

7 July 2017

Office of General Counsel
ASX Limited
20 Bridge Street
Sydney
NSW 2000

Attention: Gary Hobourn

Dear Mr Hobourn

ASX Consultation Paper: ASX Equity Market Closing Price and Settlement Price Determination

Chi-X is grateful for the opportunity of providing a submission on the ASX Consultation Paper: ASX Equity Market Closing Price and Settlement Price Determination ('the CP').

This submission outlines:

- Possible uses of and the wider public/stakeholder interest in closing prices;
- Issues raised in relation to the two closing prices mentioned in the CP;
- The draft proposed text in Appendix A; and
- Future considerations.

1. The Uses of and Public Interest in Closing Prices

There are many potential uses for a closing price, including:

- (a) valuing a listed company;
- (b) compiling a proprietary index of public companies;
- (c) valuing holdings in a publicly listed company for a particular purpose (eg tax or portfolio performance);
- (d) providing a reference price for exchange traded and OTC financial products; and

- (e) providing a reference price for prudential and risk management measures including capital and clearing requirements for participants clearing products traded on ASX and Chi-X markets.

There is a varying degree of public and stakeholder interest in each of these uses. For some uses, these interests can be addressed by transparency surrounding the price and the methodology applied: for example a warning on the timeliness of the 'closing price' used may be sufficient. For other uses, the public and stakeholder interest may impact on the closing price methodology itself: for example prudential and/or risk management measures may require timely prices from all significant liquidity pools be considered.

Chi-X can provide over 25% of the daily trading (including auctions) in some of Australia's largest and most heavily traded public companies. For example, on the 28th of March 2017, Chi-X accounted for 29.23% of all order book trading in Telstra, including auctions. In some smaller companies, Chi-X may provide the majority of trading on a particular day. For example, on 6 July 2017, Chi-X provided 100% of the order book trading in 37 ASX listed companies and over 50% of the order book trading in 137 ASX listed companies. On days when an ASX outage occurs, Chi-X may provide the most timely market data for all Australian trading in ASX listed companies.

Public and wider stakeholder interests therefore may require that trading on Chi-X either:

- (a) be incorporated into the applicable methodology for any closing prices that have a significant public and wider stakeholder interest; and/ or
- (b) a transparent explanation be provided for why that trading is disregarded and what impact that may have on the utility of the price used by ASX.

Unfortunately, the CP indicates that ASX has had little or no transparent regard, when developing its closing price methodologies, to the public and wider stakeholder interests in Chi-X liquidity being considered when calculating a closing price. This is a serious flaw in any closing price methodology used for a purpose that has an important public interest factor such as the risk management and prudential regulation of clearing participants in the Australian equities market.

2. Two Closing Prices Considered by the CP

The CP considers two closing prices: an ASX Market Closing Price and an ASX Settlement Price. While the CP does not consistently define or analyse the possible uses of and public interest in each of these prices, it does segment them in a way which facilitates their separate consideration in this response to the submission.

- (a) ASX Market Closing Price

Appendix A of the CP contains the following definition:

"The ASX market closing price – published daily by ASX to reflect the last traded price executed on the ASX market".

This closing price exists exclusively for the commercial purposes of the ASX and it is therefore appropriate that ASX should be able to use a price set on an earlier business day in the event of an outage lasting one day or longer.

Importantly however, it is in the public and wider stakeholder interest that ASX provide a clear and prominent warning that the ASX market closing price may be stale and/or does not incorporate a significant percentage of trading on that day. This warning will enable users of the ASX Market Closing Price to consider whether it reflects the “market closing price”.

(b) Settlement Prices

Settlement prices are used by ASX Clear for calculating margin calls and for the calculation of theoretical prices for derivatives contracts to be used in the settlement-to-market process for those contracts. As a consequence, the use of incorrect or out-of-date prices can have a significant detrimental impact upon ASX Clear’s risk management and the prudential regulation of clearing and settlement participants. This in turn has a significant impact on the international reputation of Australian financial markets. Additionally, incorrect or stale settlement prices can be harmful to participants and their clients. In this context, it should be noted that the CP does not accurately portray the Canadian model for closing prices, where the framework provides for the use of the most timely closing price and is not restricted to trading on one market.

The CP notes that *“there may be scenarios where ASX Clear uses settlement prices that diverge from the ASX market closing price to value positions in order to effectively manage clearing house risks”*. Chi-X agrees that such divergence is appropriate, particularly when it is clearly apparent that the ASX market closing price is stale and the ASX CSPA for a business day could not be held due to an ASX outage. An extreme example would be where the ASX closing prices were set based upon the CSPA for the previous business day.

The CP states that *“The review did identify that the market would benefit from the publication on ASX’s website of what the ASX market closing price represents and the process that ASX Clear uses to establish the ASX settlement price”*. Chi-X is very supportive of ASX Clear’s intention to provide greater transparency.

The CP notes that in circumstances where ASX is unable to hold a CSPA due to an ASX outage scenario *“accurate pricing is even more critical as inaccurate or stale pricing may lead to ASX Clear holding insufficient initial margin and not adequately covering its market exposure, increasing the risk of losses to the clearing house”*. Chi-X is in total agreement with this view. As a consequence, it is difficult to understand why ASX Clear has failed to produce any empirical evidence to show that in the event of an ASX outage the ASX closing prices for the previous business day are more accurate than the closing prices on Chi-X determined at 4.20pm on the day of the ASX outage.

The table set out on page 9 of the CP fails to provide the degree of transparency that should be provided to markets cleared by ASX Clear, to market participants and to regulatory authorities. It notes that ASX Clear would use the ASX market closing price (which could have been determined on the previous business day) *“unless there was evidence that there had been a material market*

movement” but it fails to explain where that evidence would be gathered from and what would be considered material.

3. Appendix A - Draft text for the ASX Web Site

The proposed text for the ASX web site is of course of a matter for the ASX. However, it may be worthwhile to consider the following.

(a) Clear and consistent terminology

The introduction of the proposed web site text references “ASX market closing price” and “ASX settlement price” and states that these two prices may be different. The next paragraph states: *“The settlement price for exchange-traded options is derived from the underlying cash equity closing price, i.e. the settlement price for the underlying equity”*. It is not clear whether this sentence is conflating the “ASX market closing price” and the “ASX settlement price”, when the introductory text has identified that these two prices may in fact be different. This is not a purely theoretical issue given the background to the draft text is the ASX outage outlined at the top of page 4 of the CP and the fact that an ASX market closing price is not always the most timely closing price.

(b) Whether greater transparency can be provided on the methodology that will be used when the ASX market does not provide the most timely “closing price”

There is little or no transparency on the methodology to be employed when ASX market prices are not the most timely despite the fact that there is significant public and wider stakeholder interest in those prices. ASX Clear proposes that if there was no CSPA due to an ASX outage if during the period of that ASX outage the SPI Futures contract had moved by more than 1% then ASX Clear would take the ASX closing price determined immediately prior to that outage and make a similar percentage adjustment to those prices for all cash equities in the S&P/ASX 200. ASX Clear may wish to consider providing empirical evidence to demonstrate that what appears to be a rather crude approximation is superior to other options such as taking Chi-X’s closing prices.

The draft text in Appendix A of the CP states that where *“no data is available from any ASX source (including futures)”* and *“there is evidence of a material market movement occurring during the period of the ASX outage”* then reference to market data from *“alternative sources may be considered in exceptional circumstances”*. ASX Clear may wish to consider providing greater certainty by quantifying what it would regard as *“material movement”* and what it means by *“exceptional circumstances”*.

The CP also states that *“where there is sufficient liquidity to provide confidence in the quality of price formation”* ASX Clear may reference *“price movements in other licensed markets trading ASX securities”*. Again for the sake of greater certainty in the event of an ASX outage, ASX Clear may wish to consider quantifying what it means by *“sufficient liquidity”* and justifying its position.

4. Future Considerations

Chi-X is of the view that all stakeholders have a role to play in determining the appropriate models and methodologies for determining Australian closing prices, including those discussed in the CP. Chi-X is therefore of the view that it is appropriate:

- (a) for further consultation to occur on the ASX proposals; and
- (b) for all stakeholders, including the ASX, to contribute to an enhancement of the governance surrounding closing price methodologies, with greater regard being given to transparency and public and wider stakeholder interests.

Significant conflicts of interest arise when a market operator, selling its own market data, has a monopoly on providing some or all of the data that is used for the dominant purpose of meeting a public or wider stakeholder interest.

Chi-X supports prioritising public and wider stakeholder interests when resolving these conflicts. The CP does not do this.

In these circumstances, the best development solution for those uses of a closing price that have significant public and wider stakeholder interests, may be for a representative industry body to take a lead role in resolving conflicts of interest and shaping an Australian closing price methodology.

Chi-X notes that in some jurisdictions a “last sale price” is defined in regulations and can be used as a reference price for multiple purposes, including “settlement prices”. In these jurisdictions “last sale price” is not restricted to prices generated on one market. Having such a framework in Australia, combined with an industry led body, may:

- (a) allow stakeholders to analyse transparent closing price methodologies with a view to determining what ‘closing price’ is best for them; and
- (b) facilitate data vendors publishing a single agreed price as the Australian closing price for an Australian security.

I hope this submission assists in your deliberations in this important area.

Please do not hesitate to contact us if you have any queries.

Yours sincerely



Chi-X Australia Pty Ltd