

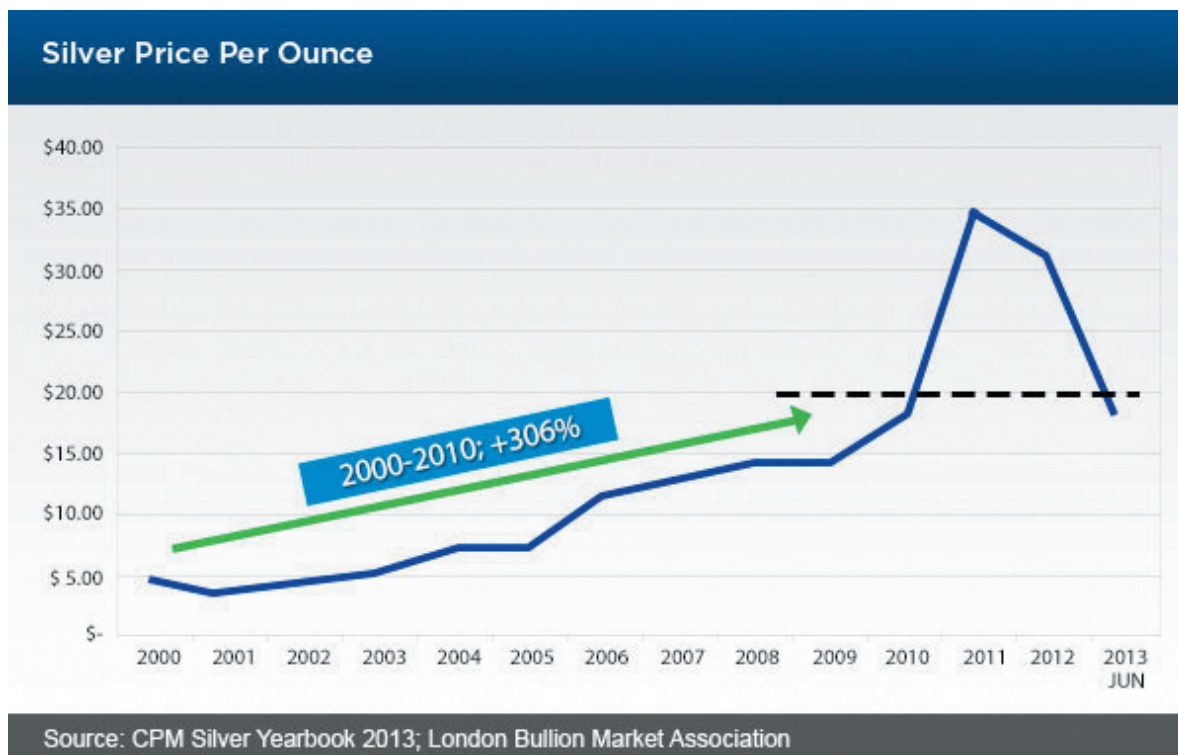
SILVER DÉJÀ VU: Are We Ready for Rebound?

By Michael Haynes

From the turn of the century in 2000 through 2010, Silver increased in value by 306%, from \$5 to \$20.31 per ounce. On June 30, 2013, Silver was valued at \$18.86 per ounce. Is Silver positioned for Déjà Vu, a rebound from these levels to higher valuations?



Chart 1. Silver Price per Ounce, 2000-2013.



As shown in Chart 1, Silver began the century at \$5 per ounce and, due to the market forces of supply and demand at work, held relatively steady until 2003. Then, with a determined climb, Silver reached approximately \$15 per ounce in 2008, the year of the Great Recession. With a pause for 2008, Silver broke through \$20 per ounce in 2010, moving quickly to approximately \$35 in 2011, and then retreating to approximately \$20 as of June 2013. Since market forces were at work all the way up from \$5 through the \$20 mark and back down to the \$20 mark, it would be useful to review the markets in 2010 (when Silver pierced \$20 per ounce) so that we might understand the supply/demand relationships at that time and interpret those relationships in today's market.

Chart 2. Supply of Silver, 2000-2012.



THE SILVER SUPPLY HISTORY, 2000-2012

The supply of Silver is more than 95% reliant on mining and secondary (or scrap) sources, with mining providing 68% to 71% of the supply. The secondary market, Silver presented for recycling, has been relatively stable as a percentage of the supply since 2000, although the market has not experienced price reductions of the magnitude recently demonstrated in 2013. Since a portion of the secondary market may be price sensitive, it is difficult to predict how much scrap may be submitted for recycling should the lower price levels of recent weeks continue into the future.

As shown in Chart 2, mining provided 689 million ounces of Silver in 2010 and 698 million ounces of Silver in 2012, an increase of only 1%, while secondary sources provided 279 million ounces in 2010 and 282 million ounces in 2012, also an increase of only 1%. From a supply perspective, 2010 and 2012 look very similar, except that with lower prices of Silver in 2013, it may be reasonable to assume that the secondary sources may not provide the same number of ounces, which may create a bias to the downside on secondary sourced ounces.

On closer examination of mining sources seen in Chart 3, every source provided only 1% growth or declined in ounces from 2010 to 2013 except for two: (a) Mexico, which provided a 6% increase in ounces; and (b) China, which provided a 9% increase. Overall, mining output increased by only 9.5 million ounces, or 1% in total, including the increase of China of 9.7 million ounces.

It is unclear which of the mining sources could not produce the 2012 levels of ounces economically at the lower prices in 2013. If any of Mexico, Peru or China reduces production of 5% or more in 2013 (despite the greater than 30% price correction in Silver from 2012 levels), coupled with hindrances in other mining sources, the overall mining supply could stall at 2012 levels or even decrease.

In summary, supply of Silver in 2013 could be restricted in both the mining sources and secondary sources as Silver prices return to 2010 levels.

THE SILVER DEMAND HISTORY, 2000-2012

Chart 3. Mining Sources of Silver, 2000-2012.

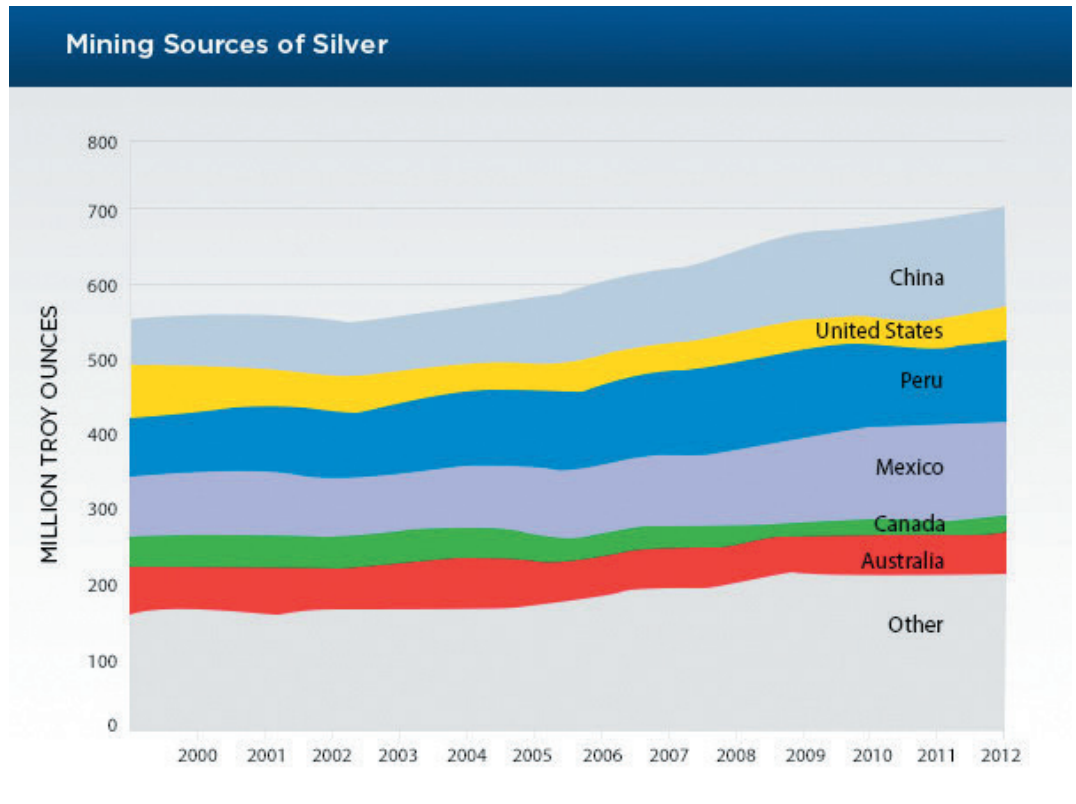
With the Silver supply at levels that may stabilize or even fall due to lower Silver prices, Silver demand from Fabrication and coinage may fluctuate.

Fabrication from 2010 through 2012 fulfilled 86%, 90% and 88%, respectively, of the aggregate demand for Silver each year. As shown in Chart 4, fabrication demand exceeded mining supply in every year. Accordingly, secondary sources are critical in the supply/demand balance for Silver, and with the price correction in 2013, it is unclear how Silver supply will provide sufficiently for fabrication demand.

When adding the coinage demand to the fabrication demand and then comparing the aggregate demand with the aggregate supply in 2010, the margin for error was small, as the difference between supply and demand was barely 4%. The balance continued with very slim differences in supply and demand in 2011 and 2012 with a 2% shortage in supply in 2011 and a 3% excess in 2012.

Upon closer examination of fabrication demand for 2010-2012 in Chart 5, only the photography segment had lower Silver fabrication demand, with a decrease of approximately 17 million ounces.

Each of the remaining Silver fabrication demand segments increased their requirements from 2010 to 2012 and in the aggregate by 31 million ounces, which was substantially supported by the increase of approximately 12 million ounces of Silver for fabrication in electronics (which includes batteries) for 2012 over 2010. The fastest growing segment of fabrication demand is from the photovoltaic segment, with an increase of 25%, or approximately 9 million ounces of Silver from 2010 to 2012. Between the hot expansion areas of electronics (including batteries) and photovoltaics, more than 60% of the increase in Silver fabrication from 2010 to 2012 is represented.



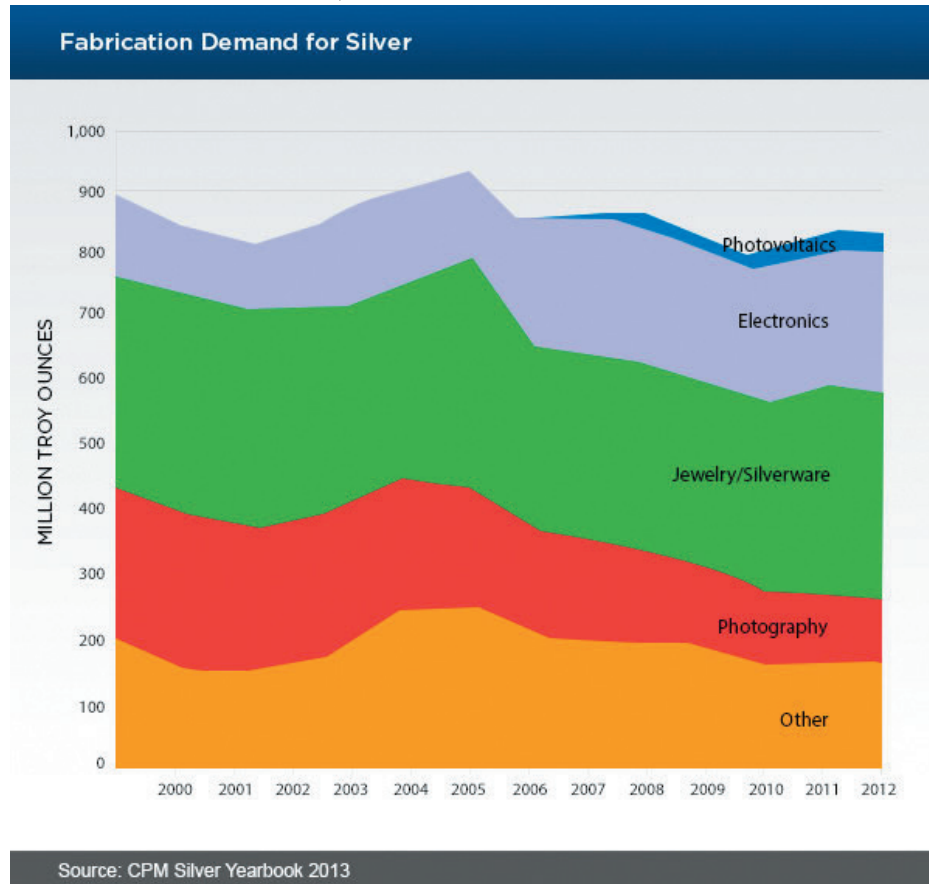
Source: CPM Silver Yearbook 2013

Chart 4. Silver Supply and Demand, 2000-2012.



Source: CPM Silver Yearbook 2013

Chart 5. Fabrication Demand for Silver, 2000-2012.



The largest segment of Silver demand is from jewelry/silverware, which increased in demand by approximately 10 million ounces from 2010 to approximately 300 million ounces, or 35% of the aggregate fabrication demand, in 2012. Of all of the segments of fabrication demand, perhaps jewelry/silverware is the most price sensitive, with rising prices restricting demand while decreasing prices fuel demand. In 2013, with the price corrections in Silver, jewelry/silverware demand may experience a material increase.

DÉJÀ VU IN SILVER POSSIBILITIES

While it may be challenging to predict Silver prices, it is reasonable to examine the supply and demand components using historical data at similar price points to the current market and perhaps draw directional conclusions in the major segments.

Supply: Silver mining in 2010 and 2012 has not grown, and with the Silver price correction in 2013, it is possible that some of the mining operations will slow due to a more unfavorable economic result. Silver Secondary sources in 2010 and 2012 have not grown and with the Silver price correction in 2013, it

is possible that inflows of Secondary sources (or Scrap) may be sluggish.

Demand: Aggregate fabrication demand in 2010 as compared to 2012 has increased very modestly. The fastest growing areas of electronics (including batteries) and photovoltaics do not seem to be restricted and in the aggregate, provide sufficient demand to more than offset the gradual decline of demand in photography. Lower prices from the recent price correction may increase demand in the jewelry/silverware segment, the largest of fabrication demand.

Fueled by the lower prices in 2013, Silver may see a more rapid increase in demand. Conversely, the same lower prices create economic hurdles for any increase in supply, either from mining or secondary sources. The balance between supply and demand in 2010, 2011 and 2012 was very finely tuned, and any changes in supply or demand could create a more significant imbalance.

Is it possible to see another Silver run like the 2000 to 2010 cycle? The historical data is here, and the only ingredient needed is your forecast for supply and demand. **ATA**