

20<sup>th</sup> July 2011



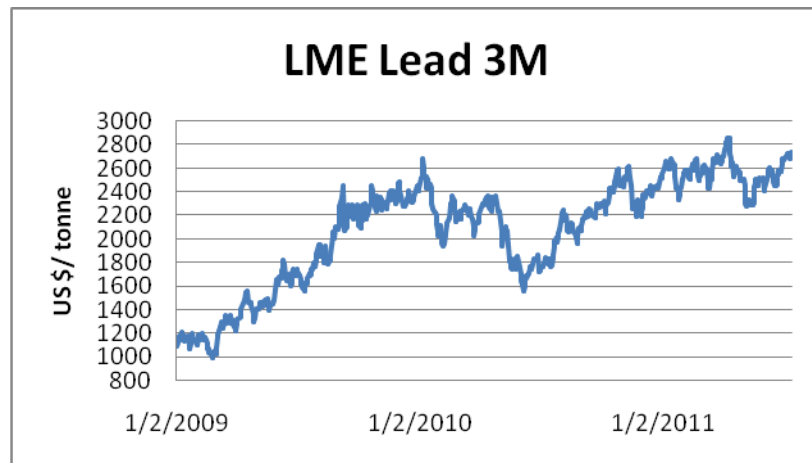
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# A Break in Lead Rally



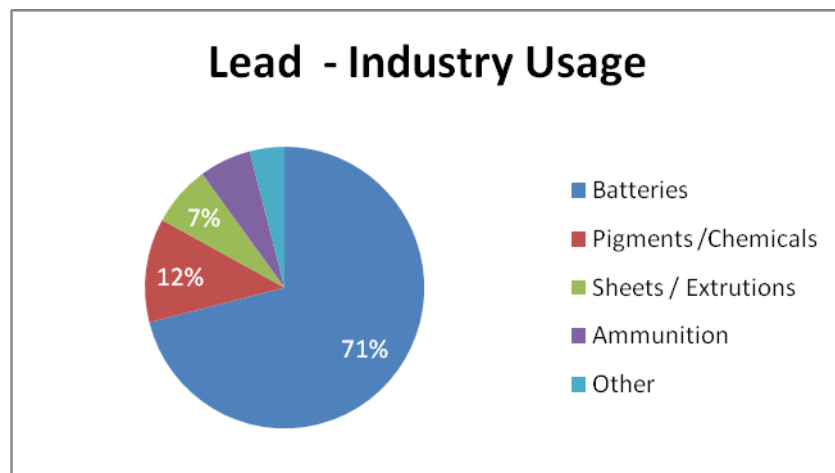
**Lead (The Metal):**

Lead has been a very strong metal compared to other metals in the complex over the past one year. It has managed to test \$2,700 per tonne on the LME and provided over 7.5 percent return to investors on an absolute basis this year. Strong demand from battery manufacturers across the globe helped the metal lead to hold on to its prices levels or bounce back to be an outperformer in the non-ferrous complex.



Source: Reuters, NB Research

The demand for batteries went up in Japan after the meltdown of Japanese nuclear reactors due to the earthquake and Tsunami in March earlier this year, pushing the demand for batteries in that region for some time.



Source: Reuters, NB Research

About 71 percent of the total refined lead goes into the manufacture of batteries. Hence, any major development with respect to the production - usage of batteries is likely to have a direct impact on the prices of lead prices.

### **Chinese Crackdown on Lead-Acid Batteries:**

Ignoring environmental concerns for the sake of rapid industrialization in major developing nations used to be a common practice until now. Polluting or contaminating natural resources was considered to be a trade-off between nature and development. However, nations across the world have begun taking steps to preserve the environment.

One of such steps has been taken by China. It shut down several factories that manufacture lead-acid factories for violating environmental norms. In May, authorities downed shutters of as many as 300 lead-acid battery plants situated in China's eastern Zhejiang province and **southern Guangdong province**.

Zhejiang accounts for 32 percent of China's total lead-acid battery production, while Guangdong, the second-largest producing region, accounts for 13 percent, according to SMM Information and Technology Co.

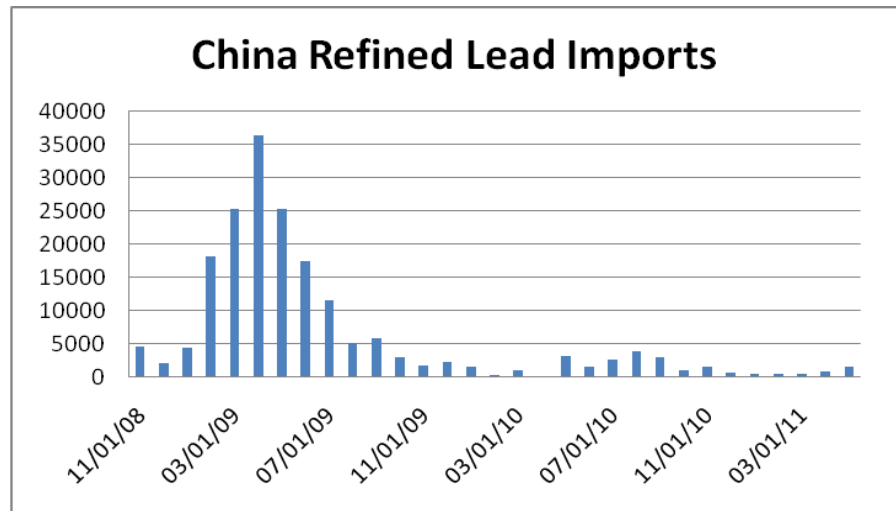
China's Anhui province shut down more than 80% of its lead-acid battery plants in the first half of this year amid a nationwide clampdown due to environmental and health concerns, local news agency Xinhua reported.

**Twenty-six of the 97 lead-acid battery makers were shut down or demolished and 55 are being idled for safety checks, accounting for more than 80% of all battery plants in the province, Xinhua said, citing data from Anhui's department of environmental protection.** It is estimated that, about three quarters of lead-acid battery manufacturing plants in China could be phased out in the next 2 to 3 years, after Beijing launched a crackdown.

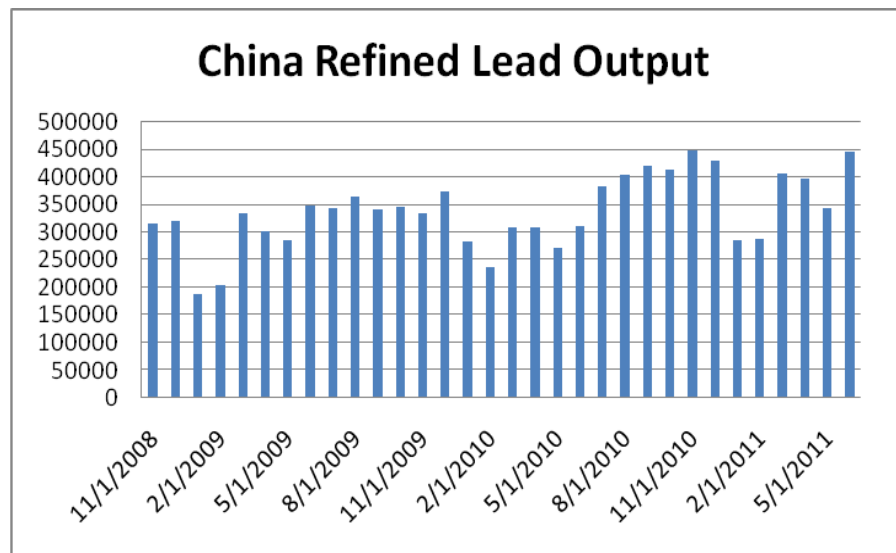
Battery plants and recyclers in Zhejiang, Guangdong, Sichuan and Henan provinces suspended production from mid-May after hundreds of people were poisoned by lead.

Battery production accounts for about 80 percent of the domestic lead consumption in China. Hence, any crackdown on lead-acid battery manufacturing activity is likely to have a direct impact on the demand for the metal lead in China.

**Lead (Metal) Trade - China:**



Source: Reuters, NB Research



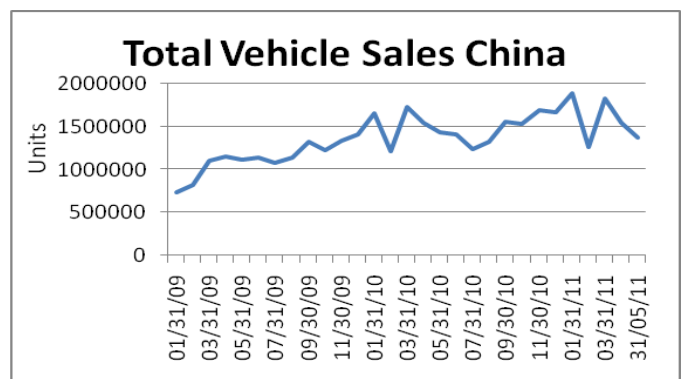
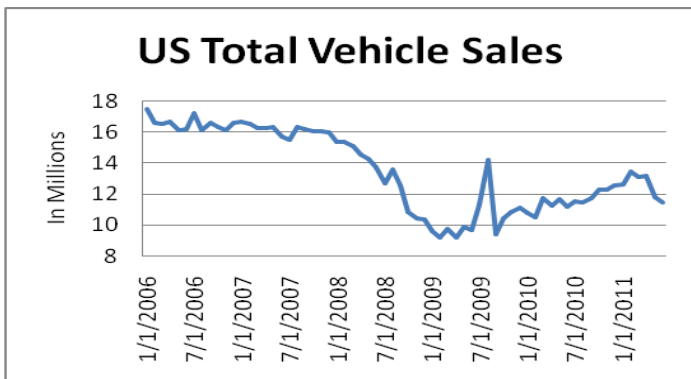
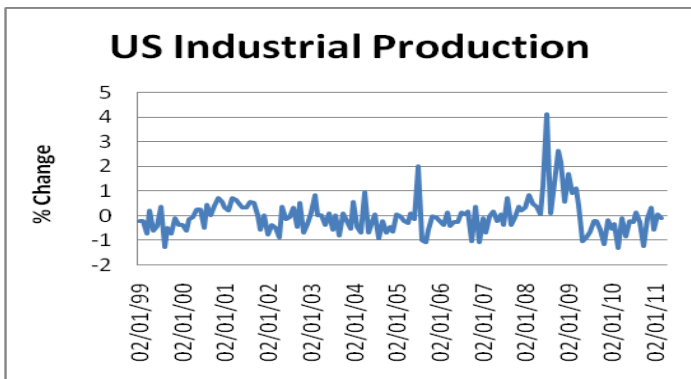
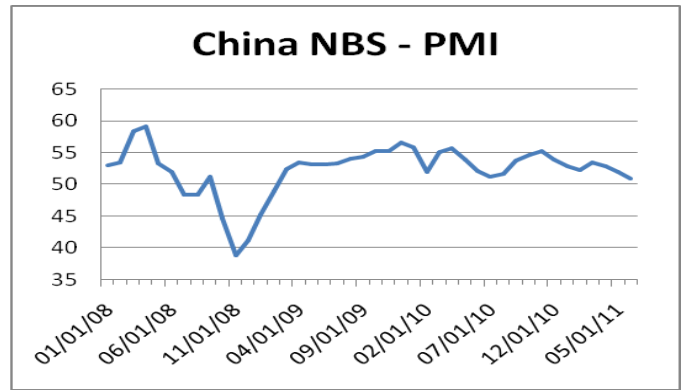
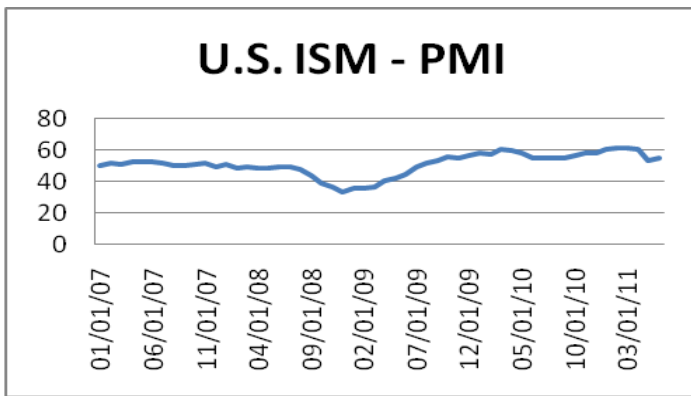
Source: Reuters, NB Research

Lead import by China once again reached a four figure amount, but remains well below the five figure amount seen in the 2009 import policy of the nation. Refined lead imports by the nation were about 80 percent higher than April 2011, in China. But, on a y-o-y basis, it was nearly 48 percent lower.

China's refined lead output reported a 25 percent rise in the first six months of the year 2011 from the corresponding period in 2010. It has also been observed that the output has been gradually increasing over the years.

Hence, with this trade we observe that lead (metal) is well supplied in local Chinese markets, which accounts for about 40 percent of the total global consumption.

**Industrial Activity Scenario - US and China:**



Source: Reuters, NB Research

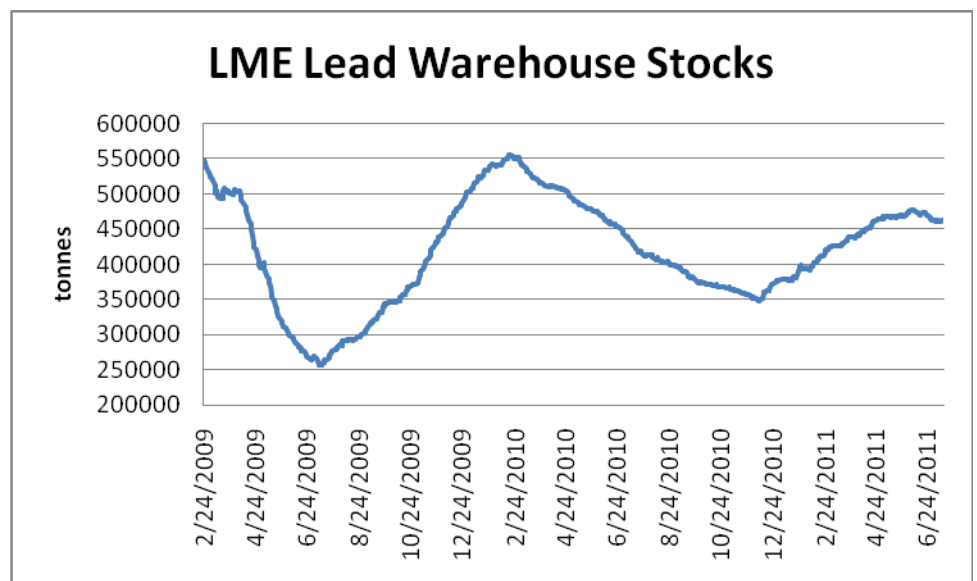
Manufacturing activities across the US and China are still subdued, as the data suggests. NBS PMI numbers in China are close to the 50-mark, raising risks for manufacturing activities going into contraction. ISM PMI data of the US unexpectedly reported some respite but remains well below the 60-figure seen at the start of the year.

However, industrial production data reveals the other part of the story. There is absolutely no growth in the level of industrial production in the US. However in China, the industrial production growth remains quite robust with a y-o-y 15 percent growth.

The vehicle sales figures in both countries are showing a similar trend. Vehicle sales lately seem to have slowed down quite considerably in those regions. In China, the latest vehicle sales figure in May 2011 reveals a ten percent decline from April 2011. A series of interest rate hikes and RRR hikes can be held responsible for slowing car sales in China, Also in the US, vehicle sales in the previous quarter have declined by 7 percent from the first quarter of the year.

Since lead is a prominent metal used in the manufacturing of batteries and batteries are being widely used in the manufacture of vehicles. Hence, any slowdown in this sector in is likely to have a direct impact in on the demand for this metal.

### Lead (Metal) LME Warehouse Stocks:



Source: Reuters, NB Research

London Metal Exchange (LME) monitored warehouse stocks have been steadily increasing since the end of 2010. Lead LME warehouse stocks have gone up by 17.5 percent since the start of the year. Build-up in stocks signifies a subdued physical demand for the metal globally.

### Lead (Metal): Demand-Supply:

(In 000 tonnes)	Production	Consumption	Surplus/ Deficit
2008	8653	8648	5
2009	8867	8791	76
2010	9455	9418	37
2011 (F)	9760	9752	8

Source: ILZSG, NB Research

Looking at the demand-supply scenario, lead was oversupplied by 37,000 tonnes in the year 2010. This year, mine production exceeded by 11% compared to the same period in 2010 this was due to higher output in Australia and China. During April 2011, the metal supply exceeded demand by 74kt and inventories rose to 126kt.

The world refined lead metal output rose 14% this year due to higher production in China. In Europe and the United States the metal usage increased by 3.9% and 6.9%, respectively. And Chinese apparent demand rose to 26.5%. However, looking at the current demand-supply scenario we do not expect the metal to go into deficit till the end of the year.

### Outlook:

Factors such as ample of supplies of the supply of the metal in local Chinese local markets, slowing Chinese import numbers, weak manufacturing activity across US and China, dip in vehicle sales across those regions China and the US\_and most importantly, low demand from lead-acid battery manufacturers in China is likely to pressurize lead. **We expect lead prices to fall back to \$2,440-\$2,460 per tonne on the LME and Rs 108-Rs 110 per kg on the MCX.**

RESEARCH TEAM		
Name	Designation	E-mail
Kunal Shah	Research Head - Commodities	kunal.shah@nirmalbang.com
Vikash Bairoliya	Research Analyst	vikash.bairoliya@nirmalbang.com
Devidas Rajadhikary	Technical Analyst	devidas.rajadhikary@nirmalbang.com
Evelyn Rodrigues	Technical Analyst	evelyn.rodrigues@nirmalbang.com
Harshal Mehta	Technical Analyst	harshal.mehta@nirmalbang.com
Vinod Maloo	Technical Analyst	vinod.maloo@nirmalbang.com
Sunit Mehta	Research Associate	sunit.mehta@nirmalbang.com
Ravi D'souza	Research Associate	ravi.dsouza@nirmalbang.com
Somya Dixit	Research Associate	somya.dixit@nirmalbang.com
Subhash Lalwani	Research Associate	subhash.lalwani@nirmalbang.com

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**Address:** Nirmal Bang Commodities Pvt. Ltd., B2, 301 / 302, 3rd Floor, Marathon Innova, Opp. Peninsula Corporate Park, Ganpatrao Kadam Marg, Lower Parel (W), Mumbai - 400 013, India.