The Center for Emerging Market Enterprises
The Fletcher School, Tufts University

SEMINAR SUMMARY REPORT:
Deepening Local Capital Markets in Emerging Market Countries
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INTRODUCTION

The Fletcher School at Tufts University established the Center for Emerging Market Enterprises (CEME) in 2007 as the first global center for and about emerging market enterprises (EMEs). CEME builds on Fletcher's strengths across geographies, disciplines, and professions with a mission to help emerging market-based entities, private sector companies, investors, governments, not-for-profit institutions, and interested individuals benefit from knowledge of EMEs and their environments. CEME has designed its signature research programs to illuminate the knowledge and perspectives needed for success in emerging market environments. These programs include: Enterprises Serving the Base of the Pyramid and Entrepreneurship; Emerging Markets Corporate Strategy; Emerging Market Local Capital Markets; Energy and Commodity Markets; and Executive Education, with focus on selected countries such as Brazil, India, China, and Turkey.

On April 23, 2008, CEME hosted a seminar event entitled "Deepening Local Capital Markets in Emerging Market Countries: A Key Change Element for Local and Global Markets." This seminar was the first session exploring local capital markets to be organized by CEME. The Emerging Market Local Capital Markets program will be one of CEME's core programs moving forward, featuring a series of events throughout the 2008-09 academic year.

Four speakers presented perspectives on development of and investment in local capital markets in key emerging market (EM) countries, particularly those in Latin America and Asia. The four speakers and their presentation topics, summarized in this report, were:

Dr. Eliot Kalter, CEME Senior Fellow
"Local Capital Markets: Emerging Market Investment Opportunities"

Neil Allen, CEME Principal Senior Fellow
"A Practitioner's View of the Evolving Local Capital Markets"

Ignacio Sosa, Managing Partner, Globalis Investments LLC
"Emerging Market Infrastructure Investing"

Dr. Patrick Schena, The Fletcher School
"Asia's Capital Markets"

Each speaker drew upon his significant professional and/or academic expertise to provide a unique perspective on local capital market development within emerging markets. All agreed that these markets are undergoing a tremendous growth phase and present significant opportunities for external investors and domestic development. Speaker biographies can be found in this document as APPENDIX 1.

CEME wishes to thank the four panelists who presented this seminar, as well as those who attended and provided additional perspectives.

DR. ELIOT KALTER
"Local Capital Markets: Emerging Market Investment Opportunities"
Dr. Kalter is a CEME Senior Fellow and President, EM Strategies Inc.

Dr. Eliot Kalter introduced his remarks by providing the audience with an overview of his professional background at the International Monetary Fund (IMF), where he advised countries on local capital market development. He expressed a great interest in continuing this work and, in particular, what he feels is a little-explored aspect of that work: private sector access to emerging market local capital markets. While a great amount of effort to date has been spent on deepening local capital markets for the public sector (which is a logical first step since it creates the ability to issue bonds with longer maturity and creates benchmarks that can then be used by the private sector), private sector access to those same markets is at its infancy. Dr. Kalter stated that, realistically, it will be another ten years before the private sector has broad access to local capital markets in many emerging markets. He views the issue as one of public policy: to have social stability, a deep middle class is needed; to have a deep middle class, it is necessary to have capital markets that can be accessed by small and medium sized businesses.

Dr. Kalter's presentation focused on five aspects of emerging markets local capital markets investment: (1) emerging markets becoming center stage; (2) the global financial environment; (3) underpinnings for sustained success; (4) implications for local capital markets; and (5) emerging market investment opportunities.

(1) Emerging Markets to Center Stage

Dr. Kalter stressed that emerging markets drive global growth and can no longer be thought of as a side issue. Emerging markets now account for half of global GDP, a majority of international trade, and a majority of both international reserves and international reserves growth.

GDP. Over time, emerging market countries have played an increasingly larger role in global GDP growth, and their success is a significant factor in the ability of U.S. companies to maintain decent profit reports in the last year of slower U.S. growth—international operations, especially those in emerging market countries, are a stabilizing force.

International trade. Emerging market economies play an increasingly important role in international trade, accounting for over 70 percent of world trade Emerging Europe, Asia, and Latin America are increasingly opening their boarders for international trade.

Foreign reserves. Very importantly, emerging markets have accumulated significant foreign reserves, and are projected to accumulate almost $7 trillion in foreign reserves by 2009. This number would account for over 90% of all international reserve holdings.

(2) Global Financial Environment

Dr. Kalter gave an overview of the global financial environment and the phenomena within it that have led to the growing importance of emerging markets in the past decade: high growth rates (average emerging market growth rate was 6.5%, compared to advanced country average rate of 2.75%); inflation rates approaching convergence with those of industrial countries; positive net savings rates (an average of 4.5% of GDP, compared to a mature economy average rate of -1.25%); and current account balances that mirrored net savings balances.

Net savings. Dr. Kalter noted that since the mid-1990s through the present, emerging market economies have had positive net savings balances, while those of advanced economies are much lower. These savings are driving emerging market external account surpluses, and the phenomenon will not, he said, last forever, since investment is beginning to catch up with savings in many emerging market countries.

Regional differences. In the Middle East, investment is starting to catch up with savings with net savings and external surplses declining (assuming the price of oil stabilizes) , but fluctuating oil prices may change these projections. Already, net savings are a thing of the past in the Latin American emerging markets due to sharp increases in consumption and investment. The net savings indicators are also a factor in the difference stages of development of the Asian and Latin American capital markets.

Where we are headed. Emerging market countries have been significant net savers, and their external current account surpluses have been driven by this net savings. However, emerging market current account surpluses will narrow and their accumulation of international reserves will slow down as a natural part of the globalization process.. Consumers in emerging market countries are demanding more consumption, and investment opportunities are expanding as these countries converge with mature market economies. This process will only go smoothly if these emerging market countries have worked toward establishing a strong economic and financial underpinning.

(3) Underpinnings for Sustained Success

To ensure sustained success, Dr. Kalter said, emerging market countries need strong economic and financial fundamentals, locking in the gains in net savings for the future through both active asset and liability management.

Active asset management. Sovereign wealth funds are a key method of active asset management for emerging market countries. The accumulation of sizeable reserves has allowed active asset management through sovereign wealth funds to enhance returns. In the emerging markets, sovereign wealth funds have grown significantly (i.e., Abu Dhabi Investment Authority, more than $500 billion in assets; China Investment Corporation, $200 billion in assets; Kuwait Investment Authority, $213 billion in assets).

Active liability management. A decade ago, Dr. Kalter said, many emerging market countries had significant domestic and external debt, at short maturity and high interest rates. Since then, debt levels have declined in most emerging market countries due to the implementation of strong fiscal and monetary policy. In addition, these countries have been able to restructure their external debt in the global capital markets and restructure their domestic debt in their deepening local capital markets. As a result, not only have debt levels declined, but interest rates are lower and maturities longer.. (The decline in emerging market domestic debt maturity under one-year terms is striking.) As a result of the improved finances in emerging market countries, credit ratings of the sovereign and corporates have been upgraded significantly. When this occurs, more investment is attracted (i.e., U.S. pension funds are now diversifying into emerging market countries).

Sustained success: where we stand. Today, Dr. Kalter said, emerging market countries account for a majority of global population, land mass, international reserves, energy consumption, GNP, and trade. Many emerging market countries have adopted measures that will sustain success when global conditions are less hospitable, though to varying degrees. Further, favorable credit ratings for both the public and private sectors within emerging markets are attracting increased institutional buying.

Sustained success: where we are headed. With the increased attention given to emerging markets (both country- and asset-specific) in the face of tighter global liquidity restrictions, there is also an increased emphasis on countries that have successfully implemented appropriate economic policy and active asset and liability management programs. Local capital market development will be key if emerging markets are to take advantage of the significant net savings gain they have accumulated. Emerging market local capital markets and sovereign wealth funds will continue to grow in importance with both local and global consequences. Dr. Kalter also stressed that the financial and social stability stemming from local capital market development is a key factor in sustained economic growth.

(4) Implications for Local Capital Market Development

Dr. Kalter outlined the main factors in local capital market development: emerging markets are growing rapidly; there are strong risk-adjusted performance in local markets; domestic markets are still relatively underdeveloped; and there are still limited options for private sector financing in the emerging market local markets. He also explored the public policy implications for the development of local capital markets.

Emerging market local capital market growth. There have been significant capital inflows and increased market capitalization in the emerging markets. These growing capital inflows have been enabled by the deeper local markets and are also facilitating this market deepening. Capital inflows help deepen local markets both structurally through the diverse benefits of a larger investor base as well as through the rapid learning process from intellectual transmission.

Strong risk-adjusted returns in local markets. The significant capital inflows have been attracted by strong risk-adjusted returns in local capital markets.. As a result, local market fixed income capitalization has exceeded the capitalization of emerging market external debt since 2004. This trend indicates a significant increase in importance of the local capital markets in emerging market countries—while emerging markets had previously depended on external markets for financing, they now have the option of going to local or foreign markets depending on their objectives.

Domestic markets are still relatively underdeveloped. Bond market development in selected regions from 1990-2004 shows that the G7 countries have much deeper domestic markets than those in East Asia or Latin America. In public sector bond markets, Latin American market capitalization has not grown as quickly as that of Asia but both are significantly lower than the market capitalization of the G7.. In contrast, private sector bond market capitalization in Asia is much higher than in Latin America, and is approaching that of the G7 Developments in stock market "value traded domestically" tell a similar story, with Latin American markets significantly less developed and Asian market development approaching that of the G7 (the "value traded" measure takes into account both capitalization and liquidity).

Limited options for private sector financing in emerging market local markets. The composition of domestic debt across emerging market countries illustrates that the corporate sector—excluding banks—has limited access to the local markets. Mexico, which is renowned for its development of its local capital market, can be used as a case study for this process. Despite its relative success, its corporate debt composition is virtually the same as it was fifteen years ago. Corporate financing remains mainly from commercial banks, retained earnings and suppliers credits. Corporates that once could go to the external markets now have the choice to go to external or local markets. However, lower rated corporates still do not have access to local capital markets (securitized issues are rapidly growing in importance, but still are a minor part of the market)..

In sum, emerging market private sector bond and stock markets still show a high degree of concentration in both supply and demand and lack adequate liquidity. While AAA corporations can access the capital markets externally—or in some cases domestically—mid-sized companies have limited options. Market access through securitization is growing but is still in its infancy. We can conclude, however, that emerging market domestic capital markets have significant room to grow. While emerging market countries now account for 50 percent of global GDP (based on purchasing power parity weights), they still account for less than 15 percent of global market capitalization.. It is clear that with globalization, these markets will continue to grow rapidly..

Public policy implications for the development of local markets. The public policy goal of deepening local markets is aided by external financial interests. Along with the deepening of local capital markets, the investor base is broadened, and growing institutional investor participation shifts toward strategic investors (rather than opportunistic investors with short-term objectives). This increasing role of strategic investors contributes to improved geographic diversification, the stability of the investor base, and improved governance. A broader investor base enables emerging market debt managers to use increasingly sophisticated portfolio

management techniques to better manage risk while investors gain new opportunities for hedging financial and exchange rate risks. Both investors and emerging markets gain from more stable local markets.

The G8 Action Plan for Developing Local Bond Markets in Emerging Market Countries—considered an important international public policy document on the issue—calls for: more efficient and robust market infrastructure; improved public debt management practices; a broader and more diversified local investor base; development of derivatives, swaps, and securitization; the improvement of local market databases; the promotion of regional development of bond markets where appropriate; improved and better coordinated technical assistance by international financial institutions; and improved dialogue between emerging and G8 market participants.

NEIL A. ALLEN
"A Practitioner's View of the Evolving Local Capital Markets"
Mr. Allen is a CEME Principal Senior Fellow and Chairman, Allen Global Holdings

Mr. Allen opened his remarks by expressing his pleasure to be part of the inaugural presentation of the Local Capital Markets program of the Center for Emerging Market Enterprises (CEME). He explained his multifaceted involvement: he is a Fletcher graduate, a long-serving member of the Fletcher Board of Overseers, and the Principal Senior Fellow of CEME, where his main role has been to help shape CEME's programs and begin to make the center operational. Mr. Allen's presented, as he put it, "a ramble down memory lane" about the progression of emerging markets—from defaulted debt that started to trade by appointment in the mid-1980s to a broader market that was subject to roller coasters of violent ups and downs across regions and instruments to, finally, a major global asset category in which all types of investors feel they have to be active. His goal was to provide a practitioner's personal perspective on local capital markets in emerging market countries: where we have come from, where we are, and where we are going.

(1) Stage One: The Debt Crisis Cometh

The late 1970s and early 1980s were the beginnings of international bank debt in the emerging markets. In 1978, Mr. Allen wrote an analysis at the Hudson Institute on less-developed country (LDC) debt that concluded there was no LDC debt problem. By December 1981, however, the debt began to be problematic. The largest developing country private sector international borrower, Mexico's Grupo Alfa, stopped payments on debt of over $3 billion. Mr. Allen's employer at the time, RepublicBank Dallas, was a leading lender to Alfa's main subsidiary, Hylsa, Mexico's largest steel company, and he became the leader of the Hylsa lender group and a member of the Alfa Bank Steering Committee. The Alfa workout brought bankers from around the world together in a process that would last many years and conclude with bankers holding debt that was worth, on average, about 20 to 30 cents on the dollar. The following year, on a Friday afternoon in August, Mexico suspended payments on its debt. Mr. Allen recalled being summoned into a meeting with RepublicBank's top brass, who were concerned since Mexico was the firm's largest international exposure. They asked him, "You're our Mexico guy. What do you think?" Mr. Allen remembered all eyes turning to him. It was late August, he was leaving that afternoon on his first vacation in a year, and he was tired of doing battle with the other bankers and Mexican company owners who seemed to willfully ignore any and all agreements they had entered into. In a highly politically insensitive moment—which he wouldn't recommend as a path to career advancement—he looked up at the Chairman of the eighth largest bank in America and said, "Well, it's really simple. The bastards stole our money and we're never getting it back." A stunned silence fell over the room.

For the next several years, other countries followed Mexico and stopped servicing their debt. The situation was dismal. Bankers formed committees, met, and got nowhere slowly. These were the hopeless years. But one day, as he sat at his desk, Mr. Allen received a call from a person he didn't know named Marty Schubert, who

offered to trade Mr. Allen's firm's Venezuelan supplier debt for other debt. Mr. Allen saw that there were motivated bankers with ideas that presented potential to work with.

(2) Stage Two: Starting a New Market—Present at Creation

With this indication of new prospects, Mr. Allen next went to Bankers Trust to start a new business with the objective to make money by trading the restructuring country debt that the banks held. It was a wonderful opportunity—two employees, a secretary, and a management that was foresighted for banking and gave them leeway to operate. There were no markets and no prices, and there was a lot of this debt, which was carried on banks' books at a hundred cents to the dollar—the full value of the original loans. There were no buyers except for a few sharp purchasers of private sector debt (for example, the aforementioned Grupo Alfa was stonewalling its creditors with one hand and buying back its debt for pennies on the dollar with its other hand).

Mr. Allen recalled that their business was in the beginning pure arbitrage. The group was not allowed to take one dollar of new exposure on its books and spent weeks putting together transactions. One day Mr. Allen received a phone call from the Chilean Central Bank. Chile was at the time the most heavily indebted restructuring country, and the Chilean Central Bank had an idea for debt reduction it wanted to discuss. They said, "We're starting two programs, one for bank debt and one for converting debt into new equity investments in Chile. Each program uses external debt that can be bought abroad at a discount to face value and brought back to Chile to be exchanged with the Central Bank for local currency. What do you think of that? Will there be paper for the programs?" Mr. Allen didn't say so at first, but thought the idea sounded great—at last there was a ready buyer for some of this debt. His and his colleagues' advice was simple: "Whatever you do, please do it right." Fortunately, the programs the Chileans established were so efficient and effective that by the end of the 1980s Chile had moved from the most to the least heavily external debtor in Latin America. The programs created a true institutional demand. Bankers Trust became a leader in Chile and in Chilean debt transactions. The demand for Chilean paper enabled the bank to approach debt holders around the world—sometimes buying and selling for cash, and other times structuring complicated multiparty transactions to get the Chilean debt.

This was the start of what became a global emerging markets business, and marked an expansion for Bankers Trust. Mr. Allen met with bankers in the UK and Europe and concluded that a London office was needed to service European banks that didn't know what to do with the debt they had. Ignacio Sosa, a speaker here today, was sent out to Japan, which was a very counter-cultural move—a high energy Cuban-born New York banker living and working with the Japanese—but it worked extremely well. Mr. Allen recalled that even though the Japanese "hardly cared about where Latin America was," a lot of good business was done with Japanese financial institutions..

Beyond Chile's programs, another event really inspired the growth of the emerging markets. In 1987, John Reed was running Citibank—by far the biggest, strongest, and most global bank at the time—and had a brilliant idea. At the time virtually all banks carried the loans on their books at their original full face value. They had not taken any reduction in value or recorded any losses. The bankers' wishful thinking was that eventually this debt mess would get sorted out, the countries would come to their senses, and the loans would be paid back in full. John Reed's idea was that Citi would write down the value of its debt. In so doing, Citi would show its strength and weaken its competition, like Manufactures Hanover and Chemical, who had relatively larger exposures, smaller earnings, and less capital and who would have to follow Citi's lead and take the write-downs. In the 24 hours before the announcement, there were strong rumors of an impending event and major movements in all global markets as Citi repositioned its books. Citi announced it was reducing the value on all restructuring country debt by about 30 percent of face value.

Mr. Allen recalled that he and the Bankers Trust team responded with a quick shorthand: "If 100 is 70, is 70 now 40?" By this they meant if loans that had been carried at 100 cents on the dollar, or full value, were trading at 70 cents on the dollar, would loans that after the write-down were being carried at 70 cents trade down from 70 cents to 40 cents on the dollar? By now, the emerging market debt operations Mr. Allen oversaw had

graduated from specialized craft to real business and operated with limits for maintaining long positions. Believing that 70 would soon be 40, Mr. Allen and his colleagues went to management and got limits in place for shorting the marketing. Anyone who would buy, they would sell and get the paper later. The market went straight south. The shorts were rewarded until all buyers disappeared from the market.

Supply was overwhelming demand. Everybody had written down this debt. Each write-down led to more paper and lower values. Prices seemed to be in a race to the bottom. The leading market makers, including Mr. Allen, were called to a meeting in New York at the invitation of David Mulford, the Deputy Assistant for International Affairs of the U.S. Treasury. Mulford, representing Secretary of the Treasury Brady, said, "We have an idea we want to run by you. What if we could create some liquidity for these loans that the banks are holding and you are trading. What would happen?" And, after a lengthy discussion, the participants in the meeting agreed that new liquid instruments were a good idea that would be well received in the market. Shortly thereafter Brady Bonds—new, more tradable instruments—were introduced as part of new debt restructurings that included real debt reduction that made the remaining debt more serviceable and more valuable as well as more liquid. The creation of Brady Bonds marked the end of the first stage of creating a market.

<u>(3) Stage Three: Riding the Emerging Market Roller Coaster</u>

The third phase in the development of emerging market local capital markets was marked by many ups and downs. Around this time, a market was starting to open for new equity investing and new debt issues. Bankers Trust hosted a meeting in Tokyo to reintroduce Latin America to Japan. The meeting included: from Venezuela, Moises Naim, who was the Minister of Development and is now the Editor-in-Chief of Foreign Policy magazine; from Chile, Eduardo Aninat, who became the finance minister of Chile; and from Mexico, Angel Gurria, who became Mexico's Finance and then Foreign Minister and now heads the OECD. Bankers Trust led the first international bond for, among others: a Mexican private sector company; Venezuela's national oil company, PDVSA (which issued Deutschemark-denominated bonds in Germany); and an issue for the Republic of Colombia that was priced and sold as investment grade before Colombia was rated investment grade. A key part of the restructurings that created Brady Bonds were programs for converting debt to equity. The most impressive outside of Chile was Mexico's privatization of the Mexican telephone monopoly, Telefonos de Mexico (Telmex). At the time, Doug Campbell—who had his own firm, D.H. Campbell & Co., which was one of only a few firms that covered Telmex—came in and said, "Telmex is at twenty cents a share. They're going to privatize it—it's going to be worth five dollars." Mr. Allen and his colleagues thought Campbell was reaching, but he made a fortune, and he was right. Mr. Allen recalls realizing the world had changed when, during a stopover in Alaska on an around-the world trip for the Republic of Colombia's first international bond issue, he told a layman what the team was doing and he responded, "Telmex, good buy, huh?"

At the same time, Mr. Allen's division got into the structured product business. which included moving heavily into the local markets. In 1992-93, the team created a market for peso-levered notes in Mexico. These levered note transactions were very interesting and innovative and were the precursors to the structured products that are at the center of the sub-prime crisis. Mexico had a fixed exchange rate system for converting peso into dollars and dollars into pesos. The system was highly regarded and provided stability to the Mexican economy: as long as the peso/dollar exchange rate was anchored, international investors were interested in investing in peso instruments that had much higher interest rates than could be obtained through U.S., Japan, or major European instruments. Structured transactions not only provided access to peso returns but they enhanced the returns by providing investors with leverage to take additional exposure. Investors would buy notes with some combination of equity and debt. The equity was cash paid to purchase a fixed value of a particular instrument, and the rest of the assets for the note were purchased with debt that was provided by the note maker—in this case, Bankers Trust. The loan generally was a non-recourse loan with collateral, meaning the bank had recourse for repayment to the collateral backing the note, not to the buyer of the note. The amount of equity was usually much less than the amount of debt; ratios varied from 1:4 to1:9. As the business evolved, the client's risk was limited to his equity invested, and as the value of the underlying assets decreased, the client's equity was reduced. The client

had the choice to provide more equity or to take losses. The combination of leverage and the exposure to local currency proved deadly when the Mexican peso was devalued in December 1994.

Mr. Allen's division was fortunate and foresighted, having been the first into this market in 1992. Other institutions—Lehman Bros. in particular—entered later and blundered in the market, cutting margins in half and taking much too much risk for themselves. Rather than compete in this environment, Mr. Allen and his colleagues stopped doing new transactions and were left managing a very large portfolio of peso-levered notes and the underlying peso assets. Because the market strongly and firmly believed that the Mexico peso exchange rate would stay fixed, there were major institutions that were selling peso-dollar exchange protection at bargain prices. Mr. Allen's group bought protection first to hedge its books and then, when fully hedged, continued to buy, going long dollars and short pesos because the coverage was markedly cheaper than it should be. When the spit hit the sham and Mexico devalued, Mr. Allen's bank was comfortable, while its counterparts, including Citibank, Goldman Sachs, and AIG, were left holding the bag. Lehman Bros. and a few other firms had exposure that they had not understood and had not measured properly and could have gone under if it had not been for President Bill Clinton organizing emergency bailout financing for Mexico.

As with the first debt crisis, Mexico had again brought the market to a halt and then a tailspin. The "Tequila Crisis," as it was known, spread from Mexico throughout Latin America and the other emerging markets. This time assets were liquid and tradable. Managements of major international firms active across emerging markets acted with predictable herd instincts. "Sell! Reduce exposures to zero!" were the daily orders on the emerging market desks. These asset sales forced prices to fall sharply for non-Asian emerging markets assets. Asia at this time had strong domestic economic performance and avoided the contagion from the Tequila Crisis, for the time being.

This crisis was different. There were fundamental changes in policies that kept the decline from becoming something worse, and the crisis was quick to subside. Chile and Brazil had solid economic programs and management. In Brazil, the Real Plan, ably administered by the Finance Ministry and the Central Bank, crushed inflation and put Brazil on a good path forward. Brazil overnight local rates were raised to an annualized rate of over 60 percent. The economy went into recession. Inflation went below an annualized rate of 20 percent. At this time, Mr. Allen had left Bankers Trust to start a new emerging markets business at Donaldson Lufkin & Jenrette. He had the fortune to enter the market with no exposure. The DLJ business took its first big position and went very long in overnight local Brazil exposure. By year end, this position had more than paid for the full cost of starting and running a new business that included proprietary trading, structured product sales, and trading, investment banking, and private equity.

Once again, the emerging markets roller coaster was on the upswing. Latin America stabilized and started up. Emerging Europe came into play. Russia—both old international debt and the new local GKO market—and Turkey (local instruments) offered new high return markets. Asia was also booming. In 1997, Mr. Allen had the mandate to start an Asian emerging markets business. Unable to see how to enter the market and make money, he hesitated. Then, Asia entered a crisis of its own.

Again, the roller coaster swung downward. Russia melted down. Argentina melted down. Brazil was also the target of some concerns. In 2001, leading up to the 2002 Brazilian presidential campaign, Citibank—under the leadership of its chairman, Sandy Weill—pulled the plug on Brazil. Weill had taken over Citibank as the last move in building a financial supermarket. He was a world-renown deal-maker who had limited direct experience in international finance and banking. Brazil was a jewel in the Citi crown, probably producing up to 10 percent of the company's worldwide profits in the previous decade. When Argentina crashed in 2001, Citi was not prepared and lost more than a billion dollars—quite a difference from its earlier trend of getting out before the others based on first-rate intelligence and risk management. When the worries about Brazil started, Weill directed sell-offs and reduction of exposures, without consideration for long-term profits and relationships. Once again, the banker herd moved, with everyone pulling—because if Citibank was getting out of the Brazil market,

how could anyone else stay in? In Brazil—a country with no inflation—the real devalued from 220 to 385 to the U.S. dollar. There were no takers, and the truth is the country was the cheapest country in the world at the time, and wasn't in bad shape except that the external players had pulled not only out of international markets but the domestic markets as well.

(4) Stage Four: Everyone into the Emerging Markets Pool

According to Mr. Allen, we have entered another phase in emerging market development since 2002, as Brazil has stabilized and strengthened. The "new paradigm," which Dr. Kalter described in his presentation—marked by export growth, fiscal balance, and reserve accumulation—has led everyone into the emerging markets pool. In the years since the Brazil events, emerging markets have outperformed the rest of the world in almost every investment category—in fixed income, in local currency, in equities. There have been super high return performances within sub-markets or within markets.

There are now hedge funds, mutual funds, country funds, cross-regional funds, global emerging market funds, currency funds, individual investors, and private equity. In the process there has also been a proliferation of new instruments and activities, including default swaps and ETFs for specific countries. Mr. Allen started a hedge fund that took the 60 most liquid instruments across the emerging markets valued each of those instruments on a monthly or weekly basis and established long-short pair positions. At the same time, there are now dedicated funds to go to the frontier. There has been a movement into what Mr. Allen calls "levered illiquids," which, as the sub-prime crisis illustrates, does not always end well. There is also increased real estate investment. In the early 1990s, Bankers Trust bought real estate in Chile—investments which were unheard of at the time. Bankers had a real rationale—it owned the largest life insurance and pension management companies in the country, and they needed headquarters. Now, every real estate firm is global. And finally, Mr. Sosa's upcoming presentation will cover infrastructure, which is another area that used to be considered highly illiquid and almost untouchable except with official institution financing but is now a strong prospect for investment.

"Where do we go from here?" is a good question. Mr. Allen believes we've reached a point where the world is "long the real and short the dollar." This hasn't happened since the early 1990s. The U.S. has been the consumer of last resort. Mr. Allen recalls that he and his colleagues used to consider Argentina before it blew up, and said that it wasn't a question of "if," but "when" because of its unsustainable deficits. The U.S. is not Argentina, but it has set itself up as a cheap currency country, where consumption patterns are probably unsustainable. If in fact the U.S. deteriorates, a lot of these illiquid instruments that people have gone to for yield could become problematic, could put a bit of a damper on the expansion of the emerging market local markets area.

Mr. Allen believes that we are at an interesting turning point: while we are not going back onto the "roller coaster," the emerging markets are not going away, and there certainly are some issues that must be addressed as we look ahead. The emerging markets are "discovered," there are ample resources available, and the governments are smart and they want to expand. CEME is looking at and making presentations on local capital markets and how they can deepen, identifying potential issues as well as opportunities. He urged the audience to tune in next year, when CEME will further develop its program on Emerging Market Local Capital Markets.

IGNACIO SOSA
"Emerging Market Infrastructure Investing"
Mr. Sosa is Managing Partner and Portfolio Manager, Globalis Investments LLC

Ignacio Sosa stressed the importance of emerging market infrastructure investment, stating that it is a key driver of the sector's activity and growth. Emerging market infrastructure spending is estimated to exceed $21.7 trillion within the next ten years, 71% of which is directed toward the BRIC countries (Brazil, Russia, India, and

China). Within the next three years alone, $3 trillion will be spent, and 2008 is only the beginning. Mr. Sosa identified three key drivers of infrastructure spending: GDP growth, demographics, and self-financing.

GDP growth. BRIC economies are set to outperform both developed and broad emerging market economies within the next several years. By 2025, according to Goldman Sachs, BRIC economies will be over half as large as those of the G6, and by 2040, BRIC economies will overtake the G6. Mr. Sosa believes that even these significant projections are modest.

Demographics. Around the world, emerging market countries are experiencing increased per capita income, a rising middle class (as a result of GDP growth), and an urbanization of the population. Within emerging markets, incomes are rising from three figures to five, making a significant jump within a relatively short period of time. Domestic consumption is increasing alongside macro-level economic growth. In addition, the emerging market labor force is young and strong compared with fully industrialized economies. Urbanization is also increasing in the emerging markets, while it is decreasing in the developed economies.

Self-financing. While some have expressed concern that capital markets are a bubble set to explode, Mr. Sosa believes that there has not been an overvaluation of emerging market equity markets, and that there is still room to grow. Emerging market countries are no longer borrowing externally, as they can now access local markets (via issuance or sovereign wealth funds). In both emerging markets and the developed world, there has been a dramatic increase in emerging market infrastructure spending.

Mr. Sosa stressed that emerging nations are now becoming creditor nations. Much of the international reserve assets are held in the BRIC countries, and emerging market sovereign wealth funds are now bailing out U.S. banks, rather than the opposite. Mr. Sosa believes that it is difficult for the IMF, the U.S., or other nations to advise emerging markets on the best course of action because many have already bucked conventional wisdom and have done well. In addition, increased financial resources in emerging markets has also led to increased power.

However, local capital markets cannot finance a projected $22 trillion infrastructure buildout on their own. Instead, Mr. Sosa argues, they will need to continue to rely on external borrowing along with increasing access to local market debt. It is often less expensive for countries like Brazil to borrow externally rather than domestically, but there is a conflict because local market access can help to develop lower markets—forcing a decision between lower-cost external borrowing and the positive impact of domestic borrowing. The development of local capital markets in the future will be driven from various parts of the world, including the Middle East.

In sum, Mr. Sosa emphasized the importance of emerging market infrastructure investment, stressing that it is a key driver in the global decrease in poverty. It is an exciting career opportunity for graduate students entering the field.

DR. PATRICK SCHENA
"Asia's Capital Markets"
Dr. Schena is Adjunct Assistant Professor of International Business Relations at The Fletcher School

Dr. Patrick Schena's presentation focused on the development of local and regional capital markets in Asia, and took a detailed view of the region. He explored four key aspects of Asian capital market development (1) trends in the development of local capital markets; (2) specific issues presenting challenges for the region as a whole;

(3) lessons from the China-Hong Kong market; and (4) common themes in the development of Asian capital markets.

(1) Trends in the Development of Local Asian Capital Markets

In concert with the previous speakers, Dr. Schena noted the extremely high savings rates among Asian countries, with the exception of Cambodia. Additionally, reserves are very high in the region: in 2006, Asia held $3 trillion in reserve assets, accounting for 62% of all world reserves. While China and Japan account for much of those holdings, other nations also hold significant reserves.

However, Dr. Schena noted that two-thirds of those reserve assets are held in U.S. dollars. This means that there are vast pools of capital in the region, but the capital is not held in local currency. He notes that assessing why this is happening and identifying ways to reinvest foreign currency holdings back into the region will have implications for the development of local capital markets—and local bond markets in particular.

(2) Specific Challenges for the Asian Region

Dr. Schena questioned whether Asia's capital markets are actually as vibrant as they are portrayed. He pointed to the continuing corporate use of bank debt and domestic credit, especially in China, Japan and Korea. Additionally, despite a significant amount of de-levering over time, debt to equity ratios are still high in the region (i.e., 4:1 in China, 7:1 in Korea). Market capitalization debt to equity ratios have declined over the last several years, mainly because equity market capitalization in the region has expanded, most significantly in Chinese and Hong Kong listings.

Dr. Schena also pointed to the fact that a significant number local corporate issuers are issuing in foreign currency rather than in local currency. This points to capital de-control and often occurs in the same places where local bond markets are also less developed. Offshore bond market issuance still represents a significant amount of balance sheet debt for corporates within the region. Equity markets in the region are not widely used among all countries. Significantly, there is a continued growth of corporate access to equity and equity markets in the region, with the most advanced countries being Japan and Korea. Malaysia relatively also uses a significant amount of equity. China and Japan have driven new issue markets in Asia. Chinese relative value for shares, as measured by price to earnings ratios, is considerably higher than other countries in the region, pointing to a deeper issues in the Chinese markets and marking an important theme for the region.

(3) Lessons from the China-Hong Kong Market

Dr. Schena provided profiles of the China and Hong Kong equity markets through 2007. He focused on three main aspects of the China-Hong Kong Market: the Hong Kong market as a source of capital for Chinese companies; the potential convergence of the Shanghai, Shenzhen, and Hong Kong markets; and the development of local bond markets.

Hong Kong market as a source of capital for Chinese companies. Within the Hong Kong local market, the last several years have shown a fair amount of new issuance growth. While Chinese companies can issue in the China market (through A shares in local currency or B shares in foreign currency), they can also issue abroad to a limited degree and as H shares in Hong Kong. Many domestic Chinese companies have used the Hong Kong market as a source of capital, with the issuance of H shares rising dramatically: between 2003 and 2007, Chinese companies have comprised from 15 to 20% of the listings on the Hong Kong main board. There is also an increasing market for emerging companies within the Hong Kong exchange. The Chinese companies are actively using Hong Kong as a source of capital for several reasons, including to exploit pools of capital outside China and to link to stronger issuing requirements and broader disclosure guidelines that imply an ability to do business globally. Many execute a dual listing, issuing A shares in China and H shares in Hong Kong. Significantly, all of the top ten Chinese companies (ranked by market capital) and over 50% of the top 40 trade

in Hong Kong. This indicates that, for large public or former state-owned companies, the Hong Kong market is a means of accessing pools of capital.

Potential convergence of Shanghai-Shenzhen-Hong Kong markets. Dr. Schena asked whether the Shanghai, Shenzhen, and Hong Kong markets could be considered as a single market. Between all three exchanges, there are approximately 2,000-3,000 listed companies. A common evolution may be possible and could work to remedy the problem of the large pools of local capital that are finding homes in U.S. dollars; a greater Chinese securities exchange could credibly provide sources of capital for local companies and effectively finance regional growth. In terms of market capitalization, the Hong Kong exchange's annual growth rate is an impressive 40%, while China over the same period saw a staggering 70% growth rate in A share issuance.

Challenges to a common market development include:

- *Structural obstacles and barriers:* While the Hong Kong exchanges are publicly traded and transparent, the Shanghai market is a nonprofit entity controlled by the Chinese Securities Regulatory Commission, creating different standards and norms.
- *Share issuance is "held hostage" by administrative guidance of Chinese regulators:* The government is concerned about the level of share prices and to what extent a sharp decline in equity values presents concerns among shareholders. Since many local shares are held by the government, releasing these onto the market could expand the supply of shares and drive prices lower. In terms of financing, there is also evidence that the Chinese government encourages local firms to issue shares in local markets when shares prices are buoyant and discourages it when new supply could accentuate share price weakness..
- *Listing standards:* By the standards of the New York Stock Exchange, Chinese listing standards are not robust. To some degree, then, the Hong Kong exchange is the bellwether, acting to bridge the gap between the Chinese and foreign markets. Bringing the China-listed companies up to standard would present a challenge.

Bond market development. Bond markets in the region are still relatively underdeveloped, especially local currency bond markets. What appears to be significant growth from 1995 through the present is mostly driven by government bond issuers. This has arisen from a need to issue public capital to restructure due to the Asian financial crisis of the late 1990s.

(4) Common Themes in the Development of Asian Capital Markets

Dr. Schena explored four common themes: viewing current conditions through the lens of the Asian financial crisis of the late 1990s; the evolution of local currency markets and structured financing; local corporate markets development; and derivatives and derivative securities.

Viewing issues via the Asian financial crisis. Dr. Schena asserted that a common theme across the region is a tendency to view current issues through the lens of the Asian financial crisis of the late 1990s.The lesson countries learned from that era is to never again put themselves in a position where the financial sector is financed largely by short-term, foreign currency debt. While debt is still widely used in the region, countries are starting to move away from short-term and foreign currency debt.

Evolution of local currency bond markets and structured financing. Local currency bond markets, including those for structure products, have evolved to a limited extent. In Thailand, Korea, and other countries, there are interesting examples of structured deals emerging, and an increasing use of securitized and structured debt particularly after the Asian financial crisis. Structured finance was mainly used to help restructure failed banks and dispose of non-performing loans, and the deals were consciously structured in order to facilitate issuance, establish benchmarks, and gradually develop markets. Noetheless, the markets for structured products in the region remain under-developed, with the exceptions of Japan and Korea. Legal infrastructure is needed to

develop this market; some countries (i.e., China) have not yet established regulations, but have only established non-binding guidelines as the basis for several experimental deals.

Local corporate bond markets. In Asia, local corporate bond markets are emerging, as local currency corporate bond markets hae grown at a rate of 30-36% over the last two years. Ironically, the global credit crisis is driving corporate local markets; since local currency issuers are constrained from issuing in global markets due to the decline of the U.S. dollar, local currency bond markets have expanded as a positive byproduct of the credit crisis. Corporate issuer markets are still fairly concentrated.

Derivatives and derivative securities. Debt markets and derivative securities are complementary. One way to manage risk in local currency is to use local currency derivatives (exchange-traded derivatives, or futures). There is a global market for futures, dominated by interest rate futures and currency futures, while the market for equity futures is considerably smaller. Asian markets account for 10% of the total market of exchange-traded derivatives, and that 10% is dominated by the large markets like Singapore and Tokyo. In terms of derivatives, advancing the development of risk management products is one of the key issues in the development of local currency bond markets. A well-developed, functioning market for bonds is needed in order to establish reference rates for interest rate products and in turn to develop markets for derivatives and derivative securities. This will continue to be a key challenge to the development of local currency markets.

PANEL Q&A

All four speakers participated in a question-and-answer session with the audience, which was facilitated by Mr. Allen.

Q: What are the implications of sovereign wealth funds for global interest rates and growth?

Dr. Kalter: The key question here is: why do sovereign wealth funds have significant resources? It is due to the large accumulation of reserves by many countries. This is occurring not just in petroleum- or commodity-based countries, but also in oil-importing countries like China. The number of sovereign wealth funds has doubled within the past seven years in the face of growing international reserves held by emerging market countries and oil exporting countries. As international reserves grow beyond that needed for precautionary purposes, countries have transfers some of these resources to sovereign wealth funds that face fewer restrictions on asset allocation Sovereign wealth funds invest assets differently than a central bank would; the central bank portfolio is likely to focus on fixed income in mature markets, while the sovereign wealth fund portfolio also will include riskier –both fixed income and direct investment-- increasingly within emerging markets. Sovereign wealth funds are able to have less conservative asset allocation mandates due to their distinct mandates and clean balance sheets.

The impact of this increased sovereign wealth fund activity, all else equal, will be an increase in global interest rates as assets move to direct investment and appreciation of the exchange rates in countries with sovereign wealth funds and those that are invested in by sovereign wealth

Q: While the seminar has explored the Asian and Latin American markets in detail, there has not been much focus on Africa. What is your view on the development of local capital markets in Africa?

Mr. Sosa: South Africa is an exciting story. There is a beginning of a middle class and high commodities production, though infrastructure needs to be strengthened. However, this is one country that can have deep enough capital markets, with adequate governance, to be the center of African investment (as Hong Kong is in

Asia). There is some potential in other regions of Africa, but due to poor governance it is not a good outlook in the next few years, and there are more attractive investor opportunities in other regions of the world.

Dr. Kalter: Increasingly in the region, investment banks are willing to be a part of institutional investments and investors are willing to buy bond issuances. There are about a dozen African countries where this type of activity is being encouraged by the investment community. The IMF and the World Bank are helping these countries implement appropriate debt management practices and urging caution in accessing private capital markets while concessionary financing is still available. In addition, sovereign wealth funds are increasingly looking to Africa, and China sees Africa as a commodity base.

Mr. Allen: At the base of the pyramid, microfinance and technology transfer have been particularly successful in Africa. This activity, combined with the commodities boom, has yielded some positive growth. However, the institutional infrastructure in the region is not well developed enough, and this combined with lack of market size and other factors makes the development of local capital markets in Africa much more difficult than in other regions. While some investors are indeed moving to the "frontier," this is based on continued prospects and a willingness to take risks. If that sentiment evaporates in the global markets, Africa will be the first region to feel the effects.

Q: ***Chile has been very successful at developing its local capital markets. What about the proposal to unify the Central American Market?***

Dr. Kalter: Unifying the Central American market would require many steps including harmonization of financial regulations. These countries realize that they cannot stand alone as individual capital markets, but coming to agreements on common standards could take some time.

APPENDIX 1
Speaker Biographies

Neil Allen
Principal Senior Fellow, Center for Emerging Market Enterprises

A 1976 Fletcher graduate with an M.A. and a long-serving member of the Fletcher Board of Overseers, Mr. Allen works on CEME strategy, operations, recruitment, and outreach with special attention to developing "EM Local Markets" and "Businesses at the Base of the Pyramid" initiatives.

Mr. Allen has extensive emerging markets expertise. After working in West Africa and Venezuela, managing a leasing company in Mexico, and leading debt restructurings for Mexican and Latin American private and public sector entities, Mr. Allen entered the then nascent world of trading of restructuring country debt. At Bankers Trust Company, he started and guided a new business of secondary market trading in defaulted country debt from a two-person, one office startup to a global trading business with desks in New York, London, Tokyo, Hong Kong, Sao Paolo, Buenos Aires, and Santiago. As Managing Director in charge of Latin America, Middle East, and Africa at Bankers Trust, Mr. Allen expanded the markets business into one of the first truly global emerging market businesses. Under his leadership, he integrated and developed international and local proprietary trading, derivatives, new issues debt and equity, investment banking and private equity businesses, and a network of leading Latin American financial companies, including Chile's largest pension management and life insurance companies and investment banks in Brazil, Chile, and Argentina.

Designated an "Emerging Market Superstar" and "Top Head of Latin America" by Global Finance, Mr. Allen joined Donaldson, Lufkin & Jenrette to spearhead the firm's international expansion. As the Managing Director in charge of Emerging Markets and a member of the Management and Risk Committees, he started and led new emerging markets proprietary trading, derivatives, investment banking, and private equity businesses and was one of the earliest institutional entrants to Russian and Turkish markets.

Mr. Allen continues to be chairman of Allen Global Holdings, an emerging markets advisory firm. In addition to his degree from Fletcher, Mr. Allen has a B.A., cum laude, in American Studies from Yale College.

Eliot Kalter
Senior Fellow, Center for Emerging Market Enterprises

Dr. Eliot R. Kalter brings almost thirty years of experience in the study and practice of global capital markets, including a hands-on relationship with the emerging market public and private sectors.
Eliot Kalter established and is President of E M Strategies, Inc. since July 2007. The firm offers emerging market (EM) strategies that facilitate a mutually beneficial relationship between the EM Sovereign and the private sector. E M Strategies focuses on:

- EM Sovereign and asset class risk assessment/opportunity
- EM market access; private investment in EM local currency assets and financial instruments
- EM investment in mature markets consistent with asset/liability management best practices

Mr. Kalter retired from the International Monetary Fund in June 2007 as Assistant Director of the Monetary and Capital Markets Department. He began his career in 1976 as an economist at the International Finance Division of the Board of Governors of the Federal Reserve System. His career at the International Monetary Fund started in 1979, with more recent responsibilities including heading up:

- Public Debt Managers Forum, bringing together international institutional investors and public debt managers from all principal EM countries
- International capital markets technical assistance for EM countries globally
- Financial surveillance for Brazil, the Caribbean, Central America, Chile, Colombia, Ghana, Mexico, Peru, Russia, South Africa, Turkey, Ukraine, and Uruguay
- IMF country discussions and negotiations with Bolivia, Chile, El Salvador, Haiti, Honduras, Mexico, and Nicaragua

Dr. Kalter holds a Ph.D. and M.A. in International Finance from the University of Pennsylvania; an M.Sc. in International Monetary Economics from the London on the topics of international and local capital markets, public debt management, corporate restructuring, international competitiveness, and financial crises.

Patrick Schena
Adjunct Assistant Professor of International Business Relations, The Fletcher School, Tufts University

Dr. Schena is adjunct assistant professor of international business at The Fletcher School, Tufts University, where he teaches courses in corporate finance and banking, with a particular focus on East Asia. Dr. Schena is also Director of Fletcher's Hitachi Center for Technology and International Affairs and is an Associate in Research at The Fairbank Center for East Asian Research, Harvard University.

In addition to his responsibilities at The Fletcher School, Dr. Schena is Managing Partner of iX Partners, Ltd, a investment technology and services firm. His corporate experience includes positions as: Director, Professional Services, NewsEdge Corporation; Vice President, Product Management, Automatic Data Processing; Vice President and CFO, Investment Software Systems, Inc. His prior academic experience includes teaching finance at Suffolk University, Graduate School of Business and New Hampshire College, Graduate School of Business.

Dr. Schena holds a Ph.D. and M.A.L.D. from The Fletcher School, as well as an M.A. and B.A. from Boston College.

Ignacio Sosa
Managing Partner and Portfolio Manager, Globalis Investments LLC

Mr. Sosa is a founding principal of Globalis Investments, LP and serves as lead portfolio manager for the firm's flagship Globalis Sovereign Growth and Income Fund I. Globalis Investments is a Boston-based asset management company focused on long/ short EM investing. The firm is an affiliate of the Macquarie Group of Australia and is the successor to OneWorld Investments, LP which was founded in 1999 by Mr. Sosa and David Dali.

Mr. Sosa began his career in emerging markets in 1981. He has direct hands-on experience with virtually every aspect of emerging market (EM) finance. Mr. Sosa has appeared on CNBC and his opinions on EM finance have been recently published in the *Wall Street Journal*, *The New York Times*, *Institutional Investor*, *Financial Times*, and *Latin Finance*. His career has spanned the full spectrum of EM finance; from trading to sales, research, capital markets, underwriting and derivatives. Mr. Sosa was founding group head of the EM investment bank and Asia banking at BankBoston Corp (BKB). He was also a member of the BkB Executive Management Group.

Prior to joining BkB, he spent nine years at Bankers Trust in New York and Tokyo, five years trading EM debt and ultimately co-heading taxable fixed income sales, including EM and credit derivatives. Mr. Sosa began his career at Bank of Boston in Boston and Buenos Aires.