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Is Gold Too Expensive Compared to Platinum?

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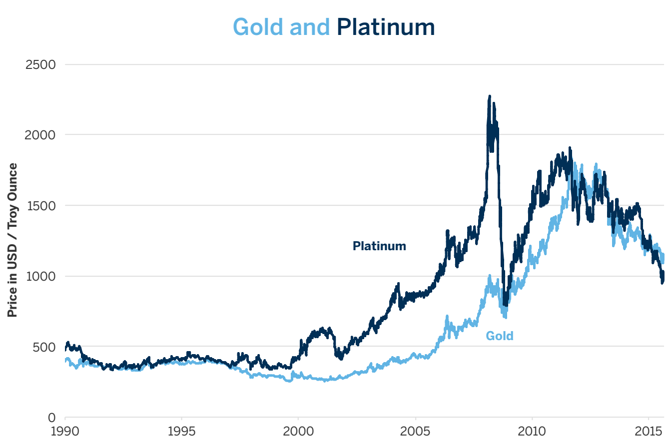
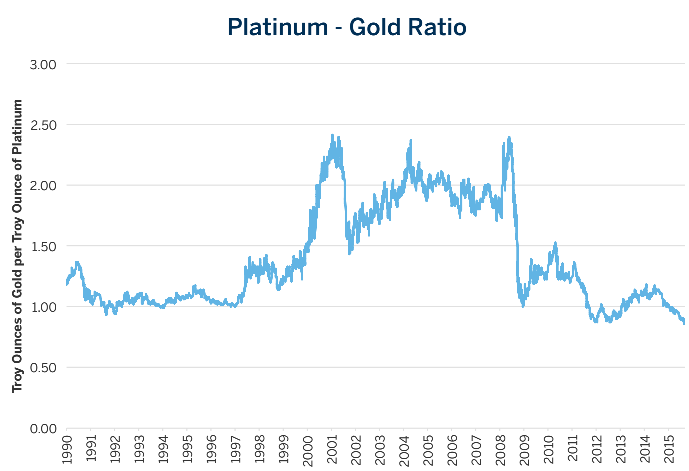
For most of the past quarter century, platinum has traded higher than gold, sometimes at twice the value. Since January, however, (Figures 1 and 2) gold has turned the tables on platinum, rising above the white metal for only the second time in the past five years.

Figure 1: Gold Trading Higher Than Platinum



Source: Bloomberg Professional (GC1 and PL1)

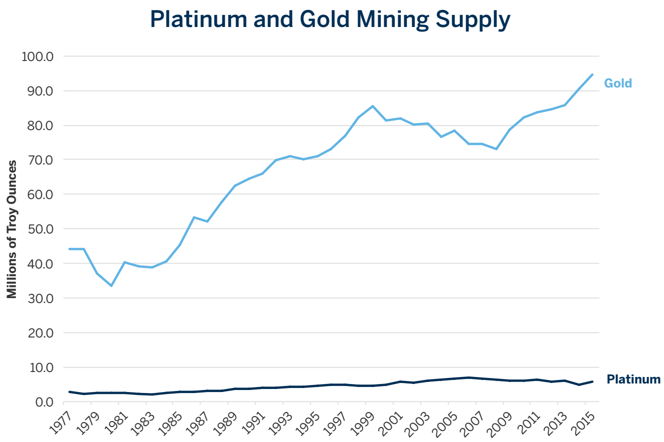
Figure 2: Platinum In-The-Ground More Abundant Than Gold



Source: Bloomberg Professional (GC1 and PL1)

This makes sense, from the narrow perspective of the relative abundance of the two metals in the Earth's crust. Platinum is about 20% more abundant than gold. What may come as a surprise though is that the world mines only about 6% as much platinum as gold. In 2014, for example, the world mined just over 5 million troy ounces of platinum compared to over 91 million troy ounces of gold (Figure 3).

Figure 3: Platinum Mining Output Likely to Rebound in 2015



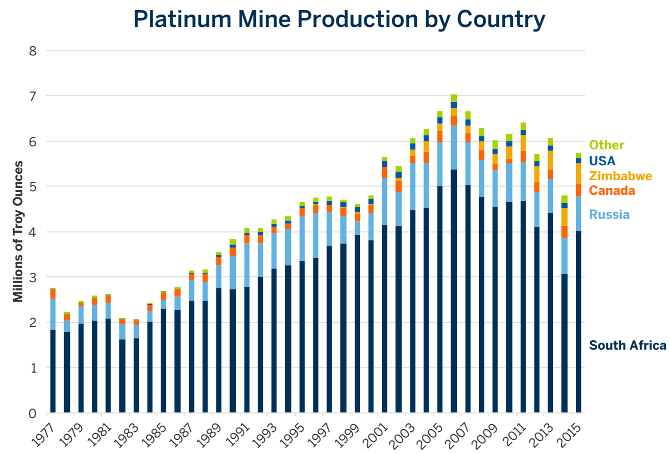
Source: The CPM Platinum Group Metals and Gold 2015 Yearbooks

Platinum mining, which has been declining since 2005, is expected to rebound sharply in 2015 after a series of strikes in South Africa during 2014. However, production of platinum will likely be about 18% less than in 2006. By comparison, gold production this year will likely be about 26% higher than in 2006.

Not only is global production of gold both much greater and growing faster than platinum, the sourcing is more diversified. China, the world's largest producer of gold, accounts for only 16% of global production, followed by Russia and Australia at 9% each, the United States at 8% and Canada at around 5%. The top five producers account for less than half (47%) of global production. In contrast, South Africa this year will account for 70% of global platinum production. Russia, the second largest producer, will account for 13%, and the top five producers account for 98% of the world total (Figure 4).

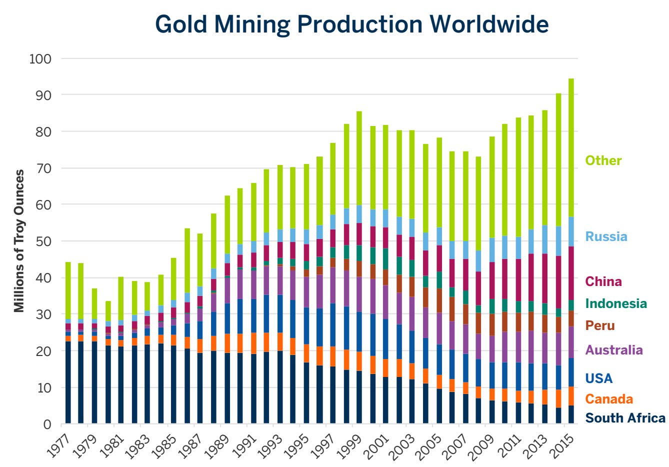
The geographical diversity of gold production, along with a far larger and faster growing supply, should make for a gold price that is substantially lower than that of platinum (Figure 5).

Figure 4: Platinum Mining Production Is Concentrated And Declining



Source: The CPM Platinum Group Metals Yearbook 2015

Figure 5: Gold Mining Production Is Diversified And Rising

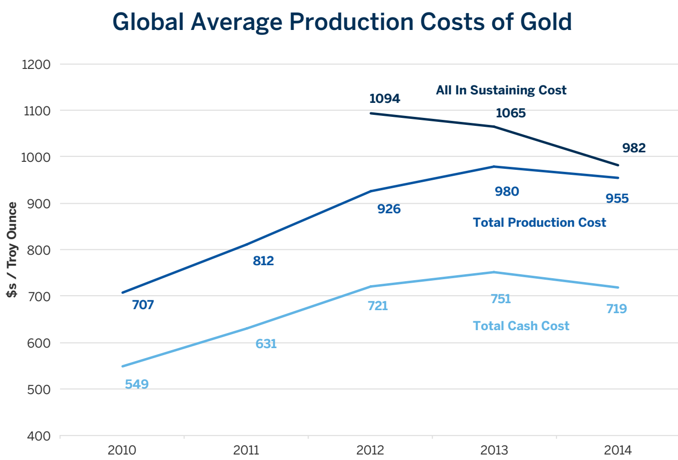


Source: CPM Group Gold Yearbook 2015

What's more is that platinum costs far more to produce than gold. In 2014, the cash cost of producing platinum was $1,209 / troy ounce. That is about 20% above the current price! This implies that platinum mining production might continue its decline in coming years as producers run into financial trouble.

The cash cost of extracting gold, by contrast, is around $700 per ounce, or about 40% below current prices. Moreover, the price of gold is still about 10% above the all-in sustaining cost of running a mine (just below $1,000 by the estimate in Metals Focus). This implies that gold production is likely to continue to rise in coming years – in defiance of expectations that gold mining output might peak in 2015 (Figure 6).

Figure 6: Cash Cost of Mining Gold Below Price

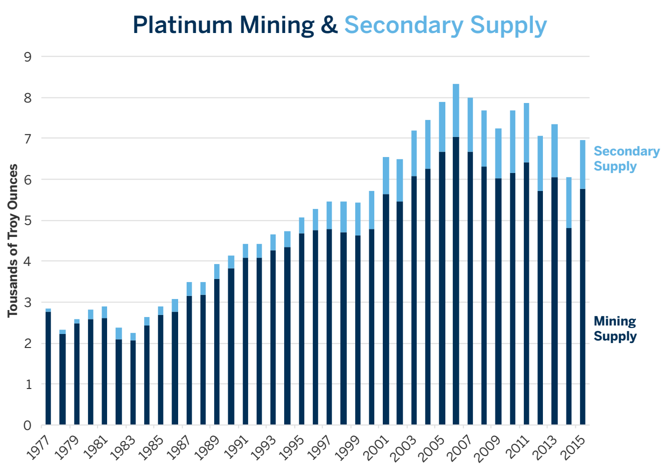


Source: Metals Focus: Gold Focus 2015, Metals Focus Gold Mine Cost Service

From a mining-supply perspective, the message is clear: the price of gold should be much lower than the price of platinum. So why is gold trading higher than platinum currently?

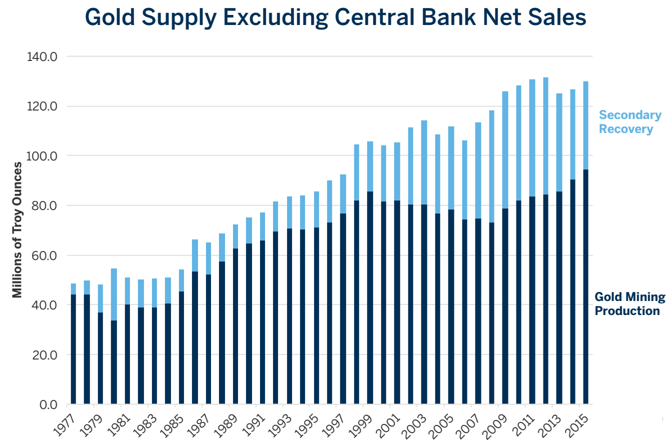
The answer isn't secondary supply which is no greater for platinum than it is for gold (Figures 7 and 8).

Figure 7: Platinum Secondary Supply is Expected to be 17.3% of Total Supply in 2015



Source: The CPM Platinum Group Metals Yearbook 2015

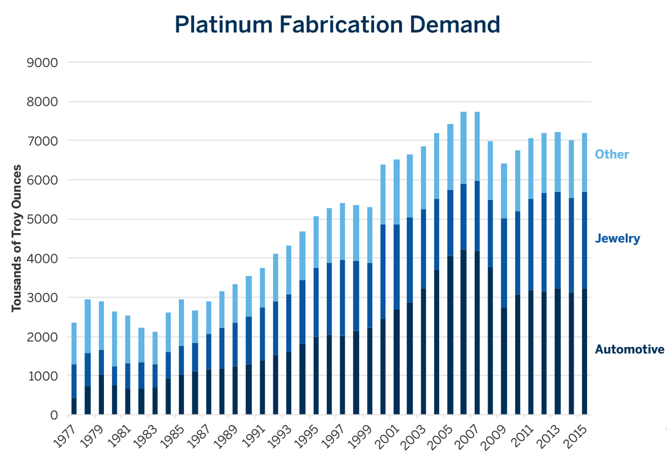
Figure 8: Gold Secondary Supply is Expected to be 27% of Total Gold Supply in 2015



Source: CPM Group Gold Yearbook 2015

The explanation for the depressed price of platinum relative to gold comes mainly from the demand side. Platinum's primary industrial use is as a catalyst in diesel engines. The crisis in emerging market countries may be depressing truck demand. Also automakers have found ways to use less platinum in their catalytic converters, also constraining demand growth (Figure 9).

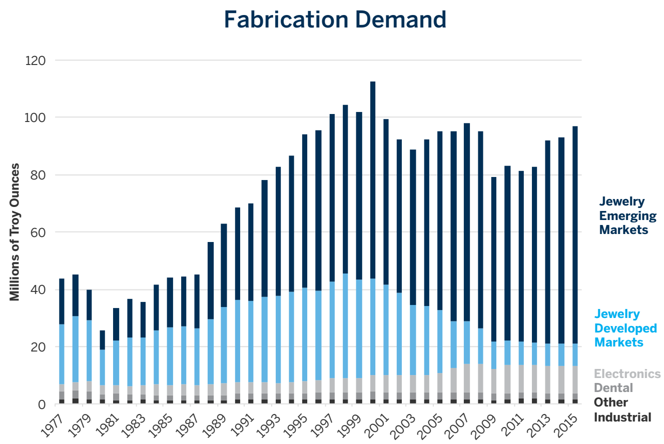
Figure 9: Platinum Automotive Use Isn't Growing



Source: The CPM Platinum Group Metals Yearbook 2015

By contrast, gold is much less reliant on industrial uses and demand for gold jewelry will likely rebound given the recent declines in price, helping to support demand. Platinum jewelry will also likely see an increase in demand but jewelry use is less important to platinum than it is to gold.

Figure 10: Gold Fabrication Demand is Much Less Reliant on Industrial Uses



Source: CPM Group Gold Yearbook 2015

Bottom Line

From our perspective there are significant upside risks to the platinum:gold ratio, especially on the supply side. Declining platinum mining production, much of which is underwater in terms of cost, could create spikes in the value of platinum relative to gold. In stark contrast to platinum, gold is seeing rising mining production, and has a highly diversified supply base. Moreover, despite the decline in the USD price of gold over the past four years, it is still profitable to mine. As such, we think that gold mining will likely defy predictions of an imminent peak in primary supply, and that mining production will continue to grow for some time. If we are correct about the supply side effects, platinum could rise versus gold in coming years.

With respect to the demand side, our sense is that the slowdown in China and other emerging markets (Latin America, the Middle East, and Russia), as well as efficiency gains with respect to the use of platinum in the automotive sector, are already priced in to a large extent. As such, unless the slowdown in global truck demand is much sharper than currently expected, platinum could also see some upside there as well – at least relative to gold.