the economic growth, the debt ratios, and the credit ratings of the countries. As noted, the fundamentals of the Korean economy have done very well. The other thing that has happened is that Korean companies have changed dramatically. 20 years ago no one would have bought a Hyundai car. Now, Hyundai and other Korean manufacturers are leaders around the world, and we see the brand names of Korean companies all around the world. So the confidence in these companies is increasing due to their global presence and the growth that they have exhibited. The other aspect is the technological preeminence of many of the Korean companies—Samsung is the leading memory producer in the world. All of this is adding up to higher confidence for investors. Thus, they ignore North Korea. Of course, North Korea is in the back of their mind, but China is there as a moderating influence. They also look at the increasing trade between Korea and China, and while they have come to expect a few incidents, they believe nothing will happen in the long run. However, I think you have heard about the Korean discount. Korean companies have tended to have cheaper valuations than other equal companies around the world. This discount is, I believe, due to the low level of dividends paid by Korean companies. The orientation of Korean companies is very Confucian in their outlook in the sense that they are looking at business along the lines of generations. So instead of returning money to the investors they continue to expand and invest which accounts for the discount. However, I believe that will change going forward. After discussing this with many Korean companies they are beginning to realize they need to think about the shareholders. Of course, if they can give much higher returns on investment than an investor can get on a bond or savings deposit then fine. However, in many cases we have seen Korean companies invest when the returns were very low.

Q I have three short questions. First, you said that bull markets last longer than bear markets. Have you observed any empirical regularity in this? Can you say that a bull market tends to last two or three times longer than a bear market? If you have that kind of figure, please tell us. Second, your metaphor using elephants was very nice. Do you think the derivatives market will die out or will it flourish again? If it will flourish, when will that be? Third, you spoke of the case of Greece moving from developing status to developed status after joining the EU. What about Korea? Is it graduating from an emerging economy or has it already graduated?

A With regards to the bull and bear periods I have just a general guess—bull markets last 4 to 5 times longer, but it is not regular and there is no way of predicting (figure 17). If you recall the chart I showed, we had two bear markets within a 5 year period. So, the challenge is to understand when we will get a bear market, but that is very difficult and probably impossible. As George Soros noted, there is a reflexivity built into the system. That is, if you behave as if a bear market is coming, a bear market will come because you are causing it by selling. So it is very interesting to look at cycle theory. There have been many cycle theories, but fundamentally it is not a very good guide to investing.

With regards to derivatives—the derivatives market is not dead. It is alive and well. In Hong Kong they had a very interesting derivative. If a stock is \$20, it is sold to the client for \$15. But if the stock starts to go down the client has to buy more. If the price goes up over 20% from where it started, the client has to stop buying. That is a derivative. They call it an accumulator. In Hong Kong those came to be known as ‘I kill you later.’ So, derivatives are alive and well. As I pointed out, it is a market of over \$600 trillion. But why do I think it is unlikely to be killed? I think it will not be killed because there is so much money being made. Why would you want to kill the golden goose that lays the golden egg? Bankers around the world are making tremendous amounts of money on derivatives. You can go to any Korean company, and all of them have been asked about buying a currency hedge or interest rate hedge. These are all derivatives. Some of them are quite innocent and useful. You must remember that derivatives do have a use for farmers—where derivatives started. Farmers in America needed to know what price they would get for their wheat, so they would sell forward and there would be people buying those options. It was very useful in the past, but now

it has become a very complex thing. Essentially, it is a gambling mechanism.

Regarding emerging markets and Korea, I don't know why Koreans do not want to be an emerging market anymore. Emerging markets are exciting. I think there's justification because the rule that we started with in 1987 was to take all of the low and middle-income countries in the world and classify those as emerging markets. That meant per capita income of less than \$10,000. Currently, the average per capita income in the developed countries is \$40,000 per year. Correct me if I'm wrong, but in Korea it's around \$20,000. In emerging markets, Russia is the highest at about \$10,000. That places Korea right in the middle. Of course, at the rate that Korea is growing it is going to reach \$40,000 very soon. From that point of view, Korea would be considered developed. However, instead of income per capita I like to use growth rates as a measure for emerging markets. From that point of view, Korea is an emerging market, as it will grow around 5% this year.

Q You've shared with us a very useful perspective on emerging markets, which have always been considered the secondary place to be. But I would like to turn that table around a bit because there are a lot of good arguments that say that developed markets have compromised themselves very badly, particularly with their financial sectors which have impacted the world with a crisis over the past few years. Fortunately, we have all been able to survive it, but the after effects have not yet begun to show. There are many consequences yet to come out, and some argue that with the various forms of extra taxation and increased regulation likely to be imposed on banks, that they will continue to be further compromised, and function less effectively as recyclers of global savings that largely come from this region as well as from the emerging markets group. It would seem to me that so called developed markets are likely to be on the wane in the future, and emerging markets will have even more opportunity to stand out. If that is the case, Korea would much rather be in the emerging group than in the developed market group. The distinction between the two will be between those that let their traditional banks become gambling casinos as opposed to those that kept their traditional banks in the classic game of raising customer deposits and lending them out in straight forward ways. Do you have a viewpoint on what is likely to happen in the developed country financial structures? Secondly, how will that effect the attractiveness of these emerging

markets which have always been viewed as the sort-of orphan child, but actually—partly because of China—are now much more likely to become the main game?

A There's no question that the power base is gravitating towards emerging markets and the so-called BRICs. There is a growing confidence, as I've pointed out. In the developed countries I think what is happening and what is hurting them—and will hurt them going forward—is the higher taxes. The higher taxation regimes in the United States and in Europe will continue to depress growth in these markets. Interestingly, the administration in the United States has reversed its views on unemployment. In the past, Larry Summers used to say that lower taxes were better because that stimulated employment. Now, he's saying higher taxes are good for unemployment. So, there's been a sea change in Washington regarding growth and unemployment and all of these things.

We have to be very careful as investors to differentiate companies globally. There are many American companies and European companies that will be very profitable going forward because of their global presence. There are many American companies that have a big footprint in emerging markets and are very well run. They will do very well going forward, so I would not abandon these markets completely because there will be opportunities. The problem now facing the United States and Europe is how to do something about the regulatory framework.

I imagine that many people here have heard of Ayn Rand. She was a Russian immigrant to America who hated the Communists, and believed that everything should be free—that there should be a completely free economy with no government regulation. One of her books was called *Atlas Shrugged*. She was very influential and she influenced the Federal Reserve chairman to become a staunch advocate of completely free markets, which is why the Federal Reserve refused to regulate the market even after the collapse of Long Term Capital Management. That philosophy permeated the American philosophy in government for a long time. Recently Greenspan said—in front of a congressional panel—that he was wrong. However, other members of the administrations have not been brave enough to admit their mistakes. The warnings were there. The head of the Future's Commission—Brooksley Born—was warning them even before Long Term Capital Management collapsed, but Summers, Rubin, and others said we should not regulate. Now, it's clear that she was right. But, the forces against the

regulation of derivatives are very strong, and I personally don't think that the regulations will be put in place.

Q You seem to be very optimistic on BRICs. This year, which emerging or frontier markets are most promising?

A The problem we have with doing country projections is that we are bottom up investors. We look at companies first, not at countries or sectors. The best way to understand which countries we favor is to look at their weight in our portfolio. For emerging markets we have Brazil, India, and China, Thailand, Turkey and Russia in that order. In frontier markets, we favor Vietnam, Ukraine, Kazakhstan, and Nigeria. Among emerging markets Korea is in the middle.

Q Which company do you like among Korean firms? What is your judgment on Korea's market performance this year?

A Again, look at our portfolio. We have a system where we do an intensive 5 year analysis of financial records. We then visit the company, ask questions, and finally make a 5 year projection. We then decide on the price to buy that company. Whether we get that company or not depends on what happens in the market. But looking at our portfolio, Samsung Electronics is the largest. It's the most liquid, and happened to be cheap when we were buying. It's not necessarily the favorite, because we are trying to buy others, but I won't tell you what we're trying to buy. However, we are particularly interested in Korean firms that are moving into emerging and frontier markets because I think Korean firms are capable of operating in difficult environments like India. They are very tough, patient, and willing to take the long view. That is what is needed, and when they do that it will be very profitable over the longer term.

Q First, if I have some extra funds to invest should I invest it in Korea or China funds? Second, you mentioned direct regulation of the derivatives market. At the upcoming G20 summit, the leaders are sure to discuss a new architecture for the international financial system. There is some disagreement between developed and developing countries on what the new international

financial structure should look like. What side should Korea take in that argument?

A First, don't invest in Korea or China. Go into a diversified emerging markets fund. One thing we've learned is that no one market is going to be the best performing market year after year. In the last 20 or 30 years there has only been one market—Hong Kong—that has been the best performing in two years, but that was not two years in a row. So, you must be globally diversified. The best way to do that is by getting a global fund. It's very difficult to decide between the two, but I would say China over the longer term. However, you should be diversified.

With regards to the regulatory system, my feeling is that the whole financial system is all screwed up. In order to have a proper financial structure you have to think of incentives—people must be paid, and we can follow the money. Let me go down the list. Let's start with the accountants and auditors. Who selects the accountants and auditors? The management. Who are the accountants and auditors going to do favors for? The management. So, the accountants are already favoring the management and are hiding a lot of information from the investors. That incentive has to be changed—accountants must be paid by the investors. Let's look at credit agencies. Why did they rate these CDS AAA or AA? They were being paid by the people who were asking for these ratings. Why should they give an E or D rating? They are not getting paid to do that. Let's look at the regulators. Who selects the regulators? The politicians. How do the politicians get elected? The bankers and people who have money pay the politicians. Therefore, they select people who will not regulate, who will not restrict. You have to go down the list of each player, and that's not to say they are wrong or evil or bad, but you need to have a structure that will incentivize people to do the job that people think they are doing. Unless we start to look at that it will be very difficult, and we'll continue to have a cycle of fraud and other problems. I love economic history because history repeats itself and I'm now reading a book about Ivar Kreuger, a Swedish man who had a monopoly on the stick match market. It was called Safety Match. His product was unique in that it had the phosphorous on the matchbox so it wouldn't blow up in your face like the German matches, which had the phosphorous on the tip of the match. This man went to America and started something like a Ponzi scheme. The same things happened back then. He had derivatives. He bribed the accountants to fix the accounts. At that time his accountant was Ernst & Ernst. One of the Ernst accountants was wined and dined, and he fixed the accounts. So these things repeat themselves. As investors we

have to be very cautious. Don't trust the regulators to protect you. You have to protect yourself. Don't even trust the fund manager.

Q The repeal of Glass-Steagall allowed deposit-taking institutions to merge with risk-taking institutions. Today, I think it's fair to say that this is at the root cause of a lot of the damage we have seen today. What is the prospect for return of legislation like Glass-Steagall—something that will separate deposit takers from risk takers?

A I would love to see a return to Glass-Steagall, but I'm afraid the cat is already out of the bag because of that \$600 trillion market. I would say that it's impossible. The Volker rule would be great, but he's been ignored. Korean banks are closely regulated and can hopefully avoid some of these risks, but as this machine continues many banks around the world will look like they are making a lot of money because of derivative transactions. Due to that, there will be the temptation for other banks to emulate those high earners. The immediate solution, I think, would be to impose some kind of turnover tax and force derivatives to become transparent and liquid. At least then there would be a market price. A small tax of 10 or 20 basis points—which would raise a lot of money for governments around the world—would make derivatives transparent by forcing them into the open. I think that is one answer, but I don't know if that will be adopted.