

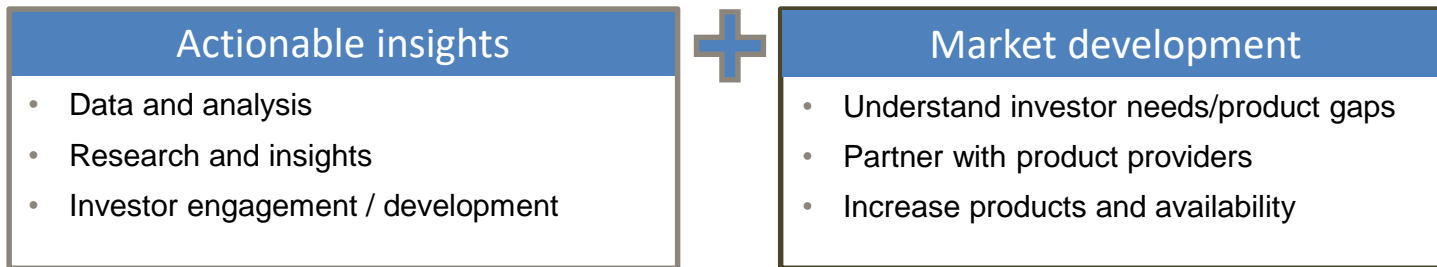
The Case for Platinum Investment

Marcus Grubb, Director of Market Development

World Platinum Investment Council

WPIC MISSION DEVELOP THE PLATINUM INVESTMENT MARKET

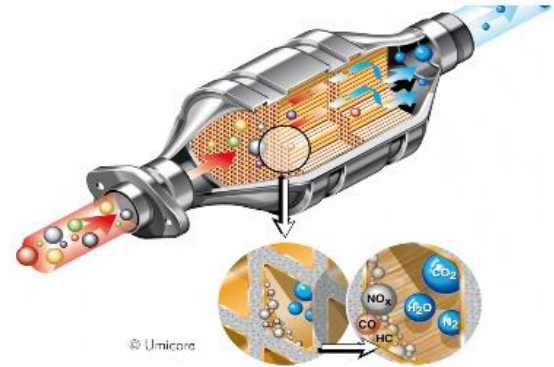
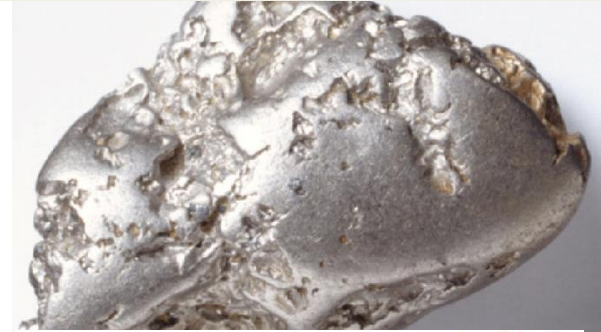
- Provide investors with objective and reliable platinum market data and insights
- Stimulate investor demand for physical platinum through targeted market development
- Members: Anglo American, Aquarius*, Impala, Lonmin, Northam, RB Plats



- 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



- 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

Platinum vs. Gold – Spread



Discount / Premium (Jan 2012 – Mar 2017)



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



The
Royal
Mint

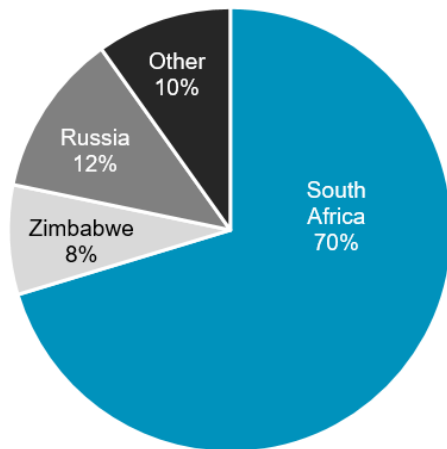


BullionVault

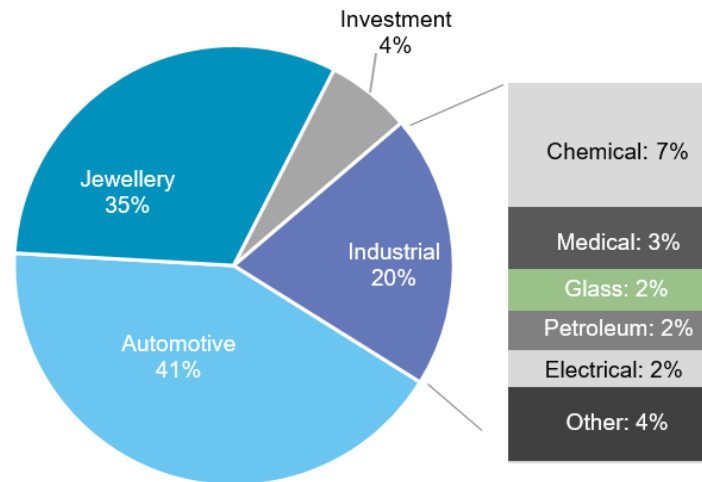
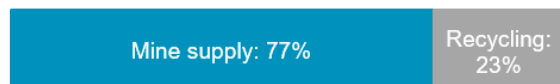


PLATINUM DEMAND AND SUPPLY ~8MOZ MARKET

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	5,855	5,230	6,195	6,055	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	7,835	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	-755	-735	-340	-360	-65
Above Ground Stocks	3,385	2,650	2,310	1,950	1,885

- 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

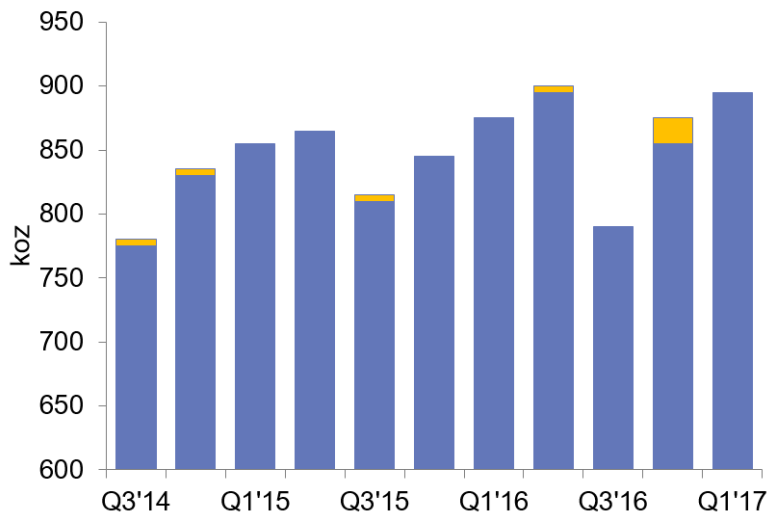
Source: WPIC Platinum Quarterly Q1 2017, SFA (Oxford)

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	150	-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

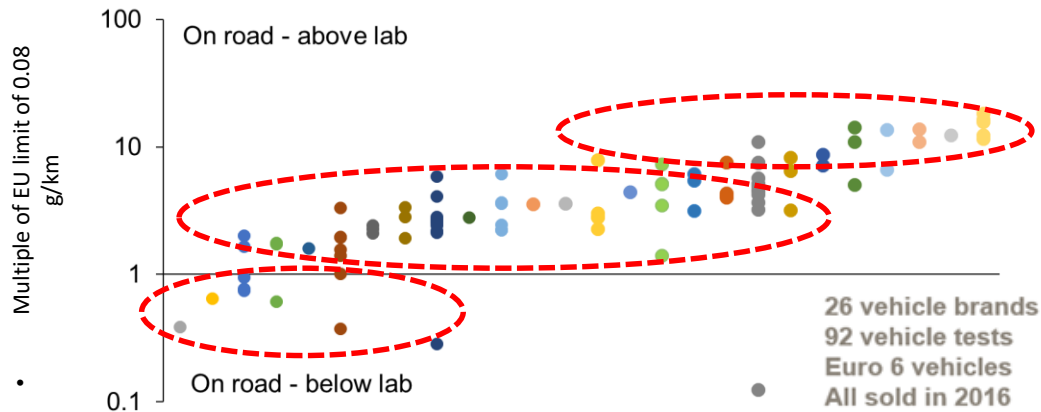


Source: WPIC Platinum Quarterly Q1 2017

- 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 NO_x strategies due to C40 as more cities focus on high NO_x diesel cars
- Higher platinum loadings to achieve low NO_x and higher SCR to avoid risk of non-compliance
- Low NO_x strategies not yet visible in platinum data

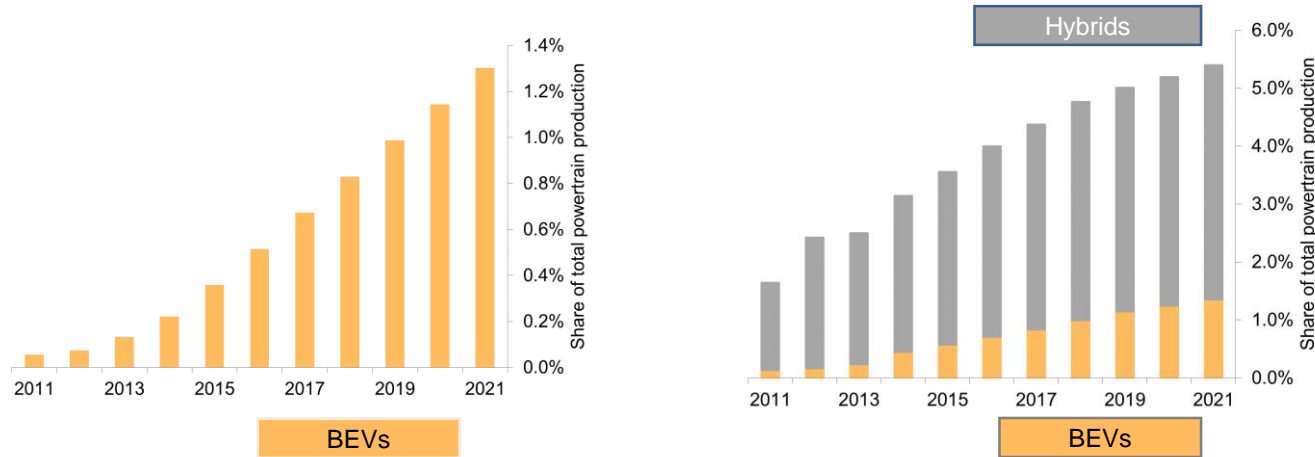
C40 CITIES MEANS LOWER NOX/ HIGHER PLATINUM

On-road testing results per auto brand (EQUA) 92 vehicles



- C40 city action to drive change in automakers to move low NO_x
- 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' NO_x 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

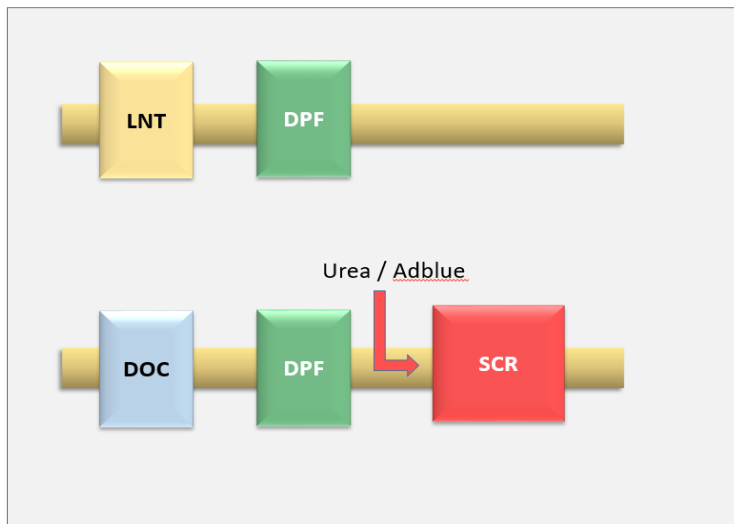
Battery electric vehicles have low impact on CO₂

FUEL CELL ELECTRIC VEHICLES ARE GROWING



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

Diesel car emissions control SCR and NO_x



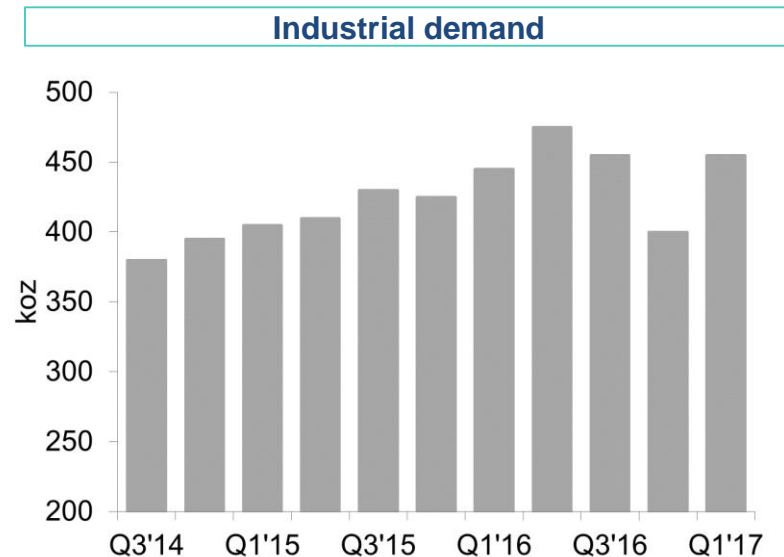
LNT: Lean NOx trap

DOC: Diesel oxidation catalyst

DPF: Diesel particulate filter

SCR: Selective catalytic reduction

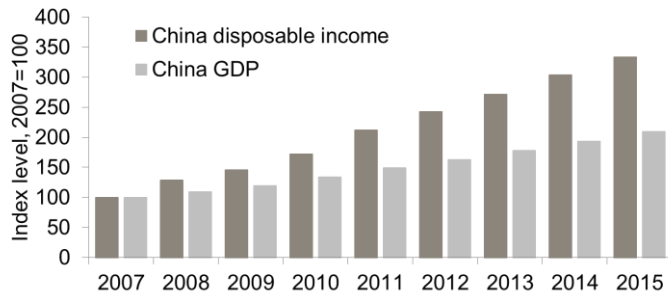
- Euro 6c RDE starts in September 2017
- Existing car platforms must achieve lower NO_x
- Increasing Urea (Ad Blue) dosing can reduce NO_x but requires larger DOC with higher platinum loading
- Higher loadings already in place?
- Automakers and fabricators unable to disclose proprietary loadings



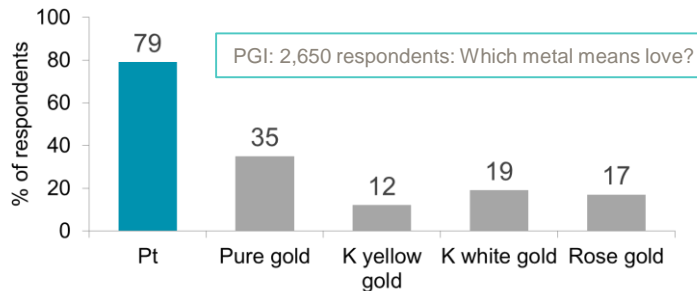
- Industrial demand segment is the most correlated to global GDP growth
- Petroleum plant closures in Q4'16 reduced net demand
- Medium term forecast is positive with robust industrial applications for platinum
- New industrial uses likely in the future

SIGNIFICANT GROWTH POTENTIAL IN CHINA AND INDIA JEWELLERY

China disposable income vs. China GDP

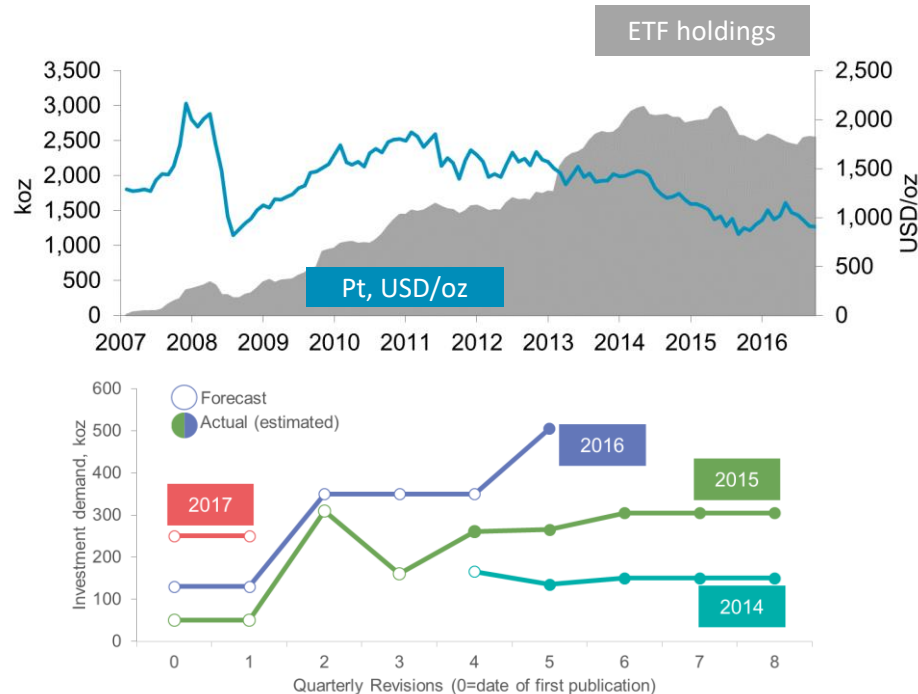


Platinum's unique 'love' brand strength in India



- 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

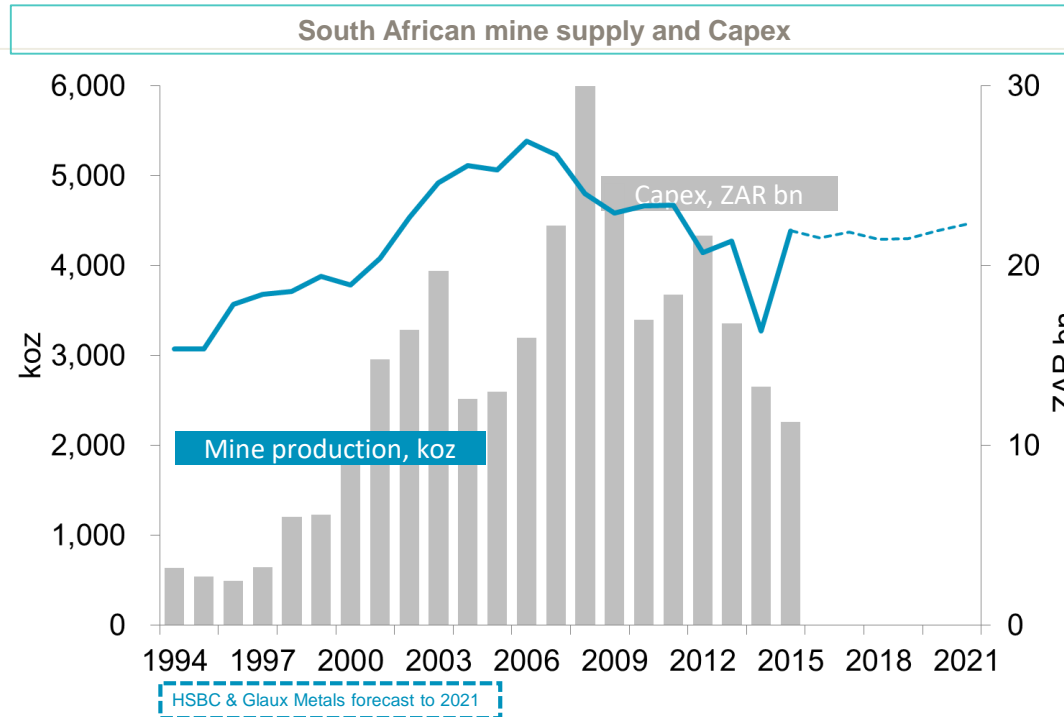
PLATINUM INVESTMENT HAS GROWN IN 3 YEARS AND ETFS STABLE



- 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

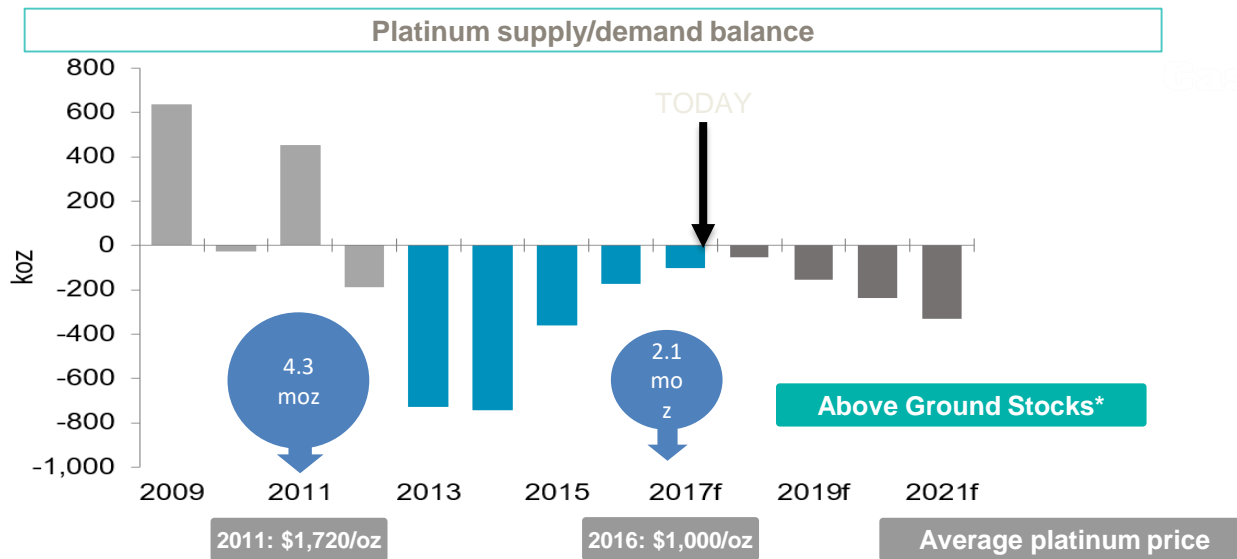
Strong and sticky demand for investment platinum

MINING SUPPLY IS CONSTRAINED: CAPEX DOWN



Harder to maintain current production and slow response to rising price

WPIC EXPECTS MORE DEFICITS TIGHTER MARKET



- Five consecutive deficits, opinion divided, WPIC expects a deficit
- An improvement in sentiment can quickly tighten the market and the discount to gold

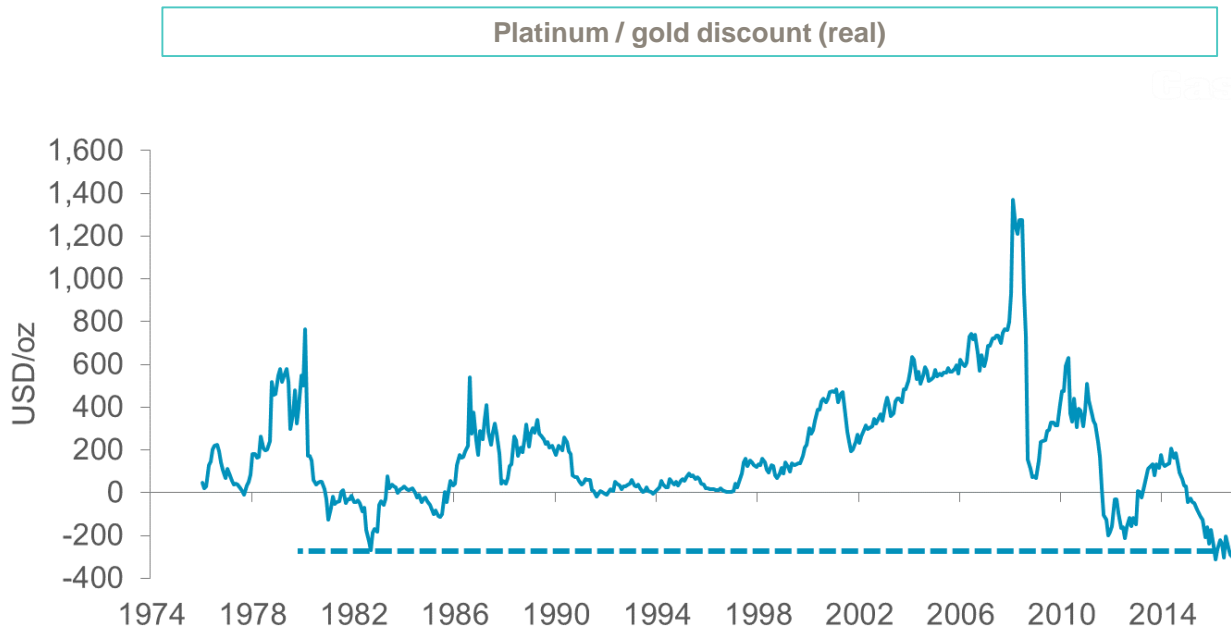
PLATINUM PERFORMS LONG TERM AND IS A DIVERSIFIER

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%)

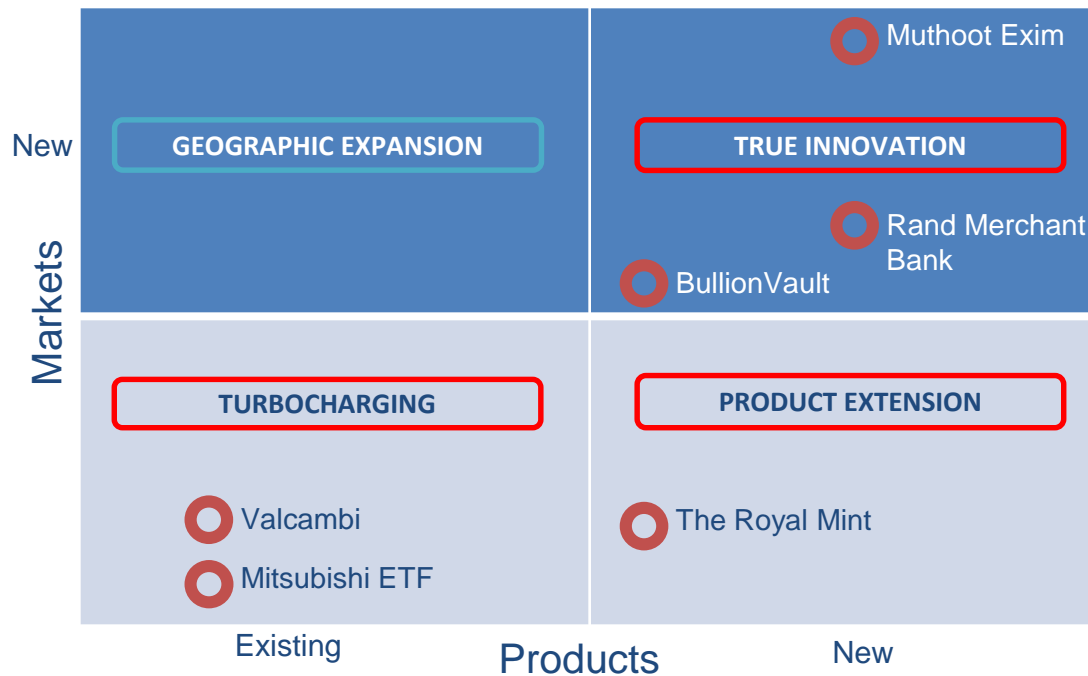
Notes: Annualised returns across each 5-year window. Total asset returns used, where applicable.

- 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

PLATINUM IS AT THE HIGHEST DISCOUNT TO GOLD IN 35Y



WPIC PLATINUM MARKET DEVELOPMENT STRATEGY



MARKET INTELLIGENCE : INDIA THE MARKET OPPORTUNITY

newinfo.com

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

- 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

Performance Since Launch



Muthoot

- 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



The Royal Mint

- 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



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



COPYRIGHT AND DISCLAIMER

This document is subject to the terms, conditions and disclaimers on the World Platinum Investment Council website www.platinuminvestment.com and below. The World Platinum Investment Council is not authorised by the Financial Conduct Authority to give investment advice and nothing within this document shall be construed as offering to sell or advising to buy any securities or financial instruments. Unless otherwise specified in this document all material is © World Platinum Investment Council 2015. All rights reserved. Material sourced from third parties may be copyright material of such third parties and their rights are reserved. While reasonable efforts have been made in the collection and presentation of the material in this document, neither the World Platinum Investment Council nor any third party supplier of material warrant the accuracy or completeness of such material nor accept any liability of any kind for the use of or reliance on such material.

Third Party Material

GlauX Metal Report Disclaimer

The author of this report (David Jollie/GlauX Metal) acknowledges the limitations and challenges of forecasting supply and demand fundamentals in the platinum market given the complex interaction between platinum prices, the prices of other materials, economic growth and supply and demand. The author acknowledges that external and internal factors could affect the balance of the platinum market over this time period and could cause actual results to differ materially from any forward-looking statements made here. Although the author believes the expectations reflected in the forward-looking statements to be reasonable, he does not guarantee future results. In preparing this research report, the author has utilised information from the public domain, which has not been verified and internal, proprietary models. This report therefore uses our best estimates of how the platinum market might develop over the period 2016 to 2021. Accordingly, any forward-looking statements contained in this report are based on the opinions of the author at the time of writing. The facts, analysis and findings presented in this research report do not constitute investment advice. The author does not accept liability for any losses arising from reliance upon the information presented in this research report, or in any excerpts from this report.

SFA (Oxford) material is © SFA Copyright reserved. All copyright and other intellectual property rights in the data and commentary reproduced in this presentation and provided by SFA remain the property of SFA, and no person other than SFA shall be entitled to register any intellectual property rights in the information, or data herein. No part of this data and commentary may be reproduced or distributed in any manner without attribution to the authors. SFA has made all reasonable efforts to ensure that the sources of the information provided are reliable, and the data reproduced are accurate at the time of writing. The analysis and opinions set out in the document constitute SFA's judgment as of the date of the document and are subject to change without notice. Therefore, SFA cannot warrant the accuracy and completeness of the data, and analysis, contained in this document. SFA cannot be held responsible for any inadvertent occasional error, or lack of accuracy or correctness. SFA accepts no liability for any direct, special, indirect, or consequential losses or damages, or any other losses or damages of whatsoever kind, resulting from whatever cause through the use of, or reliance on, any information contained in the document. The material contained herein has no regard to the specific investment objectives, financial situation or particular need of any specific recipient or organisation. It is not to be construed as a solicitation, or an offer to buy or sell any commodities, securities or related financial instruments. The recipient acknowledges that SFA is not authorised by the Financial Conduct Authority to give investment advice. The material is not to be construed as advice to the recipient or any other person as to the merits of entering into any particular investment. In taking any decision as to whether or not to make investments, the recipient and/or any other person must have regard to all sources of information available to him. This material is provided for general information purposes only and the use of and reliance of the content of the report is entirely at your own risk.

COPYRIGHT AND DISCLAIMER

This document is subject to the terms, conditions and disclaimers on the World Platinum Investment Council website www.platinuminvestment.com and below. The World Platinum Investment Council is not authorised by the Financial Conduct Authority to give investment advice and nothing within this document shall be construed as offering to sell or advising to buy any securities or financial instruments. Unless otherwise specified in this document all material is © World Platinum Investment Council 2015. All rights reserved. Material sourced from third parties may be copyright material of such third parties and their rights are reserved. While reasonable efforts have been made in the collection and presentation of the material in this document, neither the World Platinum Investment Council nor any third party supplier of material warrant the accuracy or completeness of such material nor accept any liability of any kind for the use of or reliance on such material.

Third Party Material

Venmyn Deloitte Material

In reading this presentation you acknowledge the primary focus of the Venmyn Deloitte research is to identify and investigate any observable relationship between capital expenditure and refined platinum production in isolation of other factors and is limited in this respect and applying the principle of ceteris paribus. In preparing this research report, Venmyn Deloitte utilised information from the public domain. Venmyn Deloitte has not verified this information. Factors such as unforeseen political and industrial disruption, currency fluctuation and interest rates could have an impact on the South African platinum mining industry. The majority of these factors are, and will be, beyond the control of the South African platinum mining industry. This report contains forward-looking statements. These forward-looking statements are based on the opinions of the Venmyn Deloitte research team at the date the statements were made. The statements are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those forward-looking statements anticipated by the Venmyn Deloitte research team. Factors that could cause such differences include changes in world platinum markets, equity markets, costs and supply of materials, and regulatory changes, as well as the factors noted above. Although Venmyn Deloitte believes the expectations reflected in the forward-looking statements to be reasonable, Venmyn Deloitte does not guarantee future results, levels of activity, performance or achievements. The facts, analysis and findings presented in this research report do not constitute investment advice. Venmyn Deloitte and its directors accept no liability for any losses arising from reliance upon the information presented in this research report, or in any excerpts from this report.