

JM&B Monthly Gold & Silver Report

December 2016

<http://www.johnson-matthey.ch/>

Introduction

The purpose of this report is to comment on developments in the gold and silver markets on a monthly basis. For more information about this report, please consult the Appendix. Johnson Matthey plc issues reports on platinum group metals:

<http://www.platinum.matthey.com>

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1. Commentary

Gold and silver appeared to be stabilising in price in December.

2. Gold

2.1 News and Fundamental Considerations

Selected News Items from the Month

Bahrain, 5th December 2016, (Reuters) – Islamic finance experts have developed new rules for gold transactions, they said on Monday, potentially opening the way for Islamic institutions to trade gold and silver much more actively.

Gold transactions must be fully backed by physical metal and settled on the same day, the developers of the new guidance said, to observe Islam's distinction between real economic activity and speculation.

Traditionally, gold has played a very minor role in Islamic finance and there has been little activity beyond spot trading, partly because of uncertainty over what is religiously permissible. The new standards, which also apply to silver, could help to change this.

The Bahrain-based Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) spent a year working out the new rules on gold trading and agreed them last month.

AAOIFI developed its guidelines with the World Gold Council (WGC), a London-based market development body, to clarify existing Islamic rulings on bullion and make it easier to conduct complex transactions.

The guidelines will help to increase acceptance of gold products among Islamic investors while giving Islamic banks new liquidity-management tools, said Hamed Hassan Merah, secretary-general of AAOIFI, whose standards are followed in whole or in part by sharia-compliant banks around the world.

AAOIFI also requires same-day settlement of trades, Merah told Reuters. Many conventional gold products are settled two days after the trade; by eliminating the delay, same-day settlement means less risk but can be less convenient for investors who need to have cash on hand.

"A number of providers have already been developing products in anticipation of the standard," said Natalie Dempster, managing director of central banks and public policy at the WGC.

The standards permit buying gold through agents, which will allow for exchange-traded funds (ETFs) and online retail platforms, Dempster said.

There has been interest in products among Islamic banks in the United Arab Emirates and Turkey, she added.

CLARITY

Uncertainty about how gold can be used in Islamic finance has slowed both product development and investor demand. Malaysia's capital market regulator issued guidance for Islamic ETFs based on gold and silver in 2014, but no such products have been launched there.

In 2009, the WGC and the Dubai Multi Commodities Centre launched an Islamic gold exchange-traded product that was eventually delisted.

Now Dublin-based gold dealer GoldCore plans to offer a sharia-gold trading platform for use by Islamic financial institutions in the first quarter of 2017.

It is designed to offer segregated gold accounts with the option of physical delivery, the firm said in a statement.

Dubai-based Konooz Capital plans to issue gold-backed sukuk, or Islamic bonds, through a \$5 billion programme it originally registered in 2014 and again in August this year, according to regulatory filings.

The proposed programme uses a structure known as wakala, where one party acts as the manager of a portfolio of assets and charges a management fee.

Last month, the Jeddah-based Islamic Development Bank and Turkey's Borsa Istanbul said they planned a gold trading platform for use by majority-Muslim countries.

The AAOIFI standard could also affect existing gold products by widening their investor bases, Dempster said.

Islamic banks including Kuwait Finance House and Malaysia's Bank Muamalat already offer gold investment products, while Toronto-based Bullion Management Group has two funds which have been accredited as sharia-compliant since 2009.

In 2008, London-based ETF Securities launched a range of sharia-compliant products based on physical platinum, palladium, silver and gold.

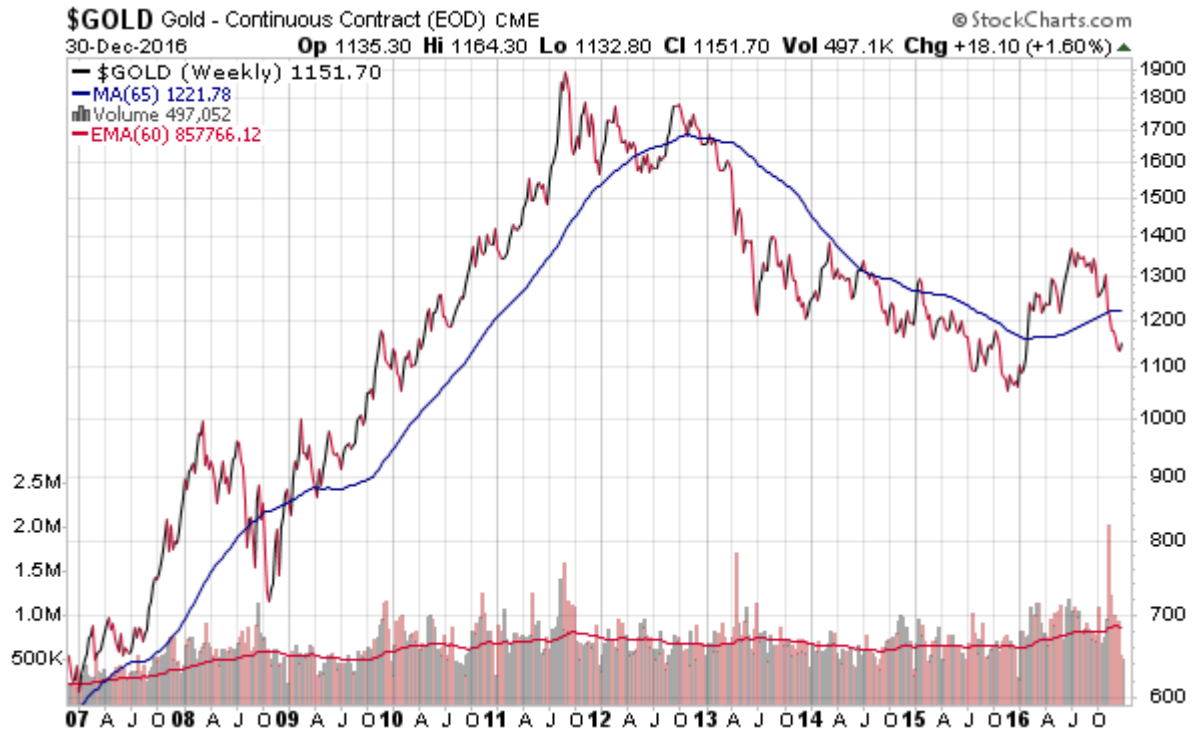
ETF Securities said the new standards were unlikely to change the price of gold and that it would take time for markets in new products to develop.

AAOIFI also plans to conduct workshops for gold merchants in the Middle East to help clarify how to implement the standards in their daily operations, Merah said.

2.2 Technical Comments

Long Term Technical Comments

Gold appeared to be basing in December:



Daily/Weekly Technical Comments

London afternoon fix in USD/toz:

Open	High	Low	Close
01.12	07.12	20.12	30.12
1162	1178	1126	1159

London afternoon fix in €/toz:

Open	High	Low	Close
01.12	02.12	22.12	30.12
1096	11.02	15.74	1098



Sideways for gold in December.

3. Silver

3.1 News and Fundamental Considerations

London, 9th December 2016, (GFMS) – Scorching demand for silver used in solar cells is set to peak this year as technology advances slash the amount of metal required.

Solar power accounts for around 8 percent of overall silver consumption and has been a rare bright spot this year as falls in jewellery demand, industrial use and physical investment feed into a 9 percent fall in demand.

Silver demand for photovoltaic cells is expected to hit a record 83.3 million ounces in 2016, GFMS analysts at Thomson Reuters said, up from just 1 million ounces in 2002.

The sector has seen huge growth in recent years, with half a million solar panels a day installed last year.

Solar and wind energy generated globally are expected to double by 2020, according to the International Energy Agency (IEA).

Falling costs are helping spur growth in solar energy. Between 2010 and 2015, costs for new utility-scale solar photovoltaics fell by two-thirds, according to the IEA.

"We do expect photovoltaic installations to see stable growth in the coming years -- about 3-5 percent per annum -- but this does not necessarily cascade to silver demand growth," GFMS analyst Ling Wong said.

"We expect silver demand use in the photovoltaic sector to fall by 4.5 percent annually."

Photovoltaic demand for silver took off in 2011, but a jump in prices to nearly \$50 an ounce that year encouraged the industry to move away from thick-film technology to thin-film systems that use less silver.

A typical photovoltaic cell generating up to 4 watts used 0.17 grams of silver in 2014, down from 0.3 grams in 2010.

"They're adding more busbars (metallic strips that conduct electricity) to the cell, which adds more lines but decreases the amount of silver per cell," said John Smirnow, secretary-general of the Global Solar Council.

"You're also seeing some investment in replacing silver with copper," he said.

German solar panel maker SolarWorld AG said it had been reducing silver use in its solar cells for years and would continue to do so.

"Less silver consumption reduces dependence on availability and price developments in the silver spot market," SolarWorld Vice-president Milan Nitzschke said.

3.2 Technical Comments

Long Term Technical Comments

Like gold, silver appeared to be basing in December:



Daily/Weekly Technical Comments

London fix in USD/toz:

Open	High	Low	Close
01.12	08.12	23.12	30.12
16.30	17.13	15.74	16.24

London fix in €/toz:

Open	High	Low	Close
01.12	14.12	23.12	30.12
15.35	16.06	15.06	15.38



Essentially a sideways move for silver in December.

John Fineron, 3rd January 2017.

Appendix: More about this report

Purpose of the Report

The purpose of this report is to comment on developments in the gold and silver markets on a monthly basis. Johnson Matthey plc issues reports on the platinum group metals:

http://www.platinum.matthey.com/publications/price_reports.html

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This report is prepared in the English language, as are the vast majority of contributions on precious metal markets.

Structure of Report

The report comprises two sections:

Fundamental Considerations

This section addresses aspects of supply and demand in gold and silver, which typically affect the market over periods of **several years**. Over the long term, the price of a commodity will rise or fall until natural supply and demand reach equilibrium. Completion of this process, can take many years and is significantly influenced by hoarding and dis-hoarding. For example, dis-hoarding of stockpiles to compensate for supply shortages can proceed over decades and thereby delay movement to a true equilibrium price.

Technical Comments

This section describes aspects of technical analysis in gold and silver, which can be used to assist in buy and sell decisions over periods of **weeks to months**. Traders often use technical analysis to trade or profit from price movements up or down. Because large traders, e.g. hedge funds, often use the same signals, price-movements are often amplified and technical signals become self-fulfilling prophecies due to the herd-mentality.

Learn more about technical analysis:

<http://stockcharts.com/education>

and the terms used:

<http://stockcharts.com/education/GlossaryA.html>

Learn more about candle charts:

<http://www.litwick.com/about.html>

All charts used are courtesy of Stockcharts.com unless otherwise stated.

Find out more about the Elliot wave principle:

<http://www.prognosis.nl/principle/index.html>

Please note that our technical comments will be purely technical in nature and will not attempt to rationalise or second-guess the reasons for price movements.

Advice on buying and selling precious metals

It is not the policy of Johnson Matthey & Brandenberger AG, to advise customers on specific buy or sell points. We are however prepared to assist customers in formulating views on precious metal markets and preparing strategies suited to their individual buying and selling needs.

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