PLATINUM PERSPECTIVES



Above ground stocks are not seen as a major headwind to platinum prices as deficits loom

We are forecasting the platinum market to enter a sustained deficit from 2023. Unlike palladium in the 2010's, platinum prices are unlikely to be constrained by significant above ground inventories as there is no Russian equivalent inventory, and the above ground stocks that do exist are either mostly depleted, increasingly price sensitive, or geographically constrained to China.

Although the palladium market entered sustained deficits from 2012, it was not until 2016 that the price began to move higher. The delay was due to Russian above ground palladium inventories, that were well publicised but of unknown scale, that acted as a psychological overhang on price appreciation. Furthermore, once the price did begin to move higher, flows from ETF profit taking slowed the pace of price appreciation.

We are projecting the platinum market to enter deep and sustained deficits from 2023 for the foreseeable future (*chart below left*), with ongoing robust demand for automotive and industrial end uses supplemented with small but growing demand from the hydrogen economy. Despite this, there are concerns that platinum prices will be slow to react due to above ground stocks acting to supress the price re-rating. However, we are of the opinion that the platinum market is in a very different situation to the palladium market in the 2010's; there is no Russian equivalent inventory, and the above ground stocks that do exist are either mostly depleted, increasingly price sensitive, or geographically constrained to China (*chart below right*).

Edward Sterck
Analyst
+44 203 696 8786
esterck@platinuminvestment.com

Brendan Clifford

Head of Institutional Distribution +44 203 696 8778

bclifford@platinuminvestment.com

World Platinum Investment Council
www.platinuminvestment.com
166 Piccadilly,
London, W1J 9EF

11 October 2022

We forecast the platinum market to enter sustained and deepening deficits from 2023 to 2026.



Source: SFA (Oxford) 2013-2018, Metals Focus 2019-2022f, WPIC Research 2023-2026

China's excess platinum imports have restricted the geographical distribution of above ground stocks.



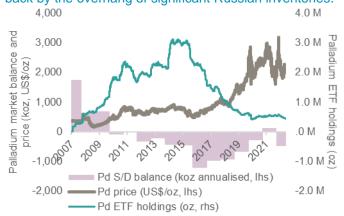
Looking at the platinum market in detail, we note that Bloomberg sourced customs data for China indicate that it has imported more than 4 Moz of platinum in excess of identified demand since 2019. Even allowing for data inaccuracies, this more than absorbs the aggregate 2 Moz of platinum surpluses in 2021 and 2022f. Whilst the accumulation of platinum inventories in China would be a local supply overhang, we think holders are only likely to release this material at significantly higher platinum prices. Similarly, current platinum ETF holders are more likely to have long-term views and higher value expectations given the outlook of platinum deficits, as well as growing investor awareness of platinum's key role in the hydrogen economy and global decarbonisation. However, some profit taking from ETFs will likely slow the pace of a platinum price run. Finally, we also think that exchange stocks are already at minimum levels from a risk management perspective, eliminating this source of supply, which has been significant since mid-2021. In conclusion, we do not see above ground stocks of platinum as being a hinderance to price appreciation as the market enters a period of sustained deficits.

Above ground stocks of platinum are either mostly depleted, increasingly price sensitive, or geographically constrained to China and are not expected to limit a re-rating of the platinum price as deficits loom.

Platinum's attraction as an investment asset arises from:

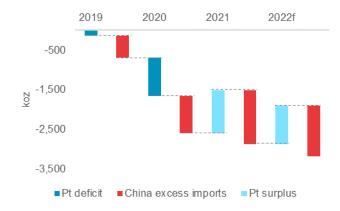
- Supply severely constrained for three more years despite some new investment in mining capacity
- Platinum price remains historically undervalued and significantly below both gold and palladium
- Automotive PGM demand growth should continue due to increasingly restrictive emissions rules
- Market balance and price mismatches between palladium and platinum drive substitution
- Investment demand is softer after two record years, but price and fundamentals remain attractive

Figure 1: Despite sustained deficits through much of the last decade, palladium prices were slow to react, held back by the overhang of significant Russian inventories.



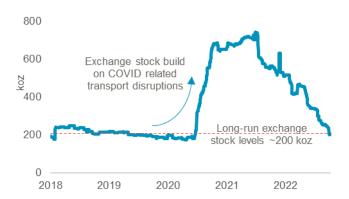
Source: Metals Focus, Johnson Matthey, Bloomberg, WPIC Research

Figure 3: But the platinum market is in a very different position to palladium in the 2010's. As well as there being no equivalent to the Russian palladium stockpile, China has continued to import platinum in excess of identified demand, fully absorbing recent surpluses...*



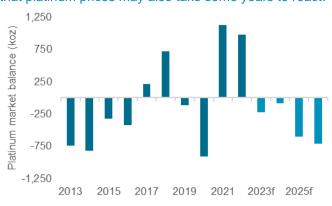
Source: Bloomberg, WPIC Research, *N.B. 2022 surplus is a forecast, 2022 China excess imports is 2x excess H1'22 imports

Figure 5: Platinum exchange stock outflows have been significant, but stocks have almost returned to historical levels, limiting expected future supply to the prompt physical market.



Source: Bloomberg, WPIC Research

Figure 2: Whilst we are forecasting the platinum market to enter sustained deficits from 2023, there are concerns that platinum prices may also take some years to react.



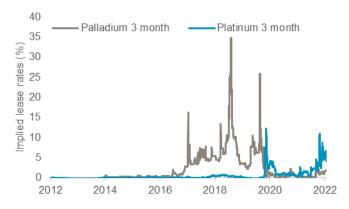
Source: SFA (Oxford) 2013-2018, Metals Focus 2019-2022f, WPIC Research 2023-2026

Figure 4: ...as well as recent ETF and exchange stock outflows on capital reallocation and market arbitrage incentives respectively.



Source: Bloomberg, SFA (Oxford), Metals Focus, Johnson Matthey, WPIC Research

Figure 6: China imports and dwindling exchange stocks are resulting in physical market tightness being evident in high platinum lease rates. High palladium lease rates were a precursor to price appreciation in 2016.



Source: Bloomberg, WPIC Research

IMPORTANT NOTICE AND DISCLAIMER: This publication is general and solely for educational purposes. The publisher, The World Platinum Investment Council, has been formed by the world's leading platinum producers to develop the market for platinum investment demand. Its mission is to stimulate investor demand for physical platinum through both actionable insights and targeted development: providing investors with the information to support informed decisions regarding platinum; working with financial institutions and market participants to develop products and channels that investors need.

This publication is not, and should not be construed to be, an offer to sell or a solicitation of an offer to buy any security. With this publication, the publisher does not intend to transmit any order for, arrange for, advise on, act as agent in relation to, or otherwise facilitate any transaction involving securities or commodities regardless of whether such are otherwise referenced in it. This publication is not intended to provide tax, legal, or investment advice and nothing in it should be construed as a recommendation to buy, sell, or hold any investment or security or to engage in any investment strategy or transaction. The publisher is not, and does not purport to be, a broker-dealer, a registered investment advisor, or otherwise registered under the laws of the United States or the United Kingdom, including under the Financial Services and Markets Act 2000 or Senior Managers and Certifications Regime or by the Financial Conduct Authority.

This publication is not, and should not be construed to be, personalized investment advice directed to or appropriate for any particular investor. Any investment should be made only after consulting a professional investment advisor. You are solely responsible for determining whether any investment, investment strategy, security or related transaction is appropriate for you based on your investment objectives, financial circumstances and risk tolerance. You should consult your business, legal, tax or accounting advisors regarding your specific business, legal or tax situation or circumstances.

The information on which this publication is based is believed to be reliable. Nevertheless, the publisher cannot guarantee the accuracy or completeness of the information. This publication contains forward-looking statements, including statements regarding expected continual growth of the industry. The publisher notes that statements contained in the publication that look forward in time, which include everything other than historical information, involve risks and uncertainties that may affect actual results. The World Platinum Investment Council name and logo and WPIC are registered trademarks of the World Platinum Investment Council. All other trademarks used in this publication are the property of their respective trademark holders. The publisher is not affiliated, connected, or associated with, and is not sponsored, approved, or originated by, the trademark holders unless otherwise stated. No claim is made by the publisher to any rights in any third-party trademarks

WPIC Research MiFID II Status

The World Platinum Investment Council (WPIC) has undertaken an internal and external review of its content and services for MiFID II. As a result, WPIC highlights the following to the recipients of its research services, and their Compliance/Legal departments:

WPIC research content falls clearly within the Minor Non-Monetary Benefit Category and can continue to be consumed by all asset managers free of charge. WPIC research can be freely shared across investment organisations.

- 1. WPIC does not conduct any financial instrument execution business. WPIC does not have any market making, sales trading, trading or share dealing activity. (No possible inducement).
- 2. WPIC content is disseminated widely and made available to all interested parties through a range of different channels, therefore qualifying as a "Minor Non-Monetary Benefit" under MiFID II (ESMA/FCA/AMF). WPIC research is made freely available through the WPIC website. WPIC does not have any permissioning requirements on research aggregation platforms.
- 3. WPIC does not, and will not seek, any payment from consumers of our research services. WPIC makes it clear to institutional investors that it does not seek payment from them for our freely available content.

More detailed information is available on the WPIC website: http://www.platinuminvestment.com/investment-research/mifid-ii