China Starts Setting The Pace

A lazy comedian always could get a cheap laugh with a rubber chicken. A lazy market analyst has, since 2004 at least, been able to get by with either "China" or "hedge funds" as the answer to every question. One of the reasons this has worked, of course has been the strong element of truth involved. Hedge funds became the preferred vehicle for hot money and for displaced traders looking for a way to play the market with someone else's money. China became the low-cost producer of just about everything, the marginal buyer of just about everything and the world's largest creditor at about the same time. When the Federal Reserve started trying to solve every problem by cutting interest rates to stimulate the U.S. consumer, production to shifted offshore to China and the money came back into the U.S. to feed the hedge funds and the voracious U.S. Treasury.

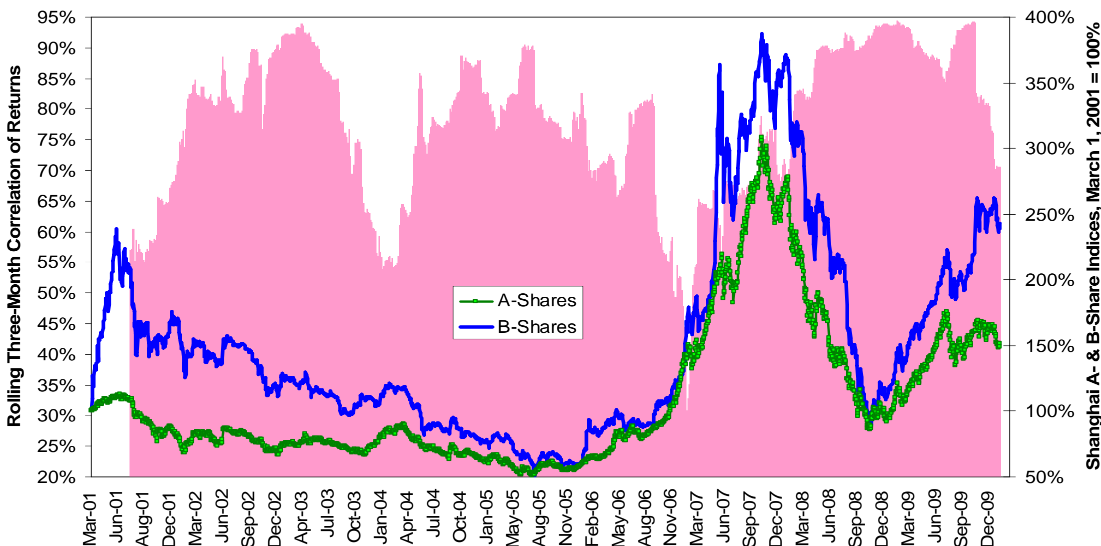
Stock Around The Clock

It is no great news stock markets around the world feed each other, especially when negative shocks are involved. This is one reason why international stock index exchange-traded funds such as the EFA and EEM are popular; anyone who sees a strong move in the U.S. during the day can guess the effect on Asian markets overnight. The effect was never particularly strong coming from Asia to Europe and the Americas at the start of Japan's long bear market in 1990.

China has been another matter on several occasions, most notably on February 27, 2007, when a 10% selloff led to a huge downturn around the globe. In retrospect, this was one of the early warning signs the bull market then-extant was running out of steam, but the Chinese markets went on to post ferocious gains for much of the remainder of 2007.

The Shanghai exchange maintains two broad indices, those of A-shares open to Chinese nationals and qualified foreign investors and B-shares open to all foreign investors. If the B-shares sound like a playground for global hot-money types, they are; over time, their standard deviation of returns has been 1.3 times that of the A-shares. These two indices have had different return characteristics and a widely fluctuating three-month rolling correlation of returns with each other. Interestingly, the correlation of returns moved higher during both the selloff of 2008 and subsequent rebound in 2009.

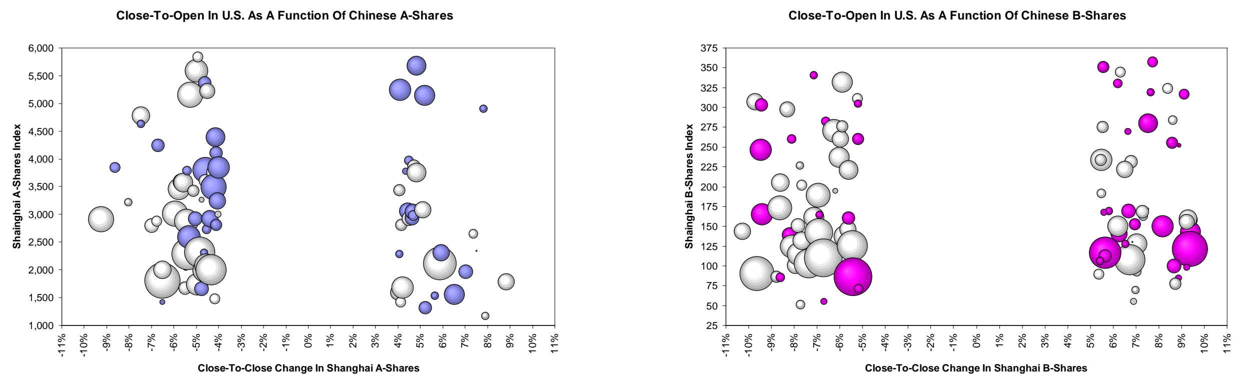
Comparative Paths Of Shanghai A- And B-Share Indices



Big Days

Now let's ask the question what happens when there is a big move in the Chinese markets, with "big" defined as outside a ±97.5 confidence interval. We can map the close the close-to-open changes in the U.S. market as measured by the broad-based Russell 3000 index against both the ordinal level of the A- and B-share indices and against the large close-to-close changes in the Chinese market. The magnitude of the U.S. change is depicted by the size of the bubble, with positive changes in blue and magenta for the A- and B-share indices, respectively, and negative changes in white.

If the U.S. market was in lockstep thrall to the Chinese market, we should expect to see a preponderance of colored bubbles on the right-hand sides of these charts and a preponderance of white bubbles on the left-hand side. Neither is the case.



The most prominent visual effect is how we see larger bubbles in the lower halves of the charts; this indicates the big changes in the Chinese market led to larger percentage changes in the U.S. market when the Chinese markets were at lower price levels.

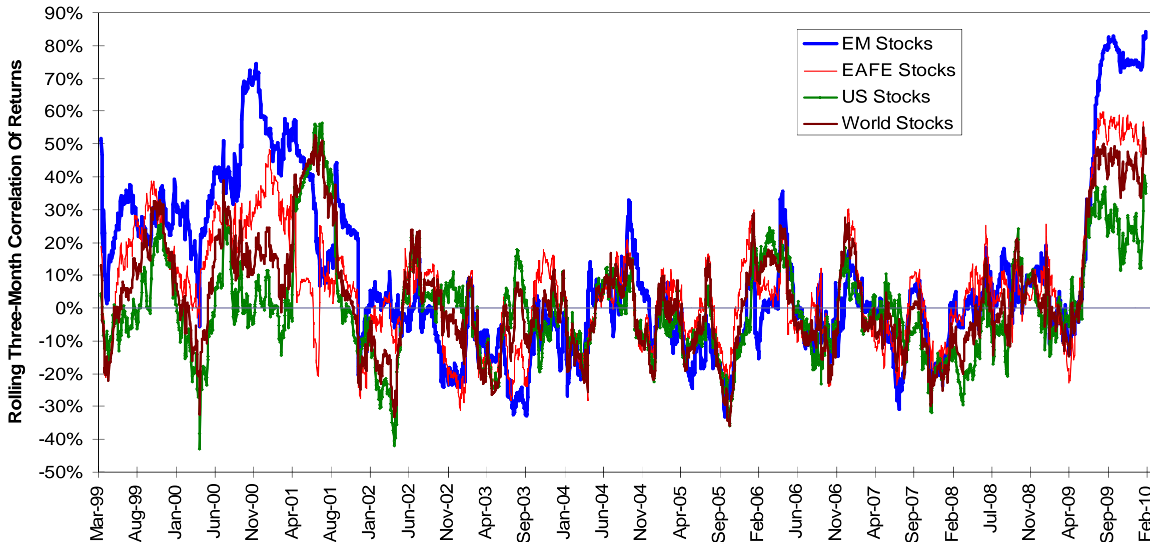
But if you can lie with statistics, all statisticians know your eyes lie. You have to run the numbers at some point. We need to compare whether these large close-to-open changes in the U.S. are in fact different from the close-to-open changes on all other days. The effect is skewed: While we can be 99.1% confident large negative changes in the A-shares produce a different close-to-open response in the U.S., we can be only 70.1% confident for large positive changes in China having this effect. Comparable figures for the B-share index are 88.5% and 73.9%.

The results can be summarized as U.S. investors are not phased by large gains in either Chinese index and are somewhat willing to ignore large drops in the B-shares. It is the large drops in the more sedate A-share index that scare American investors.

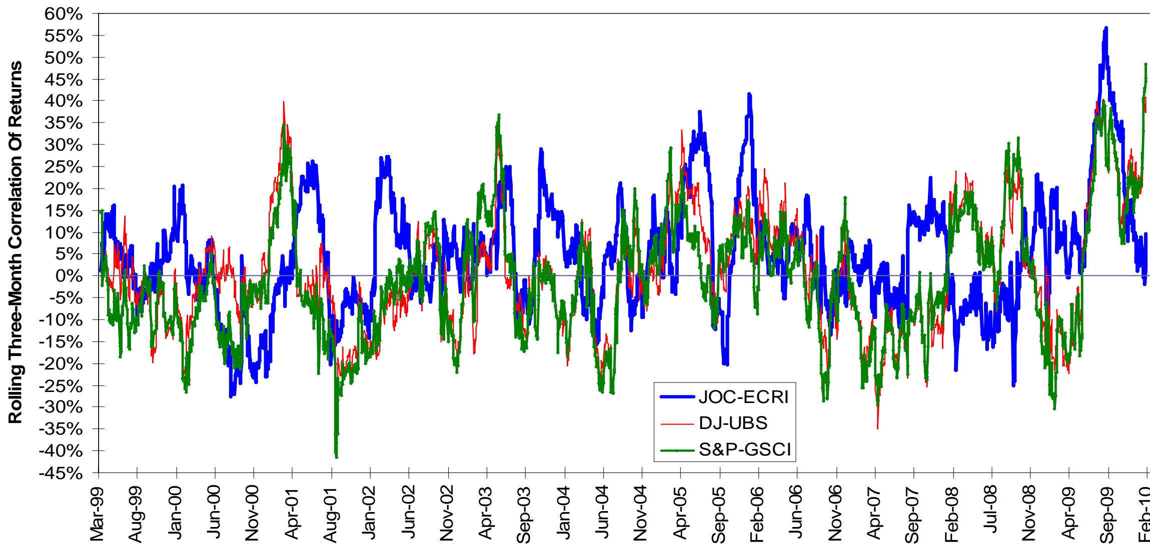
Asset Impact

Let's shift now to the question whether longer-term changes in Chinese markets are related to changes in other asset classes. Here we will return to an analytic structure introduced in January 2010 (see "Crisis Trading"). The rolling three-month correlation of returns from the total return on the MSCI China Free index will be mapped against those for major equity, fixed-income and materials indices. The Journal of Commerce-Economic Cycle Research Institute index is price-only; it has no total return series.

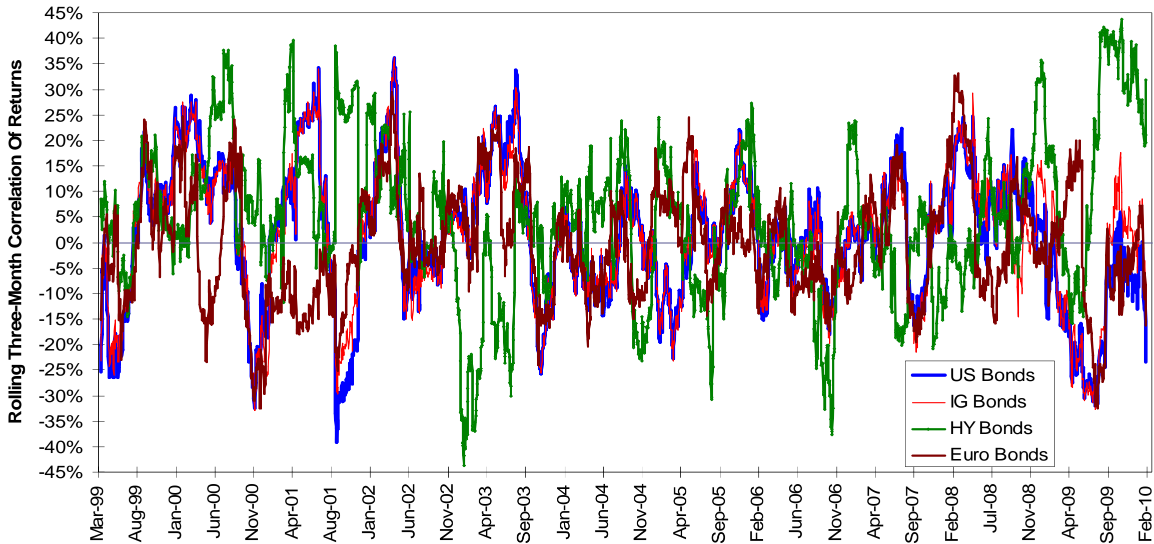
First, let's take a look at the correlation between China and equity indices including the MSCI Emerging Markets Free, Europe-Australasia-Far East (EAFE), World Free and U.S., all expressed in USD terms. Something quite significant happened at the 2009 market lows. The rolling correlation of returns against China exploded higher and in general unison with the Emerging Markets index leading the way followed by the EAFE. The role of China in leading global equity markets out of a bear trough was greater than commonly realized.



Next, let's look at the correlation with the total return indices for the Dow Jones-UBS and S&P-GSCI indices and the JOC-ECRI index. Once again, the story is the same: The rebound in Chinese equities was accompanied by a straight-up move higher in the correlation against the materials indices. The JOC-ECRI index' correlation of returns separated from those of the two tradable indices at the start of 2010.



Finally, let's do a similar comparison against the total return indices for U.S. government bonds, Pan-European bonds, and for U.S. investment-grade and high-yield bonds. Here high-yield bonds, which by definition are more equity-like and riskier (see "You Do Not Get Rewarded For Risk," February 2010), jumped into a strongly positive correlation of returns while the other bond indices' total returns remained negatively correlated against Chinese stocks. We can conclude the rally in China corresponded to an end to the flight-to-safety in the spring and summer of 2009 and to a flight toward higher-risk corporate bonds.



Nothing ever makes the life of an economist and market analyst easier. For years, the sheer size of the U.S. economy and its financial markets meant the first duty of any commentator was to understand the U.S. and then decide whether other markets were ahead, behind or in synch with American cycles. This is no longer the case. The rapid turns of events in the past decade have thrust China to the fore.

Now if we could just get a similar quality and quantity of information from China's statistics mills as we get from American ones, life would be easy.