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Aluminium warehousing, premiums and prices

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CEPS, Price formation in commodities markets, Brussels , Oct 2013

Premiums

- Supply, demand, freight, rental, withdrawal and trading costs are drivers of premiums.
- The main driver is the broad supply and demand balance in the market. Premiums tend to increase when markets are tight and decrease when markets are oversupplied.
- Premiums are quoted over the LME cash price and vary according to delivery location.
- Premiums typically show a good correlation to LME cash price

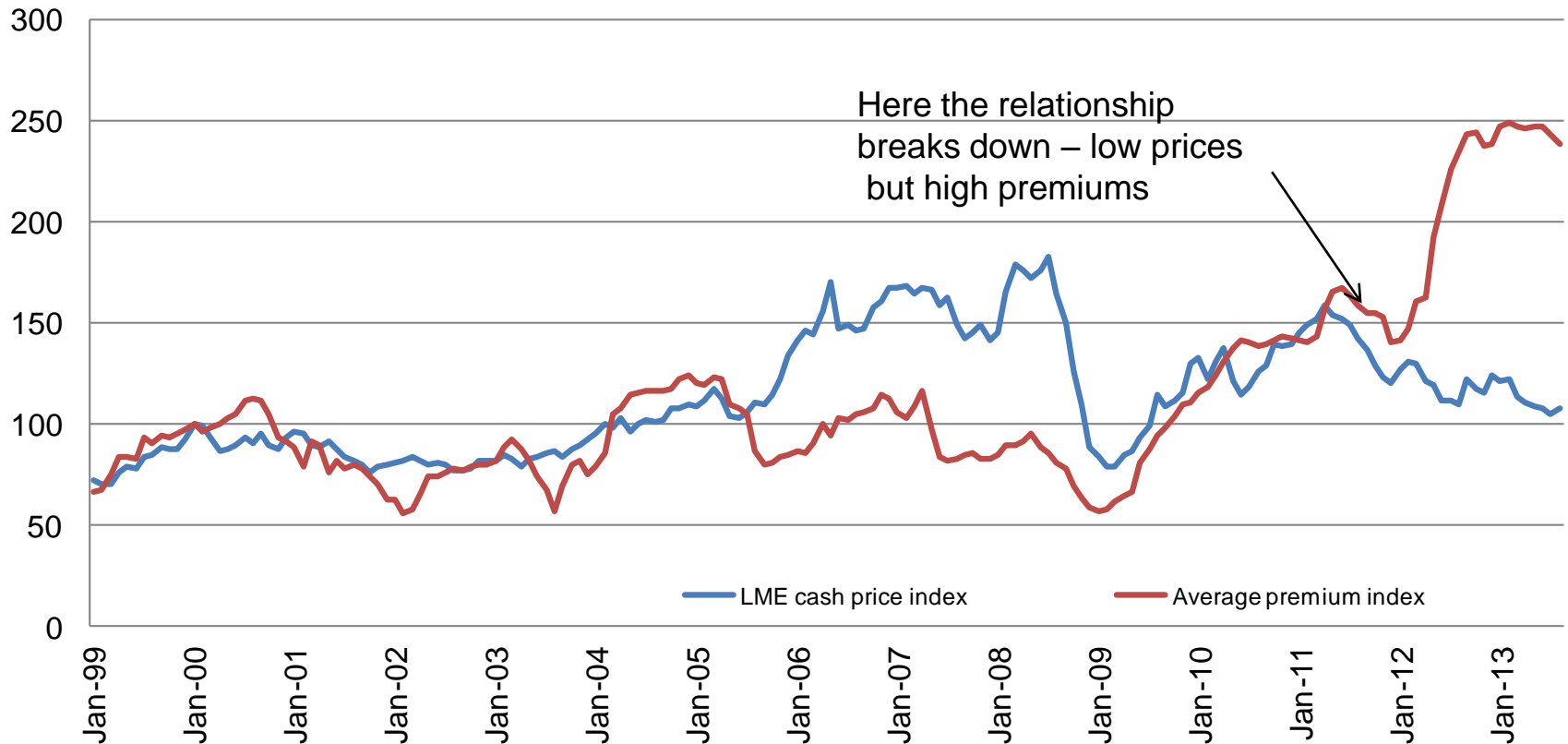
What has changed

- In recent years LME inventories of aluminium have greatly increased, mostly as a result of the reduction in consumption associated with the global financial crisis.
- Based on historical evidence premiums should decrease, however, the premiums for physical delivery of aluminium have **hit record highs**.
- The relationship between market balance, premiums and LME cash price has evidently broken down

Why

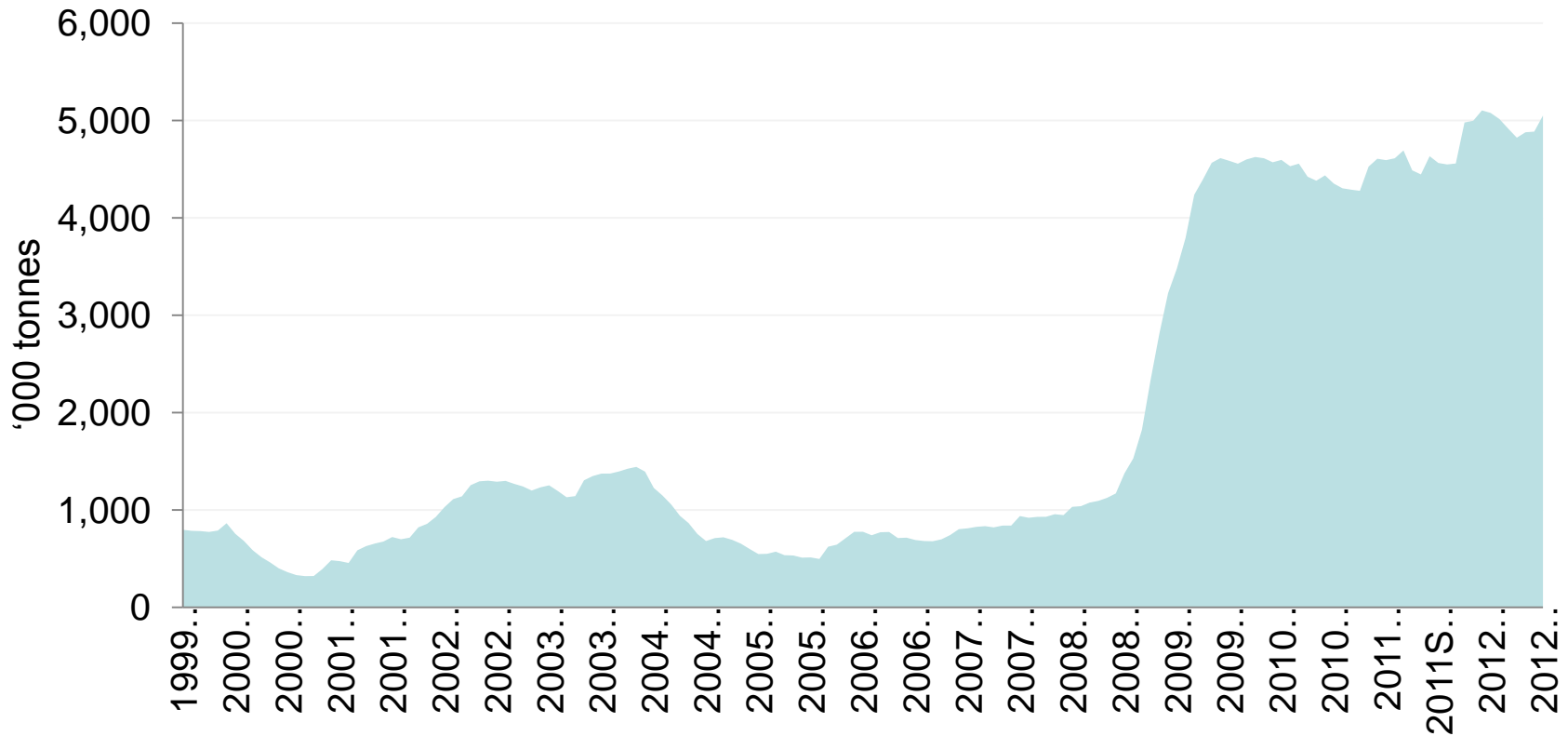
- There are two main reasons- inventory financing and warehouse backlogs

Average premium vs. LME price index (2000 = 100)



Note(*): Average premium Index consists of average of US Midwest , Europe duty paid and Japan 3M CIF premiums

Total LME aluminium stocks – sharp rise after financial crisis in 2008/9



Financing deals a product of cheap financing and high inventories

- The “carry trade” has long been a feature of the LME. However, since the Global Financial Crisis (GFC) (2008-09) a large amount of metal has been tied up in longer term financing – why?
- A large surplus of LME stocks built up, due to the slump in demand
- Availability of cheap finance and wide market contango, and low returns available elsewhere
- Warehouses attracted metal with offers of low rents and high incentives. Some banks and traders acquired warehouse companies
- In consequence, this metal was not available for physical consumption, and financial demand for metal drove up incentives, tightened the market for physical metal, and raised premiums



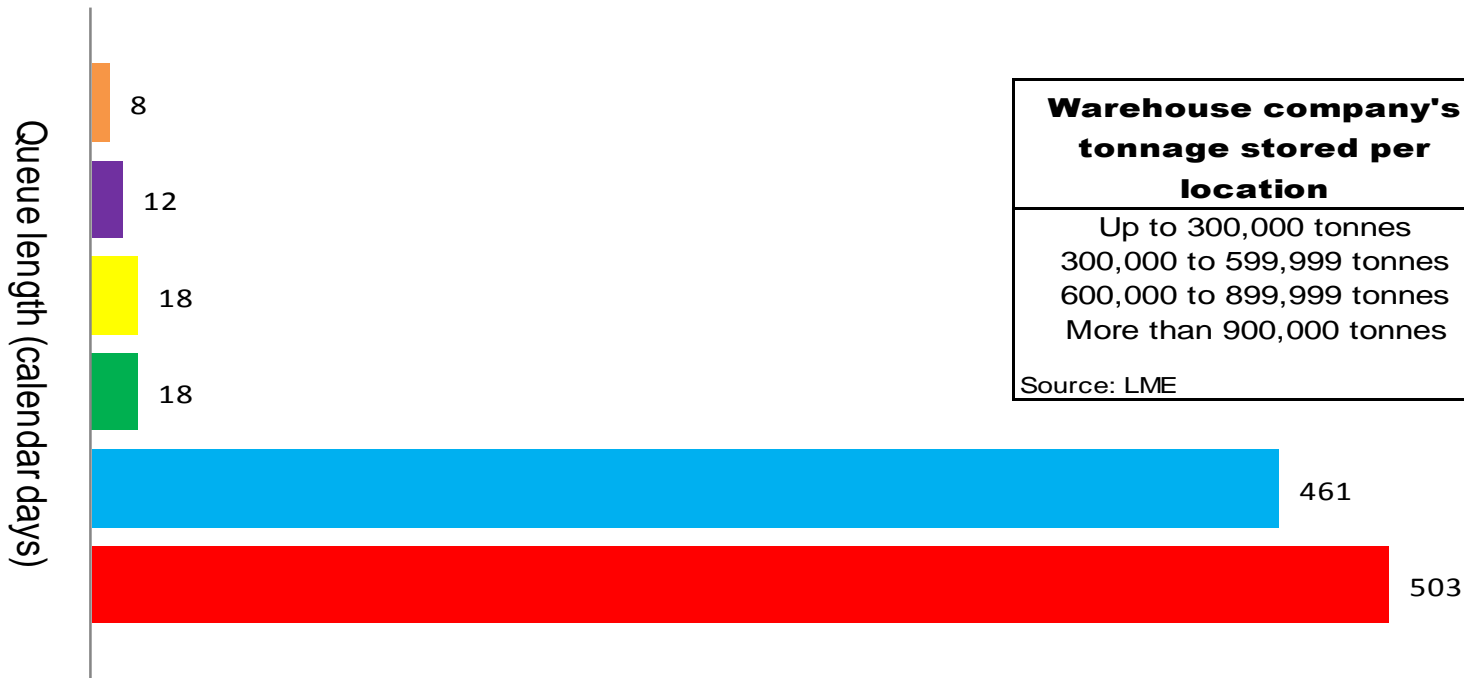
Warehouses acquired by banks and physical traders

Bank/Trader	Warehouse company	Purchase date	Main location	Total number of warehouses
Goldman Sachs	Metro	Feb 2010	Detroit	112
JP Morgan	Henry Bath	Feb 2010	Rotterdam	74
Trafigura	NEMS	Mar 2010		44
Glencore	Pacorini	Aug 2010	Vlissingen	179
Noble	Worldwide Warehouse Solutions	Oct 2010		15
Barclays	Erus Metals	Sep 2010	Antwerp	5

Data: LME, CRU

LME stocks have been concentrated in Detroit and Vlissingen

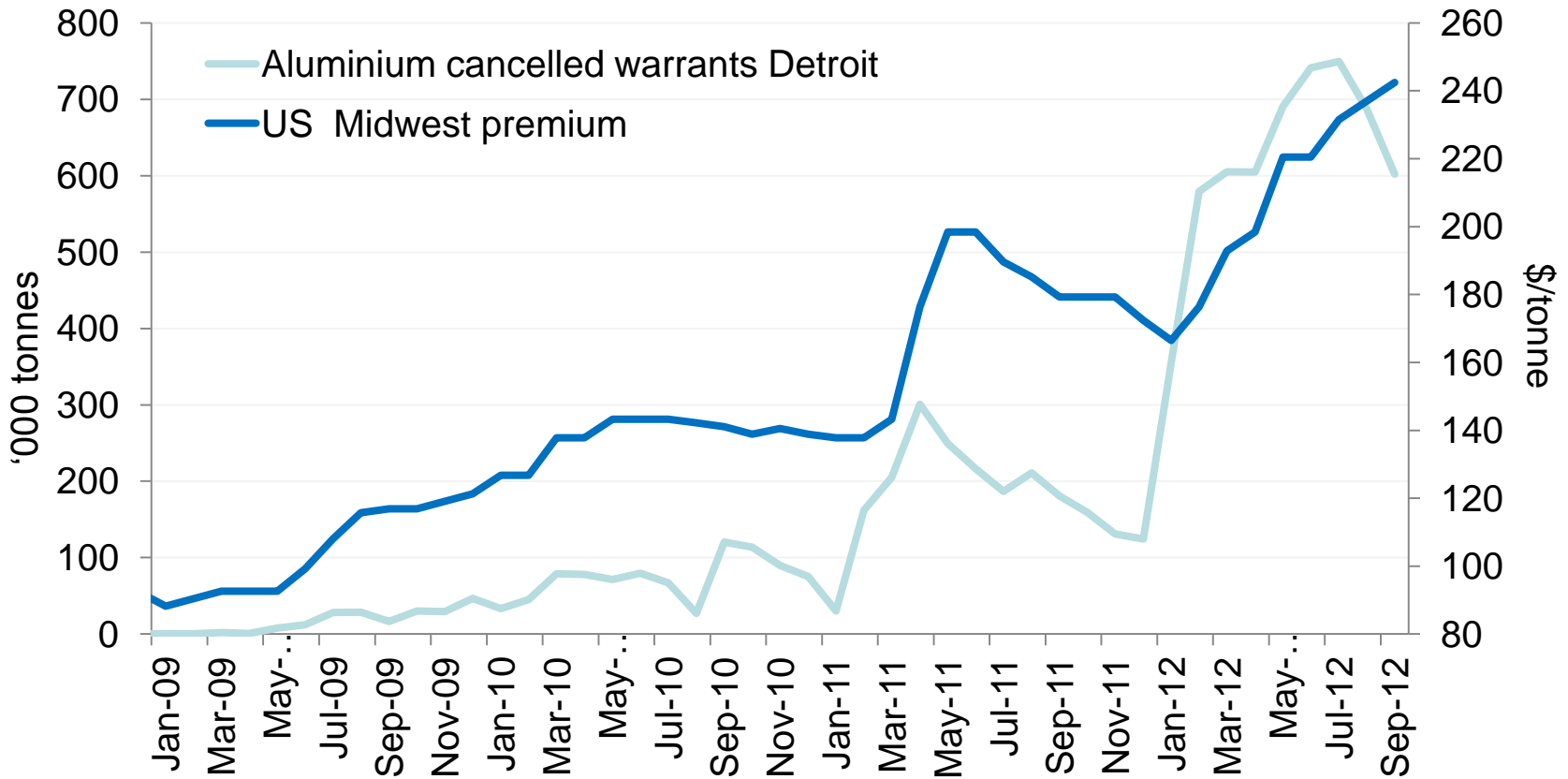
- Spain Bilbao
- USA Baltimore
- Singapore
- USA Mobile
- USA Detroit
- Netherlands Vlissingen



Warehouse company's tonnage stored per location	Minimum daily load-out rate
Up to 300,000 tonnes	1,500 tonnes
300,000 to 599,999 tonnes	2,000 tonnes
600,000 to 899,999 tonnes	2,500 tonnes
More than 900,000 tonnes	3,000 tonnes

Source: LME

Cancelled warrants and premiums rise





What next?

- LME proposal to increase outflows and limit queues to 100 calendar days
- Consumers call for greater transparency, higher load out rates, and smaller queues
- Producers call for greater transparency of LME warrants by establishing reporting similar to CFTC's Commitment of Traders Reports, and price mechanisms for hedging of premiums (exchange traded contracts)



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Thank you for your attention

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CRU's Aluminium Services

RAW MATERIALS

ANALYSIS

- > Bauxite and Alumina Monitor
- > Carbon Products Monitor

OUTLOOKS

- > Bauxite and Alumina Market Outlook
- > Aluminium Smelter Power Tariffs
- > Carbon Products Market Outlook
- > Bauxite Mining Cost Service
- > Bauxite Long Term Market Outlook
- > Alumina Refining Cost Service
- > Bauxite Mining and Alumina Cost Model
- > Bauxite Mining Cost Curve Database
- > Alumina Refining Cost Curve Database

PRIMARY ALUMINIUM

ANALYSIS

- > Aluminium Monitor

OUTLOOKS

- > Aluminium Market Outlook
- > Aluminium Price Risk Management Service
- > Primary Aluminium Smelting Cost Service
- > Primary Aluminium Smelting Business Cost Curve Database

FINISHED PRODUCTS

ANALYSIS

- > Aluminium Products Monitor

OUTLOOKS

- > Aluminium Rolled Products Market Outlook
- > Aluminium Price Risk Management Service
- > Aluminium Rolling Cost Service
- > Aluminium Rolling Cost Curve Database
- > Casthouse Shapes Market Outlook

COST SERVICES

- > Bauxite Mining Cost Service
- > Alumina Refining Cost Service
- > Bauxite Mining and Alumina Cost Model
- > Primary Aluminium Smelting Cost Service
- > Aluminium Rolling Cost Service
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