

Information note on trade in intermediate goods: trade in platinum group metals in 2020



- World exports of platinum group metals (PGMs), including iridium, osmium, palladium, platinum, rhodium and ruthenium, were worth US\$ 63.6 billion in 2020. PGMs are typically traded as intermediate goods for the production of a wide range of manufactured products, ranging from catalytic converters to mobile phones.
- The United Kingdom was the main PGM exporter, with exports worth US\$ 11.6 billion in 2020. South Africa is the world's largest producer of PGMs with more than 90 per cent of global reserves. Its PGM exports were worth US\$ 10.7 billion in 2020.
- World PGM exports in 2020 grew by 57 per cent in value but by only 18 per cent in volume.
- A large part of PGM trade flows in 2020 took place among the top exporters, with the United Kingdom acting as a hub in the platinum supply chain. UK imports of PGMs increased markedly from the Russian Federation and the United States (118 per cent each).

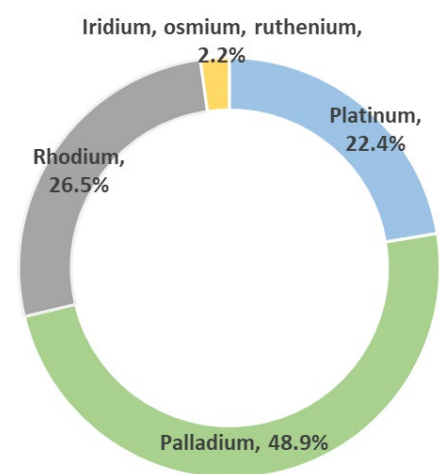
World exports of PGMs, 2020

World PGM exports in 2020 were worth US\$ 63.6 billion.

Palladium accounted for almost half of traded PGMs in 2020.

PGMs accounted for around 2 per cent of ores, precious stones and rare earths exported in 2020.

PGMs are strategic inputs, often used in metal alloys by many industries, such as the automotive industry (catalytic converters to treat exhaust emissions), IT/telephones (to increase the performance of capacitors and microprocessors), medicine (anti-cancer drugs, dentistry), jewellery and glass/fibre optics.



Source: Trade Data Monitor.

Top PGM exporters and producers, 2020

The United Kingdom was the main PGM exporter in 2020 (US\$ 11.6 billion) due to large stocks held by investment funds. The UK industry also refines PGMs and produces alloys for worldwide manufacturers in jewellery, automotive and IT industries.

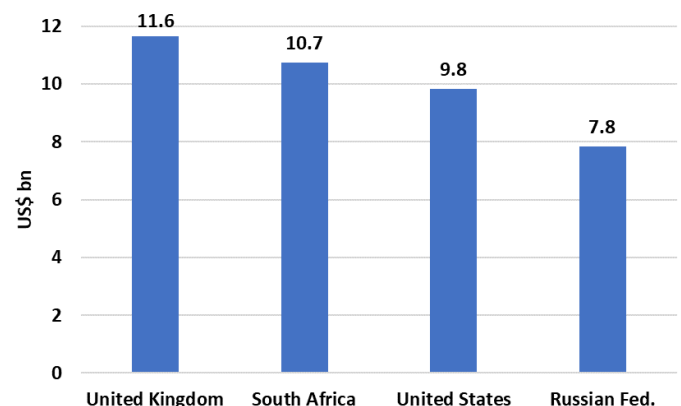
South Africa is the world's largest PGM producer with more than 90 per cent of global reserves and exported US\$ 10.7 billion of PGMs last year.

The United States exported US\$ 9.8 billion of PGMs in 2020.

The Russian Federation is the main producer and exporter of unwrought palladium metal, which accounts for more than 80 per cent of its PGM exports, valued at US\$ 7.8 billion in 2020.

US\$ 63.6 billion
world PGM exports in 2020

Palladium
almost 50% of traded PGMs in 2020



Source: Trade Data Monitor.

PGMs share unique physical and chemical properties, such as strength and durability, high melting points and resistance to oxidization. They are exchanged at the earlier stages of supply chains as raw or semi-manufactured inputs.

Impact of commodity prices and COVID-19

Platinum and palladium prices decreased sharply in Q1 2020, at the peak of the COVID-19 crisis, and then surged to exceed the levels of the end of 2019. Overall, the demand for platinum during the pandemic decreased by less (-7 per cent) than the supply (-20 per cent).

Declining PGM demand due to lower global automotive production was offset by the rising adoption of more stringent CO₂ standards and hence the need for PGM in exhaust catalysts. There was also a rise in PGM demand for IT and telecommunication products to enable remote working during lockdown periods.

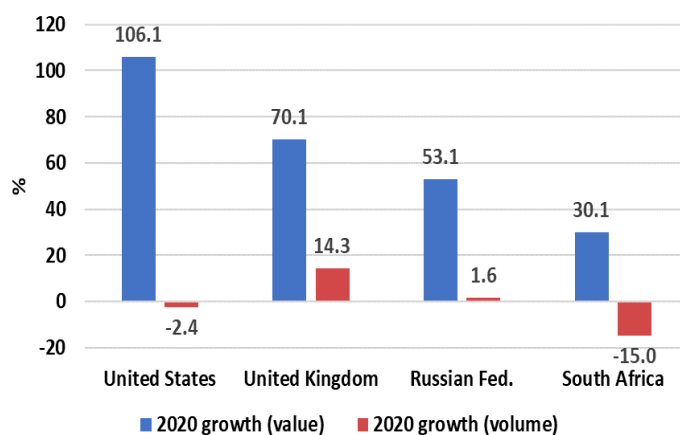
World PGM exports in 2020 grew by 57 per cent in value but by only 18 per cent in volume.

PGM exports in value of the four top exporters increased greatly in 2020, with US exports rising the most (106.1 per cent).

Among the top four exporters, only the United Kingdom (14.3 per cent) and the Russian Federation (1.6 per cent) increased export quantities.

The volume of South African PGM exports decreased (-15 per cent) following the lockdown measures applied to mining companies.

57% in value
vs.
18% in volume
world PGM export growth in 2020



Source: Trade Data Monitor.

> 200% growth in value in 2020

UK & US PGM exports to China

UK PGM exports to Japan

Trade interconnections in PGM supply chains

A large part of major PGM trade flows in 2020 took place among the top exporters, with the United Kingdom acting as a hub in the platinum supply chain.

UK imports of PGMs increased markedly from the Russian Federation and the United States (118 per cent each).

UK exports of PGMs to Japanese and Chinese manufacturers jumped respectively by around 290 per cent (US\$ 1.5 billion) and 200 per cent (US\$ 1.4 billion) to meet the demand from Asian IT and automotive supply chains. Japan is a leading exporter of hybrid vehicles and relies on PGMs imports for their production, which requires more platinum alloys than traditional internal combustion engines (due to stop-start systems).

China greatly increased its imports of platinum materials from the United States by over 260 per cent in 2020. Despite the decline of automotive production during the COVID crisis, Chinese industries imported massive quantities of platinum metal for the production of exhaust catalysts to comply with newly adopted regulations on carbon emission standards.

Top 4 PGM exporters	2019-20 growth	2020 value (US\$ bn)	Destinations (importers)
Russian Federation	118.2%	2.0 bn	United Kingdom
South Africa	69.1%	3.3 bn	United Kingdom
United Kingdom	92.8%	1.2 bn	United States
	288.8%	1.5 bn	Japan
	49.6%	2.6 bn	Hong Kong (China)
	200.6%	1.4 bn	China
United States	117.5%	1.3 bn	China
	261.3%	2.3 bn	China

Source: Trade Data Monitor.