QDII: Diversification Benefits for

Chinese Investors | October 2007

Introduction

RESEARCH BULLETIN

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With the recent relaxation of the Qualified Domestic Institutional Investors (QDII) rules in China, institutional investors in China are increasingly able to invest in equity markets outside the country. Here we address to what extent Chinese institutional investors can obtain diversification benefits from investing internationally. We also consider the implications of a potential appreciation in the Chinese currency.

Performance and Risk Characteristics of the China A Market

Figure 1 shows the performance of the MSCI China A index since December 2000, against the MSCI All Country World Index (ACWI) which covers 23 developed markets and 25 emerging markets around the world.





For the entire period shown, the MSCI ACWI recorded an annualized return of 8.0% while the corresponding return for the MSCI China A Index was 20.9%, both in US dollar terms. The higher return was largely caused by the sharp rise of the China A market since the fourth quarter of 2006. The China A market is substantially more volatile than the global market. For the same period the volatility for the China A market was 26.8% and for the MSCI ACWI was only 13.4%. The higher return of the China A market therefore came at the cost of substantially higher risk.



0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 -0.1 -0.2 Nat 03 JUN-03 Seros 080.03 Maros Junos JUNOO MaroA JUNOA ,Sr Ś Ś 0^{eci} ୢେଟ୍ 0°°C 000 Nat 000 Ser Ser No MSCI World (Developed Mkts) MSCI Emerging Mkts MSCI All-Country World

Figure 2: Correlations between MSCI China A Index and Major MSCI International Equity Indices

Figure 2 above plots the last 24 months of correlations between the MSCI China A index and other MSCI International Equity Indices. For the MSCI World (Developed Markets) and MSCI ACWI Indices, the correlation was low throughout the sample period and did not exceed 0.5. As for the MSCI Emerging Markets Index, the correlation with the MSCI China A Index exceeded 0.5 only for a brief period in 2005 and early 2006. From a portfolio construction perspective, these low correlation levels imply that the inclusion of global equities into a portfolio with Chinese equities could potentially help to diversify risks and lower the volatility of the overall portfolio.

The Currency Issue

From a risk perspective, there seem to be substantial potential benefits. However, from a returns perspective, many investors have raised concerns over the a potential appreciation of the Renminbi relative to the US dollar. This uncertainty has had a dampening effect on the incentive for Chinese QDII investors to invest overseas, particularly given that the domestic market is performing well.

The decision whether to venture into foreign equity markets is likely to be part of a long-term strategy for Chinese institutional investors, Therefore rather than trying to predict the level of appreciation for Chinese currency over the short to medium term, it is more meaningful to consider the potential appreciation over a longer term. The implicit exchange rate for a 10-year non-deliverable forward (NDF) is now 6.50, which implies an expected 14.2% appreciation from the level at the end of July 2007¹. Over a 10-year horizon, a 14.2% appreciation translates into an average annual appreciation of 1.5% per annum. Thus we adjust the expected returns for global equities, which are based on the US dollar, downwards by this value in order to factor in this possible appreciation of the Renminbi. This is implemented for the analysis that follows.

¹ NDF value as at August 8, 2007.



Diversification Benefits

Now assuming the long-term appreciation of the Renmimbi, we look at the risk-return profile for a portfolio that diversifies into foreign equity. Consider a portfolio that invests in either Chinese cash, China A stocks, or global equities. The tradeoff between them in the risk-return space is shown in Figure 3 below. Note that the expected returns and risk levels used in this analysis are simply based on historical data over the sample period from January 2001 – July 2007. The expected returns used in this example are 6.3% for the MSCI All Country World Index and 19.2% for the MSCI China A Index. Volatility levels are assumed to be 13.4% for global equities and 26.8% for China A.

Figure 3: Diversification Benefits from Investing Overseas



Note: Returns of MSCI All Country World Index (AWI) in USD are revised downwards by 1.5% per annum to reflect the expected Renminbi appreciation. For point C, the associated risk-free rate is 3.33%, which is the one-year deposit rate drawn from the International Monetary Fund's International Financial Statistics: bank rate/discount rate.

A Chinese investor currently investing only in domestic equities is at the point marked "MSCI China A". If he moves all his investments into global equities he would move to the point denoted "MSCI All Country World", where he would have lower returns but lower risk. These two points trace out an efficiency frontier, which captures the risk-return tradeoff from mixing China A stocks and global equities in varying proportions. Alternatively he could also place all his investable funds into cash in China, which would be represented by point C.

Point M, which is the tangency point between the efficiency frontier and the cash line, denotes the optimal mix between Chinese (2/3) and international stocks (1/3). At this point the investor has a lower expected return as compared to investing fully in domestic stocks, but on a risk-adjusted basis he stands to gain. This is because the risk-adjusted return that he can expect from portfolio M is higher than the point marked "MSCI China A". This may be seen graphically from the fact that the latter point is below the cash line. Thus even with a possible appreciation of the Renminbi, this stylized example given long-term historical rates shows that there may be potential diversification benefits for Chinese investors to consider foreign investment.

The expected returns for the China A markets that were used above are based on the average returns over the last several years. However, much of the strong performance by China A stocks occurred in the last two years (see Figure 4 below). If we exclude 2007, the average annual return for the six years from 2001 to 2006 is only 11.3%. If we further exclude



2006, this figure drops to -12.0%. Given the strong run over the last two years, which may not be sustainable in the long run, the return of the China A market going forward may therefore potentially be more modest compared to the 19.2% assumed in the analysis of the preceding section.



Figure 4: Annual Return of MSCI China A Index

If a lower expected return is used for the China A market, the optimal portfolio (point M in Figure 3) would allocate an even high percentage to global equities.

Conclusion

Given the relaxation in QDII rules, institutional investors in China are increasingly free to invest in equity markets overseas. This short note considers the risk-return tradeoff of international diversification factoring in a potential appreciation of Renminbi. The results show that there may be potential diversification benefits for Chinese investors in investing in the global equity markets.



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