



A Brief Analysis of the General Situation and Price Influencing

Factors of Pink and Blue Diamonds in Auction Market

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Background

In recent years, colored diamonds have become the hot spot of jewelry auction market with a prominent performance in the auction of diamonds, which can be proved by the fact that an apparently increasing number of pink and blue diamonds, representatives of colored diamonds, have been auctioned with the price setting records over the past years. Since pink diamond or blue diamond always occupy the top of global diamond auction price list of the year from 2015 to 2018, they can represent colored diamonds in the auction markets when taking their number and quality of auction into comprehensive consideration.

Data and Analysis

1. Auction trend of pink and blue diamonds

Colored diamonds have a tendency to occupy more markets both in the auction market and retail market. From 2008 and 2018, a total of 449 pieces of jewellery with pink diamond being the main stone have been auctioned, and a total of 144 pieces of jewellery with blue diamond being the main stone have been done. Overall, the number of auctioned pink diamonds is much higher than the number of auctioned blue diamonds, but both of the numbers show generally the same trend in different years.

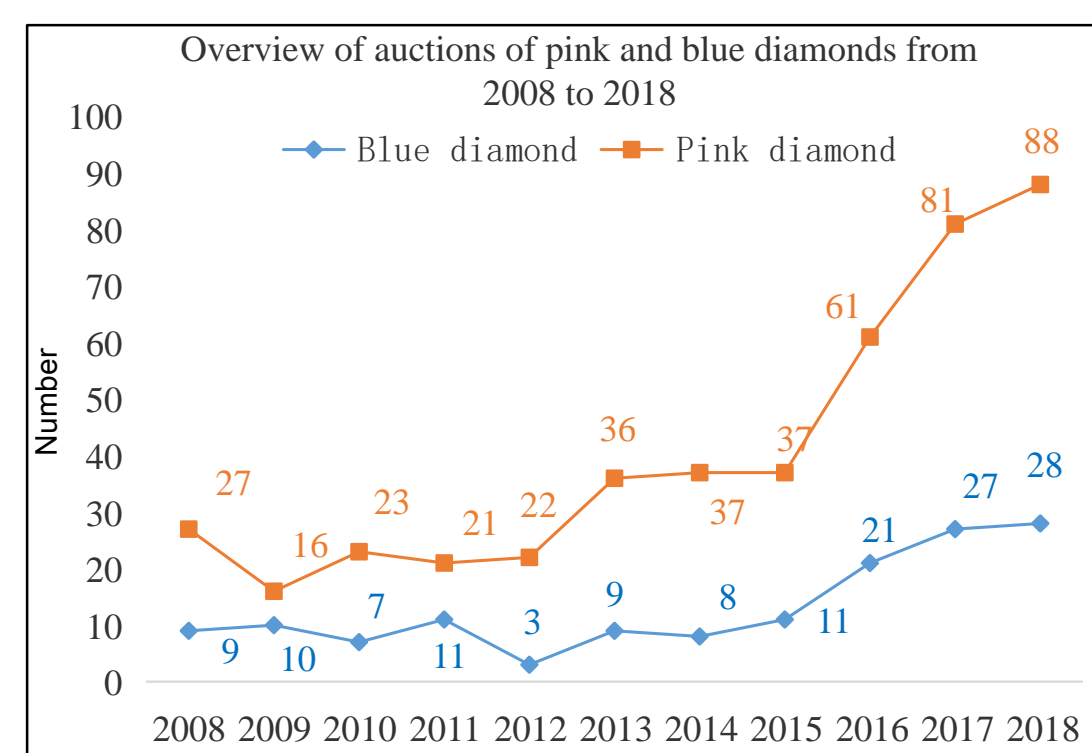


Figure 1 Overview of auctions of pink and blue diamonds from 2008 to 2018 (data provided by www.wjadp.com)

The four main locations for the Pink Diamond and Blue Diamond auctions are as follows: Hong Kong, New York, Geneva and Beijing. Among them, Geneva auctioned high-quality pink and blue diamonds. Mainland China auctioned high-quality pink diamonds mainly in Beijing and Shanghai, accounting for 13.25% of the total, which, to a certain extent, shows that the auction industry in China has just been developing for a short time but rapidly. Comparing with Sotheby's and Christie's by whom the world's pink and blue diamonds are mainly auctioned, Chinese auction companies are quite young, and the auction industry is just getting started.

	Geneva	London	New York	HongKong	Beijing	Shanghai	Other cities	Total
Pink diamond(number)	75	27	99	153	72	14	9	449
High-quality pink diamond (number)	27	3	16	26	8	3	0	83
Proportion of high quality	32.53%	3.61%	19.28%	31.33%	9.64%	3.61%	0	100%
Proportion of auctions	36%	11.11%	16.16%	16.99%	11.11%	21.43%	/	/
Blue diamond(number)	27	9	41	52	13	2	0	144
High-quality blue diamond (number)	15	0	13	15	0	0	0	43
Proportion of high quality	34.88%	0	30.24%	34.88%	0	0	0	100%
Proportion of auctions	55.56%	/	31.71%	28.83%	/	/	/	/

Table 1 Statistics of high-quality pink diamond and blue diamond auctioned at different auction sites (data provided by www.wjadp.com)

Note: The proportion of high quality is the percentage of high-quality diamonds auctioned at one auction site in all high-quality diamonds auctioned at all sites; the proportion of auctions is the percentage of high-quality diamonds auctioned at one auction site in all diamonds auctioned at this site.

	Sotheby's	Poly	Beijing Council	Christie's	China Guardian	Phillips	Bonhams
Pink diamond (number)	201	38	38	82	33	14	42
Blue diamond (number)	75	7	4	34	7	6	11
Total (number)	276	45	42	116	40	20	53

Table 2 Number of auctioned pink diamonds of auction companies from 2008 to 2018 (data provided by www.wjadp.com)

2. Analysis of factors impacting the auction price

① Impact of modifying colors on the price

Modifying colors' impacts on the auction price of pink and blue diamonds, both negatively and positively, tend to be declining, which suggests the enhancement of overall value of these two kinds of diamonds. However, a few modifying colors' impact on price has changed a lot. For example, the average impact of blue diamond with greenish color has decline from 128.7% to minus 29.4%, while that of pink diamond with orangish color has done from minus 34% to 13.1%, which are opposed to the previous statistical results and imply the changes in people's aesthetic standard to a degree.

Table 3 Impact of modifying colors on the carat price of pink and blue diamonds from 1996 to 2011[1]

Color	Modifying colors	Number of auctions in the comparison	Average impact
Blue	Grayish	7	-47.6%
	Greenish	3	128.7%
	Purplish	44	22.3%
Pink	Brown-Orangish	2	-78.6%
	Brownish	17	-69.3%
	Orangish	26	-34.0%

Note: Average impact = (Carat price of diamonds with modifying colors / Carat price of diamonds without modifying colors - 1) × 100%

Table 4 Impact of modifying colors on the carat price of pink and blue diamonds from 2008 to 2018

Color	Modifying colors	Number of auctions in the comparison	Average impact
Blue	Grayish	8	-41.5%
	Greenish	3	-29.4%
Pink	Purplish	40	27.2%
	Brown-Purplish	3	-48.9%
	Brownish	11	-21.5%
	Orangish	15	13.1%

Note: Average impact = (Carat price of diamonds with modifying colors / Carat price of diamonds without modifying colors - 1) × 100%

② Impact of carat on the carat price

The carat price of blue diamond is more sensitive to the impact of carat than that of pink diamond. Furthermore, the impact of carat on the diamond's value is also disturbed by other more important factors, such as color grade, which means the color grade has more impact on the value than the carat.

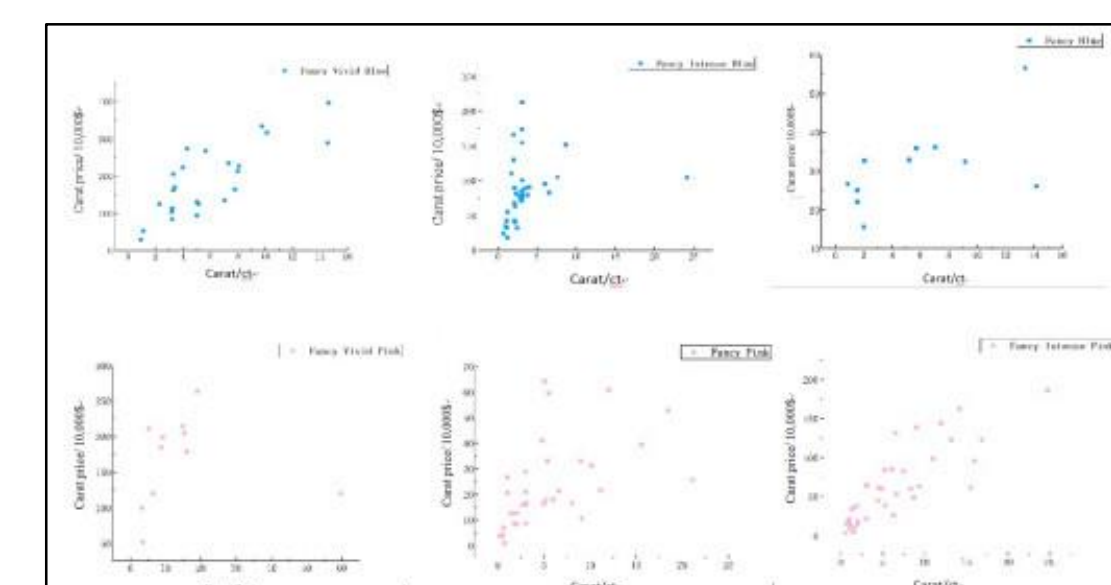


Figure 2 Carat price Versus carat weight at different color grade (data provided by www.wjadp.com)

③ Impact of color grade on the value

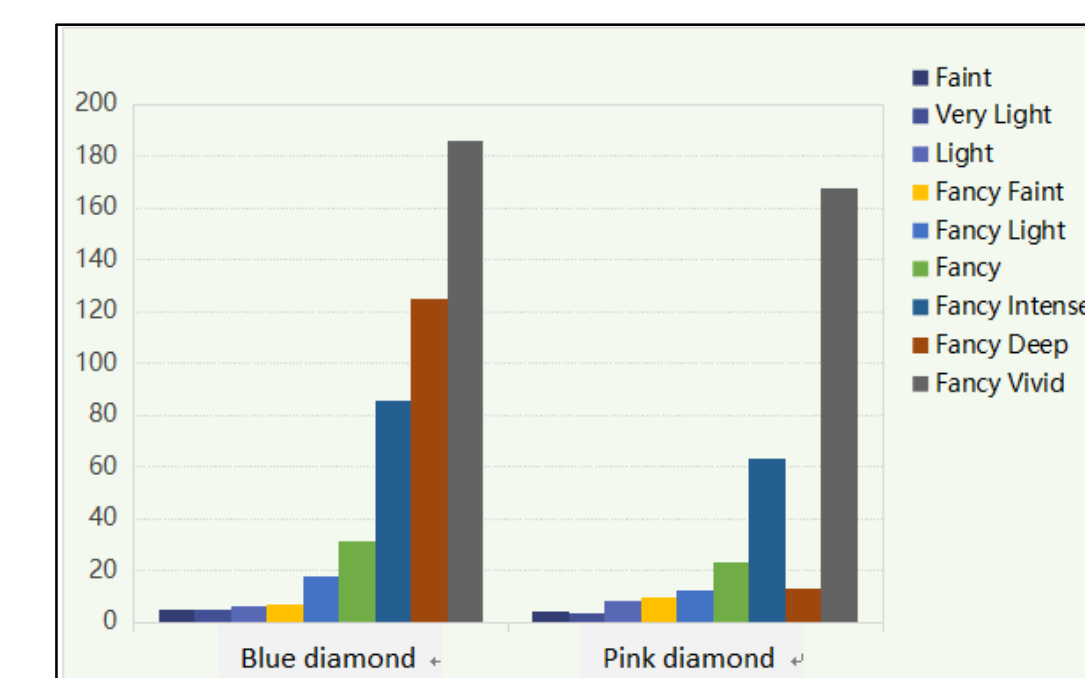


Figure 3 Average carat price for different color grades

Color is still the most important factor affecting the price, because even when disturbed by other variables, color grade still influences the price of pink and blue diamond regularly with a much bigger impact than clarity grade and other individual factors.

④ Impact of shape on the clarity

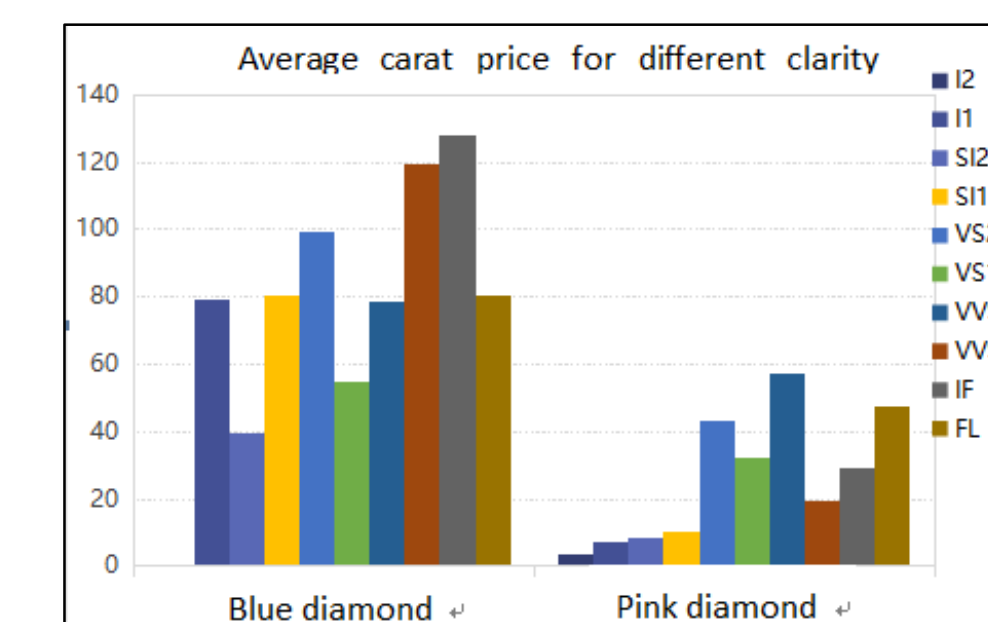


Figure 4 Average carat price for different clarity grades Note: The price multiple equals the carat price of higher clarity divided by that of lower clarity.

Table 5 Carat prices with different clarity grades of the same color grade

Year	Color Grade	Weight/ct	Clarity Grade	Carat Prices /10,000\$	Price Multiple
2015	Fancy Intense Blue	3.17	VS2	79.36	2.68
2018			VVS1	212.89	
2018	Fancy Vivid Blue	8.07	VS2	226.92	0.94
2016			VVS1	213.42	
2012	Fancy Pink	6.03	VS2	17.95	1.19
2009			VVS1	21.35	
2015			VS2	9.38	3.31
2014	Fancy Light Pink	5.91	VVS1	31.05	
2018			VS2	2.80	2.47
2017	Light Pink	1.59	VVS1	6.91	

The color grade exerts greater influence on the value of pink diamond and blue diamond than the clarity grade. As the figure shows, the average carat price of blue diamond is basically higher than that of pink diamond, indicating that blue diamond is more valuable than pink diamond under similar conditions.

⑤ Impact of cutting style on the value

Cutting style	Ratio of carat price
Pear cut: Olive cut	1.679、1.350、1.300、0.868、0.762、0.620、0.532
Pear cut: Round cut	0.784、0.493、0.476
Pear cut: Emerald cut	1.735、0.589、0.549、0.511、0.420
Pear cut: Cushion cut	1.150、1.130、1.080、0.924、0.885、0.822
Pear cut: Heart cut	1.250、0.904
Pear cut: Square cut	2.164、1.569、1.565、1
Pear cut: Oval cut	0.956、0.926、0.547

As the statistics shows, the rough influence ranking of cutting styles is as follows: round cut > oval cut / emerald cut > pear cut / olive cut > square cut. Due to the instability of the auction price, the contrast between the cutting style and the value here is just a rough estimate, which means it is impossible to accurately indicate which cutting style is more valuable than the other one, or find their concrete value-added or value-reduced coefficient.

Results & Discussion

Pink diamonds and blue diamonds have received more and more attention in the auction market when color diamond auction market in China has developed rapidly and well. Based on the analysis of auction's sites, quantity, and quality, it can be concluded that Hong Kong and Geneva are the two auction sites that deserve the most attention in the jewelry auction, so it is recommended that collectors from all over the world should pay close attention to the jewelry auctions in these two sites for more information and references of quality auctions.

The price of pink diamond and blue diamond is relatively stable in the auction market and invulnerable to the impact of macro economic environment. Meanwhile, the colors, including the color grade and the modifying colors, has the biggest influence on the price of colored diamonds, which means other factors, such as clarity grade, carat, and cutting style, are less influential.

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