Journal of Applied Economics and Business Research
JAEBR, 1: 53-63 (2011)

The Causal Relationship between Dual-listed A-shares and H-shares in China: An Error Correction Model

Michael Mau-Hung Chan[1]

Faculty of Finance, Shanghai University of Finance and Economics, China

The present paper intends to investigate empirically the causal relationship between the return of China A- and H shares over the period Sept 2007 to Jun 2009. In fact, the ultimate goal of the paper is to answer the question of whether the return of China A-shares has an impact on that of China H-shares. The paper utilizes the co-integration and error-correction model (ECM) to establish the causal relationship between the two indexes. The paper performs unit root test to test for the stationarity of the time series before applying the Engle and Granger's two-step and Johansen co-integration approaches to test the existence of the long-run linear combination between the two series. The unit root tests results show that the series are integrated of order one, I (1). The two series are stationary at their first difference. The Johansen co-integration test shows that there is a long-run equilibrium. The empirical results of the ECM show that there is a causal relationship between the two series. However, price disparity between A-and H-shares implies that the markets are not efficient enough. Based on this result, this paper suggests that the QDII and QFII schemes should be further expanded to improve the market efficiency.

Keywords: *A-shares, H-shares, Granger causality test, Error Correction Model, dual-listed.*

1. Introduction

Currently, companies incorporated in Mainland China can be listed on the Hong Kong stock exchange and one of the two Mainland Chinese stock exchanges. The shares they issued and traded in Hong Kong are regarded as "H-shares" while those issued and traded in Mainland China are regarded as "A-shares". H-shares are available to both Hong Kong residents and foreign investors, but A-shares are restricted to Mainland Chinese investors.

Research efforts have been made to analyze the factors that lead to the price disparity or convergence between A and H-shares (see Fong, Wong and Yong (2007); Miao and Peng (2007); Wang and Jiang (2004); Birtch and McGuinness (2005)). Instead of complementing the analysis made by these researches, this paper attempts to analyze whether there is any causal relationship between the two. In addition, an Error Correction Model (ECM) is constructed to help identify if there is a long run relationship between the two series, using the econometric tool, Eviews.

[1] Correspondence to Michael Mau-Hung Chan, E-mail: mauhung@hotmail.com

The paper is organized as follow: In Section 2, we discuss the institutional background of A- and H-shares and introduce the previous studies that form part of the background to our study. In Section 3, we present the results of empirical analysis relating to the causal relationship between A- and H-share returns. These include co-integration test, Granger-causal test, and the construction of ECM model. Section 4 summarizes our main conclusions and policy suggestions.

2. Background

China reopened its stock markets in the early 1990s. The Shanghai Stock Exchange (SHSE) opened on 26 November 1990 while the Shenzhen Stock Exchange (SZSE) opened on 11 April 1991. Currently, there are three classes of shares issued by Chinese listed companies: A, B, and H shares.

The A-class shares are stocks listed locally in Mainland China. The prices of A-class shares are quoted in Renminbi (RMB) and generally, only domestic investors are allowed to trade them.

The B-class shares are also stocks listed locally in Mainland China, but designated for both foreign and domestic investors with appropriate foreign currency dealing accounts. The shares are denominated in Renminbi and payable in foreign currency (US dollars for Shanghai B-shares and Hong Kong dollars for Shenzhen B-shares).

H-class shares are stocks for companies that are incorporated in Mainland China but listed on the Hong Kong stock exchange, although there are now some Chinese stocks traded on the New York, Singapore and London stock exchanges. These shares traded in Hong Kong are denominated in Hong Kong dollars. Most H-class share companies are former China State-Owned Enterprises (SOEs) that are in the process of privatization. These companies operate and have their headquarters in Mainland China. Many H-share issuing companies are dual-listed. That is, they simultaneously listed A-shares on either the SHSE or the SZSE.

3. Literature Review

There are research efforts in understanding the relationship between dual-listed A and H shares. These researches mainly focus on the price convergence between dual-listed A and H shares, the volatility of the two markets.

Miao and Peng (2007) compare the volatility of the A-share market China with that of the H-share market in Hong Kong between 2000 and 2007. They find that A-share market is more volatile, due to the large presence of individual investors and inadequate sophistication of the trading mechanism.

Wang and Jiang (2004) analyze Chinese A- and H-shares using the data from 1994 to 2000, by constructing an ARMA(1,1)-GARCH(1,1) model and they find a large time varying H-share price discount relative to A-shares, and they explain this in terms of location of trade, ownership restrictions and market liquidity.

Birtch and McGuinness (2005) examine the 2001-2005 price convergence in the A- and H-shares of Chinese state-owned enterprises, and they found that there was a marked contraction in the mean A-to H-price relative, whereby A-price generally softened and H-price soared. The research suggests that expectations surrounding the likely deployment of a qualified domestic institutional investor (QDII)[2] scheme were one of the factors leading to the above-mentioned phenomenon.

Peng, Miao and Chow (2007) agree that the liberalization of QDII investment leads to the convergence of A- and H-shares. They further explain that informal channel to trade A- and H-shares is also a reason for the convergence, since Mainland and Hong Kong investors can shift funds through informal channels, although there are legal restrictions on the trade. Fong, Wong and Yong (2007) complement the analysis of the changes in the price disparity by Peng *et al*. (2007), and they suggest that the disparity is caused by a combination of both micro and macro factors.

4. Empirical Analysis

In this section, the investigator presents the methodology and the process of building an error correction model (ECM) in order to treat the relationship between the A-shares and H-shares series. ECM model is an approach that was first adopted by Sargan (1964) and developed and popularized by Engle and Granger (1987). It is based on the assumption that two series sometimes exhibit an equilibrium relationship that ultimately determines their short- and long-run behavior.

There have been relatively new studies which involve the application of techniques of co-integration and ECM models (see Lau, To and Zhang (2010); Bashier and Bataineh (2007); Maniatis (2009) and Oyekale (2007)).

4.1. Data

The data consists of 510 daily measurements of the Hang Seng China AH (A) Index and the Hang Seng China AH (H) Index. Data adopted in this research are obtained from the Hang Seng Indexes Company Limited. Constituents list of the China AH series is presented in Appendix 1.

The Hang Seng China AH Index Series (China AH Series) was launched on 9 July 2007.The Series includes the AH-Premium Index, China AH (A+H) Index, China AH (A) Index, as well as China AH (H) Index.

The Hang Seng China AH (A) Index ("AH (A) Index") is part of the Hang Seng China AH Index Series which comprises the largest and most liquid mainland China companies with both A-share and H-share listings ("AH Companies"). The index is designed to track the price performance of the AH Companies in the A-share market.

The Hang Seng China AH (H) Index ("AH (H) Index") is part of the Hang Seng China AH Index Series which comprises the largest and most liquid mainland China companies with both A-share and H-share listings ("AH Companies"). The index is designed to track the price performance of the AH Companies in the H-share market.

Hong Kong, Shenzhen and Shanghai are all in the same time zone, and the markets trade from Monday to Friday. The trading hour in Hong Kong is between 10:00am and 4:00 pm while those in Shenzhen and Shanghai trade between 9:30am to 3:00pm. The trading hours in these markets overlap each other to a large extent. However, the trading days in Hong Kong and Mainland markets are not completely consistent due to different general holidays in the two regions. In order to ensure the consistency of the sample series, the paper adopts the adjustment method suggested by Chen, Firth and Rui (2002). When data are

[2] Qualified Domestic Institutional Investors (QDII) scheme refers to the scheme that allows Mainland financial institutions with foreign exchange to invest in capital markets such as shares and bonds outside the Mainland such as Hong Kong under certain conditions.

unavailable due to general holidays, the index level is assumed to stay the same as that on the previous trading day.

4.2. Preliminary Data Analysis

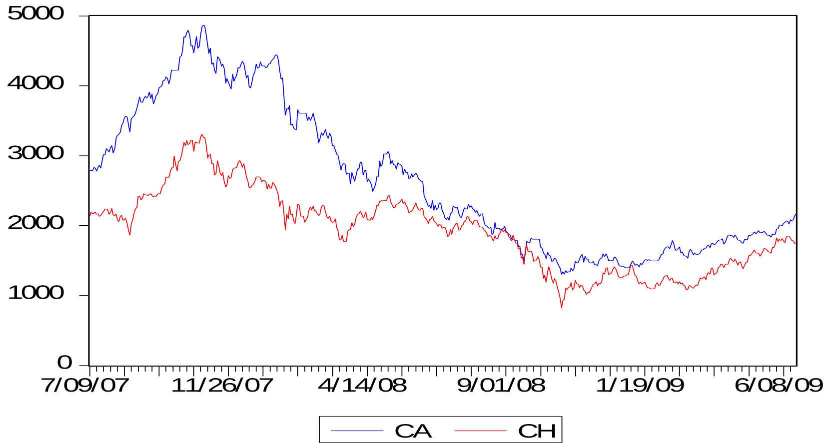

Figure 1. Line Graph of CA and CH series

From Figure 1, we can see that the China A-shares and H-shares closing indexes generally share stochastic trends and move in a regular pattern. This implies that there may be a co-integration relationship between the two series.

4.3. Stationarity Test

Sometimes financial time series data are non-stationary, but appear to be integrated. Regression involving non-stationary data lead to exaggerated results and spurious regression problem (Granger and Newbold, 1974; Phillips, 1986). The use of non-stationary data often produces empirical results in which the R^2 appears to be high, but the Durbin-Watson statistic is quite low. In order to avoid spurious regression problem, we perform unit root tests on the two series.

Unit root test on CA

In order to test the stationarity of CA more precisely, we perform a unit root test on the CA series. In this paper, we make use of a unit root test provided by Dickey and Fuller (1979, 81). Since CA series is a random walk process, we choose "None" to include in the test equation in Eviews. For the number of lagged difference term to include, we start from "1" to "4". As results, AIC value for p=1 is 11.28617, p=2 is 11.29161, p=3 is 11.28030 and p=4 is 11.28389.

Table 1: Preliminary result for ADF tests on CA series

ADF Test Statistic	1% Critical Value*	5% Critical Value	10% Critical Value
-0.602331	-2.5697	-1.9401	-1.616

*MacKinnon critical values for rejection of hypothesis of a unit root.

Table 2. Preliminary result for unit root test on CA series

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CA(-1)	-0.000643	0.001068	-0.602331	0.5472
D(CA(-1))	-0.011651	0.044218	-0.263499	0.7923
R-squared	0.000576			
Adjusted R-squared	-0.00138			
S.E. of regression	68.18351			
Sum squared resid	2375634			
Log likelihood	-2892.903			
Durbin-Watson stat	1.999483			
Mean dependent var	-1.113918			
S.D. dependent var	68.13652			
Akaike info criterion	11.28617			
Schwarz criterion	11.3027			
F-statistic	0.294608			
Prob(F-statistic)	0.587519			

Included observations: 513 after adjusting endpoints

As a result of analysis, the smallest AIC value appears when *p*=3 (11.28030). Therefore, we confirm that *p*=3 and perform the ADF again. As a result of ADF test on CA, the ADF value (-0.622821) is greater than the MacKinnon critical value (for 10%, the value is -1.6160) even at the 10% significant level. Therefore, we do not reject the null hypothesis. This implies that the CA series has a unit root and the series is non-stationary.

We then perform another unit root test on DLCA. We choose *p*=2 when the smallest AIC value appears at this *p* value. The result of the ADF test on DCLA shows that ADF value (-11.94232) is smaller than the MacKinnon critical value (for 1%, the critical value is -2.5697) at 1% significant level. We therefore reject the null hypothesis and conclude that unit root does not exist and DLCA is stationary.

Unit root test on CH

The process of performing unit root test on CH is basically the same as that on CA. we first observe the correlogram of CH and that on DLCH (CH after taking natural log and performing first difference). The results show that CH is non-stationary while DLCH is stationary.

We then perform ADF test for the existence of unit root in CH and DLCH series. We choose *p*=1 for both the CH and DLCH series since the respectively AIC values are the smallest at *p*=1. As a result of ADF test on CH, we find that the ADF test statistic (-0.591064) is greater than the MacKinnon critical value (for 10%, the critical value is -1.6160) at 10% significance level. We therefore cannot reject the null hypothesis and it implies the existence of a unit root. The CH series is non-stationary.

As a result of ADF test on DLCH, we find that the ADF Test Statistic (-15.88561) is smaller than the MacKinnon critical value (for 1%, -2.5697) at 1% significant level. We can reject the null hypothesis and conclude that there is no unit root and thus, the DLCH series is stationary.

4.4. Co-integration Test

Cointegration is an econometric term to describe the relationship of time series variables. If two series are themselves non-stationary, but a linear combination of them is stationary, then the series are said to be cointegrated (Engle and Granger, 1987). Having completed the unit root test above, we can conclude that both CA and CH series are integrated of order one I (1), which meets the prerequisite of co-integration test. That is, the first step of co-integration test is done.

We now proceed to the second step, which requires that the two series be co-integrated. That is, to examine if there exists a long-run relationship between the two series. In our case, the purpose is to determine whether there is a long-run relationship between DLCA and DLCH.

Engle and Granger's Two Steps Approach

Engle and Granger (1987) introduce a two-step approach to test for co-integration. The first step is to test the order of integration to see variables have the same order. The second step is to estimate the co-integration equation by the Ordinary least squares (OLS) approach and use the ADF test for the stationarity of residuals obtained from these regressions.

The estimated co-integration equation is:

$$CH = 582.706 + 0.515CA \quad (1.1)$$

$$t = (23.526)\ (58.560) \quad R^2 = 0.870.\ DW = 0.056$$

Table 3. Output of Co-integration Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	582.7058	24.76833	23.52625	0
CA	0.514672	0.008789	58.55976	0
R-squared	0.869871			
Adjusted R-squared	0.869617			
S.E. of regression	205.1566			
Sum squared resid	21591776			
Log likelihood	-3471.495			
Durbin-Watson stat	0.055998			
Mean dependent var	1933.068			
S.D. dependent var	568.1667			
Akaike info criterion	13.4893			
Schwarz criterion	13.50578			
F-statistic	3429.245			
Prob(F-statistic)	0			

Included observations: 515 after adjusting endpoints

In order to conduct a unit root test on the residual more conveniently, we retain the residual in a series called "u" and conduct a unit test on the residual series "u". The smallest AIC value appears when p=1 and the ADF test on residual of CA results that the ADF t-value (-2.358960) is smaller than the Mackinnon Critical Value (for 5%. -1.9401) at 5% significant level but greater than that at 1% significant level (the critical value for 1% is -2.5697). Therefore, we can reject the null hypothesis at 5% significant level and conclude that unit root does not exist in the residual series. and that it is stationary. In other words, residual series "u" is integrated of order 0. i.e. u ~ I(0) and co-integration relationship exist between the CA and CH series. Equation (1) is the co-integration equation with co-integration vector (1. -1.690).

Johansen Co-integration Test

Johansen (1991. 1995) provide another approach to test for co-integration. The Johansen approach can determine the number of co-integrated vectors for any given number of non-stationary variables of the same order.

The results reported in Table 4 suggest that the null hypothesis of no co-integration can be rejected at 5% significance level. It can be seem from the Likelihood Ratio (L.R.) that we have two co-integration equations. In other words, there exist two linear combinations of the variables. This echoes the results that we obtain by using the Engle and Granger approach.

Table 4. Results of Johansen Co-integration Test

Eigenvalue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value
0.19567	194.973	15.41	20.04
0.152365	84.14061	3.76	6.65

Series: DLCA DLCH
Lags interval: 1 to 4
*(**) denotes rejection of the hypothesis at 5%(1%) significance level
L.R. test indicates 2 cointegrating equation(s) at 5% significance level

4.5. Granger Causality Test

Granger causality test is a technique for determining whether one time series is significant in forecasting another (Granger. 1969). A time series X is said to Granger-cause Y if it can be shown through a series of F-tests on lagged values of X (and with lagged values of Y also known) that those X values predict statistically significant information about future values of Y.

In this paper, we aim at examining whether or not there is a causality between the A-shares companies listed in Shanghai and their counterparts H-shares companies listed in Hong Kong. That is. wehther or not there is a Granger-causality between CA and CH.

Table 5. Results of Granger-Causality Test

Null Hypothesis:	Obs	F-Statistic	Probability
DLCH does not Granger Cause DLCA	509	1.82923	0,10551
DLCA does not Granger Cause DLCH		3,28291	0.0063

The null hypotheses of the Granger-Causality test are:

H_0: $X \neq Y$ (X does not granger-cause Y)

H_1: $X \neq Y$ (X does Granger-cause Y)

We find that the F-statistics are large and the probability values are all close to 0 for Ho of “DLCA does not Granger Cause DLCH". Therefore, we reject the Ho and conclude that DLCA does Granger-cause DLCH.

As for the Ho of “DLCH does not Granger Cause DLCA”, we cannot reject the Ho since the F-statistics are rather small and most of the probability values are close to or even greater than 0.1 at the lag length of 5. Therefore, we accept the Ho and conclude that DLCH does not Granger Cause DLCA.

4.6. Error Correction Model

From the above conclusion that at 5% significance level CA and CH series are co-integrated. That is, there is a long-term, or equilibrium. relationship between the two. Of course, in the short-run there may be disequilibrium. Therefore, one can treat the error term in (1.2) as the"equilibrium error" (Gujarati. 2004). We can use this error term to tie the short-run behavior of DLCH to its long-run value.

We can now build an error correction model. The error term is the residue series "u" that we obtained from the co-integration equation in Section 3.4. In the Equation menu box, enter "dlca c u(-1) dlch" and obtain the result in Table 6.

Table 6. Output of Error Correction model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.0000758	0.001189	0.063734	0.9492
U(-1)	-0.0000139	0.0000058	-2.392532	0.0171
DLCA	0.835144	0.047052	17.74945	0
R-squared	0.385269			
Adjusted R-squared	0.382863			
S.E. of regression	0.026945			
Sum squared resid	0.371013			
Log likelihood	1129.737			
Durbin-Watson stat	1.975444			
Mean dependent var	-0.000287			
S.D. dependent var	0.0343			
Akaike info criterion	-4.384192			
Schwarz criterion	-4.359432			
F-statistic	160.1288			
Prob(F-statistic)	0			

Since the constant "C" with t-statistic<2, is statistically insignificant. We therefore, redefine the equation, and enter "DLCH U(-1) DLCA" to obtain the output in Table 7.

Table 7. Output of Modified Error Correction model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
U(-1)	-0.0000139	0.0000058	-2.394931	0.017
DLCA	0.835092	0.046999	18	0
R-squared	0.385264			
Adjusted R-squared	0.384063			
S.E. of regression	0.026919			
Sum squared resid	0.371016			
Log likelihood	1129.735			
Durbin-Watson stat	1.975426			
Mean dependent var	-0.000287			
S.D. dependent var	0.0343			
Akaike info criterion	-4.388075			
Schwarz criterion	-4.371568			
F-statistic	320.8777			
Prob(F-statistic)	0			

We now can obtain the ECM model in the form:

$$\Delta DLCH = \alpha_1 ecm_{t-1} + \alpha_2 \Delta DLCA + \xi_t \qquad (1.2)$$

Where, Δ denotes the first difference operator. ξ_t is a random error term;

ecm_{t-1} is the one-period lagged value of the error from the co-integrating regression;

α_1 estimates the speed of return to equlibrium after a deviation;

α_2 estimates the short run effect of an increase in DLCA on DLCH

By substituting the outputs we obtained above into (1.2). we get

$$\Delta DLCH = -0.0000139 ecm_{t-1} + 0.835 \Delta DLCA + \xi_t \qquad (1.3)$$

(-2.395) (17.768)

ECM equation (1.2) suggests that DLCH depends on DLCA and also on the equilibrium error term. If the latter is nonzero, then the model is out of equilibrium. The negative sign of the coefficient of ecm_{t-1} implies that ΔDLCH will be negative to restore the equilibrium. That is. If, $DLCH_t$ is above its equilibrium value, it will start falling in the next period to correct the equilibrium error. The absolute value ofα_2 decides how quickly the equilibrium is restored.

As (1.3) shows, short-run changes in DLCA have a positive impact on short-run changes in DLCH. The coefficient on ΔDLCA indicates that an increment of DLCA by 1% is followed by a DLCH increment by 0.835%.

5. Conclusion

An attempt has been made in this paper to examine empirically the causalrelationship between the China A- and –H shares. The stationary test (unit root test) provides that the variables are stationary at their first difference. The Engle – Granger approach and the Johansen test revel that the variables are co-integrated and have a stable long-run relationship. The presence of the co-integration between the two series allows the use of Granger Causality Test to determine the causality direction between the two series.

The results show that there is a causal relationship run from China A-shares to China H-shares. Furthermore, the causal relationship runs from A-shares to H-shares but not from China H-shares to China A-shares. In addition, the ECM model suggests that there is both short run and long run relationship between A –and H-shares.

Comparing to other literature that mainly explain the price convergence between dual-listed A-and H-shares, the results of this paper provide an in-depth look into the causal relationship between the different shares of dual-listed companies. In this sense, this research allows us to draw the conclusion that the trends of H-shares are led by that of A-shares.

References

Bashier, A.A., Bataineh. T.M.. 2007. The Causal Relationship between Foreign Direct Investment and Savings in Jordan: An Error Correction Model. *International Management Review* 3:4,12-18.

Chen G.M., Firth. M., Rui, O.M. 2002. Stock Market Linkages: Evidence from Latin America. J*ournal of Banking and Finance* 26:6, 1113-1141.

Dickey, D. A. Fuller, W. A. 1979. Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association* 74, 427-431.

Engle, R. F. Granger, C.W.J. 1987. Cointegration and error correction: representation, estimation and testing. *Econometrica* 55, 251-276.

EViews 4. 1998 User´s *guide, Reference Manual, Quantitative Micro Software*, Irvine, California.

Fong, T., Wong, A., Yong, I. 2007. *Share price disparity in Chinese stock markets*, Hong Kong Monetary Authority Working Paper November 2007.

Granger, C.W.J., 1969. Investigating causal relations by econometric models and cross-spectral methods. *Econometrica* 37 3, 424–438.

Granger, C.W.J., P. Newbold. 1974. Spurious Regression in Econometrics. *Journal of Econometrics* 2, 111-120.

Gujarati D.N. 2004. *Basic Econometrics, Fouth Edition*, McGraw-Hill

Johansen, S. 1991. Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models. *Econometrica* 59, 1551–1580.

Johansen, S. 1995. *Likelihood-based Inference in Cointegrated Vector Autoregressive Models*, Oxford University Press.

Lau, M.C.K, To, C.K.M., Zhang, Z. 2010. Import demand response of MFA apparel/nonapparel fibers and cottons in the United States: a case study of China and Hong Kong. *Journal of the Textile Institute* 10, 223 -235.

Maniatis, P. 2009. Consumption and Income in Greece 1960-1994. Relationship using Error Correction Model. *The Business Review Cambridge*, 12, 226-232.

Miao, H., Peng, W. 2007. Why A Share Market Volatility is High? *China Economic Issues*, June 2007.

Oyekale, A.S.. 2007. Determinations of Agricultural Land Expansion in Nigeria: An Application of Error Correction Modeling ECM. *Journal of Central European Agriculture* 8:3, 301-310.

Peng, W., Miao, H., Chow, N. 2007. Price Convergence Between Dual-listed A and H shares *China Economic Issues*, July 2007.

Phillips, P.C.B. 1986. Understanding spurious regressions in econometrics. *Journal of Econometrics* 33, 311–340.

Press Release 30 Oct, 2009, Hang Seng Index Company Limited, Available at http://www.hsi.com.hk/HSI-Net/static/revamp/contents/en/news/pressRelease/20091030e.pdf (20 Jan, 2010)

Sargan, J.D. 1984. *Wages and prices in the United Kingdom: a study in econometric methodology. Quantitative Economics and Econometric Analysis.* Basil Blackwell, Oxford

Wang, S.S. Jiang, L. 2004. Location of trade, ownership restrictions, and market illiquidity: Examining Chinese A- and H-shares. *Journal of Banking and Finance* 28, 1273-1279.

Appendix

Appendix 1: Constituents of China AH Indexes

Code		Company Name	A/H Price Ratio (%)	FAF (%)		% Weighting in	
H share	A share			H share	A share	Price Index^	Premium Index
1065	600874	Tianjin Capital	300.70	100	30	0.07	0.04
* 2727	601727	SH Electric	284.67	100	7	0.41	0.32
* 991	601991	Datang Power	261.31	100	55	1.31	0.71
1071	600027	Huadian Power	254.79	100	35	0.28	0.16
1055	600029	China South Air	250.84	100	35	0.39	0.25
* 358	600362	Jiangxi Copper	245.73	100	25	0.96	0.76
588	601588	Beijing N Star	236.25	100	55	0.27	0.15
* 753	601111	Air China	205.62	50	20	0.52	0.38
317	600685	Guangzhou Ship	199.18	100	50	0.16	0.11
* 386	600028	Sinopec Corp	197.97	100	6	3.71	3.26
* 2883	601808	China Oilfield	192.93	100	20	0.49	0.41
* 2600	601600	CHALCO	186.90	100	35	1.97	1.48
* 1171	600188	Yanzhou Coal	184.15	100	15	0.75	0.69
* 2866	601866	CSCL	172.41	95	30	0.49	0.40
548	600548	Shenzhenexpress	171.16	90	30	0.12	0.10
* 902	600011	Huaneng Power	168.28	100	35	0.95	0.74
1812	000488	Chenming Paper	166.42	100	75	0.20	0.15
525	601333	Guangshen Rail	155.90	100	50	0.41	0.31
* 1919	601919	China COSCO	153.02	100	30	1.34	1.12
* 857	601857	PetroChina	152.75	100	3	6.25	5.98
* 1898	601898	China Coal	139.73	100	20	1.62	1.52
* 1138	600026	China Ship Dev	138.97	100	30	0.52	0.49
* 2899	601899	Zijin Mining	133.19	100	55	2.04	1.79
2338	000338	Weichai Power	132.38	100	45	0.66	0.58
* 998	601998	CITIC Bank	123.39	55	9	1.26	1.25
1072	600875	Dongfang Elec	123.29	100	40	0.49	0.45
1766	601766	CSR	115.50	100	35	0.60	0.58
* 1088	601088	China Shenhua	111.54	100	15	4.85	4.86
* 168	600600	Tsingtao Brew	111.03	65	40	0.50	0.50
* 390	601390	China Railway	106.57	100	30	1.36	1.38
* 323	600808	Maanshan Iron	104.83	100	35	0.42	0.43
* 3988	601988	Bank of China	103.05	100	4	8.18	8.56
* 177	600377	Jiangsu Express	101.65	100	15	0.27	0.29
* 3968	600036	CM Bank	99.68	100	100	8.39	8.82
* 939	601939	CCB	98.92	30	100	11.39	11.96
* 3328	601328	Bankcomm	97.48	60	65	6.8	7.25
763	000063	ZTE	97.41	100	60	1.17	1.26
* 347	000898	Angang Steel	96.95	100	25	0.86	0.92
* 914	600585	Anhui Conch	95.84	100	35	0.99	1.07
* 2628	601628	China Life	94.70	100	8	7.35	7.8
* 1186	601186	China Rail Cons	94.48	100	25	1.05	1.14
* 2318	601318	Ping An	94.38	55	80	7.68	8.4
* 1398	601398	ICBC	91.90	75	6	10.5	11.18

Source: Hang Seng Indexes Company Limited