

Snap | 3 May 2018

## Wide gap in Zinc TCs reflect market near its turning point

After some delay, the 2018 annual zinc concentrate treatment charges have been agreed down to 15% YoY. The gap from decade lows in spot charges has hit extremes and reflects expectations that mine supply will soon loosen significantly

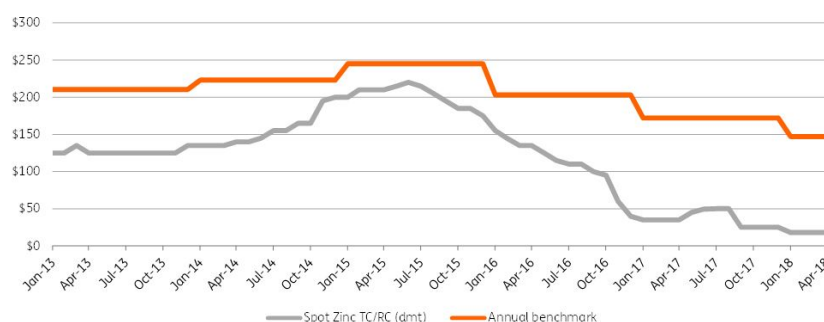


Source: Shutterstock

## Wide gap between annual and spot zinc concentrate treatment charges (\$/dmt)

Treatment and refining charges (TC/RC) reflect the fee deducted from the concentrate value by the smelter. Higher TC's mean more profit for smelters and less for miners. The fees reflect the availability of raw materials (concentrate) vs smelter capacities.

Annual Zinc TC/RC's vs spot terms:



Source: Asia Metal, ING Research

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## Drawn out negotiations reach a close

Nyrstar has today reported the 2018 annual benchmark for zinc concentrate charges at \$147/dmt which is a 15% decrease from last years \$172/dmt.

Negotiations have been dragged out for far longer than usual this year given the broad disagreement on this year's fundamentals. Miners have pointed to spot charges that are currently the lowest in over a decade. Indeed compared to the \$18/dmt spot charge the gap from the benchmark, even given this recent reduction, is at extremes. Also widely contested, is that zinc smelters only pay for 85% of the contained metal in concentrate, compared to 95% in copper. That status quo stems from historical recovery rates not reflective of today's smelters, but reports of the miner's attempts to change those terms have once again failed.

Compared to spot terms, and original reports of miners bidding as low as \$90/dmt, zinc smelters may have fared better than expected, although the flip side of the argument is that 2018 will very much be a year of two halves as mine supply is expected to rebound considerably. ING identifies +400kt from just new mines/expansions/restarts outside of China (before disruptions, other losses) while others are chasing high grading mine plans while prices are high.

China's own domestic output expected to rebound between 150-200kt although this will be vulnerable to any repeat health and safety limitations like was seen last year. With the low treatment charges, smelters, (especially in China that tend to buy on the spot), are suffering to turn a profit and there are wide reports of smelters bringing forward maintenance with the hopes of re-starting production when fees get higher. The closing of the SHFE-LME arb, weaker physical premia and weakening outright prices, also curbs revenue to be generated outside of the treatment charges.

This pinch on zinc smelting profits could escalate tightness in years to come as a lack of investment in new smelting capacity is expected to become the next bottleneck. Many are calling

for above 90% utilisation rates (unseen since the 90's) in order try to hit only modest deficits in years to come. Any permanent smelter closures amid the concentrate drought would be very bullish for our further dated zinc projections.

Type	Mines	Company	Capacity	2016	2017	2018	2019	2020
Restart	Lady Loretta (Mt Isa)	Glencore	160	-120	0	60	100	0
Curtailed	George Fisher (Mt Isa)	Glencore	-85	-64	0	0	?	?
Curtailed	Iscaryuz	Glencore	-80	-75	0	0	?	?
Curtailed	McArthur River Expansion	Glencore	-135	-101	0	0	?	?
Curtailed	Kazzinc	Glencore	-40	-30	0	0	?	?
New	Century Tailings	New Century	270	0	0	30	120	120
New	Gamsberg	Vednata	250	0	0	50	150	50
New	Dugald River	MMG	170	0	10	90	70	0
New	Castellanos	Trafigura	100	0	10	40	25	0
Expansion	Bisha	Nevsun	100	41	52	10	-17	-10
New	Terrafame	Terrafame	70	21	27	10	0	0
Restart	Middle Tennessee	Nyrstar	60	0	25	25	25	0
Expansion	Buenavista Zinc	Grupo Mexico	60	0	0	0	0	20
Restart	Empire/Balmat	Titan	50	0	0	10	26	18
Restart	Niaca/ Ray de Plata	Penoles	50	0	0	0	20	20
Restart	Woodlawn	Heron	40	0	0	20	10	10
New	Macorna Tailings	Shaixin	30	0	0	5	20	0
Restart	Myra Falls	Nyrstar	25	0	5	15	5	0
New	Silvertip	Coeur Mining	20	0	5	10	5	0
New	Olympias	Eldorado Gold	20	0	0	10	5	5
New	Thalanga	Red River	0	0	2	18	0	-5
Expansion	Neves Corvo	Lundin	75	8	6	-5	20	70
Restart	Campo Morado	Telson	20	0	0	12	8	0
Restart	Shalkiya (stage 1)	Shakilya Zinc	50	0	0	0	20	30
Operational Changes (YoY)								
High Grading	Antamina	Glen/Teck/BH	400	-37	177	15	30	0
Operational/H	Penasquito	Goldcorp	200	-57	44	7	50	0
Extension	Skorpion	Vedanta	150	2	3	6	9	30
Transition	Rampura-Aguchi	Vedanta	700	-172	154	-100	0	0
End of life	Phasalami	FQM	40	5	7	-22	-3	-12
Largest	Red Dog	Teck	500	0	542	-7	-35	0

Source: Company Reports, ING Research

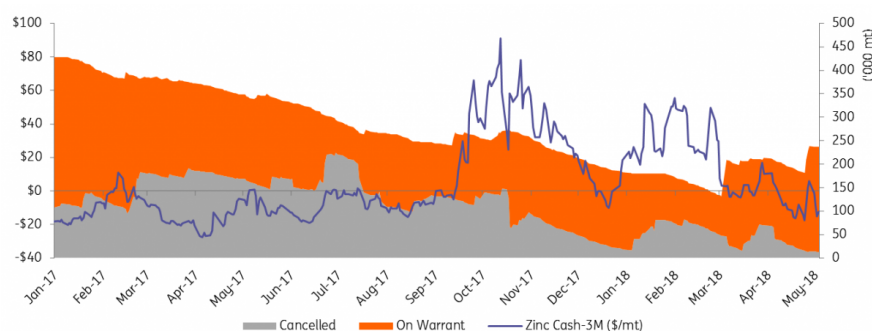
## Refined looks more available than ever, but bears beware, we are still in deficit

In our last zinc note (April 12th) we were losing faith as to whether a last spur of backwardations and tightly held inventories could see zinc prices go the last leg higher before supply-demand balances began to loosen. With LME inventory now more available than ever, it looks increasingly less likely. In late April LME stocks have increased by another 58kt. For LME spreads it's always been more about the availability of metal rather than the absolute amount and seeing the amount of stock cancelled fall below 6% provides little impetus for any tightness in the curve. The Cash-3M flirted with a brief backwardation of \$6b last week but was short-lived (\$12.25c currently), and this was seemingly only on the back of sister metal lead following a pick-up in lead stock cancellations.

China's pull on zinc stocks is also looking tame, but import losses are starting to narrow now that the local market is rebounding from reports in early of April the SRB was preparing to sell stocks. Domestic stocks at social warehouses have been on the decline and now stand at 154kt, down 42% from the highs in March and premiums appear to have bottomed. We have always argued, last years LME Zinc tightness was exaggerated as financial arb traders perpetuated the conditions for more metal than necessary to flow East from West. But, now that this overhang is being digested, it could only take a few more smelters to extend maintenance to drive increased flows once more.

The timing is going to be everything as we approach the finale for zinc's fundamental rally. Stock availability via LME cancellations and the impact on spreads can quickly change on a large traders actions. The 18% increase in financial firms (non-risk reducing) LME zinc shorts since February could be headed into a bear trap if so. A sizeable refined deficit expected around 260kt this year (source ILZSG) wouldn't make such a draw unlikely. This said, the clock is ticking, evident by the wider gap for annual treatment charges from the spot. Mine supply will loosen this year, and with it, the chapter closes on the fundamental zinc story that began with large mine closures in 2015's (Century/Lisheen etc.). Any last volatility in the footnote of this rally depends wholly on whether the spreads swing before conditions loosen.

## What tightness? Hardly any LME stock is cancelled and spreads in contango



Source: LME, ING Research

## Author

### **Amrita Naik Nimbalkar**

Junior Economist, Global Macro

[amrita.naik.nimbalkar@ing.com](mailto:amrita.naik.nimbalkar@ing.com)

### **Mateusz Sutowicz**

Senior Economist, Poland

[mateusz.sutowicz@ing.pl](mailto:mateusz.sutowicz@ing.pl)

### **Alissa Lefebvre**

Economist

[alissa.lefebvre@ing.com](mailto:alissa.lefebvre@ing.com)

### **Deepali Bhargava**

Regional Head of Research, Asia-Pacific

[Deepali.Bhargava@ing.com](mailto:Deepali.Bhargava@ing.com)

### **Ruben Dewitte**

Economist

+32495364780

[ruben.dewitte@ing.com](mailto:ruben.dewitte@ing.com)

### **Kinga Havasi**

Economic research trainee

[kinga.havasi@ing.com](mailto:kinga.havasi@ing.com)

### **Marten van Garderen**

Consumer Economist, Netherlands

[marten.van.garderen@ing.com](mailto:marten.van.garderen@ing.com)

### **David Havrlant**

Chief Economist, Czech Republic

420 770 321 486

[david.havrlant@ing.com](mailto:david.havrlant@ing.com)

### **Sander Burgers**

Senior Economist, Dutch Housing

[sander.burgers@ing.com](mailto:sander.burgers@ing.com)

### **Lynn Song**

Chief Economist, Greater China

[lynn.song@asia.ing.com](mailto:lynn.song@asia.ing.com)

### **Michiel Tukker**

Senior European Rates Strategist

[michieltukker@ing.com](mailto:michieltukker@ing.com)

**Michal Rubaszek**

Senior Economist, Poland

[michal.rubaszek@ing.pl](mailto:michal.rubaszek@ing.pl)

**This is a test author**

**Stefan Posea**

Economist, Romania

[tiberiu-stefan.posea@ing.com](mailto:tiberiu-stefan.posea@ing.com)

**Marine Leleux**

Sector Strategist, Financials

[marine.leleux2@ing.com](mailto:marine.leleux2@ing.com)

**Jesse Norcross**

Senior Sector Strategist, Real Estate

[jesse.norcross@ing.com](mailto:jesse.norcross@ing.com)

**Teise Stellema**

Research Assistant, Energy Transition

[teise.stellema@ing.com](mailto:teise.stellema@ing.com)

**Diederik Stadig**

Sector Economist, TMT & Healthcare

[diederik.stadig@ing.com](mailto:diederik.stadig@ing.com)

**Diogo Gouveia**

Sector Economist

[diogo.duarte.vieira.de.gouveia@ing.com](mailto:diogo.duarte.vieira.de.gouveia@ing.com)

**Marine Leleux**

Sector Strategist, Financials

[marine.leleux2@ing.com](mailto:marine.leleux2@ing.com)

**Ewa Manthey**

Commodities Strategist

[ewa.manthey@ing.com](mailto:ewa.manthey@ing.com)

**ING Analysts**

**James Wilson**

EM Sovereign Strategist

[James.wilson@ing.com](mailto:James.wilson@ing.com)

**Sophie Smith**

Digital Editor

[sophie.smith@ing.com](mailto:sophie.smith@ing.com)

**Frantisek Taborsky**

EMEA FX & FI Strategist

[frantisek.taborsky@ing.com](mailto:frantisek.taborsky@ing.com)

**Adam Antoniak**

Senior Economist, Poland

[adam.antoniak@ing.pl](mailto:adam.antoniak@ing.pl)

**Min Joo Kang**

Senior Economist, South Korea and Japan

[min.joo.kang@asia.ing.com](mailto:min.joo.kang@asia.ing.com)

**Coco Zhang**

ESG Research

[coco.zhang@ing.com](mailto:coco.zhang@ing.com)

**Jan Frederik Slijkerman**

Senior Sector Strategist, TMT

[jan.frederik.slijkerman@ing.com](mailto:jan.frederik.slijkerman@ing.com)

**Katinka Jongkind**

Senior Economist, Services and Leisure

[Katinka.Jongkind@ing.com](mailto:Katinka.Jongkind@ing.com)

**Marina Le Blanc**

Sector Strategist, Financials

[Marina.Le.Blanc@ing.com](mailto:Marina.Le.Blanc@ing.com)

**Samuel Abettan**

Junior Economist

[samuel.abettan@ing.com](mailto:samuel.abettan@ing.com)

**Franziska Biehl**

Senior Economist, Germany

[Franziska.Marie.Biehl@ing.de](mailto:Franziska.Marie.Biehl@ing.de)

**Rebecca Byrne**

Senior Editor and Supervisory Analyst

[rebecca.byrne@ing.com](mailto:rebecca.byrne@ing.com)

**Mirjam Bani**

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

[mirjam.bani@ing.com](mailto:mirjam.bani@ing.com)

**Timothy Rahill**

Credit Strategist

[timothy.rahill@ing.com](mailto:timothy.rahill@ing.com)

**Leszek Kasek**

Senior Economist, Poland

[leszek.kasek@ing.pl](mailto:leszek.kasek@ing.pl)

**Oleksiy Soroka, CFA**

Senior High Yield Credit Strategist

[oleksiy.soroka@ing.com](mailto:oleksiy.soroka@ing.com)

**Antoine Bouvet**

Head of European Rates Strategy

[antoine.bouvet@ing.com](mailto:antoine.bouvet@ing.com)

**Jeroen van den Broek**

Global Head of Sector Research

[jeroen.van.den.broek@ing.com](mailto:jeroen.van.den.broek@ing.com)

**Edse Dantuma**

Senior Sector Economist, Industry and Healthcare

[edse.dantuma@ing.com](mailto:edse.dantuma@ing.com)

**Francesco Pesole**

FX Strategist

[francesco.pesole@ing.com](mailto:francesco.pesole@ing.com)

**Rico Luman**

Senior Sector Economist, Transport and Logistics

[Rico.Luman@ing.com](mailto:Rico.Luman@ing.com)

**Jurjen Witteveen**

Sector Economist

[jurjen.witteveen@ing.com](mailto:jurjen.witteveen@ing.com)

**Dmitry Dolgin**

Chief Economist, CIS

[dmitry.dolgin@ing.de](mailto:dmitry.dolgin@ing.de)

**Nicholas Mapa**

Senior Economist, Philippines

[nicholas.antonio.mapa@asia.ing.com](mailto:nicholas.antonio.mapa@asia.ing.com)

**Egor Fedorov**

Senior Credit Analyst

[egor.fedorov@ing.com](mailto:egor.fedorov@ing.com)

**Sebastian Franke**

Consumer Economist



[sebastian.franke@ing.de](mailto:sebastian.franke@ing.de)

**Gerben Hieminga**

Senior Sector Economist, Energy

[gerben.hieminga@ing.com](mailto:gerben.hieminga@ing.com)

**Nadège Tillier**

Head of Corporates Sector Strategy

[nadege.tillier@ing.com](mailto:nadege.tillier@ing.com)

**Charlotte de Montpellier**

Senior Economist, France and Switzerland

[charlotte.de.montpellier@ing.com](mailto:charlotte.de.montpellier@ing.com)

**Laura Straeter**

Behavioural Scientist

+31(0)611172684

[laura.Straeter@ing.com](mailto:laura.Straeter@ing.com)

**Valentin Tataru**

Chief Economist, Romania

[valentin.tataru@ing.com](mailto:valentin.tataru@ing.com)

**James Smith**

Developed Markets Economist, UK

[james.smith@ing.com](mailto:james.smith@ing.com)

**Suvi Platerink Kosonen**

Senior Sector Strategist, Financials

[suvi.platerink-kosonen@ing.com](mailto:suvi.platerink-kosonen@ing.com)

**Thijs Geijer**

Senior Sector Economist, Food & Agri

[thijs.geijer@ing.com](mailto:thijs.geijer@ing.com)

**Maurice van Sante**

Senior Economist Construction & Team Lead Sectors

[maurice.van.sante@ing.com](mailto:maurice.van.sante@ing.com)

**Marcel Klok**

Senior Economist, Netherlands

[marcel.klok@ing.com](mailto:marcel.klok@ing.com)

**Piotr Poplawski**

Senior Economist, Poland

[piotr.poplawski@ing.pl](mailto:piotr.poplawski@ing.pl)

**Paolo Pizzoli**

Senior Economist, Italy, Greece  
[paolo.pizzoli@ing.com](mailto:paolo.pizzoli@ing.com)

**Marieke Blom**  
Chief Economist and Global Head of Research  
[marieke.blom@ing.com](mailto:marieke.blom@ing.com)

**Raoul Leering**  
Senior Macro Economist  
[raoul.leering@ing.com](mailto:raoul.leering@ing.com)

**Maarten Leen**  
Head of Global IFRS9 ME Scenarios  
[maarten.leen@ing.com](mailto:maarten.leen@ing.com)

**Maureen Schuller**  
Head of Financials Sector Strategy  
[Maureen.Schuller@ing.com](mailto:Maureen.Schuller@ing.com)

**Warren Patterson**  
Head of Commodities Strategy  
[Warren.Patterson@asia.ing.com](mailto:Warren.Patterson@asia.ing.com)

**Rafal Benecki**  
Chief Economist, Poland  
[rafal.benecki@ing.pl](mailto:rafal.benecki@ing.pl)

**Philippe Ledent**  
Senior Economist, Belgium, Luxembourg  
[philippe.ledent@ing.com](mailto:philippe.ledent@ing.com)

**Peter Virovacz**  
Senior Economist, Hungary  
[peter.virovacz@ing.com](mailto:peter.virovacz@ing.com)

**Inga Fechner**  
Senior Economist, Germany, Global Trade  
[inga.fechner@ing.de](mailto:inga.fechner@ing.de)

**Dimitry Fleming**  
Senior Data Analyst, Netherlands  
[Dimitry.Fleming@ing.com](mailto:Dimitry.Fleming@ing.com)

**Ciprian Dascalu**  
Chief Economist, Romania  
+40 31 406 8990  
[ciprian.dascalu@ing.com](mailto:ciprian.dascalu@ing.com)

**Muhammet Mercan**

Chief Economist, Turkey

[muhammet.mercan@ingbank.com.tr](mailto:muhammet.mercan@ingbank.com.tr)

**Iris Pang**

Chief Economist, Greater China

[iris.pang@asia.ing.com](mailto:iris.pang@asia.ing.com)

**Sophie Freeman**

Writer, Group Research

+44 20 7767 6209

[Sophie.Freeman@uk.ing.com](mailto:Sophie.Freeman@uk.ing.com)

**Padhraic Garvey, CFA**

Regional Head of Research, Americas

[padhraic.garvey@ing.com](mailto:padhraic.garvey@ing.com)

**James Knightley**

Chief International Economist, US

[james.knightley@ing.com](mailto:james.knightley@ing.com)

**Tim Condon**

Asia Chief Economist

+65 6232-6020

**Martin van Vliet**

Senior Interest Rate Strategist

+31 20 563 8801

[martin.van.vliet@ing.com](mailto:martin.van.vliet@ing.com)

**Karol Pogorzelski**

Senior Economist, Poland

[Karol.Pogorzelski@ing.pl](mailto:Karol.Pogorzelski@ing.pl)

**Carsten Brzeski**

Global Head of Macro

[carsten.brzeski@ing.de](mailto:carsten.brzeski@ing.de)

**Viraj Patel**

Foreign Exchange Strategist

+44 20 7767 6405

[viraj.patel@ing.com](mailto:viraj.patel@ing.com)

**Owen Thomas**

Global Head of Editorial Content

+44 (0) 207 767 5331

[owen.thomas@ing.com](mailto:owen.thomas@ing.com)

**Bert Colijn**

Chief Economist, Netherlands

[bert.colijn@ing.com](mailto:bert.colijn@ing.com)

**Peter Vanden Houte**

Chief Economist, Belgium, Luxembourg, Eurozone

[peter.vandenhoute@ing.com](mailto:peter.vandenhoute@ing.com)

**Benjamin Schroeder**

Senior Rates Strategist

[benjamin.schroeder@ing.com](mailto:benjamin.schroeder@ing.com)

**Chris Turner**

Global Head of Markets and Regional Head of Research for UK & CEE

[chris.turner@ing.com](mailto:chris.turner@ing.com)

**Gustavo Rangel**

Chief Economist, LATAM

+1 646 424 6464

[gustavo.rangel@ing.com](mailto:gustavo.rangel@ing.com)

**Carlo Cocuzzo**

Economist, Digital Finance

+44 20 7767 5306

[carlo.cocuzzo@ing.com](mailto:carlo.cocuzzo@ing.com)