

The SGX logo consists of the letters "SGX" in a bold, blue, sans-serif font, followed by a stylized graphic of three horizontal bars in blue, green, and yellow.

## Circular

11 July 2017

Circular No. DC/AM – 50 of 2017

### Methodology Changes to TSI Iron Ore 62% Fe Benchmark Index

On 15 May 2017, Platts proposed to amend the methodology for the TSI Iron Ore 62% Fe Benchmark index to align with that of the Platts' IODEX assessment. Platts also sought market feedback on the proposed amendments.

During the open consultation, Platts conducted a methodology forum to explain the changes and advised that the methodology changes do not show a tangible price impact on the undelying value of the TSI index. Please see Appendix A for the slides Platts used in the forum.

On 6 July 2017, Platts announced methodology changes to its TSI Iron Ore 62% Fe Benchmark index, effective 2 January 2018. Please see Appendix B for Platts' announcement.

In light of Platts' announcement and with reference to Circular No. DC/AM - 27 of 2017 dated 3 May 2017 and Circular No. DC/AM - 6 of 2017 dated 18 January 2017, SGX confirms that the changes set out in Circular No. DC/AM - 27 of 2017 will continue to be effected on 2 January 2018.

There will be no additional adjustments to open positions in SGX's TSI Iron Ore CFR China (62% Fe Fines) derivative contracts as Platts has advised that the methodology changes do not show a tangible price impact on the undelying value of the index.

For any clarification, please contact your Business Manager or any of the following:

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Iron Ore

# TSI & IODEX Methodology Forum

May 25, 2017

Ciaran Roe  
Global Methodology  
Specialist, Metals



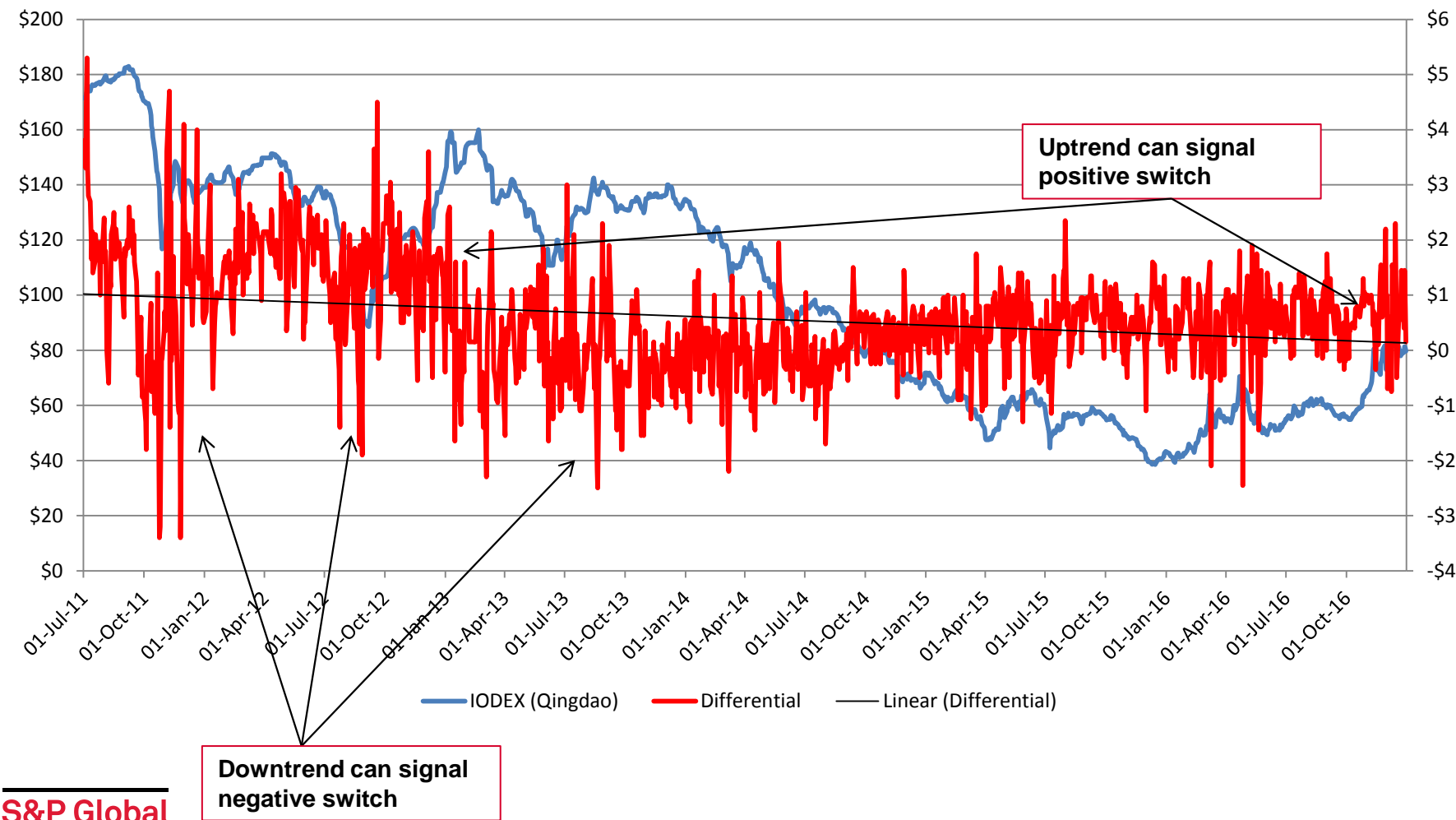
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**S&P Global**  
Platts

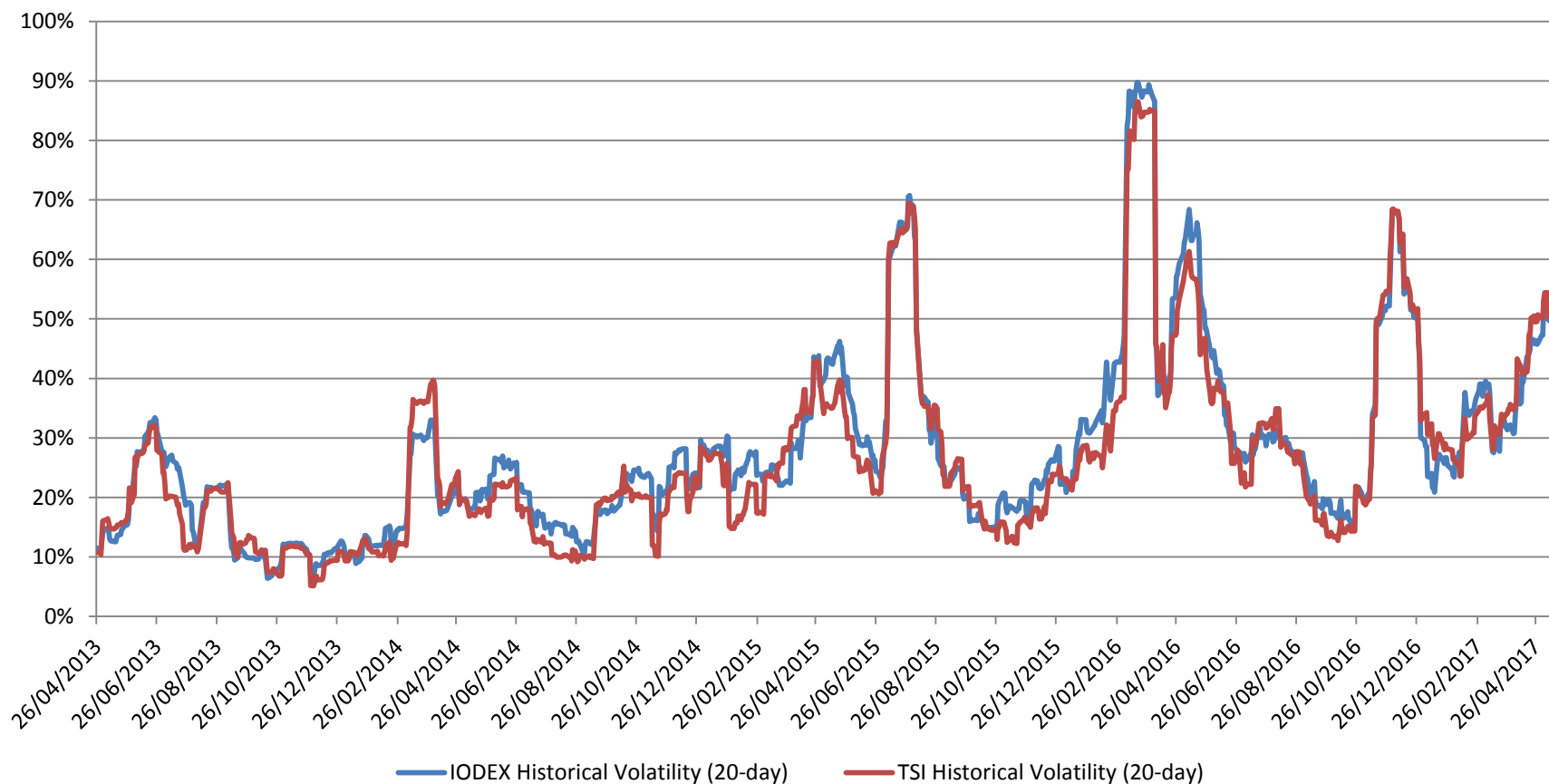
# Contents

- Rationale for Proposal
- Summary & Impact of Proposed Changes
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  - To IODEX
- Q&A

# IODEX – TSI “Switch”



# Historical Volatility



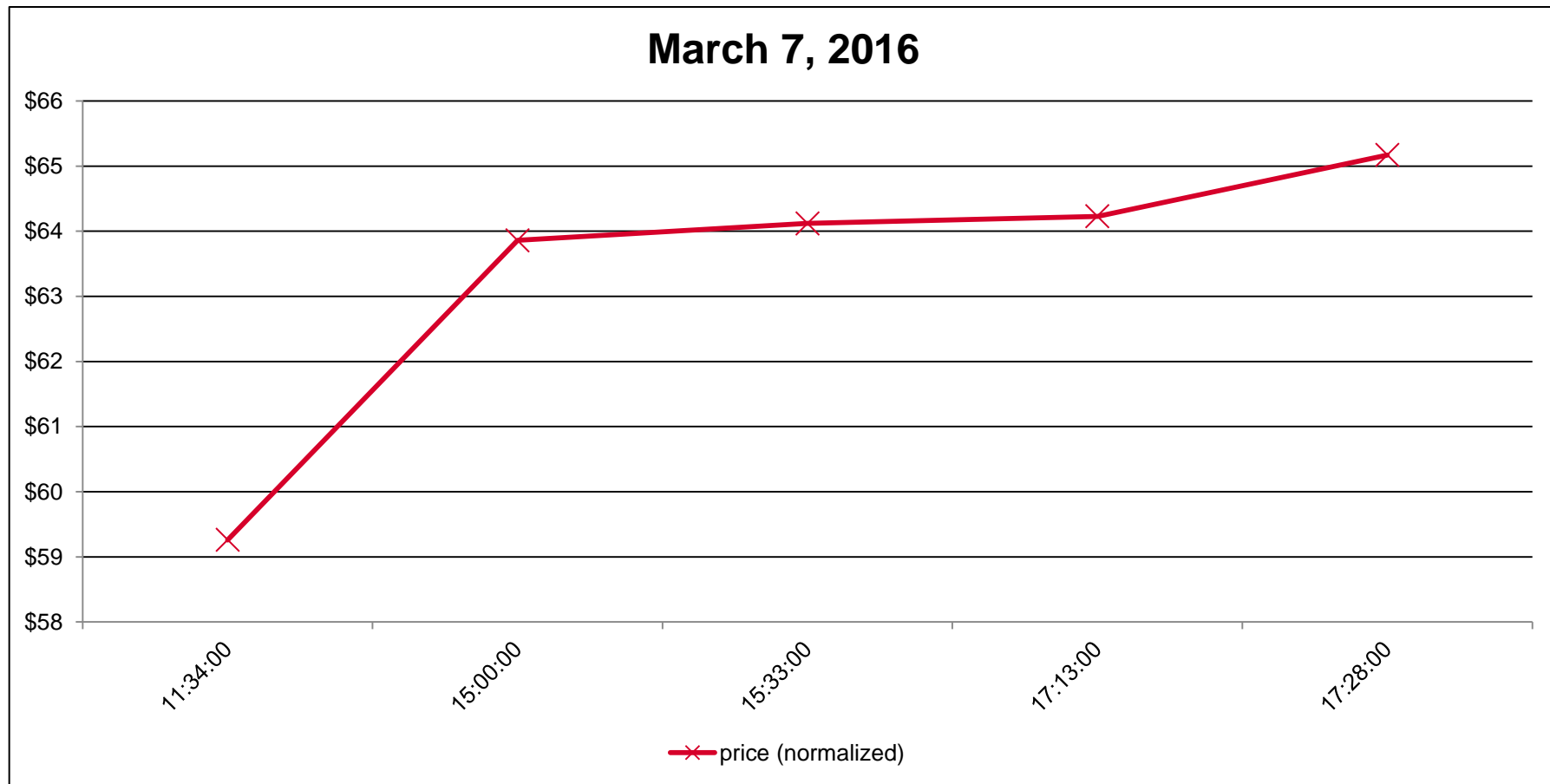
# Proposed TSI Change (1)

Move to 5.30pm **timestamp** from 6.00pm **cut-off**.

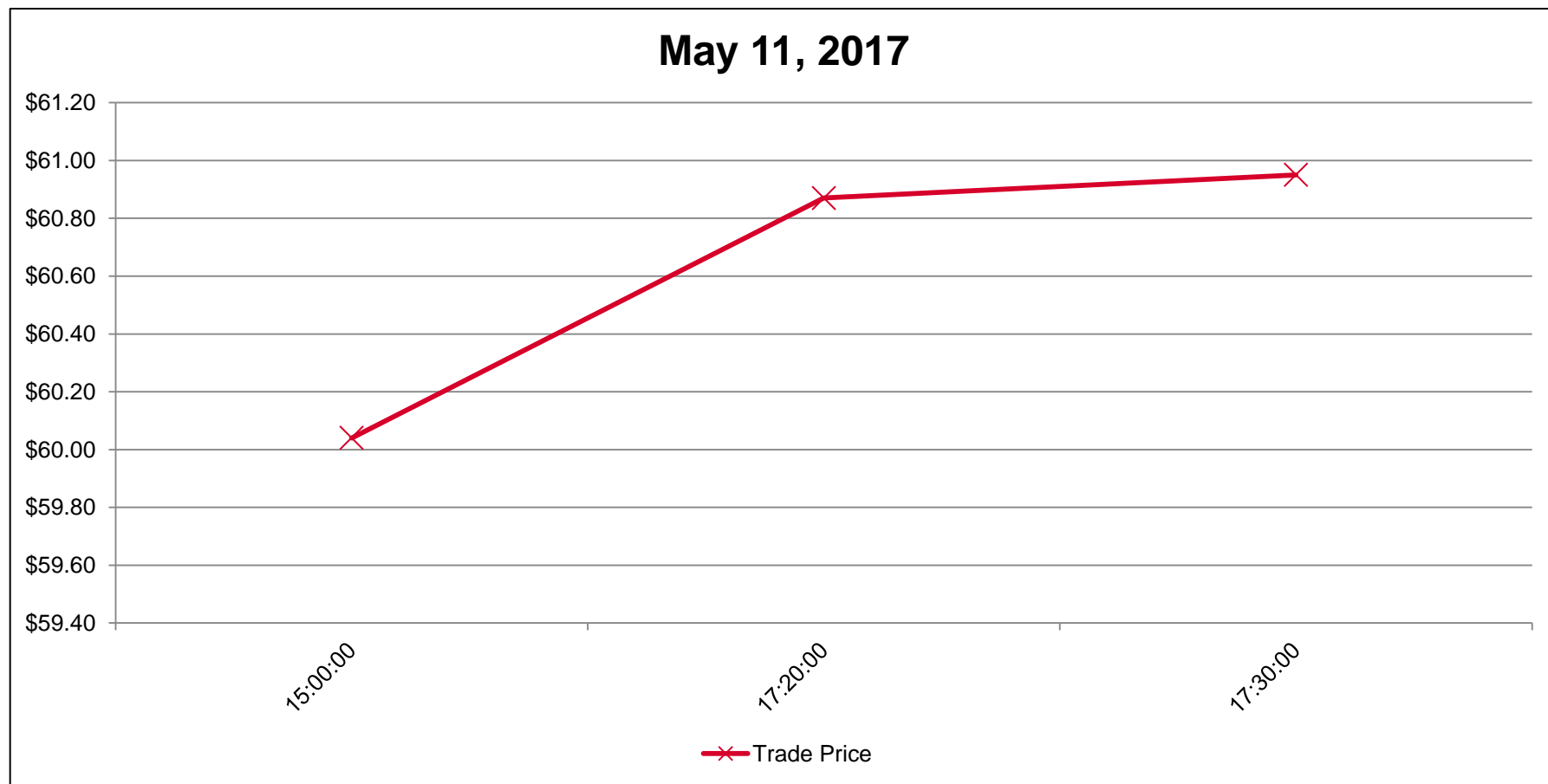
**Impact:** volume-weighted averaging across the course of the day removed; previous day's data no longer factored in.

End-day pricing used to determine index value.

# Visible Intraday Price Movement (Physical)

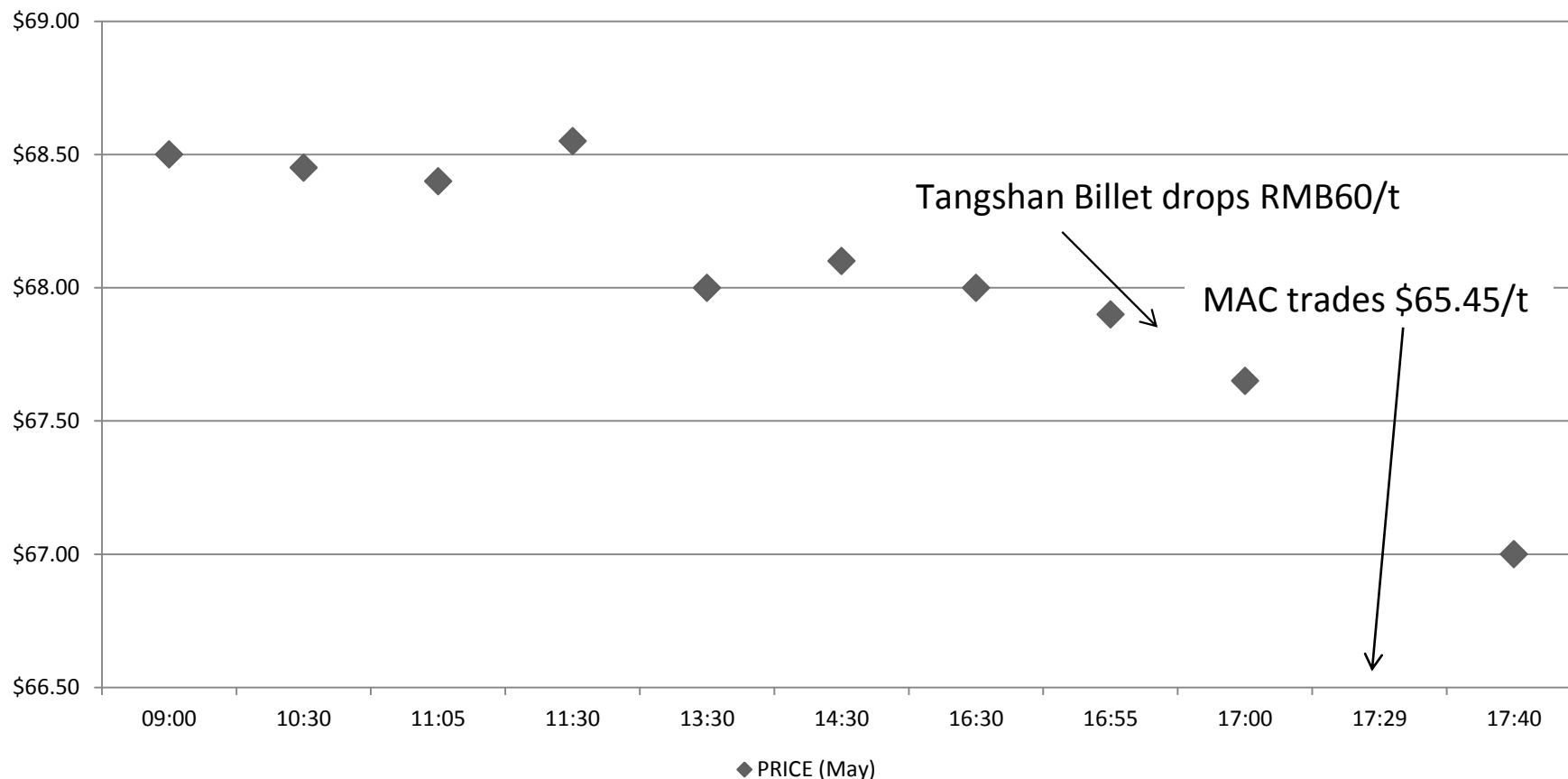


# Visible Intraday Price Movement (Physical)



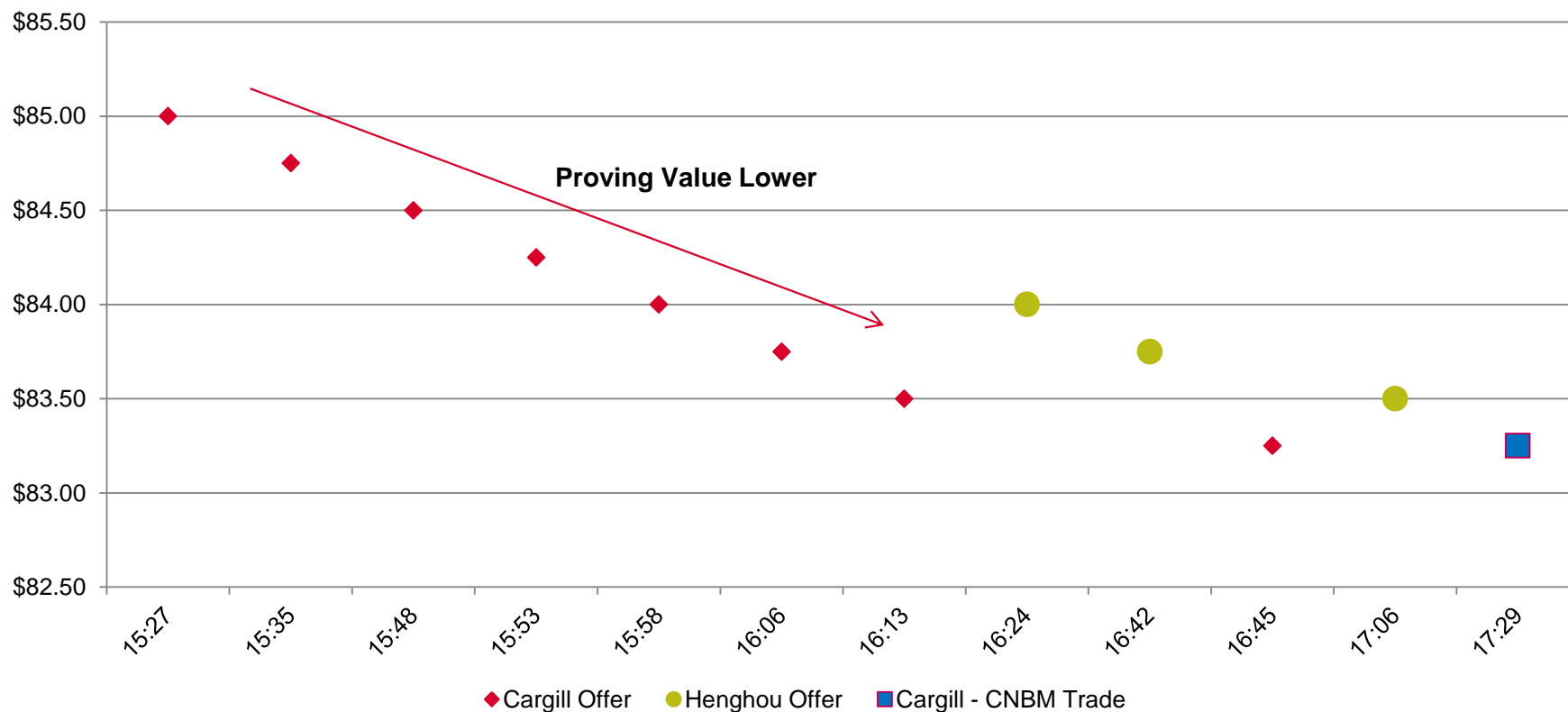


# Visible Intraday Price Movement (TSI-62 Paper)



# Iron Ore: Intraday Evolution Continues

March 22, 2017



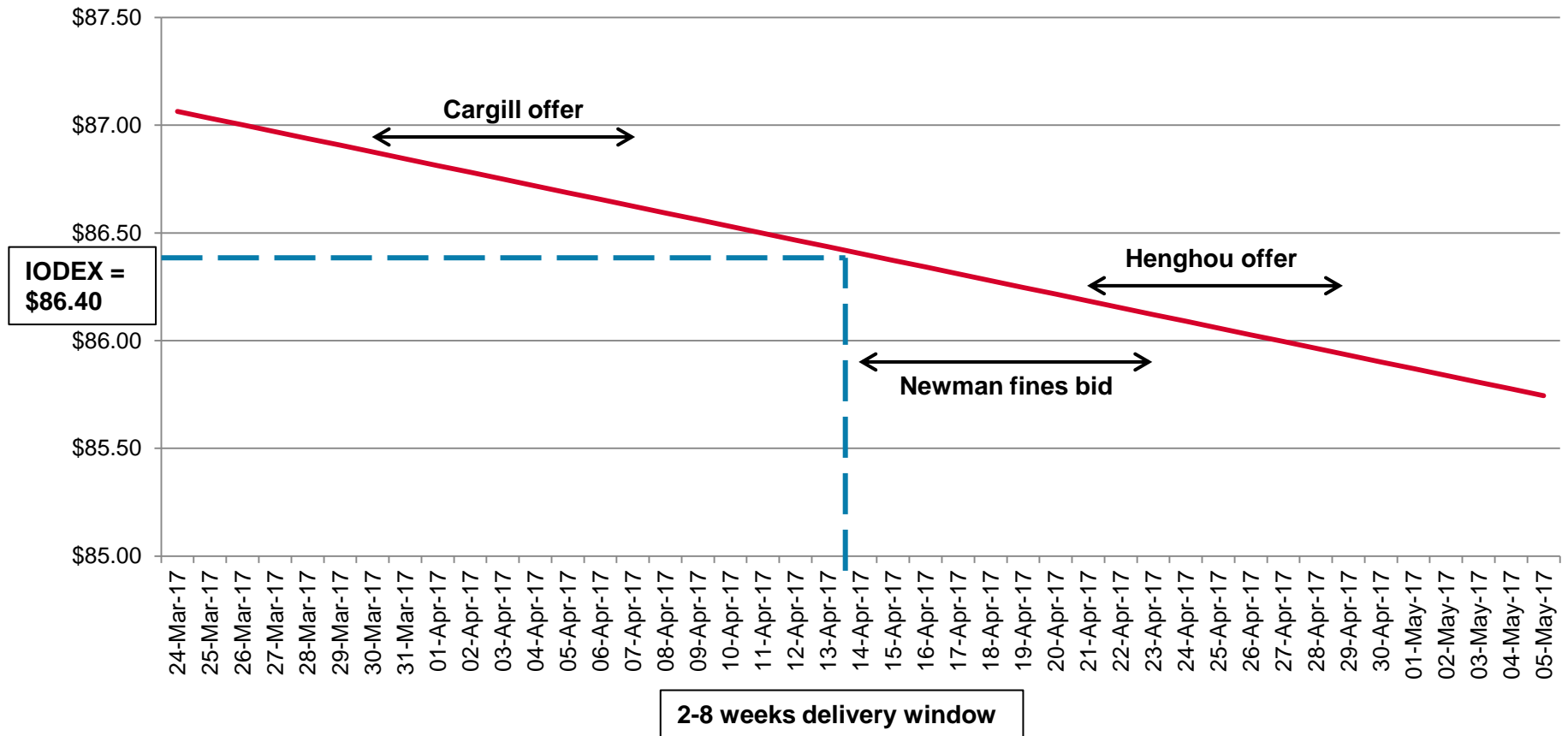
## Proposed TSI Change (2)

Move to 2-8 week delivery period from “loading within 4 weeks; delivery within 8”.

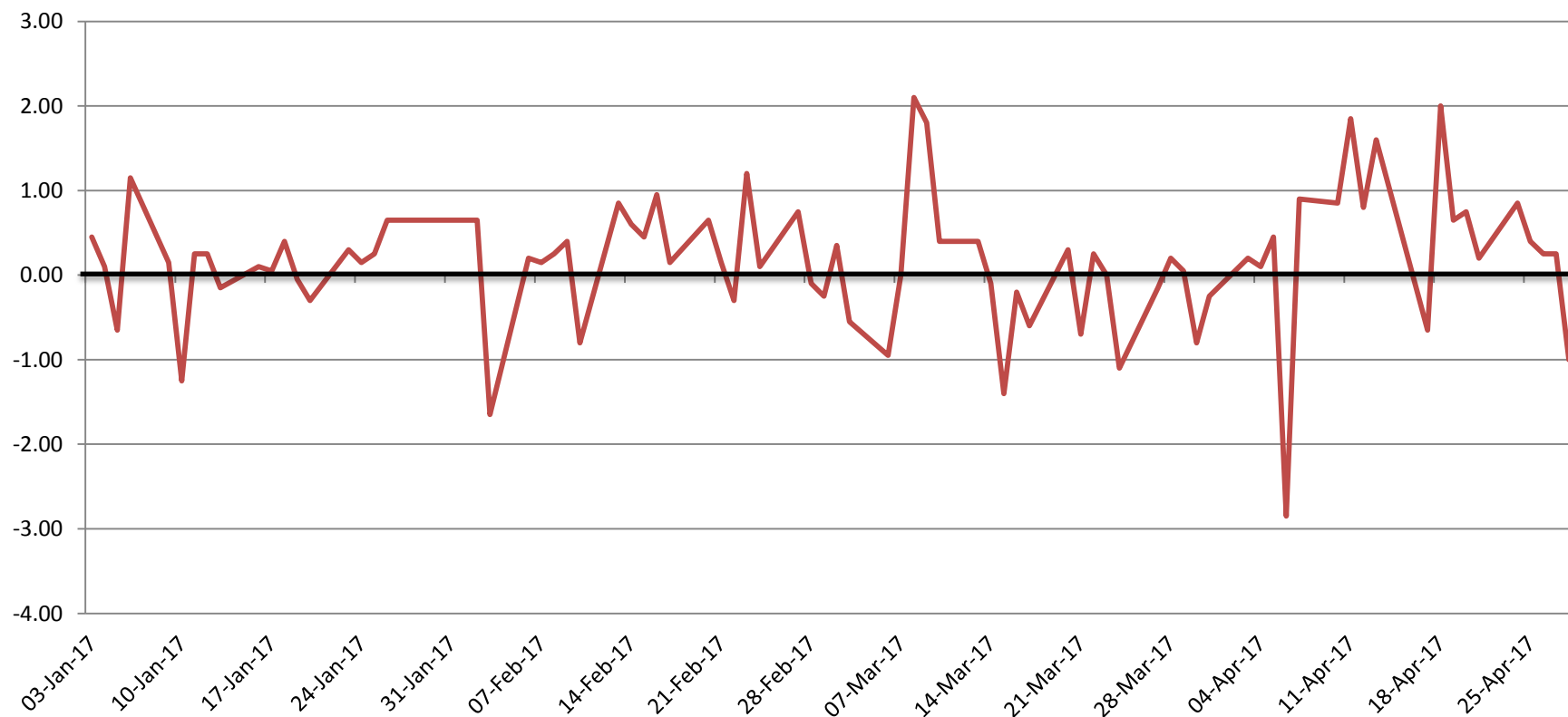
**Impact:** average of 2-8 week delivery period data used to value index – factoring in potential price difference due to delivery period

# Delivery: Use in Index

March 10, 2017



# Differential Without Freight, Spec.



Product codes used in graph:  
TS01020; IOBZ00

— IODEX - TSI Qingdao

YEAR	IODEX – TSI Qingdao	Price Trend
2014	-0.98	Downward
2015	-0.54	Downward
2016	0.26	Upward

# Proposed TSI Changes

**Impact:** no measurable impact to future value in light of historical like-for-like data analysis.

Analysing TSI Qingdao and IODEX data, the price impact difference between the VWAV & end-day approaches depends on flat price directional movement.

Therefore, these methodology changes to TSI-62 do not show a tangible price impact on the underlying value.

# Full Published Rationale

April 18, 2017:

Platts assessed the 62% Fe Iron Ore Index at **\$63.80**/dry mt CFR North China Tuesday, down **\$0.45**/dmt from Monday.

Rio Tinto sold 61%-Fe Australian Pilbara Blend fines at **\$62.61**/dmt CFR Qingdao via spot tender, 190,000 mt, loading May 8-17. Taking into account the iron content, impurity adjustments, and 10 cents/dmt premium that PB fines currently commands over other brands, the PB fines trade normalized to **\$63.80**/dmt on IODEX specifications.

An offer for 80,000 mt of 60.8% Fe Australian Mining Area C (MAC) fines stood at **\$54.80**/dmt CFR China, on COREX, loading 1-10 May, according to sources with access to the platform. **Six out of eight mill and trading sources said they were not matched with the seller on the platform.**

An offer for 140,000 mt cargo of 62.0% Fe Australian MNP Fines stood at **\$56.00**/dmt CFR Qingdao on globalORE, loading 6-15 May. Two different cargoes of 62.0% Fe Australian MNP fines was also offered for loading May 1-10, the first stood at **\$56.50**/dmt CFR Qingdao for a parcel of 80,000 mt, and the second at **\$56.25**/dmt CFR Qingdao for a 90,000 mt lot. Four out of five mill and trading sources said they were not matched with these three sellers on the platform. **According to the globalORE report, these three offers were available to only five counterparties.**

No market data was excluded from the April 18 assessment process.

# Proposed IODEX Change

Specification change: adjustments to silica, alumina, phosphorus and minimum tonnage reflected.

Measure	Current (%)	Proposed (%)	Direction
Fe	62	62	
Si	<b>4.5</b>	<b>4</b>	<b>-</b>
Al	<b>2</b>	<b>2.25</b>	<b>+</b>
P	<b>0.075</b>	<b>0.09</b>	<b>+</b>
S	0.02	0.02	
M	8	8	
Tonnage (minimum)	<b>35,000 t</b>	<b>50,000 t</b>	<b>+</b>



# Proposed IODEX Change

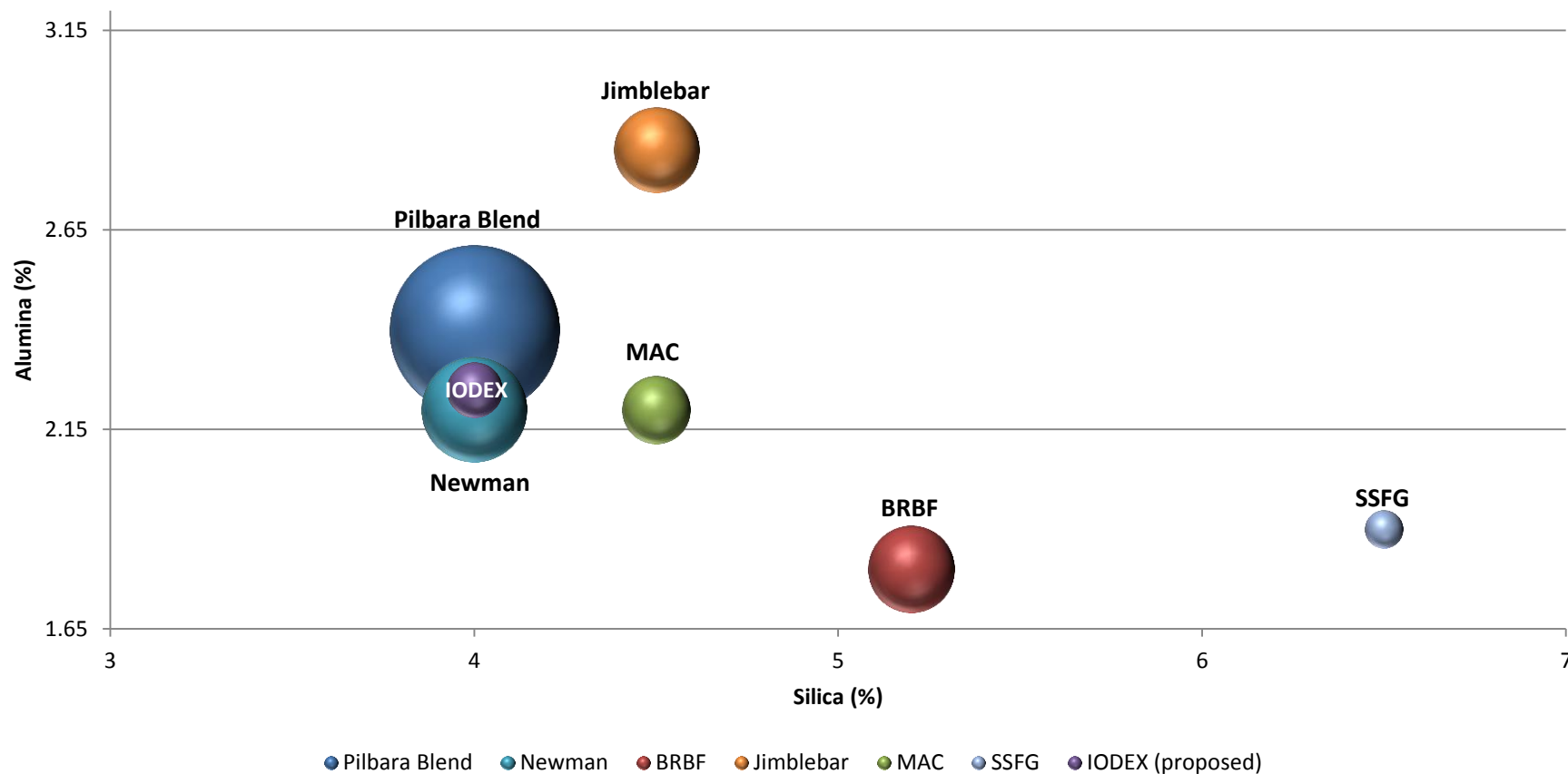
**Impact:** no material impact to future value in light of historical impurity penalty data analysis.

Using the average of data over the 2015-2016 period IODEX data\* for alumina & silica differentials, the price impact of this proposed specification change would be **insignificant**: daily normalization ranged from **-\$0.08/t** to **+\$0.13/t** over this period.

This is due to the lower silica to a great extent **netting off** the higher alumina content in the proposed specification.

\*Data used: 1-2.5% alumina; <4.5% silica impurity differentials

# Observable Spot Trade: Proposed IODEX Spec.



# Thank you for your attention

# Q&A

[Steel Prices](#) | [Iron Ore Prices](#) | [Scrap Prices](#) | [Coking Coal Prices](#) | [TSI-News](#) | [TSI-Events](#)

Dear,

Following feedback received in its formal consultation process, S&P Global Platts will merge The Steel Index Iron Ore Fines 62% Fe price series (TS01021) and Platts IODEX (IODBZ00) assessment on **January 2, 2018**.

This merger will be achieved by changing the methodologies of both price series to align them.

As a result of these changes, TSI-62% and IODEX will be published as two identical values from the start of 2018. These changes will eliminate this basis risk for market participants looking to hedge their IODEX-linked physical exposure via the derivatives contracts settling against the TSI-62% index.

Platts opened a consultation process on this proposed change on May 15, 2017 (<http://plts.co/6CPr30daBrH>). Since then, the topic has been discussed in public methodology forums and in dozens of bilateral meetings involving stakeholders across the industry.

Feedback received during the consultation has been positive regarding a merger and supportive of the proposed process, roadmap and timing for the changes to be effected. During the feedback period market participants requested increased visibility of the normalization process used in determining the final value, which Platts will address with more detailed information in its daily assessment rationale.

Market participants have also expressed a preference for a publication timestamp for the final index and Platts is reviewing the possibility of implementing a standard publication time.

#### **SUMMARY OF METHODOLOGY CHANGES:**

**1) TSI-62% will be published as an end-day value, timestamped to 5.30pm Singapore time.**

Market participants noted during the consultation that price movement in the iron ore market is visibly time-dependent.

Inter-day volatility in the iron ore market has trended among the highest of any bulk commodity in 2017, while a 5:30 pm timestamp will help

capture price movement at a period of heightened trading activity in the iron ore market.

This change will remove volume-weighted averaging from the TSI-62% index. Platts published a white paper on April 25, 2017 detailing the intra-day price movement present in the iron ore market. This paper can be found at: <http://plts.co/QPWB30bFAQH>.

## **2) TSI-62% will reflect a 2-8 week delivery window.**

The vast majority of medium grade fines trades observed in 2017 were for delivery between 2-8 weeks forward; TSI-62% will reflect cargoes for delivery within 2-8 weeks of the assessment date.

Furthermore, TSI-62% will factor backwardation or contango into this forward structure. Market stakeholders reaffirmed during the consultation that iron ore cargo pricing can alter depending on the expected delivery date.

TSI-62% will take into account this forward structure by averaging the physical forward curve indicated by relevant transactional information across the 2-8 week delivery window.

## **3) IODEX will change to match the incoming TSI-62% specification.**

Platts will change the underlying specifications of the IODEX assessment to match those due to come into effect for TSI-62% from January, 2018. This will see small adjustments to silica, alumina and phosphorous levels, with the minimum lot size reflected also changing. Using historical impurity penalty values, these changes amount to a negligible value difference between the present specifications and the future ones, but will align IODEX further with the most liquid iron ore brands traded on a CFR China basis.

Measure	Current	Future
Fe	62%	62%
Silica	4.5%	4%
Alumina	2%	2.25%
Phosphorus	0.075%	0.09%
Sulfur	0.02%	0.02%
Moisture	8%	8%
Tonnage	35,000 t	50,000 t

### **RATIONALE FOR CHANGE:**

The merger of TSI-62% and IODEX will be carried out due to increasing market calls to remove the price difference between the two indices.

These requests have grown as index-linked trade has become more

prevalent in the spot market and derivative trading volumes have grown.

Merging the two values will allow for greater certainty when converting index-linked indications (trades, bids & offers) to a fixed price basis. Platts will be able to fully reflect floating price indications in its indices once January 2018 becomes the predominant underlying month for index-linked spot cargoes. A subsequent subscriber note will be published to indicate when this occurs.

In cases where an index-linked indication crosses with a fixed price indication (a comparable fixed price bid is higher than an index-linked offer for the same time period, for example), then the fixed price indication would take precedence. For a full description of Platts' assessment data hierarchy, please consult page 5:  
<http://plts.co/BMzV30bFAVO>.

Platts seeks to provide market participants with as much information as possible regarding its assessments. Therefore, in conjunction with the three methodology changes listed above, a full & transparent index rationale for TSI-62% will be published, which will detail how the final value was arrived at.

In order to do so, Platts will have to discontinue receiving submissions pursuant to the existing TSI Data Provider agreements for companies submitting to TSI's Iron Ore indices.

Platts already publishes a rationale for its IODEX assessment -- available in its SBB Steel Markets Daily publication and on Platts Metals Alert, which will be valid for the merged values.

#### **NORMALIZATION:**

In this rationale, Platts will provide expanded details of the normalization process for indications used in the final value.

Impurity penalties/premia will be determined using inter-brand differential comparisons and indications received from active market participants. Firm market indications, such as transactions, bids and offers, are prioritized in this process over indicative values.

TSI-branded impurity penalties/premia bands will change to match those currently used in the IODEX assessment process.

For a full list of published impurity bands for the IODEX assessment, please consult page 8: <http://plts.co/BMzV30bFAVO>.

Platts will also start publishing a 2.5-4% alumina penalty band and formalize its assessment for ores containing silica <4.5% as part of this

merger process.

Medium grade fines (60-63.5% Fe) transactional information will form the basis of the TSI-62% index value, rather than ores with Fe content greater than 60%. TSI-62% will be published to two decimal places, rounded to the nearest \$0.05/dmt.

Please submit any feedback, comments or questions to [pricemethodology@spglobal.com](mailto:pricemethodology@spglobal.com).

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Kind regards,

Oscar Tarneberg  
*TSI Region Head, APAC*

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