

PLATINUM QUARTERLY PRESENTATION Q1 2020

London

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AGENDA: PLATINUM QUARTERLY – Q1 2020 AND 2020 FORECAST

1. Introduction

Paul Wilson, CEO

2. Platinum Quarterly, fundamentals review

Trevor Raymond

3. Focus on fundamental drivers

Trevor Raymond

4. Questions

Paul Wilson

Trevor Raymond



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Supply, demand and balance: Q1'20, 2020f

Trevor Raymond, Director of Research

3. Focus on fundamental drivers

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Q1 2020 SUPPLY: TOTAL SUPPLY DOWN 6% ON LOWER RUSSIAN OUTPUT AND WEAK JEWELLERY RECYCLING

SUPPLY	Q1 2019 // Q4 2019		Q1 2020
Refined Production	1,320	1,579	1,283
South Africa	874	1,189	879
Zimbabwe	113	106	118
North America	85	94	93
Russia	204	149	150
Other	44	41	43
Inc(-)/Dec(+) in Producer Inventory	+12	+48	+0
Total Mining Supply	1,332	1,627	1,283
Recycling	549	556	490
Autocatalyst	413	420	406
Jewellery	121	121	70
Industrial	15	15	13
Total Supply	1,881	2,183	1,773

- South Africa supply flat (+5 koz) YoY on power disrupted Q1'19
- Russian supply down 26% (-54 koz) YoY on pre-commissioning of a new refinery
- Recycling supply down 11% (-59 koz) YoY
 - autocatalyst -2% (-7 koz) YoY
 - jewellery -42% (-51 koz) YoY
- Total supply down 6% (-108 koz) YoY, but down 19% (-410 koz) QoQ

Q1 2020 SOUTH AFRICA MINE SUPPLY FLAT ON SMELTER OUTAGE AND COVID V WEAK Q1'19

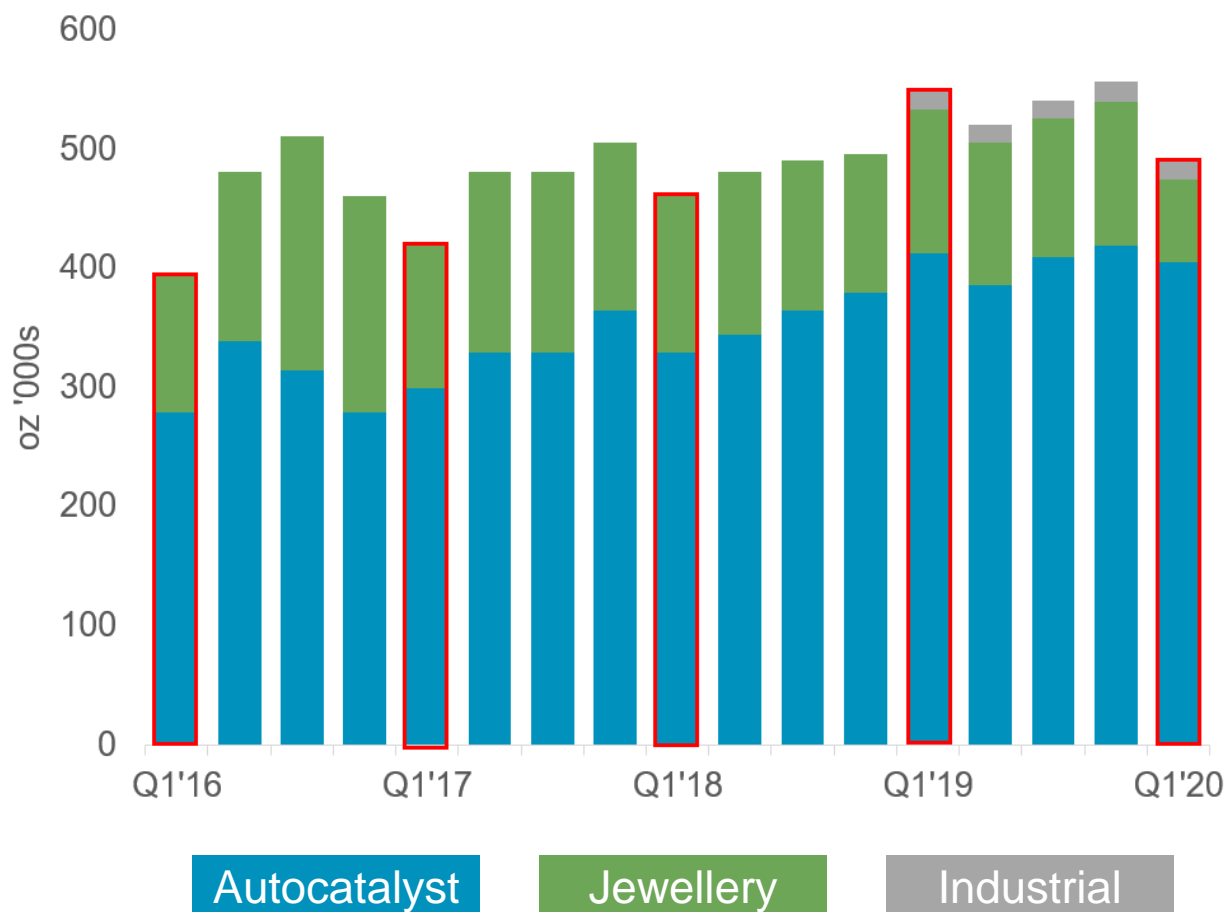
South African quarterly mining production (koz)



- South Africa Q1 weaker than seasonally expected
- Angloplat converter (ACP) outage and force majeure March 5 (-500 koz in 2020)
- COVID-19 lockdowns March 26
- Flat YoY vs. weak Q1'19 due to Eskom

Q1 2020 RECYCLING: AUTO FLAT, JEWELLERY DOWN ON COVID LOCKDOWN

Recycling (koz)



- Q1'20 recycling down 11% (-59 koz) YoY
- Jewellery recycling down 42% (-50 koz) YoY as COVID-19 lockdowns impacted jewellery sales in key China and India market
- Autocatalyst recycling down 2% (- 7 koz) YoY. COVID-19 lockdown impacted North American and EU only towards the end of the quarter
- Industrial recycling (including electronic scrap) down 11% (- 2 koz) on weak platinum prices

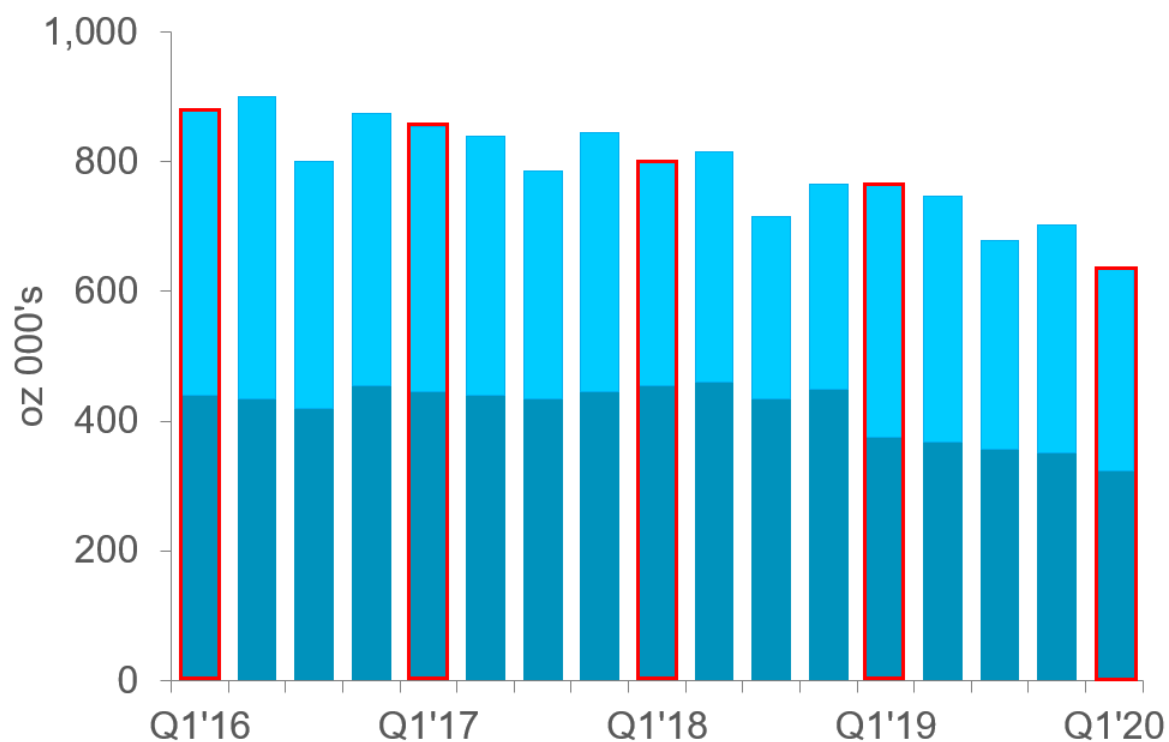
Q1 2020 DEMAND: AUTO /JEWELLERY IMPACTED BY COVID-19 LOCKDOWN, STRONG BAR/COIN DEMAND

DEMAND	Q1 2019 // Q4 2019	Q1 2020
Automotive	766	703
Autocatalyst	766	703
Non-road	†	†
Jewellery	540	510
Industrial	549	447
Chemical	138	191
Petroleum	55	55
Electrical	35	36
Glass	114	-26
Medical & Biomedical	62	47
Other	145	145
Investment	794	82
Change in Bars, Coins	111	28
Change in ETF Holdings	687	47
Change in Stocks Held by Exchanges	-4	6
Total Demand	2,649	1,742
Balance	-768	441
		124

- Automotive demand down 17% (-132 koz) YoY as COVID-19
- Jewellery down 26% (-138 koz) YoY on weaker Chinese demand
- Industrial demand flat (-14 koz) YoY on strong glass sector demand on capacity additions
- Strong bar and coin demand up 182% (+202 koz) YoY
- Market surplus of 124 koz

Q1 2020 DEMAND: GLOBAL LV SALES DOWN 24% AS COVID-19 IMPACTS, AUTO DEMAND DOWN 17%

Autocatalyst demand (koz)



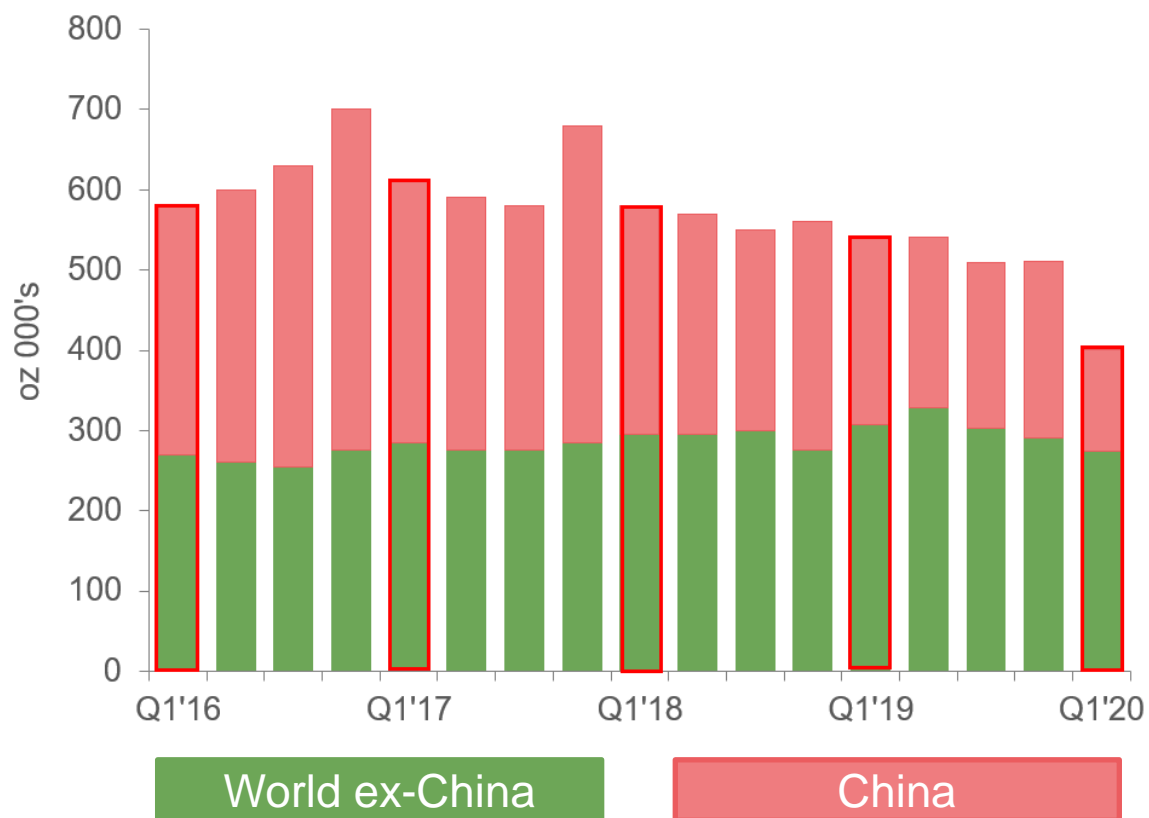
World ex-W.E.

Western Europe

- Automotive demand down only 17% (-132 koz) YoY despite a 24% fall in Q1 light global vehicle sales
- Tightening global emissions standards, driving higher pgm loadings, partially counters lower auto sales/production
- W. Europe diesel share decline slowed on increased diesel sales
- Diesel vehicles still key for automakers to avoid or reduce heavy CO₂ fines
- German diesel car market share continued to recover (Q1'20 average 35%, up 1.3% over 2019 average)

Q1 2020 DEMAND: COVID-19 IMPACTS JEWELLERY DEMAND IN ALL MAJOR MARKETS

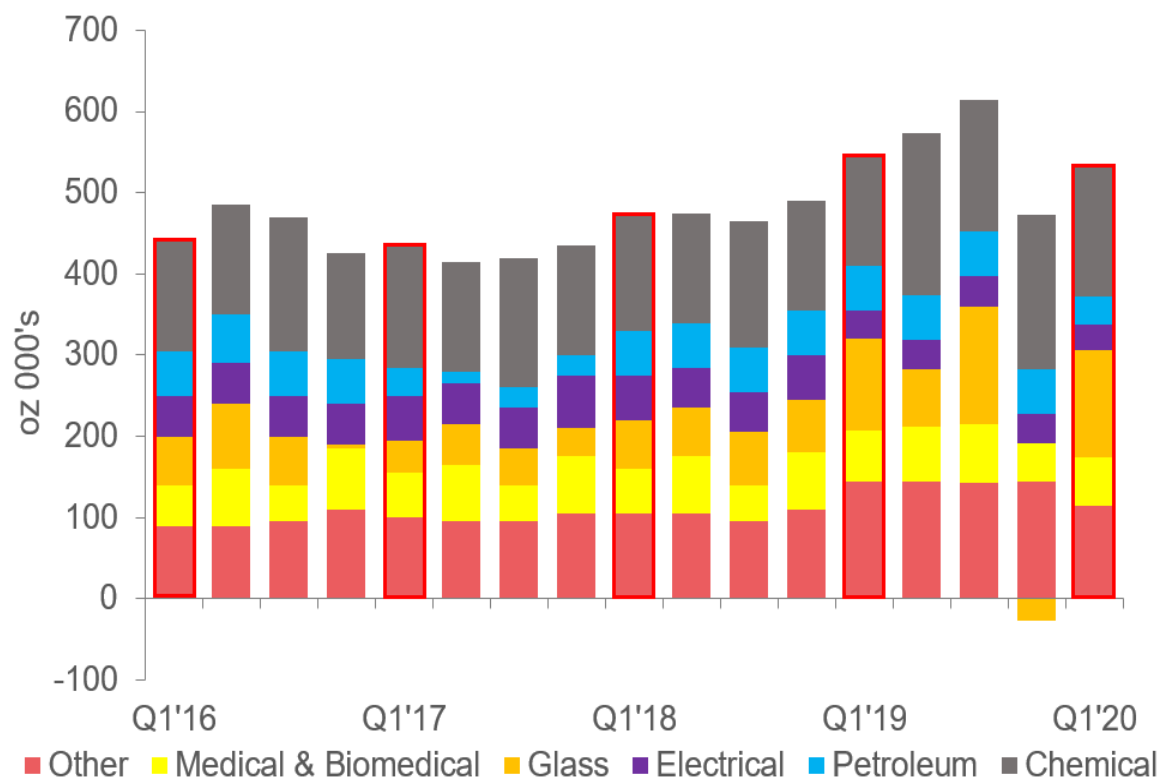
Jewellery demand (koz)



- Jewellery demand down 26% (-138 koz) YoY
- COVID-19 prompted wedding postponements and fabricator shutdowns
- Rest of world impacts late in quarter

Q1 2020 DEMAND: INDUSTRIAL DEMAND STABLE, GLASS AND CHEMICAL UP, OTHER DOWN

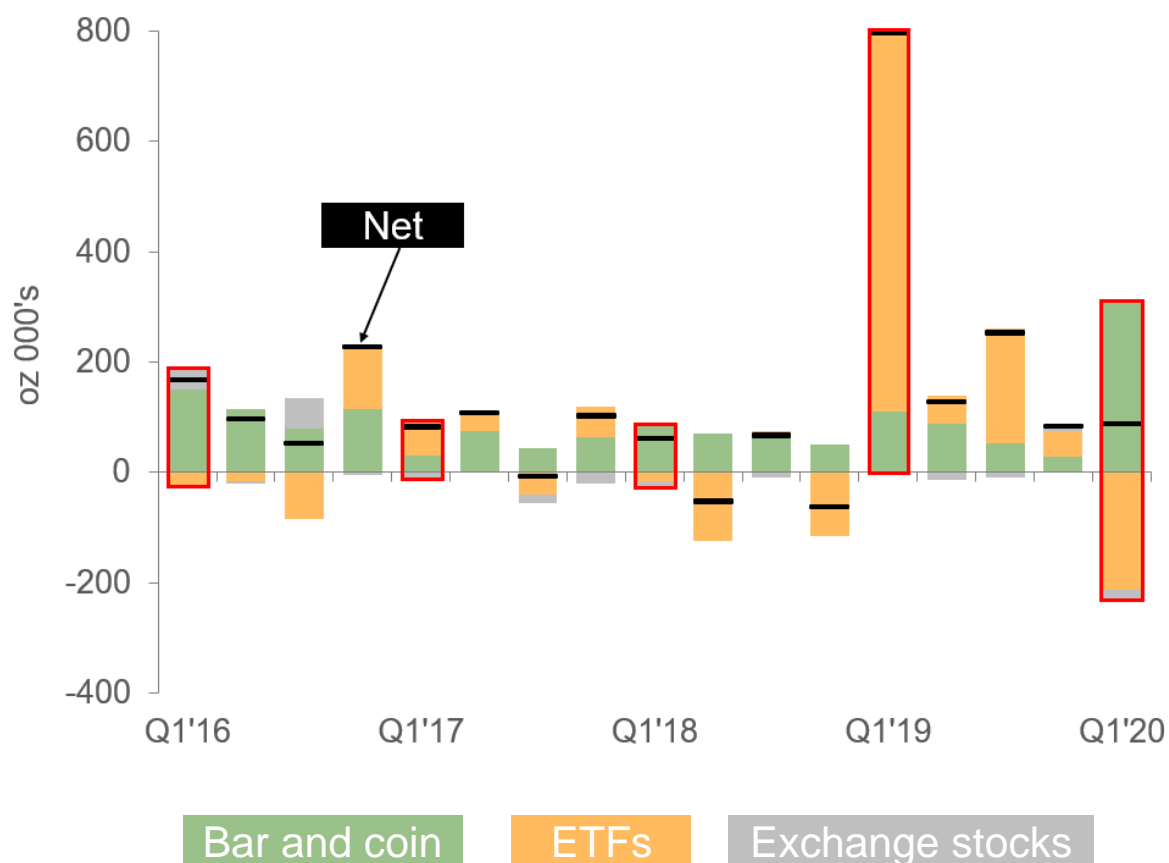
Industrial demand by category (koz)



- Platinum industrial demand down only 3% (-14 koz) YoY
- Strong glass demand up 16% (18 koz) YoY driven by manufacturing capacity additions
- Chemical demand up 17% (+23 koz) YoY on Chinese paraxylene capacity additions
- Petroleum demand down on COVID-19 and oil producer impasse

Q1 2020 DEMAND: RECORD BAR & COIN INVESTMENT DEMAND COUNTERS ETF OUTFLOWS

Investment demand by category (koz)



- Investment demand of 79 koz in Q1'20
- Record Q1'20 bar & coin demand of 312 koz; mainly Japan and North America counters ETF outflows
- ETFs down 213 koz in Q1'20 despite price fall, but mainly smaller holdings

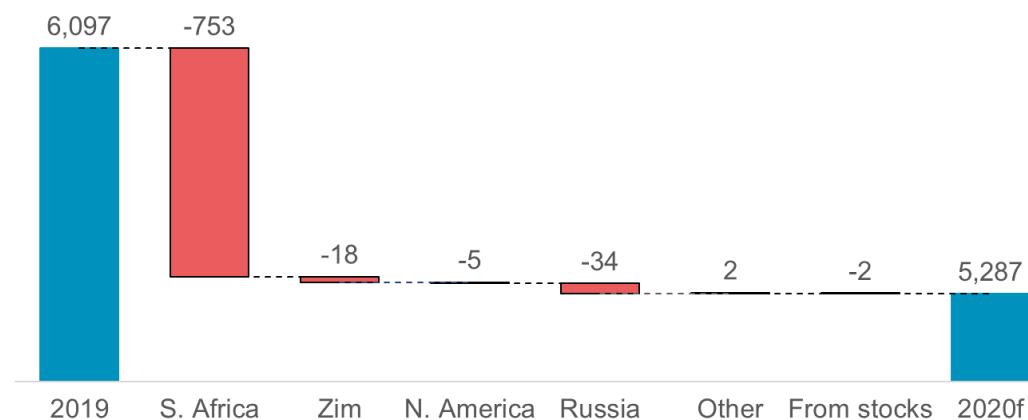
2020 FULL YEAR: SURPLUS OF 247 KOZ, 128 KOZ UP ON PREVIOUS FORECAST DESPITE COVID-19 IMPACT

SUPPLY	2019	2020f	YoY, oz	YoY, %
Refined Production	6,094	5,287	-807	-13%
South Africa	4,402	3,649	-753	-17%
Zimbabwe	455	438	-18	-4%
North America	356	352	-5	-1%
Russia	716	683	-34	-5%
Other	164	166	2	1%
Inc (-)/Dec (+) in Producer Inventory	+2	+0	-2	-100%
Total Mining Supply	6,097	5,287	-810	-13%
Recycling	2,165	1,910	-255	-12%
Autocatalyst	1,630	1,508	-122	-7%
Jewellery	477	345	-132	-28%
Industrial	58	57	-1	-2%
Total Supply	8,262	7,197	-1,065	-13%
DEMAND				
Automotive	2,894	2,481	-413	-14%
Jewellery	2,100	1,785	-315	-15%
Industrial	2,184	2,080	-105	-5%
Investment	1,252	605	-647	-52%
Total Demand	8,430	6,950	-1,480	-18%
Balance	-168	247	-	247%
Above Ground Stocks	3,482	3,730	248	7%

- South African supply down on smelting outage and mine lockdowns
- Auto recycling down only 7% (-122 koz) as 2019 stock build offsets pandemic slowed logistics
- Total supply down 13% (-1,065 koz) in 2020
- Total Auto demand down 14% (-413 koz), but Chinese auto demand up by 14% on rising HDV loadings
- Total demand down 18% (-1,480 koz)
- Modest surplus in 2020 (247 koz) despite impact of COVID-19

2020 FORECAST: SUPPLY DOWN 13%, TOTAL DEMAND DOWN 18%

Total mining supply 2020F (koz)



- SA mine supply down 17% (-753 koz) dominates 2020 supply forecast
- Demand reduced in 2020 in all segments but investment off exceptional base in 2019 and offset by stellar bar and coin
- Forecast risk remains high for demand and supply

Total demand 2020F (koz)



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3. Focus on fundamental drivers

- Impact of COVID-19 on platinum
- Demand growth prognosis
- Improved platinum investment case

Trevor Raymond, Director of Research

4. Questions

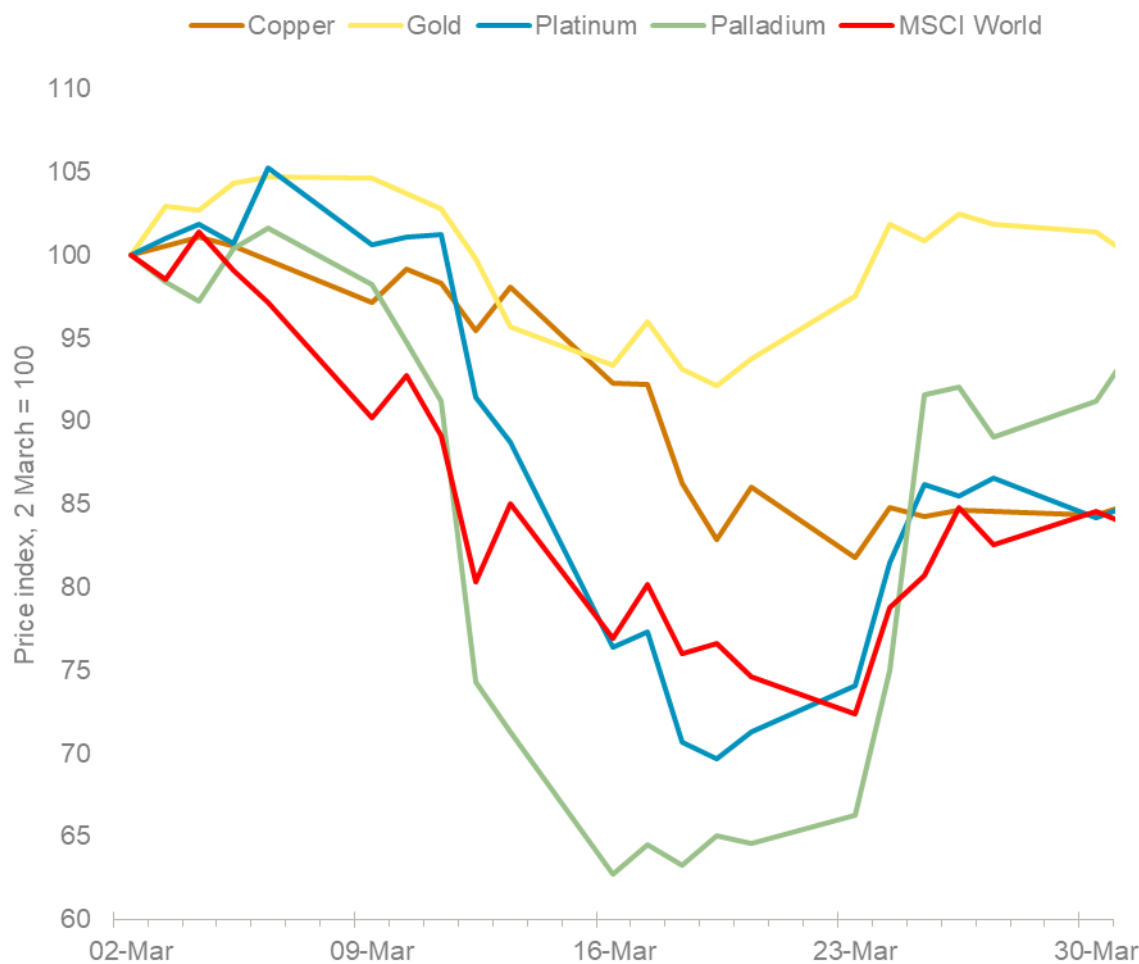
Paul Wilson

Trevor Raymond



COVID-19 DRIVEN LOCKDOWNS PROMPTED SELLING OF LIQUID ASSETS AS ECONOMIC CONCERNS MOUNTED

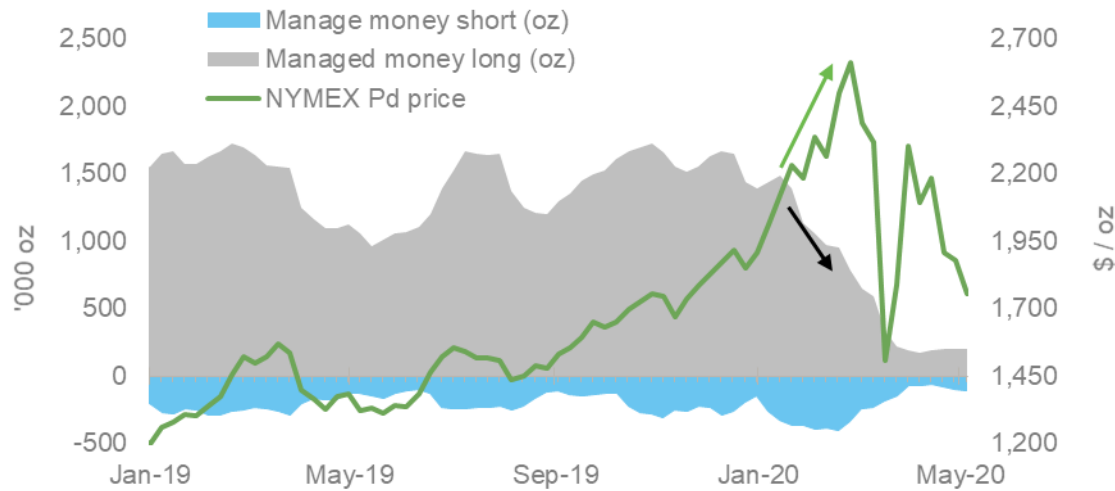
COVID-19 impacted all asset classes in early March



- All asset classes fell -10% to -35%
- Gold in demand as a risk hedge
- Platinum down on demand fears but supply loss largely ignored

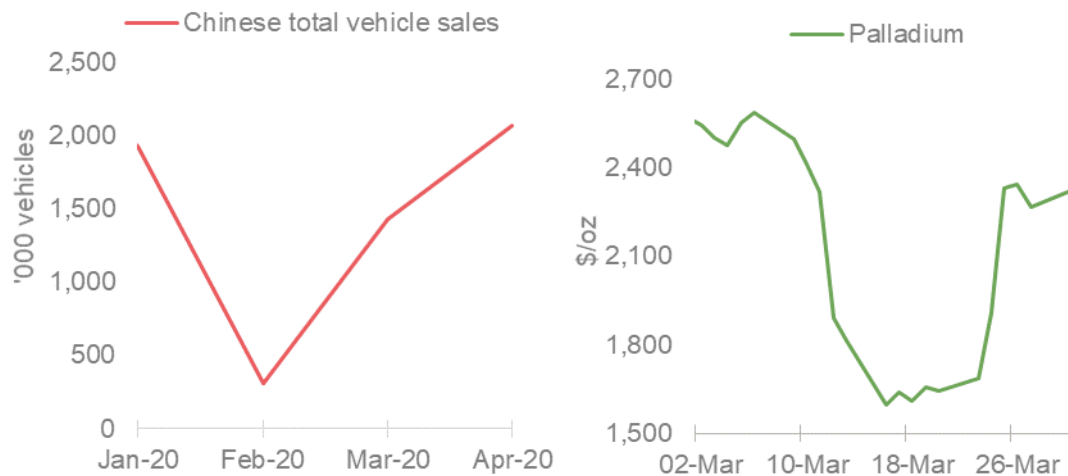
PALLADIUM: DRIVEN BY CHINA AUTO SECTOR – SPOT BUYING AND HIGH CHINA 6 LOADINGS

Palladium positioning - little impact on price moves



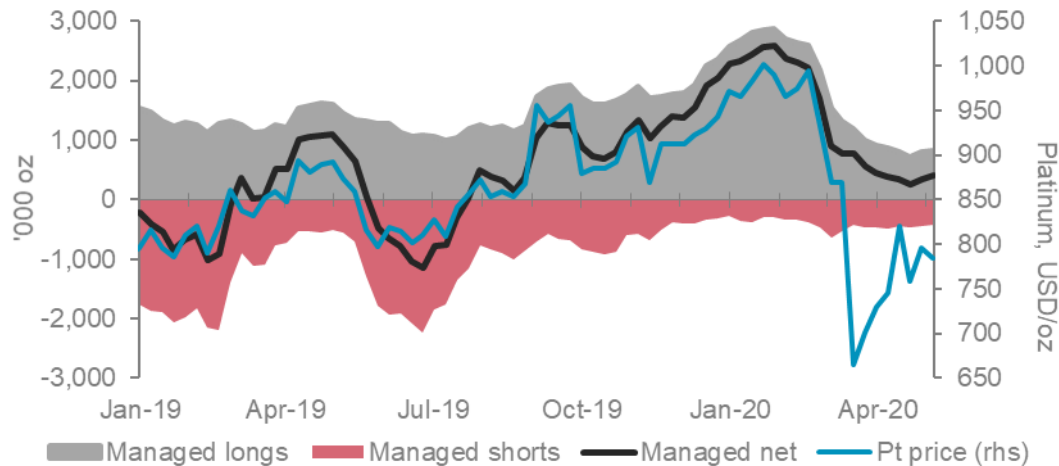
- Investors not influential in palladium’s 2019 price rise, March 2020 collapse or late March rebound
- Pd Price rose despite long liquidations
- China auto manufacturing halted and palladium spot buying absent
- Duration of factory shutdowns and absence of spot buying – both 16 days

Palladium price driven by China auto sector



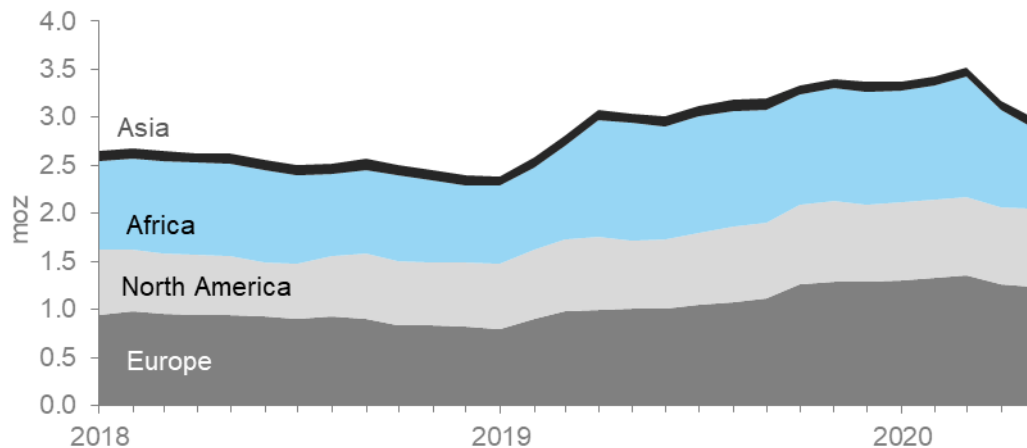
PLATINUM: PRICE FALL ON FUTURES SELLING. ETFS FOLLOWED – PRICE RISE ON CHINA PHYSICAL BUYING.

NYMEX Money manager Pt positioning



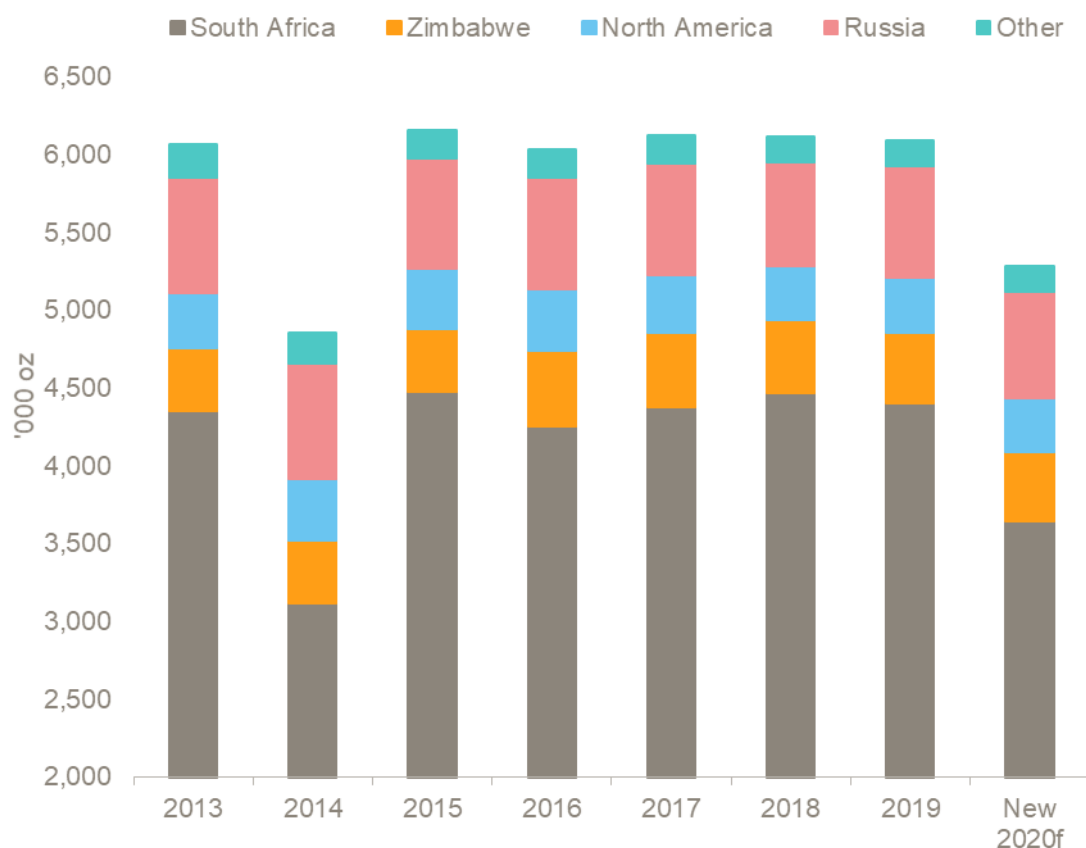
- Money manager longs down by 1.2 moz
- ETFs -499 koz (March & April), 40% price fall
- Price rebound on China buying:
 - SGE: 2019 quarterly average 172 koz, Q1'20 455 koz
 - China imports: 2019 quarterly average 574 koz, Q1'20 834 koz
- Tight physical market a turning point?

Platinum ETF holdings



2020 SUPPLY LOSSES SIGNIFICANT IN TIGHTENING PHYSICAL MARKET

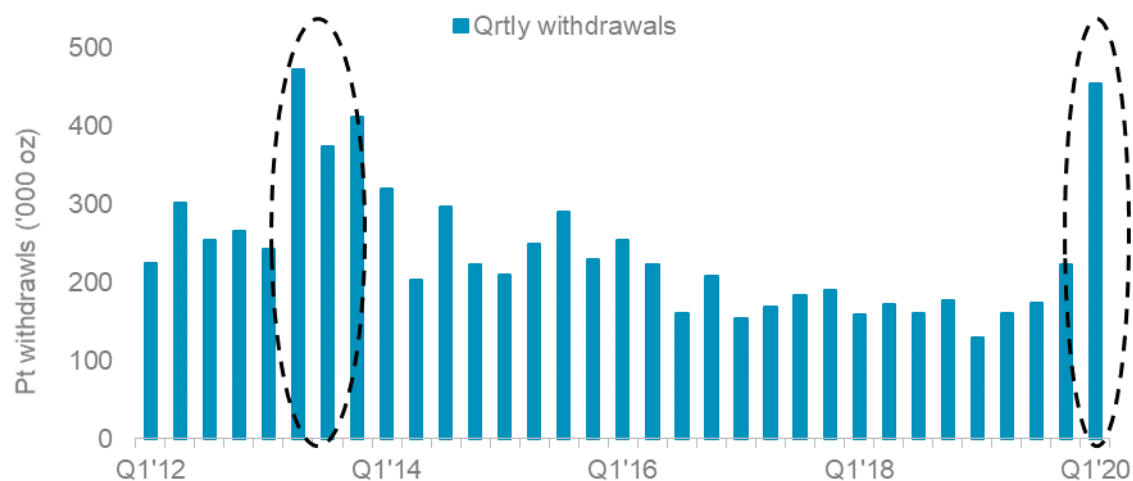
Refined platinum mine supply (koz)



- 2020f down 756 koz vs. previous forecast (6,043 koz now 5,287 koz)
- Lower supply due to:
 - Anglo Platinum ACP converter (c.-500 koz)
 - COVID-19 shutdowns of SA mines
- 2020f 810 koz lower than 2019
- Supply shocks quickly tightened market:
 - Sudden ACP failure stopped refining
 - Swiss refiners near Italy stopped
 - SA exports stopped on lockdown
 - Metal logistics: stopped or slowed
 - Surge in bar and coin demand

CHINA PHYSICAL PLATINUM BUYING SURGED IN Q1 2020; SIMILAR IN Q1 2009 AND Q3 2013

SGE platinum volumes



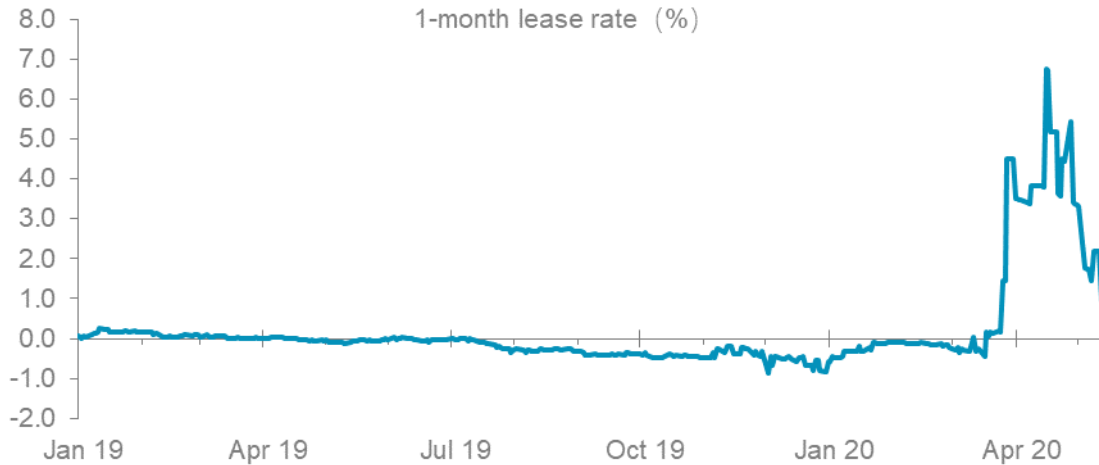
China platinum imports



- China manufacturers - industrial and jewellery – have historically reacted to shortages and low price of platinum
- **Q1'09** GFC price fall \$2,100 to \$700 \$/oz with Pt jewellery market buoyant
- **Q3'13** SA ETF growth of 900 koz (ABSA) and strike expected (AMCU + Wage negs)
- **Q1'20** surge in buying (SGE and import):
 - Tight market from 1 moz ETF buying in 2019, ACP and rapid Covid effects
 - Manufacturers back from lockdown
 - Fortuitous price fall

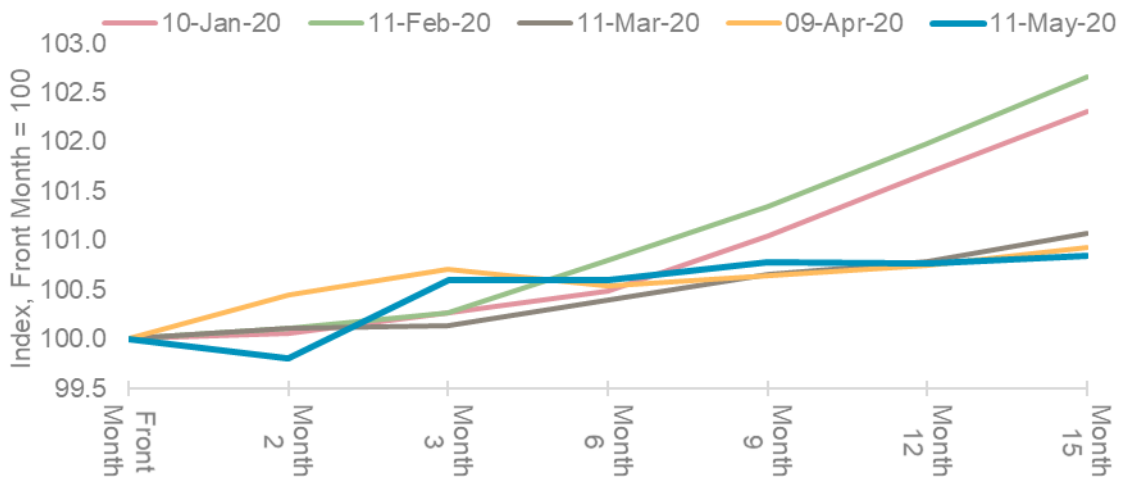
PLATINUM MARKET TIGHTNESS A POSITIVE FOR INCREASED INVESTMENT DEMAND

Platinum lease rates



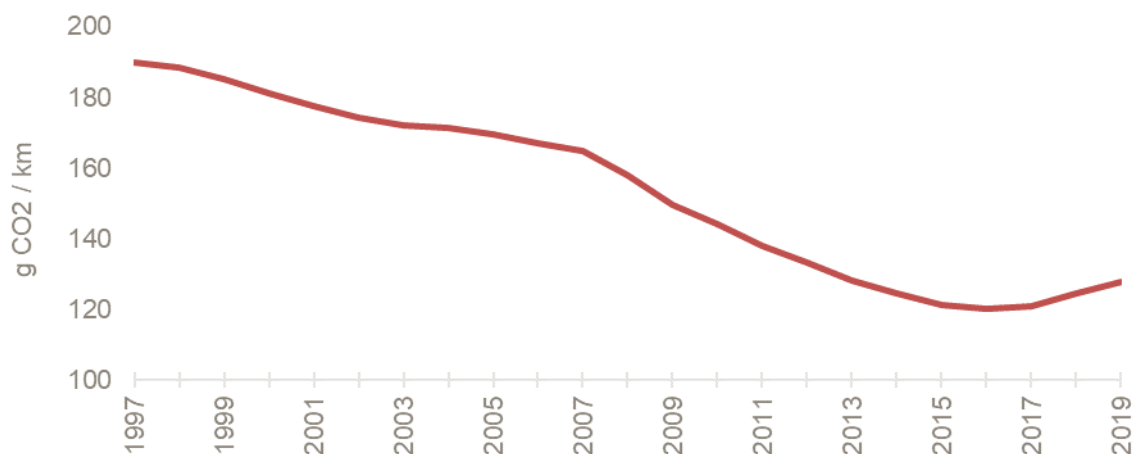
- Platinum lease rate spike and backwardation highlight market tightness
- This may have been overlooked due to pandemic related volatility and forecast uncertainty

Pt forward curve progression



COVID-19 ECONOMIC COST MAY STALL BEV ROLLOUT LOW CO2 DIESEL CARS LIKELY TO GROW & PT DEMAND

UK average new car CO₂ emissions - registration weighted



- Average per new car sold in the EU is increasing, as shown by UK data
- EU fleet CO₂ limit of 95 g/km legislated in 2009 (EC443/2009)

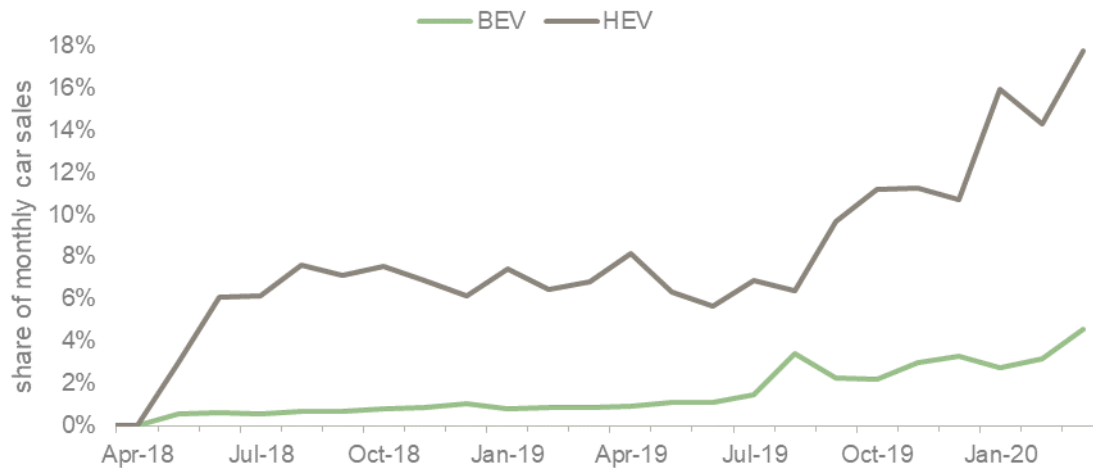
- Many more diesels than expected have been launched recently
- More launches of new mild and plug-in diesel hybrids announced for 2020/21

New diesel models already on sale in the EU

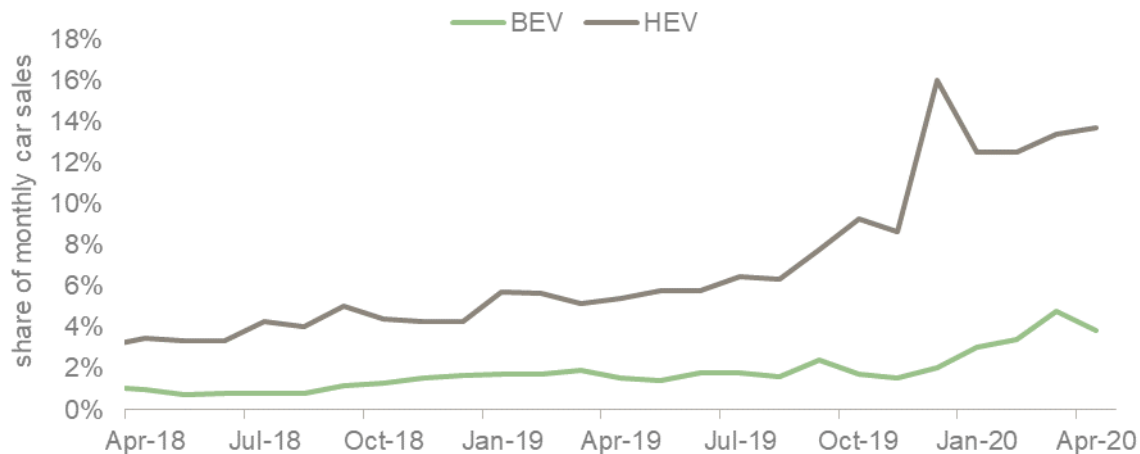
Make	Model	Engine	PHEV	mHEV	CO ₂ g/km
Audi	Q7 Sport 45 TDI	3.0 L		✓	184
	SQ7	4.0 L		✓	200
BMW	X3 - xDrive20d,	2.0 L		✓	134
	3 series - 320d xDrive	2.0 L		✓	117
Daimler	C-Class - C300de EQ Power	2.0 L	✓		38
	E-Class - E300de EQ Power	2.0 L	✓		41
	GLE 350de 4 Matic	2.0 L	✓		29
Ford	Kuga Ecoblue Hybrid	2.0 L		✓	113
Hyundai	Tuscon 1.6 CRDi 2WD DCT	1.6 L		✓	114
	Tuscon 2.0 CRDi 4WD Auto	2.0 L		✓	147
JLR	Range Rover Evoque	2.0 L		✓	149
Kia	Sportage 1.6 CRDi	1.6 L		✓	129
Volvo	XC60 B4/B5	2.0 L		✓	151
	X90 B5	2.0 L		✓	156

HYBRID DIESEL SALES RISE TO AVOID EU CO2 FINES PANDEMIC COST COULD BOOST THIS & PT DEMAND

UK BEV and Hybrid sales share



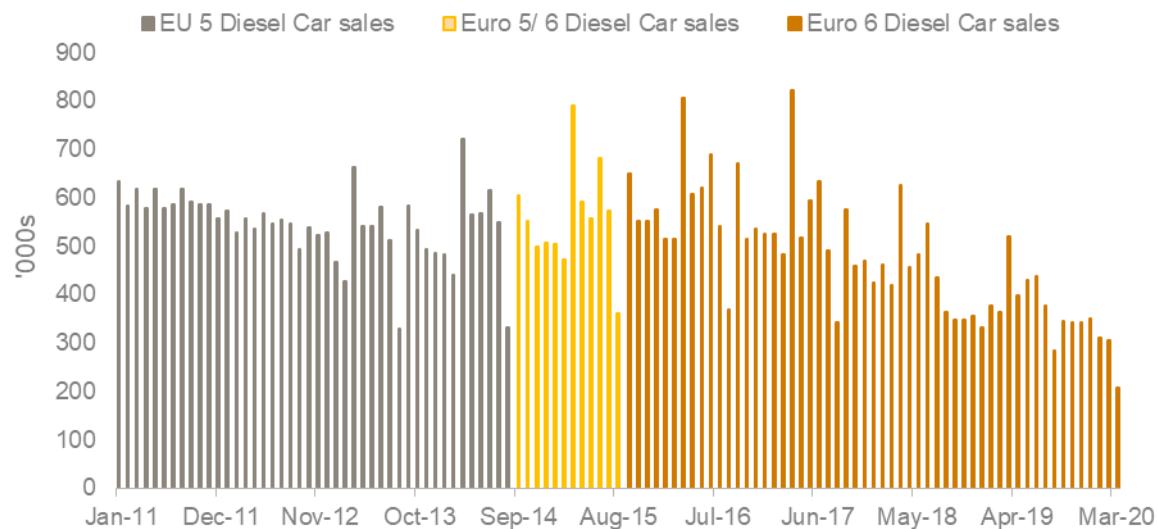
German BEV and Hybrid sales share



- Extreme negative cost of COVID-19 on national Governments globally likely to:
 - restrict funding of power grid / charging infrastructure
 - limit mass roll out of Battery Electric Vehicles (BEVs)
 - restrict funding to grow renewable power supplies
- Low CO₂ diesel models already developed provide a cost-effective way of keeping some effort to reduce climate change
- Hybrid Electric Vehicles (HEVs) have seen rapid growth in share of sales since mid-2019 to avoid EU CO₂ fines

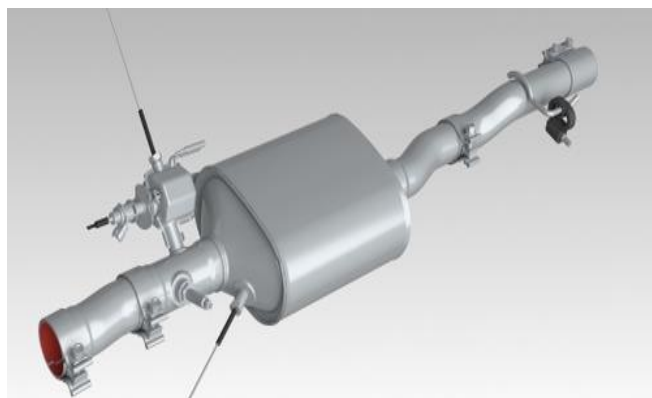
EURO 5 DIESEL NOX RETROFITTING IN GERMANY ADDS TO PLATINUM DEMAND GROWTH POTENTIAL

Over 56 million Euro 5 / 6 diesels sold from Jan'11



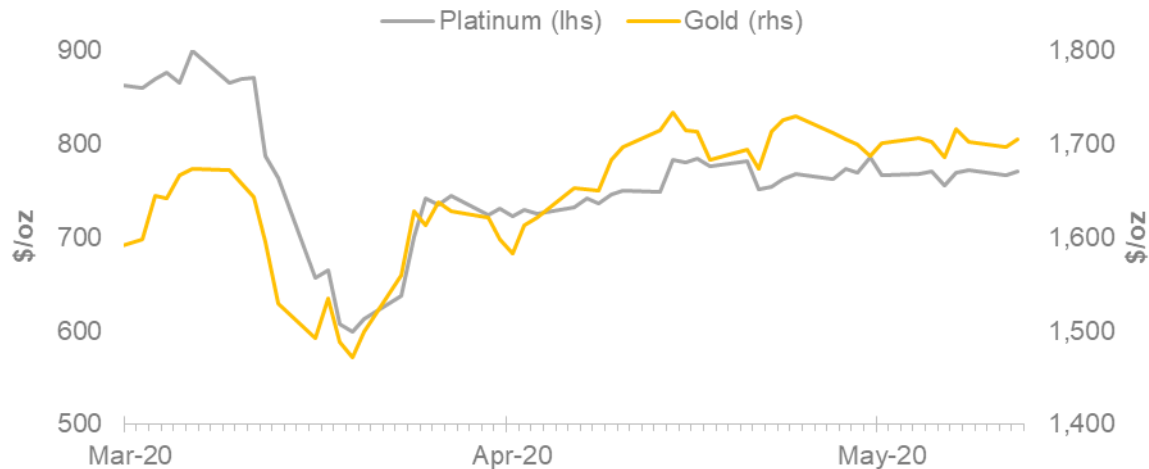
- Bans in German cities in place (Euro 4: Jan 19, Euro 5, Sept 19)
- New German Federal Law – Access with ban in place if NO_x <270 mg/km (Euro 5 now - also for Euro 6 high emitters on the road)
- Bosal system ASC uses c. 1g platinum
- Retrofitting high value portion of Europe's c.56 m Euro 5 & 6 diesel car fleet c.780 koz
- Independent testing available for EU roll out

'Add-on' SCR system by Bosal Retrofit GmbH



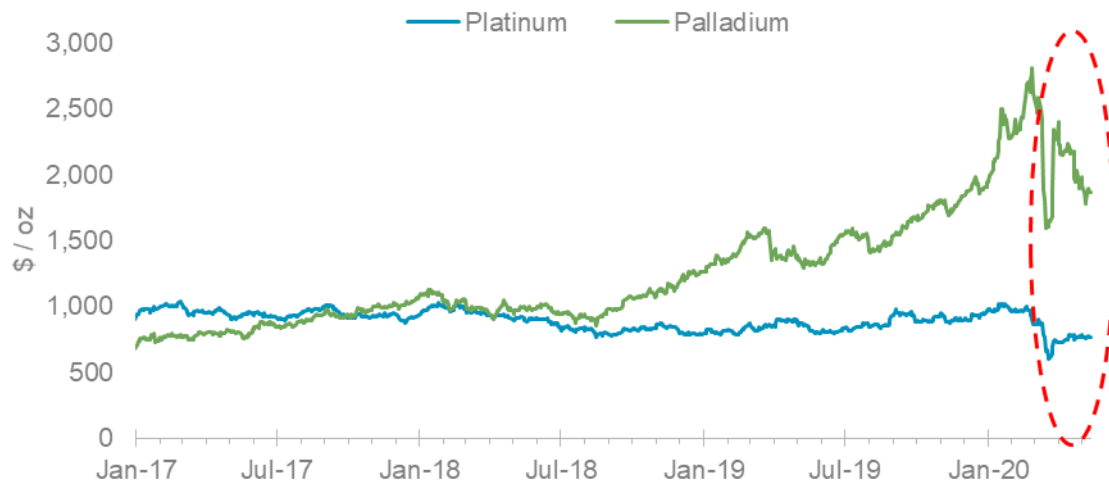
PHYSICAL ASSETS APPEAL - HEDGE HIGH GLOBAL RISK PALLADIUM SHORTAGE NOT RESOLVED BY COVID-19

Platinum and Gold, closely correlated post March



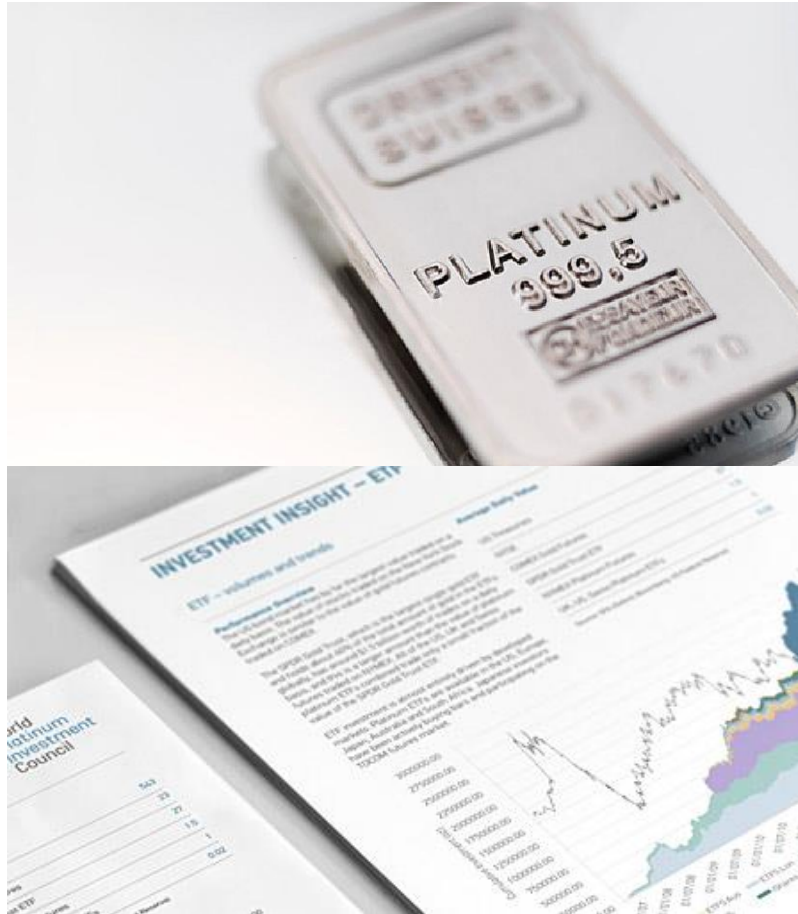
- Gold in demand due to negative fiscal impact of pandemic on global economy
- Platinum correlation with gold up after March volatility
- Platinum's deep discount to gold highlighted by platinum market tightness

Palladium remains at significant premium to platinum



- Palladium loadings growth (China 6) reduces impact of pandemic car sales loss
- Palladium lack of supply growth and >\$1,000/oz premium above Pt still driving substitution by platinum (5% = 450 koz)
- Data on substitution remains proprietary and confidential

WHY PLATINUM? - PANDEMIC REDUCES SUPPLY AND DEMAND; MORE COMPELLING INVESTMENT CASE



- Pandemic impact on platinum still being determined but bearish sentiment overlay may be unwarranted
- Unexpected 500 koz supply loss from smelting failure overlooked
- Demand growth remains in place despite base being lowered by pandemic:
 - Diesel vehicle growth stronger due to EU CO₂ fines and pandemic limiting BEVs
 - Platinum substitution for palladium to continue growing
 - Retrofitting underway - possible boost
- Automotive demand growth may attract significant investment demand

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