

Platinum|2004

Johnson Matthey

17th May 2004

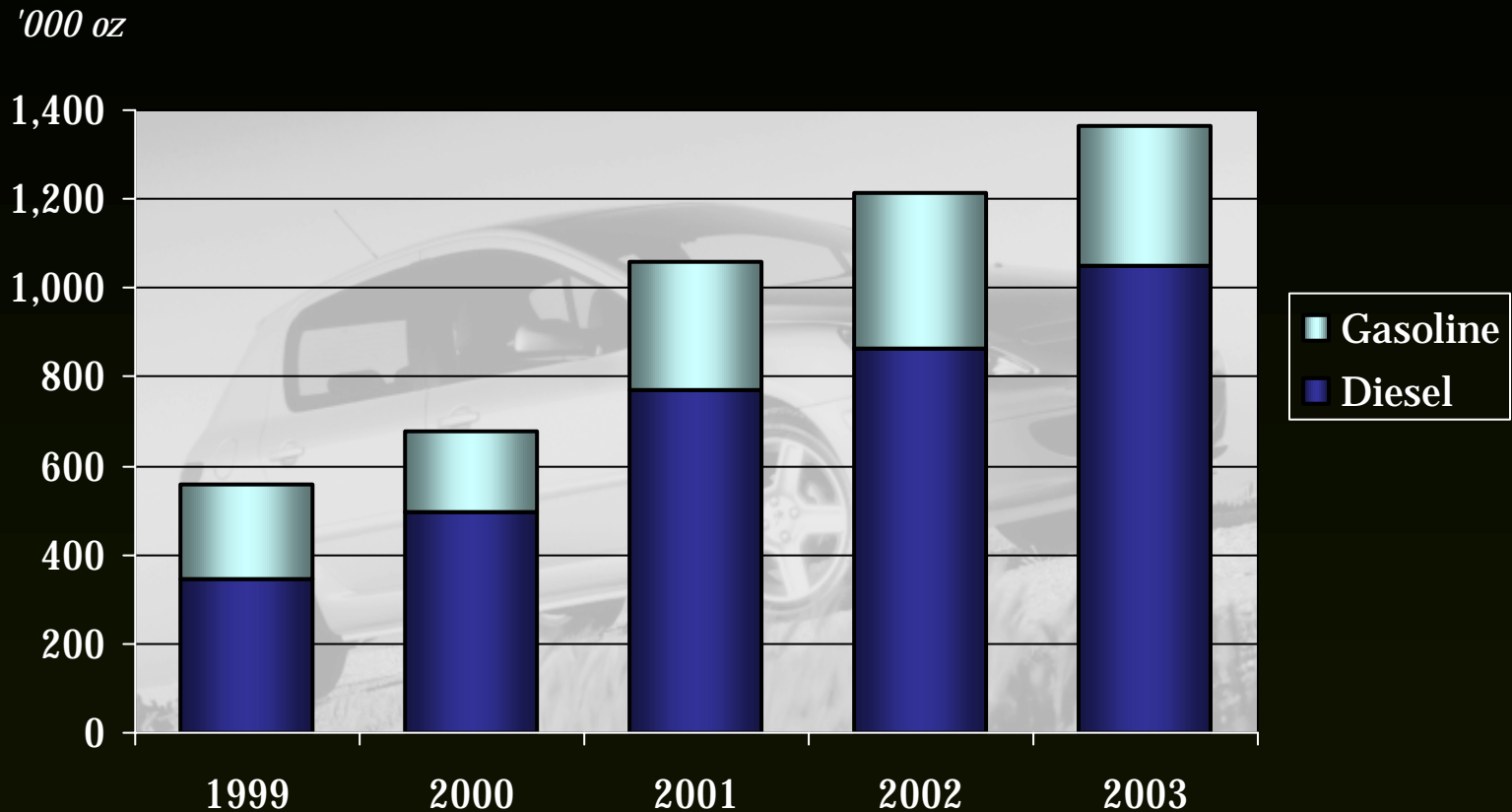
Platinum

- **Demand edges up to 6.52 million oz**
- **Sustained by rising auto industry purchases**
- **But purchases for jewellery in China & Japan drop**
- **Output from South Africa and Zimbabwe climbs**
- **Market deficit shrinks to 280,000 oz**
- **Funds contribute to price strength**

Platinum Demand by Application

<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	2,590	3,190	23

European Demand for Platinum in Autocatalysts 1999 - 2003



Autocatalyst demand – Japan

Tokyo HDD retrofit
boosts Pt demand
by 18%

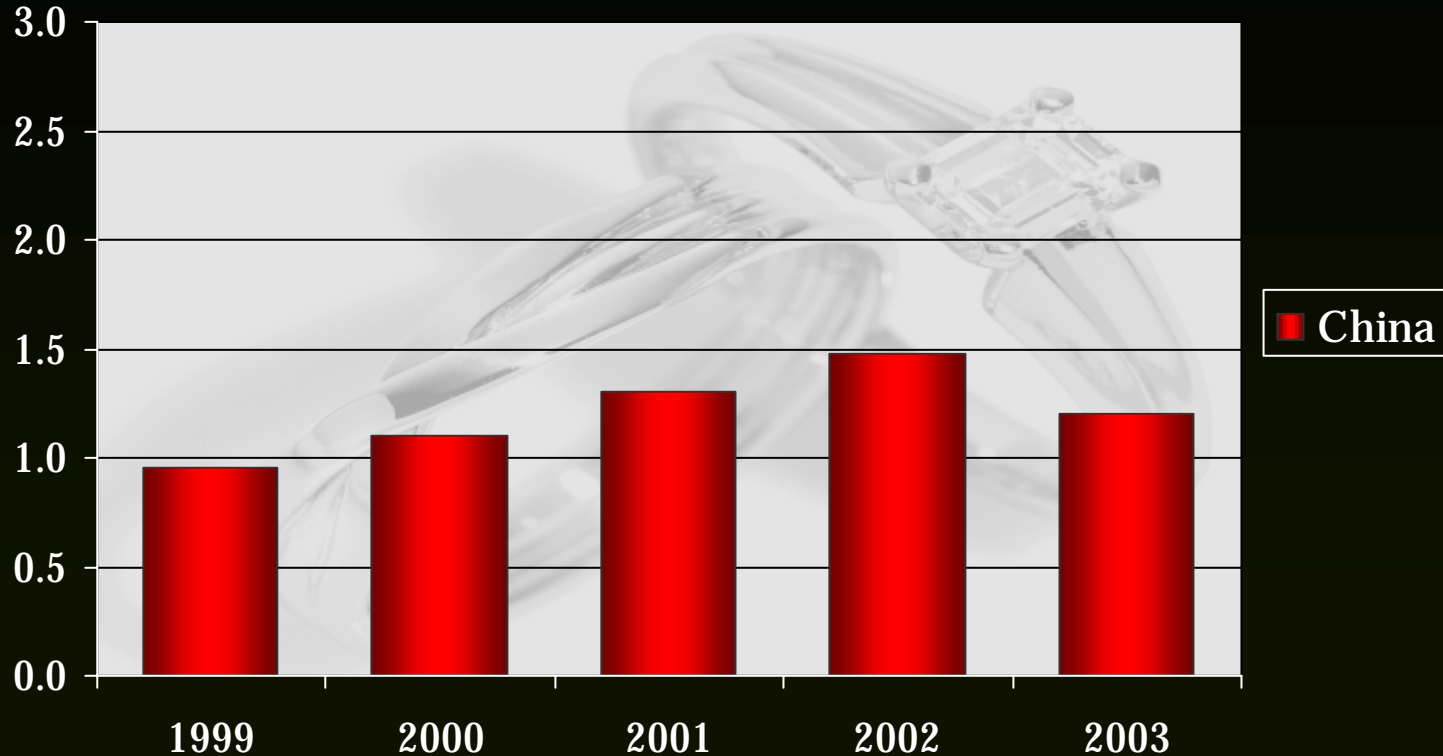


Platinum Demand by Application

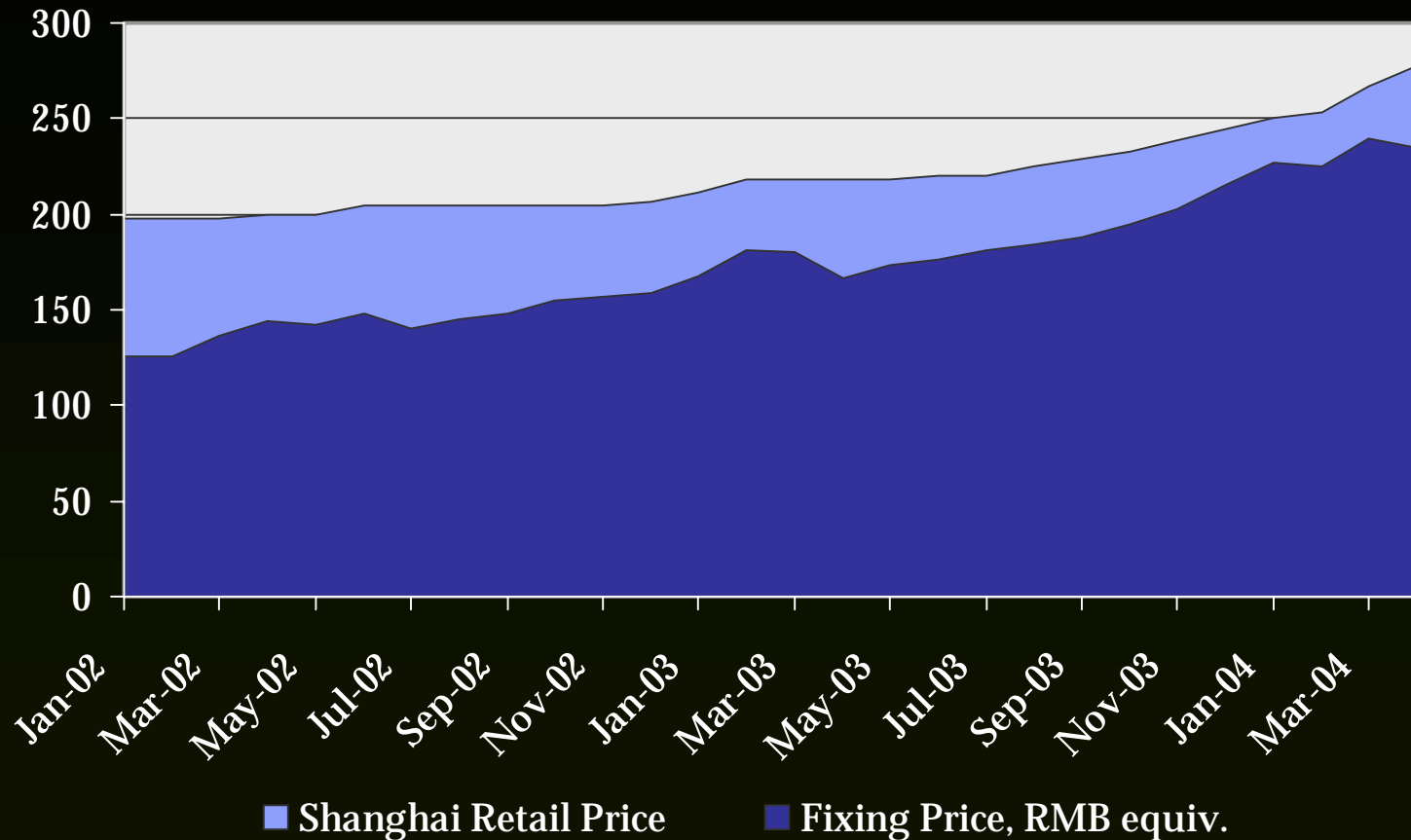
<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	2,590	3,180	23
recovery	(565)	(645)	14
Jewellery	2,820	2,440	(13)

Demand for Platinum in Jewellery 1999 - 2003

million oz

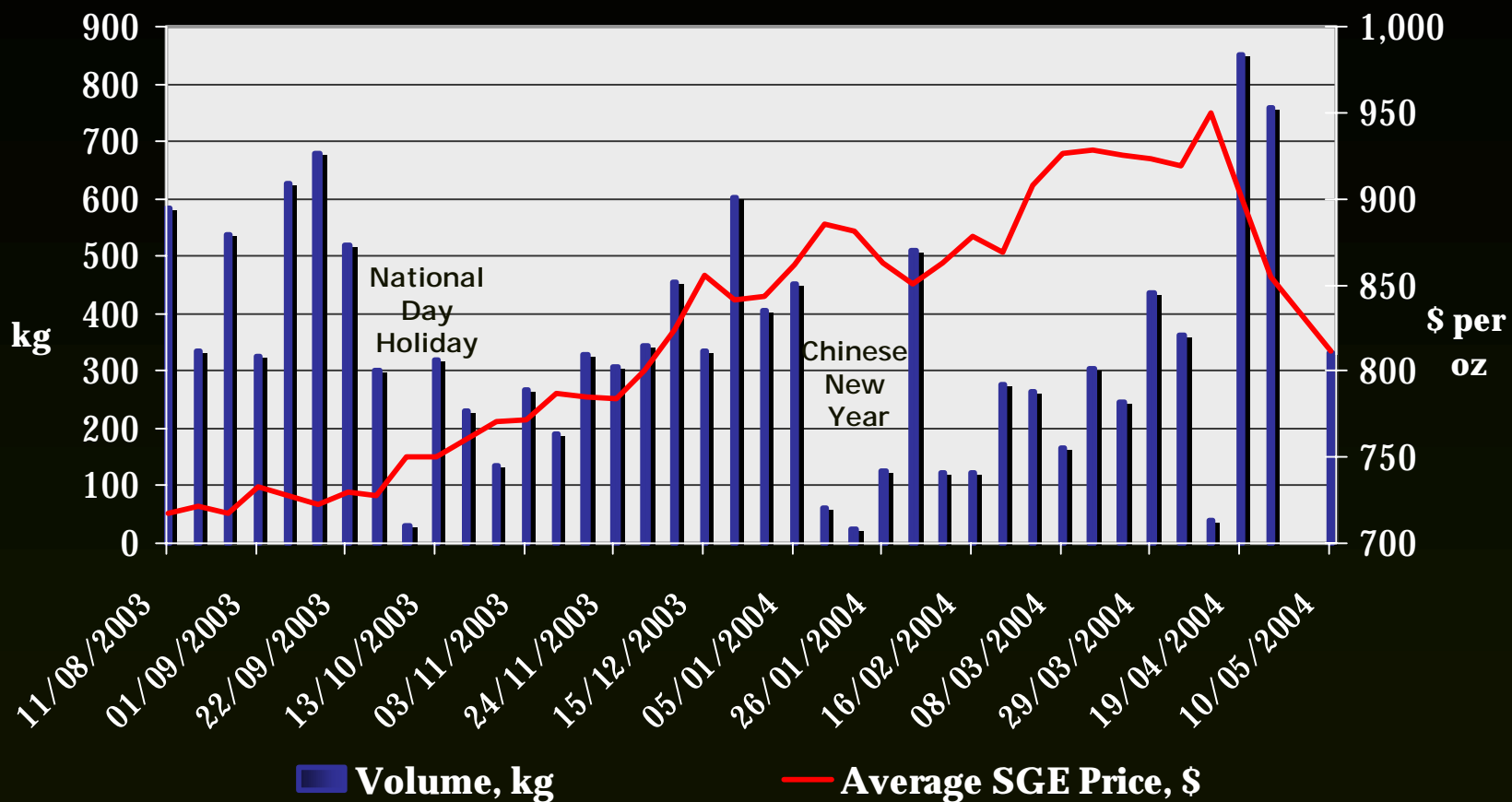


Retail price of platinum jewellery in Shanghai vs equivalent fixing price



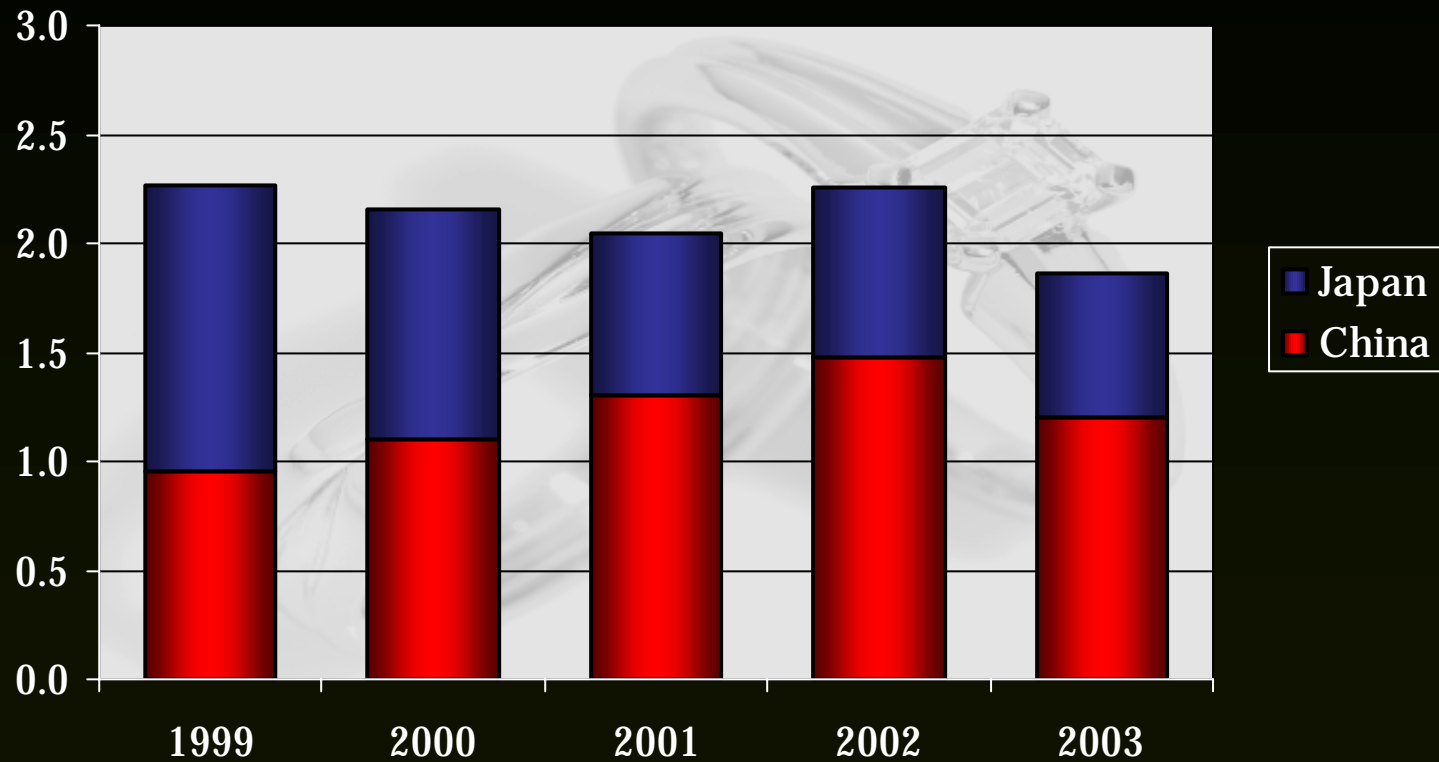
Shanghai Gold Exchange: Weekly platinum trading activity

August 2003 - April 2004



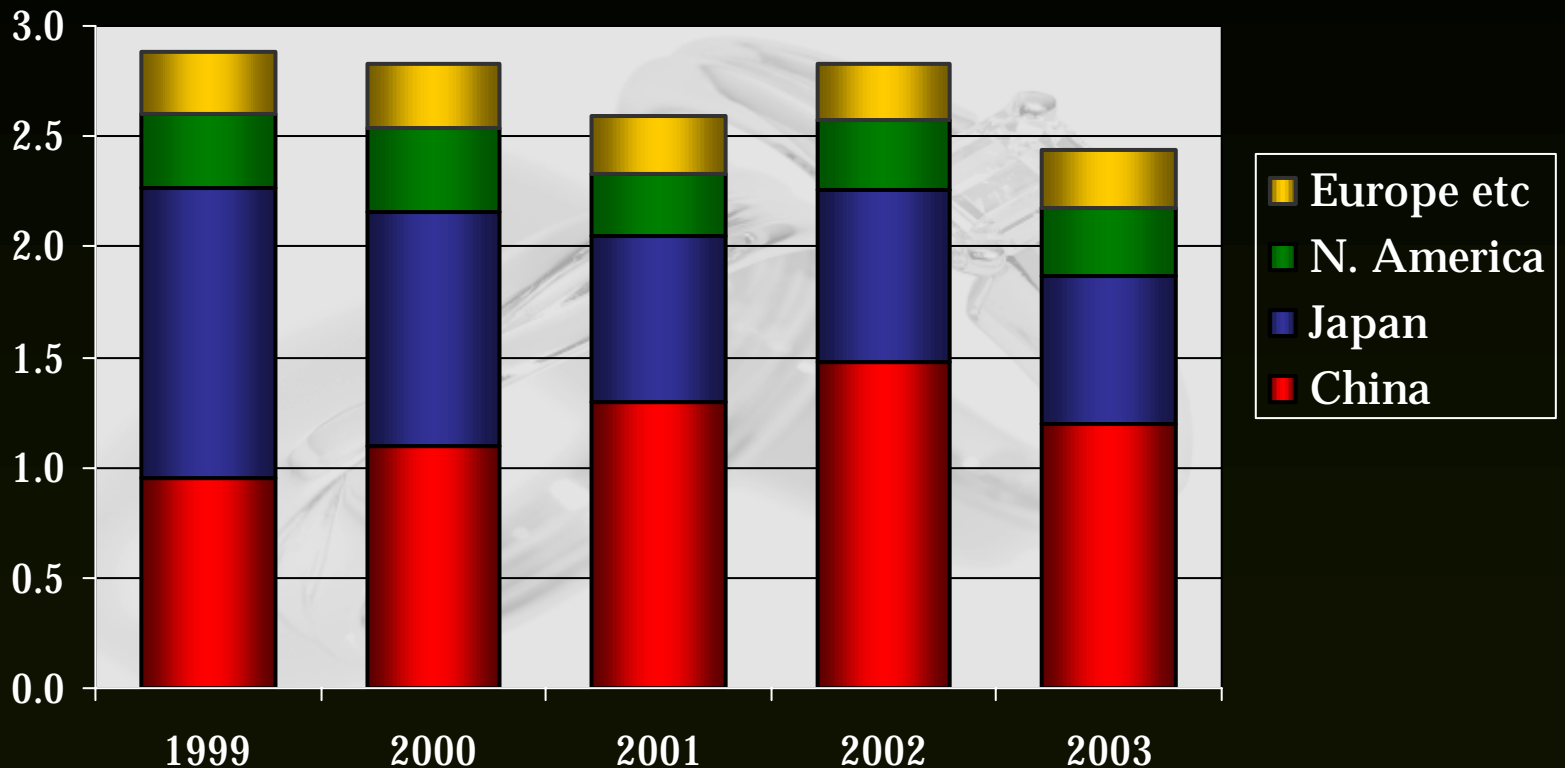
Demand for Platinum in Jewellery 1999 - 2003

million oz



Demand for Platinum in Jewellery 1998 - 2002

million oz



Platinum Demand by Application

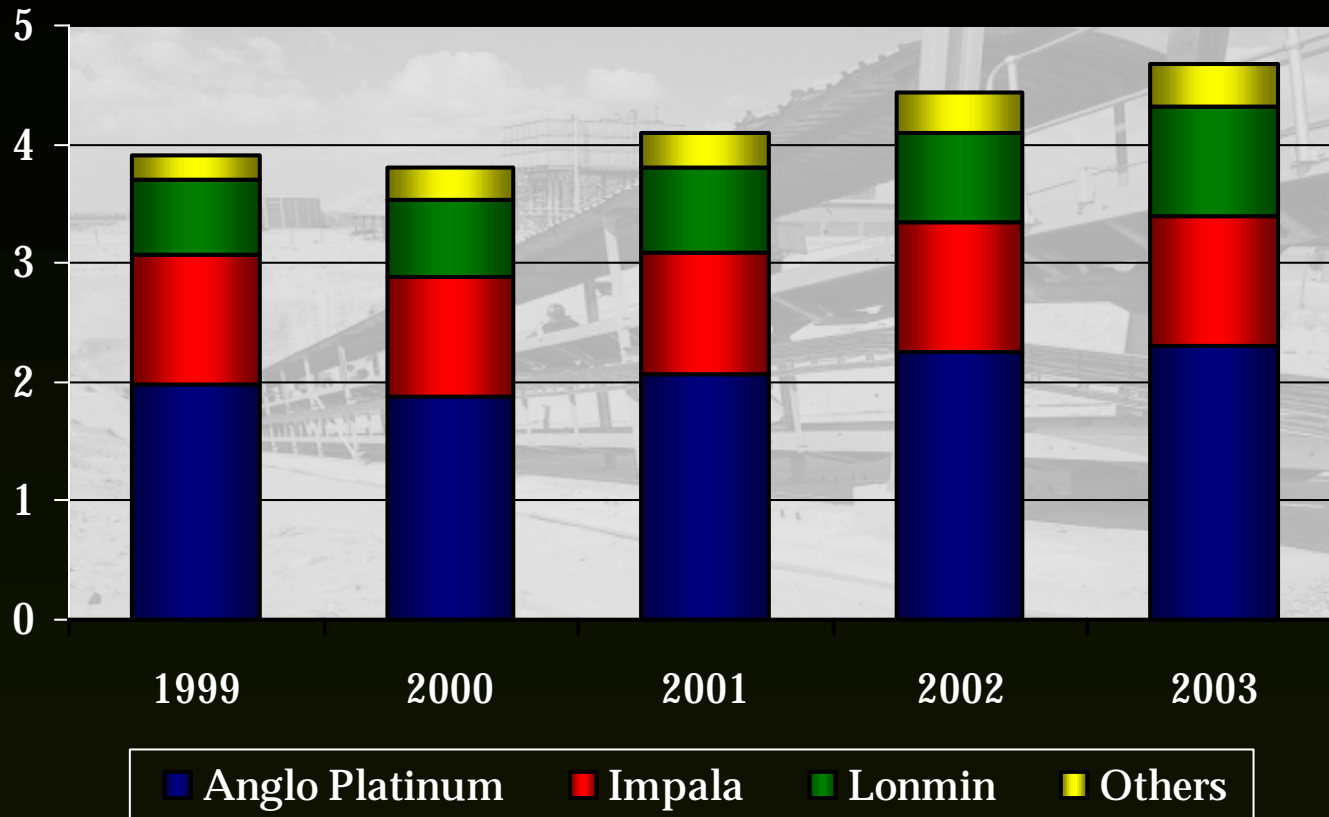
<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	2,590	3,180	23
recovery	(565)	(645)	14
Jewellery	2,820	2,440	(13)
Industrial	1,545	1,520	(2)
Investment	80	15	(81)
TOTAL DEMAND	6,470	6,520	1

Platinum Supply by Region

<i>'000 oz</i>	2002	2003	% change
South Africa	4,450	4,670	5

Expanding South African Supply

million oz



Platinum Supply by Region

<i>'000 oz</i>	2002	2003	% change
South Africa	4,450	4,670	5
Russia	980	1,050	7
Others	540	520	(4)
TOTAL SUPPLY	5,970	6,240	4.5

Platinum Supply and Demand

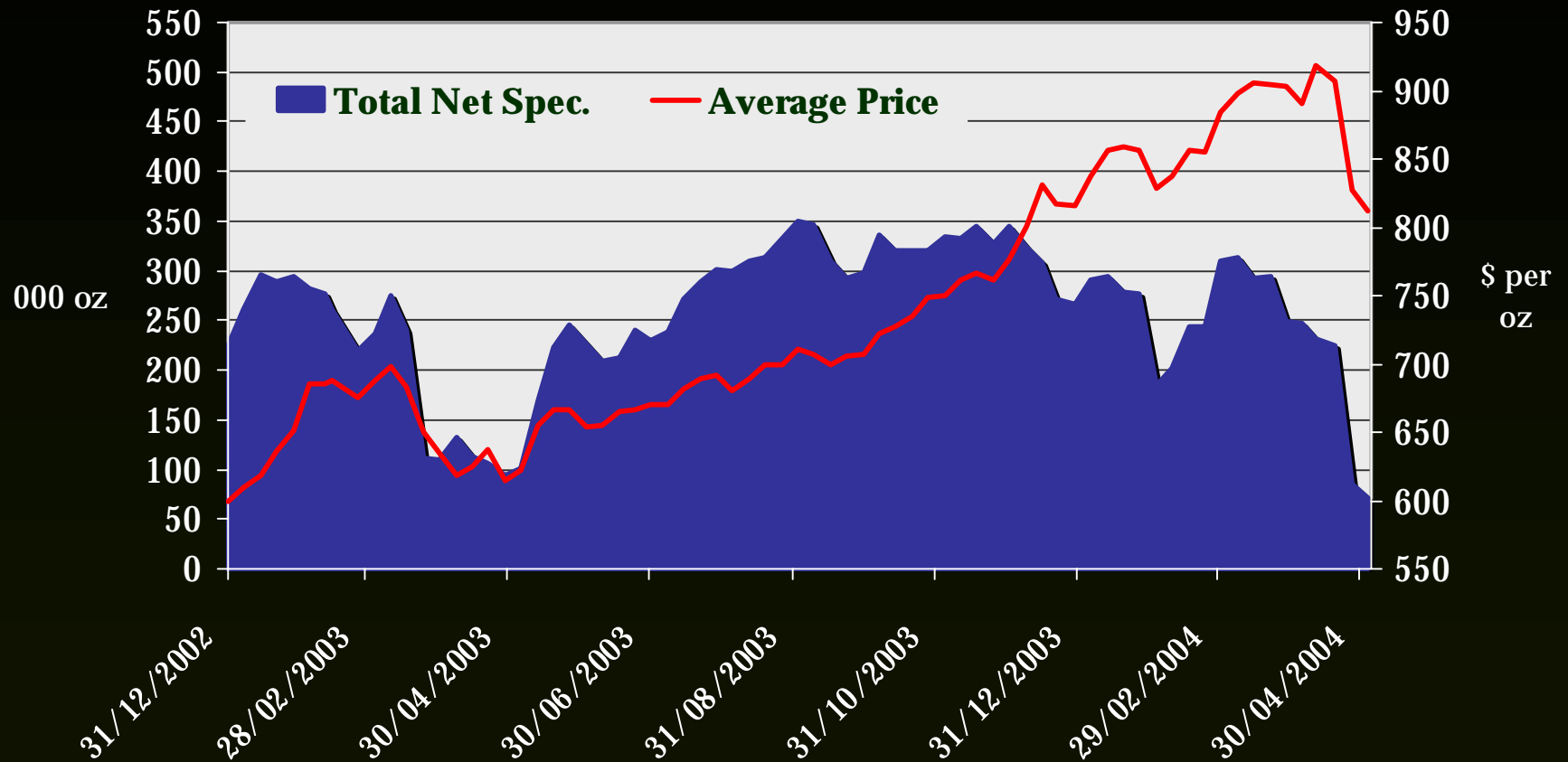
<i>'000 oz</i>	2002	2003	% change
Demand	6,470	6,520	0.8
Supply	5,970	6,240	4.5
Movements in Stocks	(500)	(280)	

Platinum Price January – December 2003



Platinum – NYMEX speculative position versus price

Jan 2003 - April 2004



Palladium

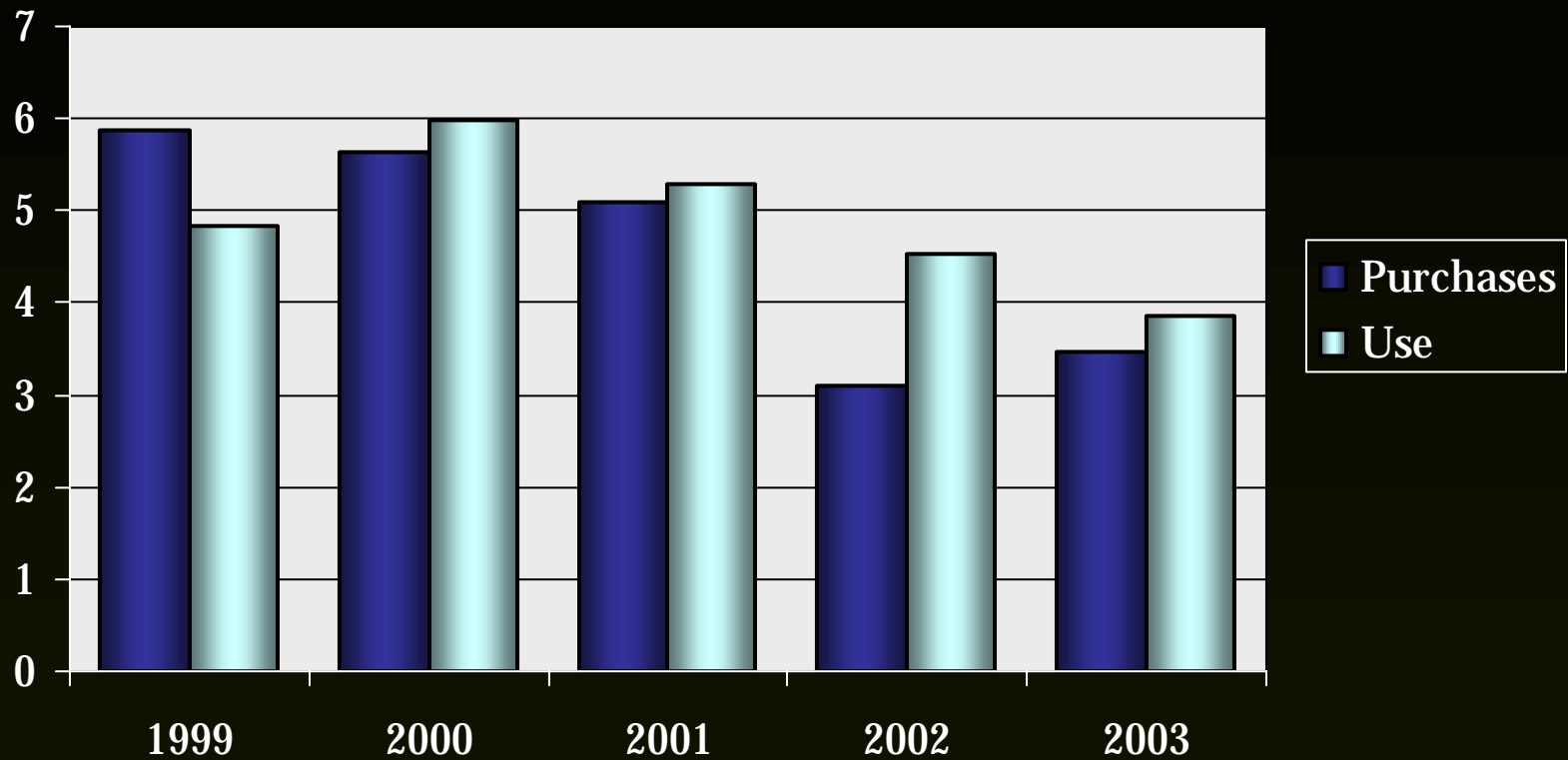
- **Demand improves to 5.26 million oz**
- **Far less use of inventories by auto companies**
- **Stocks no longer affect purchases for electronics**
- **Dental alloy demand falls further**
- **Russian sales rebound to 2.95 million oz**
- **Market surplus widens substantially**

Palladium Demand by Application

<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	3,050	3,460	13

Palladium Autocatalyst Demand 1999 - 2003

million oz



Palladium Demand by Application

<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	3,050	3,460	13
recovery	(370)	(410)	11
Electronics	760	895	18

Palladium Demand by Application

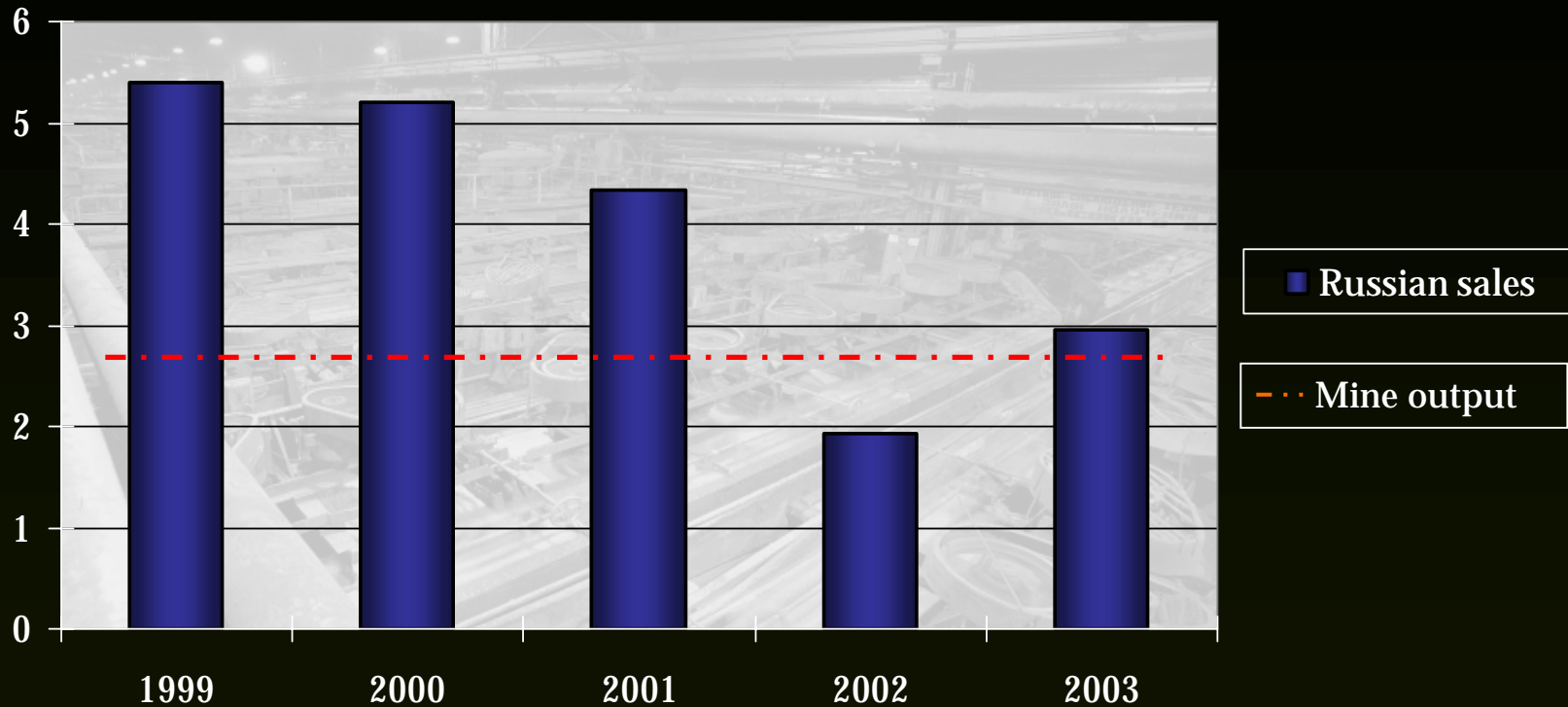
<i>'000 oz</i>	2002	2003	% change
Autocatalyst: gross	3,050	3,460	13
recovery	(370)	(410)	11
Electronics	760	895	18
Dental and Other	1,390	1,315	(5)
TOTAL DEMAND	4,830	5,260	9

Palladium Supply by Region

<i>'000 oz</i>	2002	2003	% change
Russia	1,930	2,950	53

Russian Palladium Sales 1999 - 2003

million oz



Palladium Supply by Region

<i>'000 oz</i>	2002	2003	% change
Russia	1,930	2,950	53
South Africa	2,160	2,310	7
North America	990	940	(5)
Others	170	250	47
TOTAL SUPPLY	5,250	6,450	23

Palladium Supply and Demand

<i>'000 oz</i>	2002	2003	% change
Demand	4,830	5,260	9
Supply	5,250	6,450	23
Movements in Stocks	420	1,190	

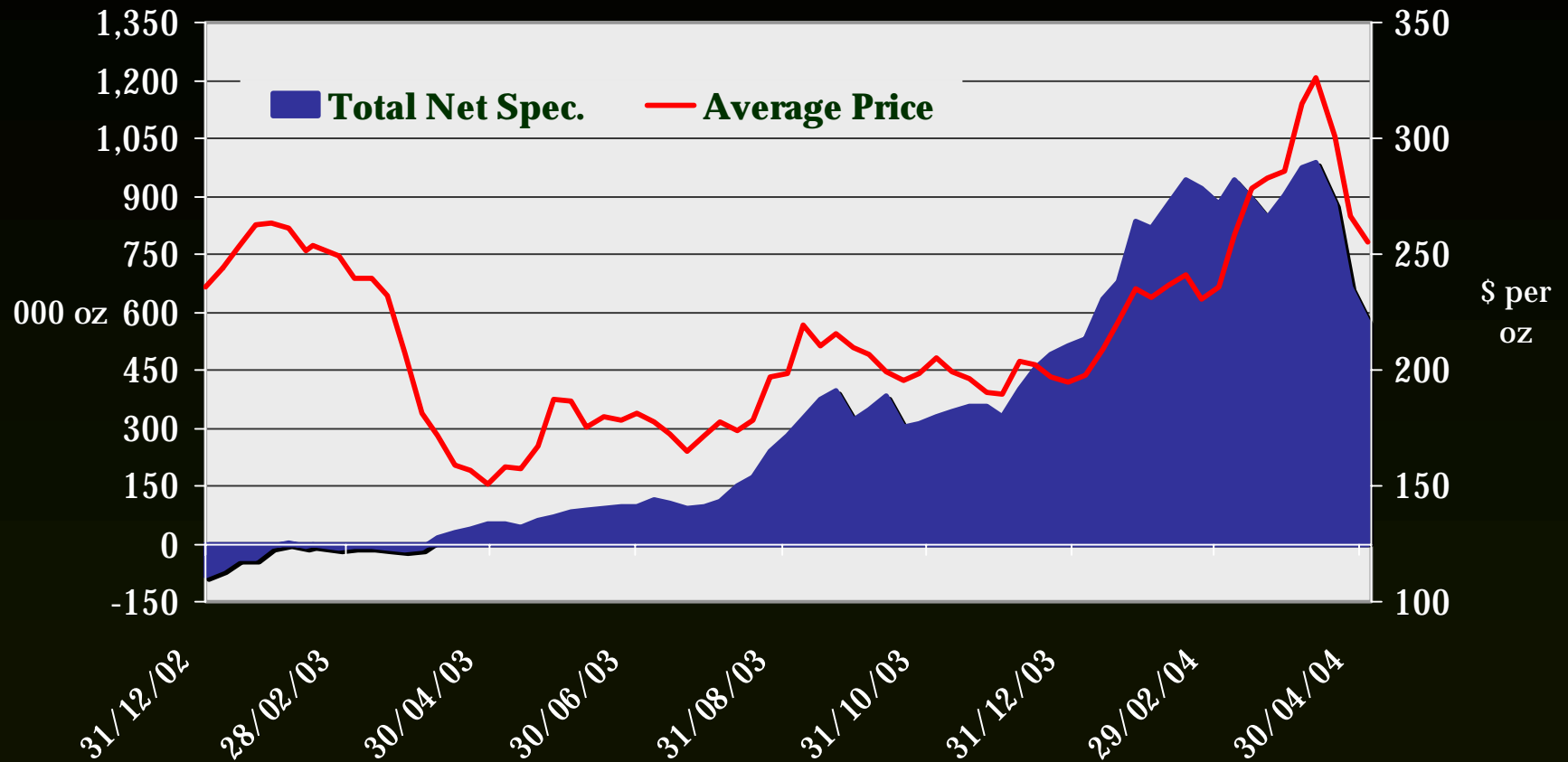
Palladium Price January – December 2003

\$ per oz



— Palladium: London am fix

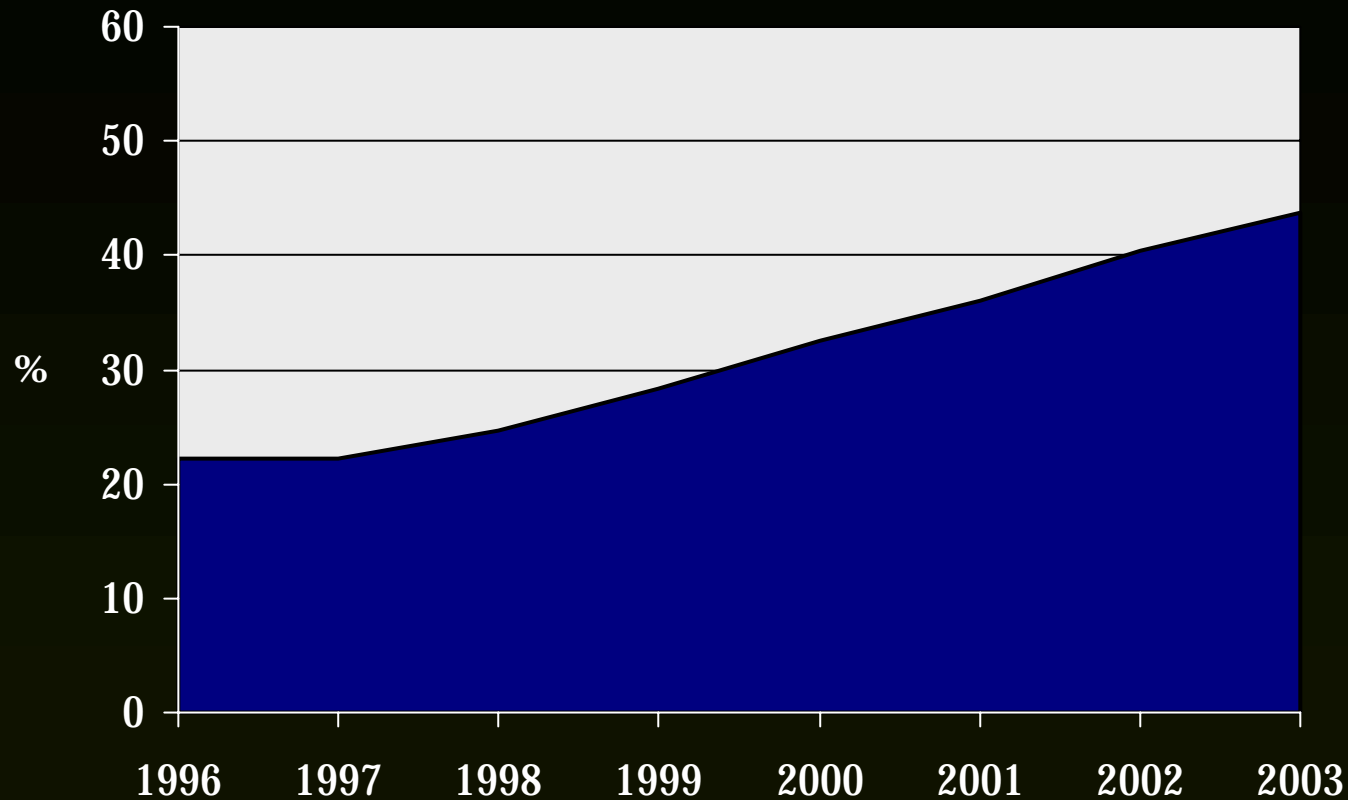
Palladium – NYMEX speculative position versus price Jan 2003 - April 2004



Looking Ahead

- **Auto industry**
 - **diesel car sales**

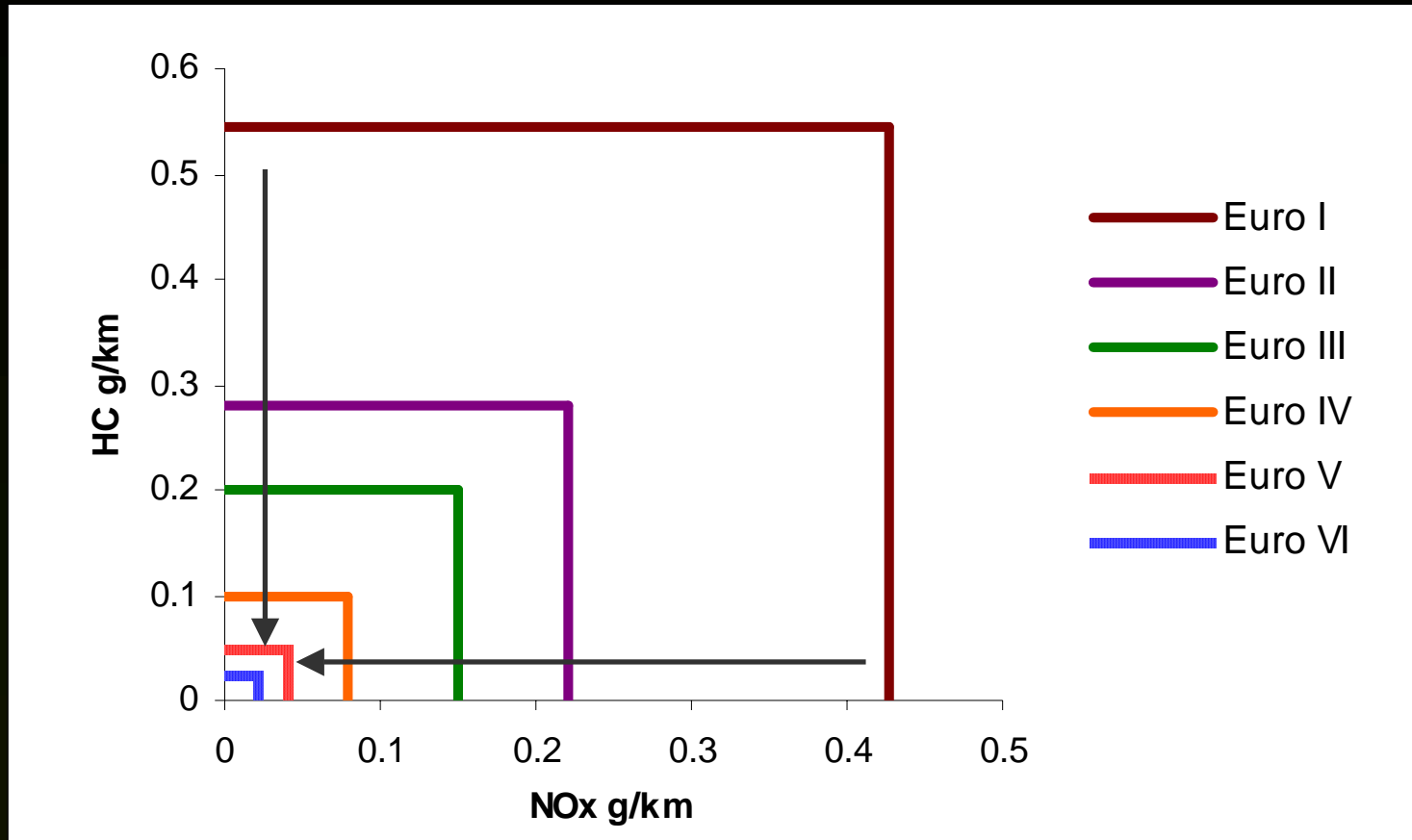
Growth of diesel car penetration in Europe, 1996 - 2003



Looking Ahead

- **Auto industry**
 - diesel car sales
 - **emissions legislation**

Evolution of European Vehicle Emissions Legislation



Looking Ahead

- **Auto industry**
 - diesel car sales
 - emissions legislation
 - **changing pgm ratios & thrifting**

Looking Ahead

- **Auto industry**
- **Chinese jewellery demand**
- **South African mine expansions**
 - Profitability

Looking Ahead

- **Auto industry**
- **Chinese jewellery demand**
- **South African mine expansions**
 - Profitability
 - Legislative programme

Looking Ahead

- **Auto industry**
- **Chinese jewellery demand**
- **South African mine expansions**
- **Palladium stocks**
- **Fund activity**

Forecast Platinum Price For The Next 6 Months



Forecast Platinum Price For The Next 6 Months



Forecast Palladium Price For The Next 6 Months

\$ per oz



Forecast Palladium Price For The Next 6 Months

\$ per oz



Conclusion - Platinum

- **Market to move closer to balance in 2004**
- **Fundamentals remain strong**

Conclusion - Palladium

- **Auto industry purchases to improve but thrifting continues**
- **Supplies to rise significantly; market to remain in substantial surplus**