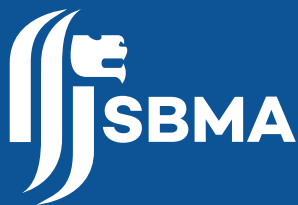


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Speakers



Mr Satvinder Singh
Asst CEO
IE Singapore



Mr John Reade
Chief Market Strategist
World Gold Council



Ms Ruth Crowell
CEO
LBMA



Mr Albert Cheng
CEO
SBMA



Mr Sunil Kashyap
Chairman
SBMA



Mr Marcus Grubb
Director, Market Development
World Platinum Investment Council



Dr Haywood Cheung
President
Chinese Gold & Silver Exchange Society



Mr David Mann
Chief Economist- Asia
Standard Chartered Bank



Mr Robin Lee
Managing Director
HelloGold



Mr Ermin Siow
President
Federation of Goldsmiths and
Jewellers Association of Malaysia



Mr Khin Maung Han
President
Myanmar Federation of
Mining Association



Mr Bart Melek
Director and Global Head of
Commodity Strategy
TD Securities



Dr Rinjai Chakornpipat
Senior Executive VP and Group Head of
Market Division
The Stock Exchange of Thailand Group



Mr Huynh Trung Khanh
Managing Director
Vietnam Gold Consultants



Mr Robin Martin
Managing Director, Market Infrastructure
World Gold Council



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Mr David Janczewski
Director of New Business
Royal Mint



Mr Yuichi (Bruce) Ikemizu
Head of Tokyo Branch Manager
ICBC Standard



Mr Andrew Wang
Product Director
Shanghai Gold Exchange



Mr Shaokai Fan
Director
World Gold Council



Mr Rithikone Phoummasack
Senior Advisor
AIF Precious Metal
Import-Export Service Sole Co., Ltd



Mr Hawk Namiki
Executive Director
SBMA



Mr Nikos Kavalis
Director
Metals Focus



Mr Waqar Chaudry
Product Manager, Energy & Commodity and
OTC Markets
Australian Securities Exchange (ASX)



Ms Pawan Nawawattanasub
CEO
YLG Bullion International Co



Mr Brian Lan
Managing Director
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Mr Muhidin ST
VP - Mktg, Sales & Operations
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Mr Alexey Romanchuk
Chief Technology Officer
Copernicus Gold



Mr Arjun Raychaudhuri
Head of Strategy and
Digital Transformation
MMTC-PAMP



Mr William Chin
Head of Metals & Bulk Commodities
SGX



Mrs Barbara Oteng Gyasi
Deputy Minister
Lands & Natural Resources, Ghana

PROGRAM SCHEDULE

| Day - 1: Sunday, June 4, 2017 | |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00 hr Onwards | Room check-in starts |
| 16:30 - 18:00 hr | Delegate Registration Waterfront Foyer |
| 18:00 - 19:00 hr | Welcome Cocktail Reception sponsored by ICBC Standard Bank, Waterfront Ballroom |
| Day - 2: Monday, June 5, 2017 | |
| 08:30 - 09:00 hr | Delegate Registration at Grand Ballroom |
| 09:00 - 09:30 hr | Welcome Address - Sunil Kashyap , Chairman, SBMA Guest of Honour - Satvinder Singh , Asst CEO, International Enterprise Singapore Signing of MOU between Myanmar Gold Development Public Co Ltd & SBMA |
| 09:30 - 10:00 hr | Keynote Address - Relevancy of Gold at a turbulent time John Reade , Chief Market Strategist, World Gold Council |
| 10:00 - 10:30 hr | Special Address 1 - Update on London Markets Ruth Crowell , CEO, London Bullion Market Association |
| 10:30 - 11:00 hr | Networking Break |
| 11:00 - 11:30 hr | Special Address 2 - ASEAN economy and its opportunities to the precious metals market David Mann , Chief Economist- Asia, Standard Chartered Bank |
| 11:30 - 13:00 hr | Roundtable - ASEAN Precious Metals Markets and Opportunities (Chaired by Albert Cheng CEO of SBMA) <ol style="list-style-type: none"> 1. Introduction - Hawk Namiki, Executive Director, Singapore Bullion Market Association 2. Myanmar Market - U Khin Maung Han, President, Myanmar Gold Development Public Co. Ltd. 3. Laos / Cambodia Markets - Rithikone Phoummasack, Senior Advisor, AIF Precious Metal Import-Export Service Sole Co. Ltd 4. Vietnam Market - Huynh Trung Khanh, Managing Director, Vietnam Gold Consultants 5. Indonesia Market - Muhidin ST VP - Mktg, Sales & Operations, PT Antam (Persero) Tbk 6. Malaysia Market - Ermin Siow, President, Federation of Goldsmiths & Jewellers Association of Malaysia 7. Thailand Market - Pawan Nawawattanasub, CEO, YLG Bullion International Co 8. Singapore Market - KL Yap, Singapore Refining BU Manager, Metalor Technologies Singapore Pte Ltd |
| 13:00 - 14:00 hr | Networking Lunch sponsored by CME Group |

PROGRAM SCHEDULE

| | |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00 - 16:00 hr | <p>The Shaping of New Market Infrastructure in Asia (The session will be co-chaired by Albert Cheng, CEO, SBMA & Robin Martin, MD, Market Infrastructure, World Gold Council)</p> <ol style="list-style-type: none"> 1. "Globalisation and the Gold Market : the Growing Interconnectivity of Trade and Trading" Philip Klapwijk, Managing Director, Precious Metals Insights 2. CGSE RMB Kilobar Gold Contract traded in Hong Kong with delivery in Qianhai Dr Haywood Cheung, President CGSE 3. Forward curve on the largest Gold reserves in the world: Disruption or Opportunity Waqar Chaudry, Product Manager Energy & Commodity, ASX 4. The new developments at TOCOM on precious metals contracts, Ryoichi Seki General Manager, Global Business Development Department, TOCOM 5. LMEprecious initiatives and its implication to Asia, Alex Shaw Head of Market Development - Precious Metals, LME 6. TFEX role in providing an access to a hedging tool for the investors and gold trade with a Baht-based Gold Futures Contract, Dr. Rinjai Chakornpipat, Managing Director Thailand Futures Exchange Public Co. Ltd. 7. Singapore - The natural hub for trading and custodian services for precious metals for private and institution investors including central banks. Sunil Kashyap, Managing Director, Head of Asia, ScotiaMocatta 8. Introduction to the Shanghai Gold Benchmark, Andrew Wang, Product Director, SGEI |
| 16:00 - 16:30 hr | <p>Presentation - Case for Platinum Investment Marcus Grubb, Director of Market Development, World Platinum Investment Council</p> |
| 16:30 - 18:00 hr | <p>Workshop hosted by CGSE "Building a Physical Gold Corridor in Asia - Plus" (Shanghai - Hong Kong/Qianhai - Singapore)</p> <ol style="list-style-type: none"> 1. A New Chapter of the Chinese Gold & Silver Exchange Society Dr. Haywood Cheung, President, The Chinese Gold & Silver Exchange Society 2. Qianhai Bonded Warehouse, the bridge of the Gold Corridor Junxiang Wu, Senior Vice President, Ping An Commodities Trading Co Ltd |

PROGRAM SCHEDULE

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|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>3. Opportunities of Qianhai Bonded Warehouse Project Raymond Chan, former President & Advisor to Qianhai, The Chinese Gold & Silver Exchange Society</p> <p>4. Q/A moderated by Albert Cheng, CEO, Singapore Bullion Market Association</p> <p>5. Closing Remarks Albert Cheng, CEO, Singapore Bullion Market Association</p> <p>To be followed by signing of MOU between CGSE and SBMA on closer cooperation between Hong Kong and Singapore Precious Metals Sector</p> |
| 19:00 - 22:00 hr | Cocktails & Dinner at Hotel Promenade sponsored by LBMA |
| Day - 3: Tuesday, June 6, 2017 | |
| 09:30 - 11:00 hr | New Opportunity in Gold |
| 09:30 - 10:00 hr | <p>1: Islamic Gold Investment Products - Rules, Compliance & Products (Chaired by Shaokai Fan, Director, World Gold Council)</p> <p>i. Shari'ah-compliant futures contract - SGX Kilobar Gold Contract William Chin, Head of Metals & Bulk Commodities, SGX</p> <p>ii. Shari'ah-compliant gold fintech platform, Robin Lee, Managing Director, Hello Gold</p> |
| 10:00 - 11:00 hr | <p>2: Fintech Development in Gold Chair - Robin Martin, Managing Director, Market Infrastructure, World Gold Council</p> <p>i. Gold, silver transaction with block chain technology David Janczewski, Director of New Business, Royal Mint</p> <p>ii. A multi-currency platform for buying and selling digital gold linked to physical gold bullions Alexey Romanchuk, Chief Technology Officer, Copernicus Gold</p> <p>iii. Network effect, accessibility and convenience for trading Physical Gold, Silver and Platinum, Brian Lan, Managing Director, GoldSilver Central Pte Ltd</p> <p>iv. Leveraging technology and transparency to redefine gold savings and divestment Arjun Raychaudhuri, Head of Strategy and Digital Transformation MMTC-PAMP</p> |
| 11:00 - 11:15 hr | Networking Break |
| 11:15 - 12:30 hr | <p>Precious Metals Market Review and Outlook Bart Melek, Director, Head of Commodity Strategy Rates FX and Commodity Research TD Securities</p> <p>Nikos Kavalis, Director, Metals Focus</p> <p>Yuichi (Bruce) Ikemizu, Head of Tokyo Branch, ICBC Standard</p> |
| 12:30 - 13:00 hr | <p>Conference Summary John Reade, Chief Market Strategist, World Gold Council</p> |
| 13:00 - 14:00 hr | Networking Lunch & End of Conference |

Welcome Address

SBMA Chairman Sunil Kashyap's welcome address at Asia Pacific Precious Metals Conference, 5 June 2017



Introduction

Good morning. On behalf of the Singapore Bullion Market Association, I welcome all participants and distinguished guests from around the world to the inaugural Asia Pacific Precious Metals Conference.

While this is the beginning of the conference it is also the end of the beginning for SBMA. Let me explain.

The journey to the conference began almost four years ago when a revived SBMA started to focus to making Singapore a hub for the physical trading of precious metals. One of our key goals was to raise the profile of SBMA in the region and around the world. This inaugural APPMC is a realization of that dream.

All through this journey we have been guided by IE Singapore - the government agency in Singapore promoting international trade. Today we are indeed honoured to extend a warm welcome to our guest of honour Mr Satvinder Singh, Assistant CEO of IE Singapore, who will be delivering his speech shortly.

The theme of this conference is "Your Gateway to the Asia Pacific Precious Metals Markets". We have about 330 delegates from more than 23 countries, over 170 companies which include 10 exchanges, 17 refineries and 8 bullion banks represented here. So, I hope that many fruitful discussions will happen amongst you in the next two days.

The participation of many experienced and distinguished speakers underscores SBMA's mission and the conference theme, for Singapore to be a gateway to the rest of Southeast Asia and Asia Pacific's precious metals markets, including frontier and emerging markets.

Let me quickly introduce SBMA for those who are unfamiliar with us.

SBMA is a non-profit organisation to represent key stakeholders from the precious metals industry, including bullion banks, exchanges, refineries, bullion dealers and secure logistics companies.

SBMA plays a pivotal role in the development of Singapore as an ASEAN precious metals hub. But more importantly, it integrates and harmonises the ASEAN

gold market, encouraging ASEAN bullion organisations to use Singapore as a hub for refining, trading, logistics, price discovery and risk management, and plays an active role in sharing expertise and connecting organisations to industry players and markets.

One example I would like to highlight is Myanmar, Asia's newest democracy, whose economy is slowly liberalising. It is the world's fastest growing economy, according to the IMF but it is still considered a "mystery" market to global players.

Today, SBMA will sign a Memorandum of Understanding with the Myanmar Gold Development Public Co. Ltd to establish a bilateral framework of cooperation for the development of the Myanmar precious metals sector.

Likewise, SBMA will sign a Memorandum of understanding with the Chinese Gold and Silver Exchange Society to establish a bilateral framework of cooperation later in the day.

Going forward, SBMA aims to establish Singapore as a hub for connecting the international markets with the precious metals markets in Southeast Asia. The precious metals market in the region has tremendous potential and is seeing explosive growth.

Gold is particularly rooted in the life and culture of people in Asia. Increasing wealth and disposable income among the growing middle-class population in Southeast Asia is also creating a huge consumer market for lifestyle products and consumer goods, which extends to jewellery, gold and financial products like insurance policies and investment funds.

SBMA encourages the introduction of bespoke products like investments that are compliant with the Shari'ah Standard on Gold. You will hear more about that later today.

The region also has a healthy appetite for platinum, particularly from the industrial and automotive sectors.

This is set to grow even further as the middle class expands and demand for automobiles and jewellery increases. Singapore can be an important hub for platinum group metals, particularly as platinum qualifies as an investment precious metal, and as such, is also exempted from GST. Today we will hear more on this subject from the World Platinum Investment Council.

APPMC

The main purpose of this conference is to provide a platform for stakeholders from the jewellery, mining sector, retailers, traders, bullion banks & dealers, market participants, policy makers to meet and exchange ideas, and learn about the opportunities in Southeast Asia. As you have seen in the programme of the conference, we have a very robust line-up of sessions planned for the next two days.

Moving forward, we intend for this conference to become an annual mid-year event, and we hope to gain the support of partner organisations and industry players.

I would like to thank all our sponsors: The Chinese Gold and Silver Exchange Society, World Gold Council, World Platinum Investment Council, LBMA, LME, CME, Brink's Global Services, ICBC Standard Bank, Metals Focus, exhibitors and associations that have supported SBMA's inaugural conference.

I also want to thank those who have worked to ensure the success of this conference - the Foretell team, led by President G Srivatsava and the SBMA team, led by CEO Albert Cheng, who has leveraged his experience, knowledge and wide network to bring all of this together.

Conclusion

I look forward to the translation of these themes into enhancements and progress in the precious metals market across the region in terms of identifying greater opportunities for partnerships, collaboration, demystifying markets, breaking down barriers and more. I have no doubt that this will be a stimulating conference for all participants. I wish you all a fruitful conference ahead.



Opening Address

Guest of Honour, Mr Satvinder Singh, CEO, IE Singapore



*Mr. Sunil Kashyap presenting a memento to the Guest of Honour Mr. Satvinder Singh
Assistant CEO, IE Singapore*

Introduction

1. Mr Sunil Kashyap, Chairman of Singapore Bullion Market Association, Distinguished guests, ladies and gentlemen, a very good morning. I am delighted to join you for this inaugural Asia Pacific Precious Metals Conference, organised by the Singapore Bullion Market Association. It gives me great pleasure to see many important players from the precious metals sector with us this morning, including a strong representation from South East Asia and of distant Russia, Ghana and the US.
2. Singapore's precious metals sector has grown significantly since the Goods and Services Tax was lifted on investment-grade precious metals in October 2012. In 2015, more than 2,642 tonnes of gold were traded in Singapore, capping off a CAGR of 188% since 2012. This translates to over US\$100 billion of trade value, significant considering the plunge of gold prices by over 30% in the very same period.

Value of a Hub for the Precious Metals Industry

3. The trading of precious metals involves building relationships with clients and understanding their unique needs. It is also important to gather intelligence on flows and to understand market demand and supply in order to structure deals according to the needs of clients. The movement of precious metals needs to be managed to ensure timely delivery. More importantly, the necessary legal documentations need to be arranged and a close eye kept on all these activities to ensure that risk levels do not exceed limits. These activities are interlinked and need to be located together to ensure the swift processing of time-sensitive transactions of the precious metals. It is hence essential for the precious metals industry players to be present in a centralised hub.
4. Singapore exemplifies itself as a prime candidate for said centralized hub. Strategically

located in the heart of the Asia growth region, Singapore boasts an established participant network, an international, multi-lingual talent pool, a strong financial and trading infrastructure, in addition to robust legal and tax frameworks, a well-developed physical infrastructure, and a conducive general business environment.

Singapore's value as a Precious Metals Trading Hub

5. Currently, it is estimated that 66% of global gold demand originates from Asia. The combined share in particular, of global gold demand from India and China in 2016 exceeded 50%, outstripping the 25% share characteristic of the early 1990s, according to the World Gold Council. Other markets such as Thailand, Vietnam and South Korea have also witnessed growth in their domestic markets. These key demand centres all situate within a 7-hour flight radius from Singapore, according to industry players anchored in Singapore ease of tapping the enormous potential markets in Asia Pacific.
6. Singapore boasts a participant network featuring several internationally established industry players, amongst them INTL FC Stone, Tianxinyang, YLG, MTS Gold and local companies such as SK Bullion and Gold Silver Central. Access to the network allows precious metals players opportunities to conduct international business with unparalleled effectiveness and convenience, a catalyst to growth and outreach to Asia and international market. To illustrate,
 - i. INTL FCStone, one of the world's most recognised non-bank global bullion trader and services provider has long chosen Singapore to serve as its hub and gateway to the Asia Pacific markets, while connecting Asia to its global network. Currently, 60% of INTL's bullion turnover, translating to about 60 million ounces of gold, originates from its Singapore office. In 2017, it has also launched

- the first global premium based physical platform designed and tailored specifically to the Asian physical markets.
- ii. YLG, one of Thailand's most established bullion trader, has also set up a presence in Singapore to tap on its international participate network. Since commencing operations in 2013, the Singapore office has seen its trading volume increase at 30% per annum.
 - iii. Similarly, our home grown Singapore company SK Bullion and Silver Bullion have also benefited greatly. SK Bullion's customer base has grown by 20% since August 2016, while Silver Bullion saw a year-on-year increase in sales of more than 60% in 2016. Access to the extensive participant network is one of the pivotal enablers for our home grown companies to grow.
7. Our highly qualified workforce, a policy of openness to top global talent, as well as solid cultural and linguistic connections across Asia, buttress Singapore's ability to provide specific support to industry players wishing to access the Asia and international market through Singapore. On a broad assessment, nearly a full half of the total Singaporean workforce possess higher educational qualifications and more than 70% are effectively bilingual.
 8. Singapore also presents a triple A financial centre rating backed by strong inherent financial and trading infrastructure. The Republic at present, is within the top three largest offshore RMB clearing centres, offering precious metals players greater access to RMB liquidity through links to Chinese financial markets. Singapore is also the third largest global foreign exchange market and amongst the top four derivative trading centres in the world. This strong financial infrastructure will enable low-cost financing of high trade volumes.
 9. On the legal front, Singapore consistently ranks as a leading centre for contract arbitration and offers effective avenues for alternative dispute resolution. Its neutrality and established jurisprudence also makes it an ideal location for the settlement of international disputes. Regarding taxation, both: (i) the GST exemption of investment-grade precious metals; and (ii) the Approved Refinery and Consolidator Scheme (ARCS), act to ease cash flow for traders and encourage greater transaction volumes.
 10. Singapore already has in place developed physical infrastructure specific to the precious metals sector. Metalor Technologies Singapore commenced operations in June 2014, and its production volume has since quadrupled. On the secured logistics front, providers such as Brinks, Certis Cisco, Malca Amit, G4S and Loomis provide competitive and high quality support services.
 11. The advantages of doing business in Singapore are plentiful and considerable. I invite you to share them and to gain from these opportunities through greater engagement and collaboration.
- ### The Importance of SBMA
12. Five years have passed since Singapore first embarked on the journey to revitalise the precious metals sector. We have made good progress. However, this is a journey of decades, not years. This is where an industry-led association like SBMA can play a leading role, propelling initiatives in concert with industry players and government agencies.
 13. I would like to first congratulate SBMA on its achievements in these short two years since its inception. Its membership count has grown to 36 since 2015. Its members include some of the world's well-established and recognised international organisations such as the World Gold Council, London Metals Exchange, JP Morgan, ICBC Standard and INTL Asia.

14. SBMA has also organised several regional outreach trips aimed at exposing its members to emerging markets. Notably, SBMA has organised 3 trips to Myanmar in the last year, and the discussions have produced concrete results. SBMA will be signing an MoU with the Myanmar Gold Development Public Co, a prelude to deeper collaboration forthcoming. Additionally, SBMA's engagement with international precious metals organisations such as the London Bullion Market Association and the World Gold Council has accentuated the visibility of the Singapore precious metals industry on the world stage. I am delighted to see SBMA creating value for its members and the industry.
15. Looking ahead, SBMA will continue to be the industry's consolidated voice. Recognising the need for more detailed statistics to map ASEAN market growth and increase transparency, SBMA will spearhead the gathering and analysis of such data and its eventual dispensing to members. SBMA will also be working with tertiary education institutes in Singapore to set up the SBMA Academy, a talent development initiative aimed at nurturing the next generation of trading professionals for the precious metals industry.
16. I have every confidence in SBMA's continued relevance and success, and I thank them for their distinguished service thus far.

Conclusion

17. The precious metals sector remains an area brimming with potential. With a growing number of enterprises, strong supporting infrastructure, SBMA at the helm and continued support from IE Singapore, I have every confidence that the precious metals sector will continue to flourish. I therefore encourage you to adopt Singapore as your own launch-pad to South East Asia, the broader Asia Pacific region, and beyond.
18. I wish everyone a fruitful conference ahead. ■■■
-

Keynote Address: Gold in a Time of Turbulence

John Reade, Chief Market Strategist, World Gold Council



World Gold Council: Research & Strategy

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... in many ways, we've never left.

Turbulence and Gold

- Gold was one of the best performing assets through the financial crisis

- Below \$700/oz. at the start of 2007
- Above \$1100/oz. at the end of 2009
- S&P500 fell by 21% over the same period
- But as the chart on the next slide shows:
 - Gold was volatile over the period
 - Fell from above \$1000 per ounce to below \$700/oz. after the failure of Lehman
 - Volatility was extremely higher – realised and especially actual.

Gold Price, January 2007 to December 2009

US\$/oz



Source: Bloomberg
World Gold Council | Gold in a Time of Turbulence | 5 June 2017

More Turbulence and Gold

- From 2009, gold traded steadily higher, fears of inflation from QE
 - Topped out above \$1900/oz. in September 2011
 - Declined through 2012 and then fell sharply in 2013
- US Debt-ceiling crisis
 - Fears of US default due to political stalemate
 - Resolution saw gold top-out and then weaken

- But demonstrated that politics has the potential to drive gold higher
 - Especially if it risks Financial Stability

Turbulence and Gold

Gold Price, January 2009 to December 2013



Fast forward to the present

The Present

Gold Price, from 2007

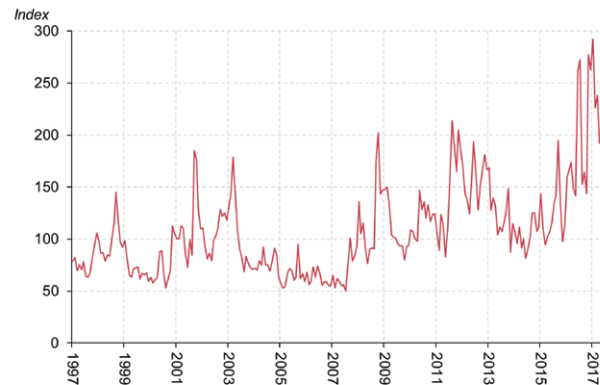


Are we living in a turbulent age?

- Politics has become less predictable
 - Brexit
 - Election of President Trump
 - Populist parties more popular in Italy, France, Netherlands, Austria, etc.
 - North Korea tensions & Middle East conflicts
- Post Financial Crisis Malaise
 - Summers's Secular Stagnation
 - Balance Sheet Recession and Tepid Recovery
- Concerns that asset markets are overvalued

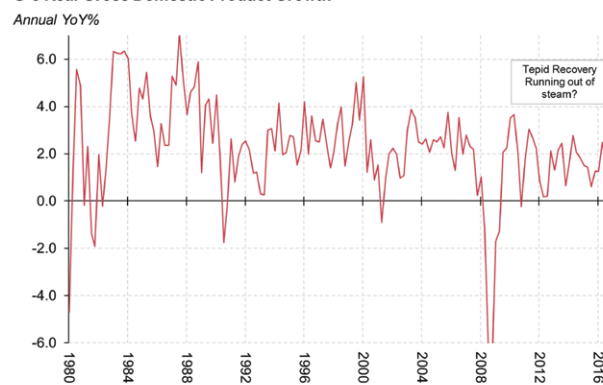
Economic Worries Higher than during Crisis

Global Policy Uncertainty



Sluggish post-crisis recovery

G-8 Real Gross Domestic Product Growth



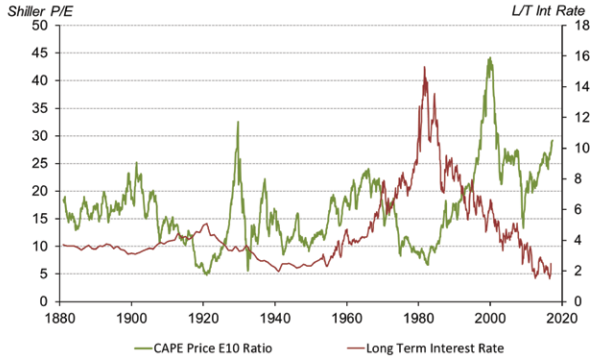
A 36-year Bull Market in US Government Debt

US 10-Year Bond Yield



Equities hardly inexpensive

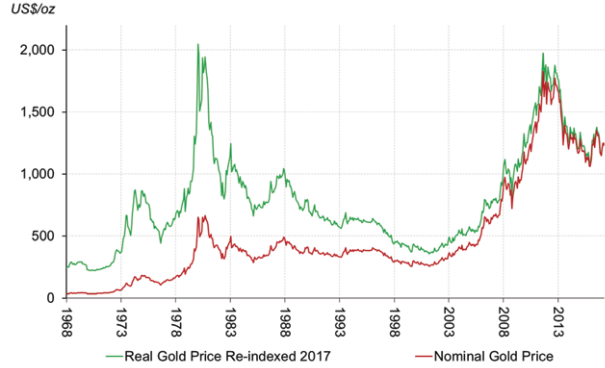
S&P500 Shiller CAPE P/E10



Source: Robert Shiller; World Gold Council
World Gold Council | Gold in a Time of Turbulence | 5 June 2017

Gold is averagely priced

Real and Nominal Gold Price from 1968



Source: Bloomberg
World Gold Council | Gold in a Time of Turbulence | 5 June 2017

US Dollar strength – how much longer?

US Dollar Effective Exchange Rate



Source: Bank of England; Bloomberg
World Gold Council | Gold in a Time of Turbulence | 5 June 2017

Has gold ever looked more alluring?

- Political shocks and worries abound
- Are we nearing the end of the post-crisis recovery?
- Asset markets looking expensive
- Gold averagely priced after the US dollar has come a long way

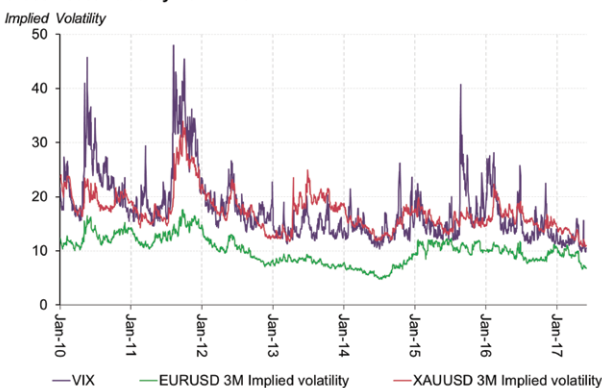
Not just for times of turbulence

Gold is one of the most effective diversifier

- Due to its dual nature as a consumer good and investment, gold's correlation to major asset classes is low in both expansionary and recessionary periods

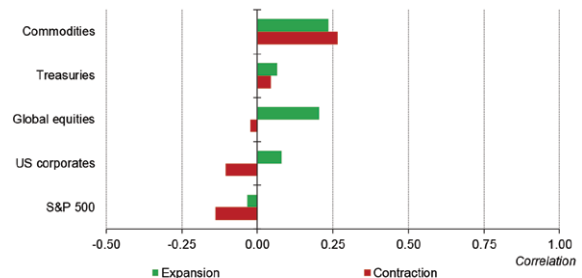
Low vol may point to higher risk

Cross Asset Volatility from 2010



Source: Bloomberg
World Gold Council | Gold in a Time of Turbulence | 5 June 2017

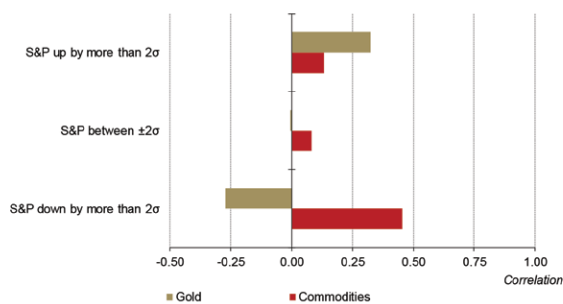
Gold's correlation to major financial assets during US expansions and contractions*



*Based on weekly returns of the S&P 500, MSCI ACWI ex-US, JPMorgan US Treasury Index, BarCap Corporate Bond Index, S&P GS Commodity Index and LBMA Gold Price using from January 1987 to February 2017. Business cycles as defined by the National Bureau of Economic Research (NBER).
Source: Bloomberg, NBER, ICE Benchmark Administration, World Gold Council

- Its correlation to stocks turns more negative, the stronger the pullback is
- Yet, when stocks rally, gold may also go up

Correlation of US stocks versus gold and commodities*



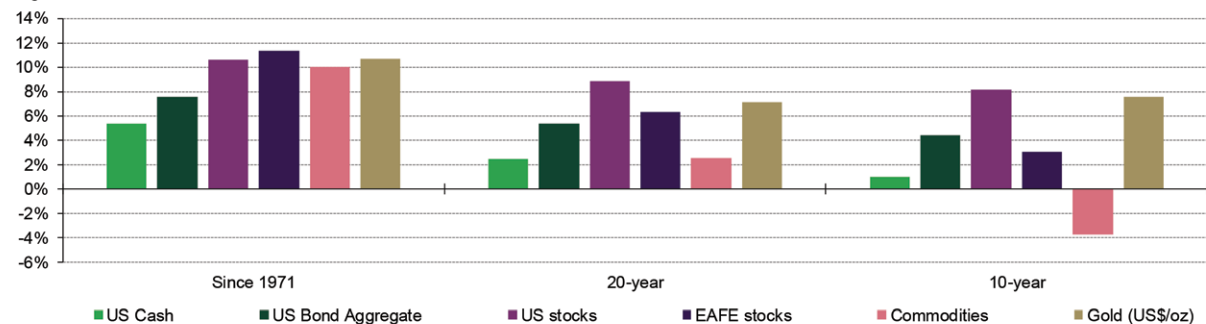
*Based on weekly returns of the S&P 500, LBMA Gold Price and the S&P Goldman Sachs Commodity Index using data between January 1975 and March 2017.
Source: Bloomberg, ICE Benchmark Administration, World Gold Council

Gold provides returns

- Gold can be a **source of return** for investors' portfolios – it is not useful only in periods of higher uncertainty
- Gold has delivered **comparable returns to US stocks over the long run**
- **Income growth increases demand for gold** in the form of jewellery and long-term savings

Gold's long-term performance compared to other financial assets*

Avg. annual return



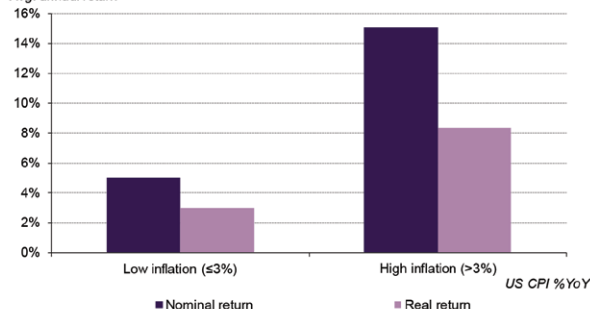
*Based on total returns indices including MSCI US, MSCI ACWI ex US, JPMorgan 3-month US cash, BarCap US Bond Aggregate, Bloomberg Commodity for the 10- and 20-year average, and S&P Goldman Sachs Commodity since 1971 due to data availability. Gold performance based on the LBMA Gold Price. Data between January 1971 and December 2016.
Source: Bloomberg, NBER, ICE Benchmark Administration, World Gold Council

Gold has outperformed inflation and cash

- **Gold returns have outpaced CPI and short-term bonds over the long run**
- **Gold prices tend to sharply increase in periods of high inflation**
- **Fiat currencies – including the US dollar – tend to fall in value against gold**

Gold returns as a function of annual inflation*

Avg. annual return



* Inflation computed using annual US CPI year-on-year changes between 1970 and 2015.
** For each year on the sample, real return = (1+nominal return)/(1+inflation)-1.
Source: Bloomberg, Bureau of Labor Statistics, ICE Benchmark Administration, World Gold Council

Compounded gold excess returns over various periods of time*

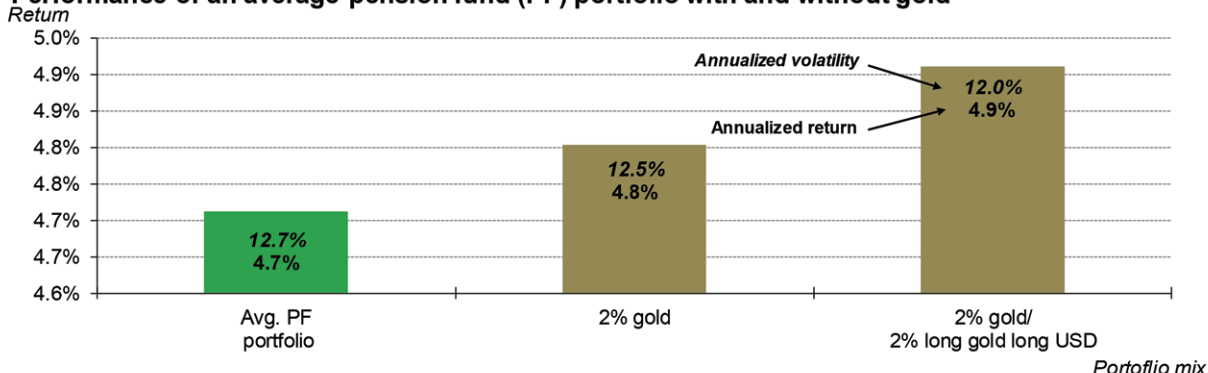
| | Gold return in excess of: | | | |
|----------------|---------------------------|------------------|---------|-------------|
| | US inflation | global inflation | US cash | global cash |
| Since 1971 | 3.59% | 1.88% | 2.17% | 1.68% |
| 20-year return | 3.61% | 3.21% | 2.84% | 4.07% |
| 10-year return | 3.99% | 3.90% | 4.26% | 6.38% |

*Metrics computed using the LBMA Gold Price, US CPI, OECD global CPI, 3-month US T-Bill and J.P. Morgan's 3-month global cash index. Data between January 1971 and December 2016.
Source: Bureau of Labor Statistics, Federal Reserve, ICE Benchmark Administration Ltd, OECD, J.P. Morgan, World Gold Council

Gold can improve risk-adjusted returns

- Over the past 10 years, a representative well-diversified US pension fund portfolio* with 50% of its assets in stocks and 25% bonds and 25% in alternative assets would have returned 4.7% per year with an annual volatility of 12.7%
- Proportionally re-allocating 2% of alternative assets to gold could have increased the average return to 4.8% and reduced volatility to 12.5%
- But investors could have done even better. Re-allocating 2% to gold and 2% to a long gold long dollar position from alternatives could have further increased the portfolio's average annual return to 4.9% while reducing volatility to 12%

Performance of an average pension fund (PF) portfolio with and without gold*



*Based on performance between 12/2006-12/2016. The average PF portfolio is based on Willis Tower Watson Global Pension Assets Study 2017 and Global Alternatives Survey 2016. It includes a 50% allocation to stocks (30% Russell 3000, 20% MSCI ACWI ex US), 25% allocation to fixed income (22% Barclays US Aggregate, 1% Barclays Global Aggregate ex US, 1% JPMorgan EM Global Bond Index, and 2% short-term Treasuries), and 25% alternative assets (9% FTSE REITs Index, 7% HFRI Hedge Fund Index, 7% S&P Private Equity Index, and 2% S&P GS Commodity Index). The allocation to gold comes from proportionally reducing the alternatives bucket. Source: Bloomberg, ICE Benchmark Administration, Solactive AG, World Gold Council

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Special Address: London Market Update

Ruth Crowell, CEO, LBMA



Good morning everyone and thank you very much SBMA for the invitation to address this morning. I have to say it's a real pleasure to be back here in Singapore. It is also nice to be back on a market forum masterminded by Mr. Albert Cheng. Albert always does fantastic job with coming up with speakers, topics, discussion panels, and it's really wonderful to be with him once again. It is also nice to hear from IE Singapore for government's support to the industry; it is something I want to see more particularly in London. This is the reason why it is nice to be back in Asia for the real engagement, support from the government side. And last but not the least as the former conference organizer by myself, I would like to thank Foretell Business Solutions. These guys are doing excellent job and you can really see the quality of their works. Thank you very much for the fantastic conference

so far, and hoping as a sponsor of tonight's dinner, there will be fantastic evening tonight.

Albert, you asked me to talk about an update on London market; it is really high level. We are seeing a talk about LME metals, what is happening there and may be little bit about precious metals code, and regulation. The problem is that giving an update on London, and talk about on regulation, it is a bit of a challenge. Because we are exhausted with regulations in London – it started with US code that is being implemented and now we have EU coming into place, and as John mentioned, we have BREXIT, which also means UK version as well and it is really just exhausting and it is starting to see effects of that coming through headlines you are asking about. So, there are effects on the prices, there are effects in respect of drivers behind what is happening in our London metals division, and one thing that I want to focus on is conduct of anxiety! This is one thing that in a market place we are suffering from. The rules and regulations are putting in place to protect the investors, protect you in market place, but in a way that has gone so far actually starting to hurt you on those intentions. I will explain little bit about that tricky subject.

What you are seeing in the prices that both gold and silver are now UK critical regulated benchmarks. This means if you are found guilty manipulating this benchmark, you will be personally going to jail, losing your house, and livelihood. This is very serious; they are serious benchmarks and they need that protection. But the result has been the reaction to do just nothing to make sure that I am not going to jail if I do not do anything at all. There is a big problem because,

particularly on gold and silver auctions, the price discovery mechanism is different from LIBOR. The way LIBOR is calculated is through panel of banks and ultimately putting in well educated what they think price would be, but actually, they are not trading on the price – there is no risk capital involved. But there is risk involved in gold and silver auction – traders are putting a price and then they survey what is the interest worldwide in terms of buying and selling. If it is too high, then you are going to have too many sellers, and if it is too low, it is vice-versa. Now the problem is if you have an instruction from compliance that no matter what the price is, either too high or low, I am going to physically standing behind you and not letting you change your order or changing your clearance order. The mechanism does not function, and once the regulators have not said what they are asking for, they have also not said the opposite and actually you are standing in anxiety having on prices. Now, happy to say that there are some people doing this – the LBMA and other participants are trying to make some changes and administrators are also working hard on this. This is the challenge on the process altogether. I am happy to say that there are improvements particularly on gold with clearing coming in; we have seen changes in dynamics in our mechanism and that is something we are going to continue watching.

I want to give you now a background as to what we are facing in London regulatory-wise and how we are seeing the effects of that as we go forward. You need to see the first bullet points here in my presentation ‘Global Precious Metals Code’. You just read the 50 page documents and when we back track and explain where all these come from, you will find that market has always a code of conduct – it is kind of non-investment product code. This was originally written by Bank of England and as LBMA, we really brought in the ‘definition’ – what is an allocated and un-allocated account. But the principles were decided out of regulator basis. For members of LBMA, who have been associated since beginning actually signed up the application and we have used it for other members during the course of the history. So, this is not new; what is new is the regulation at this time. So, as opposed to saying in respect of prices, here is the high principle and absolutely not a guidance and how you

should implement them and when it comes to the grey areas that what is right and what is wrong. We made sure we have high standards, but we also tried to give you practical and credible examples how did you tackle difficult situations like giving client market colour – what is acceptable and what is not and start to having real conversation that something you can actually use and start to address some of these credibility and integrity issues at a market place we have been struggling with in last few years. So, it is going to be a code that brings integrity to the market. This is not something new – this is just to making sure leveling the playing field for all players.

The next is about transparency. It is about credibility of physical holding. Questions raised like if the physical holding is there, and if so, why is there no statistics? This is really big news. There is actually big achievement just to get press release out to say we are going to report prices. It has taken me at least five years for me to bidding our vaults and bankers to see the value. We know there are people who will never believe how much information we give them that the gold is really there. But, at the same time, you have also credible investors, who find it little odd in the market place that there is no data. This is something changing this summer certainly with physical holdings numbers starting with gold and silver. This is going to be on monthly basis; you have an aggregate figure with a three month delay. This is in line with what Federal Reserve does and what Bank of England has started doing from January this year.

Moving forward, now I will focus on trade reporting. I will tell you a little story here. Few years ago, I perhaps made a mistake by volunteering in team triathlon. I used to swim in school and I thought I would make it. I really should have asked questions rather how deep is the water, how murky is it, etc because it was an open water swimming and I have never done before that. So, it was a challenge. Obviously, I survived. I did take a bit of training in a London reservoir and it was the darkest water I had ever seen. It is just like swimming into ink; it is extremely difficult to see anything inside as no light comes through, and you have no idea how deep it is and you also do not know who is swimming with you. So, point is, for an

investor, not having transparency is not exactly inviting as a market player. We need transparency for everyone; they should have an idea, shape and perhaps of the sharks lurking beneath. So, trade reporting is going to make big change, something that we start from end of this year. We already have lot of information from market makers and David Gornall, former Chairman of LBMA, has been working hard and getting us across the line in the market place.

But will we want do this, that's where work really starts. It will take these transparency initiatives and explain them to regulator, to investors that gold performs really well. There is no case that we should make regulations at such a high level.

In case of market reporting, many keep on telling me "Ruth, we are happy to do it, but can you ensure rest will follow?" I think I will highlight here our enforcement side to explain this point. If you have any doubt whether LBMA will take any action, I would like to say that actions that we have taken in last few months suffice to that. You could see that we have delisted one refiner based in United States, and this is on not following our responsible gold guidance and due to be ongoing FBI investigation. This is a tough decision, but for me it validated a decision we made in the year previously, in which we stopped recognizing CFSI audit as well as Responsible Jewellery Council audits. And the reason for that their scope is too small. CFSI just deals with West Africa based on US law and they really do not look into global basis. And the case in point here had it with money laundering and this is something is always an issue in global market and it is something that we want to do with responsible gold guidance that we will be building a new structure here. I also want to flag out that more resignations you will be going to see this year, and that is because of annual tonnage requirements enforcement. This is something we have not turned on over night; three years ago we said that we haven't been consistent when we apply the tonnage requirements. If a refiner falls down one year, it is too harsh to take him out. What we have done now that we have three years rolling average to determine (unless the refiner has enough reason that it is going to relocate it refinery and

production will come on line). So, it is not the same as responsible guidance requirements. It reflects ultimately LBMA is keeping up the standards quite high. It might sound little harsh; as an association we also work for betterment of our members. But our work as a world authority on this Good Delivery Standard is so vital not just for the central bank, banks, but for all the refiners, investors around the world, who rely on that quality and relying on us not only to check box when comes to US law, but to make sure meeting expectations in the long run. Otherwise, for trying to do everything by themselves will be (a) challenging, and (b) costly. So, need to maintain that high credible market standards.

And one of the things that I am interested to looking at in next few days that the use of technology and the ways how we can do our job better. Lots of ideas are out there and there are also lots of solutions looking for problem, but we are really looking for solutions to our problem, "how we address purity issue, what can LBMA do in Kilobar market etc. Prior to 2014, we really had stance that we don't touch kilobar; its only large bars and Good Delivery bars that we are concerned about. That's really changed. We started with specifications of Kilobar of 9999 standard, and now we will be looking at other things we can do like take the responsible gold, take the purity, all the expertise of visual guides etc., and see how we can leverage technology to make this even more helpful for you and how you pass on that information to your clients.

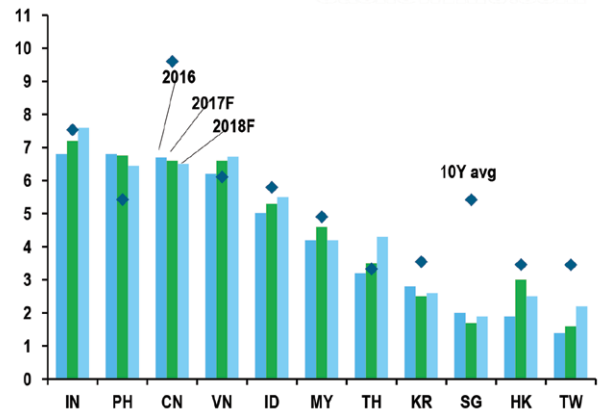
Last thing that I want to share here our experience as an association is an asset which we can share with SBMA; it is also something that we hope to continue to work together not just today, but be going forward, and looking forward to reaping precious rewards.

Special Address: Asia - The Best Economic Neighbourhood

David Mann, Chief Economist Asia, Standard Chartered Bank



Mixed growth outlook for Asia
GDP growth, %



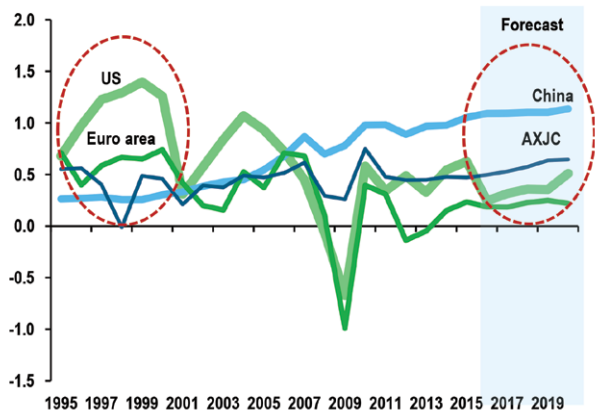
Source: Standard Chartered Research

Asia – External sectors are now less important for growth, but ...

Asia – The biggest contributor to global growth

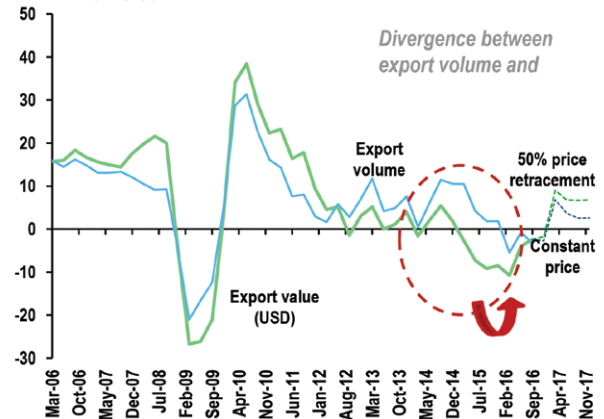
China and AXJC will likely contribute c.60% of global growth in 2017

Contributions to global growth, ppt



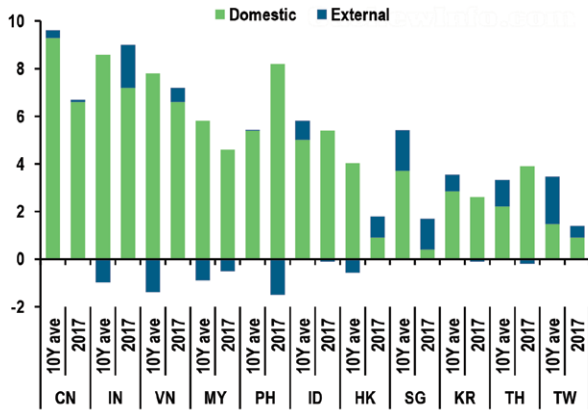
Source: IMF, Standard Chartered Research

Asia's nominal exports should return to positive growth in 2017 (% y/y)



Note: We include Australia, Japan, China, Hong Kong, South Korea, Singapore, Taiwan, Malaysia and Thailand in Asia's composite exports; see On the Ground, 18 May 2016, 'Asia exports – reasons for optimism (in 2017)'. Source: WTO, Standard Chartered Research

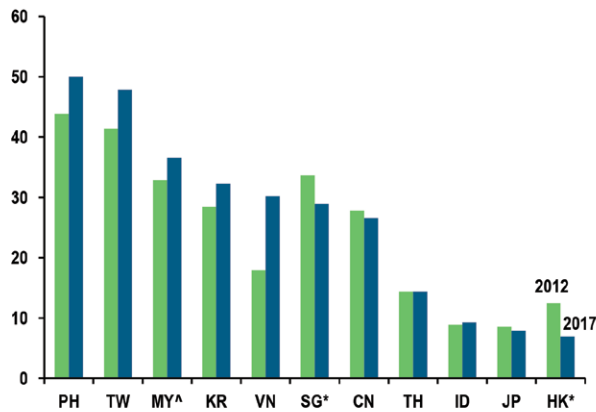
External sector plays a marginal growth role for most of Asia (GDP growth contributions, ppt)



Source: Official sources, Standard Chartered Research

Large spillover from exports to most economies in Asia

Electronics are increasingly important to Asia's exports (Electronics exports, share of total %)



*We use domestic exports for HK and NODX for Singapore; ^Malaysia includes both electronics and electrical exports, without further granularity; Source: CEIC, Standard Chartered Research

Gross export growth is a key input to our Asia growth trackers

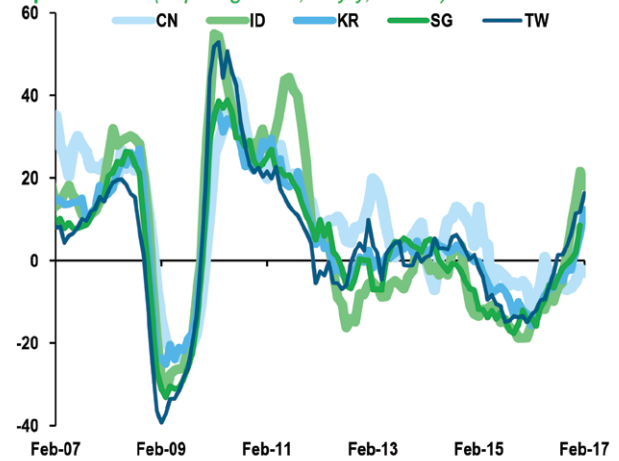
Economic inputs to our econometric GDP growth trackers

| Country | Input 1 | Input 2 | Input 3 | Input 4 |
|-------------|------------------|-------------------------|---------------------|---------------|
| Australia | Exports | Imports | Retail sales | Capex |
| China | Exports | IP | | |
| Hong Kong | Exports | Retail sales | China PMI | |
| India | IP | Passenger vehicle sales | Bank credit | |
| Indonesia | Bank credit | JCI | CPI | |
| Japan | IP | Econ Watchers Survey | Construction orders | Leading Index |
| Korea | Trade balance | IPI | BSI | |
| Malaysia | IP | Leading index | Bank loans | |
| Philippines | Exports | Imports | Business outlook | |
| Singapore | NODX | IP | | |
| Thailand | Tourist arrivals | Consumer confidence | VAPI | |
| Taiwan | Exports | Leading index | | |

Source: Standard Chartered Research

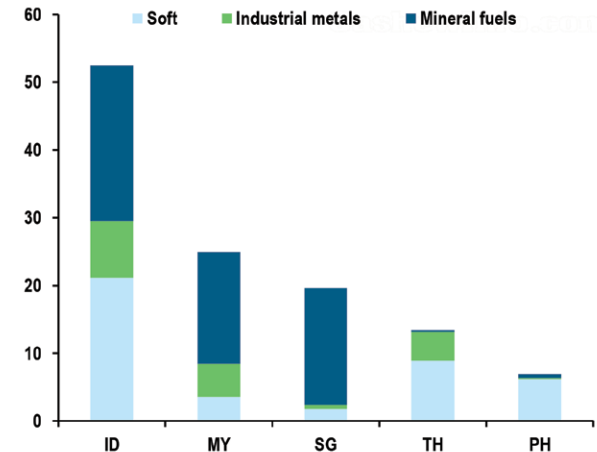
Asia – Don't get carried away

Exports picked up in early 2017, in line with our expectations (export growth, % y/y, 3mma)



Source: CEIC, Standard Chartered Research

Price recovery is supporting exports (% of total exports, 2015)

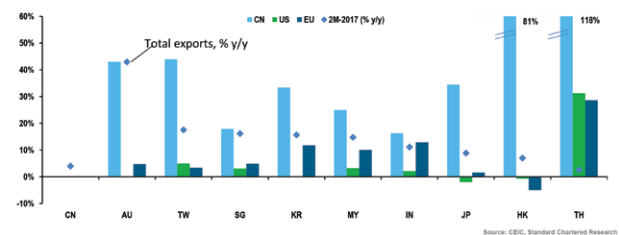


Source: WTO, Standard Chartered Research

Asia – Where are exports going?

China is providing key support

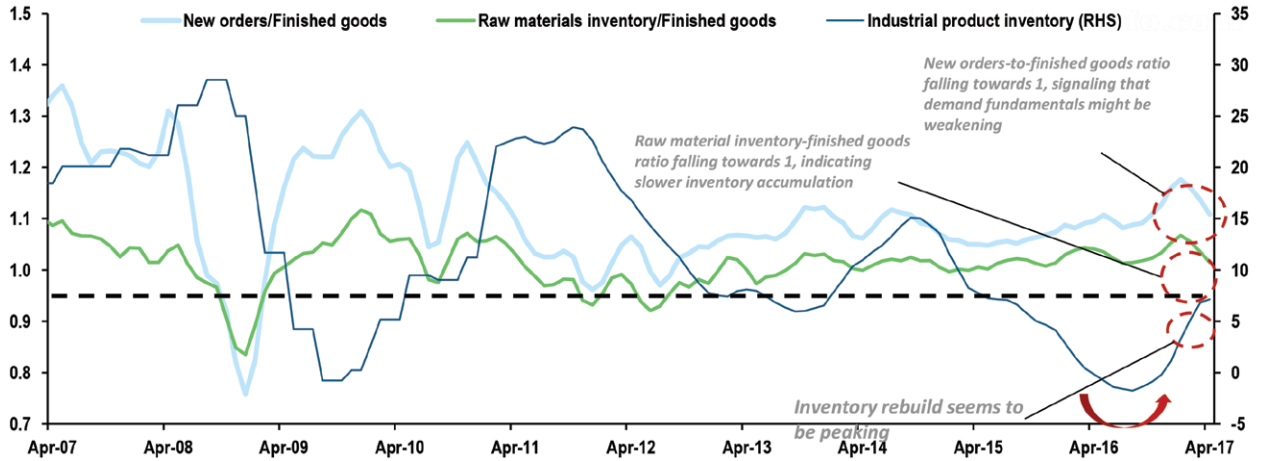
% of total export increase accounted for by exports to China



Source: CEIC, Standard Chartered Research

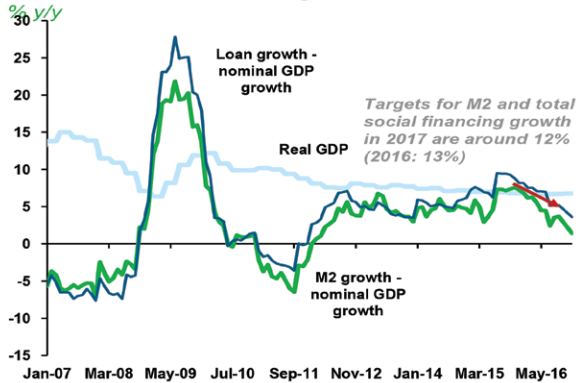
China's inventory rebuild may be showing signs of peaking

% y/y, 3mma



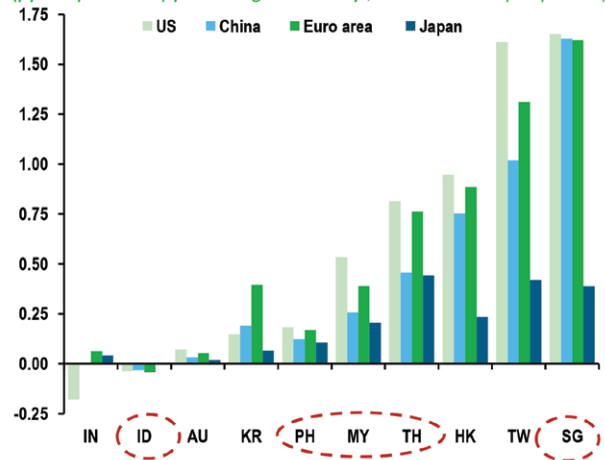
China growth may slow versus 2016 on tighter monetary conditions, property cooling measures and softer domestic demand

Credit conditions and GDP growth



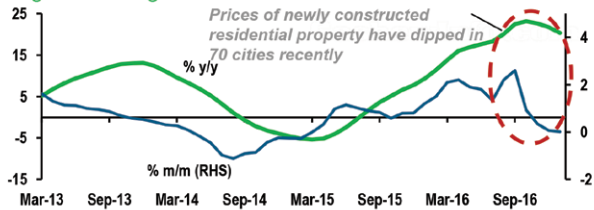
Asia – Small, open economies are vulnerable

Singapore, Taiwan are most vulnerable to US slowdown (ppt impact of 1ppt GDP growth drop, 2000-15 sample period)

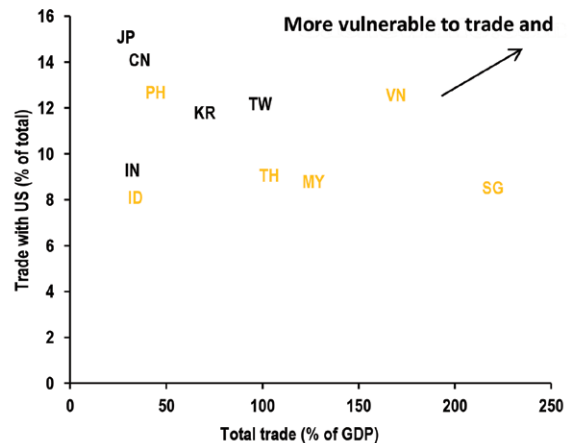


Residential property prices

Weighted average



Large domestic market-oriented economies are more resilient in this environment (%)



Retail sales and passenger car sales



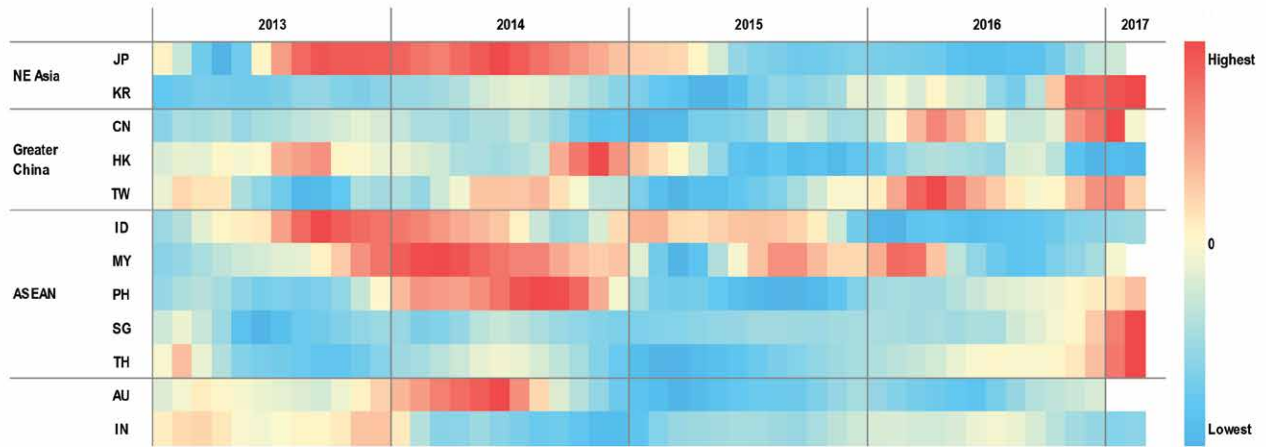
Source: CEIC, Standard Chartered Research

Source: CEIC, IMF, Standard Chartered Research

Asia – Rise in headline inflation

Headline inflation – Upside risks on a low base effect

Shades of red (or blue) indicate higher (lower) inflation compared to the past three years; darker shades show a stronger signal

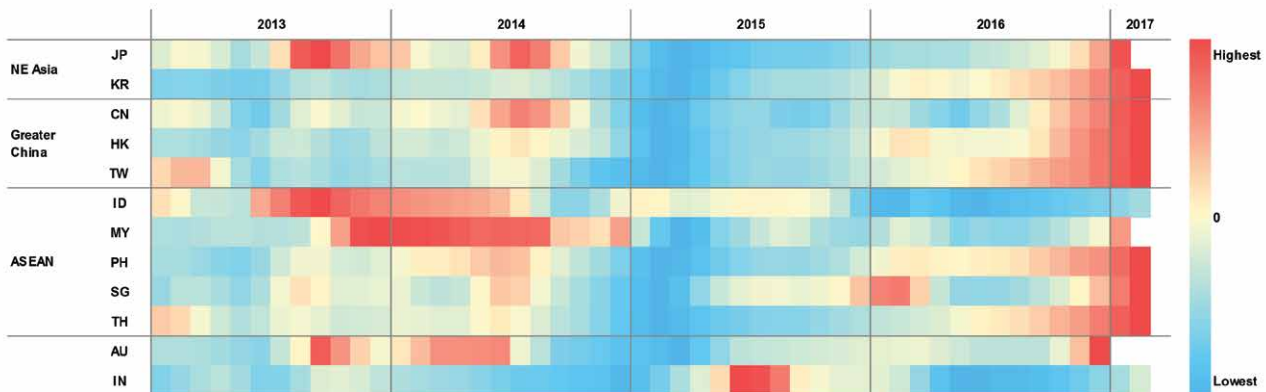


Source: CEIC, Standard Chartered Research

Asia – Oil prices provide main boost to inflation

Energy inflation – Likely to remain elevated in the near term

Shades of red (or blue) indicate higher (lower) inflation compared to the past three years; darker shades show a stronger signal

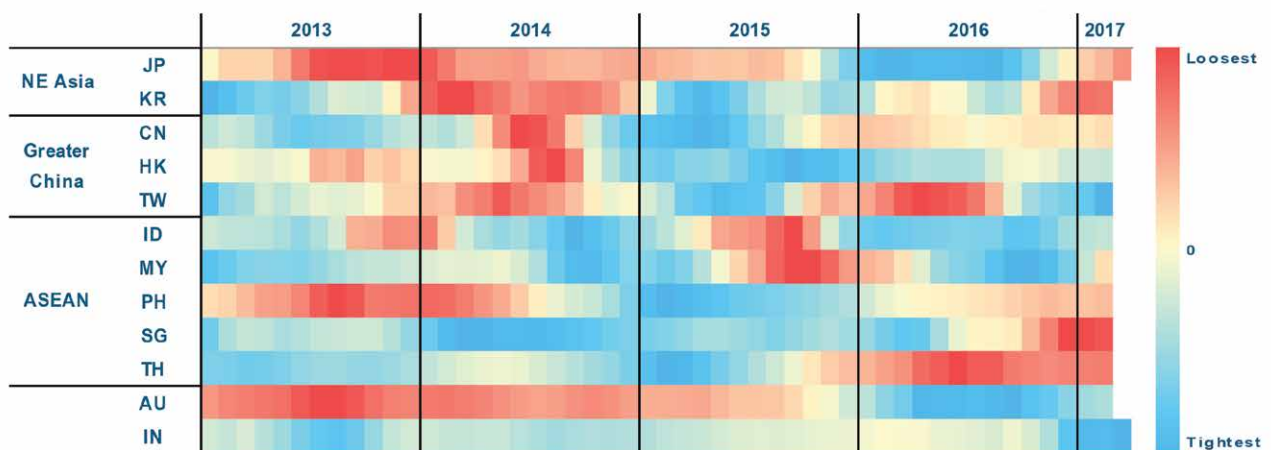


Source: CEIC, Standard Chartered Research

Monetary conditions are tight in Taiwan, India; loose in South Korea, Singapore

Monetary conditions are loose in South Korea, Singapore; tight in Taiwan, India and Australia

Shades of red (blue) indicate looser (tighter) conditions than in the past three years; darker shades show a stronger signal



Source: CEIC, Standard Chartered Research

Asia – Our leverage heatmap

China has the biggest concentration of credit risk (in the corporate sector); Malaysia's and Korea's households are also stretched

| | | CN* | IN* | ID | KR | MY | PH | TW | TH | HK | SG | AU | JP |
|------------------------------------------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| Economy | Total credit/GDP | 242%↑ | 138%↓ | 68% | 235% | 240% | 92% | 137% | 188% | 299% | 261% | 243% | 410% |
| | Credit-GDP growth gap (5Y avg, bps) | 734↑ | 103 | 514↑ | 115↓ | 274↓ | 205↑ | -137↓ | 292↓ | 470↓ | 215↓ | 391↑ | 33↓ |
| Private non-financial | Total borrowings/GDP | 182%↑ | 70%↓ | 40%↓ | 196% | 183% | 56% | 100% | 162% | 299% | 162% | 206% | 164%↓ |
| | Credit-GDP growth gap (5Y avg, bps) | 708↑ | 85↑ | 718 | 75↑ | 326↑ | 669↓ | -150↓ | 315↑ | 476↑ | 432↑ | 289↑ | -134↓ |
| | DSR | 17%↓ | 11%↓ | 5%↓ | 20%↓ | 14%↓ | | | 14%↓ | 26%↓ | 15%↓ | | |
| - Corporates | Business borrowings/GDP | 137%↑ | 56%↓ | 23%↓ | 106%↓ | 93%↓ | 48% | 58% | 81% | 233% | 88% | 83% | 98%↓ |
| | Credit growth less LT average (ppt) | 6.7 | 6.7 | 9.4 | -2.9 | 5.3 | | | 3.1 | 7.2 | 7.5 | | |
| - Household | Household borrowing/GDP | 45% | 14% | 17% | 90% | 90% | 8% | 42%↓ | 80%↓ | 66%↓ | 75% | 123% | 66% |
| | Credit-HH income gap (1Y avg, ppt) | 10.7↑ | 8.4↑ | -0.7↓ | 5.7↑ | -2.2↓ | 14.7↑ | -0.8 | 0.3↓ | 4.2↓ | -1.0↓ | 8.1↑ | 1.3 |
| | Borrowing/household income | 67%↑ | 26%↑ | 28%↑ | 153%↑ | 191%↑ | 19%↑ | 62%↑ | 135%↑ | 92%↑ | 147%↑ | 187%↑ | 115%↑ |
| | Debt service ratio | 7% | 4% | 5% | 16% | 22%↓ | 3% | 6% | 15% | 8% | 14%↓ | 20%↑ | 11%↓ |
| Government | Government debt/GDP | 60%↓ | 68%↓ | 28% | 39% | 57% | 36%↓ | 37% | 31%↓ | | | 37% | 246% |
| | Int. payments/govt revenue | 2% | 15% | 11% | 5% | 14% | 14% | 3% | 5% | | | 4% | 6% |
| External debt | External debt/GDP | 5% | 16%↓ | 32%↓ | 15%↓ | 47%↓ | 19%↓ | 33%↓ | 23%↓ | 76%↓ | 79%↓ | 47% | 44%↑ |
| | Total ext. debt (incl fin. sector)/GDP | 13%↓ | 23%↓ | 36%↓ | 28%↓ | 72%↓ | 27%↓ | 34%↓ | 36%↓ | 408%↓ | 427%↓ | 117% | 71%↑ |
| | FCY share of total external debt | 60% | 75% | 83% | 71% | 58% | 97% | | 72% | 93% | | 26% | 35% |
| | External debt/FX reserves | 0.2x↑ | 1.0x | 2.7x↑ | 0.6x↓ | 1.5x↑ | 0.7x↓ | 0.4x | 0.5x | 0.7x↓ | 1.0x | 13.2x↓ | 1.8x↑ |
| | M2/FX reserves | 7.0x↑ | 5.3x | 3.3x | 5.5x | 4.2x | 2.1x | 2.9x | 3.0x | 4.2x | 1.6x | 32.0x↑ | 7.6x |
| | Short-term (<1Y) share of external debt | 52%↑ | 24% | 8%↓ | 16%↓ | 18%↓ | 5% | 92% | 31% | 31%↓ | 68%↓ | 3% | 65%↓ |
| | Private-sector share of external debt | 66%↑ | 71%↓ | 46%↓ | 54% | 59%↓ | 41%↓ | 99% | 72%↓ | 99% | 100%↓ | 62%↓ | 40%↓ |
| Moody's External Vulnerability Indicator | 18.9 | 74.3 | 56.6 | 45.1 | 119.9 | 30.2 | 39.9 | 45.2 | | | | | |

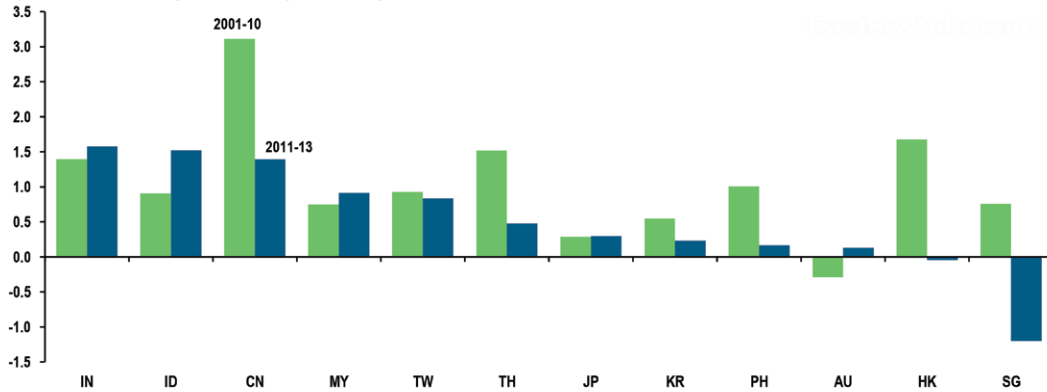
Colours indicate leverage and potential stress: Low (Green), Moderate/sustainable (Yellow), High (Red). Arrows indicate change from June 2015: ↑ Moderate increase, ↑↑ Fast increase, ↓ Decrease.

*The difference between 5Y CAGR of credit growth and 5Y CAGR of nominal GDP growth; a difference of more than 5ppt (500bps) is our threshold for a red flag; #China and India data is as of December 2016, all other numbers are as of June 2016; Source: Bloomberg, BIS, IMF, Standard Chartered Research

Lack of reforms and slow global growth may have hit productivity

Productivity's positive momentum has faded in recent years

Ppt contributions to growth, multi-year average

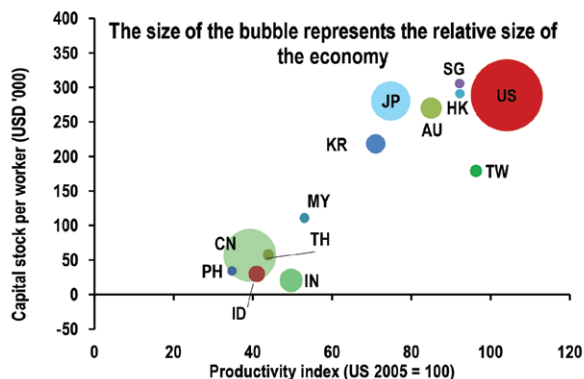


Source: Penn World Tables, Standard Chartered Research

ASEAN and China – Long-term potential

Plenty more room for investment in ASEAN and China

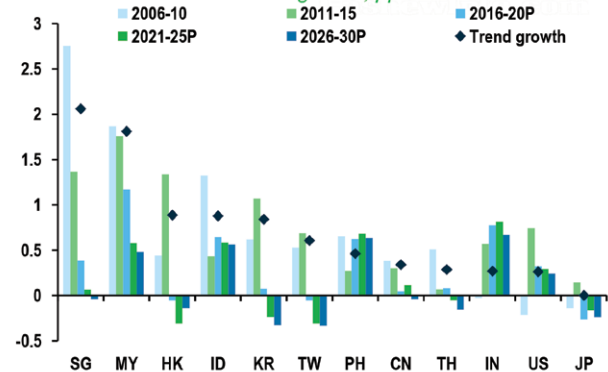
Economy size (bubble area)



Source: IMF, Penn World Tables, Standard Chartered Research

ASEAN benefits from still-positive labour force contributions to growth

Labour contributions to GDP growth, ppt



Note: We use UN working-age population data for our projections for 2016-40, while actual numbers on employed personnel for 2001-15 are from Penn World Tables. The key assumption here is that labour growth is equal to working-age population growth; Source: UN, Penn World Tables, CEIC, Standard Chartered Research

Summary

- Advanced economies: Policy divergence widens
 - US post-Trump: Envisaging tighter monetary policy (rate hikes) and looser fiscal policy
 - Europe: Extension of QE amid Brexit and major elections
 - Japan: QQE may last longer than expected as the BoJ pursues yield curve control
- China: Achieving growth of around 6.5%, but at a cost
 - Monetary policy turning tighter; fiscal policy takes the baton
 - CNY faces short-term pressure, but medium-term depreciation is not sure
 - Trade frictions with the US inevitable; trade war can be avoided
 - Structural reforms lagged in key areas, undercutting long-term growth potential
- Race to the 19th Party Congress: Reshuffling likely to improve policy implementation
- Key risks: Trade war, rising leverage, capital outflows, housing bubble, policy missteps
- ASEAN is a consistently fast-growing region vs other EM
 - ASEAN is the fastest-growing region in our coverage
 - But it is not insulated from slow global growth; the region will grow below trend in 2017
- Within ASEAN
 - Indonesia, the Philippines, Thailand and Vietnam are expected to perform better
 - Public investments are key, and regional governments are playing their part
 - Malaysia and Singapore may underperform
 - Vietnam remains an FDI magnet

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Roundtable - ASEAN Precious Metals Markets and Opportunities



*(Left to Right) **Albert Cheng**, CEO, SBMA, **Hawk Namiki**, Executive Director, SBMA, **U Khin Maung Han**, Chairman, Myanmar Gold Development Public Co. Ltd, **Rithikone Phoummasack**, Senior Advisor, AIF Precious Metal Import-Export Service Sole Co. Ltd, **Huynh Trung Khanh**, Managing Director, Vietnam Gold Consultants, **Muhidin ST**, VP - Mktg, Sales & Operations, PT Antam (Persero) Tbk, **Ermin Siow**, President, Federation of Goldsmiths & Jewellers Association of Malaysia, **Pawan Nawawattanasub**, CEO, YLG Bullion International Co, **KL Yap**, Singapore Refining BU Manager, Metalor Technologies Singapore*

Albert Cheng

I am sitting with my friends from eight ASEAN countries and arguably, we are short of another two countries to complete the whole ASEAN fraternity and I promise, it will be our target to complete it by next year.

As you have seen our brochure, our motto is to develop, drive and connect ASEAN bullion market. What is more important is to bring transparency into these markets. SBMA will try to take the ASEAN market to global platform going forward and at the same time, will bring the global market to ASEAN.

We have assembled here today with leaders in ASEAN markets on this stage. I will urge all my friends to remain connected with market and at the same time, I would like to tell my friends here sitting in audience that if you want to do business in the respective country, these are the leaders who could take you to the respective market. The objective of SBMA is to connect ASEAN countries with global giants like India and China in gold business.

Asean Economic Community

*Hawk Namiki, Executive Director,
Singapore Bullion Market Association*

Asean Economic Community (AEC)

- 7th largest economy in the world
- Population: 625.5 million
- Asean Free Trade Area
- Infrastructure development
- Major production and distribution hub
- Wealth accumulation

Asean Economic Community Data

| 2015 *2014 | Population (million) | GDP Growth | GDP/P | CPI | Export (US\$ billion) | Import (US\$ billion) | F. Reserves (US\$ billion) |
|-------------|----------------------|------------|----------|-------|-----------------------|-----------------------|----------------------------|
| Singapore | 5.5 | 2% | \$53,004 | -0.6% | 377 | 295 | 240 |
| Thailand | 67 | 0.90% | \$5,445 | 1.9% | 225 | 200 | 157 |
| Indonesia | 255 | 4.80% | \$3,379 | 3.4% | 150 | 143 | 106 |
| Malaysia | 31 | 5% | \$10,222 | 2.1% | 200 | 176 | 95 |
| Philippines | 101 | 5.80% | \$2,877 | 1.5% | 58.6 | 67 | 81 |
| Vietnam | 92 | 6.70% | \$2,036 | 0.6% | 162 | 166 | 34 |
| Myanmar* | 51.4 | 8.50% | \$1,228 | 5.9% | 11 | 16 | 5 |
| Lao PDR* | 6.9 | 7.50% | \$1,739 | 1.3% | 17 | 9 | 1 |
| Cambodia* | 15.3 | 7.10% | \$1,096 | 3.9% | 11 | 14 | 6 |
| Brunei* | 0.4 | 17.10% | \$41,411 | -0.2% | -8 | -6 | 4 |

Source: FocusEconomics

Asean Gold Supply and Demand

| SUPPLY (tonnes) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------------|------|------|------|------|------|------|------|
| Mine Production | 194 | 164 | 143 | 152 | 153 | 175 | 174 |
| Recycling | 128 | 134 | 114 | 94 | 88 | 69 | 159 |
| Total Supply | 322 | 297 | 257 | 245 | 241 | 245 | 333 |
| DEMAND (tonnes) | | | | | | | |
| Net Physical Investment | 195 | 263 | 232 | 305 | 204 | 166 | 150 |
| Jewellery Fabrication | 138 | 128 | 120 | 153 | 149 | 145 | 134 |
| Industrial | 10 | 10 | 10 | 11 | 13 | 10 | 10 |
| Total Demand | 343 | 402 | 361 | 469 | 366 | 320 | 295 |
| Market Balance | -21 | -105 | -104 | -224 | -125 | -76 | 38 |
| Nominal Gold Price (US\$/oz, PM fix) | 1225 | 1572 | 1669 | 1411 | 1266 | 1160 | 1251 |

Source: Metals Focus

New Demand and Participants

- Shari'ah Standard on Gold
- India-Asean free trade agreement (FTA)
- Uncertainty of key reserve currencies
- Weak Asian currencies
- New generation of gold investors
- Sovereign wealth funds and pension funds
- Regional HQ function in Singapore to cover Asean

Asean Currency Table

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2012 vs 2016 |
|-------------|--------|--------|--------|--------|--------|--------------|
| Myanmar | 856.97 | 986.24 | 1032.7 | 1310 | 1357 | -58% |
| Malaysia | 3.0585 | 3.2755 | 3.4965 | 4.2925 | 4.4862 | -47% |
| Indonesia | 9638 | 12170 | 12385 | 13778 | 13473 | -40% |
| Philippines | 41.04 | 44.39 | 44.71 | 47.17 | 49.73 | -21% |
| Brunei | 1.2216 | 1.262 | 1.3246 | 1.4179 | 1.4481 | -19% |
| Singapore | 1.2218 | 1.263 | 1.3255 | 1.4185 | 1.4468 | -18% |
| Thailand | 30.59 | 32.865 | 32.904 | 36.083 | 35.799 | -17% |
| Vietnam | 20840 | 21095 | 21388 | 22485 | 22761 | -9% |
| Laotian Kip | 7986 | 8021 | 8099 | 8148 | 8184 | -2% |
| Cambodia | 3995 | 3995 | 4073 | 4049 | 4069 | -2% |

Source: Bloomberg

Asean SWF and Pension Fund

| Institution | Asset Size (billion) | Country | Type |
|------------------------------------------------|----------------------|-----------|---------------------|
| Government of Singapore Investment Corporation | 303* | Singapore | SWF |
| Central Provident Fund | 213 | Singapore | Public Pension |
| Temasek Holdings | 171 | Singapore | SWF |
| KWSP EPF (Employee Provident Fund) | 160 | Malaysia | Public Pension |
| Permodalan Nasional Berhad (PNB) | 60 | Malaysia | Government Agency |
| Brunei Investment Agency | 40 | Brunei | SWF |
| Khazanah Nasional | 39 | Malaysia | SWF |
| Pension Trust Fund (KWAP) | 28 | Malaysia | Public Pension |
| Social Security Office | 25 | Thailand | Public Pension |
| Government Pension Fund | 17 | Thailand | Public Pension |
| BPIS Ketenagakerjaan (JAMSOSTEK) | 15 | Indonesia | Public Pension(P) |
| PT Taspen (for civil servants) | 12 | Indonesia | Public Pension(CS) |
| Tabun Haji | 10 | Malaysia | Government Agency |
| PT Asabri (for the security and armed forces) | 2 | Indonesia | Public Pension(SAF) |
| Total | 1094 | | |

Non-Monetary Gold



HS CODE FOR NON-MONETARY GOLD
HS 71081300 NON-MONETARY GOLD IN SEMI-MANUFACTURED FORMS
HS 71081200 NON-MONETARY GOLD IN OTHER UNWROUGHT FORMS

Source: IE Singapore

Conclusion

- Increasing wealth and disposable income
- Gold is rooted in the life and culture of people
- Shari'ah Standard
- New generation of gold investors
- Diversification of asset class for SWF and PF
- Singapore as the precious metals trading hub

Myanmar - An overview of the domestic scene

U Khin Maung Han, President, Myanmar Federation of Mining Association & Chairman Myanmar Gold Development Public Company

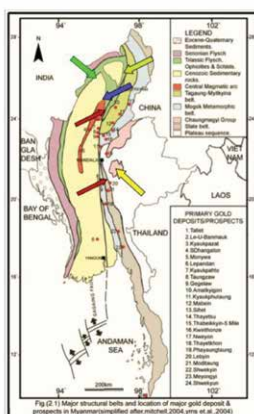
Introduction

- Myanmar's attendance the Asia Pacific Precious Metal Conference coincides with the Myanmar Government's aim to engage with the global industry.
- New laws and policies have been implemented to benefit not only the country and its people, but also to encourage foreign investment.
- The primary objective is to create a commercially viable, sustainable and globalized standards for the gold industry in Myanmar.

Geological Characteristics

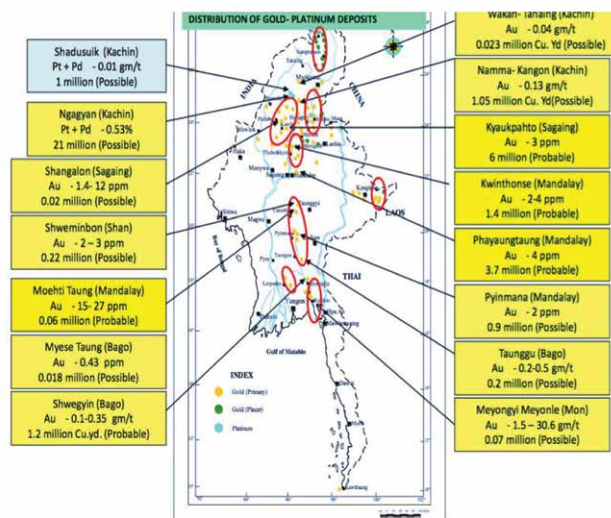
- Myanmar is a country with geological characteristics that points towards abundance of natural resources.
- Surveys and exploration done in collaboration with many countries, namely Japan, Korea, China and Finland, have shown that Myanmar is fairly rich to very rich in its precious metals and minerals.
- Major primary and placer precious metal deposits have been found running along major fault lines and dormant volcanic formations.

Characteristics of Gold Deposit



- (1) Mesothermal gold-quartz lode, porphyry style Cu-Au & its related Epithermal Au along the central magmatic arc.
- (2) Sediment-hosted epithermal Au mineralization along the Sagaing fault zone.
- (3) Mesothermal and epithermal gold mineralization in Tagaung - Myitkyina belt.
- (4) Au(Cu) skarn & Mesothermal veins in marble, gneiss and granite within the Mogok metamorphic belt & Jurassic marble of Turbidites.
- (5) Slate belt style Mesothermal gold-quartz veins in Chaung Magyi & Mergui Groups.

Deposits and mines (circa 2015)



Over 340++ occurrences of gold found

Prospects

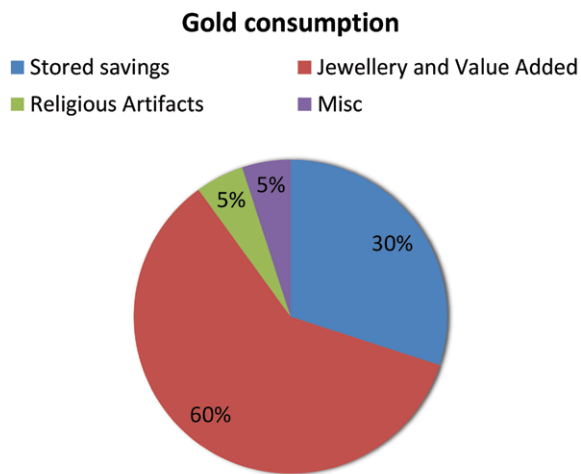
The Myanmar government has mandated the development, modernization, globalization and standardization of it's gold industry for the following key areas:-

1. Gold Mining.
2. Gold refining & assaying.
3. Value added products, such as Coins, Souvenirs, Jewelry, Religious artifacts, etc.
4. Export & Import of gold.
5. The Central Exchange.

The Local Market

- Depending on seasons, approximately 200-400Kg gold are produced daily across the country. These values are the sum total of declared production.
- Unofficial cross border trade and production is estimate to be much higher.
- Mine gold feed is 30-40% while the rest are from recycled jewelry and other miscellaneous item.
- Firm figures from just two cities, Yangon and Mandalay, shows a daily turnover of US\$ 8 million. Other major cities and townships in Myanmar are not included due to limited records.

The local market (cont'd)



Who We Need

Being a new market with limited international exposure, we wish to engage and partner with industry leaders in the following areas (but not limited to):

- Industry standardization according to established codes & practices. (ISO, OHSA, IRMA, Responsible Mining, etc)
- Investors to develop over 400+ small scale mines, e.g. implementation of advance mechanized equipment, mine infrastructure, health & safety aspects, environmental conservation and management, etc.
- Technical and knowledge partnership in Refinery/ Assay Lab.
- Development of Value added industry, e.g. jewelry, mint coins, marketing and research, etc.
- Setting up of an exchange, bank systems, financial systems, etc.

What are the Benefits?

- Special Economic Zone, with tax exemption for up to 5 years. Specialize projects zones will have a 7 year tax exemption.
- Components **vital** to the industry, will be granted extra benefits in terms of operations and taxes.
- Myanmar Foreign Investment Law (FIL) under the Myanmar Investment Commission (MIC), is designed to ensure the rights and protection of investment.

- Be a market maker for one of the world's newest market.
- The potential to be involve and form a new Bullion Market Association which welcomes Foreign membership.
- The assurance of business prospects.

Summary & Invitation

Therefore in view of our limited experience internationally, the Myanmar Federation of Mining Association, the Myanmar Gold Development Public Company and our sister associations, on the behalf of Myanmar, wishes to invite all in attendance who are interested, to engage with our delegates.

We also warmly welcome you to Myanmar for further bi-lateral and economic discussions.



We Thank you for your time!

Overview of Lao Gold Market

*Rithikone Phoummasack, Managing Director,
AIFS Precious Metal Import – Export
Service Co., Ltd (AIF Gold)*

General Information



- Store of wealth 60 percent
- Jewellery 35 percent
- Industry 5 percent
- Gold Price in Laos is closely reflect on the fluctuation of the Lao world gold market
- Gold Infrastructure trading provided by AIF Gold is well developed
- **The import and export of Gold is strictly control by Government, and there is 10 percent import tax and 10 percent valued added tax imposed on gold Importation**
- The Lao Government encourage the foreign and local investment in mining sectors.
 - Reserves of **gold**, copper and zinc were assessed at about 500 to 600 tons, 8 to 10 million tons, and 2 to 3 million tons respectively
 - Currently, there are 4 major gold mining operation in Laos and more than 30 small mining operation, with the total production capacity of more than 40 tonnes per year.

SWOT OF LAO Gold Mark



Lao PDR

| COUNTRY AT A GLANCE | | | |
|-------------------------------------------------------------------------------------|--------------------------------|-----------------|------|
|  | Population | 6.802 million | 2015 |
| | GDP | \$12.37 billion | 2015 |
| | GDP growth | 7.4% | 2015 |
| | Inflation | 1.5% | 2016 |
| | More Data > | | |

Lao PDR is one of the fastest growing economies in East Asia and the Pacific. It has improved access to electricity, schools, roads, and has become an important energy exporter. [Read Overview >](#)

Lao Gold Market

- Gold is used as a traditional savings mechanism, unit account for transaction, hedge against the depreciation of Lao currency.
- Consumptions Gold Volume 2016 – 10 Tonnes.
- Gold as Investment and Trading 2016 – 8 Tonnes.
- The distribution of gold demand according to our estimation is as follows:

Role of AIF Gold

- AIF Gold is currently the only active and licensed Company to import and distribute the Gold in Laos.
- AIF Gold is only the active and licensed to provide gold trading and investment platform for investor to trade on gold.
- Currently, AIF Gold is only the company is allowed to be trial for special lump sum tax payment for gold importation.
- AIF Gold is mandated to report regular on the Gold market transaction, and to give recommendation to the Government on how Government can facilitate the Gold Trading.

Thank you

Vietnam Gold Market

*Huynh Trung Khanh, Managing Director,
Vietnam Gold Consultants*

Gold Market Overview

- 20 Millions of SJC gold bars produced and in circulation.
- 500-700 tonnes of gold bars are hoarded by the public.
- 2007-2016 : 836 tonnes of gold in cumulative demand.
- Average consumption : 898 Kgs/ Million of inhabitants.

Gold Management Policy

- Before 2001, Gold market was highly regulated.
- 2001 : Market's gradual liberalization by Decree 174.
- 2002-2003 : Physical gold imports authorized with greatly reduced taxes.
- 2005-2007 : Authorization of gold margin trading.
- 2009 : Tightening of gold policy because of high foreign trade deficit.
- 2012 : Market's activities restricted by Decree 24. State's monopoly on gold bars' production and official imports.
- 2017 : New policy on loosening up conditions on gold bar retail sales and financing loans from commercial banks.

MARKET POTENTIALS

- Strong physical demand at 85 tonnes per annum.
- Potential Gold Mobilization Plan of 500 tonnes minimum
- Future VN Gold Exchange with large trading potentials
(Daily margin trading volume of 2 Millions ounces in 2008)

Indonesia Precious Metals Market

*Muhidin ST – VP - Mktg, Sales & Operations,
PT Antam (Persero) Tbk*

AGENDA

- Business Environment in Indonesia
- Current Situation of Indonesia
- Opportunities
- Q&A Session

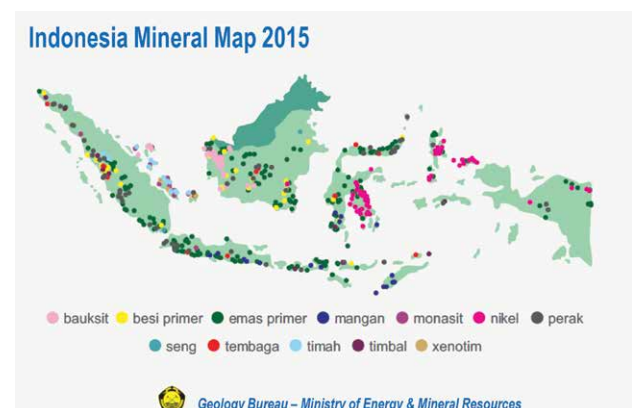
Indonesia's Business Environment



Gold Business in Indonesia

Mining Refining Jewelery

Indonesia Mineral Potential

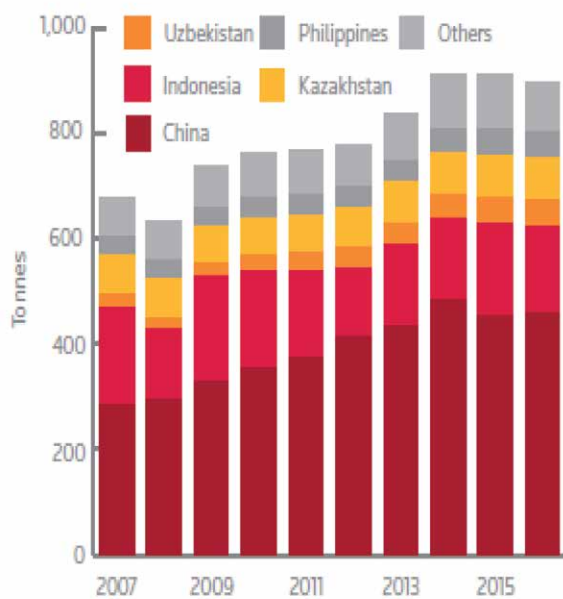


| Commodity | Reserves (Tons) Metal |
|--------------|-----------------------|
| Primary Gold | 7.513 |
| Bauxite | 7.518.270.485 |
| Nickel | 21.110.993 |
| Copper | 24.673.637 |
| Iron | 39.825.354 |
| Iron Sand | 25.412.653 |
| Manganese | 5.029.045 |
| Zinc | 2.274.983 |
| Tin | 335.762 |
| Silver | 1.691.954 |
| Lead | 777.789 |

Indonesia Gold Mine Current Performance

- Currently the 2nd biggest producer in Asia and 4th in the world
- Each year new gold mines project submerge for exploration and production

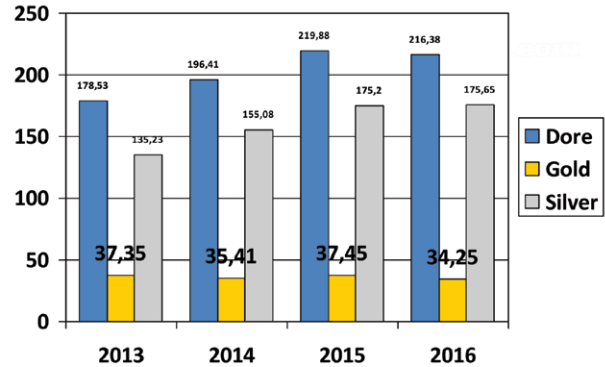
ASIAN MINE PRODUCTION



Source: GFMS, Thomson Reuters

PT. ANTAM - Logam Mulia Production

- Refined almost of gold mine production in Indonesia
- From small to large artisanal gold mining
- No (not yet) treating gold slime from copper concentrate

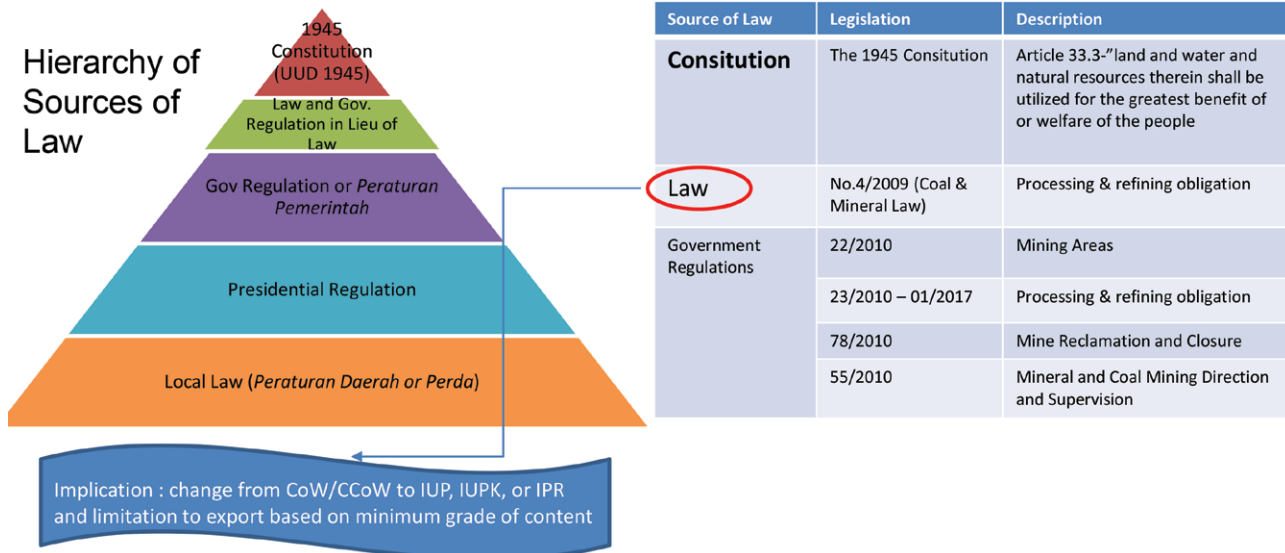


TOP 20 GOLD MINING COUNTRIES

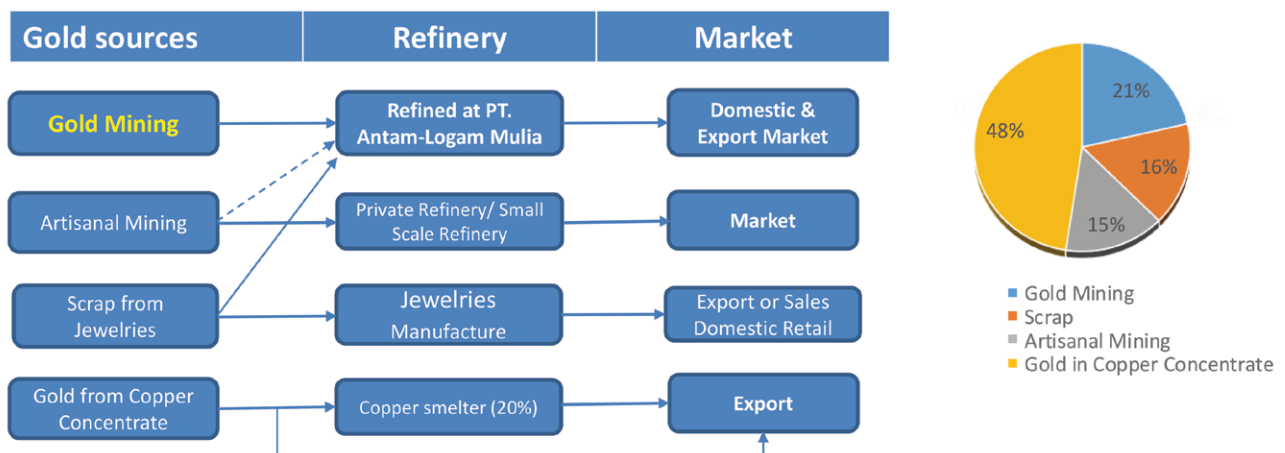
| Rank | | Production (t) | | |
|------|------|--------------------|----------------|----------------|
| 2016 | 2015 | 2015 | 2016 | |
| 1 | 1 | China | 450.1 | 453.5 |
| 2 | 2 | Australia | 279.2 | 290.5 |
| 3 | 3 | Russia | 249.5 | 253.5 |
| 4 | 4 | United States | 218.2 | 236.0 |
| 5 | 5 | Indonesia | 176.3 | 168.2 |
| 6 | 7 | Canada | 159.0 | 165.0 |
| 7 | 6 | Peru | 175.9 | 164.5 |
| 8 | 8 | South Africa | 151.0 | 150.0 |
| 9 | 9 | Mexico | 135.8 | 120.5 |
| 10 | 10 | Ghana | 95.1 | 95.0 |
| 11 | 12 | Brazil | 81.8 | 83.3 |
| 12 | 11 | Uzbekistan | 83.2 | 82.9 |
| 13 | 14 | PNG | 57.2 | 59.9 |
| 14 | 13 | Argentina | 63.8 | 57.4 |
| 15 | 15 | Mali | 49.0 | 49.8 |
| 16 | 18 | Tanzania | 46.8 | 48.7 |
| 17 | 19 | Philippines | 46.7 | 48.5 |
| 18 | 17 | Colombia | 47.6 | 48.3 |
| 19 | 16 | Kazakhstan | 48.2 | 48.0 |
| 20 | 20 | Dem. Rep of Congo | 45.7 | 44.4 |
| | | Rest of the World | 548.5 | 554.3 |
| | | World Total | 3,208.6 | 3,222.3 |

Source: GFMS, Thomson Reuters

Indonesia Gold Bullion Industry (Mining Policies)



Indonesia Gold Bullion Industry (Prospects of Gold)



- Gold has been used by Indonesian people for so many generation, mostly in Jewelleries form for ex. Srivijaya Kingdom used gold thread which was originally wound with real gold leaf
- Major tribes often teach to their ancestor the important of saving gold for ex. Batak, Minangkabau, Malay South Sumatera, Java etc.

Structure of Gold Bullion Industry in Indonesia

- Approx. 13 Gold Mining Companies in Indonesia (CoW & IUP) coming to PT. ANTAM (Persero) Tbk for dore refining
- Gold & Silver has been offtake by lender/project financing scheme, some parts as offtake, some parts as spot selling, and some parts has been hedge.
- No Bullion Banks available in Indonesia
- Private/small Refineries which is not LBMA also

taking part to refined the gold-dore from artisanal or scrap refining

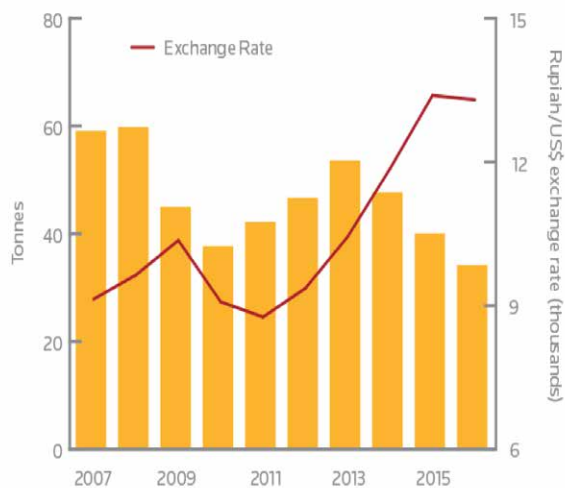
Trend in Demand for Jewelleries for Export and Domestic

- Indonesia jewelry demand fell 10% y-o-y as a weaker rupiah drives gold to a record high.
- Jewelry fabrication in Indonesia is understood to have fallen to 43.5 tons in 2016, down 10% from

2015 volumes.

- In 2016, the stronger gold price that dulled the retail sector jewelry demand lower over the archipelago, the average gold price in rupiah terms rose 7% last year, peaking in July at an all time high when local price breached Rp.575,000 per gram.
- In addition these price pressures the Indonesian Economy also played the role in negatively impacting consumption across the country as consumer sentiment remained weak.
- Not all gold collected for recycling is jewellery scrap or investment bars with gold-dore collected from artisanal mining. The collectors of this material are well organized and have the facilities to refine and upgrade the gold dore produced

INDONESIAN JEWELLERY CONSUMPTION



Source: GFMS, Thomson Reuters

Opportunities for Overseas Players to Engage with Indonesian Gold Bullion Industry

- Collaboration with Credible Partner



- Understand Comprehensive Regulations :
- Mining, Industry, Customs, Tax, etc
- Having local partners

Gold bar Milestones



Our Products



Precious Metal Market & Opportunities -Malaysia

Ermin Siow, President, Federation of Goldsmiths & Jewellers Association of Malaysia

Precious Metal Market

1. Finished Jewellery – Gold
2. Gold Bullion Market

I. Finished Jewellery - Gold

- Predominantly 22K or 916 Gold ~ 90%
- Balance 18K & 24K Gold
- Estimated Domestic Market Size approximately 20MT a year
- Metal Focus Gold Report (2016) ~ 15.5MT, jewellery + retail investment
- Thompson Reuters (GFMS) ~ 13.0MT, jewellery + retail investment
- About 40% - 50% of retail sales dominated by a few multi-outlets retail chain stores
- Total no. of retail outlets , ~ 3,000
- For big cities & towns mostly in shopping malls.

Export

- Malaysia export about 50MT of finished gold jewellery annually
- Mainly to Middle East countries
- Penang - main fabrication center, ~85%
- Quite a fair bit of export through Singapore

II. Gold Bullion Market

- Prior to April 2015, before implementation of GST, 2 main importers/traders of Gold Bullion/Gold Bar
- Post April 2015, GST implemented at standard rate of 6%
- LBMA accredited Gold Bar exempted from GST, others will be standard rated at 6%
- New amendments introduced in Jan 2016 for import

of Gold Bullion

- Importers only granted exemption from GST for gold bar meant for investment
- Need apply for permit, with conditions, to enjoy GST exemption for investment Gold Bar
- Gold Bar for fabrication of gold jewellery will be standard rated at 6% GST
- This new amendments rendered one of the main importers to suspend trading of Gold Bar pending appeal
- Estimated total import of Gold Bar ~ 15 - 20MT/yr

Statistics of Precious Metal Import/Export for year 2014-2016

Jewellery Export

| YEAR | RM (MILLION) |
|------|--------------|
| 2014 | 6827 |
| 2015 | 7766 |
| 2016 | 7186 |

Bullion Import

| YEAR | RM (MILLION) | MT (approx.) |
|------|--------------|--------------|
| 2014 | 10933 | 70 |
| 2015 | 11338 | 68 |
| 2016 | 9602 | 55 |

Opportunities (Gold Bullion)

3. Relative small market
4. Limited players
5. Relative ease of entry

Thank You!

Thailand Gold Market

Pawan Nawawattanasub, CEO, YLG Bullion International Co., Ltd.

Thailand Gold Market



- Gold is deeply steeped in Thailand’s culture and history and continues to play an important role for all Thais.
- The strong sentimental attachment is bonded by the very special occasions when gold is inseparable from the celebrations like weddings, one of life’s greatest moments, where gold is used for the marriage dowries.
- For the past 10 years, gold buying behaviour has evolved and they are more attuned towards investment and speculation.



99.99% gold

1 kilogram gold = 32.148 ounces
1 ounce gold = 31.1034768 grams
1 kilogram gold = 65.6 baht



96.5% gold

1 baht gold jewellery = 15.16 grams
1 baht gold bar = 15.244 grams
1 kilogram gold = 65.6 baht

- In Thailand, there are many ways to invest in gold.
- Different products can be used to achieve a variety of investment objectives.



Albert Cheng

I think the success of Thai market is because of two things –

- i. Thailand has very steady government. When they decided to open the market, they continued to maintain the policy.
- ii. Trade participants continuously talk with external markets, working with global community and if they have issue, they seek help from their overseas partners. For example, when the Thai companies discovered that their financial infra-structure was not able to take up the stress of frequent money and physical gold flow in and out of the country, for their gold trading business, they opened offices in Singapore to take away some of the burden. So development of Thailand market is very good example in ASEAN region.

Singapore Precious Metals Market

*KL Yap, Refining Business Unit Manager,
Metalor Technologies Singapore*

METALOR®

History

- 1978 - Trading in gold futures was introduced with Gold Exchange of Singapore (GES).
- 1994 - Goods and Services Tax (GST) was introduced and eroded Singapore's competitiveness as a regional precious metals trading hub.
- 2012 - The Ministry of Finance announced the removal of GST on investment-grade precious metals (IPM).
- Since then, started formation of the precious metals-market ecosystem with the commencement of operations by 1st LBMA gold refinery Metalor Technologies in Singapore.
- Approved refiners or consolidators enjoy GST suspension on imports for the processing of IPM in Singapore.

Rules and Regulations

Regulatory Bodies mainly oversees by:

- International Enterprise Singapore
- Monetary Authority of Singapore
- Inland Revenue Authority of Singapore







Regulation and Licensing

- Import and export of gold are not expressly restricted.
- Companies engage in any form of commodities trading activities are subjected to strict regulations under the Commodity Trading Act ("CTA"), enacted since 1992.

Tax

- GST (currently 7% as at August 2016) is exempted on Investment Precious Metals (IPM).
- Corporate tax is 17%.

Precious Metals Ecosystem

-  Bullion banks
-  Stock exchange/Financial service institutes
-  Secured logistics service providers/Singapore FreePort
-  Traders/wholesalers
-  Retail shops
-  Online platforms
-  Refineries
-  Government support and sponsorship

IPM traded in Singapore

- 4,932 tonnes of physical Investment Precious Metals (IPM) were traded in Singapore in 2015, amounting to about USD 30 billion worth of IPM, of which 89.5% were Gold, 7.8% Silver and 2.6% Platinum.
- Sales were mostly made to – Indonesia, Thailand and other Asian countries, also to the two largest gold consumption countries, China and India.

| | 2014 | 2015 | % Increase |
|-------------------------------------------------|-----------------|-----------------|--------------|
| Total Annual Physical IPM Traded (Tonne) | 3,060.13 | 4,932.35 | 61.18 |
| Annual Gold Traded (Tonne) | 516.93 | 656.08 | 26.92 |
| Annual Silver Traded (Tonne) | 2,506.95 | 4,253.49 | 69.67 |
| Annual Platinum Traded (Tonne) | 27.25 | 21.17 | -22.30 |

Why Singapore?

Value Proposition

At the Heart of Trade Flows

- Singapore is strategically located (within a 7-hour flight radius) to key demand centres of China, India and SE Asia, and in close proximity to 15.5% of the world's mining supply of gold (Australia, Indonesia, Papua New Guinea, the Philippines).
- In 2014, more than 50% of world's scrap gold came from Asia.

Singapore's Value Proposition

- World-class infrastructure for precious metals storage and trading
- No GST on investment-grade precious metals (IPM) since 2012
- Strong, efficient and transparent legal and judicial framework
- AAA credit rating
- Strong government support to the industry
- Singapore Bullion Market Association (SBMA) supporting market players

Conducive Pro-Business Environment

- Singapore's pro-business environment has earned various recognitions from international organisations:
 - Asia's top financial centre (Global Financial Centres Index 2016)

- The world's easiest place to do business (World Bank Doing Business 2012-2016 Report)
- Among the top 2 most competitive countries in the world (The Global Competitiveness Report 2015-2016, World Economic Forum)
- The best business environment in Asia Pacific and worldwide for 2015-19 (Economist Intelligence Unit, Country Forecasts, May 2015)
- Most "network ready" country in the world (Global Information Technology Report 2015)

Plans Going Forward

Role in ASEAN market

- With the set up of ASEAN Economic Community (AEC), this provides an opportunity for SBMA to create a seamless regional market and production base.
- Singapore to be positioned as a conduit for the ASEAN precious metals businesses connecting to global bullion players, making Singapore the Asia Pacific precious metals trade hub.

Questions and Answers

To Ermin Siow

What is the qualifying criteria for importing investment grade gold (which is exempt from GST) into Malaysia?

As far as Customs is concerned, the onus lies with importer to tell the custom that the import is meant for investment, and not for fabrication. The importer has to

categorically indicate in document that a certain lot of gold is imported only for investment purpose and the importer has to submit the document to the authority so that the authority can do the audit. Physically, there is no difference between gold for investment and gold for fabrication. However, for customs, for the sake of audit trail, the importer needs to submit the serial numbers of gold bars which are meant for investment. The importers also have to submit a report as to who did they sell to.

There is another clause imposed on importer if they intend to import gold for the investment purpose, i.e. the importer has to provide bank guarantee (BG). The amount in the BG is based on the estimated import value for a week or a month depending upon the frequency of import. The bank guarantee has to be deposited with the Customs in order to get the permit of bringing investment grade gold and enjoy the exemption of GST.

What is tax rate on gold bar in each of the ASEAN country?

Albert Cheng

In Singapore, there is no tax on investment grade gold bar. In Thailand, it is zero. Ermin has just said that there is GST exemption on investment grade gold in Malaysia. In Indonesia, it is 0.5% for investment. In Lao PDR, it is 10 percent. In Myanmar, it is 5 percent. We do not have exact knowledge about Cambodia and Philippines at this point.

Is there any export tax on scrap gold in Laos?

Rithikone Phoummasack

When an exporter is exporting gold dore from mines, there is provision that some have to be taxed and some have to pay royalty tax for that. On the scrap gold export, there is no clear-cut rate now. But when we export, we export on the pretext that some of the gold has been imported earlier and we are sending back the same to our suppliers. So, in simple words, there is zero tax on scrap gold export.

Is there any possibility that import duty will be exempted under Free Trade in Laos?

Rithikone Phoummasack

So far, there is no such possibility. Of course, we have been working with government and the government has given us some guidelines. For domestic consumption, there is no possibility of exemption.

Albert Cheng

India and China are the largest markets in Asia and Thailand at present links part of the Indochina market into the regional market. Going forward, I hope Myanmar will feed into Thailand and of course Laos, Vietnam all have the potential to feed into this Asian chain or to prove themselves as the 'hub'. I think, all ASEAN countries are inter-connected, but should be interconnected better in future if each one knows the other better.

I believe they are doing business with each other. However, at the same time, I do believe that they do not know each other adequately. Through creating this platform, we are trying to provide opportunity to these ASEAN countries to network, and know each other.

We have good turned out of delegates from China and Hong Kong; in my opinion, trade from Hong Kong and China also looks north for business opportunities and they seldom look south, I request everybody here to start looking south and get connected, This is the purpose of this conference.

We also have delegation from far away countries like Ghana, Congo and we also do have participants from Australia. They all want to move their products via Singapore to ASEAN region for our consumption. Hopefully, this is the beginning of our engagement process and we are really well privileged to be with this distinguished panel.



The Shaping of New Market Infrastructure in Asia



*(Left to Right) **Robin Martin**, Managing Director, Market Infrastructure, World Gold Council, **Philip Klapwijk**, Managing Director, Precious Metals Insights, **Waqar Chaudry**, Product Manager, Energy & Commodity, ASX, **Alex Shaw**, Head of Market Development - Precious Metals, LME, **Sunil Kashyap**, Managing Director, Head of Asia, ScotiaMocatta, **Andrew Wang**, Product Director, SGEI, **Dr. Rinjai Chakornpipat**, Managing Director, Thailand Futures Exchange Public Co. Ltd., **Ryoichi Seki**, General Manager, Global Business Development Department, TOCOM, **Dr. Haywood Cheung**, President, CGSE, **Albert Cheng**, CEO, SBMA*

Albert Cheng

Before we start, I would like to highlight why we have chosen this topic. In last two years, we have observed that there were lot of initiatives taken either by international exchange or respective country exchange in the east launching new products. Even some initiatives from London based exchanges are targeted to Asian market. So we thought we have great opportunity to get everybody together here and we will try to see if there is any commonality across the market and at the same time we will try to understand what kind of opportunities one is providing and I am sure there are common difficulties as well. One common difficulty I could see is to break the inertia of people away from their comfort zone and move on to accept new thing.

Robin Martin

Market infrastructure is a critical topic. It plays a critical role in ensuring that market is fair, transparent, and accessible to broader spectrum of market participants. And equally, having market infrastructure ensures market participants can trade effectively and with confidence. As Albert mentioned, right now we see lots of exchanges all around the world launching new products (it's happening in London, New York, India, Middle East and of course in Asia Pacific). There are many reasons for this, but I will summarize just three drivers which explain this important phenomena.

One is regulatory development since the time of financial crisis of 2007-08. We have seen regulators all around the world trying to push all asset classes, not just commodities and precious metals, but all asset classes towards transparent trading venues such as exchanges.

Second, we are seeing more and more economies around the world looking to liberalize and formalize their gold market. That means introducing transparency, stamping out legal practices and really exchanges are very useful mechanism for driving adherence to standards. If you look back at 90's, when Istanbul Gold Exchange was introduced, or more recently Shanghai

Gold Exchange in China, these have been very successful examples of that.

And finally, we are seeing banks are playing less dominant role in intermediating the market. We see lots of banks, except intermediating in the precious metals market, today are more capital constrained; they are more selective who they do business with, and they are extending fewer credit lines. And that's why exchanges provide some market participants a very attractive option to accessing wholesale market directly. With this backdrop and the exceptional panels here, I think there is also reason to be cautious. Listing of products and setting up new exchange is very difficult. If you look over last few decades, the vast majority of new products have failed. That tells us really to look at what are the key factors that typically make introduction of new exchange, launch of new products successful. I will summarize four key factors which could make products successful.

First, any new product needs to solve real world problem. That obviously sounds self-explanatory but even today we see far too many cash settled look alike contracts are not introducing genuinely new to the market. There needs to be real market 'need'.

Secondly, it is really very important for any new exchange or product serves a broad range of market participants. It manages to attract both physical player (refiners, fabricators, miners, banks) as well as financial market participants, be it banks, funds, speculators, investors to bring that sort of depth and liquidity into the market.

Third, you have to make the product and operating model right. Again it sounds obvious, but getting the exact contract specification, delivery standard and making those successful is actually incredibly difficult even more so physical deliverable contracts.

And fourth and most importantly, crucial to get intensive right. Market participants prefer to wait and see. So, I think, market infrastructure providers while launching the products, really have to think about what is it that

is going to compel the market to start trading these products. Financial centres, often go a long way, are typically insufficient. So, I think it is instrumental that exchanges think about that what are the catalysts that can successfully get a new market for the products started.

Globalisation and the Gold Market: The Growing Interconnectivity of Trade and Trading

*Philip Klapwijk, Managing Director,
Precious Metals Insights Limited*

Globalisation and the Gold Market: The Growing Interconnectivity of Trade and Trading

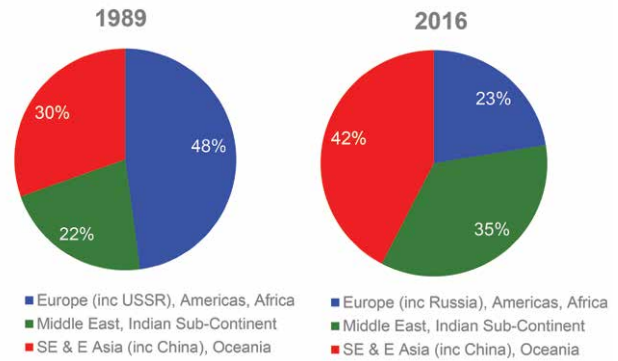
- Gold market has for well over a century been truly 'Global':
- Gold production in S Africa & Americas; finance for mining companies; refining & trading; central banks and Gold Standard; pivotal role for London market
- Globalisation stalled post-WW1, resumed post-WW2 but constrained by: politics, regulation, technological limitations
- Faster pace of Globalisation in the 'internet age' due to economic liberalisation, rapid growth in emerging markets, financial innovation, new technology

Global gold bullion exports have increased substantially over the last decade



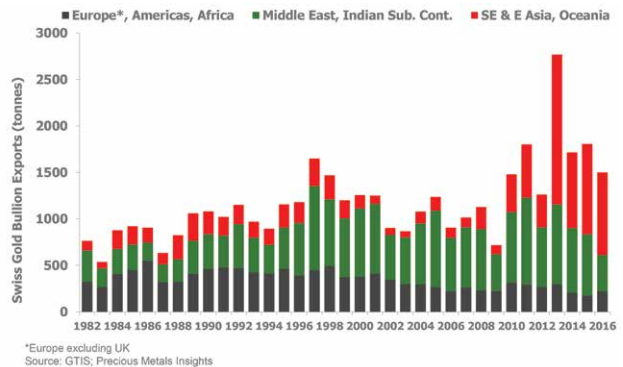
Source: GTIS; Precious Metals Insights

Fabrication demand in 1989 and 2016 roughly equal but its regional distribution has changed markedly



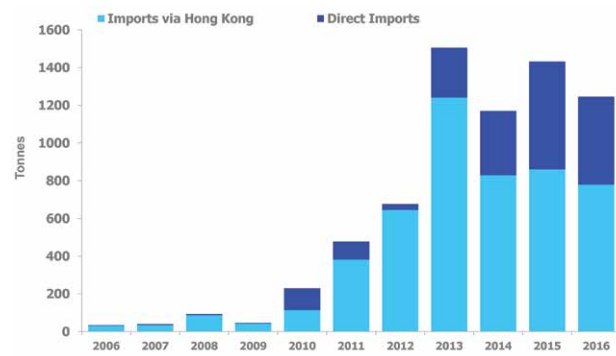
Source: Thomson Reuters GFMS; Metals Focus; Precious Metals Insights

East Asia has been the main destination for the higher level of Swiss gold bullion exports in recent years



*Europe excluding UK
Source: GTIS; Precious Metals Insights

China's gold bullion imports have exploded, much of them now going directly to the mainland instead of via Hong Kong



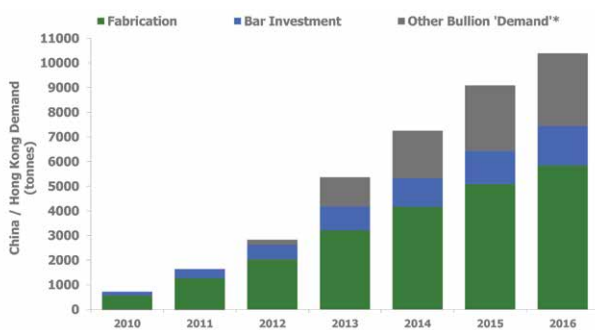
Source: GTIS; Metals Focus; Precious Metals Insights

In recent years there has been a substantial apparent supply 'surplus' in the China / Hong Kong market



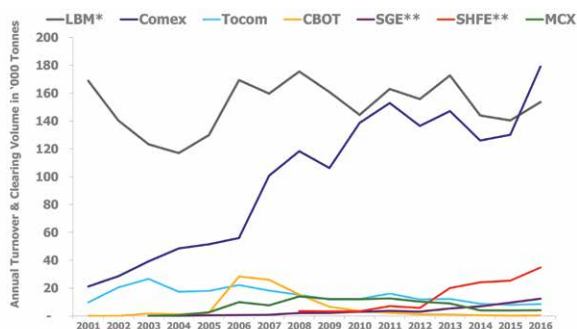
*Fabrication Demand (jewellery + industrial + coins); **Total Supply (mine production + scrap recycling + net imports to China/HK)
Source: Metals Focus, Precious Metals Insights

Cumulative China / Hong Kong gold 'demand' since 2010 has amounted to over 10,000 tonnes



*Other Bullion 'Demand' is a net figure for mainland China plus Hong Kong
Source: GTIS, Metals Focus, Precious Metals Insights

Turnover has risen on Shanghai's exchanges but it still lags New York and London markets by a considerable margin



*London Bullion Market Clearing Transfers Volume annualised; **SGE & SHFE figures divided by two for comparison with others
Source: LBMA, Exchanges listed above

Proposed gold trading initiatives would promote further interconnectivity in the global gold market

- LBMA's OTC trade repository and pricing project
- LME spot and futures trading; centralised clearing venture
- HKEX's CNH and USD gold futures contracts
- CGSE's Qianhai / Hong Kong corridor
- SGE partnership with DGCX to trade Shanghai gold futures
- SGX's Shariah compliant futures contract
- Planned gold futures contract on the ASX

Globalisation and the Gold Market: Conclusions

- Gold market globalisation is well advanced in terms of trade links, although there are still important exceptions, e.g. (near) prohibition on gold exports from China
- While Switzerland/UK are still pivotal, other physical entrepôts have become increasingly important and intra-regional trade, especially within Asia, is growing
- Domestic gold trading has become liberalised in most countries but currency and capital controls still hinder cross border activity in several cases
- Scope for arbitrage exists where partial gold market liberalisation creates opportunities based on local / international price or regulatory differences
- China's market development a key factor for future trends in globalisation; much depends on the Chinese leadership's appetite for further capital account liberalisation and the associated scope for internationalisation of the RMB
- London will remain the dominant OTC trading hub and Comex the principal gold futures market for the foreseeable future but their market shares will be eroded to the benefit of competitors in Asia, especially Chinese exchanges

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Albert Cheng

Thanks Philip for providing this kind of broad overview. There is no doubt that London and US will continue to be important markets going forward. However, in the business world you have to understand the money flow, physical flow in the market place; and I guess this is the reason why we have in this panel various exchanges talking about the initiative that they are going to take moving forward. Dr Haywood Cheung from CGSE will now present the kind of facilities Hong Kong is providing to leverage the big China market as well as the rest of the Asia.

Forward Curve on the Largest Gold Reserves in the World: Disruption or Opportunity?

Waqar Chaudry, Product Manager Energy & Commodity, ASX

Disruption or Opportunity

|  Disruption |  Opportunity |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • ...difficult for something to continue in the normal way | <ul style="list-style-type: none"> • ...particular situation makes it possible to do or achieve something |

ASX Gold Futures Creating Opportunities

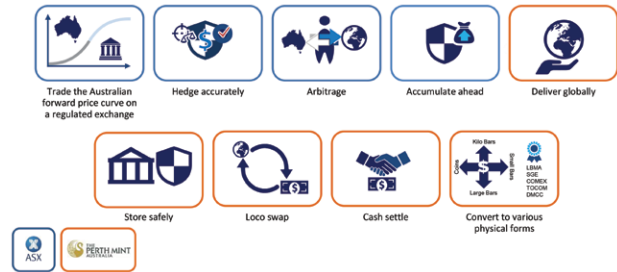


Australia a Major Natural Gold Hub

- Largest economic reserves (~9100 mt)*
- Second largest gold producer after China
- Largest major net exporter
- Major source of gold for Asia in the same time zone
- Stable economy and safe geopolitical location
- Globally recognised refining and vaulting facilities
- No GST on investment grade gold



ASX Gold Futures - The Opportunities



ASX Gold Futures - Contract Specifications

| Contract Type | Gold Futures |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contract Months | Monthly, Front three monthly expiries and up to 7 quarters ahead Example Contract Listing Sep17, Oct17, Nov17, Dec17, Mar18, Jun18, Sep18, Dec18, Mar19, Jun19 |
| Pricing Location | Perth |
| Price Quotation | US Dollars and cents per troy ounce |
| Contract Size | 100 troy ounces of unallocated Gold |
| Delivery Point | Gold Corporation (Perth Mint); ASX's unallocated account |
| Expiry Day | 2 Business days before the third Wednesday of the Contract Month |
| Settlement Day | 2 Business day after Expiry Day |
| Tick Size | USD 0.10 |
| Trading Hours (Sydney Time) | 07:30 a.m. – 4:30 p.m. (Covers Asia, Middle East) 05:00 p.m. – 07:00 a.m. (Covers Europe and North America) |

Partnership Built on Experience



The heart of Australia's financial markets

- Available through trading hubs including US, UK, Singapore and Hong Kong
- 24 hour trading platform
- World class derivatives clearing facility
- Global connectivity
- Ideally placed in the Asian time zone
- Over 100 years of exchange experience



Globally recognised precious metals experts

- Distributes around \$18 billion in precious metals per year
- 30,000+ customers in over 100 countries
- State of the art vaults and multi-accredited refinery
- World's only government guaranteed depository service
- Online and offline spot market services
- Servicing and promoting the gold industry for over 100 years

Want to know more? Get in touch.

ASX

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The Perth Mint

New Developments at TOCOM on Precious Metals Contracts

Ryoichi Seki, General Manager, Global Business Development Department, TOCOM

TOCOM Precious Metals

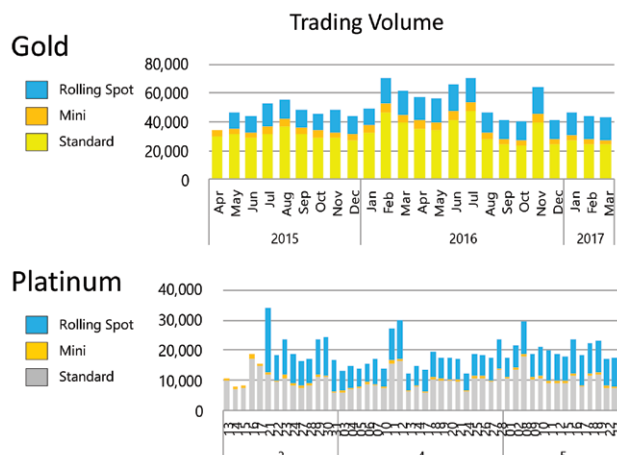
- Precious metals constitutes 62% of exchange volume (Jan-Apr 2017)
- Gold accounts for 45% of exchange volume
- 54% of Gold Standard (1kg) trading originates outside of Japan
- Most liquid international gold market in Asia

Rolling Spot Futures

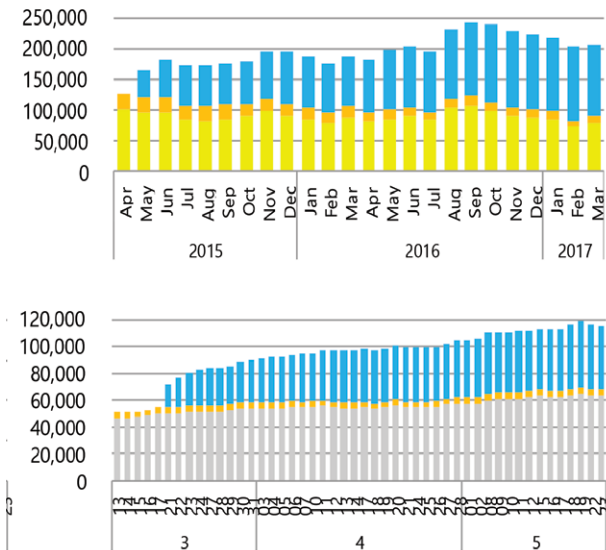
- Gold listed on May 7, 2015 and Platinum on March 21, 2017
- No maturity- contracts are automatically rolled to the next day
- Daily settlement (marked to theoretical spot price)
- Cross margining (R.S. and Standard, Gold and Platinum, etc.)



Gold and Platinum Volume and OI



Open Interest

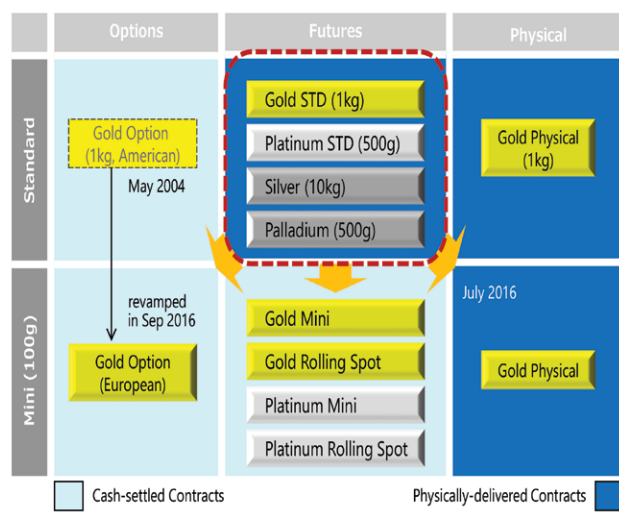


Looking Ahead

Precious metals ETF and ETN

- Introduce new precious metals index
- List new ETF/ETN based on the new index
- Promote TOCOM products and related ETF/ETN to pension funds, etc.

Listing a Wide Range of Precious Metals Contracts



LMEprecious and its Implications for Asia

Alex Shaw, Head of Market Development – Precious Metals, LME

LMEprecious

What is LMEprecious?

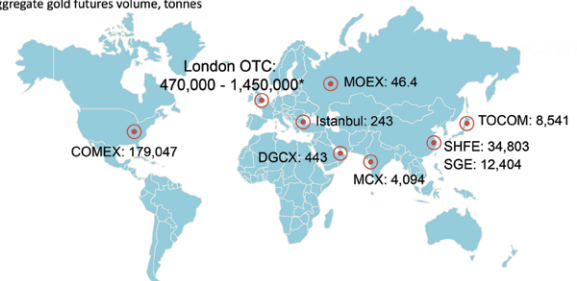
Gold

Silver

- Gold and Silver exchange traded futures contracts
- Cleared in London
- Settled loco London in unallocated bullion
- On-screen daily liquidity from spot out to five years
- Launch date: 10 July 2017*
- 100 fine troy ounces – quoted in USD
- 5,000 troy ounces – quoted in USD

The global bullion market

2016 aggregate gold futures volume, tonnes



Note: * London market size derived from LPMCL reported cleared gold 2016 – 157,013t x 3 -9.25 (x3 is GFMS, x9.25 is based on a LBMA survey of loco London transactions from 36 members)

The Changing Face of the London Market

- Traditional bilateral trading market
- Profound regulatory change
- Increased cost of capital
- Increased cost of trading non-cleared OTC derivatives
- Vaulters, banks and traders leave the bullion market
- Increased pressure on bilateral credit lines

Need for liquid trading venue with multilateral netting and central clearing

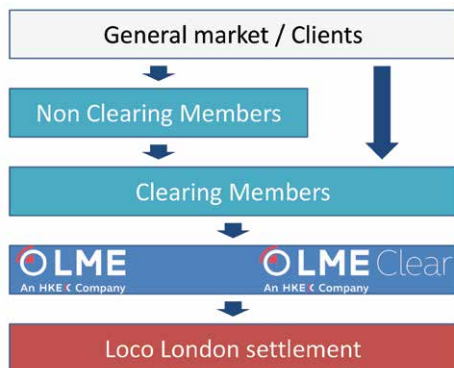
The market drive for LMEprecious



Contract design requirements

- Combines spot liquidity with futures on the same venue
- On-screen tradeable calendar spreads (e.g. “EFP” trade)
- Easy to arb against existing liquid contracts
- Continuous pricing provision at depth
- Ability to execute trades on-screen or phone-brokered

Trading LMEprecious contracts



- Access via LMEprecious Member
- \$0.90 per cleared trade

- No joining fees
- \$0.50 per cleared trade*

- Default fund contribution
- “B share” purchase requirement

- LME provides Member interface
- ISVs can provide user interface

- Unallocated bullion settlement (as per OTC loco London trading)

LMEprecious Clearing Members

Clearing Partner Banks

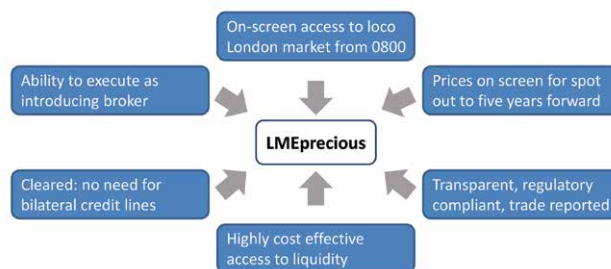
- Goldman Sachs International
- ICBC Standard Bank Plc
- Morgan Stanley & Co. International plc
- Natixis
- Société Générale (London Branch)

Additional Clearing Members*

- BOCI Global Commodities (UK) Limited
- Commerzbank AG
- Macquarie Bank Limited
- MAREX Financial Limited
- Société Générale International Limited

* The following firms have given their consent to be publicly named as having expressed the intention to become LMEprecious Clearing Members

Significance for the Asian bullion market



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TFEX Gold Futures Role in Providing an access to a Hedging tool for the Investors and Gold trade

Rinjai Chakornpipat, Managing Director, Thailand Futures Exchange

Outline

- Gold Trading Landscape in Thailand
- TFEX Gold Futures
- Upcoming development

• Gold Trading Landscape in Thailand

- TFEX Gold Futures
- Upcoming development

Gold as a wealth indicator for Thai

- Perceived as low risk asset, suitable for saving
- High liquidity asset that can exchanged for cash at any 7,500 gold shops around the country
- Trade in local unit and purity
Weight : 1 Baht Gold = 0.49 toz. or 15.244 g. Purity: 96.5%
- Price as indicated by Gold Trader Association which usually change twice daily



Thailand is among the top 10 gold importers



| | Importers | Import Value in 2016 (Billion USD) | % of World Import Value |
|-----|-------------|------------------------------------|-------------------------|
| 1. | Switzerland | 82.9 | 30% |
| 2. | UK | 58.0 | 21% |
| 3. | Hong Kong | 29.5 | 11% |
| 4. | India | 22.9 | 8% |
| 5. | USA | 16.5 | 6% |
| 6. | UAE | 11.6 | 4% |
| 7. | Turkey | 6.5 | 2% |
| 8. | Thailand | 5.9 | 2% |
| 9. | Canada | 5.6 | 2% |
| 10. | Germany | 5.5 | 2% |

Source: <http://www.trademap.org>

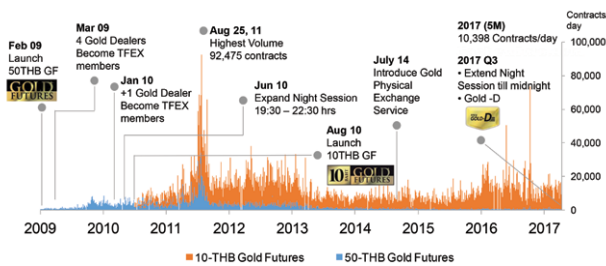
- Gold Trading Landscape in Thailand
- TFEX Gold Futures
- Upcoming development

Top 10 Gold Futures Trading in Asia (2016)

| Rank | Exchange | Volume |
|------|--------------------------------------------|------------|
| 1 | Shanghai Futures Exchange | 34,759,523 |
| 2 | Tokyo Commodity Exchange | 13,596,195 |
| 3 | Multi Commodity Exchange of India | 13,095,302 |
| 4 | Borsa Istanbul | 4,779,214 |
| 5 | Thailand Futures Exchange | 2,903,950 |
| 6 | Pakistan Mercantile Exchange | 1,669,372 |
| 7 | Dubai Gold & Commodities Exchange | 733,821 |
| 8 | Indonesia Commodity & Derivatives Exchange | 162,318 |
| 9 | Taiwan Futures Exchange | 111,875 |
| 10 | National Commodity&Derivatives Exchange | 16,737 |

Source: FIA

Development of Gold Futures in Thailand



TFEX Gold Futures

Volume/day in 2017 (5M)
(Contract)

9,764 (10-THB Gold Futures) vs 635 (50-THB Gold Futures)

- Underlying asset: Gold bullion with purity **96.5%**
- Contract Size: **10g** (152.44 grams, ~ USD 29,000) and **50g** (762.20 grams, ~ USD 5,800)
- Settlement Method: **Cash** Settlement
- Contract Month: 3 nearest even months
- Final Settlement Price: **LBMA** Gold AM Fixing x **Weight adj.** (15.244 / 31.1035) x **Purity adj.** (0.965 / 0.995)

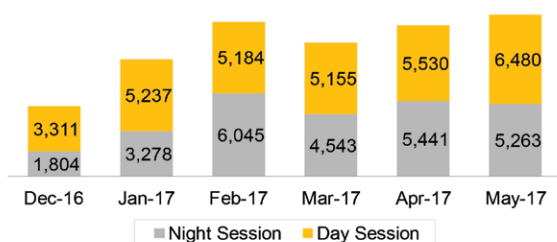
Remark

1 Baht Gold = 0.49 Troy Ounces or 15.244 grams

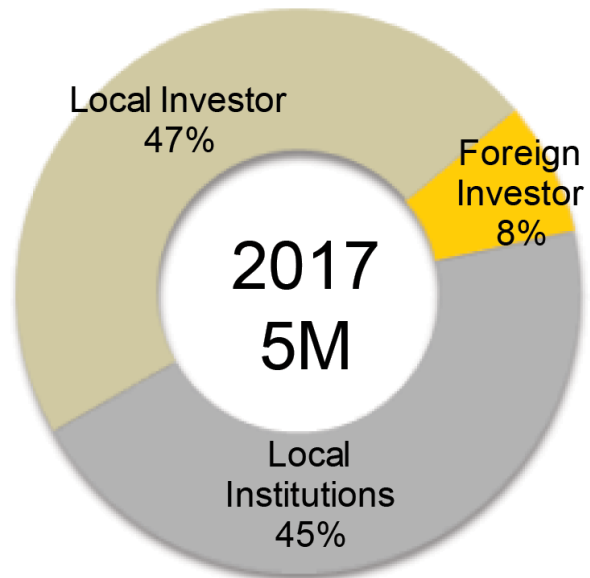
Trading Statistics

- Total trading of Gold Futures in 2017 is 10,398 Contracts/day (as of May)
- Majority of investors are local investors and domestic institutions
- 46% of trading occurs during night session (19:30 – 22:30 hrs.)

Daily Average Volume (Contract/day)



Investor Type



Arbitrage opportunity with global gold price

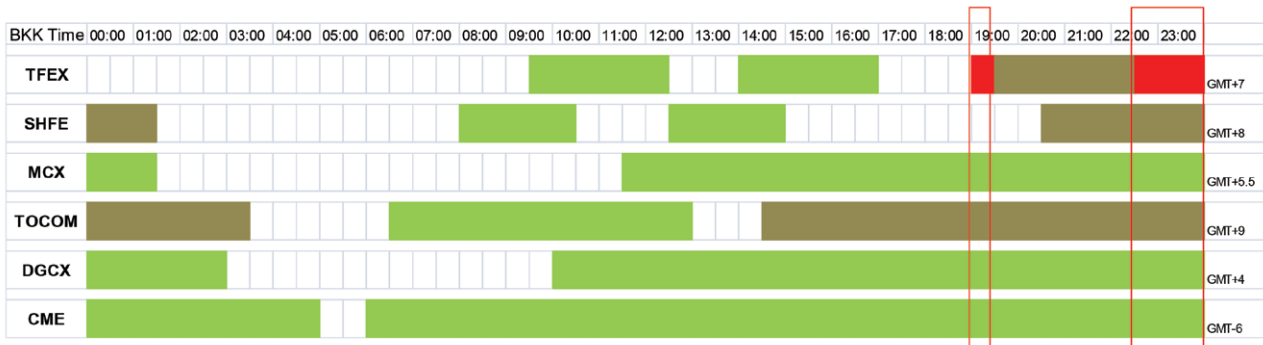


Source: <http://www.trademap.org>


- Gold Trading Landscape in Thailand
- TFEX Gold Futures
- Upcoming development

Extending Night Session

- In Q3/2017, TFEX will expand the night session trading hours for Gold Futures from 7:30 pm – 10:30 pm to 7:00 pm – 23:55 pm. in order to increase overlap trading time with other major exchanges.



TFEX Gold-D: a deferrable physical delivery contract



- Underlying asset:** Gold bullion with purity **99.99%**
- Contract Size:** **100 Grams** (3.2148 Troy Ounce)
- Delivery Unit:** **1,000 Grams** or 10 Contracts
- Eligible Asset to Delivery:** 1 Kilobar of **LBMA** bar
- Contract Month:** 1 quarterly month
- Storage:** Secure gold vault as assigned by exchange
The vault charge very low storage fee at only THB 1 /k.g./day. (approx ≈ 0.018% per year)
- Trading price:** **USD/Oz.**
- Tick size:** **0.1 USD/Oz.** (approx 0.32 USD/Tick)

Precious Metal Product in TFEX





| | Gold Futures | | Gold-D (Deferred Spot) |
|----------------------------|----------------------------------|----------------------------------|---------------------------|
| | 10-THB | 50-THB | |
| Purity | 96.5% | | 99.9% |
| Contract Size | 10 Thai Gold Baht (152.44 grams) | 50 Thai Gold Baht (762.20 grams) | 100 grams |
| Trading Price | THB | | USD |
| Tick Size | 10 | | 0.1 |
| Contract Months | 3 nearest even months | | 1 nearest quarterly month |
| Settlement Method | Cash Settlement | | Physical Delivery |
| Delivery Unit | NA | NA | 1000 grams |
| Appx. notional value (USD) | 5,800 | 29,000 | 40,000 |
| Volume per day (Contracts) | 9,368 | 673 | coming soon |

Thank you

Singapore – A Safe Haven Opportunities for trading and storage

Sunil Kashyap, Chairman - SBMA

Precious Metals Ecosystem

-  Bullion banks
-  Stock exchange/Financial service institutes
-  Secured logistics service providers/Singapore FreePort
-  Traders/wholesalers
-  Retail shops
-  Online platforms
-  Refineries
-  Government support and sponsorship

Opportunity for Physical Gold Investors

- Buy Loco Singapore gold
- Store the gold
- Lend the gold
- Sell the gold

Why Singapore

- Proximity
- Economically secure - AAA country
- Politically stable and neutral
- Sophisticated and regulated financial infrastructure
- Robust legal system

Prerequisites

- Logistics – storage and transportation
- Active inter-bank physical market
- Strong financial counterparties
- Role of a quasi-government entity

Shanghai Gold Benchmark Price

Andrew Wang, Product Director - SGE

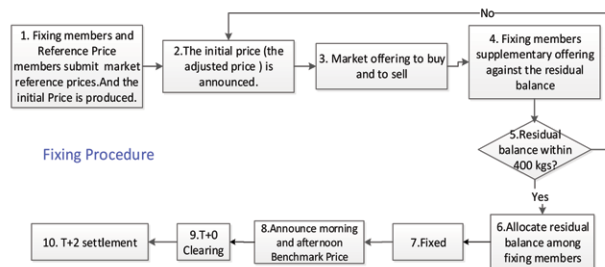


Introduction



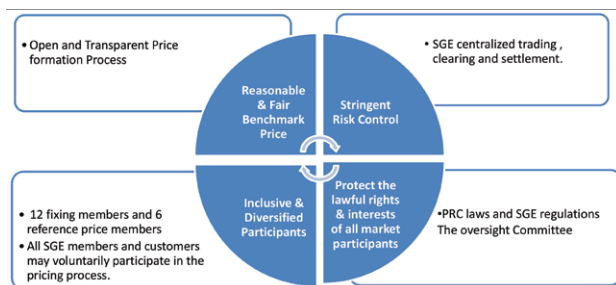
Shanghai Gold Exchange (SGE) Chairman Mr. Jiao Jinpu declared the launch of Shanghai Gold Benchmark Price trading on April 19, 2016.

- Kilo gold bars of fineness 999.9 or higher
- Quoted in RMB per gram
- T+2 delivery at SGE vaults
- Twice a day at 10:15 a.m. and 2:15 p.m. Beijing time
- Daily trading volume in 2016 was 3.29 tons. Daily trading volume for 2017 till 18 May was 3.71 tons.



Round 3 Market Order Sup Order 00:00:18 00:00:10 Fixing --

| MARKET INFO | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------|--------------|------------|
| Price | Change | Bid | Offer | Inbal | Market Inbal | Sup Volume |
| 242.68 | +0.20 | 2000 | 800 | +1200 | 1200 | 0 |
| <div style="display: flex; justify-content: space-between;"> BID Cancel All </div> <div style="display: flex; justify-content: space-between;"> 0 +10 -10 </div> | | <div style="display: flex; justify-content: space-between;"> OFFER Cancel All </div> <div style="display: flex; justify-content: space-between;"> 0 +10 -10 </div> | | Total Equity 746,903,581.57 Available Amount 746,901,907.75 Refresh | | |
| Prev Market Order Size | -- | Buy | Sell | | | |
| Prev Sup Order Submission | -- | -- | -- | | | |
| Current Market Order | -- | -- | -- | | | |
| Current Sup Order Submission | -- | -- | -- | | | |
| Total | -- | -- | -- | | | |



Expectations

- Active participation in the daily Shanghai Gold Benchmark Price Trading
- Benchmark price for physical gold and its raw material trading in China and its import and export
- Benchmark price in RMB for gold derivatives and investments in China
- A global gold benchmark price in RMB in addition to London and New York gold benchmark price in USD

“The bullion world has been looking at the East now. We’re looking for the future” .

-- The statement of SGE Chairman Mr. Jiao Jinpu

Wish a bright, golden future for all of you!

Thank you!

Andrew Wang Email: Andrew.wang@sge.com.cn

Questions and Answers

Question for Waqar Chaudry

Mine producers in Australia are pricing in Australian dollar and your contract is denominated in US dollar. Why don't you price your contract in Australian dollar instead of US dollar?

Waqar Chaudry

We did consider contracts in Australian dollar. If it is a OTC contract, pricing the contract in Australian dollar certainly makes sense. It is true that mining companies do have their transactions in Australian dollar. However, if you see their hedge leg, they do in US dollar primarily.

Robin Martin to Philip Klapwijk

How do you conceive these contracts in different exchanges? Are these good for the market? Are these solutions of needs of particular problems in particular markets?

Philip Klapwijk

First of all, choice is good thing. Innovation is good thing. Having said that, it is unlikely to see the fragmentation, rather what we need to watch closely that in the past there were unsuccessful launches. There will be winners and losers, but which 'horse', one should be bet on it's a tough call. There is always incumbent advantage. If you look at largest incumbent side, mentioned in my presentation, some of the products or contracts being offered here are backed by strong rationale and strong players (without mentioning anybody's name). I therefore believe that we will see some changes. I think drift from OTC to exchange will certainly lead to certain degree of market disruptions, but I do not think market fragmentation is the correct word, rather we will see one or two entrants will grab the market share.

Robin Martin to Sunil Kashyap

How bank like yours does evaluate different exchanges traded offerings?

Sunil Kashyap

We have benefit of choices, but banks actually are the

facilitators. So we fulfil the customers' requirement. At the end of the day, it is going to be driven by customers' comfort to trade. Wherever the liquidity goes, there will be two things to understand. First, we guide the liquidity to go towards the venue and second in order to facilitate the liquidity, later on in illiquid periods, we would step in and provide our own banks' liquidity to ensure gaps are removed. It is really driven by customers' call on the first place and then bank follows either for arbitrage purposes or for filling in the liquidity gap.

Robin Martin

Alex, what we have seen in your presentation with banks, brokers and potential inclines to push clients into that venue?

Alex Shaw

I think for the success of any exchange driven contract, there is need of core base of liquidity and demand from the clients who want to transact. As it is popularly said that liquidity brings liquidity, it was in our top of the mind in LME that what we will do in precious metals and so over couple of years we recognized that there is need for suitable contract specifications and then see what happens. However, it is very much more compelling to bring together the body of parties that can guarantee the required liquidity in the screen from the very first day. In this point that we are confident that come July 10 and with prices on the screen and we will see decent amount of liquidity in the platform from the committed partners before it attracts the rest of the market.

Albert Cheng

Both Sunil and Philip talk about choices in the market and we should also take note of the cannibalization between products and exchanges as well as cannibalization of more than one contract that is offered by the exchange. We have here TOCOM exchange which has already a gold contract and they continue to develop new contract. Has it been cannibalizing your existing volume and customers or you are offering a new dimensions to attract new customers?

Ryoichi Seki

For the introduction of new products our focus is to reach out to Japanese retail investors, and whereas for existing contracts are concerned, our focus is not just to reach out to retail customers, but also proprietary firms, trading companies or in single terms, we are targeting new customers. We have added new liquidity in the market with the introduction of new product.

Dr. Rinjai Chakornpipat

Actually for launching the new products, we always look at some ways to tap the new market that we have not entered yet. So we are looking and learning from the past to see if we can introduce the new contract. But thing is when we talk to some investors, once the contract has the liquidity it is always draws the liquidity for new contracts. For example, if you look at my slide, 50 baht gold futures has not got much of liquidity, but when the 10 baht contract took off, the feedback I got that we could improve to get the volume for the market makers because they are interested to trade in new contracts.

Robin Martin

I guess we might be talking about competitions, but some of you also have partnerships with exchanges. For instance, SGE has signed lots of MoU with various corporations, and I guess CGSE also signed a few. I would like to ask particularly to Haywood and Andrew to comment on role of partnership to understand where you are taking your business.

Andrew Wang

Whenever we talk about this kind of topic, we always think for 10 years. China believes that if you become champion, nobody can play with you. It means you are paying with yourself. The basic idea for us is very simple – we support each other not competing within.

Haywood Cheung

We ought to have friendly competition – that's why there is connection between Shanghai-Hong Kong and then later on Shanghai-Dubai, then we have Hong Kong-Dubai, Hong Kong Singapore connect etc., all

these are macro-missions targeting to connect all these physical gold corridors. We ought to have competitors of course, but keeping friendship with Shanghai Gold exchange as benchmark, Hong Kong as benchmark, RMB denominated gold as benchmark, all these put together becomes a gold industry in Asia.

Albert Cheng

On the inter- connectivity among various geographies and sectors in our gold market, Philip was telling us in the beginning how the industry has to be developed. It was started from London, then linked to New York and now Shanghai as well, and then linking further with sub-regional markets. Of course, every body should have or gear up to have their sufficient resources; otherwise it is not possible to survive. This is what Philip was referring as Darwinism, in which only the fittest can survive.

Robin Martin

We have heard of now more of retail oriented gold contracts in TOCOM, Thailand. Now, the question is how do you see competing product categories? In TOCOM we have heard exchange traded fund; we are also seeing increasing emergence of very sophisticated online vaulted gold providers, and even in your own exchange, we have got the rolling spot contracts competing with active month contract. How do you see all of these are unfolding?

Sunil Kashyap

We were talking about cannibalization, and on that subject, I would like to say that the focus of the industry should be towards bringing new money into the industry. That's the basis of our challenge. Gold trading accounts for minuscule part of retail or institutional participation. Real challenge is if somebody could bring in new investors class into the market, and if exchanges or any contract could able to do that, there lies the real gold mine.

Dr. Rinjai Chakornpipat

I think there is need to educate people to invest in gold as an investment asset. There are so many people in the country who believe in gold, but real challenge is how

could we convert these people to save in gold? Every product has its pros and cons of itself and it is upto the investor to choose which fits best for them.

Ryoichi Seki

The fact that I talk about that more than 50 percent volume is coming from abroad, it shows those who are taking part in our market also are taking part in other markets. It can be called as competition, but we call it as arbitrage opportunities in different markets. It is important for exchanges to provide ease of access to the market so that participants can decide whether they want to trade or not.

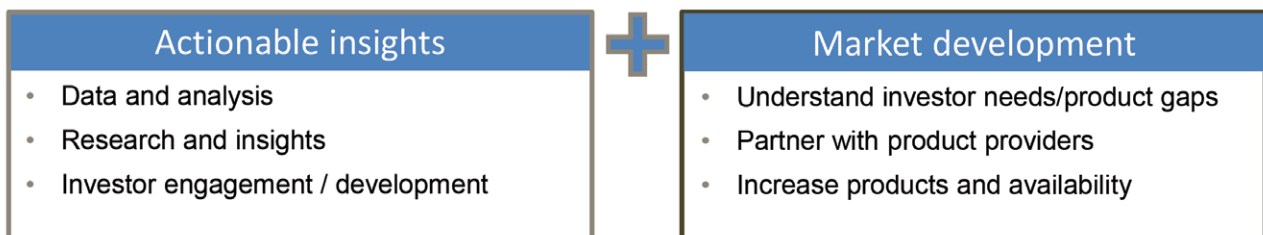


The Case for Platinum Investment

*Marcus Grubb, Director of Market Development,
 World Platinum Investment Council*

WPIC's Mission: Develop the Platinum Investment Market

- Provide investors with objective and reliable platinum market data and insights
- Stimulate investor demand for physical platinum through targeted market development
- Members: Anglo American, Aquarius*, Impala, Lonmin, Northam, RB Plats



- Many investor meetings around the world, presenting the WPIC data, research and insights
- Market development visits to identify opportunities, source partners, measure investor appetite and to develop new investment products

Platinum Is Scarce And Valued

- A rare metal with unique catalytic properties and four diverse demand categories:
 - Automotive
 - Jewellery
 - Industrial
 - Investment
- Catalytic properties which underpin future demand:
 - Industrial solutions
 - Emission control solutions
 - Fuel cells
- Jewellery and investment both have growth potential



The Current Platinum Market

- Resurgent investor interest in platinum due to deep discount and greater clarity about diesel
- Price discovery still dominated by short term views but growing scrutiny of market fundamentals
- Supply weakness, demand growth potential and deep discount make platinum interesting
- Game changing C40 city action is likely to change automaker behaviour



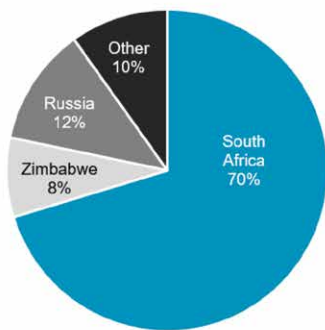
A Growing WPIC Market Development Portfolio

- WPIC partners and potential partners see latent demand for platinum
- Partner co-investment in our growing portfolio confirms their commitment to new products
- These are adding to the platinum held as an investment around the world
- Market gaps being filled across demand segments adding to global market tightness
- Market development portfolio building out in ten countries, across investor groups and new products

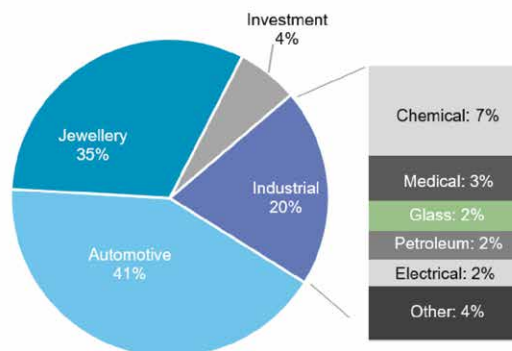


Platinum Demand and Supply: ~8MOz Market

Global mining supply 2016: 6,100 koz



Total global supply 2016: 7,965 koz



Total global demand 2016: 8,235 koz



2017 Supply Weaker And Demand Stronger

| SUPPLY | 2013 | 2014 | 2015 | 2016 | 2017F |
|----------------------------|--------------|-------|--------------|--------------|--------------|
| Refined Production | 6,070 | 4,880 | 6,150 | 6,025 | 5,960 |
| South Africa | 4,355 | 3,115 | 4,465 | 4,245 | 4,200 |
| Other | 1,500 | 2,115 | 1,730 | 1,810 | 1,770 |
| Total Mining Supply | 5,865 | 5,230 | 6,195 | 6,065 | 5,970 |
| Recycling | 1,980 | 2,035 | 1,710 | 1,865 | 1,760 |
| Autocatalyst | 1,120 | 1,255 | 1,190 | 1,235 | 1,255 |
| Jewellery | 855 | 775 | 515 | 625 | 500 |
| Total Supply | 7,825 | 7,265 | 7,905 | 7,920 | 7,730 |
| DEMAND | | | | | |
| Automotive | 3,180 | 3,305 | 3,390 | 3,435 | 3,405 |
| Jewellery | 2,945 | 3,000 | 2,880 | 2,565 | 2,530 |
| Industrial | 1,530 | 1,545 | 1,670 | 1,775 | 1,610 |
| Investment | 935 | 150 | 305 | 505 | 250 |
| Total Demand | 8,590 | 8,000 | 8,245 | 8,280 | 7,795 |
| Balance | -765 | -735 | -340 | -380 | -65 |
| Above Ground Stocks | 3,385 | 2,660 | 2,310 | 1,950 | 1,885 |

Source: WPC Platinum Quarterly Q1 2017, SFA (October)

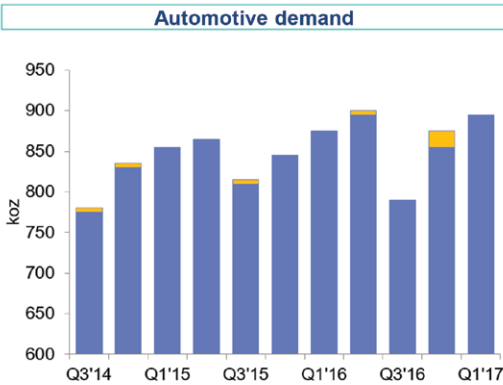
- Refined production: Downward trend continues -capex down and opex up
- Recycling: 2016 an outlier. Slow growth continues
- Demand: Jewellery weakness, automotive stronger than expected
- Investment strength likely in 2017, under forecast
- Deficits revised higher in 2016 and 2017
- Stocks at historic lows

Q1 2017 The Largest Quarter Deficit Since Q3'14

| SUPPLY | Q1 2016 // | Q4 2016 | Q1 2017 |
|---------------------------------------|-------------------|----------------|----------------|
| Refined Production | 1,270 | 1,490 | 1,390 |
| Inc (-)/Dec (+) in Producer Inventory | 160 | -75 | -60 |
| Recycling | 395 | 480 | 420 |
| Total Supply | 1,815 | 1,895 | 1,750 |
| DEMAND | Q1 2016 // | Q4 2016 | Q1 2017 |
| Automotive | 875 | 875 | 895 |
| Jewellery | 600 | 680 | 620 |
| Industrial | 445 | 400 | 455 |
| Investment | 155 | 220 | 80 |
| Change in Bars, Coins | 140 | 110 | 25 |
| Change in ETF Holdings | -25 | 115 | 65 |
| Change in Stocks Held by Exchanges | 40 | -5 | -10 |
| Total Demand | 2,075 | 2,175 | 2,050 |
| Balance | -260 | -280 | -300 |

- Producer inventories stretched
- Weak supply, the decline continues
- Recycling, low growth
- Automotive, jewellery and industrial demand firm
- Investment demand falls from strong Q4'16, but still a good quarterly run rate

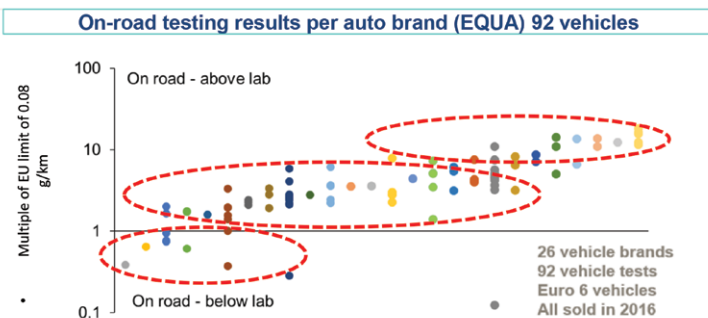
Automotive Demand Revised Higher



Source: WPC Platinum Quarterly Q1 2017

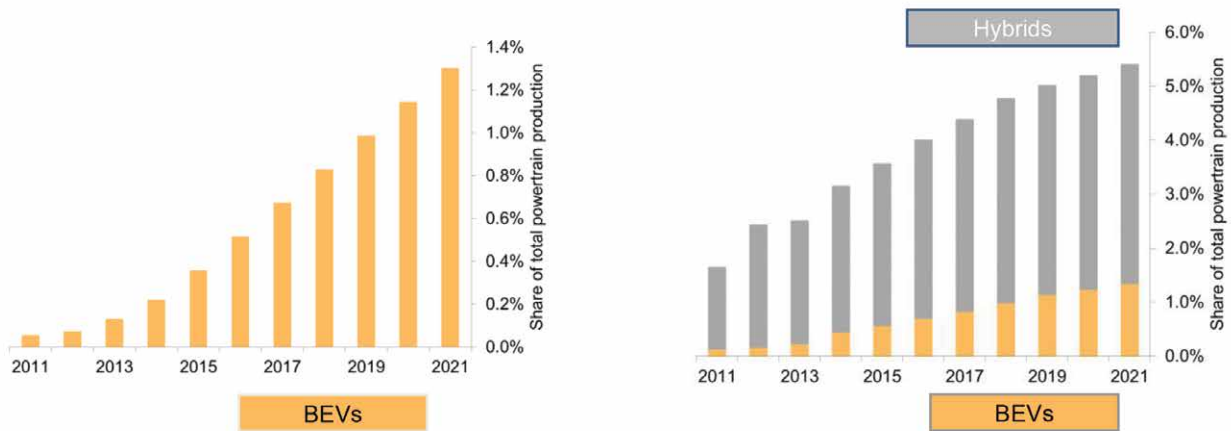
- Q1 Automotive demand was 895 koz. 20 koz higher YoY
- Q2'16 and Q4'16 revised higher by 25 koz on back of stronger sales and higher loadings. All quarterly revisions were positive to date
- Automakers more likely to rapidly adopt low NOx strategies due to C40 as more cities focus on high NOx diesel cars
- Higher platinum loadings to achieve low NOx and higher SCR to avoid risk of non-compliance
- Low NOx strategies not yet visible in platinum data

C40 Cities Means Lower Nox/ Higher Platinum



- C40 city action to drive change in automakers to move low NOx
- Some vehicle models are already real-world-driving (RDE) compliant for 2020 and beyond
- Ahead of Sept 2017 RDE test, many models have 'on-road' NOx 10 times 'lab test' - solution higher platinum loadings and SCR

Auto Platinum Demand Growth Likely



- Most informed forecasts of Battery Electric Vehicles (BEVs) = below 2% in 2025 (Tesla agree)
- 98% of 100mn vehicles manufactured will still be internal combustion
- Diesel is necessary to achieve target CO2 reduction levels

Battery electric vehicles have low impact on CO2

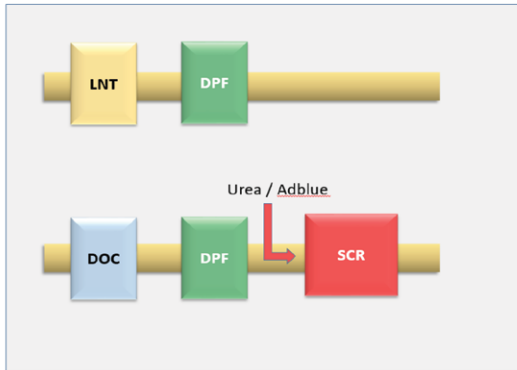
Fuel Cell Electric Vehicles Are Growing



Largest automakers will all launch a fuel cell car in the next 5 years

Automotive Demand Growth Is Likely Higher Loadings

Diesel car emissions control SCR and NO_x



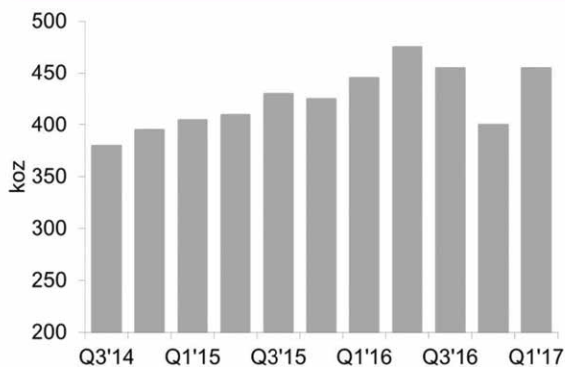
LNT: Lean NO_x trap DOC: Diesel oxidation catalyst
DPF: Diesel particulate filter SCR: Selective catalytic reduction

Source: WPI research

- Euro 6c RDE starts in September 2017
- Existing car platforms must achieve lower NO_x
- Increasing Urea (Ad Blue) dosing can reduce NO_x but requires larger DOC with higher platinum loading
- Higher loadings already in place?
- Automakers and fabricators unable to disclose proprietary loadings

Industrial Demand and Global GDP Growth in Line

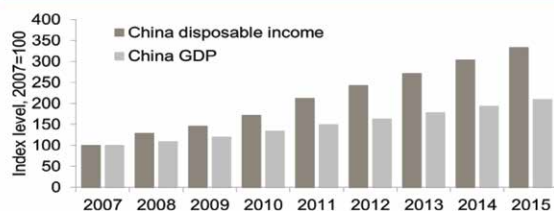
Industrial demand



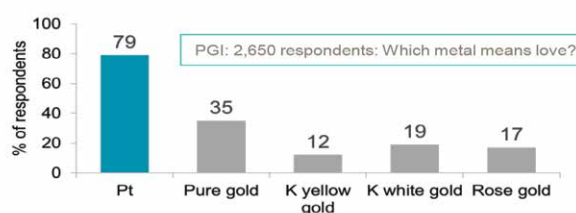
- Industrial demand segment is the most correlated to global GDP growth
- Petroleum plant closures in Q4'16 reduced net demand
- Medium term forecast is positive with robust industrial applications for platinum
- New industrial uses likely in the future

Significant Growth Potential In China And India Jewellery

China disposable income vs. China GDP



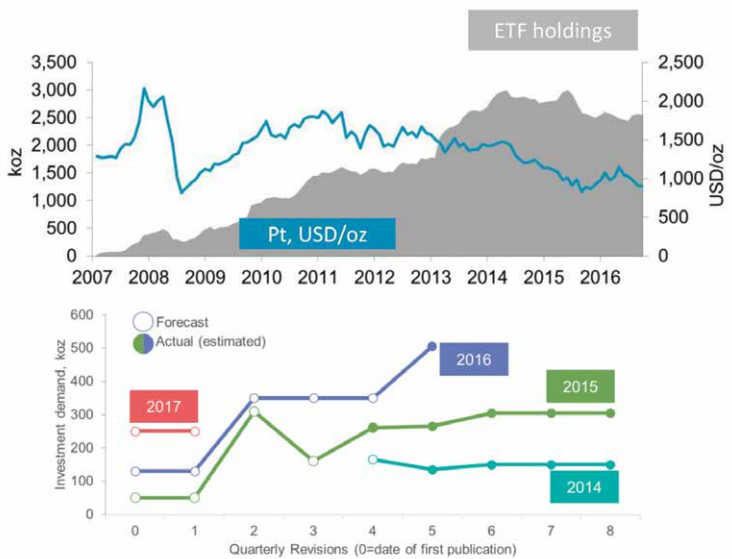
Platinum's unique 'love' brand strength in India



Source: China National Bureau of Statistics, Euromonitor, Bloomberg, PGI, WPI research

- China jewellery demand declining but rate decreasing – 4-5%
- A much better performance than gold jewellery down -15-20%
- Indian jewellery demand increasing
- Indian jewellery demand expected to grow 24-30% in 2017

Platinum Investment Has Grown In 3 Years And ETFs Stable

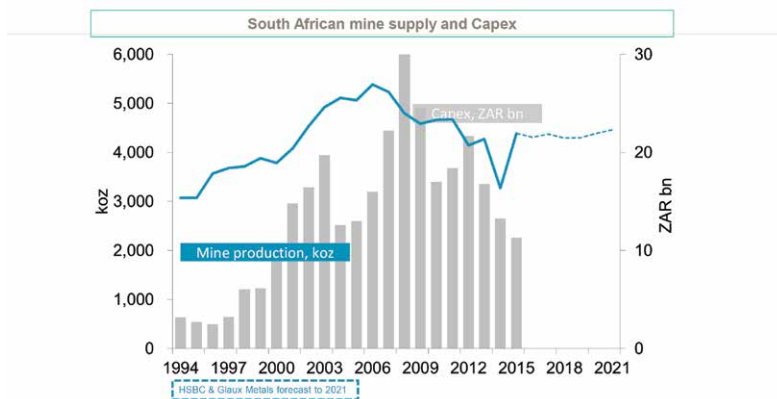


Source: Bloomberg, Respective ETP providers, WPIC Platinum Quarterly Q4 2016, SFA (Oxford) WPIC research

- Platinum ETFs have grown through the tough times and remained at \$2.5b
- ETFs up in Q1 by 65koz
- Demand growth from increased holdings and new investors
- Investment demand under forecast, averages 450koz p.a.
- Conservative initial level each year but 3 consecutive years of growth

Strong and sticky demand for investment platinum

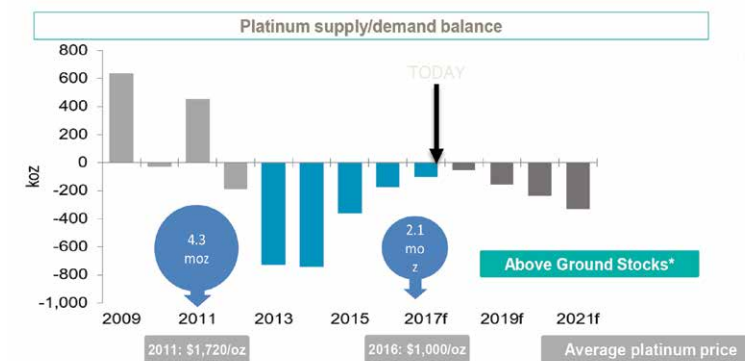
Mining Supply Is Constrained: Capex down



Source: HSBC (2018, 2019), Glaux Metals (2020, 2021), Venmyn Deloitte, WPIC research

Harder to maintain current production and slow response to rising price

WPIC Expects More Deficits Tighter Market



Source: Johnson Matthey (2009-12), SFA (Oxford) [2013-17f], Avg of Deutsche Bank, HSBC, Morgan Stanley [2018-2021], WPIC research

Five consecutive deficits, opinion divided, WPIC expects a deficit

An improvement in sentiment can quickly tighten the market and the discount to gold

Platinum Performs Long Term And Is A Diversifier

| 1991-1996 | 1996-2001 | 2001-2006 | 2006-2011 | 2011-2016 |
|------------------------|-----------------------|------------------------|------------------------|------------------------|
| Macro HF (21%) | Equity HF (18%) | EM equities (27%) | Gold (20%) | Private equity (19%) |
| Equity HF (21%) | Private equity (12%) | Global real est. (27%) | Oil (12%) | DM equities (11%) |
| Global real est. (14%) | Macro HF (10%) | Oil (25%) | US fixed income (7%) | Global real est. (10%) |
| EM equities (13%) | US fixed income (7%) | Platinum (19%) | Macro HF (5%) | Equity HF (5%) |
| DM equities (11%) | DM equities (6%) | Gold (18%) | Platinum (4%) | US fixed income (2%) |
| Commodities (11%) | Platinum (5%) | Commodities (16%) | EM equities (3%) | EM equities (2%) |
| US fixed income (7%) | Global real est. (0%) | DM equities (10%) | Equity HF (1%) | Macro HF (1%) |
| Oil (6%) | Commodities (-1%) | Private equity (10%) | DM equities (-2%) | Gold (-6%) |
| Platinum (1%) | Oil (-4%) | Macro HF (9%) | Commodities (-2%) | Platinum (-8%) |
| Gold (1%) | Gold (-5%) | Equity HF (9%) | Global real est. (-5%) | Commodities (-9%) |
| | EM equities (-6%) | US fixed income (5%) | Private equity (-12%) | Oil (-12%) |

Notes: Annualised returns across each 5-year window. Total asset returns used, where applicable.

- Long term returns are comparatively high, with a historic volatility a little higher than gold
- Platinum is similar to gold, more useful and positively correlated and leveraged to industrial demand
- In a global multi-asset portfolio, platinum is a superior diversifier to gold improving the sharp ratio

Source: Bloomberg, WPIC research

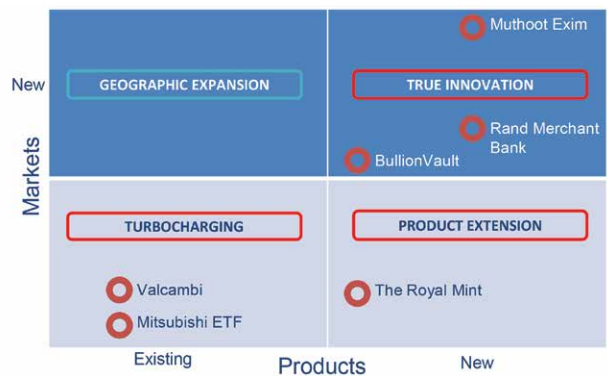
Platinum Is At The Highest Discount To Gold In 35Y



Source: Bloomberg, WPIC research

Inflation-adjusted using US CPI-U All Urban

WPIC Platinum Market Development Strategy

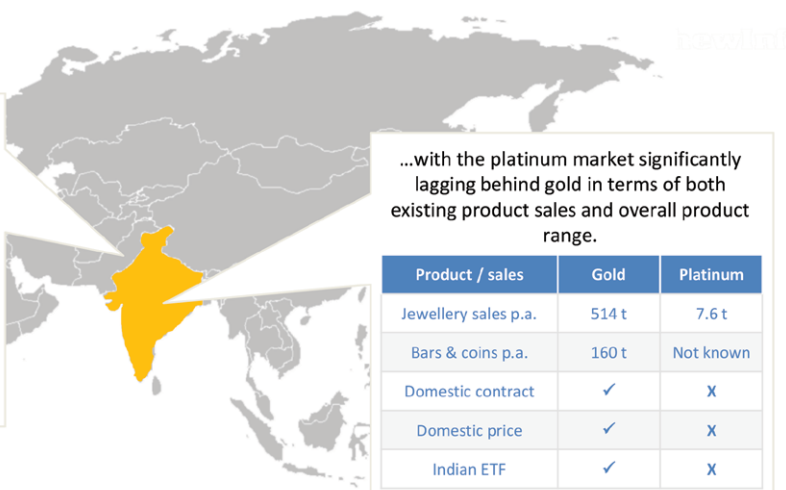


Market Intelligence : India The Market Opportunity

The Indian economy is the fastest growing economy in the G20, with a middle class that is expected to hit 200m by 2020²

| Metric | Size |
|-------------|--------------------|
| Population | 1.3 Bn |
| GDP | \$2.1 Tn |
| Growth p.a. | 7.93% ¹ |

¹2015-16 annual GDP growth rate
²EY Rapid Growth Forecast



...with the platinum market significantly lagging behind gold in terms of both existing product sales and overall product range.

| Product / sales | Gold | Platinum |
|----------------------|-------|-----------|
| Jewellery sales p.a. | 514 t | 7.6 t |
| Bars & coins p.a. | 160 t | Not known |
| Domestic contract | ✓ | X |
| Domestic price | ✓ | X |
| Indian ETF | ✓ | X |

Innovation In Platinum Investment

| BullionVault | Muthoot | The Royal Mint |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Partnered BullionVault to offer platinum for the first time The product facilitates VAT-free investor purchases and sales Since launch in March platinum volume to date of 175kg | <ul style="list-style-type: none"> Partnered Muthoot to launch India's first platinum savings scheme using a platinum deity A pilot in 625 branches across India New platinum products coming | <ul style="list-style-type: none"> Partnered the Royal Mint to launch the Mint's first platinum bullion coin and bar products March launch of the Beast, more retail platinum products to follow International distribution |
| <p>Performance Since Launch</p> | | |

Summary - The Investment Case For Platinum

- Demand – growth in demand expected in auto, industrial and jewellery. Investment is expected to grow as a demand of category
- Supply – mine supply constrained, Capex low, recycling weak = deficit
- Futures - NYMEX net long position and OI have improved radically
- Sentiment – as diesel sentiment improves, tighter supply, depleted vaulted holdings and growing investment demand will influence the market
- Price - platinum is cheap compared to history and relative to gold
- New Channels - new channels and products will broaden the investor base



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Building A Physical Gold Corridor in Asia Plus

(Shanghai - Hong Kong / Qianhai - Singapore)

Dr. Haywood Cheung, President, The Chinese Gold & Silver Exchange Society

A New Chapter of the Chinese Gold & Silver Exchange Society

CGSE background

- Founded in 1910
- sole exchange recognised by the Hong Kong Government
- daily transaction value ranges from HK\$ 100bn to HK\$ 120bn.



Members



Xi Jinping (The President of PRC)
visited Qianhai in 2012



Mission: 1500 ton bonded warehouse



CGSE Role in QH



Mr. Denny Wu,

Sr. Vice President, Ping An Commodities Trading Co., Ltd.

Qianhai Bonded Warehouse,
the Bridge of the Gold Corridor
5 June 2017

China's Gold Market Present Situation

中国黄金市场现状

Three Markets

三个市场

- The Interbank Market**
银行间交易市场
 - Where Shanghai Gold Exchange and Shanghai Futures Exchange is located.
 - 上海黄金交易所及上海期货交易所所在地。
 - Where Gathered the headquarters of domestic banks' trade department to deal on the board and OTC, which accounted for about 70% of SGE and 40% of SHFE's gold trade volume.
 - 聚集国内银行总行交易部门进行场内及OTC交易，分别占SGE交易量的70%及SHFE黄金合约交易量的40%。
- The Gold Jewelry Market**
黄金珠宝市场
 - The jewelry gold industrial chain in Shenzhen which is the biggest manufacturing and trading center consists of 3600 jewelry companies, hiring over 400K employees and covering 60% capacity of the gold jewelry in the China mainland.
 - 深圳黄金珠宝产业链，3600余家黄金珠宝企业，是深圳作为大中华区制造中心之一，是深圳珠宝首饰业的制造中心与交易中心，占全国黄金珠宝产能60%，直接从业人员超过40万人。
- Entrepot Trade Centre**
转口贸易中心
 - Hong Kong is the largest gold transit center over China, which contributes 80% of China's physical gold import.
 - 香港是中国周边最大的黄金转运中心，约占每年中国实物进口黄金总量80%。
 - In 2016, the net exports volume of gold from HK to China is about 771 metric tons while 862 metric tons in 2015.
 - 2016年香港对中国的黄金净出口为771公吨，2015年为862公吨。

The Qianhai Bonded Vault Project of CGSE

香港金银珠宝市场前海保税交割库项目

Mentality of Qianhai (Shenzhen) FTZ Bonded Vault System

前海自贸区保税交割库体系设计思路

- Convenience**
便捷
 - One-stop service experience, offshore financial services, physical inspection services, insurance
 - 一站式服务体验、离岸金融服务、实物检验服务、保险担保服务
 - Be designed for others precious metals and be integrated with the others exchange
 - 预留扩展仓库，可存放其他贵金属，可与境内外交易所联通的接口
- Efficiency**
高效
 - Shorten the gold transit between Hong Kong and China Mainland last 50km to increasing efficiency of delivery
 - 缩短深港与大陆黄金港口最后50公里路程增加交割效率
 - The good delivery of the new CNH Kilo Bar contract will be required as both the SGE and LBMA's good delivery
 - 配套的CNH公斤条合约将指定SGE与LBMA均可交割的实物黄金
- Safety**
安全
 - The vault will have the full amount insurance for the precious metal stored
 - 仓库将对存储其中的贵金属货物进行全额保险
 - The well-known International financial group will have the credit back ups for the vault
 - 引入大型国际财团作为仓库运营方
 - The setup of offshore vault will not have any contradiction of domestic policies regarding foreign exchange and gold
 - 离岸库的设计不影响国内外汇及黄金政策调整

China's Gold Market Present Situation

中国黄金市场现状

Two onshore Exchanges in Shanghai & One offshore Exchange in Hong Kong

两个在岸交易所（上海），一个离岸交易所（香港）

- SGE (Shanghai Gold Exchange)**
Major listed contract is the onshore physical gold and the offshore international board physical gold in Free Trade Zone (CNH, CNH Contract)
主要上市合约是境内实物黄金合约及自贸区国际板合约
- SHFE (Shanghai Futures Exchange)**
Major listed contracts are the onshore gold futures contracts (CNH Contract)
主要上市合约是境内黄金期货合约
- The Golden Exchange**
Major listed contracts are the offshore Hong Kong physical gold and the Loco London contracts (HKD, USD, CNH Contract)
主要上市合约是香港黄金现货合约及伦敦金现货合约

The Qianhai Bonded Vault Project of CGSE

香港金银珠宝市场前海保税交割库项目

Planning of Vault

交割库设计

- CGSE QH FTZ Vault**: Used to the delivery and storage of the new CNH Gold Contract
- Gold Vault for Futures**: Preparing for the overseas exchange's future contracts
- Gold Vault for Consignment**: Preparing for banks who need to do gold consignment
- Gold Vault for the Safe Deposit**: Preparing for domestic exchange
- Others Precious Metals Vault**: Used to the storage for physical silver outside China and the delivery of the future contract

China's Gold Market Present Situation

中国黄金市场现状

Situation and Problem of Vaults in China

交割库现状及问题

TWO PROBLEMS
(现状下主要有两个问题)

- The efficiency of logistics between Hong Kong gold vaults and domestic/SGE FTZ vaults
香港黄金交割库与境内/上海自贸区仓库间的运输效率
- Some functions of SGE International Board is partially suspended that can not play its full roles.
国际板目前部分限制导致其无法发挥全部职能

The Qianhai Bonded Vault Project of CGSE

香港金银珠宝市场前海保税交割库项目

After Vault System Built

前海仓库体系建成后

QH FTZ Bonded Vault System
前海自贸区保税交割库体系

Connections: CGSE 金业交易市场, Others Exchange 其他交易所, Foreign Institution 海外机构, Others Vault 其他黄金交割库

The Qianhai Bonded Vault Project of CGSE

香港金银珠宝市场前海保税交割库项目

Qianhai (Shenzhen) Project Introduction

前海项目介绍

The QH Free Trade Zone Bonded Vault Project can be summarized as "Trading in Hong Kong, Clearing and Settlement in Macau, Delivery in Qianhai (Shenzhen)", which can connect the Asia-Pacific market and international market by using CNH as the settlement currency. The whole operating pattern aims to be the service center provides the delivery, settlement and storage.

前海自贸区保税交割库项目可概括为“在港交易，在澳清算，前海交割”，可以连接亚太市场及国际市场并人民币进行结算交割，整体运营模式是港、澳、清为一体的服务中心。

Key Elements: VAULT (仓), CONTRACT (合约), SYSTEM (系统), RMB kilo bar contract (CNH) delivery in Qianhai (前海交割人民币公斤条), Qianhai (Shenzhen) FTZ bonded vault (前海自贸区保税交割库)

Form a complete set of trading, delivering, clearing and settlement system
配套交割、仓、清算清算系统

The Qianhai Bonded Vault Project of CGSE

香港金银珠宝市场前海保税交割库项目

Planning of the Contract

交割合约设计

Key Words: Kilo Bar, Real-time, Good Delivery (SGE & LBMA), CNH, Both Sides Clear

Important: CGSE 金业交易市场, CNH Kilo Bar Delivery, Good Delivery for SGE & LBMA (SGE及LBMA同时可交割), CGSE QH FTZ Gold Vault, LBMA, SGE

The Qianhai Bonded Vault Project of CGSE

香港金銀業貿易場前海保稅交割庫項目



Product swap

- Dore-fine bars-new jewellery-jewellery scrap-unrefined bars.
- Enhancing refiners, jewellery manufacturers, jewellery wholesalers, jewellery retailers.



Financing

- Transaction banking = cash-gold liquidity.
- Interest spread from different demand / supply clientele in the region.
- B/ + C/ financing requirements.
- Bridging financing in the industry, facilitate a vertical integration.



Mr. Raymond Chan

Former President (1996-2000) & Advisor to
Shenzhen Qianhai Chinese Gold & Silver Exchange Society

Opportunities of Qianhai Bonded Warehouse Project

5 June 2017

The participation of offshore RMB to trade gold

- The premium / discount of China gold price RMB/GM can be arbitrated against London, ie USD/OZ.
- The triangle in the mkt, meaning CNH/gm-CNY/gm-USD/oz, on factors of demand supply, liquidity, exchange rates, interest rates.



The location swap

- There will be 3 regional depository namely at Singapore/ HK /Qianhai Free-trade Zone.
- Logistic. Convenience to participants in the region, minimizing unnecessary movements, creating friendly and efficient trading / hedging/ arbitrage opportunities. Premium or discount edges.
- Time-cost-liquidity for traders and manufacturers.
- soft ware-services for logistic institutions like data records of transfers, custodian, bulk size movements.
- Financing.



Mr. Albert Cheng,

CEO, Singapore Bullion Market Association (SBMA)

Closing Remarks

5 June 2017

Questions & Answers

MOU between CGSE and SBMA on Closer Cooperation between Hong Kong and Singapore Precious Metals Sector

5 June 2017



Thank You

Islamic Gold Investment Products - Rules, Compliance & Products



(Left to Right) **William Chin**, Head of Metals & Bulk Commodities, SGX, **Robin Lee**, Managing Director, HelloGold, **Shaokai Fan**, Director, World Gold Council

Shaokai Fan

Advent of Shariah standard on gold is one of the most exciting developments that have happened in the gold market recently. I am more than happy to take you through what the centre does, what the impact would be and how WGC is engaging with broader gold industry on the topic.

As many of you might know “The AAOFI standard number 57 on gold and its trading control” was officially launched at the end of the last year. The Standard is

globally known as Shariah Gold Standard. Question is why this standard is necessary. Some people say that gold is naturally Shariah compliant because it produces no interest; it is straight forward; easy to understand commodity. But one has to understand that in Islamic finance, gold falls into the specific category called ‘revalue item’. There are six items in the category namely gold, silver, wheat, salt, debts, and barley. The reasons behind these six items are special because in the past they frequently changed hands. Gold and silver we used as currency and other four were necessary for daily

survival. As these items changed hands frequently, there arose the need to protect consumer interest. Therefore, it developed in Islamic finance the need to treat these items as special. Consequently, more stringent rules were felt required around them

Opportunities for Gold in Islamic Finance

Shaokai Fan, Director, World Gold Council

The Shari'ah Standard on Gold

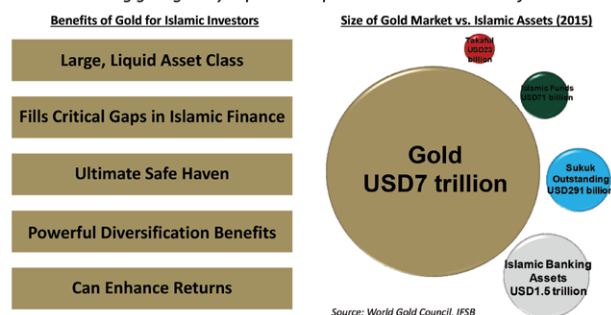
AAOIFI Standard No. 57 on Gold and its Trading Controls (the "Shari'ah Standard on Gold") was published in November 2016

Why is a Shari'ah Standard on Gold necessary?

| | |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| "Ribawi" Item | Gold is subject to more stringent religious rules |
| Limited Guidance | Existing Shar'iah guidance on modern gold products was limited and fragmented |
| What does the Shari'ah Standard on Gold do? | |
| Removes Uncertainty | An AAOIFI-issued standard carries widespread recognition throughout the Islamic community |
| Definitive Guidance | The Standard provides definitive guidance on all the modern financial uses of gold, enabling more Islamic gold products |

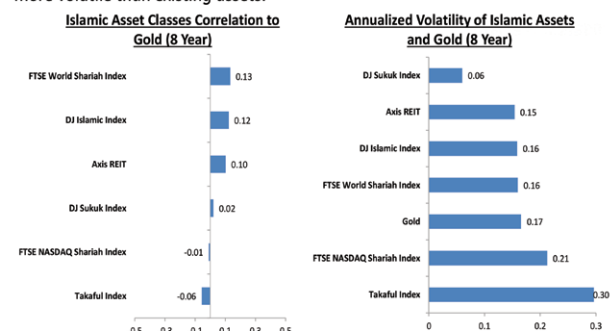
The Potential for Gold in Islamic Finance

Islamic finance suffers from a lack of diversity and liquidity in its investible universe. Adding gold greatly expands the possibilities within Islamic finance.



The Potential for Gold in Islamic Finance

Gold shows almost no correlation to existing Islamic asset classes, and is not more volatile than existing assets.



Advancing Islamic Finance Through Gold

With the Shari'ah Standard on Gold in place, we are engaging the broader Islamic finance community on gold's potential.

| New Product Development | Outreach and Education |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Working with Islamic financial institutions on creating new gold-based products Developing solutions that fit the needs of all Islamic investors – including retail, high net worth, institutional, and others | <ul style="list-style-type: none"> Engaging Islamic institutional investors and other buy-side institutions on the case for gold in Islamic finance Outreach to policymakers and industry groups on the potential for gold to advance Islamic finance |

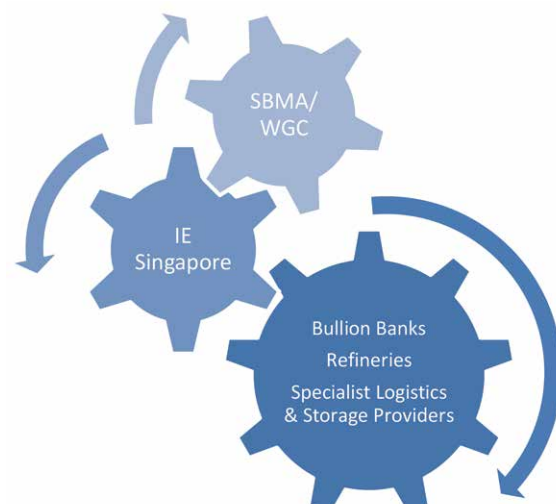
William Chin

I am not here to promote the SGX contract, but will talk about the challenges that we faced during introducing of this contract, drawing from the parallels that we do from different commodity products. Essentially the challenges really for us are that if you look back to 2014 when we first launched the contract, it was born out of three key points that we were trying to achieve - first transparency, second regulated and third a credible wholesale global price.

SGX Kilobar Gold Contract

William Chin, Head of Metals & Bulk Commodities, Singapore Exchange

Wholesale Physical Market for Asia



Singapore Kilobar Gold Futures

Complement shifting physical flows

- Premium-over-spot
- Rise of Asia and kilobars

Physical delivery in Singapore Freeport

- Strategically located between key producers and consumers
- GST exemption for investment-grade gold
- Ecosystem of bullion banks, traders, secure storage facilities, and refineries
- Neutral marketplace

Reliable marketplace – authenticity & availability



OTC Arrangement

Specifics of delivery and settlement to be agreed bilaterally



Minimum 1 Lot

25kg of gold deliverable against SGX Gold Contract



1 tonne/day

Bullion banks commit to at least 1 tonne of gold every day

See www.sgx.com/commodities/gold for latest indicative prices and each bank's contact information.

Enhancing the OTC Model

| | SGX GD Gold | OTC Market |
|-----------------------|---------------------------------------------------|-----------------------------------------------------|
| 1. Price Transparency | All-in Price Central Orderbook | Premium-over-Spot Bilateral |
| 2. Counterparty Risk | SGX as Central Counterparty Futures Regulation | Accept Counterparty Risk Trust-based Arrangement |
| 3. Settlement | Delivery Specifications T+2 | Flexible |

Delivery in Hong Kong and Bangkok



First Shariah-Compliant Gold Futures

- Launched October 2014
- Phase 1 upgrades in 2015
 - Longer trading hours (9-3.30pm)
 - (World-first) for sellers to transfer away short position(s) after the last trade date
 - Broadening delivery points via the OTC channel
- Compliant with AAOIFI Shariah Standard on Gold
- Complements Singapore's position
 - Precious metal trading hub
 - International centre for Islamic finance
- Complements international efforts on price discovery and regional transparency

Thank you

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A Shariah-Compliant Gold Fintech Platform

Robin Lee, CEO, HelloGold

HelloGold the opportunity

815 Million

Total Number of Savers in Asia⁽¹⁾

\$440 Billion

Total Annual Savings Held in Cash⁽²⁾

500 Million

Total Number of People in Asia who could not borrow from Financial Institutions⁽¹⁾

1. ASEAN & China - World Bank Data
2. ASEAN & China - World Bank Data, Manulife Report on Asia

HelloGold solves three key problems



- + 42% of household savings is in cash⁽¹⁾
- + Cash savings yield less than 0.5% return⁽²⁾



- + Less than 20% of loans granted to individuals were from financial institutions⁽³⁾
- + 15% - 25% costs for unsecured loans⁽²⁾



- + Average transaction cost of 5% - 10% assuming minimum transaction of US\$200⁽³⁾
- + Average settlement cycle of 2 - 5 days⁽³⁾

1. Manulife on Asia
2. Malaysian example: various financial institutions
3. World Bank

What is HelloGold?

HelloGold aims to give everyday consumers in emerging markets easier access to better savings products and more affordable financing by offering innovative gold financial products. The HelloGold product is a secure and trusted platform that is:

HelloGold addressable market(1) of 450 million customer

Accessible

- + International Spot Prices
- + Mobile Application
- + 24/7
- + Real-time Settlement
- + Shariah Compliant

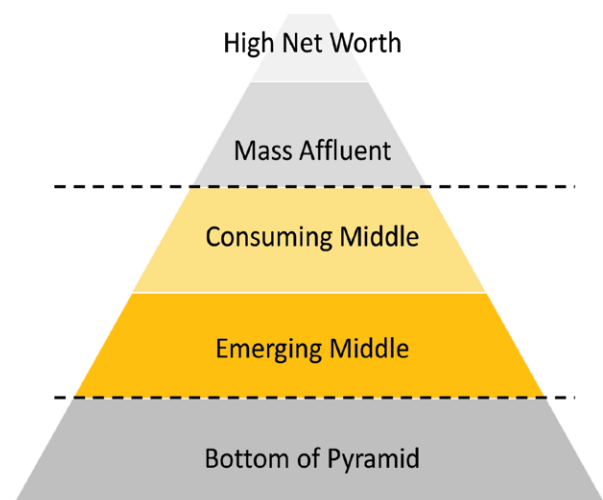
Affordable

- + Minimum RM1 purchase
- + Low fee structure
- + Competitive lending products

Secure

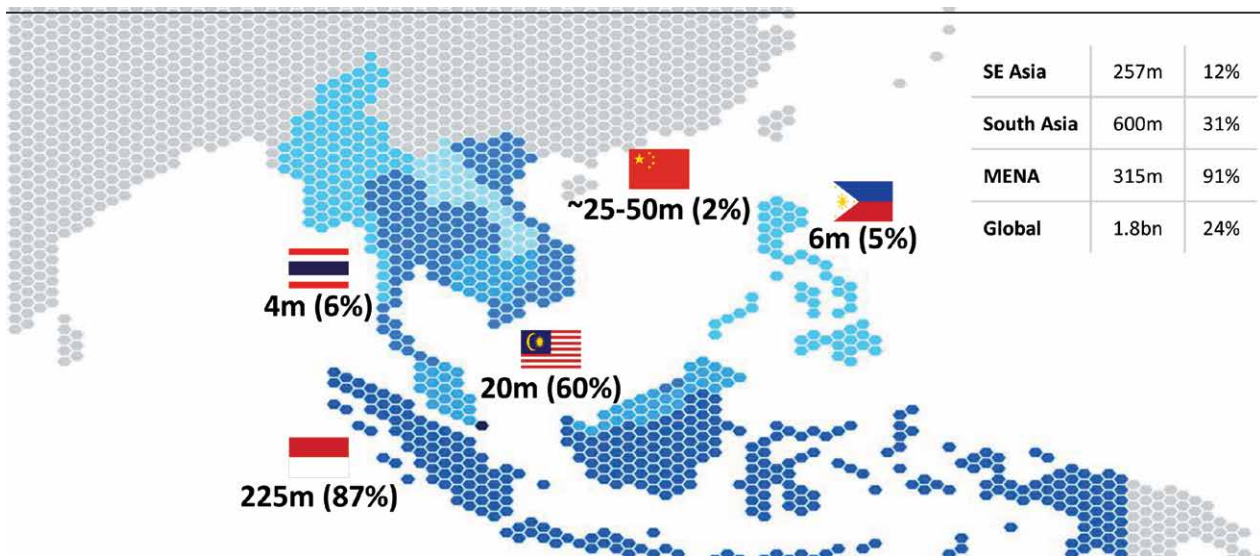
- + Blockchain Technology
- + Physical bullion vaulted in Singapore
- + Insurance & Security

~300m⁽¹⁾ Muslims in ASEAN + China



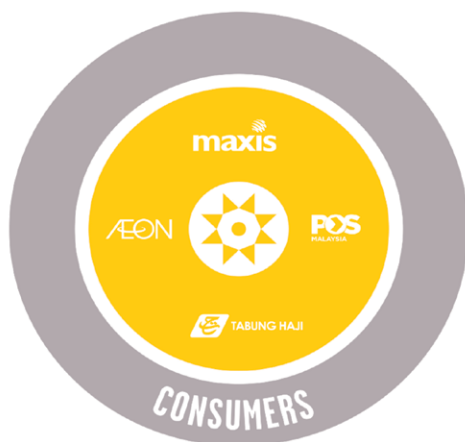
1. ASEAN & China - World Bank Data, McKinsey

- + Median annual household income of US\$13k [asiawealthinfo.com](http://www.asiawealthinfo.com)
- + High propensity to save with additional expectation growth in income would be directed to further savings
- + Lives in the city with a young family
- + Wants better financial means to mitigate against job security and to provide health cover
- + Has internet access and owns a smartphone
- + Has limited access to credit beyond a car (new or secondhand) loan and mortgage



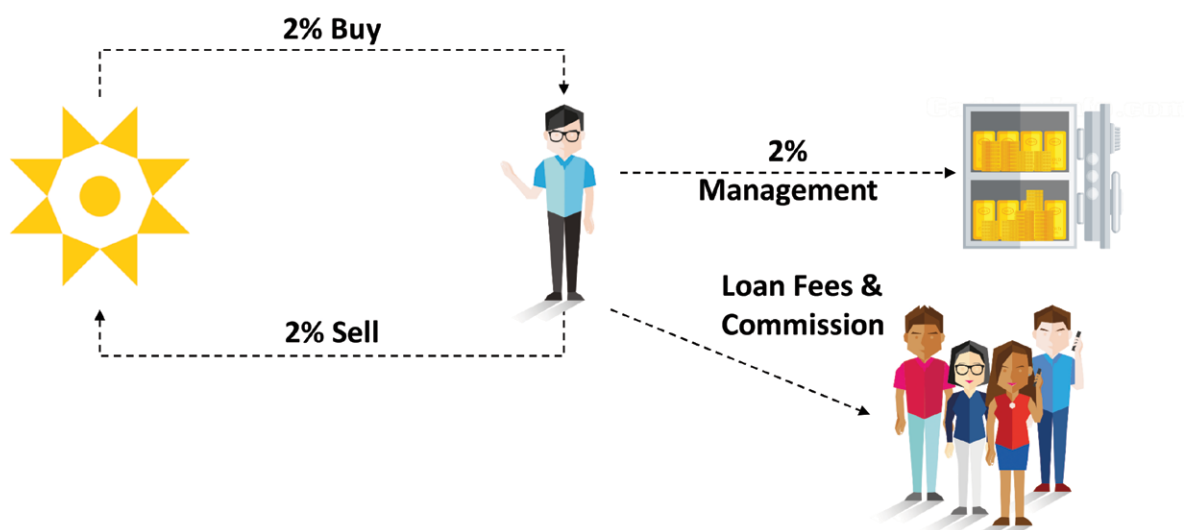
1. Pew Research Center

HelloGold customer acquisition



- + HelloGold has implemented a B2B2C customer acquisition strategy that will indirectly engage consumers through established corporate partnerships
- + Corporate partners will be selected based on the following:
 - Similar target consumer base
 - Significant consumer reach
 - High brand equity
- + HelloGold will make it easy for the customer to use its product by:
 - Customizing products specific to its partners
 - Processes that reduces the number of hand-offs
- + HelloGold will leverage on the partners distribution channel to reach the targeted consumer e.g.
 - Link to retail website
 - Promotional campaigns at outlets
 - Direct mail
 - Call centre support
- + Modelled average LTV of US\$100 over five years with average CAC of US\$10

HelloGold revenue model



HelloGold Shariah compliance



Savings

Spot transaction

- + Gold is Ribawi ('hand to hand, like for like')
- + HG acts as wakeel (agent) for savers



Custody

Wadiah (Custody)

- + No comingling of assets
- + Fee for safekeeping



Collateral

Ar-Rahnu (Collateralization)

- + HG is custodian for gold
- + Ijara thumma Al-bai for lease with sale at end (in the case of using gold as collateral down payment for an asset such as a motorcycle or white goods)



Lending

Qard Hassanah (Benevolent Loan)

- + HG is agent (loan application) for a fee
- + HG is custodian of collateral
- + Shariah compliant loan liquidity provider
- + Success commission from liquidity provider
- + 3 month tenor loans for personal needs
- + Flat fee for loans comprised of admin cost and inflation adjustment

HelloGold is the **world's first Shariah compliant digital gold product** that is in full compliance with the recently launched International Shariah Standard on Gold developed by AAOIFI with support from Amanie and the World Gold Council



HelloGold™
Life's golden



Business of a future



Fintech Development in Gold



(Left to Right) Robin Martin, Managing Director Market Infrastructure, World Gold Council, Arjun Raychaudhuri, Head of Strategy and Digital Transformation, MMTC-PAMP, Brian Lan, Managing Director, GoldSilver Central Pte Ltd, Alexey Romanchuk, Chief Technology Officer, Copernicus Gold, Singapore, David Janczewski, Director of New Business, Royal Mint

Robin Martin

The topic for today's discussion is Fintech Development in Gold. What is Fintech in Gold? In my mind, it is about applying digital technology, be that cloud computing, machine learning, any type of digital technology could be applied for financial services. Typically, fintech applications involve disintermediating established financial institutions. So lot of innovation you see is about introducing services that tend to disintermediate

banks, payment companies, asset managers or players in the capital market. Really, in my mind, fintech innovation is about introducing services that are less complex, simple, more transparent, and typically more cost effective.

So perhaps one of the greatest opportunities for Fintech is to reach new segments and as we heard already in the discussions in this conference that vast number of

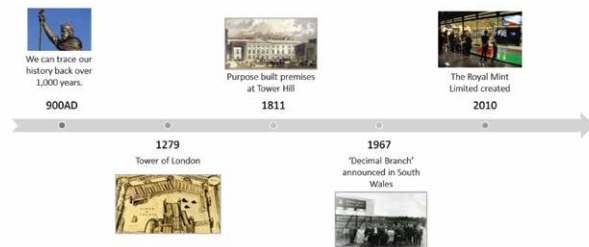
people who are completely unbanked, which means they have no access to financial services. In numbers, perhaps, there are two billion people around the world who fall into this category. Financial exclusion is one of the primary drivers or reasons as to why some people are unable to escape the poverty trap. Real potential opportunity for Fintech, I think, is to address some of these issues.

These things raise questions in terms of what Fintech means for gold. I think technology plays a powerful role in potentially democratising and broadening access to gold. If we just look at fifteen years or so, innovations like exchange trading funds, a new breed of online products, then we can see that this has really opened up access to gold. As you know, historically, accessing gold is very complex, difficult to understand to many people. So, the new breed of products provides some of the most cost effective, simpler and more traceable user experience. Before I hand over the session to the panel, briefly I want to make a comment on the ‘block chain’.

Block chain, as most of you know, is essentially the technology underpins cryptographic currency like Bitcoin – this technology is really popularized through Bitcoin. First and foremost, it is a technology which is ledger offered distributed data storage through cryptographically secured technique. It enables data to be stored arguably in a more secured, or tamper-proof or inimitable fashion. Implications of this technology could be seen in investment space, which I am not going to comment specifically, but I request the industry representatives to think about in broader applications of ‘block chain’ technology. Certainly, one of the areas that I think holds great promise is in essentially making supply chain of gold more transparent. There are number of start up companies looking at the space, not just in gold but commodities in general, really enabling a better tracking of gold or other commodities, from mines and other places to consumers and various other stages of the value chain.

RMG – The 21st Century Gold Standard

David Janczewski, Director of New Business, The Royal Mint

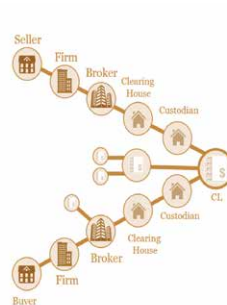


A brief history of The Royal Mint The Origins of Royal Mint Gold - RMG

- Began investigating Bitcoin in 2012
- Growth in our physical bullion business
- Identified a potential opportunity to use Blockchain technology as an efficient method of tracking ownership
- But.... The business opportunity needed refinement

Why Gold on a Blockchain?

- Why gold?
 - Gold has been a form of currency and store of wealth for millennia
 - Its limited availability, highly precious nature and global standardisation make it an ideal choice
 - The market is ripe for innovation
- Why Blockchain?
 - Proven technology with 8+ years of “real-world testing”
 - Transaction efficiencies offered by technology
 - Move to a decentralised transaction model



The Present Model



The Future – RMG Model

A new transaction model

Royal Mint Gold - RMG

- Provides direct ownership of physical gold
- Will be exchange tradable and peer to peer transferable on a platform run by CME Group
- The physical gold will be held within The Royal Mint's secure vaults
- Will have ownership recorded and updated in near real-time using block chain technology
- Have zero annual management or storage costs
- Ultimately deliver the best value gold investment

How do you deliver such a change?

- Seeking to deliver confidence and certainty
- Corporate grade infrastructure model
- Security and reliability are key whilst also maintaining ease of use
- Open, permissioned network to enable rapid deployment and trust
- Multi participant model to ensure transaction validity and speed
- Independent services to provide disaster recovery and legal enforcement capability

Just the beginning...

- With 1000+ years of experience, The Royal Mint is taking a long term view and building for the future

RMG is a Gold Digital Asset that is enabled by Blockchain and we are seeking to

1. Encourage participation – come and join the network!
2. Propagate innovation – how could you make use of RMG?



- For more information please visit: www.royalmint.com/rmg
- Email: rmginfo@royalmint.com
- Twitter: @RoyalMintUK

A Multi-Currency Platform for Buying and Selling Digital Gold Linked to Physical Gold Bullion

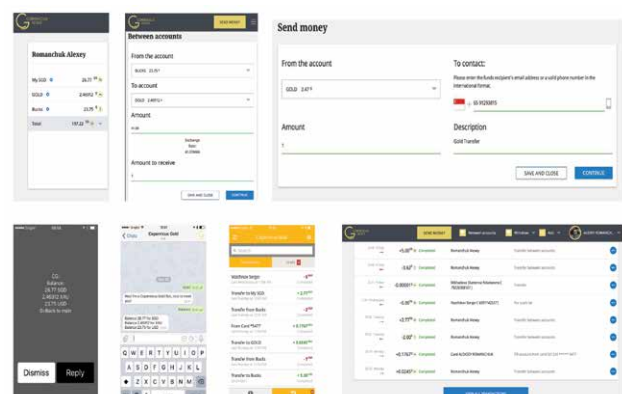
Alexey Romanchuk, Copernicus Gold

What is Copernicus Gold?



- Platform for buying and selling gold with multi-currency support
- All amount of digital gold 100% linked to real gold bullions
- Backed by blockchain technology
- Low entry threshold (1 cent, 0.1 g)
- Robust API and full automation
- The price of gold and currency exchange rate is linked to the stock rates

Copernicus Gold is fully operating



Great Interest to Gold in SEA



Many difficulties to save up for gold using currencies or small jewellerys

Copernicus Gold:

- You can start saving from S\$ 10, or one cent, or ... 0.001 g
- At the day of purchase just convert to cash
- Or purchase gold directly in jewelry shops using digital gold

Who are the clients? Amateur Investors



Who are the clients? Jewellery Shops



Stock Exchange and brokerage tools may be too complex, scary and expensive.

Copernicus Gold:

- A simple user interface and online procedure of purchase
- Instant conversions to **multiple currencies** using market rates
- An ability to diversify savings between gold and currencies
- Become long-term investors

Copernicus Gold:

- Extending the clientele
- Customers can buy digital gold for cash at shops
- Buying jewellery products directly in shops using digital gold
- Hedging risks of gold price changes

Who are the clients? Amateur Investors



Who are the clients? The whole Gold Industry



Copernicus Gold:

- Participants of the gold market may use digital gold for settlements
- Hedging risks of gold price changes
- Guarantees in digital gold

Authority of Singapore

- Mathematical models for liquidity and reserves
- Security Subsystem based on our 20 years of banking experience

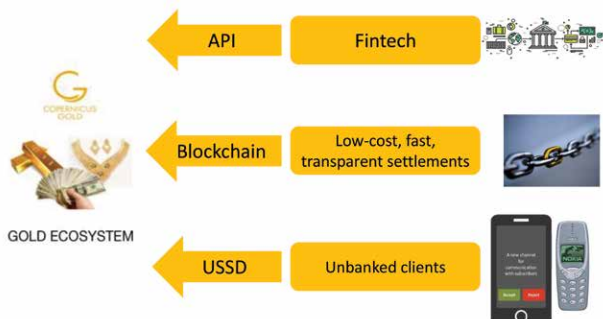
Gold Ecosystem



Project's History



Benefits



Copernicus Gold:

- Started at the end of 2013
- A team of bankers with more than 20 years of bank experience and successful bank projects
- Scientists, software developers, lawyers
- Incorporated in Singapore in 2016
- Investment acquired \$3.8 M in 2016

Mitigating Risks



- All bullions in the safest storage in Singapore
- Clients' funds on bank accounts
- Strong KYC/AML Procedures and Identification with our partners
- Transparency and reliability of blockchain
- Stored Value Facility according to Monetary

Copernicus Gold



We are open for cooperation

www.copernicusgold.com

Network Effect, Accessibility and Convenience for Trading Physical Gold, Silver and Platinum

Brian Lan, Managing Director, GoldSilver Central Pte. Ltd.

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7. Professionals or other appropriate advice should be sought before acting on any information contained in this seminar aid.

Brief Introduction

- Brian Lan is the Managing Director of GoldSilver Central Pte. Ltd. and a member of the company's Board of Directors.

- Together with the Board of Directors, he manages GoldSilver Central's global business development, operational infrastructure and sales.
- As the managing director, Brian plays an integral part in introducing pioneering precious metals solutions catered to demographics from all walks of life. Some recent ideas brought to life includes GSC Live!, the first spot physical deliverable precious metals trading platform built on MetaTrader 4 and the GSC Savings Accumulation Program based on the Dollar Cost Averaging Model.

A Little Info On Goldsilver Central

1. Member of SBMA (Singapore Bullion Market Association)
2. Authorized Distributorship of distinguished Partners
3. Awarded sole dealership of **Perth Mint Certificate Program** and **Perth Mint Depository Online** in Asia (Only Government Guaranteed Storage Program in the World)



About Goldsilver Central



Bullion



Storage



Collateral Loan



THE PERTH MINT AUSTRALIA

Government Guaranteed Storage Programs



GSC Savings Accumulation Program



MetaTrader 4



Private Wealth



Numismatics

Merging the endless possibilities of MetaTrader 4 with Physical Gold, Silver and Platinum into one mighty platform.

- Powerful Platform with highly customizable features
- Physically Deliverable Contracts
- 24/5 access to prices for buying



and selling

- Buy and sell limits for physical precious metals

Leveraging on the power of the Network Effect

- Developed on MetaTrader4
- Advanced leading online trading platform
- Investors can apply charting & analytical features & strategies to their investments.
- Millions of traders familiar with how MetaTrader 4 works.
- Works on different mobile platforms and operating systems
- Do not need to reinvent the will



GSC Live!

Able to create contracts in home currencies

- GSC's very own physical deliverable trading platform where corporations & individuals can buy physical metals online in SGD or USD or any other currencies.
- Track Gold, Silver and Platinum prices in preferred currencies and in different denominations (Kilo, 100oz, 1oz, etc)
- Physical bars become divisible with GSC Live!
- Leave buy or sell orders and it is executed automatically
- Small Contracts of 1/10oz for Gold and Platinum and 5oz for Silver available for customers to purchase and accumulate.
- Take physical delivery in any of our GSC Vault

Network



Enhancing the Accessibility and Convenience for Trading Physical Precious Metals

- GSC Live! easily accessible via mobile or desktop applications.
- Allows trading of physical precious metals including Platinum at real-time spot prices.
- Low Entry Levels and Narrow Spreads
- 1/10oz for Gold and Platinum, 5oz for Silver

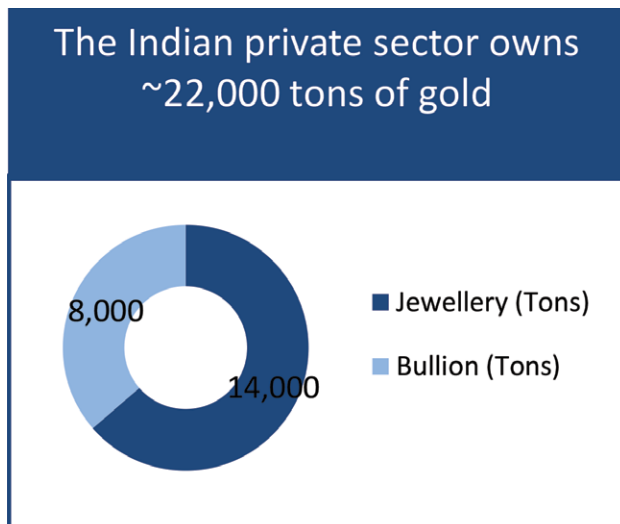
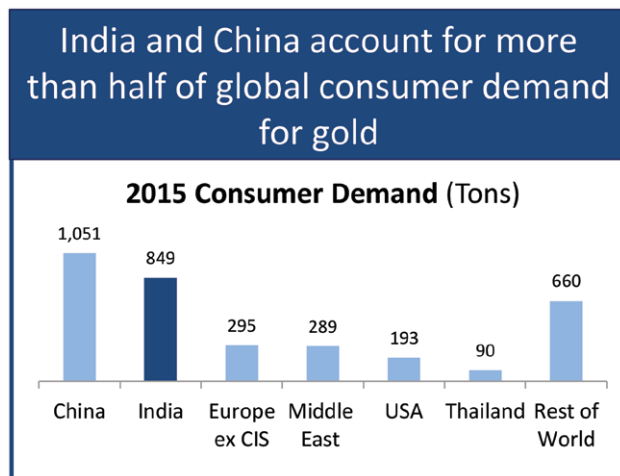


Thank you
Questions?

Leveraging Technology and Transparency to Redefine Gold Savings and Investments

Arjun Raychaudhuri, Head of Strategy and Digital Transformation, MMTC-PAMP India Pvt. Ltd.

Indians love Gold



Do we really know which sections of India consume gold? And do we really know why Indians consume gold?

Divergent views on who consumes gold and why

Divergent views on who consumes gold in India today

- **Economic survey of India 2015-16¹** - The 'rich' consume most of the Gold - top 20 per cent of population account for 80 per cent of total consumption
- **GFMS Gold survey 2016** - Indian households dependent on agriculture contribute to 35% of annual gold demand, highly sensitive to monsoons

No clear data on the exact purpose of consumption

| CONSUMPTION | INVESTMENT | SAVINGS/ QUASI-INSURANCE |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Gifting • Rituals • Jewelry | <ul style="list-style-type: none"> • Productive asset • Offers return | <ul style="list-style-type: none"> • Substitutes for social safety net • Liquid, emergency cash, limited capital at risk |

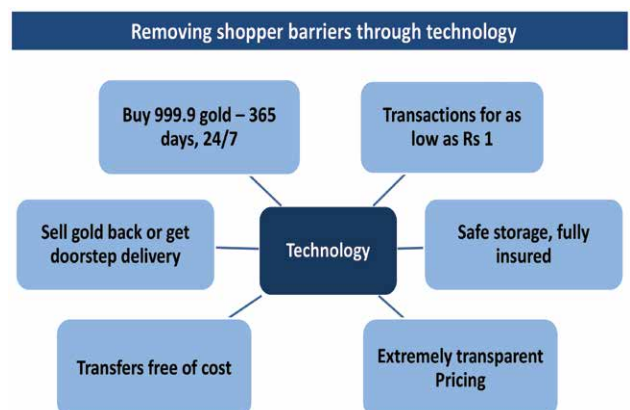
The customer also faces an opaque environment



Can technology improve transparency? Three inter-related questions

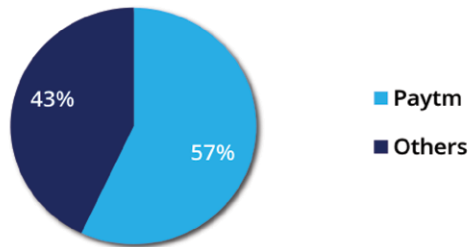
- Will technology enable us to serve the customer better?
- Will technology enable us to understand the customer better?
- What are the limits to using technology to increase transparency?

Design thinking is the starting point

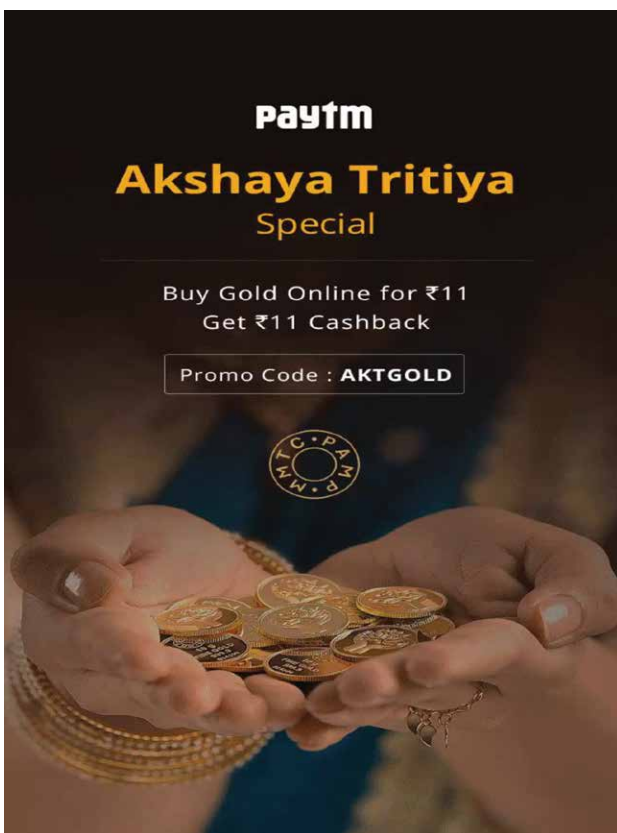


Design thinking is the starting point

Large share of payment market



- ~210 Mn + users,
- 4 mn offline merchants
- 150K online merchants
- RBI Payment Bank license



Technology yields interesting customer insights

| Customers we like | Customers we find fascinating | Customers we (really) want to hang out with |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Most sales between 10am – 12 Friday • Is this due to ritual? • Is this due to Religion/geography? | <ul style="list-style-type: none"> • Check 30 times and then buy once • Is this price shopping? Is it just phone addiction? | <ul style="list-style-type: none"> • Most price checks at 4-6pm Friday but no actual sales • Are we just waiting to go to the bar? |

During the pilot, people bought (on average) gold for \$10, and sold back around \$30

- This is very bad data, due to promos, festivals and phased introduction of features
- However, it's a step on the long journey towards finding out "what is the role of gold"

Technology is holistic

| Our biggest learning experience: Every single aspect of the product requires technology | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Convenient access | <ul style="list-style-type: none"> • Ease of interface • Customer query resolution |
| Live prices linked to Global Markets | <ul style="list-style-type: none"> • Systems for real time hedging • Value at risk |
| Buy and sell for as low as Re 1 | <ul style="list-style-type: none"> • Digitalisation – 0.0003 gm • Back end systems for inventory management |
| Available 24X7, 365 days a year | <ul style="list-style-type: none"> • Systems downtimes • Cyber attacks |
| Delivery at your doorstep | <ul style="list-style-type: none"> • Inventory planning • Real time delivery management |

Transparency comes with challenges – technology can solve only some of them

- Customers are surprised and often upset by the true cost of transacting in Gold
- Educating customers about purity is a long term process and needs multiple stakeholders.
- Customers will game the system – margin for error in using tech enabled plays is very thin

Robin Martin

We are talking about innovations and using of digital services and technology and under this backdrop, do you think that there is potential risk for gold losing some of its relevance especially to next generation?

Arjun Raychaudhuri

I probably have contrarian view on this. Gold can be an investment product, an insurance product or can

be a consumption product. Hard to tell when, but at some point of time, in India, the demand for gold as a consumption product will reduce. Gold as an investment product will increase in India because GDP is rising and as an insurance product, its role might also get reduced on emergence of financial sector. So, one of the three features will increase, and on the other hand, two of the three features will reduce. It's my personal opinion, not organization's, that in course of time, gold will emerge more in financial form in India; it will have an effect on eco-system in the long run. Someone will not buy gold in future if it is not a financial asset and I believe role of gold will change; it will work more as a financial instrument.

Robin Martin

Kind of services you are providing will refresh the role of gold to the next generation in terms of accessibility?

Arjun Raychaudhuri

Product we are offering is fairly inefficient product from the financial service perspective. It is not offering a real trading platform, it does not offer returns. Ideally, we can educate the customers on gold, but once we do it, someone brighter or smarter will take us out.

Brian Lan

I think most investors hold gold for two main reasons – he or she classifies it for trading and for balance sheet what Arjun has mentioned. So challenge is how we could bring relevance of gold today by using technology so that younger people could participate and understand gold better. Digitalizing gold, I think, will excite younger generation to participate better.

Robin Martin

One of the biggest differentiators in the services that we have been offering is the question about trust. How can we build trust with customers or with investors? For brand like The Royal Mint, for example, how the existing brand translates into digital offering?

David Janczewski

We are in a very fortunate position because of the heritage of the organization. We have been making

money. There is a degree of trust extended to us by the nature of what we do. That being said, precious metals market at large is the one which is largely distrustful. We are offering the ability to take the physical delivery and that is all part of the building trust and beyond. We consider ourselves lucky that we started at a very strong base.

Alexey Romanchuk

It is a very important question and it is also a part of my presentation. It is very important for us to build a trust with our customers because nobody knows about us here in Singapore. We also deal with blockchain technology and for most of the people in the market, trust is very important in blockchain because some of the applications are not regulated now. Currently in Singapore we use the strategy which is regulated despite we do not need any special licence. But of course, if somebody is providing the licence we would like to accept because we think licence is just a way to increase the trust to the service.

Robin Martin to Alexey Romanchuk

Have you given enough confidence to investors in terms of custody arrangements, legal entitlements of ownership of gold?

This is always an important point that if investors can touch the gold physically as it is a cultural phenomenon. We store gold in Singapore Freeport Zone and from customers' point of view, we can provide certification that he really bought this gold with the details of where exactly this gold is stored. We are trying to do third party audit for our gold storages because this will provide additional proof of existence of gold.

Robin Martin

What do you think integrating the safety components while designing a product like yours, Brian?

Brian Lan

The most important part is the physically deliverable portion. I feel clients have confidence on us what we are doing. So, sometime those who buy really sizeable amount of gold, we take them to Freeport to look at

physical storage. We take them inside the vault, take pictures, issue certificates and give them monthly payments. These are few of the measures which satisfy the customers.

Robin Martin

Another aspect is buying and selling of gold cheaply and storing securely on customers' behalf. Are any of you exploring opportunities of gold facilitated payments, gold backed cards etc?

Arjun Raychaudhuri

The way the Wallet is structured in India is that you buy a movie ticket and the wallet provider will give you a cash back. Now they are converting some of these add-ons to gold back. Next step of that phase is to payback your retail transaction by converting your gold and pay. So, it should be two-way structure always. From legal perspective, I think the idea should be gold enabled day to day retail transaction. This is natural next step if one has the access of his/her mobile phone.

Robin Martin

But clearly there are costs involved in transacting in and out of that gold. Do you think it could be overcome from user experience standpoint through gold based payments or directly digital gold alternative?

Arjun Raychaudhuri

I think true cost in all these elements is not the transaction cost but the acquisition element on one hand and customer service on the other. From narrow emerging market lens like India, the real cost is not when the person sells gold and gets cash; the cost is for every 10 customers that we call, we get back only 2. So, you have to do million phone calls. That cost will take time to go down. This is a long steady process of awareness.

Questions from Audience

How could individual institutions access the RMG ecosystem and what exactly the CME's role in this configuration?

David Janczewski

For institutions or organizations to access, they can

simply come to us and we will talk what they can do; we will let them know the account technology before the transactions; they should know about RMG and at the end it is the simple web interface. CME's role here is that to provide on and off ramps. How you could convert the fiat currency to gold and vice-versa. CME is providing the trading platform, a secondary market trading platform where anybody can come and trade in or trade off in multiple currencies. It could be done through wallet or accounts in RMG.

I would like to add here few lines on the relevance of gold in future. For me, until the middle of last century, gold was the store of wealth; it was used every day as payment mechanism. The capability still exists even today for using gold for the same purpose. The question is whether we need this and what is the cost. In reality, in today's world, there is cost involved in credit or debit card or even cash transaction. Cash is still cheapest but still it involves a bit for physically moving from one place to other. I feel gold has the opportunity to play its part.

Robin Martin to Arjun Raychaudhuri

How important everyone here thinks that cost is really a differentiator? I feel many of you will really try to bring down the cost to zero and that's what digital technology can do.

Arjun Raychaudhuri

We offered a transparent cost structure and as I was saying net promoters' call when customer sells is minus 87 percent, that say 9 out of 10 customers will never touch this produce ever again. We are kind of breaking our heads because this is the cheapest bid/ask spread in the market because of all the digital reasons. In short, all in charge that includes payment gateway charge, hedging transaction cost etc is coming around 4.5%. This is end to end cost, and in Indian context, that also includes 2% tax, payment charges etc. We are not talking about margins here. If the same customer wants to do the same physically, they face bid/ask spread all in 6 to 8 percent. Yet, we are getting killed because people are saying it is bad product. However, I am beginning to see that the transparency is beautiful; but it's a journey especially in

the emerging market. So, cost alone is unexpected. It will take some time to educate the customers before they take the product seriously.

Robin Martin

It will take some time to understand kind of cost customers are paying without realizing. Brian, what is your view on cost?

Brian Lan

For us we have many products, but the main cost that we have is the infrastructure building cost. In order to maintain this cost both in front and at the back end, we have to minimize our costs. I do not have big team and we do have to integrate everything to minimise our cost. It is something that we need to improve continuously. We have our savings programme where client could see the deposits. We need to give additional security so that clients' confidence could increase. They can see in their phone the amount of gold and cash are there in their account.

Audience Question

Hypothetically, if situation arises, say in kind of economic shock, when customers rush to you to withdraw their gold, do you have someone in the backend to support that situation and overcome the problem.

David Janczewski

It is certainly an interesting question. For us, we have our vaults and at the same time we are precious metals manufacturer. So we are offering physical delivery even as small as 1 gm of gold. So, for us, if that scenario happens, there would be lag when we can convert the vaulted gold into actual consumer deliverable; we hold large 400oz Good Delivery Bar for efficiency purposes. In practice, we could convert it into bar, or coin and making the actual delivery. I do not think there is more complexity than that.

Robin Martin

Right now dozens of service providers are working on the concept of digital gold. Do you think this space is

going to consolidate and we could see a handful of global service providers, or there continues to be lot of regional variations with lots of competing providers?

Alexey Romanchuk

We are digital gold service provider and we really think well about that. The current market is split into different pieces and there is no way to organize settlements in gold globally; we only are trying to apply the approach in the region may be. We hope it will give some results in the future.

Robin Martin

I hope it has been a fascination session and I wish many of your products will perform well in future. I wish you all the best.



Precious Metals Market Review and Outlook



(Left to Right) **Bart Melek**, Director, Head of Commodity Strategy Rates FX and Commodity Research, TD Securities (Chair), **Nikos Kavalis**, Director, Metals Focus, **Yuichi (Bruce) Ikemizu**, Head of Tokyo Branch, ICBC Standard

White House Turbulence, Gentle Fed Tightening Cycle and Fully Priced Equities Bode Well for Gold

Bart Melek, Global Head of Commodity Strategy, TD Securities

TD Securities Commodity Price Forecasts

| Commodity (Avg of forward month contracts) | Spot Price | 2017 | | | | 2018 | | | | Annual | | | |
|-----------------------------------------------|-----------------------|-------|--------|-------|-------|--------|--------|--------|--------|--------|-------|--------|--------|
| | | Q1A | Q2F | Q3F | Q4F | Q1F | Q2F | Q3F | Q4F | 2016 | 2017F | 2018F | |
| Precious Metals | | | | | | | | | | | | | |
| Gold | ¹ \$/oz | 1,260 | 1,219 | 1,260 | 1,275 | 1,275 | 1,300 | 1,300 | 1,325 | 1,325 | 1,250 | 1,257 | 1,313 |
| Silver | ¹ \$/oz | 17.03 | 17.42 | 17.25 | 17.75 | 17.75 | 18.50 | 18.50 | 19.25 | 19.25 | 17.11 | 17.54 | 18.88 |
| Platinum | ¹ \$/oz | 954 | 979 | 950 | 980 | 1,000 | 1,025 | 1,050 | 1,075 | 1,100 | 987 | 977 | 1,063 |
| Palladium | ¹ \$/oz | 776 | 767 | 785 | 785 | 800 | 800 | 825 | 825 | 850 | 613 | 784 | 825 |
| Base Metals | | | | | | | | | | | | | |
| Copper | ² \$/lb | 2.57 | 2.65 | 2.56 | 2.57 | 2.56 | 2.60 | 2.60 | 2.65 | 2.65 | 2.21 | 2.58 | 2.63 |
| | \$/tonne | 5,663 | 5,838 | 5,644 | 5,660 | 5,644 | 5,732 | 5,732 | 5,842 | 5,842 | 4,867 | 5,696 | 5,787 |
| Zinc | ² \$/lb | 1.19 | 1.26 | 1.17 | 1.24 | 1.24 | 1.32 | 1.36 | 1.40 | 1.40 | 0.95 | 1.23 | 1.37 |
| | \$/tonne | 2,627 | 2,778 | 2,575 | 2,734 | 2,734 | 2,910 | 2,998 | 3,086 | 3,086 | 2,091 | 2,705 | 3,020 |
| Lead | ² \$/lb | 0.94 | 1.03 | 0.98 | 1.04 | 1.04 | 1.15 | 1.15 | 1.17 | 1.17 | 0.85 | 1.02 | 1.16 |
| | \$/tonne | 2,072 | 2,278 | 2,161 | 2,300 | 2,300 | 2,535 | 2,535 | 2,579 | 2,579 | 1,867 | 2,260 | 2,557 |
| Nickel | ² \$/lb | 4.14 | 4.66 | 4.24 | 4.50 | 4.75 | 5.00 | 5.00 | 5.25 | 5.25 | 4.35 | 4.54 | 5.13 |
| | \$/tonne | 9,130 | 10,265 | 9,350 | 9,921 | 10,472 | 11,023 | 11,023 | 11,574 | 11,574 | 9,597 | 10,002 | 11,299 |
| Aluminium | ² \$/lb | 0.88 | 0.84 | 0.87 | 0.84 | 0.84 | 0.86 | 0.86 | 0.84 | 0.84 | 0.73 | 0.85 | 0.85 |
| | \$/tonne | 1,943 | 1,853 | 1,925 | 1,852 | 1,852 | 1,896 | 1,896 | 1,852 | 1,852 | 1,604 | 1,870 | 1,874 |
| Molybdenum | ³ \$/lb | 8.23 | 7.88 | 8.50 | 8.50 | 8.50 | 9.00 | 9.00 | 10.00 | 10.00 | 6.52 | 8.34 | 9.50 |
| Iron Ore | ⁴ \$/tonne | 61 | 86 | 66 | 65 | 65 | 60 | 65 | 65 | 65 | 58 | 70 | 64 |
| Energy | | | | | | | | | | | | | |
| WTI Crude Oil | \$/bbl | 51 | 52 | 52 | 58 | 60 | 62 | 62 | 64 | 64 | 43 | 55 | 63 |
| Brent Crude Oil | \$/bbl | 54 | 55 | 54 | 59 | 60 | 61 | 61 | 64 | 64 | 45 | 57 | 63 |
| Heating Oil (ULSD) | \$/gal | 1.61 | 1.60 | 1.58 | 1.70 | 1.85 | 1.85 | 1.80 | 1.85 | 1.95 | 1.36 | 1.68 | 1.86 |
| Gasoline | \$/gal | 1.67 | 1.58 | 1.65 | 1.80 | 1.80 | 1.85 | 2.00 | 2.00 | 1.90 | 1.40 | 1.71 | 1.94 |
| NYMEX Natural Gas | \$/MMBtu | 3.20 | 3.06 | 3.10 | 3.15 | 3.20 | 3.25 | 3.25 | 3.30 | 3.30 | 2.55 | 3.13 | 3.28 |
| AECO Natural Gas | \$/MMBtu | 2.17 | 2.01 | 2.50 | 2.55 | 2.60 | 2.75 | 2.75 | 2.80 | 2.80 | 1.67 | 2.42 | 2.78 |
| | CAD/GJ | 2.99 | 2.55 | 3.21 | 3.24 | 3.30 | 3.48 | 3.48 | 3.69 | 3.69 | 2.06 | 3.08 | 3.58 |
| Uranium | \$/lb | 20 | 24 | 22 | 25 | 25 | 30 | 30 | 35 | 35 | 26 | 24 | 33 |
| Newcastle Thermal | ⁵ \$/tonne | 62 | 82 | 78 | 80 | 82 | 85 | 85 | 85 | 85 | 66 | 80 | 85 |

Notes: F = Forecast, E = Estimate, A = Actual; 1. London PM Fix; 2. LME; 3. Molybdenum equivalent to moly oxide, FOB USA; 4. CFR China, 62% Fe, dry; 5. Japan CIF steam coal marker-Newcastle
Source: Bloomberg, TD Securities

Precious Metals

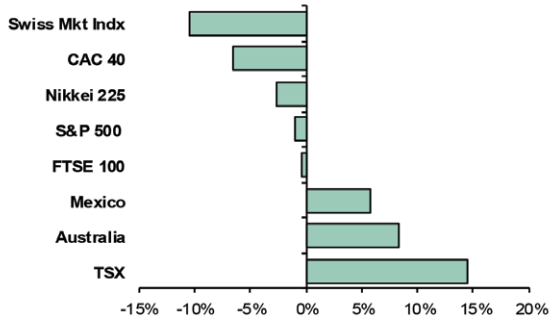
Global Real Rates, Macro and Market Risks to Keep Gold Bid Even as Fed Normalizes Policy

- While we remain relatively positive on gold longer-term, there is potential for a move to recent lows ahead of the June 14th FOMC rate decision, or if data improves and the Fed perceived to be more hawkish
- Real interest rates should continue to be low, yield curve relatively flat in the US as it increasingly becomes likely that President Trump's fiscal stimulus will take longer than expected, suggesting the US central bank may well be slower in raising rates away

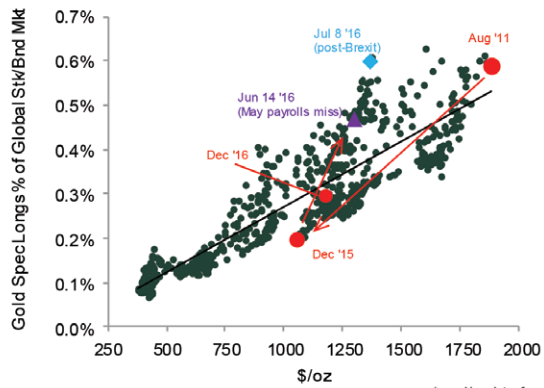
from emergency levels than previously expected

- Easy central bank monetary policy globally (ECB, PBoC, BoC and BoJ) will likely continue to stoke interest in gold and silver, as the keep global real rates low and negative in many cases and an equity correction is very much a possibility
- Opportunity and carry cost impediments to holding gold, which materialize amid somewhat tighter CB policy, may well be trumped by safe haven demand. Investors tend to overweigh in gold whenever markets worry that monetary policy could be behind the inflation curve or when sharp equity market corrections are a risk.

Gold as a Non-commodity Equity Hedge (correlation of weekly returns, 1990-current)



Source: Haver, TD Securities



Source: World Bank, BIS, Bloomberg, TD Securities * weekly data from Jan '04 to Dec '16



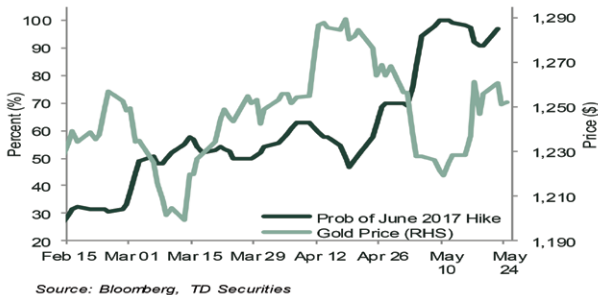
Real Rates Drive Gold, Not Inflation Alone - Fed, Other CB Policy Biases Key



Source: Bloomberg, TD Securities

Fed Rate Hike Containing Gold Upside for Now

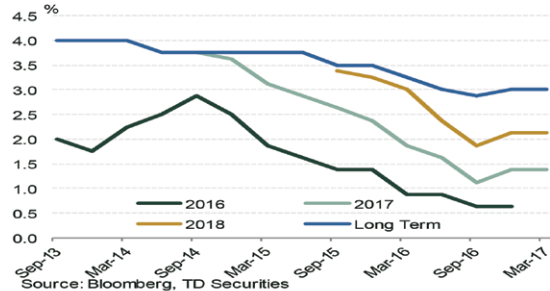
Period Ahead June Fed FOMC and Likely Hike a Risk



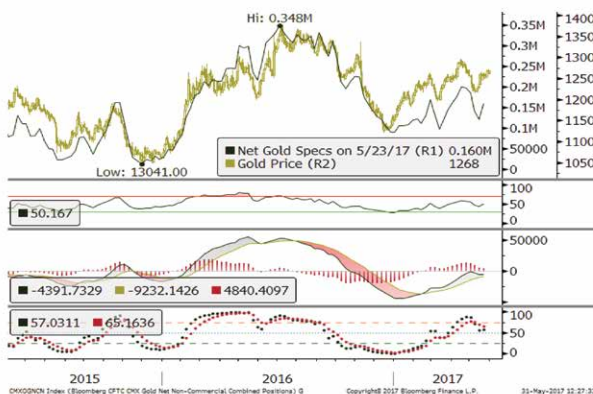
Source: Bloomberg, TD Securities

FOMC Rate Projections Key Commodity Drivers

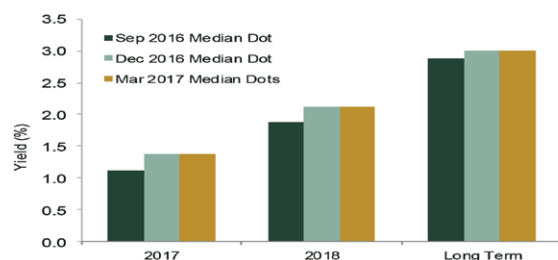
Steady Rate Trajectory Supportive



Source: Bloomberg, TD Securities

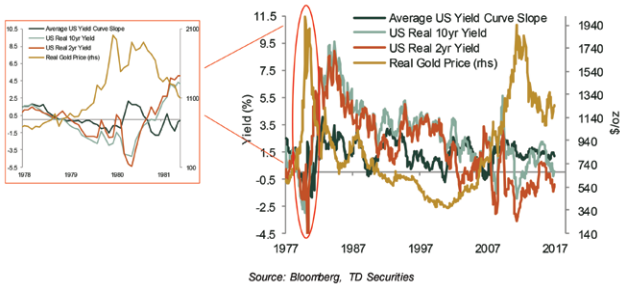


Source: Bloomberg, TD Securities



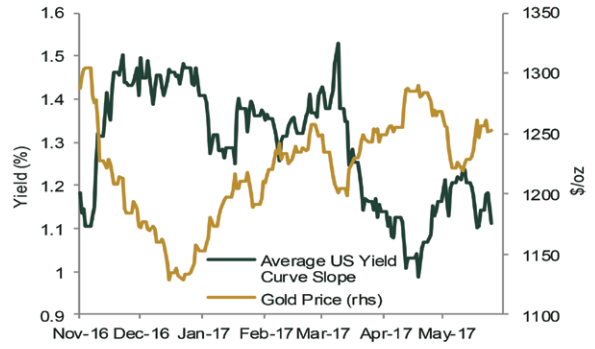
Source: Bloomberg, TD Securities

Gold Can Rally Even as Fed Tightens—Low Real Rates and Behind the Inflation Curve Chatter the Reasons

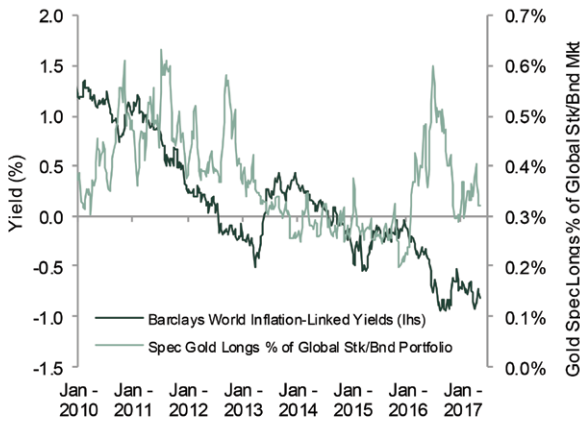


Yield Curve Slope Drives Gold

Low Carry Costs, Flattish Curve — Good For Gold

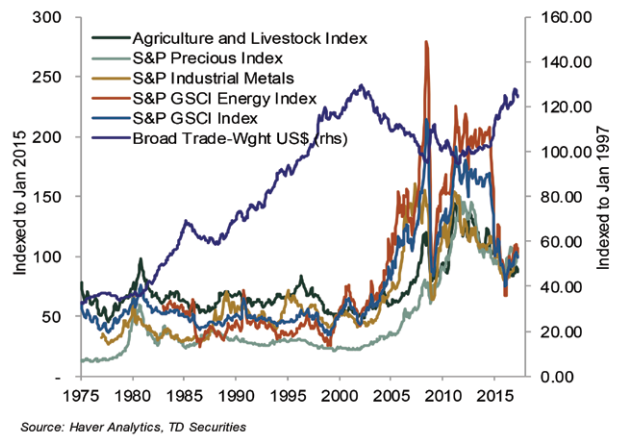


Negative Global Yields Drive Demand for Gold



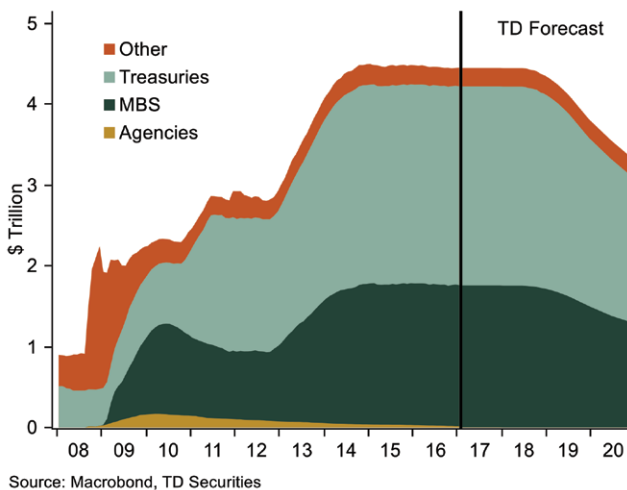
Negative Global Yields Drive Demand for Gold

Commodity Index Performance vs USD



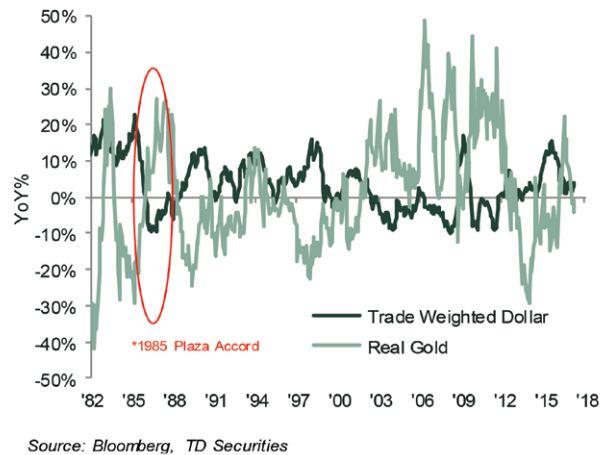
Balance Sheet: Forecasts for the Wind Down and Beyond

Fed Balance Sheet: Asset Runoff

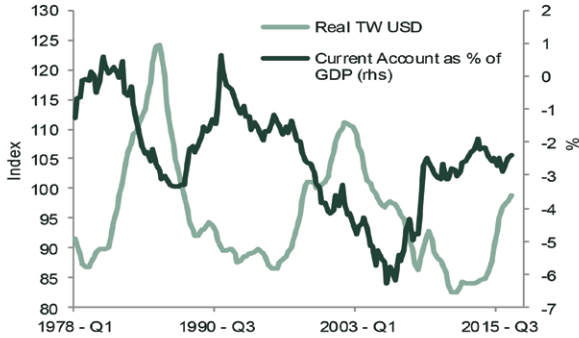


How Can Trump Weaken the Dollar?

USD and Gold So Happy Together



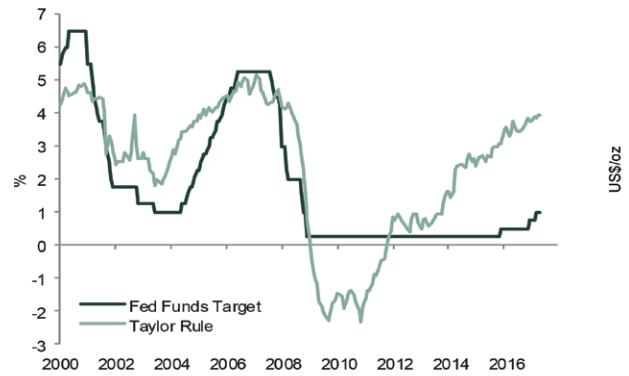
Administration Concerned Strong USD Will Deepen Current Account Deficit



Source: Haver, TD Securities

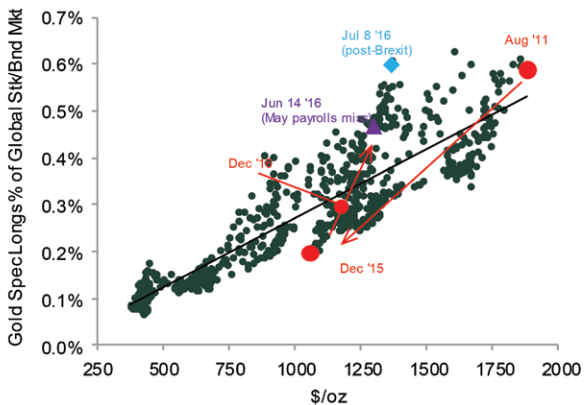
Gold Responds to Fed Dynamics

Food for Thought: Fed Behind the Curve Based on Taylor Rule



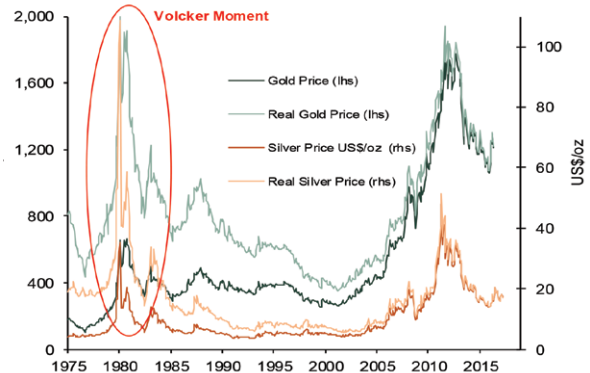
Source: Bloomberg, TD Securities

Global Risks to Drive Investor Positioning to Overweight Gold



Source: World Bank, BIS, Bloomberg, TD Securities * weekly data from Jan '04 to Feb '17

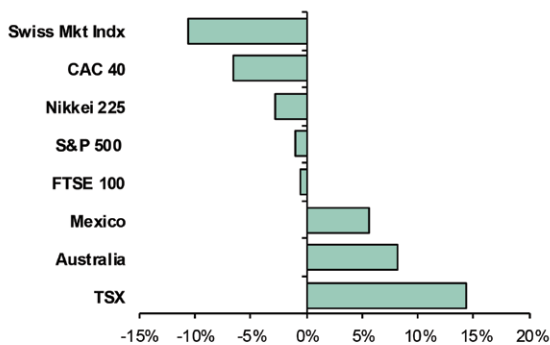
Gold Rises When Fed Behind Curve, then Plunges When Central Bank Catches Up



Source: Bloomberg, TD Securities

Gold Appeals When Non-Commodity Equities Falter—Earnings Concerns, Brexit and Other Risks a Supportive Catalyst this Year

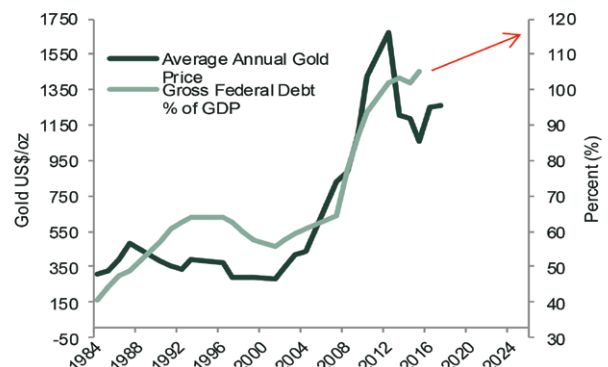
Gold as a Non-commodity Equity Hedge
(correlation of weekly returns, 1990-current)



Source: Haver, TD Securities

US Relative Fiscal Situation to Deteriorate—Which Tends to Be Gold Positive

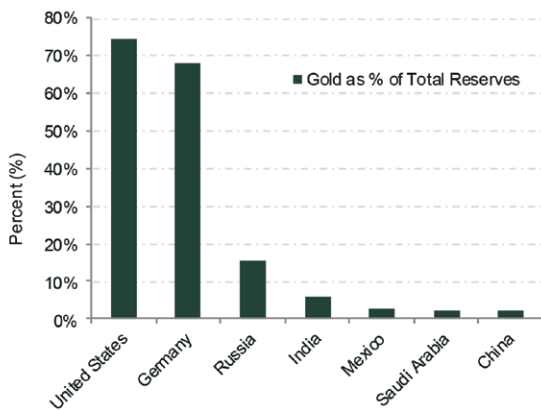
Gold vs Government Debt-to-GDP



Source: Federal Reserve Bank of St. Louis, Bloomberg, TD Securities

Modest Gold Share in FX Reserves Outside Western World

Gold in Reserves Has Lots of Room to Grow in Emerging Markets



Source: World Gold Council, TD Securities

Gold Reserves of Top 10 Countries

| | Gold Reserves tonnes | Total Reserves \$billion | % Gold |
|---------------|-------------------------|-----------------------------|--------|
| United States | 8,133 | 412 | 75.1% |
| Germany | 3,378 | 185 | 69.4% |
| IMF | 2,814 | n/a | n/a |
| Italy | 2,452 | 137 | 68.3% |
| France | 2,436 | 145 | 64.2% |
| China | 1,843 | 2,953 | 2.4% |
| Russia | 1,680 | 378 | 16.9% |
| Switzerland | 1,040 | 679 | 5.8% |
| Japan | 765 | 1,171 | 2.5% |
| Netherlands | 612 | 36 | 64.0% |

Source: World Gold Council, TD Securities

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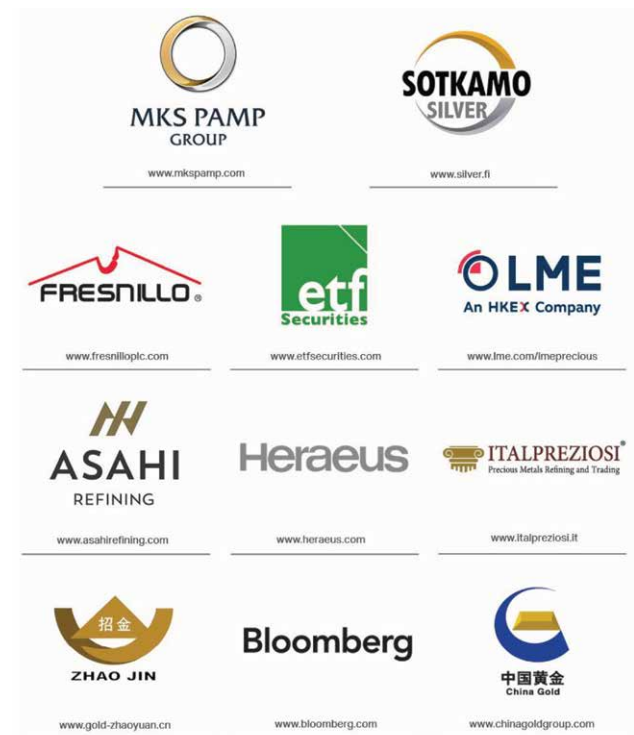
Global Silver Market Review and Outlook

Nikos Kavalis, Director, Metals Focus

About Metals Focus

- Independent
- Highly experienced
- Far reaching travel programme

Silver Focus 2017 sponsors



End of Silver Bear Cycle

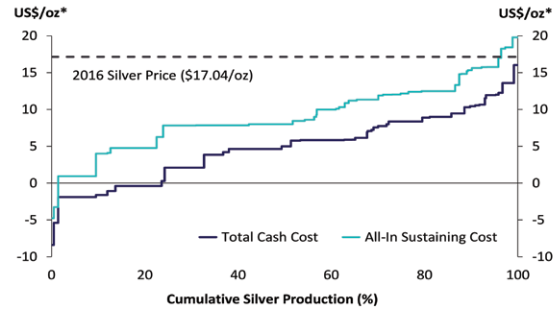


Source: Bloomberg

Gold : Silver Ratio Uptrend Reverses



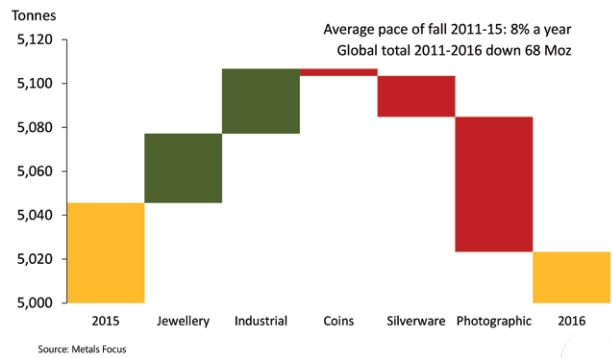
2016 Cost Curves Remain Relatively Healthy



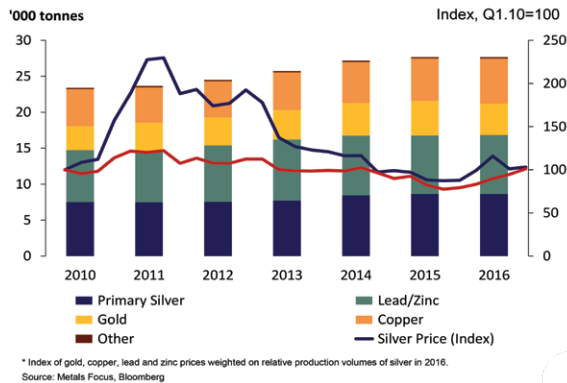
2016 Surplus, Mainly Due to Bar & Coin Losses



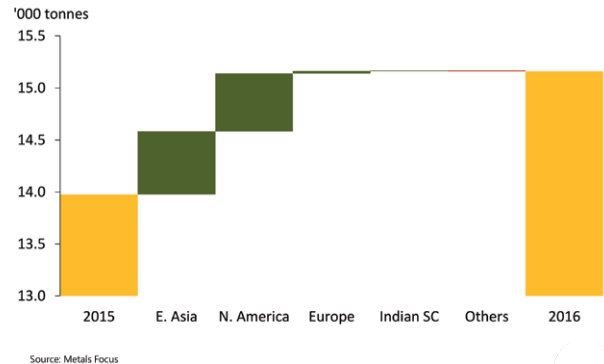
Recycling Down at the Margin



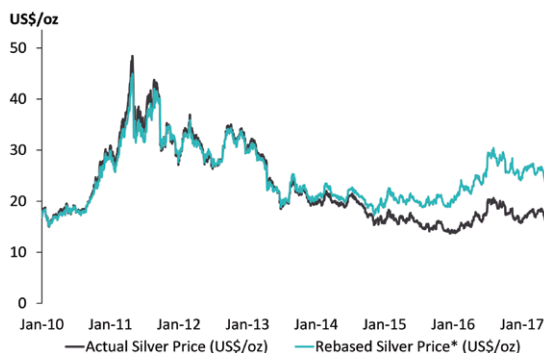
Pause in Mine Production Growth



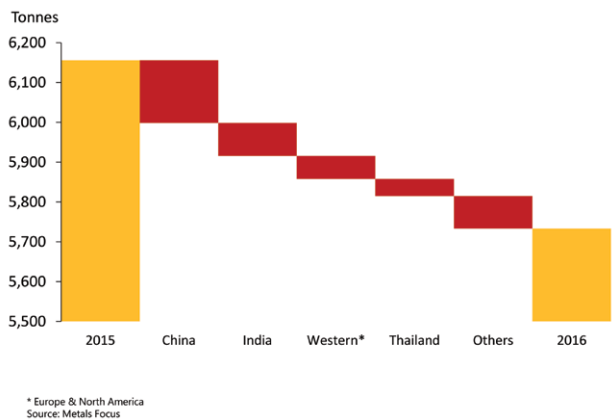
Industrial Demand Up 8% to 5-Year High



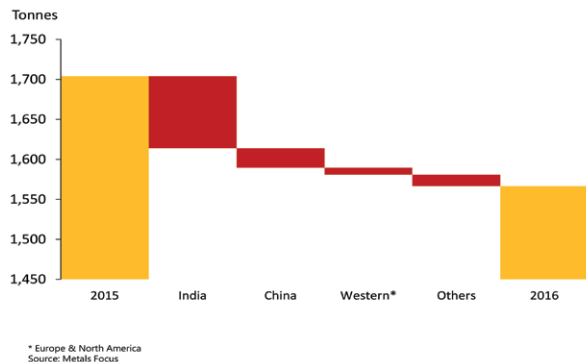
Windfall from Weaker Currencies for Mine Costs



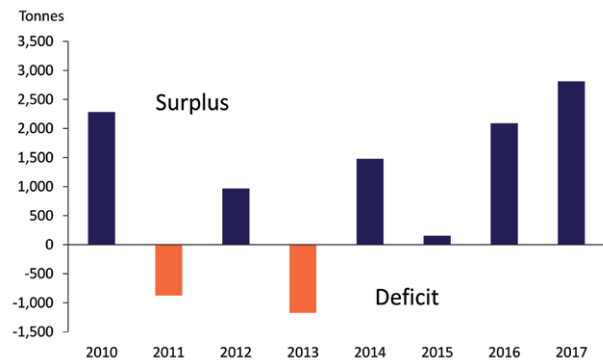
Jewellery Demand Falls by -7%



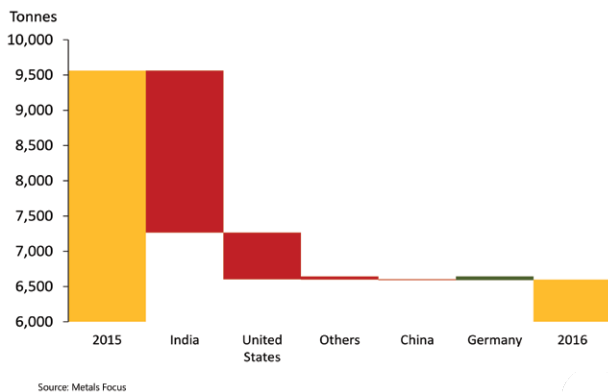
Silverware Demand also Lower



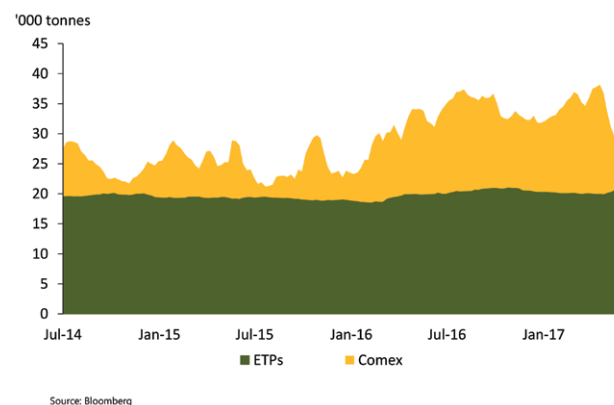
Once again, no support from fundamentals



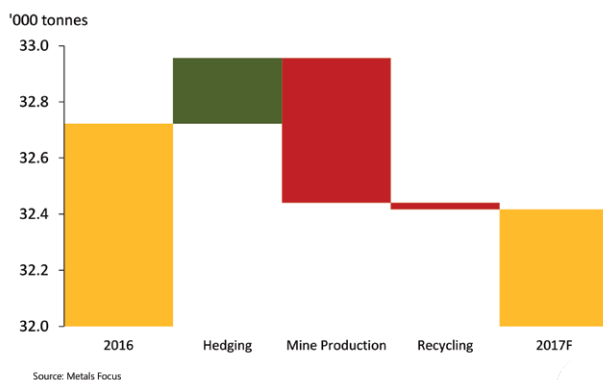
Physical Investment Down by One-Third to 6-Yr Low



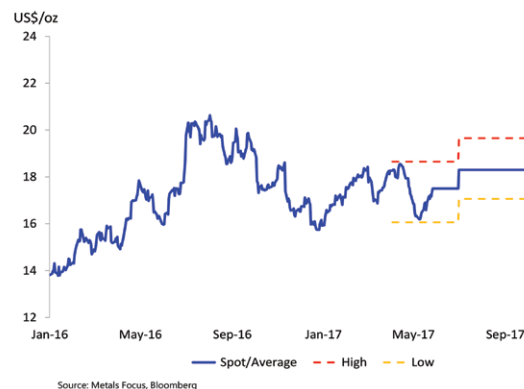
Scope for Healthy Inflows into Futures



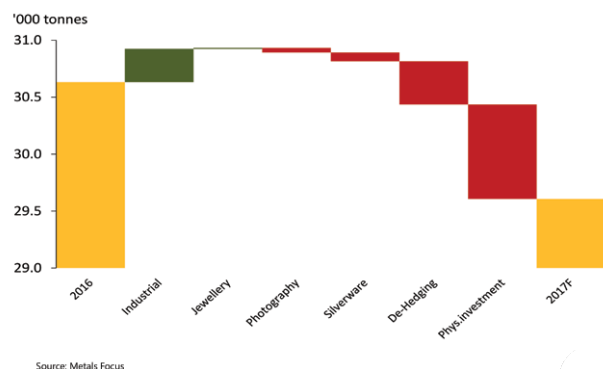
Global Supply Forecast: 2017 Down 1%



Silver Price Forecast for 2017: \$18.30, +7%



Global Demand Forecast: 2017 Down 3%



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Global PGM Market Review and Outlook

Yuichi (Bruce) Ikemizu, Head of Tokyo Branch, ICBC Standard

Platinum – Gloomy Environments Continue



- Above ground stock could surpass 280 tons end 2017
- 4.5ton over-supply 2016
- 6.7ton over-supply 2017
- Concerns over Diesel cars

Gold- Platinum Spread



- Gold premium now 2.5 years.
- Investors buy gold neglect platinum
- Political uncertainty help the gold premium over Pt.

Palladium – Going After Platinum



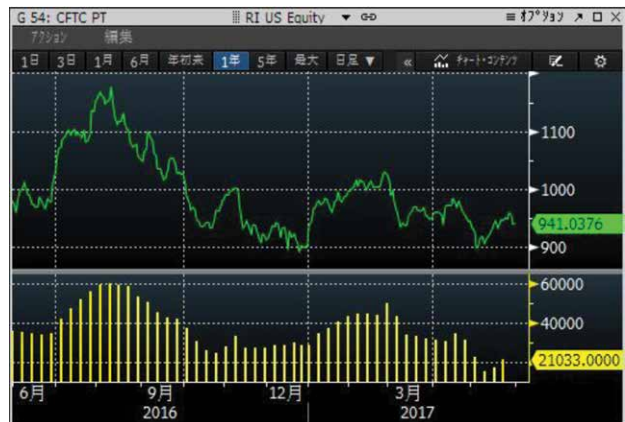
- 2016 physical deficit 36.5 tons
- 2017 physical deficit 43 tons
- Autocatalyst demand keep recording historical high – 2016 248ton, 2017 255ton

PT-PD Ratio – Will Pd surpass Pt?



- Palladium is getting closer to Pt.
- Contrasting Supply & Demand favors Pd
- In one year time Pd could surpass Pt in price.

Pt Nymex Spec Position



- Spec position decreased to a 5 year low.
- This could be a favorable factor for Pt.

Stronger Rand could help Pt?



- Cheaper Rand had been a downward pressure to Pt.
- Breach of 12 Rand could be stimulus to Pt go above 1200?

Pd Nymex Spec Position



- Biggest long position in the last 2 years.
- Long liquidation is the main downward pressure for Pd.

Outlook – Pt

- Platinum could have hit the bottom when it went down below 900 briefly in early May.
- However huge above ground stock and over supply situation would pressure Pt price.
- Pt price will still lag behind gold – stays in USD900-1100.
- The spread against gold has seen the biggest at \$350. Although we expect somewhat narrower spread this year but the gold premium will probably continue at least a year.

Outlook – Pd

- Physical deficit simply push Pd price higher.
- Pt/Pd ration will get closer to 1 as Gasoline engine far more selling than Diesel.
- Nymex long liquidation will probably pressure Pd but supply-demand imbalance will help hold any dips.
- Expect Pd to narrow the gap with Pt. Might set 800 as a bottom and move toward 900 in one year time. Spread against Pt would be less than \$100 and getting closer to Pt.

Bart Melek

Platinum at current rate is really painful for producers. For producers, it is really hard to make money at current rate. How do producers sustain at current environment?

Nikos Kavalis

The question of sustainability of miners has been going on for years now. There is no doubt that current low price is not supportive to continue the production for long. Sooner or later miners have to take a call. There is political pressure in South Africa; currency depreciated a lot against US dollar in the previous year. Most importantly, when we think about profitability of mines, we should not forget that discontinuing the operation also involves a lot of cost like closure maintenance, rehabilitation of workers etc. So one has to add the cost and calculate what should be the cut off point.

Yuichi (Bruce) Ikemizu

It is very difficult to tell how long it could be sustained. The situation is really not conducive to continue the operation for long. We could see cut down in production and as Nikos mentioned, we have to wait to see when miners will take the call.

Bart Melek

I fully agree with the view and I also do not have the idea about how long it could sustain. As an economist, I can tell that miners have to take the call as early as possible. On the other side, government has to take the initiative to support the sector as there is large employment involved.

Ever since the Volkswagen saga surfaced, platinum is one of the worst performers in PGM group. At the end of the day, the car makers have to take call between platinum and palladium and seeing the kind of price relationship, what do you foresee demand for platinum catalysts sustain to contain the CO2 emission in auto manufacturing?

Yuichi (Bruce) Ikemizu

Though the sale of diesel cars came down, but it is not so

big. The market of electric cars is very small and according to forecast, the share of electric cars will increase from current 1% to 4% in next ten years. So, demand for diesel and gasoline cars will continue to sustain. New engines have been developed which are extremely environment friendly. We don't see there is less demand for platinum compared to palladium in the long run.

Nikos Kavalis

I do not think Volkswagen scandal has affected the demand and I do not see this factor will continue to dominate. This is one of the factors among many factors. People are using fewer cars, small cars in Europe and we should remember that Europe carries 50 to 60 percent global platinum demand. Diesel engine emits more CO2 than gasoline engine when other factors remain neutral. Certainly less diesel engine cars will impact the platinum demand in the long run.

Bart Melek

Geo political tension augurs well for gold. It is the quintessential metal that stands tall against economic crisis. However, it is not performing as strongly as it could be given the fact that geo-political situation is not well at in the world. Why?

Yuichi (Bruce) Ikemizu

It is because stock market is performing exceedingly well. I am really surprised to watch why stock market is flying so high. It is absolutely interesting to see that at this moment, everything is so high – stock market and the US bond. People do not want to sell gold seeing the geopolitical problem, but at the same time, they cannot stop investing in stock market seeing the spectacular rise.

Nikos Kavalis

It is true that geopolitics does impact the gold demand, but at present situation is not so grave. At the end of the day, despite all the nuisance that is erupting from Trump administration, US economy will not collapse. The middle-east problem has been there for quite sometime. Yes, North Korea problem is little different at the current time. Investors really want to see long term growth. Therefore, they are less concerned about short

term blips in the market.

Bart Melek

I agree with views that US stock market has attracted a lot of money. Fact is geopolitical factors did not influence monetary policy; it has been kept quite accommodative. However, things can change really fast if Trump administration fails to perform in fiscal policies. It should be seen closely if Trump administration keeps its promise on individual and corporate tax cuts. Money can start moving to other assets very fast in that kind of eventuality.

Questions

Robin Martin to Nikos Kavalis

In your presentation, what explains exactly the flat trajectory of (silver) ETP CHART? And secondly, if price moves 20%, do you see new inflows?

If you see the investment pattern, 50 to 60 percent investment is held by institutional players in case of gold and for silver, it is majorly held by individual investor. So, portfolio managers can take call at any point of time which could impact the chart. On the second part of the question, what is interesting to see that in last few months, we have seen very chunky flows off the fund and most importantly, some of these funds are governed by theory of macro-economics and so on. This creates a risk of chunky flows in and out that we have seen recently. That explains why the chart is looking so flat.

Bart Melek

Industrial characteristic does carry 60 percent of demand in gold. Do you think with rise of every percent in price, volatility will rise by double?

Nikos Kavalis

The industrial characteristic does amplify or dampen the price at times, but I do not see anything could happen either for gold or silver in near term. If you see few years back when everybody was expecting price to go in straight line - higher - on silver's story and things changed suddenly. I do not know whether investors will buy again on line of that kind of story.



Conference Summary

John Reade, Chief Market Strategist, World Gold Council



It has been full one and half day conference and as Sunil Kashyap said yesterday that it is “the end of the beginning for the SBMA”. More than 330 delegates, 25 countries from four continents for the inaugural conference is a fantastic achievement. We wish to see few more countries, like Peru and Brazil, next year to declare the conference truly global.

I would start with the speech of Guest of Honour, Mr Satvinder Singh, Asst. CEO, IE Singapore. He emphasizes two important points – one, the tremendous growth that has taken place in Singapore gold market

since the removal of GST in October 2012, which culminated in US 100 billion dollars in trade flows in three years. This is a clear indication what one can do if tax is removed from gold. Secondly, he outlined about essential components of regional hub in the gold market. It includes talent pool, financial strength, neutrality and jurisprudence. Singapore has a fantastic physical infrastructure like vaulting, transport and air connectivity. He also mentioned that Singapore had identified a need for an organization to represent the precious metals industry in Singapore and hence the creation of Singapore Bullion Market Association. He concluded by suggesting more Asean regional players to be involved with SBMA and Singapore.

Moving on, I gave the speech on “Gold in a time of turbulence”. I showed gold had performed in the last period of turbulence during the financial crisis. I explained that we are living in an environment with a lot of turbulent features potentially. I demonstrated that US equities, US bonds, and the US dollar - all relatively expensive, yet, gold is fairly priced on a long-term basis. I also showed at the end that how gold is not just for time of turbulence.

Moving onto first special address by Ruth Crowell, CEO, LBMA. She gave us brief but excellent summary of the developments of London market. Two phrases of her that stood are– first “Exhausted by Regulation”, which I think is a good description to what London market had seen imposed upon it in the course of last four to five years post-financial crisis; and second, “Conduct anxiety”. In other words, bankers and traders are unwilling to do what they would like to do because they are afraid

of compliance standard hanging over their shoulders. The fact that if they are found guilty of misconduct, it can mean jail or personal liability as well. Ruth went on describing the transparency initiative that LBMA is currently involved with. She described precious metals investment is like “swimming in the pool of dark ink”. It was less pleasant perhaps discussion on the enforcement- the removal of Refinery Element from London Good Delivery List and also the expectation that there will be more refiners falling off the Good Delivery List in relatively near term for not able to meet the volume target. Finally, Ruth concluded by saying that “our experience as an association is something we can share”.

The second special address is from David Mann, the Chief Economist- Standard Chartered Bank. “Welcome to the jungle”, I think, was interesting way to address it. He picked up the common theme of global turbulence. But he did make the point that this part of the world is the best neighbourhood to be in even in this potential likely turbulent environment. It is interesting to see that Asia is responsible for 60% of global growth; China contributes a third of global growth and Asia, ex-Japan and China, (I guess mostly ASEAN) stands sixth in the global growth. I think there is a bit of contradiction on China at the moment – on one hand, Chinese government is very keen to double the GDP by 2020 (I think it is doubling from 2013 and so it’s a growth rate of 6.5 to 7 percent they are looking for) and on the other hand we see rebalancing attempt taking place there. I am also seeing an attempt to rein in a rapid credit growth. I think it is going to be difficult balance between those different objectives. Certainly, China has regional importance in Asian economy.

Then we had a very special “Roundtable on ASEAN”. Asean region is growing and getting richer, middle class is increasing rapidly. Running through the countries

individually, Myanmar is a new democracy which is opening up its new gold market, quite potential of mining. Laos, a small country with large gold market, but it does have high taxes. Vietnam on the other hand has a longstanding gold culture which has been helped and hampered by government in the past. Currently going through a phase of liberalization after five years of tight control. Certainly, I think there is enormous potential in Vietnam, but regulatory uncertainty will definitely make it difficult to grow. Indonesia is “the elephant in the region” with vast population, large gold production, but gold market seems to be slowly shrinking due to high taxes and duties. In the case of Thailand, it has moved from jewellery dominated market to more investment focussed. It does not seem fit to me with 7000 shops selling gold, but seems as if jewellery market could potentially come back to life. Thailand is also large importer and exporter and has unusual 965 fineness gold market and also has interesting size of trading of baht, very different from ounce of bar. And finally, Singapore is a great example of how liberalization can kickstart the gold industry. There is no comment on domestic demand in Singapore, though.

The next one is “Shaping of Market Infrastructure in Asia” chaired by Robin Martin. I think Robin did a very good job by making the point that market infrastructure is critical to gold market. With regulatory changes, by pushing activity towards exchanges, one could regularize the market as well. He made the point that though most new contracts fail, for contracts or a new exchange to be successful, four aspects have to be addressed: (1) The need to solve real world problem; (2) the need to attract a broad range of physical and financial participants; (3) the need to get the product and operating model right and (4) finally participants need to have right incentives. Unless you have these four criteria it is unlikely for the product to be successful.

On individual speaker's comment, I will start with Philip Klapwijk. He made an interesting comment that gold trade has increased till 2013, and then stepped back. Over the couple of decades, we have seen big shift in fabrication demand going from west to east and the trade has followed that as well. He concluded by saying that he expects London OTC market and COMEX futures market to continue to be most important players in the international gold market. But China is steadily eroding the lead that two markets have.

Dr. Haywood Cheung discussed the CGSE RMB Kilobar, attracting 900 billion CNH liquidity in Hong Kong with tremendous arbitrage opportunities.

Waqar Chaudry discussed the new Australian stock exchange US denominated gold futures contract, its partnership with the Perth Mint, the centre that runs second largest gold refinery in the world from Australia, and the proximity to larger Asian demand.

Ryoichi Seki from TOCOM demonstrated how important gold and platinum are to the TOCOM exchange and showed the new contracts would be complementary to the exchange volumes and not cannibalistic.

Alex Shaw from London Metal Exchange updated us on the launch of LMEprecious which is due to take place on July 10th. We will see spot and future markets combine in the same trading venue which should be much cheaper and capital efficient than OTC market.

Moving on we have Dr. Rinjai Chakornpipat from Thailand Futures Exchange. She showed how domestically focussed gold contract could grow firstly, through offering smaller contract size, overlapping trading times with arbitrage facilities with international markets, and how a new contract launch of internationally standardized product could potentially boost futures trade in future.

Sunil Kashyap, this time representing Scotia Bank, again detailed Singapore's attraction as both trading and storage hub. Andrew Wang from Shanghai Gold Exchange then explained to the audience how the Shanghai Gold Exchange Benchmark was successfully launched in April 19, 2016.

We then had addition of the programme of Ghanaian Minister of Land and Natural Resources who gave an update on the mining industry and how the country is committed to social, economic developments through mining activities.

Marcus Grubb, representing World Platinum Investment Council, gave an upbeat presentation on platinum. He was unexpectedly positive on the outlook of diesel vehicle catalyst demand and excited about fuel cell potential. Pitching for investment into Platinum now he concluded, "Its always darkest before dawn".

Next we moved into "Building physical gold corridor in Asia" with Dr Haywood Cheung, Junxiang Wu and Raymond Chan. Essentially, the plan is to build 1500 tonnes of bonded vault with a design to tie together the gold trade in and around and into China, effectively to complete the tri-angle, between London which trades in troy ounce, Shanghai which trades in Yuan per gram and Xianhai which trades in CNH per gram. It will allow a lot of arbitrage trade, local swaps, products swaps as well – all based around LBMA – Shanghai Good delivery. Interesting to see it will be blockchain enabled as well. The discussion was followed by signing of MoU between CGSE and SBMA.

Moving on to the presentation of this morning, first presentation we had "New opportunities in gold- Islamic gold investment product" chaired by Shaokai Fan from WGC, assisted by William Chan of Singapore Exchange and Robin Lee from HelloGold. Shaokai gave a historical

perspective on gold in Shariah and how we at the World Gold Council helped to develop the Shariah Standard for gold in conjuncture with AAOFI. He explained gold as very good complement to existing suites of products compatible with Shariah and now we are into the product development and market development phase.

William explained the Singapore Exchange Kilobar gold contract launched in 2014, upgraded in 2015 with longer trading hours. He further explained how was this Shariah compliant and how relevant is it to Singapore gold market even if the volume is not large at the moment.

Robin Lee then took us to HelloGold. He gave us some interesting numbers: 815 million savers, \$440 billion of annual saving each year and 500 million with no access to affordable financial products. So HelloGold is an attempt to access this market through app based, low cost, small denomination physically backed gold which is vaulted in Singapore. It is also a Shariah opportunity as well using third party distribution channel.

Next was panel on “Fintech” led by Robin Martin of World Gold Council. We have David Janczewski from Royal Mint, Alexey Romanchuk from Copernicus Gold, Brian Lan from GoldSilver Central Pte Ltd. and Arjun Raychaudhuri from MMTC PAMP. Robin’s introduction was very useful talking about Fintech based disintermediation process, looking at simpler, cheaper, more secure, faster transaction and the way potentially to access the unbanked two billion people out there. It also opens up access to gold too. There seems to be clear application of blockchain within the gold supply and trading environment. David discussed how they started noticing the blockchain few years ago, spent few years investigating the possibilities, came up with RMG (Royal Mint Gold) using blockchain to simplify the gold transactions allowing direct ownership of physical gold, held in the Royal Mint vault with no annual management fee forever. I think ‘forever’ is an interesting comment when the company is around 1100 years to

making big promises.

Alexey from Copernicus Gold talked about multi currency platform physical gold, tokenized blockchain technology, very small transaction size along with gold savings for jewellery purposes. He spoke about settlement angle too.

GoldSilver Central appears to be multi-product gold company including Perth Mint Certificate. But the most of conversation was about GSC Live, app based trading technology uses MT4 with million of traders. He spoke about multi currency possibility, its divisible bars obviously something going to be offering access to younger generations.

Arjun from MMTC PAMP gave, what he described, a very India focussed presentation, spoke about how MMTC PAMP is going very much from B2B background into moving into B2C world, accessing the typically the two dollar a day earning Indian potential customers who can now get access to mobile phone trading app with lot of transparency. I did like some of the things he said for the fact that the most common time to buy gold is between 10 and 12 am on Friday. The observation that 30 times price request before people actually buy might be similar to the ratio that trading desk in a private bank experience. The interesting things that he mentioned most price checks take place between 4 o’clock and 6 o’clock in the evening, but nobody ever trades. As far as I can understand, six weeks it has been in operation, it is called a ‘pilot’ but yet with millions of customers. So lots of challenges come ahead, and with challenges come scalability. It bodes well to tackle millions of potential customers, but then you get to service them; you have to answer all the telephone calls, you have to answer all the price requests. And I did get the impression that it is being a very great learning curve by MMTC PAMP. It is not about the transactions – it is about an exercise to address all of the queries that are coming.

I will briefly talk about Q and A session here. One of the things that did strike me was the trust. I think it is going to be little difficult for a start-up company to get the degree of trust needed initially. And when someone is transacting in gold, it is certainly a question where the gold is stored even for a company which is 1000 years old, perhaps. The way we trade gold, whether it is through blockchain or whether simply through mobile phone, it certainly seems to be changing. I certainly get the impression that there are views amongst the panel that gold is going to be more of trading and investment product, perhaps less to be jewellery products like in the past.

Last comes the precious metals market review and price outlook from Bart Melek, TD Securities, Nikos Kavalis from Metals Focus and Yuichi (Bruce) Ikemizu from ICBC Standard. In Bart's case, he is fairly bullish and sees 150 dollar an ounce upside. I wonder he said so not having that sort of track record recently. He identifies potentially short-term risk in gold from the Fed reserve - either through the rate hike widely expected to take place, not only in June but also in the later part of the year and also the balance sheet shrinkage that Fed is likely to conduct. But his medium-term positivity comes from the fact that he expects that the real rate to stay low, not expecting US dollar to go up much from here and the political inaction in the US by President Trump may mean less tightening of Federal Reserve.

Nikos spoke about silver and the dichotomy between what has been in 2016 and 2017 relatively poor supply and demand fundamentals. Yet the price has increased last year and is set to increase quite a bit this year as well.

Bruce who admits not an analyst, and it is actually good to hear from a trader who works under strict framework. Trader can actually tell what they think than the analysts are. In case of platinum it is most gloomy future out there, but price at \$900/oz should be a bottom and

should certainly move up to \$1000/oz over next 12 months. The current spread to gold could widen up to \$350/oz, but then that would be opportunity to pick it up. In the case of palladium, it has the brightest future – it's deficit story, strong auto demand, potentially looking at parity with platinum.

I want to sum up by adding couple of points here.

This is inaugural conference of Singapore Bullion Market Association and I think it has been an excellent conference. We have had very packed agenda, interesting presentations, speeches and I want to thank everybody involved. I picked four main themes here and it is coming again and again. Singapore appears to be a great place to do business and an excellent place to organize a hub for precious metals. Now the conference is organized by Singapore Bullion Market Association and I guess they would say that, but joking aside, it is coming naturally from everybody engaged here. Second thing that has come through that ASEAN region is exciting; countries within ASEAN region have tremendous potential to develop further economically and potentially gold markets too. I am looking forward to hearing more of those markets with potentially more detail in the coming conferences. Thirdly, it is very clear that market infrastructure is very important and its really changing at the moment. Fintech I believe also has the potential applications for the gold industry both in terms of tracking supply and also from trading potentially encouraging demand. Finally, and it is impossible to ignore here, China is the enormous global player in the precious metals markets. In fact, the impact is enormous in the region; its like China sneezes and all gets cold nowadays. It is very clear after attending this conference.







































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