THE SILVER MARKET IN 2015

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The Silver Institute - 2015 Interim Report

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GLOBAL GDP GROWTH

Source: Oxford Economics, IMF
GROWTH IN PHYSICAL SILVER DEMAND

% Change


Developing Countries
Advanced Economies

Source: GMFS, Thomson Reuters
### WORLD SILVER SUPPLY AND DEMAND

<table>
<thead>
<tr>
<th>Moz</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015f</th>
<th>% Δ - 2014</th>
<th>% Δ - 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine Production</td>
<td>755.9</td>
<td>787.5</td>
<td>832.0</td>
<td>865.0</td>
<td>867.2</td>
<td>0.3%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Total Supply</td>
<td>1,041.7</td>
<td>1,003.3</td>
<td>996.5</td>
<td>1,049.1</td>
<td>1,014.4</td>
<td>-3.3%</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Jewelry &amp; Silverware</td>
<td>235.2</td>
<td>229.2</td>
<td>276.8</td>
<td>285.2</td>
<td>280.0</td>
<td>-1.8%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Coins &amp; Bars</td>
<td>216.0</td>
<td>141.7</td>
<td>226.4</td>
<td>203.5</td>
<td>206.5</td>
<td>1.5%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Industrial Fabrication</td>
<td>628.3</td>
<td>596.9</td>
<td>601.7</td>
<td>595.2</td>
<td>570.7</td>
<td>-4.1%</td>
<td>-9.2%</td>
</tr>
<tr>
<td>Physical Demand</td>
<td>1,079.5</td>
<td>967.8</td>
<td>1,104.8</td>
<td>1,083.9</td>
<td>1,057.1</td>
<td>-2.5%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Physical Surplus/ Deficit</td>
<td>-37.9</td>
<td>35.5</td>
<td>-108.3</td>
<td>-34.8</td>
<td>-42.7</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Annual Average Silver Price $/ oz</td>
<td>35.12</td>
<td>31.15</td>
<td>23.79</td>
<td>19.08</td>
<td>15.51</td>
<td>-18.7%</td>
<td>-55.8%</td>
</tr>
</tbody>
</table>

Source: GFMS, Thomson Reuters
THE SILVER MARKET IN 2015

- SILVER PRICES
- DEMAND
- SUPPLY
- INVESTMENT
- PRICE OUTLOOK

GFMS
US DOLLAR SILVER PRICES

<table>
<thead>
<tr>
<th>US$/oz</th>
<th>Average Price</th>
<th>Average y-o-y change</th>
<th>Intra-period change*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>19.05</td>
<td>-20.0%</td>
<td>-21.5%</td>
</tr>
<tr>
<td>Jan - 13th Nov 2015</td>
<td>15.91</td>
<td>-18.3%</td>
<td>-8.4%</td>
</tr>
</tbody>
</table>

*intra-period change refers to difference between the last business day and the first business day of the year

Source: Thomson Reuters Eikon
GOLD/SILVER RATIO, 2004 – 2015 TO-DATE
(BASIS WEEKLY AVERAGE PRICES)

Average 57.9

Jan 2nd – Nov 13th 2015 = 73.7

83.4

77.7

Source: Thomson Reuters Eikon
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WORLD PHYSICAL SILVER DEMAND
FORECAST ANNUAL CHANGES: 2015F LESS 2014 (Moz)

Million ounces

<table>
<thead>
<tr>
<th>Category</th>
<th>Change (Moz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coins &amp; Bars</td>
<td>3.0</td>
</tr>
<tr>
<td>Jewelry</td>
<td>-5.6</td>
</tr>
<tr>
<td>Silverware</td>
<td>0.4</td>
</tr>
<tr>
<td>Photography</td>
<td>-1.4</td>
</tr>
<tr>
<td>Industrial Fabrication</td>
<td>-23.2</td>
</tr>
<tr>
<td>(minus Photography)</td>
<td></td>
</tr>
</tbody>
</table>

Source: GFMS, Thomson Reuters
INDUSTRIAL FABRICATION
FORECAST ANNUAL CHANGES: 2015F LESS 2014 (Moz)

Million ounces

Electronics -12.9
Brazing Alloys & Solders -5.9
Solar 11.0
Ethylene Oxide Catalyst 2.6
Other Industrial Applications -18.1

Source: GFMS, Thomson Reuters
SOLAR DEMAND - SILVER POWDER PRODUCTION

Source: GFMS, Thomson Reuters
GLOBAL COIN SALES HIT RECORD QUARTERLY HIGH IN Q3

*Excludes Commemorative and China Mint coins

Source: GFMS, Thomson Reuters – Quarterly Coin Sales Survey
WORLD PHYSICAL SILVER DEMAND
FORECAST ANNUAL CHANGES: 2015F LESS 2014 (Moz)

Million ounces

-32.3 China
-22.9 India
17.0 North America
10.4 Europe
-0.6 Japan
1.6 ROW

Source: GFMS, Thomson Reuters
DEMAND SUMMARY

• Weakening growth in China will continue to weigh on physical demand
• The growth seen in coin demand is not expected to repeat, at least to the extent seen in 2015, next year
• Jewelry fabrication is expected to recover, but will largely hinge on consumption in China
• The continued shift toward smaller mobile devices and away from larger desktop computers will remain intact, weighing on electronics demand growth in the medium term
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GFMS
MINE PRODUCTION WINNERS AND LOSERS, 2015F VERSUS 2014

Source: GFMS, Thomson Reuters
TOTAL CASH COSTS NET OF BYPRODUCTS

Source: GFMS, Thomson Reuters
TOTAL CASH COST ON A COPRODUCT BASIS + CAPEX

Source: GFMS, Thomson Reuters
WORLD SILVER SCRAP SUPPLY

Source: GFMS, Thomson Reuters

MOZ


ROW  China  India  Europe  North America

0% 5% 10% 15% 20% 25% 30%

Source: GFMS, Thomson Reuters
OUTSTANDING DELTA ADJUSTED PRODUCERS HEDGE POSITION

Source: GFMS, Thomson Reuters
SUPPLY SUMMARY

• We estimate that mine supply peaked in 2015 and will trend lower in the foreseeable future
• Supply from scrap is expected to stabilize around 2015 levels in the medium term
• The hedge book remains at low levels and hedging is not forecast to return to the market in strength
• Government sales are not expected to be a feature of the market in the years ahead
• Declining total supply is expected to be a key driver of annual deficits in the silver market going forward
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WORLD SILVER IDENTIFIABLE INVESTMENT* VOLUME AND VALUE

Total Identifiable Investment in US$ Bn (RHS)

*Identifiable Investment is the sum of bars, coins and ETFs.

Source: GFMS, Thomson Reuters
INVESTORS’* POSITIONS IN COMEX SILVER FUTURES & OPTIONS

- Managed money long and short positions

Source: CFTC data via Thomson Reuters Eikon

GFMS
ABOVE GROUND STOCKS

* As of end-Q3. Custodian vault figures exclude ETF holdings

Source: GFMS, Thomson Reuters
THE SILVER MARKET IN 2015

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PRICE OUTLOOK

- The slowdown in China’s economy has had a significant impact on silver offtake in 2015, a theme expected to persist in 2016, albeit to a lesser extent.
- While coin demand is expected to remain elevated in 2016, it may not hit fresh record highs.
- Mine supply is expected to decline in the long run and we believe that 2016 will be the beginning of this protracted decline. Meanwhile, scrap levels are expected to stabilize.
- Above ground stock levels are expected to dwindle going forward amid a chronic shortfall of supply against physical demand. This will provide support to prices in the long run.
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