Global Money Flows

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CrossBorder Capital

Implementing a global investment strategy requires an understanding of the key drivers of global money flows—demographics, inflation, economic fundamentals, and cyclical liquidity. Although corporate profitability is the key to understanding returns in the long run, sentiment and liquidity are crucial to returns in the short run. Understanding global liquidity, the heartbeat of central banks, helps investors analyze which asset classes perform best throughout the global liquidity cycle.

In *Security Analysis*, Graham and Dodd (1934) said, “...in the long term the stock market is a weighing machine that weighs the amount of profits in each issue...but in the short term it is a voting machine.” And the votes are money. So, to understand the rewards and risks of global equity investing, investment managers need to understand the votes—the global money flows. The reason is that risk and reward are functions of supply and demand. In the mid-1980s, in conventional valuation terms, European stock markets were not exciting, but they were going up significantly because U.S. and U.K. pension funds were pouring money into them. Pension funds were beginning to diversify overseas for the first time. By now, that process has become global.

Managers today can and do shift money among markets around the world at a moment’s notice, in seconds, which explains why the basic notions about asset allocation and risk must be redefined. The basic principle of asset allocation is that returns should be measured relative to risk, which makes the definition of risk very important. For an investment manager, true risk is the risk of not realizing the valuation price of an investment at some time in the future. The point is not simply to buy a cheap stock but also to have the stock go up. If risk is the risk of not realizing a price in the future, then looking backward at historical volatility as a measure of risk does not do much good. Volatility is a measure of past risk, but future or current risk is determined by the manager’s transacting ability and is a question of the manager making the necessary transaction at the size desired without altering the price. This concept of risk might be termed “global counterparty risk.” Now, the question is: What defines global counterparty risk?

The answer is: global money flows—the amount of liquidity available in the system. This liquidity is controlled ultimately by central bank activity, so the research on global money flows that CrossBorder Capital conducts is essentially a matter of keeping a watch on 60 central banks. The analysis is highly quantitative, and all the data are aggregated into regional and global indexes. The result is predictions of money flows on a global basis and on the very important interregional basis.

To set the stage for considering how analysis of global money flows fits into the current environment, I want to comment on the 1997 crisis in Asian markets. The first law of investing in emerging markets is that every emerging market crisis is first and foremost a currency crisis. The law was clearly true in 1997, but it was also true in 1995 with Mexico, in 1994 with Turkey, and in 1993 with Russia.

The 1997 Asian crisis is a clear example of a liquidity-driven crisis in global capital flows. The Asian emerging markets were not particularly expensive, and few investment funds in the United States and in Europe were shorting or underweighting the region. Although some were clearly underweight in Malaysia, many funds were significantly overweight in Indonesia as a counterweight because they believed the fundamentals were better in Indonesia. What happened was a matter of contagion, in which liquidity conditions throughout the region were affected.

Another revelation that comes out of money flow analysis is that the 1997 Asian crisis was not like the Mexican peso crisis. Mexico’s problem was the result
of Mexican economic policies. Mexico cured its problem eventually with a little help from the United States. Southeast Asia’s problem, aside from a few foolish policy mistakes, is fundamentally not of its own doing but of Japan’s and China’s. The economies of Japan and China are slowing down, and this deflationary environment is causing enormous volatility in the capital flow structures of other Southeast Asian economies, which are the tail on a wounded, perhaps seriously wounded, dog.

Understanding the returns and risks in global investing requires an understanding of market liquidity and market attractiveness—that is, why money flows the way it does into and out of the global markets.

Market Liquidity

The ability of investment managers to transact in size in various markets depends on the liquidity environment in various regions. In order to effectively judge a market’s liquidity, one must first understand what creates an attractive market.

A primary indicator of a good investment market is the level of gross domestic product. As Figure 1 shows, the relationship between GDP per capita and market value per capita for all the markets in the world provides a compelling argument for investing in emerging markets. This fundamentally nonlinear relationship, which resembles a J-curve, shows that relatively small incremental changes in GDP cause

![Figure 1. World Markets by GDP per Capita and Market Value per Capita, 1996](image-url)

**Key:** Ar = Argentina; Aus = Australia; A = Austria; Bsh = Bangladesh; Bb = Barbados; Be = Belgium; Bo = Bolivia; Bw = Botswana; Bz = Brazil; Bu = Bulgaria; Cn = Canada; Cl = Chile; C = China; Co = Colombia; CdI = Côte d’Ivoire; Cz = Czechoslovakia; D = Denmark; Ec = Ecuador; Eg = Egypt; F = Finland; Fr = France; Gh = Ghana; Gr = Greece; Ho = Honduras; HK = Hong Kong; Hu = Hungary; In = India; Io = Indonesia; Ir = Ireland; Is = Israel; It = Italy; Ja = Jamaica; Jp = Japan; Jd = Jordan; Ky = Kenya; Li = Lithuania; Lx = Luxembourg; Ma = Malaysia; Mr = Mauritius; Mx = Mexico; Mo = Morocco; Na = Namibia; Np = Nepal; N = Netherlands; NZ = New Zealand; Ni = Nigeria; Nw = Norway; Om = Oman; Pk = Pakistan; Pn = Panama; Pe = Peru; Ph = Philippines; Po = Poland; Pt = Portugal; R = Russia; Sg = Singapore; Sl = Slovenia; SA = South Africa; SK = South Korea; Sp = Spain; SL = Sri Lanka; Swz = Swaziland; Swe = Sweden; Sz = Switzerland; Th = Thailand; Tn = Tunisia; Tu = Turkey; UK = United Kingdom; US = United States; Vz = Venezuela; Z = Zimbabwe

**Notes:** Quadrants are marked according to the International Finance Corporation definition of “emerging economy” as GDP per capita of less than US$9,386 and “emerging stock market” as market capitalization per capita of less than US$3,654.

**Regression output:**
- Constant: -4.3474
- Standard error of $y$ estimate: 0.9661
- $R^2$: 0.8147
- Number of observations: 70
- Degrees of freedom: 68
- x Coefficient: 1.3722
- Standard error of coefficient: 0.0794
large incremental changes in market value per capita. The regression line, estimated in logarithmic returns, is a particularly good fit, which indicates that as economies get richer and richer, they start to go up that J-curve faster. Therefore, emerging stock markets should provide dramatically higher returns than developed markets in the long term.

What drives the relationship of market cap to GDP is ownership, or sentiment toward the market, and excess liquidity. These two components are essentially flow-of-funds variables. Sentiment, or price-to-market value ($P/M_f$), is the ratio of market value to all liquid assets and measures the portfolio allocation for an entire economy. In other words, it is the quotient of how much is invested in equity and bonds divided by the amount of money that is held in liquid financial assets. The second driver, excess liquidity, is defined as market value divided by GDP, $M_f/GDP$. This term, called “Marshallian $k$” in Japan, is traditionally called “monetary velocity” in the United States. In fact, it is inverted monetary velocity, a measure of financial liquidity or excess liquidity. Thus, market capitalization to GDP can rise as a result of rising ownership or positive sentiment and rising excess liquidity.

The following equation measures share value, $P/E$, as the product of ownership or sentiment, excess liquidity, and corporate profitability, measured by inverted corporate profit margins, or GDP divided by earnings ($GDP/E$):

$$\frac{P}{E} = \frac{P}{M_f} \times \frac{M_f}{GDP} \times \frac{GDP}{E}.$$  

The extent to which these three factors influence returns depends on the time horizon. For example, as Figure 2 shows, the sentiment factor, regardless of how it is measured, plays a large role in explaining returns in the very short term because returns demonstrate autocorrelation in the short term. An investor who buys today what went up in price yesterday is likely to make money tomorrow. This autocorrelation diminishes over time, however, so the investor who buys this year what went up last year may not make money next year, and so on. The corporate profits factor has the greatest impact over the long term (i.e., five years). That is, if investors could know what Microsoft’s earnings will be in five years, they would know pretty much all they need to know about the stock. Over the 12-month to 24-month horizon, or medium term, liquidity is the critical factor behind investment returns.

All three factors are relevant and important for investment managers, but current performance measurement criteria unfortunately force investment managers to concentrate on the short term, focusing on investor sentiment. Managers might prefer a five-

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Figure 2. Time and the Three Drivers of Investment Return

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year horizon—hoping to take a long-term view and forget about such nuisances as charts, price momentum, and liquidity flows—but these nuisances affect managers’ performance, their relative performance rankings, and their compensation. Thus, managers focus on the medium-term time frame in which liquidity and sentiment together play a larger role than most people believe and profits and fundamentals play a relatively small role.

The plot of foreign exchange (FX) trading versus the stock of FX reserves, as shown in Figure 3, illustrates that liquidity is primarily a global dimension. Between 1973 and 2000, the annual percentage turnover of government FX reserves, measured by FX trading activity, will increase from about 10 percent to more than 200 percent, which demonstrates the explosion in international global trading, especially during the 1970s and 1980s.

A particularly interesting aspect of the money flows shown in Figure 3 is that governments are losing control of the outcome. Governments may ultimately control the size of these flows, but they cannot control the deployment of them. The private-sector money flows that have been unleashed around the world in the past 15 years are now much bigger than money flows from the central banks.

Understanding that securities are a dominant portion of FX activity is important for understanding the global investment arena. For example, Table 1 indicates that in the late 1970s, money flows from banks and industrial corporations—that is, bank credit and foreign direct investment (FDI)—made up about 85 percent of total flows worldwide. In 1995, equities and bonds, representing about 68 percent of total private-sector capital outflows from major industrialized countries, dominated FX activity.

Everyone is a foreign investor today, as foreign equity trading activity continues to increase. As Figure 4 shows, cross-border and cross-exchange equity investing has increased from 14 percent to about 25 percent of total world trading. At the end of the 1970s, approximately one in fourteen equity transactions involved a foreign investor; about one in seven equity transactions in the mid-1980s involved a foreign investor; today, the figure is about one in four. Genuine cross-border trading, such as U.S. investors buying German stocks in Germany or Japanese investors buying Hong Kong stocks in Hong Kong, continues to increase, but cross-exchange trading—U.S. investors buying American Depositary Receipts or Global Depositary Receipts on the NYSE or British investors buying French shares on the CAC International in London—is growing faster than cross-border investing and is becoming increasingly important.

Trading represents gross money flow, but new money is net money inflow. Figure 5, which shows

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**Table 1. Private-Sector Capital Outflows from Major Industrialized Countries, 1975–79 Average and 1995**

<table>
<thead>
<tr>
<th>Sector</th>
<th>1975–79 Average</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>49.5%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Bonds</td>
<td>9.8</td>
<td>32.4</td>
</tr>
<tr>
<td>Equities</td>
<td>5.1</td>
<td>35.5</td>
</tr>
<tr>
<td>FDI</td>
<td>35.6</td>
<td>14.3</td>
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</tbody>
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**Figure 3. Foreign Exchange Reserves and Trading Activity, 1973–2000 (Estimated)**

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Implementing Global Investment Strategy

the new money flows into developed and emerging markets since 1986, indicates that 1997 net equity investment in world capital markets will be approximately US$200 billion, with about 25 percent absorbed within emerging markets. As the figure shows, new money flows can exhibit significant volatility as a result of central bank activity. The projections for 1998 indicate that the amount of new international investment will decrease slightly but not dramatically.

Net portfolio equity flows in 1997 were great for emerging markets and Europe. As Table 2 shows, Europe attracted huge flows, maybe as much as US$100 billion in 1997. Our data indicate a scrambling by European investors to buy the U.S. market. Thus, the US$25 billion net equity flow for the United States is probably an underestimate and may increase considerably by the end of the year.

The trend in net portfolio equity investment into emerging markets has risen strongly, perhaps on the order of US$10 billion a year on average, but with significant volatility. Although few emerging mar-
In the 1986–96 period, the inflow decreased from time to time. For example, in the wake of the Mexican peso crisis, net investment in Mexico declined by about US$20 billion in 1995. Although about US$30 billion out of a total of US$50 billion investment abroad went to the Asian emerging markets in 1996, Asian emerging markets’ share of net investment in 1997 will decrease to about US$15 billion out of a total of about US$57 billion. Some analysts were prepared to write off Latin America in 1995, when it received only US$2 billion of foreign money, but we expect the area to receive about US$25 billion in 1997. The star for the past two years in the East European markets, Russia, could alone top US$7 billion in inflows. That inflow explains in many ways the rise in the Russian stock market since the spring of 1996.

The distribution of new money inflows into various emerging market regions has changed in the past 10 years; in general, shares are now more equal than in the past. As Figure 6 shows, in the mid-1980s, the bulk of flows went to Asia, principally the large markets—Hong Kong and Singapore. In the early 1990s, the flows swung to favor Latin America, but in the past year or so, the distribution of each region’s share of net equity flows has been more homogeneous. Some of the newer, more exciting, and perhaps higher risk markets, such as Africa and the Mediterranean, are getting a fairly substantial slice of the pie. (Some of the few outflows of the early 1980s resulted from many funds being forced to divest from South Africa.) Figure 6 also shows Eastern Europe, with about 10 percent of total net equity flows in 1997, gaining importance.

Active trading tends to be concentrated among a few firms—an important aspect of trading in the emerging markets that relates to market liquidity. Our investigations indicate that the top 5 accounts in emerging markets in terms of trading volume account for 27 percent of total trading, the top 10 account for about 40 percent of trading volume, and the top 20 account for about 60 percent. Much of the money in emerging markets is either quasi-indexed or indexed and does not change much, or it is in embedded positions, in which people essentially buy and hold the markets. Hedge funds are the principal traders, and they trade aggressively in size. There-

### Table 2. Net Portfolio Equity Flows to All Markets, 1986–97 (Estimated) (US$ billions)

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<tr>
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<tr>
<td>United States</td>
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<td>16.5</td>
<td>–1.4</td>
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<td>11.2</td>
<td>19.5</td>
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<td>–15.8</td>
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<td>6.8</td>
<td>7.0</td>
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<td>46.8</td>
<td>8.9</td>
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<td>3.5</td>
<td>10.1</td>
<td>13.2</td>
<td>15.8</td>
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<td>39.9</td>
<td>18.7</td>
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<td>Rest of the world</td>
<td>1.8</td>
<td>7.1</td>
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<td>10.4</td>
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<td>2.8</td>
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<td>20.7</td>
<td>3.3</td>
<td>2.0</td>
<td>7.1</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>42.0</td>
<td>16.4</td>
<td>32.9</td>
<td>86.6</td>
<td>3.2</td>
<td>100.6</td>
<td>53.7</td>
<td>196.3</td>
<td>119.6</td>
<td>100.0</td>
<td>203.0</td>
<td>232.0</td>
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fore, the risks of investing in the emerging market arena can be quite high from a liquidity standpoint.

For U.S. investment managers, understanding the rise of U.S. cross-border investing is vital. Although the world’s biggest and most important international investor is now the United States, it was not always so dominant. During the 1980s, as Table 3 indicates, the Europeans were among the biggest cross-border investors.

Drivers of Money Flows

CrossBorder Capital has found four key drivers that are compelling in terms of understanding why money flows the way it flows—demographics, inflation, economic fundamentals, and cyclical liquidity.

Demographics. The age distribution of a population affects the amount and pattern of investment in a country. Youngsters are spenders; aging individuals are investors because, as people age, they need to build up pensions. Moreover, pensions will grow faster if the money is invested in equity-type vehicles and if those equity schemes are invested in the faster growing economies. So, population aging has a significant impact on money flows today.

As a result of population aging, people in the United States have become savers. The Baby Boomers have moved from the spending age into the saving age. Demographic patterns since World War II clearly show a pattern of graying moving across the globe. The Baby Boom generation began in the United States following recovery from the war and then moved across the Atlantic to Britain and on to continental Europe. Economic and population recovery started later in Japan. The Boomer (or Yuppy) spending phase began in the United States in the early 1980s, spread to Britain in the mid-1980s, and ended up in continental Europe in the late 1980s. The savings boom is traveling about a decade behind the spending boom.

Global graying will continue into the next century and will continue to affect global money flows. As Table 4 shows, the United States, Europe, and Japan will continue to experience significant aging of their populations during the next 50 years. The population over 65 is expected to increase by about 10 percent in Europe and the United States and by about 13 percent in Japan—about double what it is now. In all three countries, approximately one in four people will be over 65 years old by 2050, which will affect savings rates and investment flows.

Inflation. Another powerful driver of international investment flows is inflation differentials between countries and regions. Figure 7 shows the relationship between inflation and the price-to-money (or equity-to-money or equity-to-cash) ratio, the \( P/M_f \) term in the share value equation presented earlier. When commentators say that the Thai equity-

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</thead>
<tbody>
<tr>
<td>United States</td>
<td>2.6</td>
<td>-2.7</td>
<td>2.0</td>
<td>19.0</td>
<td>10.3</td>
<td>43.3</td>
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<td>84.8</td>
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<td>Continental Europe</td>
<td>12.5</td>
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<tr>
<td>Japan</td>
<td>8.2</td>
<td>16.9</td>
<td>3.0</td>
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<tr>
<td>Other</td>
<td>9.9</td>
<td>-7.2</td>
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<td>8.8</td>
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<tr>
<td>Total</td>
<td>42.1</td>
<td>16.5</td>
<td>32.9</td>
<td>86.6</td>
<td>3.3</td>
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<td>196.3</td>
<td>119.6</td>
<td>100.0</td>
<td>203.0</td>
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Table 3. Net Cross-Border Equity by Investor Nationality, 1986–97 (Estimated) (US$ billions)

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<table>
<thead>
<tr>
<th>Country</th>
<th>Expected for 2000 and 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia ex-Japan</td>
<td>5.2%</td>
</tr>
<tr>
<td>Europe</td>
<td>14.7</td>
</tr>
<tr>
<td>Japan</td>
<td>16.5</td>
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<tr>
<td>Latin America</td>
<td>5.5</td>
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<tr>
<td>United States</td>
<td>12.5</td>
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Table 4. Global Graying: Population over 65

Whether a major stock market crash will occur in the next two or three years depends on whether inflation rises. The environment in 1997 was deflationary, and the meltdown of the Asian economies provides additional downward pressure on inflation.
as these economies export their deflation westward. Thus, low global inflation will probably continue, making financial assets increasingly attractive.

**Economic Fundamentals.** Economic fundamentals are difficult to measure in terms of a single statistic, but the fundamental balance has a good track record of spotting when an economy is heading for trouble. The fundamental balance is the current account position of an economy plus all net FDI. The rationale for using it is as follows: First, an economy that is currently competitive should have a current account surplus; an economy that is uncompetitive should have a deficit. Second, if the economy is expected to have a future competitive advantage, multinational corporations will be investing in it now, which will be reflected in its net FDI; if it is not expected to have a future competitive advantage, multinationals will not be investing there today. So, the fundamental balance provides a snapshot of the competitive environment that can be compared with other snapshots to indicate whether an economy is competitive and attracting foreign investment or uncompetitive and lacking foreign investment.

History shows that portfolio flows follow the fundamental balance as a percentage of GDP. As **Figure 8** illustrates, this ratio varied significantly in the 1985–97 period for some of the most interesting developing economies. For example, Eastern Europe experienced some wild gyrations, but Russia and the larger economies of that region show signs of true competitiveness; the ratio for them became positive and stayed positive in the 1990s. Latin America was not competitive at the time of the Mexican peso crisis in 1994, but the economic fundamentals for Mexico and the rest of Latin America are returning to a fundamental surplus. In the late 1980s, Asia ex-Japan was very competitive, but the fundamental balance has been steadily declining and has taken another lurch downward in the last two years. In terms of competitiveness, Asia ex-Japan and Latin America are converging and may even change places.

To understand the fundamentals, investors need to look at what is happening in the real economies—primarily, where the multinationals are investing. The flow of FDI into emerging markets reveals what the multinational corporations believe about the strength of the various economies. **Figure 9** shows that Eastern Europe is growing in importance in terms of multinationals’ investment schemes. Asian emerging markets are still taking the lion’s share of FDI, but that share is diminishing. Latin America, which received a small share in 1995, is rebounding. The other emerging markets have very small shares. Thus, what multinational investors say and what regional trade surpluses generally indicate support the fundamental balance indicator.

Finally, in addition to strong fundamentals, strong currencies are indicators of strong economies and, therefore, of capital flow movements.

**Cyclical Liquidity.** The fourth driver of money flows is cyclical liquidity—the key to understanding central bank activity. As **Figure 10** shows, there is a strong correlation between the global liquidity cycle and net portfolio equity investment in emerging mar-
kets. Since 1989, new money flows into emerging markets have closely followed this cycle. Global liquidity measures the heartbeat of central banks and can be measured regionally and at a national level. Central banks nudge markets in certain directions and thereby add speed or force to markets’ liquidity.

Putting central bank behavior into a framework can help investors analyze how various asset classes should perform at different stages of the liquidity cycle. For example, Figure 11 indicates which asset classes perform best as central banks around the world adjust the levels of liquidity injected into their financial markets. As central banks pursue expansionary monetary policy and increase liquidity (Stages I, II, and III), investors become more prepared to take on more risk. At the trough of the cycle (Stage VI), cash is normally the best asset class. As liquidity moves into the markets, bonds tend to be the best performing asset. For example, 1982, 1985, 1986, the early 1990s, and 1995 were extremely good periods for global bond market investments. Stock markets tend to do well as liquidity cycles higher (e.g., 1987,
1983, 1993, and most of 1996 and 1997), and emerging market stocks do well around the top of the cycle (Stage III). Commodity markets tend to do well as liquidity cycles down (Stage V), so 1994 and 1988 were strong years for commodities.

From 1996 into 1997, the liquidity cycle was declining, which might prompt investors to question whether they are receiving warning of an imminent crisis. It is a warning, but it may not be a strong warning because the global cycle today is being temporarily interrupted by much more powerful regional cycles. A comparison of regional liquidity would show liquidity in Asia to be completely opposite to liquidity in Europe and the United States. Liquidity is rapidly and dramatically exiting Asian markets—partly because of capital flight out of these markets and partly because Japan is starting to tighten its liquidity conditions.

Some people might not agree with that contention; they would argue that the discount rate in Japan is very low, so monetary policy must be loose. Central banks, however, operate along more than one dimension. In addition to the discount rate, they consider the amount of liquidity they allocate to markets. In Japan, that liquidity allocation is crimped at the moment in support of the yen. So, the Japanese—perhaps under some pressure from the United States—are sacrificing their economy and their financial markets to preserve the integrity of their currency.

European and U.S. liquidity is cycling upward. CrossBorder Capital’s projections for 1997 are that
capital flow will shift significantly toward the United States and Europe. Investing in Asian markets at the moment runs relatively high risks, because transacting in the Asian markets is more and more limited as liquidity leaves the markets. In Europe and the United States today, liquidity risks are actually diminishing.

**Conclusion**

The bottom line is that, on a global basis, liquidity needs to be explicitly considered for an understanding of risk and return because it drives global financial markets. Investors must understand how demographics, inflation, economic fundamentals, and the liquidity cycle influence global net equity flows and capital market returns:

- The age distribution of a population affects savings rates and investment flows.
- Whether a stock market crashes depends to a great extent on whether inflation rises.
- Economic fundamentals, such as the current account balance and net FDI, indicate which economies are competitive and will attract foreign investment.
- The liquidity cycle helps measure the heartbeat of central banks; thus, it provides insight into the direction of financial markets.

In addition, although central bankers may bang the table and talk about markets being irrational and exuberant, at the end of the day, by conducting monetary policies that are too loose or too tight, they are the ones who create rationality or irrationality.
Question and Answer Session
Michael J. Howell

Question: How does the large flow of investment money out of Japan and into higher yielding markets affect the outlook for the Japanese market for the next year or so?

Howell: There is a lot of misunderstanding about Japan at the moment because people believe that the Japanese authorities are acting rationally. They are not. They are making big policy mistakes, not unlike the mistakes made in Europe and the United States in the 1930s. The background is one of overproduction, weak demand across Asia, and policymakers who have blinders on. They do not understand the problems, and they do not realize they have to stimulate domestic demand. Instead, they have turned to competitive devaluations or tariff changes. As a result, problems in the Asian markets will likely continue. I expect to see currency volatility in Asia throughout most of 1997 and perhaps beyond.

Currency movements in the past 10 years have been procyclical. My interpretation is that the currency is the price of economic fundamentals in a market. If the economy strengthens, that fundamental price is bid up. If the economy weakens, it is bid down. In Japan, the economy is clearly weakening. Domestic demand has been slowing dramatically under the weight of declining money supply growth, public works spending cuts, and tax increases. The market wants to drive the yen lower, but the Bank of Japan does not want to let it fall, so it is using all the money from the trade surplus to offset the capital outflow. The data show that, despite a rock-

China, like Japan, needs to create domestic demand, but it cannot do so for political reasons. It cannot enfranchise the workers too much. What China has done is very interesting. Toward the end of September 1997, it increased the incentives for FDI. In other words, China wants to get the economy growing and create jobs, but instead of stimulating domestic demand, it has turned to seeking growth through more international investment. The result is to create an even bigger export platform.

So, multinational investment in Asia could spur recovery, but other cross-currents that are going on may be more important.

To correct the Asian crisis, one of two things needs to occur—either domestic demand needs to be stimulated in Japan and China, or the International Monetary Fund (IMF) needs to oversee a formal currency arrangement. An interesting point is that all the regional currencies, the most stable currency since about mid-September 1997 has been the Thai baht, and the reason is that the IMF has been breathing down the Thais’ necks. Our asset allocation models show that Thai stock prices may be bottoming out for that reason.

Question: Can inflationary or deflationary pressures cause a bad market as well as a good market?

Howell: Absolutely. The P/Mf multiple is a nonlinear relationship; as inflation decreases, equity exposure increases. Experience also shows that it flips over at some
stage—like a ski jump. Figure 7 does not show where the relationship flips over, because I don’t know where to put it, but it is happening in Japan in the 1990s and is precisely what happened in the United States in the 1930s.

As inflation approaches zero, valuation levels start to come down because deflation hurts valuations and corporate profits. Increasing numbers of companies find it more and more difficult to make money in such a deflationary environment. I theorize that inflation coming down 50 basis points is good news but inflation coming down 150 basis points is bad news.

The Mexican peso crisis had a favorable effect on U.S. inflation in 1995, and we now have the equivalent of four Mexicos influencing inflation in 1998—Malaysia, Indonesia, Hong Kong, and Thailand. For example, with the 15 percent devaluation of the Japanese yen in the past 12 months, Kodak’s value is increasing while Fuji’s value is decreasing as margins are destroyed by deflation. And these developments are going on before even considering the 40 percent devaluation of the Asian currencies.

Looking at the rotation of the U.S. market, I sense that a shift is occurring out of the bigger international stocks, which are exposed to exchange rate risk, and into the smaller countries’ stocks, which do not have that exposure; I also sense a move to bonds, which are helped by a strong dollar.

Question: Has the interest rate cycle in Europe turned?

Howell: Yes. Our view is that the Bundesbank cannot tighten interest rates much. The European economies are clearly recovering, but they may not experience gangbuster growth, and in the lead-up to monetary union, we will probably not see large increases in European interest rates.

One school of thought is that the Bundesbank will be forced for convergence reasons to push interest rates up 150 basis points in 1998 to bring German rates in line with those of the other European economies. I disagree. Because of the transition to monetary union, low interest rates could continue. The reasoning, which is slightly quirky, is as follows (the European authorities are just starting to recognize this wrinkle in the monetary union debate): In the transition phase, a European will be allowed to have a parallel bank account. So, I can tell my bank to convert 30 percent of my British pound sterling bank account at a fixed exchange rate to German marks, lira, French francs, or whatever. Everybody can make that choice. What currency will they choose? Well, the currency they think will be the hardest currency. If they choose the mark, it is heads they win, tails they win, because the mark may go up but it definitely will not go down. Now, if each person shifts 20 percent of his or her bank account into marks, the result will be a dramatic demand for marks. What will the Bundesbank do? The Bundesbank will accommodate the demand because it wants to keep the currency fixed. So, it will increase the money supply, and interest rates will remain low. But then the bank will counter by telling the Italian authorities and the French authorities to decrease their money supplies. Do you think they will? No central bank has ever actually decreased its money supply, because doing so would risk throwing its economy into massive recession. This uncertainty with monetary union has not, as far as I know, been properly thought out.

Question: How do you gather up-to-date central bank data?

Howell: Every month, we contact 60 central banks around the world and analyze their balance sheets in detail. We create composite indexes of monetary variables that measure liquidity conditions for each central bank, and we aggregate them into regional and global indexes. Each composite index consists of about 15 variables, and we release each composite index about the middle of the following month, so the data are very up-to-date.