

Methodology: Gold market liquidity metrics 2022 Update

With average trading volumes of US\$132bn in 2021, gold is one of the most liquid assets in the world. We believe the highly liquid nature of gold and an understanding of this are particularly relevant for investors today as they are shifting to less liquid and riskier assets.

Our liquidity dataset helps investors better understand the sources of this liquidity. This dataset examines global gold liquidity across various platforms, products and markets including over-the-counter (OTC) contracts, futures, and gold-backed ETF (gold ETF). Liquidity is measured by daily average trading volume (in US dollars) over a given period, ranging from a single month to quarter-to-date, year-to-date, and full year estimates.

What revisions have we made to the data set in 2022?

We periodically review and examine our data series to ensure our methodology is up to date and the information is as accurate as possible. Representative estimates are key for investors to understand the liquidity of the global gold market.

Revisions include:

- Revised estimates of non-LBMA OTC volumes
- Addition of Shanghai Gold Exchange (SGE) OTC contracts
- Methodological adjustments to Shanghai Futures Exchange (SHFE) data
- Separation of SGE physical and deferred contracts
- Re-grouping of minor exchanges
- Review of available exchange-traded funds (ETFs) data

Non-LBMA trade data estimation adjustment

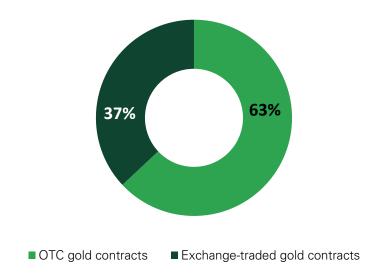
Non-LBMA trade data is intended to account for trading by non-LBMA members outside Loco London and loco Zurich, which are not included in the LBMA trade report. Based on anecdotal evidence, we estimate that this trading activity may contribute an additional 10% to 30% the volume reported by the LBMA report. The new mid-value multiplier of 20% is significantly lower than the mid-value of 75% we previously used. This adjustment is based on recent conversations our own estimates and is subject to future revisions as more data becomes available.

Adding SGE to the OTC section

The SGE is a large precious metals exchange consisting of exchange-traded contracts and "price asking contracts". Recently, we took a closer look at these "price asking contracts. Despite the fact that they are cleared centrally, they are categorised as OTC products by the SGE. As such, in our periodic review, we included these contracts to our OTC trade data calculation. They include: PAu9999, PAu9995, iPAu9999, iPAu9995, OAu9999, LAu9995 and LAu9999. And these gold contract's accumulated trading volumes in 2021 account for 63% of the SGE's total (**Chart 1**).



Chart 1: SGE OTC gold contracts and exchange-traded contracts' trading volumes in 2021*



Source: Shanghai Gold Exchange, World Gold Council

*For detailed information of these contracts, you can visit: trading_OTCMarket(sge.com.cn). Note that only contracts with active trading volumes in 2021 are included and we divide all SGE contracts' volumes by 2 as the report double-side-counted data.

Methodological adjustments to SHFE volumes

The SHFE has changed the way it calculates volumes and started to report only one side of the transaction since 1 January 2020.1 As a result, we updated our liquidity calculation accordingly given that, prior to 1 January 2020, SHFE trading volumes needed to be divided by two (as both sides of a transaction were reported).

Separating exchange-traded SGE gold contracts into physical and deferred

To help investors better understand China's physical gold demand and investment demand for gold, we separated all SGE exchange-traded contracts into two groups:

- Physical gold contracts which can be viewed as a proxy of China's wholesale physical gold demand, they include Au9999, Au9995, Au995, Au100g, iAu9999, iAu100g and iAu995
- Deferred (margin-traded) gold contracts which, combined with the SHFE's trade data, can be viewed as the proxy of short-term investment demand for gold in China. They include Au(T+D), mAu(T+D), Au(T+N1), Au(T+N2), NYAuTN06 and NYAuTN12.

For more details of these contracts, please visit: trading_matchingMarket_PhysicalTrading (sge.com.cn). Note that only contracts with active trading volumes in 2021 are included and we divide all SGE contracts' volumes by 2 as they report both sides of a transaction in their data.

LME trading volumes are now grouped under "all other exchanges"

LME data has been moved to the "all other exchanges" total as their trading volumes fell to insignificant levels.

¹ For more information, please visit: Market Data (shfe.com.cn)



Additional adjustments

- We revised any previous missing data from our liquidity table for completeness
- Ensuring that all gold ETFs² for which trading volumes are available are included in our dataset.

² Gold ETFs refer to open-ended ETFs and other products such as close-end funds, and mutual funds that hold physical gold. We periodically review the global gold-backed ETF universe and adjust the list of funds and holdings based on newly available data and information. For more details, please visit: <u>Gold ETF Commentary and Statistics | Gold ETF Holdings | Gold ETF AUM | Goldhub</u>.