

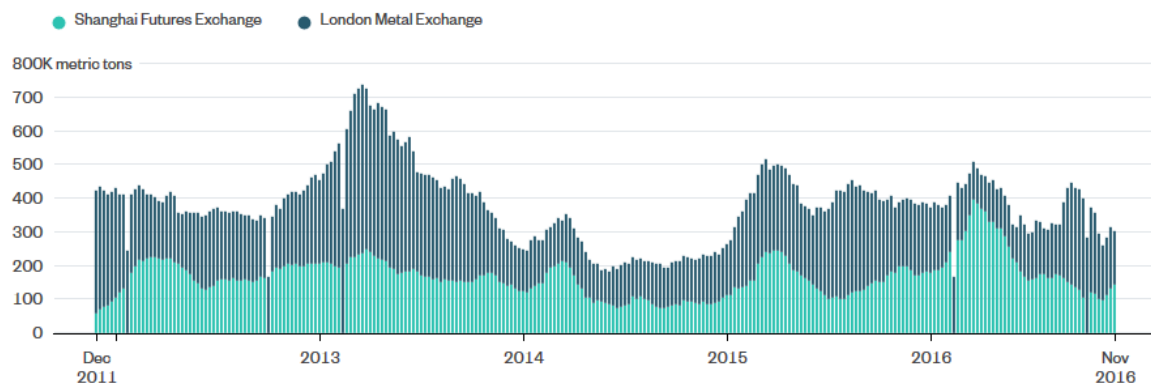
Copper's Capacity Problem

Normally, when commodity prices jump -- and LME copper is up 21 percent this month -- it's because either demand is looking strong, or supplies are looking short.

The signs of either condition are remarkably scant. Exchange inventories monitored by the London Metal Exchange and Shanghai Futures Exchange have been declining, but remain at comfortable levels. The two exchanges have about 304,000 metric tons of deliverable metal in their warehouses, about a quarter more than average levels during 2014 when copper prices slipped 14 percent.

Pedal to the Metal

Available copper stocks in major exchange inventories have fallen, but not to crisis levels



Source: LME, Shanghai Futures Exchange, Bloomberg

What about demand? Despite all the excitement over a surge in infrastructure spending if a Trump administration results in a Congress that wants to provide the government with funds rather than starve it, the public sector typically finds talking about construction spending a lot easier than actually doing it.

The [progress](#) on California's mooted high-speed rail project, for instance, is comically small-scale. Or take Australia, where Tony Abbott was elected in 2013 with a promise to be an "[infrastructure prime minister](#) who puts bulldozers on the ground and cranes into our skies." Three years on, public spending on engineering construction is still below the levels it reached in the quarter before the poll, and in every quarter of the five years prior to that.

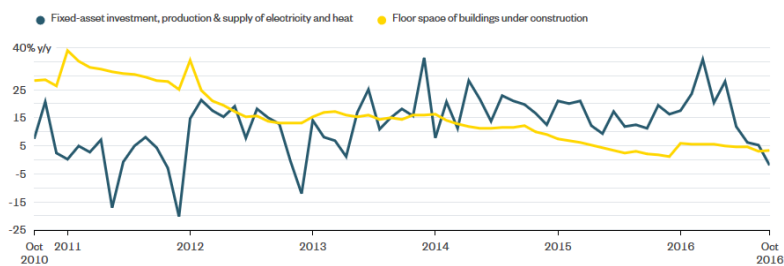
The private sector would seem a better source of demand, with U.S. housing starts jumping at the fastest rate since 1982 in October. Although at 1.3 million units a month, they remain well below pre-crisis levels and will face a major headwind from any moves to deport or

restrict migration of the Latino workers who've traditionally provided a large share of the construction workforce.

It's a similar picture in China. Perhaps further infrastructure stimulus will push consumption above the already elevated levels it's been enjoying in 2016. But building construction and spending on power infrastructure, two of the biggest consumers of copper, both appear sluggish.

No More Heroes

Growth from two of the biggest categories of Chinese copper consumption is grinding to a halt



Source: National Bureau of Statistics of China, Gadfly calculations

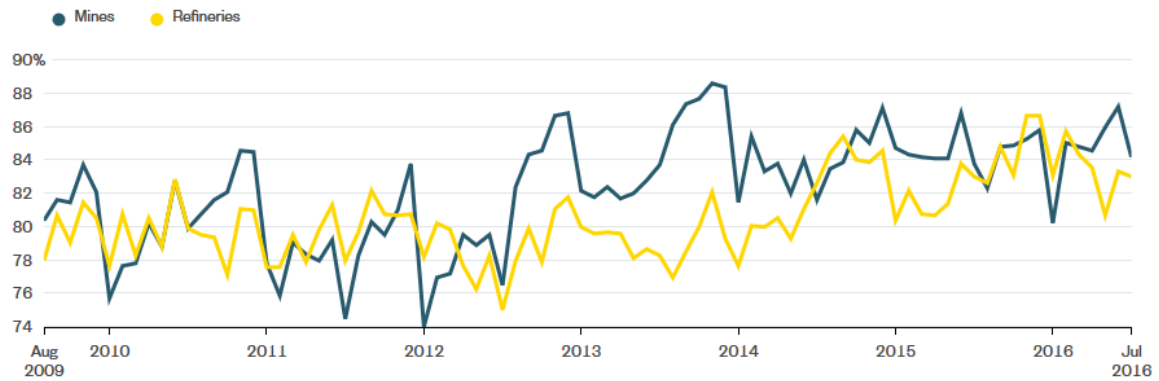
There is one bright spot that may explain the excitement. While expectations of demand look overblown, the market appears to be waking up to a supply side that seems distinctly tight.

Production at Chilean state-owned miner Codelco [fell](#) modestly in the first three quarters of the year from 2015 levels. Output slipped 6 percent in the September quarter at both [BHP Billiton Ltd.'s](#) and [Glencore Plc's](#) mines.

Even Freeport-McMoRan Inc., which overtook Codelco as the world's biggest copper miner during 2016, is facing issues. While third-quarter copper sales [were up 20 percent](#) from a year earlier, the company cut its full-year output target [by 200 million pounds](#) because of difficulties extracting the last rock from the open pit at its Grasberg site in Indonesia before mining moves underground.

Work It

Copper capacity utilization has been creeping up in recent years, leaving less room to boost supply



Source: International Copper Study Group

Capacity utilization in the world's copper mines has been running at around 85 percent for most of the year, according to the [International Copper Study Group](#). That's about as high as it's comfortably been able to go in recent years. If a new wave of demand does come down that pike, that tight supply is the factor that will drive prices higher.