



Research on the Sapphire Auction Market in China Based on Data Analysis

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Background

Asian jewelry auction market has started in the early 1980s. As for china, Christie's held the first auction in Hong Kong in 1986, which marked the first jewelry auction in China. The first jewellery auction in mainland China was held in 1995 by China Guardian Auctions Co., Ltd., and it has been more than 20 years since then. With the Chinese colored gem market flourishing in the past ten years, sapphire has repeatedly set a new price record in the auction market as a hot spot in the global gem market.

Data & Annlysis

1.The price trend of Sapphire

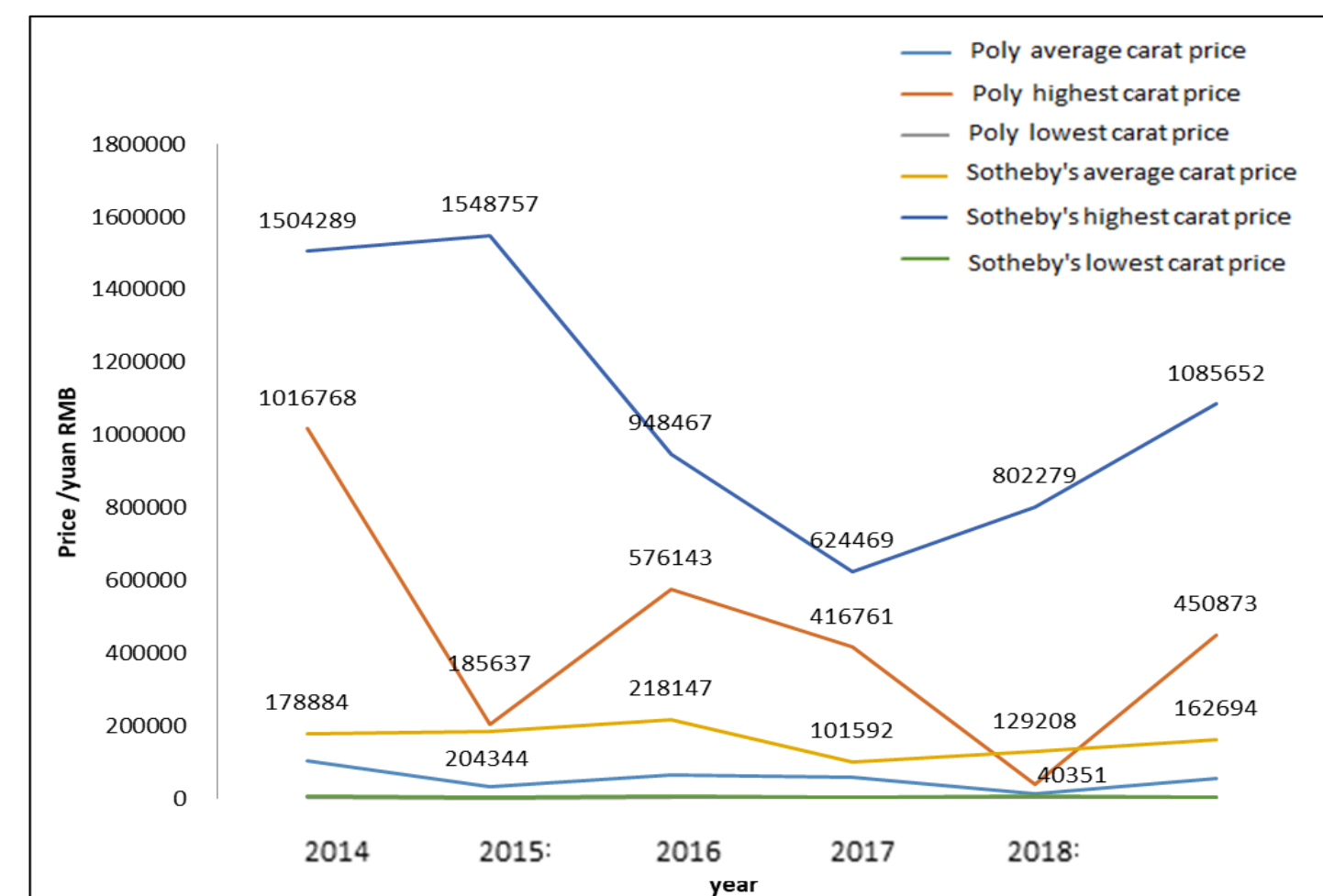


Figure 1 The highest, lowest and average carat unit prices for auctioned sapphire of Sotheby's and Beijing Poly from 2014 to 2018 (data provided by www.wjadp.com)

Between 2014 and 2018, it is found that auctioned sapphire jewellery in China has been maintaining quite steady average carat unit price and the lowest carat unit price with a considerable fluctuation in the highest carat unit price. The highest prices for auctioned sapphire jewellery in mainland China and Hong Kong had been affected to varying degrees with a sharp decline since 2014 and failed to show a slight rebound until 2018.

2.Sapphires Price trend of different weight

Buyers across the Taiwan Strait have a slight polarization when collecting sapphire jewelry. If sapphire were less than 20 carats, buyers would pay more attention to the quality of sapphire. Sapphire boast its rarity mainly by other indicators such as color, origin and so on, which means the weigtght is not the only factors affecting the value. If the carat of sapphire kept gradually increasing, the value of sapphire is mainly reflected in its carat.

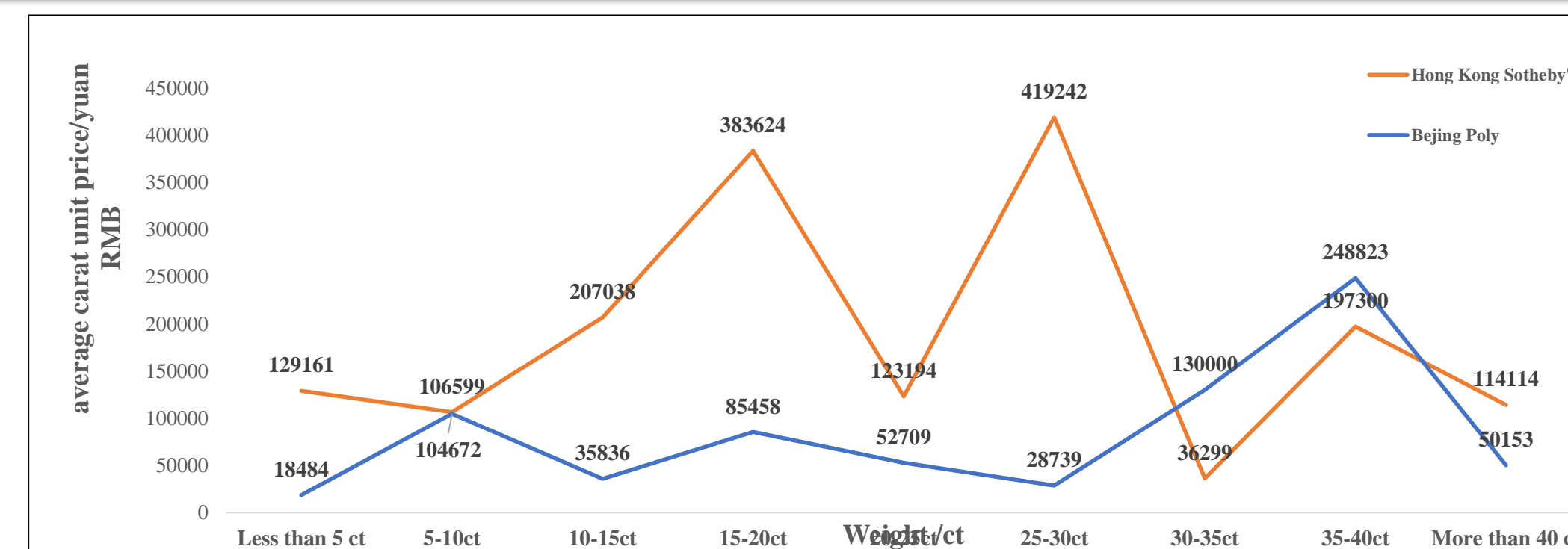


Figure 2 Average carat price trend for sapphire jewellery of different weight (data provided by www.wjadp.com)

3.Statistical analysis of the origin of high-end sapphire

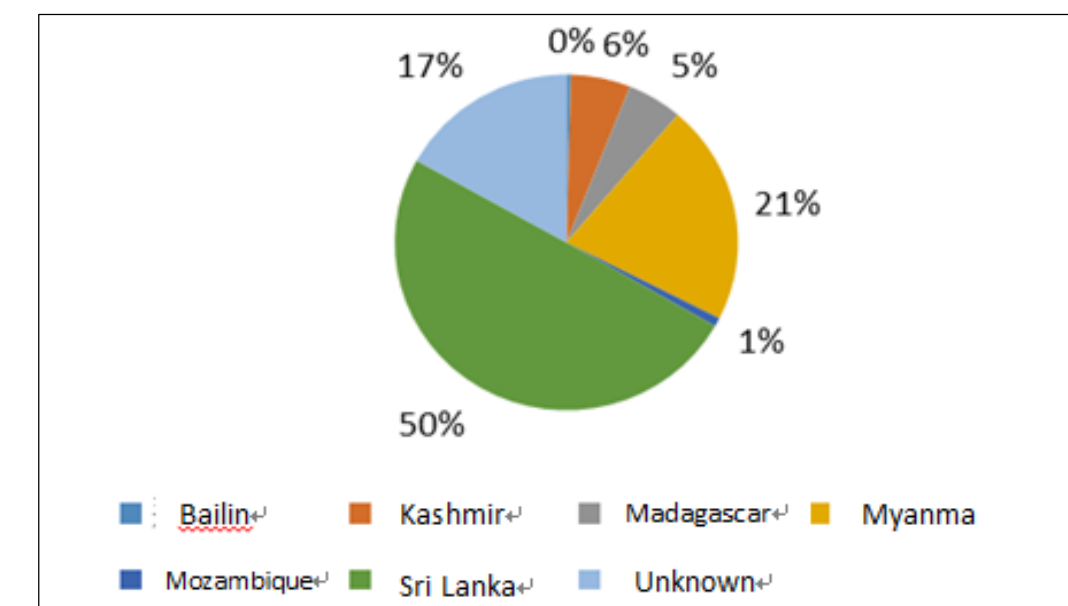


Figure 3 Different origins' proportion of auctioned sapphire of Beijing Poly

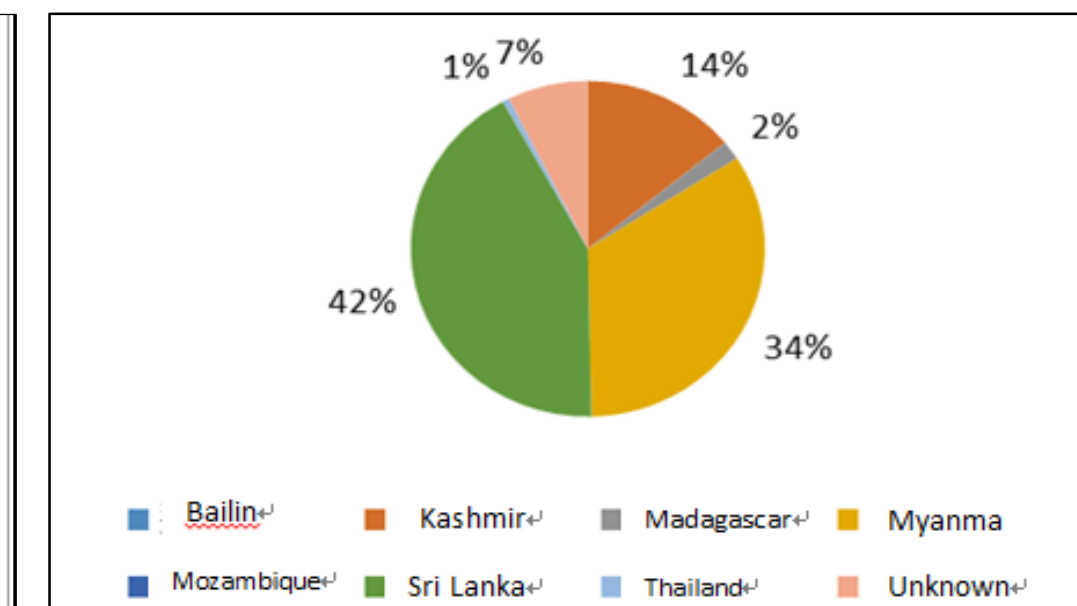


Figure 4 Different origins' proportion of auctioned sapphire of Hong Kong Sotheby's

	Beijing Poly	Hong Kong Sotheby's
Bailin	28750.00	
Kashmir	155741.03	6536826.09
Madagascar	16841.74	1281933.33
Myanmar	44189.26	1034579.09
Sri Lanka	14251.77	968443.77
unknown	4368.22	198235.00

Table 3 Statistics of average carat unit price of sapphire jewellery from different origin (data provided by www.wjadp.com)

Sapphire auction market in Hong Kong has a slightly higher demand for sapphire's origin, mainly reflected in the fact that the number of auctioned sapphire of, for example, Kashmir and Burma is more than that of the mainland China. The difference between the auction market of sapphire jewelry in Hong Kong and mainland is mainly reflected in the fact that the value of sapphire of Myanmar auctioned in mainland China is pretty high, while the value of sapphire of Madagascar, Myanmar and Sri Lanka auctioned in Hong Kong is quite close. The author believes that the sapphire auction market in Hong Kong relies on more mature buyers of colored

gemstone within the more mature quality evaluation system of sapphire, which requires a comprehensive purchasing decision based on the assessment of multiple indicators instead of blindly pursuing the sapphire carat, origin, color and other indicators.

4.Statistical analysis of the color of high-end sapphire

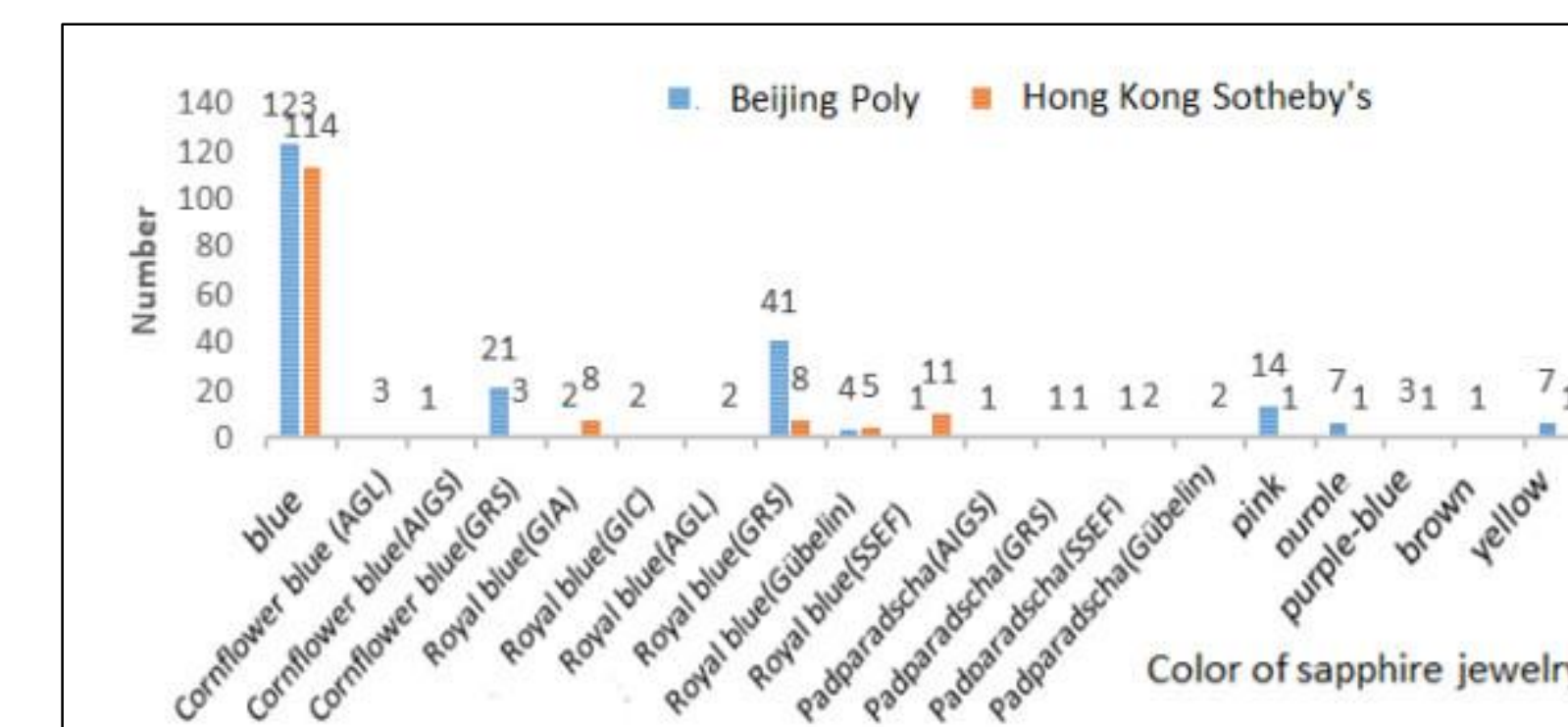


Figure 5 Distribution of auctioned sapphire in different colors in China (data provided by www.wjadp.com)

Blue sapphires are the most popular in the sapphire market, while sapphire of other colors, such as pink, purple, brown, and yellow, are less common. Colors that can affect the value of sapphire jewelry with a high commercial value, such as "Bluebonnet Blue", "Royal Blue", "Paparaccia", account for a relatively high proportion. Third-party accreditation bodies such as AGL, SSEF, Gübelin, and GIA tend to give conservative color evaluations of sapphire in certificates, while GRS is more relaxed when grading the sapphire color.

5.Other factors affecting the market price of high-end sapphire

Except three important factors including weight, origin and color, other factors affecting the quality of sapphire are as follows: clarity, sapphire optimization, special optical effects (such as star sapphire, color sapphire), designers and design brands of sapphire jewelry, and regional market demand for sapphire jewelry auctions.

Conclusion & Discussion

Form the micro perspective, consumers' demands for sapphire jewelry mainly centered upon three aspects: weight, place of origin, and color. First, Sapphire with the weight ranging from 5 to 15 carat is the most desirable, the weight is not the only factor influencing the price and consumers tend to reduce their marginal utility with the carat increasing. Second, the price of Kashmir's sapphires is obviously rising with the highest average carat unit price, but the market demands the most sapphires produced in Burma and Sri Lanka with pretty high average carat unit price. Madagascar sapphire of high-quality is a newcomer to the market, whose value is immune to the effect of origin. Third, the impact of color on the value of sapphire is more significant. Hong Kong has higher requirements for color grades issued by third-party accreditation bodies than mainland China.

From the macro perspective, it was found that the market's demand for sapphire jewellery did not reduce because of the lack of supply. Meanwhile, Sapphire jewelry can bring more returns to buyers in the trading, because it is very resistant to risks and macro-economic factors.

References

- Auction houses:A powerful market influence on major diamonds and colored gemstones. Shor R. Gems&Gemology . 2013