Equity Valuation in Mainland China and Hong Kong: The Chinese A-H Share Premium

Zhijun Zhao
Institute of Economics, Chinese Academy of Social Sciences, China
Hong Kong Institute for Monetary Research

Yue Ma
Economics Department, Lingnan University, Hong Kong, China, and
Centre for Macroeconomics Research, Xiamen University, China
Hong Kong Institute for Monetary Research

Yuhui Liu
Institute of Finance & Banking, Chinese Academy of Social Sciences, China

August 2005

Summary

Despite their identical rights in sharing earnings, the prices of A-shares in mainland China have been persistently higher than their corresponding H-shares in Hong Kong. The IPO price premium in mainland China has been consistently higher than anywhere in the world. What are the factors fundamentally and institutionally behind this phenomenon and what are the implications for the development of mainland China's capital market?

We start with an investigation of the differences in the fundamental factors that may generate the A-share and H-share price discrepancies. One of the important fundamental factors is the cost of capital. Mainland China has a closed financial market. The interest rate of 28-year Treasury bond is considered as the cost of capital. In Hong Kong there has not been such a long-term Treasury bond issued correspondingly, so we applied the US long-term Treasury bond interest rate as the risk-free rate faced by Hong Kong investors, because Hong Kong's currency is pegged to the US dollar and is fully convertible. Hence, the difference in long-term interest rates to maturity between the mainland and Hong Kong is mainly attributed to the separation of markets and to inconvertibility of the Chinese currency renminbi.

Through investigating the valuation models of DDM (dividends discount model), RIV (residual income valuation) and DCF (discounted cash flow) in theory and in practice, we find that the RIV model performs better than the DDM and DCF models in evaluating the fundamental value of A-share stocks. However, the assumptions of perfect competition and no-arbitrage are inappropriate for Chinese transitional financial market, because the market price may systematically deviate from DDM or DCF based fundamental values.

According to our estimations, about 16.6% of the price difference between A-shares and H-shares can be explained by the capital cost difference.

Although the capital cost differential can explain partly why investors in Hong Kong and mainland China evaluate the same company differently, it cannot explain all the price differentials between the two markets. Besides the capital costs, the following four institutional factors also account for the price differentials.

Firstly, there are systematic shortages of supply of equities in mainland stock markets. Chinese security supervision and management institutions are empowered to control the scale of stock issue, leading to a larger demand for stocks than supply. To issue stocks successfully, companies deliberately overestimated their future earning ability, which misled investors and caused excessive demand.

Secondly, when the speculative motive dominates stock markets, stock prices could be driven to too high a level over their fundamental values. In the early stage of the development of the mainland stock market, since investors faced very limited supply of stocks, speculative demand for stocks was strong enough to support the overpriced stock markets. Both the high IPO premium and the gap between market price and fundamental value show that speculative demand is considerably strong.

Thirdly, the great price premium also originates from the abnormal behaviours of Chinese investors. Institutional investors, especially the big ones, in the mainland are basically funded and organised by state-owned enterprises (SOEs), stated-owned banks (SOBs) and other government institutions. They are directly or indirectly owned or controlled by the state. Because of unclear ownership of state-owned institutions and lack of a proper management and supervisory system, when the financial institutions make losses, the state as the owner of the assets bears the most losses. Insiders do not take responsibility and there is no mechanism to punish those who incurred the losses. As a result, managers of institutional investors actually were encouraged to take risks. Once this type of investor dominates the stock markets, the stocks price will be driven to a very high level, leading to bubbles.

Fourthly, unrealistic optimistic expectations regarding the performance of listing companies also contribute to the high price premium. Many investors don't understand deeply the mechanism of the Chinese economy and mistakenly believe that they can share the benefits of the fast growth by accession into the capital market. However, it is well known that most of the mainland listing companies were reorganised from SOEs. The government stressed only the financing function of the capital market instead of its allocation function for financial resources. This leads the scarce resources to be allocated to less efficient SOEs.

Finally, we discussed the policy implications of reforming the financial institutions and markets, state-owned listing companies, and educating the individual Chinese investors.