

# IHS Markit Fair Value Case Study

Chinese Lunar New Year February 2021

#### Fair Value Event: Chinese Lunar New Year, January 2021

#### **IHS Markit Fair Value in Review**

The Lunar New Year Holiday in China called for the Shanghai and Shenzhen Stock Exchanges to be closed from February 11 through February 17. In the absence of readily available quotes for Chinese securities during this holiday, IHS Markit provided fair value prices for the securities to enable investors, primarily mutual funds with Chinese exposure, to accurately calculate their end of day net asset values (NAV). This ensures that long-term investors in the fund benefit from the most accurate share price possible.

#### **IHS Markit Fair Value Results**

Throughout the Chinese holiday, IHS Markit continued to provide fair value prices for 2500+ unique Chinese securities that were calculated using a stepwise multi-factor methodology. Global, regional and sector, and entity-specific factors were used to indicate macro and micro level risks. The most common input factors selected by IHS Markit's methodology for Chinese equities includes:

- iShares China Large-Cap ETF
- Chinese ADRs
- S&P Futures, Hang Seng Futures
- Currency HKD.USD
- Sector ETFs

Table 1 highlights average directional correctness, closer to open, and arbitrage reduction for the top 500 Chinese stocks by market cap during the national holiday. The tables showcase our fair value capabilities across the Shanghai and Shenzhen Stock Exchanges.

Table 1: Average Accuracy Statistics for China securities (February 17)

Exchange	Equity Count	Directional Correctness	Closer to Open	Arbitrage Reduction
Total	500	82.62%	80.37%	25.38%
SHH	283	79.06%	77.26%	21.49%
SHZ	217	87.26%	84.43%	30.04%

Table 2 displays the accuracy for the top 500 Chinese securities grouped into NAV format for the last day of the Lunar New Year holiday. Fair Value clients often gauge performance with weighted stats to replicate their fund movements. In this case, we are treating the top 500 Chinese securities as the fund with weights in shares outstanding. Our new country level fair value service works in the same way.

Table 2: Top 500 Chinese Fund Level Stats (February 17)

Date	Weighted Close	Weighted FV	Weighted Open	AOR	FV Adj	Arbitrage Reduction
2/17/2021	\$8,999 B	\$9,041 B	\$9,174 B	194.67 bps	46.79 bps	24.03%

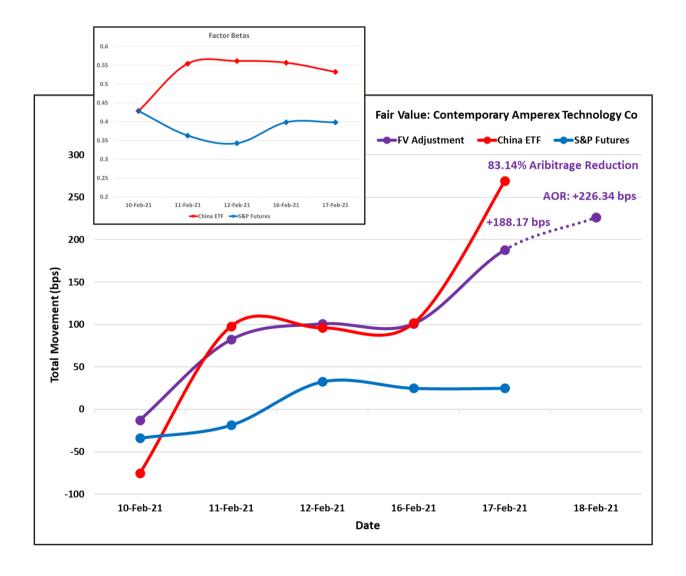
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## **Nightly Fitting and Multifactor Models**

On February 18th, IHS Markit's priced universe of Chinese securities opened 1.5% higher on average. The celebrations to begin the Year of the Ox brought positive market sentiment along with them.

One such stock that investors were optimistic about was Contemporary Amperex Technology Co Ltd. One of the largest Chinese firms by market capitalization and one of the largest firms in its sector in the world, CATL produces lithium-ion batteries for electric vehicles and energy storage systems.

Chart 1 displays the day over day fair valuations for Contemporary Amperex Technology Co Ltd along with the day over day movements for its two factors, the iShares China Large-Cap ETF and the S&P Futures. IHS Markit's multifactor regression model fits nightly to ensure optimal proxies and coefficients. The use of two futures with dynamic betas allows for a large capture of the movement in CATL over the Chinese Lunar New Year holiday.



## Significant movement captured for Large Caps

The Lunar New Year holiday was accompanied by Chinese market surges upon reopen. The multi-factor model from IHS Markit effectively captured these significant movements as it utilized the iShares China Large-Cap ETF (+2.62%) and the Hang Seng Index Futures (+3.44%) along with Chinese ADRs and sector ETFs to fair value these securities.

Table 3 highlights adjustments made on February 17 for large cap companies with significant movements.

Table 3 highlights some Large cap securities reflecting FV adjustment

Date	Name	Exchange	Adjustment	Arbitrage Reduction	Factors Used
17-Feb-21	Sinolink Securities	SHH	+196.95 bps	72.43%	China Large-Cap ETF, S&P Futures, Con Disc Sector ETF
17-Feb-21	China Merchants Bank	SHH	+170.24 bps	84.42%	S&P Futures, ADR
17-Feb-21	Great Wall Motor	SHH	+103.95 bps	70.06%	China Large-Cap ETF, S&P Futures, ADR
17-Feb-21	Shenzhen Mindray Bio- Medical Electronics	SHZ	+78.08 bps	64.80%	Hang Seng Futures, S&P Futures
17-Feb-21	Apeloa Pharmaceutical	SHZ	+132.78 bps	95.04%	China Large-Cap ETF, S&P Futures, Con Disc Sector ETF
17-Feb-21	Gree Electric Appliances Inc of Zhuhai	SHZ	+87.90 bps	94.95%	China Large-Cap ETF, S&P Futures
17-Feb-21	Shenzhen Yuto Packaging Technology	SHZ	+110.92 bps	88.39%	Hang Seng Futures, S&P Futures
17-Feb-21	Wuxi Lead Intelligent Equipment	SHZ	+116.73 bps	87.27%	China Large-Cap ETF, S&P Futures
17-Feb-21	Sunwoda Electronic Co	SHZ	+136.48 bps	98.61%	Hang Seng Futures, S&P Futures

IHS Markit's Fair Value service helps clients meet their regulatory and compliance requirements by providing daily fair value adjustment factors and prices for over 150,000 equity and fixed income securities. We provide security-level as well as aggregate-level fair value adjustment factors across global hourly snaps with the ability to add custom snap times tailored to client requests. To learn more, please visit: <a href="mailto:ihsmarkit.com/products/pricing-data-fair-value.html">ihsmarkit.com/products/pricing-data-fair-value.html</a> or contact: <a href="mailto:MK-FixedIncomePricingBusinessDevelopment@ihsmarkit.com">MK-FixedIncomePricingBusinessDevelopment@ihsmarkit.com</a>

# **Appendix**

**Actual Overnight Return**: The return of a security from its last close to its next open, regardless of how long the time gap may be.

**Directional Correctness**: occurs when a fair value price is in the same direction (+, -) as the actual overnight return of the underlying security. The values present in the document are the proportion of securities within a group that were directionally correct.

**Closer to Open**: whether a fair value price is closer to the next day open than the previous close. The values present in the document are the proportion of securities within a group that were closer to open.

**Arbitrage Reduction**: the amount of the movement in the underlying security that we captured using our Fair Value price. These values can be positive or negative, with 100% being full capture. For tables 1 and 2, the values are the average arbitrage reduction across the group.

**Market Cap Calculations**: To represent components of an index we use shares outstanding multiplied by either the close, fair value, or open price of a security. The result of this is an individual security's market cap at a given time. The sum of the securities' market caps within each index gives the total market cap at a given time. Domestic currencies are used for all calculations.