

Global Gold – connecting internationally listed futures and local OTC markets

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Create Win-Win Landscape of Global Gold Market



- Cross-Market Liquidity Between Futures and Physical Markets
 Benefits All Market Participants.
- EFP Serves as the Bridge Between CME and London OTC Markets.
- Potential for Chinese Gold Market to Develop the EFP to Benefit the Domestic and International Market Participants. The markets are ready for such link.

CME Group: Who We Are

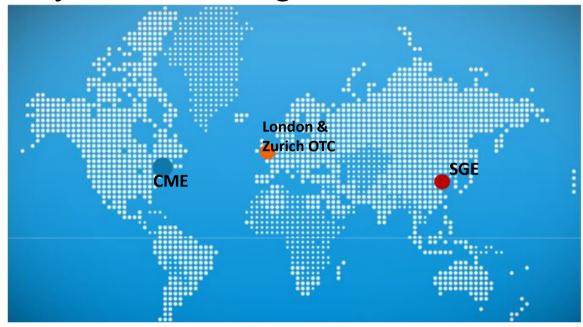
CME Group is the world's leading and most diverse derivatives exchange. It's where companies, institutions and individuals from around the globe come to manage their business risks, hedge against fluctuations and protect themselves against price volatility.



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Major Gold Trading Hubs in the World









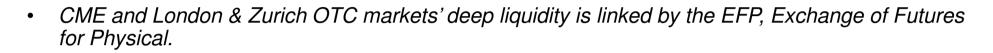
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Volume counting is single-sided for all venues. Data source: CME Group, LBMA-I, Shanghai Gold Exchange.



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EFP Allows Liquidity to Flow Between Futures and Physical Markets



• The EFP is quoted as a two-way market in brokers or by market makers, calculated as the price difference between futures and spot.



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How Gold EFP Works Between OTC vs Futures

- Gold dealers use CME Gold Futures extensively to hedge OTC physical gold business to be flat in gold price risk, then only the basis risk between spot and futures prices needs to be managed.
- The EFP allows traders to switch positions in gold futures on an exchange to and from physical unallocated accounts. Quoted as dollar basis relative the current futures prices, the EFP is a key component dealers use when pricing OTC spot gold.





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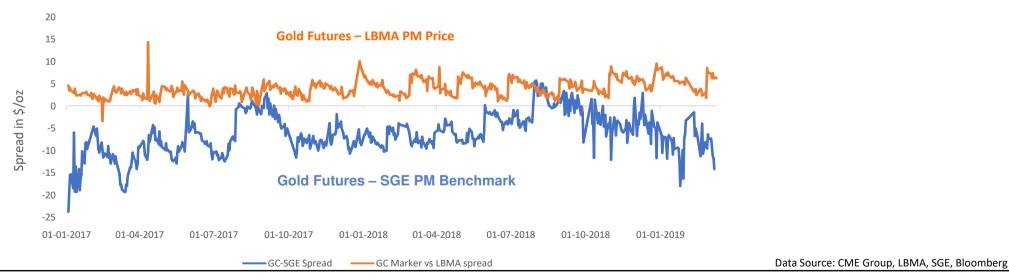
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How Gold EFP Works Between OTC vs Futures

More Volatile Spread between CME/SGE than CME/London - Trading Opportunities

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- The EFP fluctuates as a function of supply and demand while converging towards zero over time, as the spot price _ converges towards the futures price as future expiry approaches.
- Tight price difference between Gold Futures and London spot gold reflects the efficient bridge between the two markets.
- The wide range in spreads seen between Gold Futures and SGE spot prices indicate EFP opportunities. _



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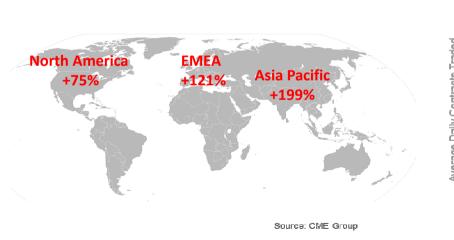
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Asian Customers' Increasing Participation in Global Futures Market

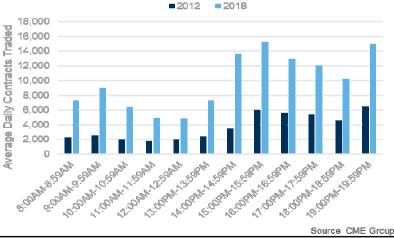
- CME's Gold Futures Traded 8 Billion Ounces in 2018 vs 4 Billion Ounces in 2012.
- Volume traded from APAC region almost tripled, whist liquidity during Asia trading hours increased by 169% during the 6 year period.
- Deep futures liquidity provided by Asia-based traders and during the Asia time zone is readily available to facilitate the link between the global futures and regional spot markets.



Gold Futures Volume Growth by Region

2018 vs 2012

Gold Futures Liquidity during Asian Hours Increased 169% from 2012 to 2018





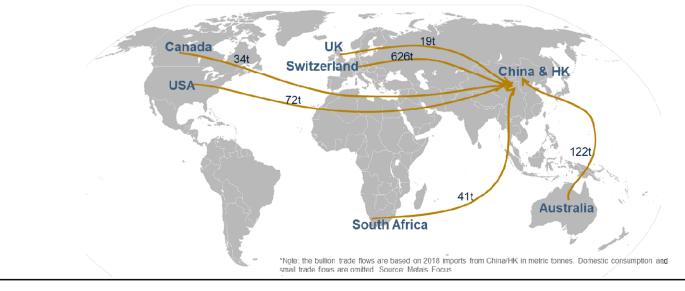
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Asian Customers' Increasing Participation in Global Physical Market

- China is the world's top country for gold demand and imports.
- Major gold physical flows into China follow the general direction: from gold producing regions (mainly in Americas, Africa, Oceania) with a certain part via the refining and trading hubs (UK & Switzerland).
- Large amount of physical gold imports into China from the international market provides the foundation for the connection between domestic spot and international futures markets.



Major Gold Trade Flow to China &HK in 2018

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The Potential Future of Asia and International Markets

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- The international market's experience with the use of EFP could be applied to the Asian market. The local physical gold market and the international futures market could benefit from the closer connection of the different liquidity pools



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What next for bridging the markets?



- Cleared OTC London Gold and Silver Forwards

- A post-trade clearing service only via ClearPort. Trading and Execution remains bilateral between clients.
- 90% margin offset against Futures.
- Key benefits: balance sheet relaxation for sell side; mitigate counterparty credit risk; margin efficiency.

Improving Options capabilities in the listed space

- Huge improvements in Asia and LDN hour liquidity in listed options
- Weekly expiry offering to aid with management of short dated OTC Options risk