

Demystifying London's Gold and Silver Vault Holdings

By Joni Teves, Precious Metals Strategist, UBS



How many bars do London vaults hold?

Telling people outside this relatively small, rather close-knit precious metals industry that you work as a 'precious metals analyst' typically results in having blank, slightly confused faces staring back at you. You then have to explain that you actually deal with financial markets and developments in the precious metals industry rather than chemistry and the more technical aspects of elements 46 (palladium), 47 (platinum), 78 (silver) and 79 (gold) of the periodic table. It's usually not until you begin discussing the gold bars in the famous James Bond film 'Goldfinger' or the movie 'The Italian Job' (and not to mention that you've actually held a real gold bar in your hands) that they start to think you might just have a pretty interesting, albeit slightly obscure, job description.

From an analyst's perspective, there's usually no such thing as 'too much of a good thing' when it comes to market statistics. The more detail and information about the market, the better chance of understanding market dynamics and putting the various pieces of the puzzle together. But the LBMA's new data series on gold and silver London vault holdings is bound to benefit not only analysts, but the market as a whole. It is a first step in a move towards greater transparency that is in line with the broader trend in the regulatory environment. And, who knows, maybe it will even be of interest to those outside the industry to finally have some idea of how many gold bars – like the ones in the movies – are actually sitting in vaults in one of the world's busiest cities,

London. (Well, according to newly launched LBMA data, gold held in London is the equivalent of close to 600,000 gold bars.)

A move towards greater transparency

Last May, the LBMA and LPMCL announced plans to start publishing data on the volume of gold and silver held in London vaults this year. This is in line with efforts to increase transparency in the market and is certainly a valuable addition to the pool of available data. Vaulting statistics is the first instalment towards further transparency, which will eventually be followed by trade reporting.

The newly launched data series covers end-period data from July 2016 through to March this year, and going forward the statistics will be published monthly, with a three-month lag. This will include gold and silver in the form of large bars, kilo bars or coins, but exclude jewellery and other private holdings held in vaults that are not part of the London clearing system. The data is collated from the Bank of England and seven custodians which offer vaulting services, and is reported on an aggregated basis. These seven are HSBC, ICBC Standard Bank and JP Morgan, which are also clearing members of the LBMA, as well as Brinks, G4S Cash Solutions (UK), Malca-Amit and Loomis International (UK) Ltd., which are also LBMA members. Clearing members which do not have their own vault operations in London use accounts with these custodians or the Bank of England (BoE), and therefore do not contribute to the statistics to avoid double accounting.

Understanding the data

To be clear, these statistics only represent metal that is held physically in London and exclude any metal held in vaulting facilities outside of this jurisdiction which may be made available at a short notice. An example of this would be gold and silver held in Switzerland, which is also another key hub for precious metals trading and liquidity, given the country accounts for a significant portion of global refining capacity. Precious metals typically get shipped between London and Zurich as participants manage liquidity depending on market supply and demand conditions, and this is in turn reflected in swap rates between the two locations (London-Zurich loco swap rates). Market participants can hold gold and silver in both locations, but only metal that is held physically in London is included in the monthly data, even though gold or silver that an institution may be holding in Zurich can be easily shipped to London.

Gold and silver that is held in London vaults underpins the daily trading and clearing activity in the London bullion market. London continues to be a key gold trading centre globally, with an average of \$18.1bn worth of gold cleared each day in March 2017, according to LBMA net daily clearing statistics. Clearing data is different from turnover data. But to somehow put this into context, it probably still helps to note that the average daily turnover of physical gold spot contracts on the Shanghai Gold Exchange is over \$1bn, while an average of about \$32bn worth of gold futures trade on Comex each day.

Gold and silver held in London vaults that back shares in exchange-traded funds (ETFs) are also included in these statistics. We estimate that there is around 2,144 tonnes of gold and about 21,483 tonnes of silver held in EFTs globally. For gold, about 55% of total holdings are accounted for by funds that trade in stock exchanges in North America, about 18% that trade in the UK and 23% that trade in Switzerland and Europe. For silver, the bulk of holdings (approximately 73%) are accounted for by funds that trade in North America and the rest by

trades in Germany, UK and Switzerland, with only a modest 1% from trading in exchanges in Asia Pacific.

It is important to note that while an ETF may be listed in one location, metal that underpins this may be vaulted in another region. For instance, the largest gold ETF is traded on the New York Stock Exchange, but its designated custodian ultimately holds the underlying metal in its London vaulting facilities. Similarly for silver, the ETF with the largest silver holdings trades on the New York Stock Exchange, but the metal underpinning the shares is allocated in various vaulting facilities in England and New York, or other potential authorised locations. In this instance, silver held in England is considered 'loco London' and therefore is included in the aggregated data provided it meets the LBMA definition of being "held within the environs of the M25". In general, this means that although gold or silver ETF shares may trade in exchanges elsewhere, as long as the metal is held physically in London, these would be considered Loco London and form part of the LBMA's monthly statistics. Our database of gold and silver ETFs suggests that, using average gold and silver prices over the past year, about 1,485 tonnes of gold worth about \$60bn and about 13,759 tonnes of silver worth about \$7.85bn are likely to be held in London to back ETF shares. This is obviously a rough estimate that's provided here only for indicative purposes.

Additional pieces in the puzzle

Given that only limited historical data is available, it is hard to fully put into perspective. For instance, we cannot compare current levels versus the amount of gold and silver held during the peak of the bull run or during the 2015 trough of the correction from 2013. Nevertheless, looking at the change in levels between July last year and the end of Q1 this year still offers some insights.

Gold

Examining the data more closely, we note some interesting observations. It is worth highlighting that the BoE has been an important contributor to this move towards greater transparency in the precious metals market. Gold holdings at the BoE account for the bulk of the metal physically held in London, representing about 68% of overall holdings at the end of March. The BoE provides custody services primarily to central bank customers, helping them get access to London gold market liquidity. To further facilitate this, the BoE also holds gold custody accounts on behalf of certain commercial banks that support central bank access to the liquidity of the London gold market. About 12 years ago, the BoE started reporting gold holdings in its annual report. This year, monthly data has been made available, with the series covering end-period data from January 2011 through to the first quarter of this year.

On the assumption that the BoE custody service primarily caters to central bank customers, it's probably fair to say that gold held outside of the BoE should better capture investor activities. Clearly, this is a broad generalisation: the BoE also has commercial banks as customers and holds gold on their behalf, while at the same time, it is also possible for central banks to hold gold in other (non-BoE) vaults. To put some context around this, let's say for illustration's sake that about 80% to 90% of BoE gold holdings are accounted for by the official sector. Further, for simplicity let's assume that the vast majority of gold held in commercial vaults is on the back of investor positions and only a negligible amount comprises official sector holdings. This suggests that over the past year, an average of about 2,945 to 3,450 tonnes (\$119-\$139 bn) of investment-related gold was held in London. These inventories would include metal held on behalf of ETFs, which as mentioned above we estimate to be around 1,485 tonnes or about

\$60bn worth of gold. Taking these ETF-related holdings into account would then leave roughly around 1,460 to 1,965 tonnes or about \$59bn to \$79bn worth of gold in unallocated and allocated accounts as available pool of liquidity for OTC trading activities. As details on the actual breakdown of gold holdings are not available, all these figures are obviously only presented here for indication. Nevertheless, despite these limitations, the data still somehow supports the broad generalisation on how Loco London gold stocks may be split between official sector and investor holdings. For instance, gold held at the BoE appears to be more stable relative to gold held in other London vaults, such that changes in total Loco London gold over the past nine months have been driven more by changes in non-BoE gold. Arguably, investment-related gold holdings would tend to be more volatile relative to official sector holdings. Central banks hold gold as part of their official reserves, which also serve monetary purposes, and they typically have much longer time horizons.

Another observation that's worth noting is the modest 2% increase in total gold holdings equivalent to around 166 tonnes from July last year to the end of Q1 this year. This change is likely a function of investor liquidations in Q4 2016, which has since reversed but at a subdued pace. This also coincides with ETF flows – heavy liquidations towards the end of last year have been succeeded by net inflows YTD, but the volumes lag considerably compared to the same period in 2016.

In particular, Loco London gold holdings during the first quarter of this year were relatively flat. This coincides well with the broadly limited investor participation in the gold market that we have been highlighting. Many investors are keeping an eye on the gold market and continue to appreciate gold's value as a portfolio, yet few have been actively involved in putting on meaningful, strategic positions. This has been apparent in speculative positioning data indicated by the CFTC Commitment of Traders Report as well as gold ETF flows. In June, sentiment towards gold understandably came under pressure given the rise in real rates – not just in the US but also in Europe – and the seemingly hawkish shift in tone among central banks. As of early July, CFTC data showed that gold net longs on Comex had fallen to the lowest levels since January last year. Despite the rebound in gold prices in recent weeks, net speculative positions on Comex have remained very lean. Meanwhile, gold ETFs marked the first month of net outflows in July. Although YTD flows remain positive, gold ETF holdings are only up by 107 tonnes compared to over 598 tonnes over the same period in 2016. The relatively subdued changes in Loco London gold holdings in a way reflect these dynamics. It will be interesting to see how Loco London gold holdings look in Q2 considering these market developments. Although the data is backward-looking, this should still allow for additional insight on investment activity, considering that the series thus far appears to corroborate other indicators.

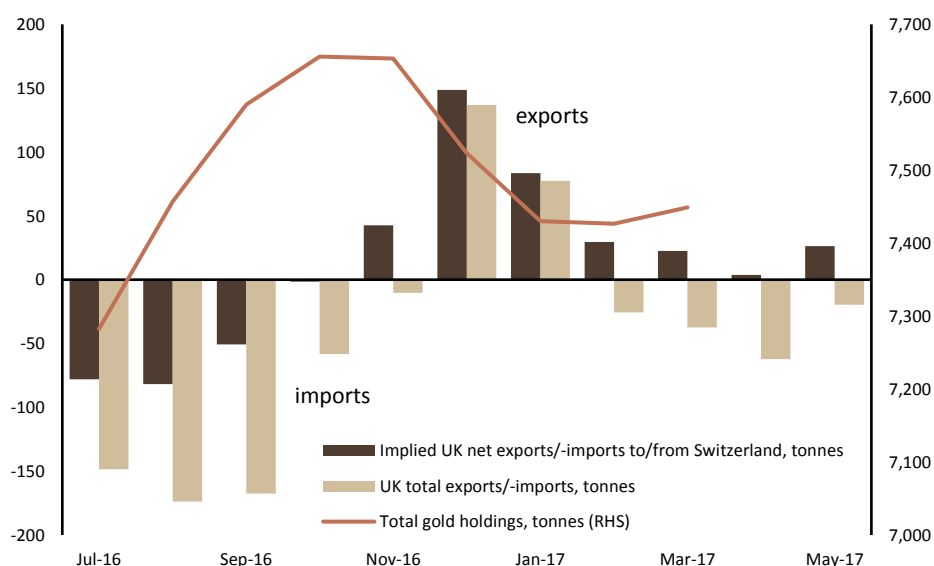
Finally, comparing total gold holdings data with the UK's gold trade flows confirms a strong link between the two. This is intuitive in that net inflows of gold into the UK should understandably translate into a build in holdings, while net outflows would suggest a reduction in overall levels. There is a shorter lag in trade data reporting, meaning that trade statistics should help market watchers anticipate changes in loco-London inventories before getting confirmation a couple months later from the LBMA report.

In addition to UK trade statistics, Swiss data on gold flows from and to the UK is also a useful indicator of how much gold is leaving or entering London vaults. Given Switzerland's key role in global gold refining, it essentially acts as an important interface between investment demand in Western markets and consumer demand in Asia which means that Swiss gold trade flows tend to hold important insights. Combining Swiss and UK trade data with London vault holdings allows

for a more complete picture (see chart 1). For instance, periods of strong physical demand out of key centres such as India and China could mean that large investment bars sitting in London vaults could be shipped to Switzerland to be transformed into kilo bars and eventually sent to physical buyers in Asia to meet consumer demand for gold jewellery and investment products. Net outflows of gold from the UK should coincide with declines in vault holdings in this case. In fact, this scenario occurred back in 2013: as the Fed's taper tantrum led to a sharp rise in US real rates, gold collapsed by 29% as investors exited gold exposures. In turn, the sharp drop in the gold price made it very attractive for physical buyers, especially in the context of a decade-long bull market. Investor gold positions held in London vaults – whether OTC or ETF-related – were being heavily liquidated. This metal then made its way to Switzerland, was converted into kilo bars, and shipped to Asia to satisfy the surge in demand in China, India as well as other parts of the region.

Interestingly, LBMA data shows that in Q3 last year, the opposite occurred – the UK was a net importer of gold and vault holdings increased. This coincided with weak physical demand for most of last year, which was more than offset by a pick-up in investment interest. Given strong demand from the investor community, gold still managed to rally 8% in 2016 (and as much as 30% from trough to peak) despite the weak fundamental backdrop. Towards the end of the year, market forces became conducive for gold to once again leave London vaults and be shipped out of the UK. Investors unwound positions in anticipation of the Fed rate hike, while at the same time, seasonal and regulatory factors in key markets boosted physical demand, allowing buyers in Asia to absorb the liquidation from Western investors. Demand out of China kicked in heading into yearend in anticipation of the Lunar New Year holidays, while the demonetisation of high-value banknotes in India led to a knee-jerk spike in demand. So far this year, physical markets have been more stable, while investment demand has been positive yet broadly more subdued. As mentioned earlier, the data tends to reflect this, with changes in Loco London gold holdings relatively limited during the first quarter of 2017.

Chart 1: Gold: Vault Holdings in London vs exports/imports

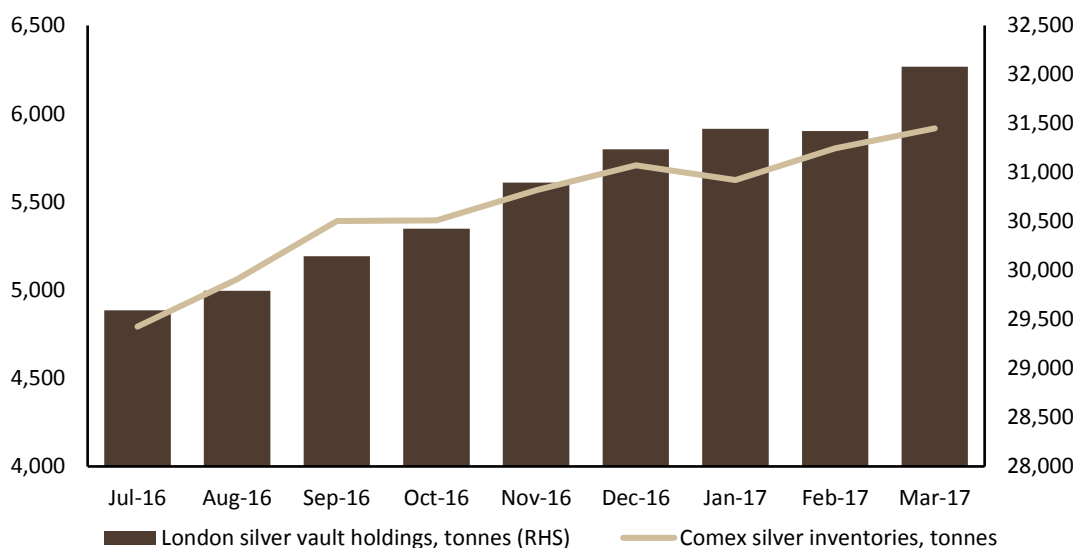


Source: LBMA, Swiss Customs, UK HMRC, UBS

Silver

There's only one component in the data series that aggregates the amount of silver held in London, unlike gold data where it is possible to split out what is held at the BoE and what is held in other vaults. This is primarily because the BoE does not provide silver custodial services. More broadly, silver tends to be considered a cheaper and more volatile way to get exposure to gold price trends, attributes that are likely more attractive for investors rather than the official sector. Silver holdings increased at a higher rate of 8% or 2,485 tonnes between July 2016 and March 2017 relative to the 2% (166 tonnes) gain in gold. Changes in global ETF holdings shows that silver positions have generally been more stable against gold in recent years. However, our database suggests that silver ETF holdings backed by Loco London metal actually declined by about 3% or 375 tonnes from July 2016 to March 2017. Relative speculative positioning between gold and silver on Comex similarly shows a stronger build in investor positions in silver than gold, at least during the first half of the year (see chart 2). Given silver's large industrial demand component, it initially attracted some attention on the back of growth and risk optimism amid the reflation theme. This translated into persistent gains in Comex investor positioning, which reached a fresh all-time high in May. Yet as reflation trades were unwound, so did the interest in silver, and Comex positioning has since given back about 81% from the highs. It would therefore be interesting to see Q2 and Q3 data on Loco London silver holdings, to find out whether OTC positions followed a similar trend. Loco London silver holdings could potentially be relatively more robust than what Comex speculative positions imply. Silver ETF holdings have generally been resilient over the past few years, despite heavy liquidations in gold ETFs, which could mean that silver OTC positions could also show a similar sense of stability.

Chart 2: Silver: Vault Holdings in London vs Comes inventories



Source: Bloomberg, LBMA, UBS

More data, more insights

The provision of information on gold and silver vault holdings brings more transparency to the London precious metals market. It marks the first step and will soon be augmented by trade reporting, which will further enhance the ability of market participants as well as regulators to track and assess market activity. Eventually having access to data on gross turnover for the Loco

London market will enable better comparisons with trading activities in other key centres such as New York and Shanghai, and allow for a broader and more holistic understanding of the market.

For a keen observer of the precious metals market, these are all very positive developments. Common questions that get asked by clients and other market participants every so often revolve around the level of holdings, the availability of metal or the comparison of physical versus paper trading activities. Up until now, the market has had to rely on third-party estimates of above-ground gold holdings, such as those provided by Thomson Reuters GFMS, the World Gold Council or Metals Focus. While the LBMA has been publishing monthly clearing statistics for years, this is not the same as trading turnover and the market has had to come up with educated estimates from the data that's available, including the one-off survey that was done to get a sense of trading volumes in the past. The publication of London vault holdings and the provision of Loco London trade data later on will now enable us to provide more informed responses to these questions. More broadly, the availability of these statistics should allow for much better insight and analysis of the precious metals markets, which in turn should ultimately contribute to more informed investment decisions.

Joni Teves, Precious Metals Strategist, UBS

Joni Teves is the Precious Metals Strategist within the Global Macro Strategy team at UBS Investment Bank in London. She covers gold, silver, platinum and palladium and is responsible for fundamental analysis, forecasting, and writing research pieces on these markets. Joni holds a Bachelor of Science in Business Economics degree from the University of the Philippines. She joined the Bangko Sentral ng Pilipinas shortly after earning her degree in 2006, and worked in the central bank's Treasury Department as a Gold Trader within the FX and Open Market Operations Group. After a brief stint with the CRU Steel Team, Joni joined UBS FX and Precious Metals Strategy in 2011.

