WORLD GOLD COUNCIL
مجلس الذهب العالمي

Gold futures (Undertakings) Product schematic

Shari'ah-compliant gold savings and investments

Conventional gold futures are agreements to buy or sell gold in the future at specified terms, such as price, quantity, quality and date, which are agreed today.

Gold futures are typically used by corporate customers for risk management purposes or by institutional customers for speculative purposes.

Some of the benefits of conventional gold futures can be replicated through Shari'ah-compliant gold undertakings. It should be emphasised that Shari'ah-compliant gold undertakings should only be used for hedging, and are structured very differently from conventional futures.

Shari'ah-compliant gold undertakings can offer:

- Safe storage
- Risk management by hedging against changes of the gold price
- Low costs and high liquidity

This schematic outlines the operation of conventional gold futures unless otherwise specified.

Physical gold futures

Conventional gold futures are agreements on the delivery of gold at a future date, the delivery date, at a pre-agreed price. Gold futures are standardised contracts, which trade on exchanges.

The contracts are defined by the respective futures exchange in terms of quantity, quality, time, place of delivery and agreed-upon price. The price at which a specific futures contract is traded in the market is determined by supply and demand on the futures exchange.

The buyer of a gold futures contract has a long position and is obligated to purchase physical gold at the agreed-upon price and date and accept delivery. The seller of the contract has a short position and has the obligation to make delivery according to the contract terms. In reality, a vast majority of futures contracts are never settled physically but cancelled out by taking an offsetting position before their expiry. For example, an investor with a long position can cancel his position by buying a short position in the same contract.

Originally, gold futures were used to mitigate the risks of price movements for producers and consumers, e.g., of agricultural commodities. Futures on grain enabled a farmer to lock in a selling price for their crop. Today, gold futures are used either for risk management (hedging), or for speculative purposes. Gold consumers like jewellers or industrial users purchase gold futures in order to mitigate risks with regards to their gold purchase prices, and it is this benefit that could be replicated through gold undertakings. Producers of gold, i.e., gold miners or recyclers, can sell gold futures in order to mitigate sales price risks.

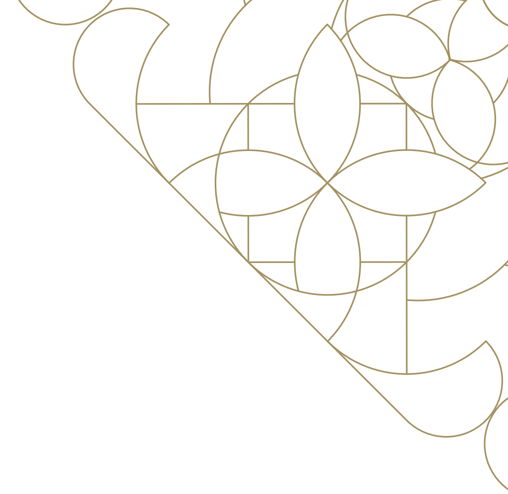
Both buyers and sellers of gold futures are subject to counterparty risk – a risk that increases if the price develops unfavourably for either party. In order to mitigate the default risk, the futures exchange requires buyers and

sellers to put up so-called initial margin, which is often fixed as a percentage of the value of the futures contract, as a deposit with a central clearer. The amounts held in margin accounts are adjusted daily as gains or losses are credited or debited to the respective margin accounts of buyers and sellers with the central clearer. When the investor's margin account balance drops below the required minimum (known as the maintenance margin level) due to daily losses, the broker makes a margin call, requesting an additional deposit by the investor. This is also called marking to market. Funds required by a margin call usually have to be delivered immediately; otherwise the broker may liquidate the investor's position in order to avoid any losses on its own.

Trading in futures is regulated; different regulatory bodies exist in the respective markets. The global market in gold futures is very large. In 2010, the top three commodity exchanges that traded gold averaged about US$ 24 billion in daily gold trading volume. However, only a small part of the trading volume is ever settled by physical delivery.

The table below summarises key aspects of conventional gold futures and compares them to other forms of gold investments:

	Shari'ah-compliant vaulted gold		Shari'ah-compliant gold savings plans		Shari'ah-compliant physical gold ETFs		Shari'ah-compliant gold undertakings (similar to futures)		Shari'ah-compliant gold certificates	
Value proposition	Own gold, which is stored in professional vaults		Accumulate gold in small amounts over a period of time and redeem for the physical metal or cash		Trade and own gold like an exchange-traded financial security		Hedge the price of gold		Own gold, evidenced and guaranteed by an individual certificate	
Target customers	individual	Institutional	Individual	Institutional	Individual	Institutional	Individual	Institutional	Individual	Institutional
	✓	(✓)	✓	✗	✓	✓	(✓)	✓	✓	✗
	$ – $$$	Corporate/ institutional investors	$ – $$		$ – $$$	Corporate/ institutional investors	$$$	Corporate/ institutional investors	$$$	
Minimum investment	$/$$		$		$		$$$		$$$	
Convenience	⊕⊕⊕		⊕⊕		⊕⊕⊕		⊕		⊕	
Cost efficiency	⊕⊕		⊕		⊕⊕⊕		⊕⊕⊕		⊕⊕	
Additional aspects	+ Customer can often choose between different vault locations		+ Continuous accumulation + Cost average effect + Redemption as bullion/cash jewellery + Gift option		+ High liquidity + Traded like an exchange-traded financial security + Physical withdrawal permitted		+ Suitable for gold price hedging + Expert knowledge required		+ Added security through personalised certificate + High degree of confidentiality possible + Gift option	



The product benefit

Gold futures can be used to hedge price risk. The market is very liquid, meaning fees or commision are low.

Investor proposition

Conventional gold futures offer investors the ability to lock in the purchase or sale of gold at a moment in the future for a price defined today. Consumers of gold, e.g., jewellers, can use gold futures to fix a price at which they can buy gold needed for the production of jewellery at a future date. On the other hand, gold miners can lock in the selling price of outputs from mining and thereby guarantee the coverage of mining costs.

In contrast to forwards, gold futures are standardised contracts, which are traded on regulated exchanges, and provide additional security, in particular through the margining requirement. Trading in futures provides investors with the flexibility to go both long or short. The markets in which gold futures are traded provide buyers and sellers with a central clearinghouse, at which deposit margins are required. This is designed to reduce counterparty risks for the investors and allows them to trade without necessarily performing their own due diligence checks.

The market in gold futures is usually highly liquid and efficient, due to the large numbers of contracts traded by professional market participants. Fees or commission charged for trading futures are comparatively low.

Commercial benefits of conventional gold futures

Banks can play different roles in the gold futures market. In the case that a bank has a physical gold business (such as offering bars or coins, vaulted gold or gold accumulation plans to its customers), the bank could benefit from using gold futures for risk reduction (hedging) purposes. Very often, banks trade in gold futures on behalf of their clients for hedging and risk mitigation purposes. In this case, banks can benefit from trading commissions.

Key product features and design considerations

The table below provides an overview of key features and design considerations of gold futures.

Target customers for gold futures are mainly corporations or institutional investors, although sometimes sophisticated private investors trade in gold futures.

The smallest available gold futures are:

1kg *mini-futures*

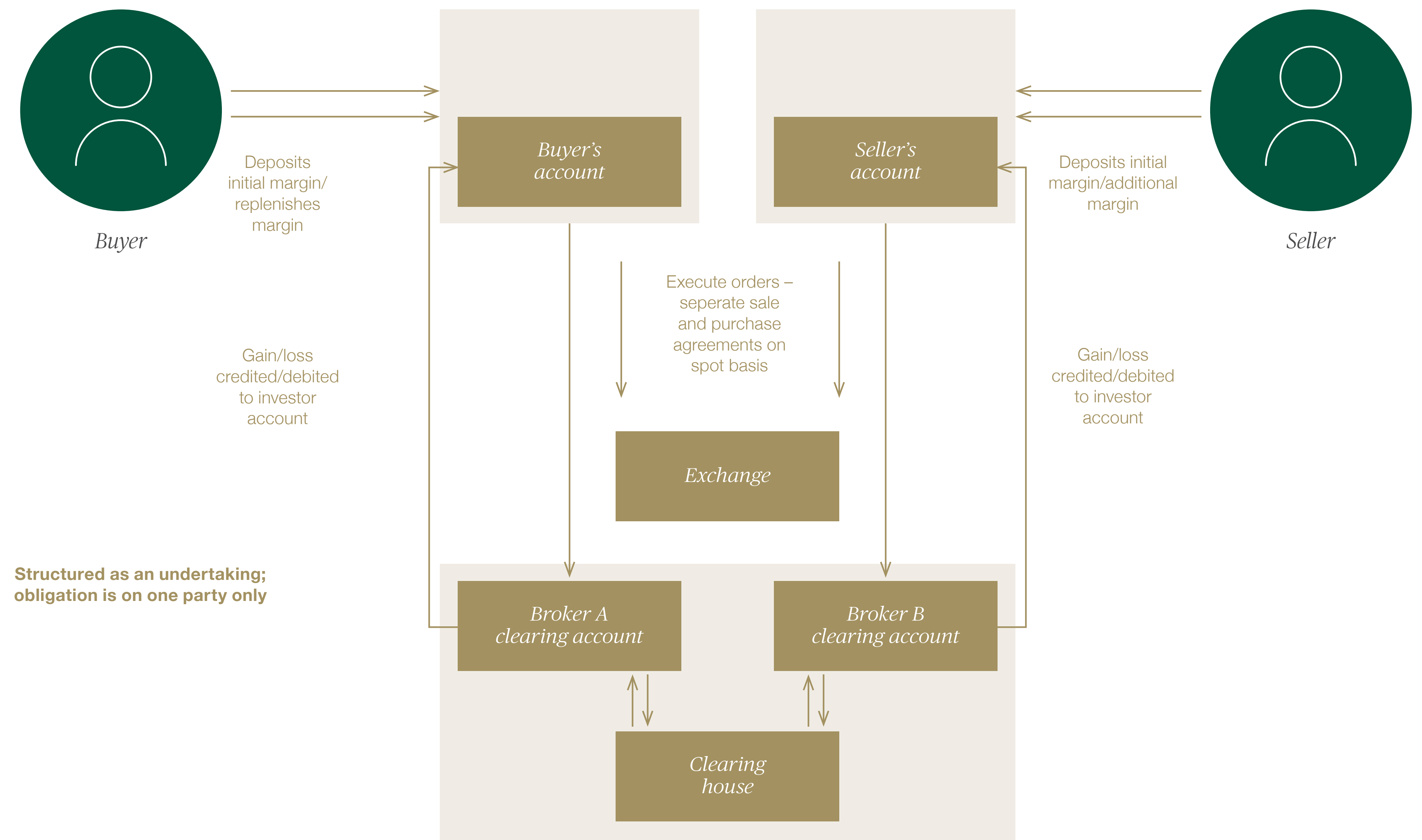
100g *contracts*

The margin that has to be provided by a gold futures trader typically ranges from 2-20% of the contract value. The minimum investment required for trading gold futures should therefore amount to a few hundreds or thousands of US$.

Feature	Description
Type of agreement	Gold futures are standardised forward contracts, which are traded on futures exchanges, which specify the contract terms like quantity, quality and settlement date, and require margining.
Contract size (Quantity of gold)	The quantity underlying a gold futures contract is often specified in troy ounces or grams/kilograms of gold. Example quantities of gold futures contracts are: o 100g o 1kg o 100 ounces o 12.5 kg
Quality of gold	A typical fineness is: o 99.5% (995 per 1000 parts) – the minimum allowed in LBMA Good Delivery bars o 99.99% (999 per 1000 parts)
Expiry/ settlement date	Expiry is the time and the day that a particular delivery month of a futures contract stops trading, as well as the final settlement price for that contract.
Method of delivery/ settlement/ cancelling out	There are two types of settlement of conventional gold futures contracts: o **Physical delivery:** the amount specified in the contract is delivered by the seller to the exchange, and by the exchange to the buyer. o **Cash settlement:** a cash payment is made based on market price. The parties settle by paying/receiving the loss/gain related to the contract in cash when the contract expires, using a specified and recognised gold reference price. Gold futures contracts are often cancelled out before expiry by the purchase/sale of an offsetting position in the same future.
Tick size	A tick is the minimum upward or downward movement in the price of a futures contract on a futures exchange.
Price change limits	Prices of futures traded on exchanges have a price change limit. The price change limit is added to and subtracted from the previous day's closing and results in the upper and lower price boundary, between which the contracts can trade on the current day. If prices reach the lower or upper price limit, trading can be stopped for that day. Price limits can be adjusted by the respective exchange. Price limits are sometimes suspended in the month the futures contract expires.
Position limits	The exchanges and regulators typically limit the number of contracts any single participant can trade in order to avoid one participant controlling the market. Position limits can differ for hedgers and speculators.
Types of trading orders	Orders can be placed in different forms, e.g.: o Market orders – Market on Open – Market on Close o Day or Good-till-cancelled orders – Limit Orders o Stop Orders
Margining	The purpose of margining is to mitigate the risk of default by the buyer or seller of a futures contract. A futures exchange requires both parties of a futures contract to deposit initial cash, the so-called margin. Margins must be maintained throughout the contract term to guarantee the fulfilment of the agreement, since the price of the contract can vary over time, causing a profit for one party and a loss for the other party. The contract is marked to market on a daily basis. Gains or losses are credited/debited daily to the investor's margin account. If the margin account goes below a certain minimum value set by the exchange, then a margin call is made and the investor must replenish its margin account. This process is called 'marking to market'.
Fees	The different parties involved in the provision of gold futures charge various costs/fees to investors: o Trading commissions o Fees for wiring money o Delivery fees o Liquidation/delivery liquidation/margin liquidation fees o Exercise/assignment/expiration fees o Minimum activity/account fees Fees vary by type of customer (institutional, corporate, private), exchange, type of membership or conditions by specific brokers.
Regulation	Futures markets are regulated. For example, the Commodity Futures Trading Commission (CFTC) and the National Futures Association (NFA) regulate the futures markets in the US.

Operation of gold undertakings

Only some aspects of a gold future can be replicated in a Shari'ah-compliant way. The principle of an undertaking may be applied to create an undertaking on one party to enter into a contract at a future date.



Shari'ah considerations

Generally gold futures contracts are among the hardest to structure in a Shari'ah-compliant manner for two fundamental reasons:

1) the delay of the subject of a sale as well as the payment for the subject is impermissible under Shari'ah rules; and 2) any arrangement which is designed for or easily misused for speculative purposes is impermissible under Shari'ah rules. Thus, conventional futures would not be compliant as they are currently traded.

However, certain aspects of a futures contract can be created using various Shari'ah-compliant contracts or structures, albeit having slightly different but workable economic outputs. For example, the principle of an undertaking may be applied to create an obligation upon one party to enter into a contract at a future date. This is a common technique in mortgage financing whereby the customer undertakes to purchase the property at a future date once the financial institution purchases the property from the supplier. One major difference between an undertaking and a futures contract however is that it creates an obligation only on one party (the one providing the undertaking) while the other party has full discretion whether to enter into the contract at the specified future date or otherwise.

As such, given the above, it is possible that something similar to a gold futures contract may be created in a Shari'ah-compliant manner, in principle, provided that such a contract would be used only for hedging and not for speculative purposes. Upon the execution of an undertaking, the parties must enter into a separate sale and purchase agreement on a spot basis whereby the purchase price is immediately exchanged for the specified amount of gold. The undertaking is only a unilateral contract under Shari'ah rules and therefore a bilateral sale and purchase contract needs to be executed for the exchange of gold for cash. Where an undertaking is frustrated, the party to which the undertaking is made is entitled to receive compensation from the undertaking party in accordance to the loss it has suffered (neglecting any cost of funds or "opportunity cost") as a result of the undertaking being frustrated, or legal remedy of specific performance.

The above are some of the key considerations in designing a Shari'ah-compliant gold undertaking and should be supplemented by other ancillary factors to ensure end to end Shari'ah compliance.

Operational considerations

The typical parties involved in operating gold futures markets and their roles are described below.

Futures broker

A futures broker executes buy or sell orders of investors and charges fees for its services.

Futures exchange

Futures contracts are traded on regulated futures exchanges. Originally, trading was done through yelling and giving hand signals in a trading pit. Today's futures exchanges are mostly electronic. In the case of physical delivery upon settlement of a gold futures contract, the specified amount is delivered by the seller to the exchange, and then by the exchange to the buyer.

Futures exchanges are usually regulated.

Central clearer/clearinghouse

The central clearer calculates, collects and holds margins and thereby protects buyers and sellers against potential defaults of their counterparties. In effect, the clearinghouse acts as a central counterparty for buyers and sellers. The clearinghouse also oversees physical delivery and reports trading data.

Large futures exchanges often operate their own clearinghouses, but some future markets have external clearinghouses.

Potential roles for a bank

A bank can play different roles in a gold futures market. For example, a bank may act as a futures broker for customers wishing to minimise risks. Potential customers could be gold mining companies or jewellers, who require either predictable sales or purchase prices. In addition, companies, who rely on gold for the production of industrial or medical goods (e.g., dentistry), could be customers for risk mitigation by purchasing gold futures. A bank could also participate in the gold futures market in order to hedge its own risks from activities related to physical gold.

Frequently asked questions

Who buys gold futures?

Customers for gold futures are typically corporate customers interested in risk management or institutional customers. Gold miners or recycling companies can use gold futures to mitigate risks with regard to the sales prices of their gold. On the other hand jewellers or industrial buyers can purchase gold futures as a means to mitigate risks related to their purchase prices.

Can the customer take delivery of physical gold?

Customers with a long position in a gold futures contract with physical settlement get physical gold delivered at the delivery date.

What are the typical contract amounts?

Exemplary contract amounts are 100g, 100 ounces, 1kg and 12.5kg (400 oz).

Can futures be traded daily?

Gold futures can be bought and sold on each trading day of the respective exchange.

How much time is required to set-up a gold futures business?

The answer depends very much on the role which the bank intends to play in the gold futures market. Trading in gold futures on behalf of clients requires becoming a futures broker with a futures exchange that trades in gold futures contracts.

The establishment of a new gold futures contract with an established futures exchange could be implemented within several months.

Developing a whole new gold futures market including an exchange, clearinghouse and brokers could require much more time.

What risks are associated with trading in futures?

Trading in conventional gold futures involves significant risks for both buyers and sellers. The leverage provided by gold futures due to margining implies that an investor's losses could be significantly higher than their original investment.

© 2017 World Gold Council. All rights reserved. World Gold Council and the Circle device are trademarks of the World Gold Council or its affiliates.

All references to LBMA Gold Price are used with the permission of ICE Benchmark Administration Limited and have been provided for informational purposes only. ICE Benchmark Administration Limited accepts no liability or responsibility for the accuracy of the prices or the underlying product to which the prices may be referenced.

Other third party data and content is the intellectual property of the respective third party and all rights are reserved to them.

Any copying, republication or redistribution of content, to reproduce, distribute or otherwise use the statistics and information in this report including by framing or similar means, is expressly prohibited without the prior written consent of the World Gold Council or the appropriate copyright owners except as provided below.

The use of the statistics in this report is permitted for the purposes of review and commentary (including media commentary) in line with fair industry practice, subject to the following two pre-conditions: (i) only limited extracts of data or analysis be used; and (ii) any and all use of these statistics is accompanied by a clear acknowledgement of the World Gold Council and, where appropriate, of Thomson Reuters, as their source. Brief extracts from the analysis, commentary and other World Gold Council material are permitted provided World Gold Council is cited as the source. It is not permitted to reproduce, distribute or otherwise use the whole or a substantial part of this report or the statistics contained within it.

While every effort has been made to ensure the accuracy of the information in this document, the World Gold Council does not warrant or guarantee the accuracy, completeness or reliability of this information. The World Gold Council does not accept responsibility for any losses or damages arising directly or indirectly, from the use of this document.

The material contained in this document is provided solely for general information and educational purposes and is not, and should not be construed as, an offer to buy or sell, or as a solicitation of an offer to buy or sell, gold, any gold related products or any other products, securities or investments. Nothing in this document should be taken as making any recommendations or providing any investment or other advice with respect to the purchase, sale or other disposition of gold, any gold related products or any other products, securities or investments, including without limitation, any advice to the effect that any gold related transaction is appropriate for any investment objective or financial situation of a prospective investor. A decision to invest in gold, any gold related products or any other products, securities or investments should not be made in reliance on any of the statements in this document. Before making any investment decision, prospective investors should seek advice from their financial advisers, take into account their individual financial needs and circumstances and carefully consider the risks associated with such investment decision.

Without limiting any of the foregoing, in no event will the World Gold Council or any of its affiliates be liable for any decision made or action taken in reliance on the information in this document and, in any event, the World Gold Council and its affiliates shall not be liable for any consequential, special, punitive, incidental, indirect or similar damages arising from, related to or connected with this document, even if notified of the possibility of such damages.

This document contains forward-looking statements. The use of the words "believes", "expects", "may", or "suggests", or similar terminology, identifies a statement as "forward-looking". The forward-looking statements included in this document are based on current expectations that involve a number of risks and uncertainties. These forward-looking statements are based on the analysis of World Gold Council of the statistics available to it. Assumptions relating to the forward-looking statement involve judgments with respect to, among other things, future economic, competitive and market conditions all of which are difficult or impossible to predict accurately. In addition, the demand for gold and the international gold markets are subject to substantial risks which increase the uncertainty inherent in the forward-looking statements. In light of the significant uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by the World Gold Council that the forward-looking statements will be achieved.

The World Gold Council cautions you not to place undue reliance on its forward-looking statements. Except in the normal course of our publication cycle, we do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, and we assume no responsibility for updating any forward-looking statements.

shariahgold.com