

**Rembrandt Works of Art at Auction:**

**An Analysis of the Market of Rembrandt  
Harmenszoon van Rijn Paintings,  
Drawings and Prints in the Period  
1986 - 2007**

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## Short Prefatory Note

This master thesis has been written to complete my studies in Cultural Economics and Cultural Entrepreneurship. Since this master degree program allows students to combine the two subjects of (visual) arts and economics, I have had a wonderful year. These are the two subjects that have fascinated me for many years. Besides, the combination of arts and economics turned out to be more than the sum of the parts. Studying the arts from an economical perspective is incredible interesting. It is for this reason that I have chosen the subject of the process of pricing for my thesis. Where do the history of arts and economics come closer together than at the auction market of an old master painter such as Rembrandt?

The subject of prices for the visual arts turned, however, out to be a relative new research domain for the faculty of History and Arts. At the start of my investigation I was unable to find such researches of previous graduates in the data-bank of the Erasmus University. My supervisor Filip Vermeylen was therefore of crucial value during the process of writing. His knowledge of the visual arts and art markets allowed me to do the research I really liked. Besides this I am thankful for his (mental) support in general. I also would like to thank my second reader Wouter de Nooy for his useful comments.

Furthermore I would like to give special thanks to my friends Carlien, Marianne, Elena and Arzu. Their encouragement and support have helped me a lot. In particular Carlien, who guided me through the SPSS analysis, was of great value.

Finally, I wish to thank my parents, sisters and brother for always being there for me. My father deserves special thanks for helping me writing this thesis in proper English. And last but not least, I would like to thank my boyfriend Wander for his rock solid confidence in me.

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# 1 Introduction

On 30 January 1998 at Sotheby's New York Rembrandt's "portrait of a bearded man in a red doublet" (accommodation unknown, 1633) was hammered down for \$8.25 million dollars. Three years later the same painting appears again on the market, this time at Christie's New York. The picture now yields \$11.46 million, more than \$3 million dollar more than the previous transaction.

On 13 December 2000 the auction market gets heated up by the "Portrait of a Lady, aged 62, perhaps Aeltje Pieterdr. Uylenburgh" (The Hague, on loan at the Mauritshuis, property of a private collector, 1632). The painting obtains a price of more than \$26 million.

Six years later it is "Saint James the Greater" (accommodation unknown, property of private collector, 1661) that reaches the headlines: a rough \$23 million is paid for the religious picture of Rembrandt.

These transactions are only a few examples of Rembrandt works that have come to auction in the past decades. Obviously, dazzling prices are paid for his works of art. However, the value of these pictures may disappear, too. The prices could even drop to a fraction of their current value without even changing the painting itself. This is proven by the "Man with the golden Helmet" (Berlin, Staatliche Museen Gemäldegalerie, around 1650), a Rembrandt painting that was highly appreciated by the art experts and the public until it became known that the work was not a real Rembrandt after all. Although the picture stayed exactly the same, people lost their interest and the economic value of the painting decreased significantly (Bonus & Ronte, 1997:103). But the opposite happens too. A collector who had bought two works made by artists out of Rembrandt's circle for the amount of respectively \$49.5 thousand and \$125 thousand suddenly had to ensure the objects for \$5 and \$6 million after the paintings turned out to be authentic Rembrandt works.<sup>1</sup>

Clearly, Rembrandt is a matter of millions. The question then is, why are we willing to pay these immense prices especially for him?

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<sup>1</sup> Velthuis, O. 30 September 2005. Het gaat mij om het werk, niet om het geld. *De Volkskrant*. <http://zoek.volkskrant.nl/artikel?text=Alfred%20Bader>, consulted on 10 July 2007.

*Which factors and what phenomena can be held responsible for Rembrandt's success in general?*

This will be the first question that will be answered in this thesis.

The answer will, however, not explain why certain pictures are expensive and others even more precious. In other words, it will not explain how individual prices are formed.

The central question of this research is therefore:

*Which factors and what phenomena play a significant role in the determination of prices of Rembrandt works of art sold at auction between 1986 and 2007?*

Although Rembrandt has made paintings and drawings and was even famous for his etchings, the focus will lay on paintings. Due to limited sources drawings and prints will only be investigated in a more rough way.

In order to answer the above raised questions I will first take a look at the existing literature on art markets and art prices. This will give us a first idea on the mechanisms at work in the market for visual arts. Furthermore, it will help us placing the research in a context.

Then different theories that shed light on the economic valuation of works of art will be discussed. Besides this, a historical approach to Rembrandt's life and market will be added. Rembrandt's recent success may after all lie partly in the past.

After that a quantitative investigation will be done in order to get a more precise picture of the market of Rembrandt prints, drawings and paintings sold at auction during the past decades and the process of pricing. Since the market for Rembrandt paintings is extremely thin, econometrical tools may fall short. It is for this reason that a qualitative part is added.

Finally, the main findings will be collected in a conclusion.



## 2 Literature review

### 2.1 Introduction

Several (empirical) studies have been done on the subject of art markets and art prices. While some of them focus on the specific characteristics of the art market, others have a more narrow view and look at the determination of prices, art as investment goods or behavioral anomalies of actors operating at the art market. Finally, some authors have investigated the researches themselves and tried to phrase the mistakes and possible pitfalls.

### 2.2 Characterization of the art market

#### 2.2.1 Differentiating factors

Some of the studies have highlighted the fact that the art market cannot be taken as any other market. The art market, its producers, products and consumers would be fundamentally different than other markets.

Baumol (1986) stated that the market for old master paintings lacks an equilibrium level since supply is often not able to adjust itself to demand. In other words, due to the fact that elasticity of supply of artists no longer living is zero, the responsiveness of supply is insufficient and unable to create equilibrium. Besides the inelastic supply the art market has some other specific characteristics. Firstly, in contrast with a particular stock that is made up of a several homogeneous securities, works of art are unique and are therefore imperfect substitutes. Secondly, while a stock is held by a large number of independent traders in a situation of almost perfect competition, the art market has a lot of monopolies. The owner of a Rembrandt for instance holds a monopoly on that painting. Thirdly, the art market is thin. While transactions in a certain stock happen frequently, transactions, in for instance the market for Rembrandt paintings, are scarce. Fourthly, according to Baumol the art market is less transparent than other stock markets. In case

of a transaction, the price of the stock is usually public information in contrast to prices of visual arts<sup>2</sup>. Finally, the true price of a given stock is known. The true or equilibrium price is the 'pro rata share of the discounted present value of the firm's expected stream of future earnings' (Baumol, 1986: 11). The equilibrium price in the art market is unknown. This means that it is impossible to say something about the evaluation of art objects. Frey and Eichenberger (1995) also mention that the art market is not like any other market. High transaction costs, incomplete information and the phenomenon that most masterpieces are not traded very often, characterize this market.

### 2.2.2 Comparable factors

Other researchers have stated quite the opposite. In their view art markets are not that exceptional. Singer and Lynch (1997) are an example of this. These authors investigated whether the market for fine art was rational. In a rational art market traders make use of all relevant art historical and critical information. Information on the authenticity of works will also be taken into account. In a rational art market works with art historical importance and a proof of authenticity will be valued higher. Artists that created or added significantly to a certain art movement will be the most expensive painters. The historical significance is communicated by the major museums and by historical and critical literature. Singer and Lynch concluded that all relevant information on art historical importance and information on authenticity play a major role in determining prices of works of art and hence, art markets are rational.

## 2.3 Determination of prices

Some investigators have taken the research of Singer and Lynch further and looked more closely at the process of pricing. They investigated which factors had an influence on price in the visual arts.

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<sup>2</sup> There seems, however, to be a difference between works of art that are sold in art galleries and works of art that are sold at the auction houses such as Rembrandt paintings. Pre-sale estimates and hammer prices of Rembrandt works of art are usually public information if these works are sold at auction. However, if a work of art does not reach its reserve price the market can indeed become a less transparent market.

### 2.3.1 The market for Old Master paintings, English 18th and 19th century art, Impressionists and 20th century paintings

Anderson (1974) has investigated the market for Old Master paintings, specifically English 18<sup>th</sup> and 19<sup>th</sup> century art, Impressionists and 20<sup>th</sup> century paintings from the period 1780 to 1970. He examined data from Mayer (1971) and Reitlinger (1961, 1970). The observed painting prices are related to size, condition, subject matter, signature, reputation of the work and provenance. Since the data from Reitlinger and Mayer does not contain all the necessary information to study each influential factor, Anderson only uses the year in which the painting was sold, the size, the year in which the work was produced, the age of the artist when the painting was made, whether the painter was alive during the transaction and the place of sale (Czujack, 1997). The year in which the work was sold, size and reputation are the only significant variables Anderson finds.

### 2.3.2 Price determination in the tertiary<sup>3</sup> market: Picasso paintings at auction

Czujack (1997) analyzed the market of Picasso paintings sold at auction in the period 1963-1994. With the help of the hedonic regression method she tested which factors and to what extent certain factors have an influence on price. The hedonic regression method is especially well suited for investigating the economic value of heterogeneous goods. It can therefore be a helpful tool in estimating prices of paintings. In order to overcome the uniqueness of works of art, different characteristics of the painting are being valued as if there is a specific market for each of these features.

Czujack used several propositions that are assumed to play a major role in the determination of prices.

- The first factor that was assumed to have an influence on price is 'size'. On the one hand one expects large paintings to be more expensive. On the other hand, large paintings may be in less demand since they are too big to hang them at the collector's walls. After applying the regression method Czujack found higher prices for larger works of art. However, the marginal price increase decreases.

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<sup>3</sup> On the tertiary market art is offered for sale at auction houses. On the secondary market galleries buy and sell art objects. The primary market consists of artists.

- Technique is the second characteristic that has been tested. Oil on canvas is assumed to be the most expensive combination of techniques and media in case of Picasso. The results of the hedonic regression method confirmed this proposition.
- Signature is seen as a very important factor, especially when it is visible. This characteristic is assumed to give the owner of a painting a feeling of prestige. However, Czujack found that this factor did not have a significant influence on price.
- The fourth characteristic that was tested was the existence of a proof of authenticity. This factor turned out to add around 17 percent to the price.
- The number of exhibitions was also thought to have an influence on price. Paintings that are often exhibited are assumed to be more expensive. The hedonic regression analysis confirmed this idea. However, it is unclear whether the higher price is caused by the amount of exhibitions or by the fact that these exhibited works are simply better than others.
- A sixth factor that was investigated was the number of times a work was sold. Folk assumptions say that it is more profitable to hold a painting for a longer period of time rather than selling it quickly after having it bought. The results confirmed this proposition. Paintings that were sold more often had lower prices.
- Although it seems logic that pre-sale estimates of auction houses play a large role in the determination of prices, the results of Czujack could not prove this idea.
- The place of transaction was also analyzed. Sotheby's and Christie's are seen as the leading salesrooms. Although their overall performance does not differ widely, Sotheby's has sold twice as many works of Picasso as its competitor during the investigated period. Sotheby's is therefore better able to attract sellers than Christie's. This may be due to a difference in reputation or to the different specializations of the salesrooms. Taken everything together Czujack found that paintings on average are more expensive in the United States but once the results are controlled for other influential factors, there is no difference between auction houses and nations. Salesrooms and countries are therefore unimportant factors in the determination of Picasso prices.
- Since Picasso's life can be divided into different periods which all have their own style, number of output, level of influence in case of art historical significance and

level of quality, one can expect that these aspects will be reflected in prices. This turned out to be not the case. The highest prices are not paid for the famous "Style Picasso paintings" but for the art objects of his childhood and youth. Czujack concludes that this may be caused by a rarity effect. Collectors pay the highest prices for works that are made in periods of low activity and therefore 'rare' pieces of art.

- Provenance, the previous owner of a painting, is also assumed to have an influence on price. Surprisingly, the results stated something different. Important collectors do not play a major role in determining prices of Picasso paintings.
- Finally, Czujack researched whether boom and non-boom periods had an influence on price and behavior on the art market. Only when Czujack compared the boom and non-boom periods for prices, differences were found. The boom raises the implicit price for size. Moreover, the different working periods of Picasso were valued differently in periods of flourishing and non-flourishing periods.<sup>4</sup>

### 2.3.3 Determination of prices in the secondary market

Rengers and Velthuis (2002) have also analyzed the determinants of prices of art. With the help of quantitative data of Dutch galleries they searched for predictors of price in the period 1992-1998. The main difference of this study is that it focuses on galleries instead of auction houses. Moreover, this research looks at prices of contemporary art rather than prices of works of art of dead artists. In other words, this study takes a look at the secondary market instead of the tertiary market. The price mechanism of galleries varies greatly with the price system of auction houses. In case of an auction house, supply and demand interacts directly to set prices. Only if the reserve price is not reached during the bidding, the market for these works of art cannot be called transparent. The primary market is characterized by posted prices. In contrast to auction prices, these prices react only indirectly to demand and supply and do not clear the market as is the case with auction houses.

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<sup>4</sup> The question is of course how representative the market for Picasso for that of Rembrandt is. Although both artists are internationally known and praised by as well the experts as the public, the two artists seem fundamentally different. The style and, perhaps more important, the lifetime of these men can hardly be compared. While Rembrandt lived four hundred years ago, Picasso only died recently.

Rengers and Velthuis divided the predictors of price into three hierarchical categories. The first level is the art object. This level consists of size and material. The second level is the artist, which captures age, sex, place of residence and institutional recognition. The last level is gallery, which consists of location, institutional affiliation and age.

The authors found that:

- Size is one of the strongest determinants of prices. Because Rengers and Velthuis have used different levels in their research, they could also state that size only explains the variance on the first level. The levels artists and galleries do not play a role here. 'In other words, price differences in the body of work of different artists are not explained by differences in size of these works.' (Rengers & Velthuis, 2002: 23). This means that differences in prices of a particular artist can be explained by the surface area of an art object. But the factor "size" cannot explain price differences between artists. Just like Czujack concluded, material and technique are strong predictors of prices.
- On the level of the artist one of the strongest determiners of price is the amount of works the artist sells. This seems logical since success in the art market will result in higher prices and increases in further sales. The authors relate to the so-called 'Veblen-effect', which reflects the idea that consumers use high prices as indicators for high quality. However, this phenomenon may also be caused by a penetration strategy. Dealers start to price their art works low and only raise the prices when a certain number of sales has been reached.
- Besides the amount of sales sex, age and residence also play an important role in the setting of prices. Older artists turned out to be more successful and sell at higher prices. Besides that, female artists have lower price levels than male artists. This difference in price is not only caused by the factor gender, but also because female artists tend to be younger.
- Artists who are living abroad receive the highest prices for their works of art. This can be explained by the fact that art dealers have to make substantial costs in order to exhibit the art pieces of these artists. Another explanation may be that consumers see the fact that artists living abroad as a quality signal. Artists who are living in Amsterdam, the (cultural) capital of the Netherlands, are the second best earners on the art market.
- Surprisingly, the effects of institutional recognition vary. Some grants have a positive effect on the prices, others tends to decrease the prices.

- Most factors of the third level, the characteristics of the galleries, do not have a significant effect on prices.

Rengers and Velthuis conclude that galleries are not able to add economic value themselves. The only important factor at this level is the selection function of the art dealers. Price differences between galleries can thus be explained by the features of the artists. 'This implies that one function of the galleries is to pass on price-increasing (or price-decreasing) factors at the artist's level to the general public.' (Rengers & Velthuis, 2002: 21).

## 2.4 Art as investment

A relatively large amount of studies have been done on the subject of rates of return of investments in art.

### 2.4.1 Different approaches to art investment studies

Frey and Eichenberger (1995) have made an overview of these studies by investigating more than twenty studies estimating rates of return of investments in art. They researched and evaluated the different approaches of these studies. The authors distinguish three goals that characterize the different studies on art markets and art prices.

- Firstly, some studies take the art market as any other market and compare rates of return of art objects to alternative investments. As mentioned before, Frey and Eichenberger disprove the idea that the art market is like any other market. High transaction costs, incomplete information, the thinness of the market are examples of this. The researchers stress the importance of the so-called psychic returns or the more intrinsic benefits of art. When comparing the art market with other markets and taking the psychic returns into consideration, one can expect the total net returns of art markets to be same as in any other markets. But due to the fact that art produces larger psychic returns than for instance bonds, the average financial returns will logically be lower in the art market.

- Secondly, some studies have investigated art market returns in order to test modern techniques of finance and econometrics. The art market as research area can be said to be irrelevant. Examples of these studies are researches that investigate the efficiency of art markets. The Granger causality test, a technique to see whether one time series is useful in predicting another one, is for instance often used. Researchers have investigated whether there are price and return interdependences between different types of art markets; whether there are interdependences between different sales locations and whether there are interdependences between art markets and financial markets such as the New York stock market.
- Thirdly, scholars who are artists themselves have analyzed art investments. They usually analyze the specific characteristics of art markets. Aspects that are important but often neglected, such as the high transaction costs and the psychic returns, are highlighted.

William J. Baumol (1986) is an example of such an artist. On the basis of a priori considerations and a large number of price data Baumol stated that there is no natural price in the market for visual art. As we have seen in the previous part, the market for visual arts lacks an equilibrium level due to the specific elasticity of supply. 'Their prices can float more or less aimlessly and their unpredictable oscillations are apt to be exacerbated by the activities of those who treat such art objects as "investments", and who, according to the data, earn a real rate of return very close to zero on the average.' (Baumol, 1986: 10).

#### 2.4.2 Rate of return

To legitimize his proposition that price movements are unpredictable and that it is impossible to choose certain paintings that will create an increase in value that exceeds the opportunity costs of the investment, Baumol investigated the rate of return on investment in art. With the help of Reitlinger (1961, 1971) Baumol produced a list of multiple sales and their prices. He computed the rate of return, which was corrected for inflation, of 650 art objects sold at least twice in the period 1652-1961. Baumol found that 3.25 percent was a representative nominal rate of return and 2.5 percent a representative real rate of return for the investigated period. He adds that, whatever the rate of return will be of paintings, a relative large risk premium must be taken into



account to get the true rate of return of art objects. In contrast to other stocks, works of art can be stolen or destroyed in for instance a fire. Moreover, sales commissions should be deducted from resale prices. Since Baumol could not collect data for these phenomena, his rates of return are overvaluations. The collected data of Baumol then show an average annual rate of return of 0.55 percent in real terms. The median was 0.85 percent. Although the rate of return for works of art is much lower than for bonds, buying art may be a rational choice if purchasers derive a high rate of return in the form of, for example, aesthetic pleasure.

Anderson (1974) has researched the market for Old Master paintings, English 18<sup>th</sup> and 19<sup>th</sup> century art, Impressionists and 20<sup>th</sup> century paintings from the period 1780 to 1970. The mean nominal rate of return is 4.9 per cent according to Anderson. Besides this Anderson finds that paintings with lower prices have a higher rate of return. This phenomenon may compensate the higher risk when people invest in unknown painters (Agnello and Pierce, 1996).

## 2.5 Behavioral anomalies

Frey and Eichenberger (1995) have emphasized the importance of looking at the different actors operating at the art market. The issue of these different actors is relevant for the outcomes of studies on art markets. The investigators state for instance that behavioral anomalies are larger in the art market because of the fact that a lot of (private) collectors are not profit orientated.

### 2.5.1 Endowment, opportunity cost, sunk costs and bequest effects

Collectors have been said to be subject to the endowment effect. They value the works of art of their own collection more than those that are not in their possession. The behavioral anomalies are also caused by the so-called opportunity cost effect. Collectors often lack to consider what would be the return in case of alternative investments. Besides these phenomena the sunk cost effect plays a role. This means that past efforts and investments in creating a collection will affect the collector in his behavior. Finally, bequest aspects are important here. Private collectors rather give pieces of art

when they die than for instance money because these gifts also embody their personalities (Frey and Eichenberger, 1995: 212).

### 2.5.2 Consumption versus investment

Corporate collecting also happens often in an 'irrational' way. While it looks as if the collecting is undertaken in a profit oriented setting, it is not unusual that the collection is in the hands of the director or some other leading person in the company. The art collection is then often managed outside the profit-oriented environment. Collecting art may therefore rather be characterized as 'consumption' instead of 'investment' (Frey and Eichenberger, 1995: 212).

### 2.5.3 Public actors

Other important actors on the art market are the public museums. These actors usually have to deal with several constraints that should prevent arbitrage. Buying or selling paintings and other art objects is often impossible.

If museums are allowed to buy works of art, this will happen in a different way. According to Frey and Eichenberger (1995) and Singer and Lynch (1997) museums buy art at the top of the information curve while other collectors purchase pieces of art before all relevant information is available. Consequently, museums pay prices that are higher than average prices in the same category. This means that the public, since the government often subsidizes museums, pays a price for the risk aversion of museums. Collectors on the other hand regularly earn a reward for being less risk averse.

### 2.5.4 Behavior and outcomes of art investment studies

The behavior of these different actors on the art market clearly affects the outcomes of researches that investigate art as investments goods. Psychic returns should not be disregarded. Art is also consumption good and hence, the return from holding art consists of more than only increases in prices. The existence of psychic returns support this. It is important to see which kind of actors operate on the art market.

### 2.5.5 Different collectors

Frey and Eichenberger distinguish several collectors such as 'pure collectors' and 'pure speculators'. Different environment factors can have an influence on their behavior and the distribution of these collectors. A change in risk may for instance change the distribution of pure collectors and pure speculators. If unpredictable price variations and other financial risks rise, pure speculators will move to another market. Pure collectors are much less sensitive to these risks. For them it is about art, not about money. High risks will therefore result in a domination of pure collectors and lower financial returns. The returns will consist mainly of psychic gains.

A change in cost will also change the distribution of actors operating on the art market. If for example the cost of selling works of art increases, pure speculators will leave the market. Pure collectors are people who do not sell their art objects very frequently (Frey and Eichenberger, 1995: 214).

### 2.5.6 Regulations and behavior

Changes in taxes will also affect the art market. When taxes are high in general, more people will buy art because of financial reasons. This is due to the fact that holding art gives them better opportunities to avoid paying certain taxes than other assets. A situation like this is likely to result in a market that is dominated by pure speculators and hence, the financial returns will be similar to any other market. Another important tax item for collectors is whether a rise in value of a holding is taxed or whether this art object is only taxed when it is transacted. If works of art are only taxed when they are sold, the market for art will be thinner (Frey and Eichenberger, 1995: 214).

Changes in regulations will also change the structure of the art market (Frey and Eichenberger, 1995: 215). An example of this is the so-called droit de suite, or resale rights. The droit de suite is the right to receive a percentage of the sale price obtained from any resale of the work after the author has sold his work of art. Because the law differs between countries, and does not exist in all countries, collectors and dealers may move to other art markets in order to avoid costs. Since resale royalties cannot be obtained in case of private sales, a professional dealer must be involved in order to get royalties, fewer paintings may be bought and sold at auction houses and galleries. Frey and Eichenberger add that the restrictions on art are becoming more severe. As a consequence international trade will decrease in importance while local art markets will

be favored. According to the authors this will be beneficial for the pure collectors who do not intend to trade.

### 2.5.7 Taste and behavior

Changes in taste are another important factor. Since social determinants create a certain taste, the psychic benefits will be affected by these social factors (Frey and Eichenberger, 1995: 215). There will be less demand among private collectors for paintings in genres that are out of fashion. Public museums on the other hand are less affected by changing tastes. These institutions choose and buy their art differently. Art objects must be interesting for their collection or must add something to the historical consciousness. In art markets with old-fashioned styles or themes pure collectors such as museums will dominate. As a consequence psychic benefits will be high while financial gains will be low.

## 2.6 Failures and Threats

The different actors operating on the art market and the potential behavioral anomalies are often missed out in researches on art markets (Frey and Eichenberger, 1995). Since these behavioral aspects underlie the outcomes of the studies this may be seen as a serious failure. Besides this Frey and Eichenberger (1995) found more crucial failures:

- The data. While there are many institutions and forms of selling and buying art, most studies rely on auction prices. Besides the fact that a large amount of sales is overlooked, auction prices should also be seen as wholesale prices in case of dealers. Private purchasers usually buy works of art at higher prices than dealers and sell their art objects at lower prices than dealers do. 'Thus, dealers enjoy a systematically higher and collectors a systematically lower rate of return than suggested by the studies.' (Frey and Eichenberger, 1995: 209).
- Hidden costs. A lot of studies have disregarded the high transaction costs such as auction fees, insurance and other handling costs. These costs are often left out because they differ greatly between countries, periods, sales houses and individual cases.

- Taxation. Another failure is the fact that taxation is not taken into account. Buying and holding art objects may have a major influence on the tax burden. However, taxes vary widely between nations and periods. Besides that, when a work of art is bought in London it may be located in a totally different place and country. Which country's taxes apply is therefore uncertain.
- Superficial comparisons. Studies that compare art investments with financial assets are often quite superficial. 'The relevant alternative investments are unclear, and for past periods insufficiently known.' (Frey and Eichenberger, 1995: 211). The investigations mostly do not take a look at those investments that are more similar to art objects. Assets such as houses or land are for example closer substitutes for investments in art.

## 3 Consumer behavior in the art market

### 3.1 Introduction

Since the year 2006 art markets are booming again. The acquisition of a painting of Jackson Pollock illustrates this. A private collector bought this painting for the incredible amount of 140 million dollars. A bit less expensive, but still an enormous amount of money was paid for a Rembrandt painting of Saint James the Greater in January 2007 at Sotheby's New York. The picture yielded 25.8 million dollars<sup>5</sup> (Artprice, 2007). Clearly, immense prices are paid for works of art. The question is why these works are in such a high demand and how the prices are set.

In the following chapter a more general view on consumer behavior is explained. This part explains the way in which consumers choose how to spend their incomes. In the second part the behavior of consumers in the art market is described with the help of the theory of the sociologist and economist Thorstein Bunde Veblen. His theory sheds light on the particular consumption pattern of purchasers of exceptional expensive goods such as Rembrandt paintings today. In the last part an attempt is made to explain the economic valuation of the art objects that yield the immense prices.

### 3.2 Consumer theory

The consumer theory illustrate the decision making process of consumers. According to this theory consumers have certain preferences or tastes. Since consumers have to deal with limited resources, their budgets are limited relative to their desires, not all desired products and services can be bought. Therefore consumers need to put their preferences and constraints together. The final decision will result in the highest feasible level of satisfaction. In other words, this choice will maximize the well being of the

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<sup>5</sup> This price includes the buyer's premium.

consumer (Katz and Rosen, 1998: 22-23). These preferences may go beyond the basic economic functions of a certain product. As Baumol (1986) and Frey and Eichenberger (1995) stated, less visible returns such as psychic benefits can play a large role in the art market.

### 3.2.1 Taste

The so-called “preference ordering” enables consumers to rank the different goods according to their desires. Although these preference ordering differ widely among individuals and time, most preference rankings share the same properties. Economists have stated that there are three features. The first assumption is completeness. This assumption means that a consumer is able to tell us which good or bundle of goods she prefers. In order to rank all possible combinations of goods a preference ordering must be complete. However, in reality a preference ordering can never be complete. There are too many products and services we know too little about and hence, we can never evaluate these goods properly (Frank, 2006: 71). This might be especially true for the art market. Art is product that needs to be “used” first before its user is able to judge its quality. In most cases the art consumer will be dependent on the judgment of the so-called experts (Robertson, 2005: 15). This might result in asymmetric information. Sellers of works of art may have a better knowledge of the object and may take advantage of this. Besides this, sellers may not “know” their own goods and hence, may under value them. This is often due to the fact that a lot of sellers have inherited their art or received them as a present and have not bought them personally (Frey and Eichenberger, 1995: 213).

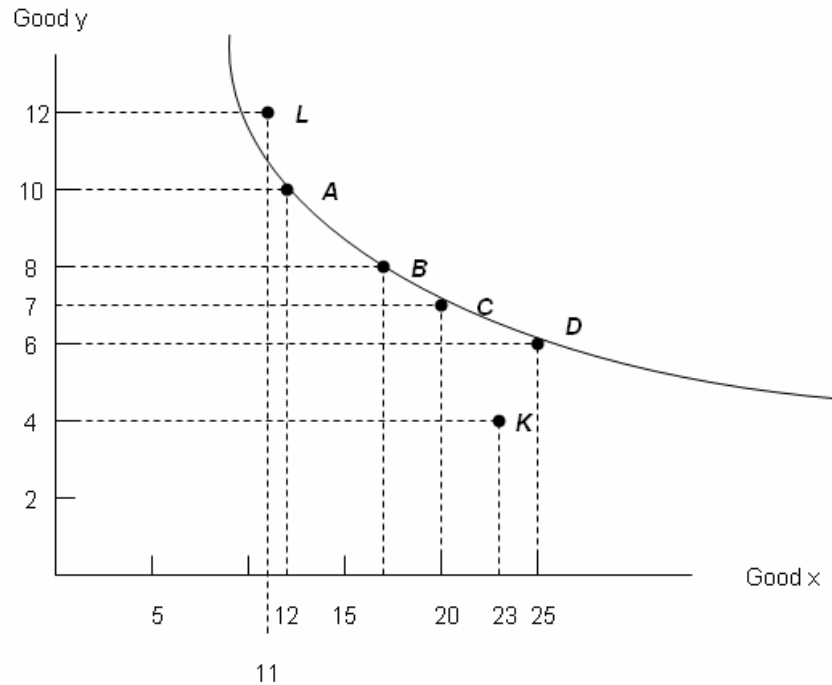
The second assumption is non-satiation, which simply means that more will always be better. More of a good will be preferred to less of a good.<sup>6</sup> The third assumption is transitivity. This implies that preferences are consistent. If bundle X is preferred to bundle Y, and bundle Y is desired more than bundle Z, then bundle X is preferred to bundle Z (Katz and Rosen, 1998: 24).

Although the assumptions are questionable, they enable us to define the preferences of a consumer in a graphical description (Frank, 2006: 74).

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<sup>6</sup> According to Katz and Rosen (1998: 25) and in contrast to the assumption of non-satiation, rational consumers will stop desiring more goods after a certain point. As a consequence the second assumption may be seen as less relevant than completeness and transitivity.

**Figure 1: Indifference curve**



The indifference curve shows a set of bundles that are equally desired by the consumer. Any bundle such as L , that lies above an indifference curve is more desired than any bundle on the curve. The bundles on the indifference curve are in turn more desired than any bundles, such as K that lies below the indifference curve.

### 3.2.2 Income

Now we have seen which bundles the consumer prefers to others, it is important to look at the income. Income or the budget constraint shows us what the consumer can do. The budget constraint reflects the bundles of goods among which an individual may choose given her income and the prices of the commodities. The budget constraint represents the bundles that are feasible and those bundles that cannot be bought by the consumer (Katz and Rosen, 1998: 37-38). The budget constraint is of course changeable. Buyers may have a change in their income or prices may become higher or lower. In case of the art market prices change constantly. Fashion and changes in taste



are possible reasons for this (Frey and Eichenberger, 1995: 215). A price increase may change the picture of the art market. If prices increase too much, some buyers can simply not afford the specific pieces of art anymore. Museums for example have a limited budget. Since we have seen that such actors may operate in a different way than for instance private collectors<sup>7</sup> the structure of the market and its outcomes may change too.

### 3.3 Determinants of demand

Besides income, tastes and the prices of goods, there are a few other determinants of demand.

#### 3.3.1 Substitutes

The prices of substitutes play an important role. Substitutes are goods or services that can be used instead of another. Two goods are substitutes if, holding the utility level constant, an increase in the price of one good, increases demand for the other commodity (Black, 2003: 452). However, in case of the art objects of Rembrandt it is questionable whether there exist substitutes at all. In general it will be hard to find perfect substitutes, goods that will have exactly the same values. Most substitutes will be imperfect substitutes. Of course, the substitutability of goods will also depend on the specific consumer. While one consumer might enjoy a Rembrandt painting as much as a work of Rubens, another individual may only value the Night watch of Rembrandt. The level of substitutability between for instance Rembrandt and Rubens might be interesting. Perhaps both artists turn out to be replaceable and are considered to be more or less equal in the market. The demand for one of the artists could then be predicted on basis of the price evaluation of the other.

Although Rembrandt could be more or less substitutable, Rembrandt's paintings can at least be called unique. This means that consumers will be relatively insensitive to prices (Goudriaan et al. 2002: 34).

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<sup>7</sup> See literature review: Frey and Eichenberger 1995.

### 3.3.2 Complements

Prices of complements, goods that should be consumed with another good, also have an influence on demand. A rise in the price of one good will decrease the demand for the other good. In case of Rembrandt works of art the keep up, possible restoration and insurance costs can be seen as complement costs<sup>8</sup> and may form a large part of the total price. These costs need to be made constantly and will increase with the value of the painting.

### 3.3.3 Expectations

Furthermore the expectations about future income and price levels of consumers will affect the current demand (Frank, 2006: 42). Logically, those who expect a higher income in the future will tend to spend more today than someone who has a less prosperous future. In the art world people may see Rembrandt works of art as investment goods and hence, will compare current prices with expected future prices. Since the media have given a lot of attention to record prices of artists like Rembrandt in the past years, collectors may become increasingly convinced that Rembrandt paintings may act as true investments. Less valuable (Rembrandt) works of art are neglected by the news papers and therefore often unseen by the greater part of the public.

Moreover, the market for Rembrandt works is becoming more and more thin, available paintings become scarcer and consequently, prices are expected to rise. These risk decreasing prospects may attract “pure speculators”, buyers who do not particularly care about the art objects and its possible psychic returns but rather look for financial benefits (Frey and Eichenberger, 1995: 214-215).

### 3.3.4 Demographic factors

Finally, the size of the population and other demographic factors play a role. The bigger the market, the more a commodity at any given price will be bought (Frank, 2006: 42). In the past decades not only the world population has grown, but also the ability to trade internationally. New technologies such as the use of Internet and improved travel opportunities have widened the access to for instance auctions and art markets in general. To put it in other words, new technologies have expanded the art markets and

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<sup>8</sup> These costs can also be seen as “additional costs”.

hence, may have increased the demand for works of art. Furthermore, emerging economies such as the Asian and Indian markets must have broadened the art market and may have increased the demand for artists such as Rembrandt.

### 3.4 Conspicuous consumption

Thorstein Veblen was the first who discovered the phenomenon of conspicuous consumption in 1899. His theory sheds light on the behavior of specific consumers. Veblen showed that the general theory of demand in which a higher price for a good is followed by a lower demand for the same good does not always count.

According to Veblen we consume partly in order to display our social power and status to others. We like to show others that we are in control of the material world that surrounds us (Carolan, 2005: 83). This theory might be particularly true for the art world: The ever increasing prices and the millions that are paid are dazzling. Are these works of art really bought for the works themselves, or might there be something else going on?

#### 3.4.1 New ways to display power

In the pre-industrial economies only those who shared a disproportional part of national income, the ruling social classes, could consume conspicuously. Today all classes are more or less able to buy status goods (Mason, 1985: 457). Consumption is now something we all do, and it is more difficult to see who is socially powerful. In pre-industrialized cultures it was immediately clear who was powerful. Those in charge of large armies or ruling big parts of society were those who possessed the luxurious houses and other goods that expressed economical wealth. 'Power during these periods, as Foucault notes (1981, 1986, 2000), was external and closely interconnected with force - that is, it was easier to "see" in feudal society who the socially powerful were, and who were not. There was no need to speak of "conspicuous consumption" during these times because consumption, all consumption, was a conspicuous display of power.' (Carolan, 2005: 83). In short, since it is less obvious who is socially powerful,

consumers search for other ways in order to display their superiority. By buying expensive luxurious goods they can display their wealth and power.

#### 3.4.2 Macro and micro factors

On the macro level, on the level of a society, the tendency to consume conspicuously is determined by culture traditions and values. Besides these factors the social and economic environment plays a role. Moreover the propensity to buy status goods is strongly influenced by the social structure and by the way individuals can move from one class to another (higher) class. On the micro level or individual level personal wealth and income are of course relevant. But subcultures also play a significant role here (Mason, 1985: 457). Subcultures will probably not only have an influence on the tendency to consume conspicuously, but will also affect the choice of the status goods. Since each subculture has its own values and ideals, some products will be more valuable than others. The so-called culture elite for instance will buy works of art rather than expensive cars in order to display their superiority. This is due to the fact that appreciation of paintings asks for education and training,<sup>9</sup> factors that are highly valued within this group. By purchasing works of art the culture elite cannot only display their economic wealth but also their knowledge and capacity to understand such goods.

Besides personal wealth and income and the subculture to which an individual belongs or wants to belong to, personality also plays a role (Mason, 1985: 457-458).

#### 3.4.3 Product utility versus purchase display

For the conspicuous consumer the effect of his buying on others is of enormous importance. 'It is the symbolism rather than the utility of products which is his prime consideration. Product evaluation therefore differs fundamentally from the process as it is normally described in that the major concern is not with product's utility, but with its potential for securing status gains within a particular social group.' (Mason, 1985: 458). In these cases the valuation of a product is more subjective and the social attributes of a product are valued higher than its economical product features. The social visibility within a certain target group of purchasing and consuming the good is of crucial

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<sup>9</sup> See also Bourdieu (1984).

importance. “Purchase display” may even be more relevant to the buyer than the actual consumption of the good (Mason, 1985: 458).

#### 3.4.4 Price

Since economic wealth and status are connected, high prices are beneficial to the conspicuous consumer. In other words, the social attributes of a product increase as its price gets higher. These goods can be called Veblen goods and their effects can be seen as a possible anomaly of the general theory of demand. In this case a higher price will not result in a lower demand. In contrast, an increase in price will raise demand. Stephen Weil, a museum scholar, has noted that the more functional the object, the lower its price will be (In: Robertson, 2005: 130). In this sense it is the price itself, and not the product, that contains the value. Furthermore, being able to buy an object which contains no user value is best able to display someone’s wealth. In previous ages this was done by rich lords who favored old, broken antique mugs above undamaged ones (Dolphijn, 1998: 19).

### 3.5 Economic valuation of the visual arts

The story of the “Man with Golden Helmet” (Berlin, Staatliche Museen Gemäldegalerie, around 1650) can illustrate the complicated process of pricing. This painting was attributed to Rembrandt and attracted large crowds. Art experts praised the work of Rembrandt. But then it became known that the painting was not a real Rembrandt at all. Although the art object stayed exactly the same, the public and experts lost interest and the economic value of the “Man with the Golden helmet” decreased substantially (Bonus & Ronte, 1997: 103).

It seems impossible to measure the value of paintings objectively. ‘There is no way to establish the quality of a certain picture or oeuvre. One cannot even judge objectively whether a given work constitutes art or not. No technical or logical standards exist by which to proceed. The quality of art cannot be proven or disproven by a scientific method’ (Bonus & Ronte, 1997: 104). Bonus and Ronte then conclude that a work of art must be credible to the public in order to yield market prices. In other words, purchasers

have to trust a given piece of art if they are unable to judge its quality. The economic value of a work of art is therefore based on its credibility. Credibility is to a large extent generated by art experts. These experts consist of dealers, cultural institutions, critics and art historians in particular in case of Old Master paintings. They decide which artists will enter the market and they value art<sup>10</sup>. Due to the fact that art needs to be consumed and enjoyed in order to understand its quality, most consumers are put at a disadvantage in the art market. As a consequence the “confused” consumer will be dependent on the experts (Robertson, 2005: 15).

Another theory to explain the economic valuation of the arts is given by Sherwin Rosen (1981). Rosen stated that small differences in talent can result in extremely skewed earnings distributions. In other words, a small difference in talent can explain why most artists are hardly able to make a living while a few painters get millions of dollars for their works of art. The phenomenon is due to the fact that a product of less quality is an imperfect substitute for a better product. Moreover the demand for better artists increases more than proportionally. The health care industry shows a similar phenomenon. ‘If a surgeon is 10 percent more successful in saving lives than his fellows, most people would be willing to pay more than a 10 percent premium for his services.’ (Rosen, 1981: 846).

The theory of Rosen is able to explain why some paintings yield such high prices in comparison to other art objects. However, it is questionable whether his theory could explain why the “Man with Golden Helmet” lost virtually all of its value after it became known that this painting was not a real Rembrandt. According to Rosen the economic value of artistic goods lays in the talent of the creator. In other words the value of a good lays in its quality. Why then did the “Man with Golden Helmet” lose almost all of its economic value while the painting itself did not change? Moreover one might wonder if talent and quality are costless observable to all potential buyers as is the case in Rosen’s theory (Bonus & Ronte, 1997: 104).

Adler (1985) has a slightly different vision on stardom and talent. In his view substantial differences in incomes are even possible where there are no differences in quality and

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<sup>10</sup> In the case of Rembrandt, Constantijn Huygens (1596-1687) played a crucial role as an art expert. Huygens was the secretary of stadholder Frederik Hendrik and furthermore a poet and a composer. He belonged to the cultural elite and had a large say in what was considered as good art. Already in the beginning of Rembrandt’s career, Huygens recognized his talent. Arnold Houbraken (1660-1719), an artist and a writer, also belonged to the cultural elite and had an important position in the art world. See for instance, Rohde, 2006; Bok, 2004 and Schwartz, 2006.

talent at all. Artist with equal talents may differ widely in their earnings. This phenomenon can be explained by the fact that the consumption of art requires certain knowledge. The more knowledge one has about a certain product the more he will appreciate the good. ' Learning about art is so important because art consumption is positively addictive in that marginal utility from art consumption increases with the ability to appreciate art, which is a function of past art consumption.' (Schulze, 2003: 433). The question then is, how do people get this knowledge? Adler argues that knowledge is gained by consuming art and by discussing it with other individuals who know about the good. This phenomenon may result in positive network externalities. The more people that know about a certain artist, the more discussion is possible. By choosing the most popular artist the costs for searching a good discussion partner decreases.

Adler's theory implies that the factor "luck" determines who will become a star and who will remain unknown. Talent is not important (Adler, 1985: 211). Although luck may play an important role in the income distribution, it seems unrealistic that talent would be irrelevant. Bonus and Ronte state that large differences in talent do exist and that these differences are of great importance in the visual arts (1997: 104). The recognition of talent or quality may even be called the most crucial factor when it comes to credibility and thus economic value. Bonus' and Ronte's process of recognition starts with an art object that catches the attention of an insider in the art world. In the vision of the particular expert the work of art holds an exceptional quality. The insider then starts to talk about this piece of art and sees if other experts feel the same way too. 'They pool their expertise, as it were, to shape their own personal judgment more clearly.' (Bonus & Ronte, 1997: 112). This may result in a phenomenon where insiders turn into so-called believers. It is here that credibility emerges for a specific artist. Bonus and Ronte add that this is a social process that takes many believers and much time (1997: 112). Moreover, the process is largely decentralized and hence, in many ways unverifiable. Once an artist is seen as a talent by the experts it can become credible to the public who is unable to measure the quality of his products. By trusting the art experts and trusting the value of artistic goods, works of art start generating economic value. As a consequence, once faith is breached, the economic value disappears too (Bonus & Ronte, 1997: 111). When it became clear that the "Man with Golden Helmet" was not a real Rembrandt after all, the painting was no longer credible to the public and hence, was unable to command a reasonable market price.

Although credibility may play a large role on the economic valuation of the visual arts the name of the artist seems to be of great importance too. Of course, the name of a famous artist may represent credibility and hence, nothing is missing in Bonus' and Ronte's theory. However, a famous name may also represent originality. Lazzaro (2006: 16) argues that originality is close to aesthetic value since it takes the artist into account who first expressed the idea. In other words, a name may symbolize originality, which on its turn represents innovation. De Marchi and Van Miegroet (1996) compared historical prices of Old Flemish paintings and their copies and tried to explain their differences. The authors found that innovation created a large difference in price. Copies were much cheaper since they lacked the first idea of the artists, the innovative factor. Their research shows how we value originality, the idea. Even if a copy is perfectly similar to the original we will value the work of art totally different. Invention, as a vital quality of the artist and as an economic category, was not recognized prior to the sixteenth century (De Marchi & Van Miegroet, 1996: 28-29). But from then on originality started to play an essential role in the world of arts and culture and never lost its value. Our copyright law is an example of this. Intellectual property right shows a similar structure. It is the idea that is protected, not particularly the product itself. This means that the devaluation of the "Man with Golden Helmet" may be caused by a change in authenticity and therefore originality rather than a loss in credibility. In other words, the innovative factor, the idea that gives the painting an intrinsic value, disappeared.

### 3.6 Conclusion

In this chapter we have looked at the phenomena that can underlay the demand for, in this case, Rembrandt works of art. We have seen that our taste and constraints form the basis of our economic decisions and our highest possible level of well being. We are, however, supposed to make decisions with full information. In the art market it is difficult to have all the information at hand.

Both taste and constraints differ per person and can change over time. A shift in constraints may result in a different structure of the art market. If prices of Rembrandt works for instance go up, some buyers may have to leave the market. Museums, that



have limited budgets, could be an example. These sorts of changes may have an influence on the behavior in the art market and therefore on prices.<sup>11</sup>

Another factor that is relevant for the demand for Rembrandt works is the level of substitutability of the artist. Since Rembrandt can be called quite unique, this level is rather low and hence, consumers will be relatively insensitive to prices. Besides this expectations about the future have an influence on the market demand. Good economic prospects will increase the demand for art. These beneficial forecasts will attract especially so-called speculators, buyers who are mainly interested in the potential financial rates of return. Furthermore, demographic factors play a role in the demand for Rembrandt art. The larger the market, the more buyers are willing to pay a Rembrandt at any price.

We have furthermore seen that actors on the art market might conspicuously consume. In other words, they might buy works of art in order to display their power and wealth. In these cases prices form significant parts of the product's functions. A higher price will therefore not result in a lower demand but will raise the demand for the product. This could help to explain the dazzling and increasing prices in the art market.

Then we have looked upon Rembrandt's popularity. Why are we willing to pay such high prices for him while other artists are hardly able to make a living? The cause seems to lie in a small difference in talent. The demand for these slightly better artists increases more than proportionally (Rosen, 1981). These talented artists will also be picked up by the experts who have a large influence on the taste of the public. It is these people who make the artist credible and create economic value (Bonus & Ronte, 1997). Besides this consumers are constantly looking for discussion partners. In other words, they like to share what they consume. That is why known artists are more demanded and get more and more popular as time goes by (Adler, 1985).

Finally, we have investigated why a name can carry so much value instead of the work itself. This is due to the fact that an artist like Rembrandt symbolizes originality and invention, factors that are highly valued within our society.

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<sup>11</sup> An example: As we have seen in the literature review, museums tend to buy at the top of the information curve, where prices are most high. This is due to the fact that they are more risk averse than for instance private collectors.

## 4 Rembrandt Research Project and the issue of Authenticity

### 4.1 Introduction

Clearly, the name of the creator of a work of art matters to us. This is further proven by the existence of the Rembrandt Research Project which will be explained in this chapter.

### 4.2 The project

The Rembrandt Research Project was established in the year 1968 in order to investigate the authenticity of works of art that have been attributed to Rembrandt. Almost 40 years later the experts of the project are still investigating which paintings, prints and drawings in Rembrandt's style were painted by the master himself. The question whether every Rembrandt painting is a real Rembrandt has been a familiar question throughout the ages. Even during Rembrandt's own life this question has been raised. However, the issue of authenticity has become more complicated during the past ages. 'Not only are there works by his contemporaries in Rembrandt's style that can be mistaken for originals, there are also later imitations to contend with, while on the other hand the originals sometimes have been so badly disfigured by later "restoration" that they have virtually become unrecognizable as Rembrandts.' (Van der Wetering, 1997: X). Besides these facts the so-called Van Meegeren affair around the year 1945, which showed how easy imitations could be made, obviously had an influence on the Rembrandt project. The affair with the fake works of art had traumatized both the museum and art-historical world. The copies of Van Meegeren evoked a paranoia regarding possible fakes. On the other hand, the laboratories with their modern techniques that had shed light on these imitations generated optimism in the art world (Van der Wetering, 2006: X). The fear for copies and the faith in new techniques that

were engendered by the affair clearly influenced the Rembrandt Research Project. The experts started the project with the idea that there would be a lot of forgeries and imitations on the market and announced that modern techniques would be used as much as possible. The press concluded that, with the help of these methods, the Rembrandt Research project would for once and all clarify which paintings were made by Rembrandt and which the master did not make. Of course it is unlikely, probably even impossible, that the Rembrandt Research project is able to eliminate all doubts regarding the works in Rembrandt's style. The fact that Rembrandt had pupils who copied his works as a way of practicing and made works in his style makes the question of authenticity very complicated. His pupils were also young men that already had some experience and training. They came specifically to Rembrandt in order to learn to paint in his style. Clearly, the works of these apprentices must have had a certain level of quality and were aimed to look like real Rembrandts. Another thing that makes things difficult is the fact that there is not one particular Rembrandt style. Comparing for example some of the self-portraits that are originated in the same year one gets struck by how large the differences in style can be. 'It would seem, and this is true not only of the painted self-portraits but also of the etchings and drawings, as though each project was for Rembrandt himself a new challenge. Each of his works, and especially the self-portraits, gives the impression that Rembrandt was an exploratory, questing artist, someone who never resorted to ready-made solutions but each time re-thought the means and the possibilities available to him, not only in relation to technical and stylistic aspects, but also in the way he 'directs' his figures and in the representation of light, volume and texture.' (Van der Wetering, 2006: XXIX). Rembrandt's exploratory way of working, which resulted in many style characteristics, has made the investigation of authenticity particularly complicated.

In order to get the most reliable results the Rembrandt Research Project makes, wherever possible, use of various research methods (Van der Wetering, 2006: XI-XIII):

- Dendrochronology, a method of dating wood panels by looking at the tree-ring growth patterns;
- canvas research that investigates the thread density among other things and helps to date paintings;
- X-radiography, a technique that is able to pass through some materials like pigments and is absorbed by other materials. This may show lines and structures

that cannot be seen at the paint surface and hence, can tell something about the development of a painting;

- infrared photography, another method to penetrate certain layers of a painting;
- chemical analysis of the grounds and paint layers. This method can tell us something about the components of for example a bit of paint and;
- microscope investigation of the paint surface that provides visible images of structures that otherwise could not be seen.

Moreover, connoisseurship played an important role in researching the authenticity. In spite of this broad range of scientific techniques, uncertainty will always exist in case of authenticity. 'Whilst in theory it may sometimes be possible to prove that a painting is not by Rembrandt by means of technical investigation, the converse, using the same methods to prove conclusively that a painting is certainly by Rembrandt, is never possible. It may be redundant to labor the point that, on the one hand, historical works of art are complex man-made objects whose materials, manufacture, as well as style and quality can vary even when made by the same person, while on the other hand works that are closely related in just these respects could have been done by different painters, e.g. in Rembrandt's immediate circle.' (Van der Wetering, 2005: XI). Searching for one specific style, material or technique that would solve the problem of authenticity is therefore useless. The fact that Rembrandt works of art or works that have been attributed to him are frequently held in small museums and private collections makes it even harder to use these techniques. Thorough research is hardly possible in these cases. Moreover, techniques such as collecting and investigating paint and other materials are arbitrary. Each painting has its own history and may have its own changes, restorations and so on. Comparing the materials of these paintings is therefore risky. Besides this the materials that Rembrandt used could also be used today.

It is obvious that no final answer can be given to the question of authenticity. But the broad range of techniques can provide us certain levels of probability that may be quite high.

### 4.3 Consequences of uncertainty

Schwartz (2006: 369) mentions that the uncertainty around the authenticity must have expanded Rembrandt's fame. The paradox is that due to the uncertainty around the attribution, Rembrandt gets more and more attached to the works of art. Because of the search for the authentic creator and because of the search for connections between the artist and the painting, Rembrandt gets more united with the object than he would ever be if there was no uncertainty at all.

The authenticity question and the existence of the Rembrandt Research Project thus seem to play a role in the popularity of Rembrandt. The activities of the project give the media also frequent reasons for publishing articles about the artist. This results in a constant flow of media attention and hence, this must contribute to Rembrandt's fame.

### 4.4 Conclusion

The question of authenticity is not a new one. Even in Rembrandt's own time uncertainty sometimes existed around the attribution. During the past ages the authenticity issue has only become more complicated. Although no final answer can be given by the Rembrandt Research Project concerning the authenticity of Rembrandt works of art, it is possible to obtain a high level of probability.

Strikingly, the uncertainty around the attribution has attached Rembrandt closer to his works than would be the case if there was no uncertainty at all. Furthermore, the existence of the Rembrandt Research Project seems to generate a constant flow of media attention. As a consequence we could say that the issue of authenticity has made Rembrandt more famous: both the authenticity issue and the Project can explain some of the artist's popularity.

## 5 The market of Rembrandt works of art

### 5.1 Introduction

Rembrandt has always been in relatively high demand. But the perception of his paintings, drawings and prints and the appreciation of Rembrandt in general have been subject to changes. In the following parts supply and demand of Rembrandt works during and after his life will be discussed.

### 5.2 During his lifetime

On 15 July 1606 Rembrandt was born in Leiden. Although many artists in the seventeenth century came from a family of painters and craftsmen, Rembrandt was the son of a miller and the grandson of a baker. Before the young Rembrandt started his training as an artist in 1620 he first followed a few years of Latin School and had an enrollment in Leiden University. After his masters Jacob van Swanenburgh (1571-1638) and Pieter Lastman (1583-1632) gave him the skills and knowledge that were necessary for the profession of an artist, Rembrandt settled in 1625 in Leiden as an independent master. During these years he often worked with the painter Jan Lievens (1607-1674) who probably had a large influence on Rembrandt (Van der Wetering, 1997: 283-284). Both men, Rembrandt and Jan Lievens soon evoked great expectations among the connoisseurs. Constantijn Huygens (1596-1687) for instance, the secretary of the stadholder Frederik Hendrik, described the “beardless boys” as the promising painters that would surpass all their Dutch colleagues (Bok, 2004: 159).

#### 5.2.1 Etchings

Huygens turned out to be right. Soon after Rembrandt started his career his innovative etchings were adopted by various important collections all over Europe (Bok, 2004: 159).

In 1625 Rembrandt started making these prints. Prints are easily disseminated and have therefore given an enormous boost to his international fame. Furthermore, prints in general, and Rembrandt's etchings in particular, were of great importance for innovation. Prints were able to disseminate the new artistic styles around the world (Van de Wetering, 2000: 36). Today museums, galleries, Internet and so on have taken over this task. Beside the fact that his etchings were able to spread his style and name around the world, the prints also formed a large source of income. By constantly revising the etch plates and thereby creating series of prints he owned an efficient marketing technique. By only making small adjustments to the plate Rembrandt produced new etchings that could be sold as true originals. Moreover, his marketing strategy created a demand for works that had not yet been made. Art lovers that possessed a print wanted to complete their collections by buying each etching of a certain series (Alpers, 1989: 197).

The story of the so-called hundred guilders print<sup>12</sup> also illustrates Rembrandt's entrepreneurial insights<sup>13</sup>. The story tells that Rembrandt bought the print himself for the substantial amount of hundred guilders even though he owned the etch plate and the other prints of this plate that had come on the market. By buying his own works of art Rembrandt made his products scarce and hence, more valuable (Alpers, 1989: 201-202).

### 5.2.2 Amsterdam

Rembrandt's success in making prints and as an artist in general really began to take shape after 1631. In this year Rembrandt leaves Leiden for Amsterdam. While the first city was in decline, Amsterdam is economically booming. During this period Rembrandt meets Hendrick Uylenburgh, a paintings-entrepreneur with a successful workshop. Rembrandt decides to move into his workshop (Van der Wetering, 1997: 286). The young Rembrandt is hired to paint portraits for the clients of the entrepreneur. Already soon Rembrandt turns out to be in great demand as a portrait painter. Uylenburgh, who is a true business man, decides to sell other sort of paintings by Rembrandt too. The

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<sup>12</sup> This etching is called 'Predikende Christus' and belongs to the collection of the British Museum, London.

<sup>13</sup> Although Rembrandt seemed to possess some entrepreneurial insights in these cases, his further career rather shows a lack of business insights. This will be discussed in the following paragraphs.

construction where Uylenburgh takes care of the marketing and sale of the workshop and Rembrandt paints is clearly a success (Bok, 2004: 167).

Rembrandt's cooperation with Uylenburgh might have had a significant influence on his popularity. As stated earlier, experts such as dealers are able to control and restrict the entry of artists and works of art onto the market. Experts discover, select and validate the art objects (Robertson, 2005: 129). Since Uylenburgh can be seen as a so-called "Alpha dealer", a dealer at the top of the art market, he probably guided and expanded the success of Rembrandt. Robertson writes: 'The extended clan of influential Dutchmen who patronized Rembrandt were the indirect result of the influence enjoyed by his first wife's family, Alpha dealers the Uylenburghs.' (2005: 45).

Rembrandt did not only meet the right people, but he was also born in an extremely prosperous period which inevitable facilitated and increased the artist's success. During the seventeenth century the Netherlands enjoyed a Golden Age. Economic, social and artistic areas were booming. Due to its superior technology, its extensive use of sources of energy such as wind, the right amount of human resources and its readily available investment capital the Dutch industry became a leading and economic world power (North, 1997: 30). The significant growth of the Dutch population and in particular the growth of the urban population made the Netherlands the most densely populated and most urbanized area in western Europe by the middle of the seventeenth century (North, 1997: 20). The large population and the economic wealth evoked a large demand for art: every year 70.000 paintings were produced (North, 1997: 1).

The Dutch society was not only the most urbanized in Europe, it also had the highest literacy rate and a remarkable tolerance of different religious beliefs. The change from an aristocratic to a bourgeois society made that birth no longer decided on an individual's social position. Income and wealth now determined the position of people (North, 1997: 43). The well developed social infrastructure must have enabled the marriage in 1634 of Rembrandt and Saskia, Hendrick Uylenburgh's niece and the daughter of the Mayor of Leeuwarden. Rembrandt's success and his marriage meant a big change in his lifestyle and probably added to his well-known financial difficulties. 'When painters were artistically and financially successful, they quickly became accustomed to the lifestyle of their middle-class or aristocrats clients. They bought houses in exclusive areas, filled their studios with works of art by foreign masters, precious objects and curiosities (which were meant to underlie their social position) even when they, like Rembrandt, could not always afford them.' (North, 1997: 57). The house



that Rembrandt and Saskia bought in 1639 illustrates this phenomenon. Unluckily, the house they bought at the Sint Anthonis Breestraat was not only very expensive but also turned out to be a bad investment. After it was purchased several structural problems appeared and the neighborhood started to decline. Clearly, this house contributed to Rembrandt's financial problems and eventually his bankruptcy in 1656.

The house may, however, not be held responsible for Rembrandt's bankruptcy. Rather, it was Rembrandt self who made too many mistakes. After Rembrandt left Uylenburgh's studio in 1635 the artist turned out to be the opposite of Saskia's uncle. With the disappearance of Uylenburgh and his studio, the good acquisition, the strong marketing and the stable and high production level also disappeared out of Rembrandt's career. This was certainly a problem due to the fact that Rembrandt had to deal with stiff competition for example from his former colleagues of the workshop. Moreover, copies and imitations after the master began to appear on the market. Besides these happenings the demand for art started to decline due to the First Anglo-Dutch War (1652-1654). In short, Rembrandt had all reasons to take an active approach but simply did not do so (Bok, 2004: 167-169).

### 5.2.3 Commissions

In spite of the lack of true business skills Rembrandt obtained various important commissions during his career. One of these orders is the famous Night Watch in 1642. The order resulted out of an old tradition of marksmen that were portrayed in order to decorate the halls of their buildings. Rembrandt left all the conventions behind and painted a monumental, lively and a stirring portrait. Whether the painting was appreciated remains uncertain. Some have stated that Rembrandt rather worked from his own perspective and taste than out of the wishes of his commissioner. Others have highlighted the fact that this portrait yielded 4000 scudi<sup>14</sup> which is twice the amount of the 1600 guilders that was usually paid for such paintings and that the picture was already highly appreciated by its contemporaries (Haak, 1990: 178-180).

The fact that Rembrandt was asked for these commissions seems logical when one reads the documents of the seventeenth century. In 1641 Rembrandt is described in a printed biography of Jan Jansz Orlers (1570-1640) as 'so talented that he has since become one of the most esteemed painters of the century.' One year later Rembrandt is

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<sup>14</sup> Scudi represented a monetary value.

again praised for his works of art in a printed document. This time he is highly appreciated for 'his faithfulness of detail' by the artist Philips Angel (1616-1683) (Van de Wetering, 1997: 288). The publications show that Rembrandt was already in high demand in his own time.

However, the uncertainty around the appreciation of the Night Watch may be the result of another often heard rumor. Taking the old documents into account that have been saved over the past four hundred years, it seems that Rembrandt often came into trouble with commissioners. Whether the cause must be found in the fact that Rembrandt demanded more time and effort of his clients than others, or because of his high prices, his character or the lack of kindness and subtleness, remains open to discussion (Rohde, 2006: 72-75). His contemporary Houbraken (1660-1719) illustrated the relationships between the artist and his patrons with the proverb "dat men hem moest bidden en geld toegeven", thereby saying that Rembrandt treated his commissioners haughtily (Alpers, 1989: 183). Bok (2004: 170-171) adds that Rembrandt was seen as dishonest and a social misfit who did not know how to behave. Alpers then divides Rembrandt's problems with patrons into three categories. Firstly, Rembrandt demands an unrealistic long term of time of his clients to pose for him. Secondly, he often did not finish his works in time. An example for this is Prince Frederick Hendrik who had to wait for six years until his series of passion paintings were finished. Rembrandt completed these paintings only when he needed money for his house. And finally, Rembrandt delivered works that were perceived as unacceptable (1997: 183-184). Taken everything together, one may conclude that Rembrandt must have been quite stubborn and not an easy person to work with. Although this may have cost him certain further commissions it has in turn probably added to the romantic perception of Rembrandt as a person and artist and consequently, to his recent success.

#### 5.2.4 Workshop production

Despite Rembrandt's lack of social skills, the artist was able to educate students and work with them. The master started to have his own pupils quite early, probably in the year 1627. Although no official register exist of these students, art historians say the number of trainees must have been relatively high. Rembrandt must have had at least fifty apprentices during his lifetime. Becoming one of Rembrandt's trainees was not reserved for everyone. Only those men who had a certain amount of training and

experience could become a student. The tutelage the students had to pay was a substantial amount of money: 100 guilders. Besides these hundred guilders tutelage, Rembrandt also earned income by selling the works of his pupils under his own name (Van der Wetering, 1997: 285).

His way of working, the use of the workshop production enabled Rembrandt to be more or less free. Instead of working for a limited number of patrons as for instance the painters Jan Lievens (1607-1674), Gerard Dou (1613-1675), Govaert Flinck (1615-1660), Frans van Mieris (1635-1681), Adriaen van der Werff (1659-1712) and Ferdinand Bol (1616-1680) did, Rembrandt choose to work with the quite old fashioned commissioners system with the help of his pupils (Schwartz, 2006: 118).

### 5.2.5 Style

Choosing the market, choosing various commissioners above a few more stable patrons, also seemed to have had an influence on the style of his paintings (Alpers, 1989: 195) 'Rembrandt refused to play the social game in service of the patronage system, nor did he wish to make works that were paid in the accepted way and hence, were valued in the common manner.'<sup>15</sup> (Alpers, 1989: 196) While Dou, Van Mieris and Van der Werff who all worked with a limited number of patrons, had a very fine and subtle painting style with a clear 'finishing touch', Rembrandt rather used 'rough' strikes. The production of the more fine paintings asked for craftsmanship, expertise and labor hours. Consequently, calculating the time that was spent on the painting mainly set the value of the painting (Alpers, 1989: 195). This way of valuing a painting was a widely used practice in the Renaissance and Baroque periods. Just like other professions such as lawyers and surgeons a clear relationship existed between the hours of labor and the price of the service (Singer, 1988: 28). In contrast to these fine works of art, the paintings of Rembrandt did not reveal any information on diligence and strain. The rough style, the constantly revising of paintings stripes took the standards that used to price the art objects away. As a consequence it was difficult to judge whether a painting was finished or not. Only the master himself could judge on the state of completion of a work of art and hence, only the master himself could decide on its value (Alpers, 1989: 196). Whether Rembrandt was really able to be the only one who decided on its prices due to his particular style is of course questionable. However, it is clear that his style was

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<sup>15</sup> Own translation.

something new and that Rembrandt became a trendsetter that inspired other artists. This in its turn has had a huge influence on his success. ‘Three generations of pupils went through his hands and although they may not all have worked in Rembrandt’s style until their deaths, it were these men that secured the Rembrandt-look as a norm or anti norm. Many other artists have played with this norm in later ages in their own work. It was them who made Rembrandt an icon since that is something no one can do himself.’<sup>16</sup> (Schwartz, 2006: 369)

### 5.2.6 Changing production

After the year 1642 Rembrandt’s output changes. Not only the number of productions declines, the chosen subjects, sizes and style are also different. In his drawings and etchings landscapes become an important theme (Van der Wetering, 1997: 289).

A change in theme may be due to a change in demand. However, if we take a look at the average prices of works of art by subject during 1600 and 1700, landscapes do not seem to become more popular in the 1640s, in contrast.

**Table 1: Average prices in guilders of pictures by subject 1600-1700**

<b>Subject matter</b>	<b>1600-1625</b>	<b>1626-1650</b>	<b>1651-1675</b>	<b>1676-1700</b>
Landscapes	30.31	21.77	24.29	43.99
Religious	33.03	43.26	70.26	52.13
Historic	47.60	38.39	44.09	65.29
Portrait	5.99	10.74	23.03	37.05
Genre	27.79	22.07	30.79	88.23
Still life	27.39	30.13	23.84	41.33
Architectural	41.43	59.34	52.71	22.50
Other	10.55	17.25	20.99	33.00

Source: North, M. *Art and Commerce in the Dutch Golden Age*, New Haven and London: Yale University Press. P. 99

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<sup>16</sup> Own translation.

In the first quarter of the seventeenth century landscapes are in a relatively high demand. After historical, architectural and religious subjects landscapes are the most expensive themes. Later, during 1625 and 1651, the average price of landscapes falls, while the average price of all paintings rises. Taking the average prices of 1625-1650 into account one would have expected Rembrandt to focus on architectural or religious paintings. Since Rembrandt has often been described as a man who had an extreme love for money, this seems rather strange. An example for his lust for money is given by Arnold Houbraken's biography of the artist. On the basis of experiences of old pupils of Rembrandt a picture is drawn of a man who was only interested in money (Bok, 2004: 172-173). Why then did Rembrandt choose to rely on landscapes? An explanation might be that Rembrandt simply could afford to do so. His success might have allowed Rembrandt to be more or less independent of the market demand. He might have been free to produce whatever he liked. A Rembrandt was a Rembrandt and would sell irrespective of the chosen subject. A proof of this idea can be found in the price that has been paid for a Rembrandt landscape in 1644. This picture yielded 160 guilders. This is quite a large amount if you compare the price with those of Jacob van Ruisdael (1628-1682) and Allart van Everdingen (1621-1675), who reached relatively high prices for their landscape pictures. Van Ruisdael reached its best prices in 1664; 60 guilders, in 1673; 100 guilders and in 1699; 80 guilders. Van Everdingen got his highest prices in 1657; 150 guilders, 1670; 100 guilders and in 1671; again 100 guilders (North, 1997: 102-104).<sup>17</sup>

Although Rembrandt was able to obtain relative high prices for works that were not specifically fashionable, the previous story can also be interpreted differently. It might for instance shed light on the fact that Rembrandt lacked certain business skills. Bok illustrates that by the middle of the seventeenth century Rembrandt no longer was considered a trendsetter or even a fashionable artist (2004: 170). Obviously, Rembrandt had been unable to adapt himself to the market. And despite the fact that this seemed not to be a big problem in his previous years, it matter at the end of his life. Even Rembrandt had to adapt himself to the economic laws of supply and demand.

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<sup>17</sup> These prices are not corrected for inflation. Nor are they corrected for factors such as size and quality. They can therefore only serve as rough indicators.

### 5.2.7 Self-portraits

From 1652 to 1669, the year Rembrandt died, fifteen self-portraits were produced. The question is why he painted this relatively large number of portraits of himself. It is often stated that Rembrandt got more interested in his own inner life. However, the large number of self-portraits may be due to a less romantic factor. There was probably a demand in some circles of collectors and connoisseurs for self-portraits by the most popular and most praised artists of the time (Van de Wetering, 1997: 291).<sup>18</sup> The growing demand for self-portraits shows that the artist himself became more important. This increasing interest in the painter may be due to a new buying public. These new buyers were able to purchase works of art but lacked the classical education that could tell them which paintings were of high quality and which were not. By buying attributed works of art value could be attached to a painting based on the reputation of the artist. 'Without an author's name attached, a painting or a print stands alone and must be judged by its merits, a notion which makes practical sense only for particular valuing groups who share a common knowledge of paintings, as well as terminology and ranking of works by genre and according to technical standards and art theoretical ideals.' (De Marchi & Van Miegroet, 1996: 47) Clearly, 'name buying' became an important phenomenon in the seventeenth century. Consequently, the interest in the painters themselves and therefore their growing fame evoked a demand for pictures of these famous artists (Van de Wetering, 2006: XXV). The fact that the demand for self-portraits increased during his lifetime contradicts with the widely believed idea that Rembrandt died poor and forgotten. It seems more reasonable that Rembrandt's international fame, which has been stimulated by the easily distributed etchings, continued to grow. This rise in fame can explain the growing demand for portraits of Rembrandt himself.

His final living place, however, does not reveal the life of a famous and successful painter. In contrary, Rembrandt spent the last days of his lives at the Rozengracht in the neighborhood the Jordaan which was not the best place to live. The area was relatively densely populated and whenever the city had to deal with a plague-epidemic, it was this neighborhood that was most severely affected (Haak, 1990: 312). Furthermore, the inventory that was made after the day he had passed away was most simple, especially

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<sup>18</sup> Furthermore an increase in average price for portraits in general can be noticed in the table 1 during 1600 and 1700. While a portrait yielded 5.99 guilders during the first quarter of the seventeenth century, it reached an average price of 23.03 guilders in the period 1651-1675. However, since inflation numbers are not taken into account these numbers must be used with great care.

when you compare this one with the inventory of 1656, the year he went bankrupt. Besides this, Rembrandt died rather unnoticed. Laudatory poems, that usually appeared when famous people died, were not published (Haak, 1990: 331-332).

His poverty however, should not be directly seen as a proof for the idea that Rembrandt died forgotten. His financial difficulties that appear again and again were not the result of a lack of demand. The opposite is true. Partly because of his success Rembrandt lived the life he could not always afford. Furthermore, Rembrandt simply lacked the necessary social and business skills. 'Both economically and socially, however, Rembrandt was a failure. By squandering the respect of his fellow burghers and refusing to court his principal patrons, Rembrandt ultimately failed to realize his full economical potential. If he had been able to outdo himself in that respect and better able to adapt to market circumstances, he would certainly have left us with more of his work – especially in the field of history painting – than we have today. He would have been able to maintain a larger studio, employing assistants who could have boosted his level of production up to the end of his life.' (Bok, 2004: 175)

### 5.3 Demand and supply after his death

Although Rembrandt's works of art have always been quite popular, the demand for his works has been subject to changes. Just like his prices, the perception of Rembrandt and his works have changed during the past centuries.

#### 5.3.1 Perception of Rembrandt and his works of art

While his work was judged by naturalism and its typical technique during the eighteenth century, the subjective and imaginary aspects of his works were highlighted in the Nineteenth century. During the past decades it is mainly the humanity in his works of art that is praised and discussed (Emmens, 1979: 7).

Alpers also mentions the unique human aspects in the works of Rembrandt and gives these factors as the initiators of his current success. 'Rembrandt did not discover, but invented the individual state. In this way his later works became the criterion of that

which counts as the indestructible uniqueness of each individual from his days to ours.<sup>19</sup>  
(1989: 178)

Haak explains Rembrandt's popularity by the fact that each generation has looked upon Rembrandt's work with different eyes and that these works have always been relevant in one way or another. Each generation could find something in Rembrandt's works that attracted them. Each time a different aspect appealed to the people (1990: 336).

The perception of Rembrandt as a person has also been subject to changes. Although his talent seemed to be established and accepted, Rembrandt has been described as avaricious, a national hero, a misunderstood genius and an international superhuman (Emmens, 1979: 7). Especially from the middle of the nineteenth century on, people's perception of Rembrandt changed and started to get prophetic. The mistakes he was assumed to have made were forgiven. From then on these shortcomings were even seen as a proof for his genius (Haak, 1990: 335). That the mistakes or the negative aspects of an artist's career can be turned into something positive is also described by Robertson. 'Thereafter the fully fledged artists are as good as their last sale/exhibition, defined on the basis of their sale records. They stop being an artist if they fail to continue to sell their work, although, like Degas and Rembrandt, both of whom were rejected by the market at the end of their lives, the late work will command premium prices after the artist's death. This premium price is calculated on the basis of their earlier successful commercial reputation, aligned to the romantic notion that they rejected the market.' (2005: 28) Whether Rembrandt was really rejected by the market remains uncertain. However, it is the perception that counts.

### 5.3.2 Evolution of prices

Until the year 1860 prices of Rembrandt works remained low. The highest price was paid in 1843 for "St John preaching in the wilderness" (Berlin, Staatliche Museen Gemäldegalerie, 1634-35). The painting yielded 3080 British pounds. Knowing that the picture consisted of 110 figures, this painting may be called cheap. Reitlinger (1982) has explained these low prices by two factors. Firstly, during the French Kingdom Rembrandt's subjects were out of fashion. A high demand existed for pompous historical images. Secondly, after buying a couple of expensive paintings that turned out to be

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<sup>19</sup> Own translation.



fakes instead of real Rembrandts, English collectors lost confidence and became reserved (Carpreau, 1999: 90).

In the period of 1860 to 1900 prices Rembrandt works of art doubled due to a booming art market. The unification of Germany and the United States during these years had a positive influence on the art market (Carpreau, 1999: 90).

After this period prices of Rembrandt works of art continued to grow. In 1911 a relatively high amount, 103,300 British pounds, was paid for “The Mill” (Washington, National Gallery of Art, 1650) (Carpreau, 1999: 90). This oil on canvas painting stayed in various French collections until the year 1792. It then moved to London where it was adopted by different collections. In 1911 it was bought by the American tradesman, investor and art collector Peter A.B. Widener (1834-1915). After Widener’s death the painting was inherited by Joseph E. Widener who gave the picture in 1942 to the National Gallery of Art.<sup>20</sup>

In 1960 the same gallery buys the horseman portrait “The Panshanger” or “The portrait of a man on a horseback” (Washington, National Gallery of Art, 1649) for the amount of 170,000 British pounds. The National Gallery got a grant of 128,000 pounds of the government for this purchase. Earlier, in 1741, the picture had been bought by Lord Grantham, a descendant of Prince Maurice of Orange, who passed it to his son-in-law Lord Cowper. The portrait then remained in the family until the museum bought it in 1911.<sup>21</sup>

In 1961 a record price of 821,400 British pounds was paid for “Aristotle” (New York, The Metropolitan Museum of Art, 1653). This painting was bought in 1810 for 79 pounds by Barnett. The picture then changed hands several times. Around the year 1905 the work is sold to the mayor art dealer Joseph Duveen (1869-1939). Duveen then sells the painting in 1907 to Huntington where it stays in the family until 1924. Again, Duveen buys the painting. In 1928 he sells the painting for 775,000 US dollars to Alfred W. Erickson, an advertising agent.<sup>22</sup> In the years that follow, after the collapse of the stock market in 1929, Erickson hands in the picture and gets a substantial loan in turn of Duveen. Later, Erickson buys the painting again and repeats this whole transaction

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<sup>20</sup> Source: The National Gallery of Art, consulted via <http://www.nga.gov/cgi-bin/pinfo?Object=1204+0+prov> on 17 June 2007.

<sup>21</sup> Source: Keesing’s World News Archive consulted via [http://www.keesings.com/search?kssp\\_selected\\_tab=article&kssp\\_a\\_id=17249n01xxx](http://www.keesings.com/search?kssp_selected_tab=article&kssp_a_id=17249n01xxx) on 17 June 2007.

<sup>22</sup> Source: The Metropolitan Museum of Art, consulted via [http://www.metmuseum.org/Works\\_of\\_Art/viewOne.asp?dep=11&viewmode=0&item=61%2E198&section=prov#a](http://www.metmuseum.org/Works_of_Art/viewOne.asp?dep=11&viewmode=0&item=61%2E198&section=prov#a) on 17 June 2007.

another two times (Alpers, 1989: 194-195). Finally, the painting is sold by the Metropolitan Museum of Art from the widow of Erickson's estate sale.

Four years later another record price was paid for a Rembrandt painting. "Titus Rembrandt in Childhood" (Pasadena, Norton Simon Museum, 1645-50) yielded 798,000 British pounds. The first recorded sale of this oil on canvas painting goes back to the year 1822 where it is bought by John Charles Spencer, an English statesman. The picture then remains in the family until 1915 when it is sold by Charles Robert Spencer to Herbert Frederick Cook. Cook is a British scholar. Francis Ferdinand Maurice Cook inherits the picture and sells it in 1965 to The Norton Simon Museum.<sup>23</sup>

Although Rembrandt's prices tend to increase, not all of his works seem to be in high demand. Reitlinger writes: 'Even the bidding for different Rembrandts shows a remarkable lack of discrimination. The child-portrait of Titus, a much scraped work, gets run up to £798,000 on account of its sentimental appeal, and in the same week a magnificent portrait of Titus's mother makes only £125,000 because she has lost her looks and her figure when she sat for it.' (1982: 298) Clearly, according to Reitlinger fashion and taste can play a significant role and preference for a particular subject may dominate artistic value.<sup>24</sup>

### 5.3.3 Supply

The demand for Rembrandt can be called relative stable. The supply of Rembrandt works of art however, has been subject to many changes. Willem von Bode's corpus of 1897-1906 registers 377 paintings that are made by Rembrandt. In the year 1906 Adolf Rosenberg publishes 558 real Rembrandt paintings in his catalogue. Wilhelm Valentiner increases this number to 606 in 1909. In 1921 Valentiner has found another 99 paintings that are produced by Rembrandt. Only eleven paintings of these 99 works are still accepted as Rembrandt works of art today. Although the total number of real Rembrandt

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<sup>23</sup> Source: Getty Provenance Index, consulted via [http://piweb.getty.edu/cgi-bin/starfinder/28340/collab.txt?action=toFB8Esdf-ER6VdtU9uSLPBmqftwbSDq4sq4GB\\_ucwtXI01RsPv8VQL](http://piweb.getty.edu/cgi-bin/starfinder/28340/collab.txt?action=toFB8Esdf-ER6VdtU9uSLPBmqftwbSDq4sq4GB_ucwtXI01RsPv8VQL) on 17 June 2007.

<sup>24</sup> It is important to note that the given prices are not the final prices. These are only the hammer prices. A buyer's premium is added to the hammer price. The buyer's premium percentage depends on the house of sale, the location of the auction house and the price of the art object. Often one winning bid may have two different rates applied to different parts of the price. In general one could say that the buyer's premium ranges from 12 to 24%. Furthermore the buyer should take other additional costs into account such as insurance costs.

paintings remains a point of discussion, most experts estimated that there are about 300 works (Liedtke et al. 1995: 3-4).

Since the drawings of Rembrandt differ widely in function, style and technique great confusion exists among experts in terms of authenticity. Moreover, Rembrandt rarely signed or inscribed his drawings. Besides these two aspects Rembrandt also taught his pupils to draw in his style. These days a group of approximately seventy drawings are thought to be by Rembrandt. A large number of other drawings are still discussed. Taken everything together, Rembrandt's drawing oeuvre of today is more precisely defined and narrower than ever before (Liedtke et al. 1995: 155).

Rembrandt's number of etchings has been subject to changes as well. Early estimates of his etching corpus mention about 375 etchings. Today his oeuvre is narrowed to 300 pieces (Liedtke et al. 1995: 201).

Due to the Rembrandt Research Project that was established in 1968 and still continues to investigate works of art that have been attributed to Rembrandt or works that may have been made by the master, the supply of Rembrandt paintings, drawing and prints has steadily decreased throughout the past decades. Besides the fact that a lot of works have been removed from Rembrandt's oeuvre, a lot of art objects have been bought by museums. Whenever a painting is adopted by a museum collection it is unlikely that it will return to market on a short-term basis. A lot of these works stay in the museums and hence, lose their exchange value. These works become more or less priceless. Since the supply of Rembrandt works is small and fixed<sup>25</sup> and the market extremely thin, prices are expected to get driven up further in the future.

On the other hand, if prices reach such levels that museums are no longer able to purchase Rembrandt paintings, the market may get less thin than one would expect at first sight. If museums no longer buy the Rembrandt works that come at auction, pictures that will be bought will probably appear again on the market. This is due to the fact that most other collectors do not keep their paintings for ever.

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<sup>25</sup> The supply is at least fixed in the sense that no more works can be made by the master. However, supply could vary due to changes in attributing.

## 5.4 2006: the Rembrandt year

In the year 2006 The Netherlands have celebrated Rembrandt's birth in Leiden exactly four hundred years ago. Exhibitions, special Rembrandt walks, a musical, and a commemorative coin are a few examples of what has been organized for the Rembrandt year. In the week of his anniversary date the Dutch television even broadcast two Rembrandt programs a day. The number of Rembrandt expositions was extremely high: The number of exhibitions in 2006 can be compared with the total number of shows that were organized during the 20<sup>th</sup> century. The overall grade that these expositions got from the visitors was a 7.9.<sup>26</sup> The attention clearly had an effect on the perception of Rembrandt: during the year 2006 Rembrandt became the most appreciated dead artist in the Netherlands. For years Vincent van Gogh was seen as the best artist.<sup>27</sup>

The year of Rembrandt furthermore evoked an economic boost in the Netherlands. Research has stated that the celebration year brought on 150 million euros. The year 2006 can also be called a record year for Dutch tourism due to the broad range of Rembrandt activities. 69 percent of the total visitors came from abroad. 155,000 of them came from France, 130,000 people came from Germany, 129,000 visitors came from Britain and 103,000 Spanish people visited one or more Rembrandt exhibitions. Besides these European visitors 215.000 American visited the Netherlands especially for the Rembrandt year.<sup>28</sup>

Taken everything together the Rembrandt year has evoked a lot of attention for the artist and extra income for the Dutch society. Whether the effects of the year should be seen as a proof of his popularity these days or as an economic appreciator of Rembrandt and his works of art, remains open to discussion. It can be expected that both options are more or less true.

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<sup>26</sup> Zeil, W. van, Rembrandt brengt nationale trots, *De Volkskrant*, 21 December 2006, <http://zoek.volkskrant.nl/artikel?text=rembrandtjaar&FDOC=0&SORT=presence&PRD=20y&SEC=%2A&SO=%2A&DAT=%2A&ADOC=6>, p. 15. Consulted on 16 June 2007.

<sup>27</sup> 10 November 2006, Mensen: Rembrandt van Rijn. *De Volkskrant* <http://zoek.volkskrant.nl/artikel?text=Rembrandt&FDOC=50&SORT=presence&PRD=20y&SEC=%2A&SO=%2A&DAT=%2A&ADOC=51> consulted on 22 June 2007.

<sup>28</sup> 6 July 2006. *Het Laatste Nieuws*, [http://www.hln.be/hlns/cache/det/art\\_412722.html](http://www.hln.be/hlns/cache/det/art_412722.html), consulted on 16 June 2007.

## 5.5 Conclusion

In the previous paragraphs the life and market of Rembrandt has been discussed. Rembrandt obviously was born at the right time and place. In the Netherlands, especially his living place Amsterdam, was economically booming and had an extremely beneficial climate for artists. Furthermore, Rembrandt was lucky to meet the right people. Already earlier in his career the young artist was recognized by the experts and hired by the successful entrepreneur Uylenburgh. These two aspects must certainly have helped him to get known by important collectors all over Europe. His innovative prints that were easily disseminated supported his international success. That Rembrandt's works were adopted by many important collections all over Europe and later the world may have had a large influence of his popularity. Due to the fact that his pictures were in the hands of so many collectors, a lot of individuals and institutions had an interest in keeping him appreciated and famous (Schwartz, 2006: 369).

But one of the most important causes of his success is the fact that Rembrandt was considered a trendsetter. Other artists have copied and used his specific style thereby making the Rembrandt-look a norm or anti norm and the artist himself an icon.

The business and social skills that Rembrandt seemed to lack made him fail to realize his full economical potential. His mistakes, however, have brought him fame in return. Because Rembrandt seemed to be rejected by the mainstream and the market, later generations could feed their image of Rembrandt as the typical romantic artist.

Besides the artist's own lifetime we have looked at the market for Rembrandt works after his life. The demand for Rembrandt turned out to be more or less stable. Although Rembrandt was out of fashion in some periods, he has always been quite popular. The supply of Rembrandts works, however, has been subject to many changes. The Rembrandt Research Project has taken many works out of his oeuvre and hence, has made the market very thin. Whether the supply of Rembrandt works of art at auction will eventually become zero depends on the recent buyers. If purchasers consist mainly of museums, the market may disappear in the end. If other collectors turn out to be the main buyers, works are expected to return on the market again.

## 6 Hypothesis

In the preceding chapters different theories have shed light on the subject of art markets and art prices. These theories give us an idea of the mechanisms at work in the market for Rembrandt works. They even gave answers to the first question: *Which factors and what phenomena can be held responsible for Rembrandt's success in general?* Although we now have an idea of the causes of the high demand for Rembrandt works in general, we still do not know how his individual prices are formed. Why certain pictures of the master are more popular than others has remained unclear so far. The central question of this research is therefore not yet answered:

*Which factors and what phenomena play a significant role in the determination of prices of Rembrandt paintings, drawings and prints sold at auction between 1986 and 2007?*

Out of the previous chapters several hypotheses can be formulated. Taking the limited sources into account I have chosen to focus mainly on the paintings. Drawings and prints will be investigated in a more rough way.

Following Czujack (1997) twelve factors are assumed to have a significant influence on the price:

- Dimension: Some sizes will be preferred to others. Since large paintings cannot easily be hanged on the walls of private collectors, these works will be less demanded. However, it seems natural that large works of art will be more expensive simply because these works are more expensive to produce.
- Techniques and media: Paintings are assumed to be more expensive than drawings and prints. Since prints are made in limited series and hence, are less unique than paintings and drawings these works will be cheaper. The paintings of Rembrandt can be divided into two categories: oil on canvas and oil on panel. Since panel can be seen as a material that is less fragile than canvas, I expect panel paintings to be more expensive than canvas pictures.

- Signature: Signature may be important since it shows the name of Rembrandt that in turn embodies a large value. A visible signature may give the buyer prestige value and will therefore increase the price of the painting.
- Proof of authenticity: Works that have been proven to be real Rembrandts by the Rembrandt Research Project will be more expensive than those that are not. This is due to the fact that the name Rembrandt contains a huge value. Consequently, a proof of authenticity implies less risk and hence, a higher price.
- Exhibition: Works of art that have been exhibited are considered high quality works. These works are chosen by art experts and are therefore expected to yield higher prices. On the other hand, a work that has been out of sight for a long period of time because it belonged to a private collector may be more exclusive and hence, more expensive.
- Resale: Works that are resold shortly after they have been bought are expected to bring on a lower price. It is assumed that it is more profitable to keep a work of art for a relatively long period of time instead of selling it soon after the purchase.
- Pre-sale estimates: Pre-sale estimates say something about the expected hammer price and the seller's reservation price<sup>29</sup>. As a consequence these estimates are expected to have an influence on the price.
- Place of transaction: Sotheby's and Christie's are seen as the leading auction houses in the art market. They are assumed to generate the highest prices. Moreover, art objects sold in the United States are usually more expensive than those in Europe.
- Working periods<sup>30</sup>: The life of Rembrandt can be divided into four working periods.

The first period ranges from 1625 -1631. This is the start of Rembrandt's career. During these years Rembrandt works as an independent master in Leiden. In this period Rembrandt produces his first etchings. In the year 1630 Rembrandt makes more than thirty prints, an exceptionally large production. The high amount of prints may have an influence on price. Since these etchings are less scarce than those out of other periods, the price may be lower too.

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<sup>29</sup> The reservation price or reserve price is the lowest amount the seller is willing to sell his work of art for. If the auction is unable to evoke a bid equal to or higher than the reservation price, the object will not be sold.

<sup>30</sup> The working periods are derived from Haak (1990) and Van de Wetering (1997).

The second period is 1632-1642. In this period Rembrandt settles in Amsterdam and moves into Uylenburgh's workshop in which portraits were made, paintings were restored and copies were produced. During these years Rembrandt produces a large number of portraits. Besides these portraits Rembrandt makes a relative large number of historical paintings and etchings. However, his great success has a disadvantage too. Quantity sometimes seems to prevail over quality (Haak, 1990: 332).

The third period is 1643-1649. During these years Rembrandt's production changes in many ways. The variation in style, theme and size are striking. Besides this only a small number of paintings are produced and hence, this may increase the price of these works.

During 1652 and his death in 1669 fifteenth self-portraits are produced (Van de Wetering, 1997: 290). The last period of Rembrandt's life can be seen as the richest of all. In his paintings, as well as drawings and etchings he excels (Haak, 1990: 334). The high quality may increase the price.

Taken everything together the first two periods, from 1625-1642, are not considered to increase the price. The latest two periods seem scarcer and are seen as more qualitative. These will therefore have a positive influence on the price.

- Provenance: The previous owner of a work of art may have an influence on price. Although Czujack divided the previous owners into four groups that existed of galleries, private collectors, others and no provenance, and ranked these groups according to their importance, I will take a slightly different approach. The reason for this is the fact that it is not in my reach to investigate who will be considered as important, relatively important and not important. Making a hierarchy with the limited resources I have would easily become subjective and would therefore be unfit for such a research. I will investigate the provenance only in my qualitative part. This allows me to see how the previous owners are perceived in pre-sale catalogues and the media. Furthermore I will take a look at the buyers of Rembrandt paintings. Who are these people and can they be seen as conspicuous consumers? Their identity can also say something about the structure of the market. Pure collectors for instance are considered to behave irrationally while the existence of speculators may say something about the possible expected profits in this market. Their existence indicates also a more



rational behavior and hence, a more predictable market. Finally, institutional buyers such as museums are important here. If they are the main buyers the market will eventually disappear and hence, Rembrandt pictures become priceless.

- Time of transaction: Prices are expected to be higher during so-called boom periods. It is often stated that 1986-1990 is a boom period in art (Czujack, 199:240). Taking a rough look, the market climbed steadily from 1991 until 2004. After the 9<sup>th</sup> of September 2001 however, a clear brief fall of the market can be noticed (Artprice 2006). Finally, the years 2006 and 2007 are often seen as boom years.<sup>31</sup> Besides these booms the year 2006 might have increased the price. This is due to the celebration of the Rembrandt year in the Netherlands.
- Subject: I will distinguish the following different types of subject<sup>32</sup>: Self-portrait, Portrait, Tronie or Head<sup>33</sup>, Preparatory work or Study, Religious, Mythological, Landscape, Nude and Genre<sup>34</sup>. It is often said that religious subjects are out of fashion. A study will probably be cheaper due to the fact that these were not intended as final products for the markets and hence, have a lower quality. A picture that has a subject which is close to Rembrandt such as a self-portrait or a portrait of one of his loved ones, on the other hand may be expected to be in a relatively high demand since it is most attached to the artist himself and carries therefore a lot of prestige value. A portrait may for the same reason be of high value whenever it shows a person who appeals to the public.

Besides testing these factors in relation to prices that have been derived from Czujack I will add the following hypothesis:

- Due to the Rembrandt Research Project and the adoption of museum collections Rembrandt works have become more scarce and hence, more expensive. The price per square centimeter of a Rembrandt picture will therefore be higher than in the past.

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<sup>31</sup> However, whether the art market is in a boom or a non boom is rather unclear. During my research I was not able to find a proper definition for a boom and a non boom period. This factor may therefore not be defined optimally and hence, could become irrelevant here.

<sup>32</sup> These types of subjects are specifically based on Rembrandt's oeuvre. Czujack, who investigated the market of Picasso has therefore a completely different classification.

<sup>33</sup> "Head" or tronie refers to a specific feature or attribute of a person. In these cases it is not about the sitter but rather about for instance his or her clothes or expression.

<sup>34</sup> "Genre" refers to those works that represent scenes of everyday life.

## 7 Methodology

### 7.1 Introduction

In this master thesis I exam the market of Rembrandt paintings, drawings and prints sold at auction between 1986 and 2007. Since my main data source “Artprice” does not publish information on years before 1986 I have chosen to use 1986 as my starting point. It is possible to collect data of previous periods in other ways. However, the time and effort that it would cost exceed the purpose and possibilities of a master thesis.

Furthermore I will use the pre-sale catalogues of the paintings that have been sold. These catalogues have been published by the auction houses and tell us something about the art historical aspects of the painting itself, provenance, signature, exhibitions and publications.<sup>35</sup> Since Artprice provides us only with information on the pre-sale estimate price, the auction result, size, date, technique and medium and location, catalogues are needed to get a better understanding of the works of art. The additional information of the pre-sale catalogues is expected to have an influence on its readers and consequently on the prices. Furthermore the catalogues will be used for a more qualitative approach of the research, to gather extra information of important factors that are assumed to play a role in the process of pricing. This qualitative part is added to a quantitative analysis due to the extremely thin market for Rembrandt paintings and drawings and therefore limited number of cases. It may be impossible to test the hypothesis only with quantitative analyses. To what extent we can use the econometrical techniques here should therefore be seen. The qualitative approach to the topic will hopefully complete the results of the quantitative analysis. In the qualitative analysis articles that have appeared in the media will be used to complete the information of the catalogues. They can for instance reveal information on the motivations of buyers of works of art.

In the quantitative part I will compare prices of paintings, drawings and prints and test whether and in which way the previous described characteristics have an influence on price. This will be done with the help of a univariate analysis, a multivariate regression analysis and the computer program SPSS.

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<sup>35</sup> Unfortunately not all auction houses provide information on these factors.

Since art objects are heterogeneous goods, the price mechanism is more complicated than in case of mass production goods. Of course, there is a clear difference between paintings and prints. While the first category consists of unique goods, the latter one is made in a certain amount of copies. Still, these prints with a limited amount of copies cannot be compared with mass productions goods that can be made in endless amounts. Moreover, while producers are usually able to adjust supply to demand, the supply for Rembrandt works is fixed. Examining the formation of prices of works of art is therefore much more difficult. There are three well-known methods for comparing art prices.

## 7.2 The Sotheby's Art Index

The Sotheby's Art Index is based on art expert's estimation of art objects. The paintings are divided into four categories; old master paintings, nineteenth-century European art, impressionists, and modern art. Every category has its own basket which exists of 30 to 40 works of art and is supposed to be representative for the painting school. The paintings are chosen in the year 1975, the so-called base year. Whenever there is an auction, a large exhibition, publication or another relevant event, the experts estimate the prices of the baskets again. In short, experts revalue the paintings of the basket whenever a similar art object is involved in an event. The arithmetical average of the prices of the basket paintings is set for both the base year and for the current year. By comparing the two values the evaluation of prices of specific painting schools can be seen.

The fact that no adjustments have to be made for the differences in the quality of the art objects is seen as an advantage of this method. Moreover, the price evolution of different painting Schools can easily be analyzed (Fase, 1996: 652). But the Sotheby's Art Index has some major disadvantages too. Firstly, the results are based on subjective opinions of art experts. The analysis is based on the ideas of certain people instead of real prices. Besides, the experts work for Sotheby's and may therefore not be objective. The experts may keep the art index artificially high in order to maximize their profit. Since the income of auction houses is a percentage of total revenue, Sotheby's has an

interest in higher sales prices. Furthermore, one may question the representativeness of the baskets. Representativeness may change over time (Carpreau, 1999: 16).

Since this model is not able to analyze whether and to which extent certain characteristics of works of art play a role in the determination of prices, the model only gives an idea of the evolution of prices, the Sotheby's Art Index is not suitable for my research and will therefore not be used in this thesis.

### 7.3 The Repeat Sales Regression Model

Another method is the Repeat Sales Regression. This method was first created to analyze movements in real estate prices (Fase, 1996: 651). The similarity between houses and paintings is clear: both are heterogeneous goods. By comparing prices of individual paintings that have been sold more than once, the problem of heterogeneity can be avoided. In this method the analysis is based on the evolution of price of one and the same object. The method calculates for each pair of sales the percentage change in price. In the equation the dependent variable price is then explained by the independent variables which are the changes in prices. Just like the Sotheby's Art Index method this analysis does not need to make adjustments for quality differences among paintings (Fase, 1996: 651). However, since not all paintings will be sold more than once, the available data will be limited. Moreover, this method measures movements in price. It is unable to investigate specific characteristics, which is my aim here. This method will therefore not be used here.

### 7.4 The Hedonic Regression Method

The third model is the Hedonic Regression Analysis. In contrast to the previous methods, this model makes adjustments for differences in quality among paintings. Each work of art can be described by its characteristics. This model gives each of these features an implicit price. The sum of all these values is the price of the painting. Since all art objects that have been sold at auction can be used, the data set will be larger and

hence, more reliable. However, not all relevant characteristics are known. It may therefore be difficult to explain prices properly (Fase, 1996: 652). Furthermore, the features have to be known beforehand. To decide on the factors that are relevant may be high-handed (Carpreau, 1999: 17). The fact that it is impossible to analyze all relevant factors is not a problem per se. The hedonic regression method takes account of this by adding an error-term<sup>36</sup>. Since this model is most effective in investigating the different characteristics of works of art, I will use this method in my quantitative research.

## 7.5 Variables

In this thesis I will investigate paintings, drawings and prints: the objects. Each object has certain characteristics. In order to compare the objects, each object should have the same sort of features. Each characteristic is dependent on the object and varies therefore from art object to art object. An example for a variable of a Rembrandt work of art may be size, place of transaction, time of transaction and so on.

Variables can be quantitative or qualitative. In contrast to quantitative variables, numbers cannot express qualitative variables. The house of sale is an example of such a variable. Quantitative or numerical variables can be measured at two levels: interval and ratio. At the first level variables have a fixed and equal distance between the points on the scale (Seale, 2004: 308). The latter one builds on the attributes of the interval level since it adds a zero point. Because of this the ratio level can also say something about the magnitude of an attribute (Seale, 2004: 169). Age is an example of a ratio variable.

Qualitative or categorical variables also have two levels: nominal and ordinal. The first level applies a name to the different qualities. There is no sense of magnitude between these variables (Seale, 2004: 308). Ordinal variables have an order between them although it is impossible to quantify the exact difference between the categories (Seale, 2004: 169).

The hedonic regression model will calculate an estimation of the price for each painting or drawing of Rembrandt sold at auction. Prints will not be analyzed with a multivariate analysis since the available resources are too limited here to do this properly. However, they will be investigated in a more general way.

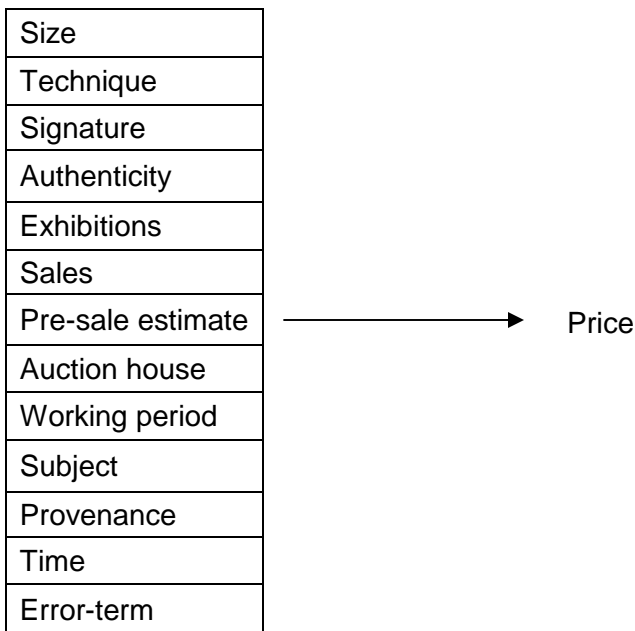
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<sup>36</sup> This will be explained in paragraph 7.6.

The estimation of the price, the dependent variable, will be dependent on the characteristics of the works of art, the independent variables. A linear model will be calculated between the dependent variable  $Y$  and the independent variables  $X_i$ . Each independent variable  $X_i$  has its own partial regression coefficient. This regression coefficient shows to what extent the independent variable has an influence on the dependent variable  $Y$ .

The estimated price will probably be different than the true price that has been paid. The difference between these two prices is the so-called error-term or the residue. In other words, it is the difference between the predicted  $Y$ -values and the observed  $Y$ -values. In short, a dependent variable will be explained by a number of independent variables (Carpreau, 1999: 20).

Following Czujack (1997) I will use size, technique, signature, proof of authenticity, number of exhibitions, number of years that lie between two sales<sup>37</sup>, pre-sale estimate, salesroom, working period, subject and time of sale as independent variables.<sup>38</sup> These aspects are usually discussed in the pre-sale catalogues of the mayor auction houses and hence, are therefore expected to have an influence on the buyers and price.



**Figure 2: Influential factors**

<sup>37</sup> This is about the number of years that a certain picture has been off the market.

<sup>38</sup> Clearly, factors such as condition and artistic value will have an influence on price. In this research I was unable to judge these factors and have left them therefore out of the investigation.

## 7.6 The equation

Although Czujack (1997) and Chanel et al (1996) used an equation in which the time dependent effect was taken into account, I will use a less complicated equation. Their model is able to divide the investigated period into different periods of which all have their own trend for the variables. This implies an added dummy variable taking the value 1 if the painting is sold in the period  $t$  and 0 otherwise<sup>39</sup>. I will use a linear regression model which only takes account of the specific features of the work of art. The model will be capable in describing the hammer prices by investigating the relative importance of different characteristics.

### 7.6.1 The equation

$$P_i = \alpha + \beta_1 \chi_{1i} + \dots + \beta_k \chi_{ki} + \varepsilon_i$$

The equation can be divided into two parts: a deterministic part and a stochastic part. The first part is:

$\alpha + \beta_1 \chi_{1i} + \dots + \beta_k \chi_{ki}$  This part shows the relationship between the dependent variable  $P$  and the regressors or independent variables  $\chi_1, \chi_2 + \dots, + \chi_k$ , which have a direct influence on the price. The intercept  $\alpha$  and the  $\beta$ 's are the parameters of the model and can be described as the stable but unknown characteristics of the investigated art objects. The intercept  $\alpha$  is the constant term and can be seen as the deterministic part of the price  $P$  if all independent variables  $\chi_1, \chi_2 + \dots, + \chi_k$ , are equal to zero. The  $\beta$ 's represent the direct effects of the independent variables  $\chi_1, \chi_2 + \dots, + \chi_k$ , on the price of a work of art. The  $\beta$ 's measure the change in price if one independent variable, a specific characteristic, changes with one unit holding other features constant. It is for this

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<sup>39</sup> This equation can be found in the appendix.

reason that the model is able to test the relative importance of each characteristic separately (Van Dalen & De Leede, 2002: 435).

The deterministic part will never be able to explain the price  $P$  exactly. Deviations between the true value of  $P$  and the expected value of  $P$  will always appear. In case of this research it is, for instance, impossible to capture all characteristics that have an influence on the price of Rembrandt works of art. It is for these reasons that the second part is added to the linear regression model. This stochastic part exists of the error-term  $\varepsilon_i$ . This term thus represents the unpredicted or unexplained variation in the dependent variable  $P$  (Van Dalen & De Leede, 2002: 436).<sup>40</sup>

## 7.7 Data Set

The data set will consist of all paintings, drawings and prints sold at auction between 1986 and 2007 that have been recorded by Artprice. Artprice owns and exploits art auction records of more than 2900 auction houses in 40 countries.

Artprice provides the following information:

- Title
- Pre-sale estimate
- Auction result
- Date of sale
- Auction house and location
- Lot number
- Medium and technique
- Size
- Dated
- Signature

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<sup>40</sup> The described equation represents a multiple regression analysis which can be done in the computer program SPSS. A rough description of this analysis is given in the appendix.



Because of limited resources I will only test whether and in which way the twelve factors have an influence on the price of paintings. Drawings and prints will be investigated in a more rough way. The amount of drawings and prints that has been sold in the period 1986-2007 is too large to investigate properly in this setting. The number of paintings on the other hand is small. Only sixteen paintings have come to the auction market between 1986 and 2007 of which two of them were not able to reach the reserve price. As a consequence, the quantitative analysis may not be fully reliable. For this reason the qualitative approach is added.

On the whole it is important to keep in mind that Artprice only provides transaction results on works of art that have been traded on the auction market. Of course, auction houses are not the only way to sell or buy a work of art. As a result we might not be able to capture all transactions of Rembrandt works of art. Furthermore one has to be aware of the fact that the given prices of Artprice are not the final prices. Auction results do not contain the buyer's premium and other transaction costs. Information costs, insurance costs and taxes may increase the price substantially. However, taxes may also cause a decrease in other costs.

## 8 The recent market for Rembrandt works of art: prints, drawings and paintings

### 8.1 Introduction

In this chapter the recent auction market for Rembrandt prints, drawings and paintings is investigated with the help of data of Artprice. The indices and price levels that Artprice provides show the market of Rembrandt works of art during the period 1997-2006. By interpreting the data questions such as “how did this market develop?” and “how did the prices of Rembrandt works of art evolve?” can be answered. The aim is to characterize the recent market for all Rembrandt works of art. The characterization might be a helpful tool to place and understand the following, more specific chapters on the different categories of works of art.

### 8.2 The general market<sup>41</sup>

Over the past ten years the marketability of Rembrandt works of art has increased. Someone who invested \$100 in 1997 in a Rembrandt work of art had an average value of \$222 in February 2007.<sup>42</sup> Although this is a huge rise in value, the market seems quite unpredictable. After the year 1997 the price index shows a decline. In 1999 the average price had fallen by 37% in relation to the base year. In the following years the prices remain under the level of 1997. In 2004 a relative large increase can be noticed and the price level passes the base year level. After 2004 prices continue to grow with a small

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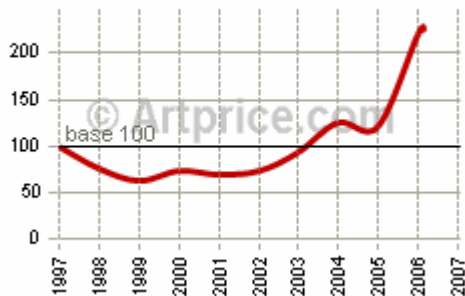
<sup>41</sup> Since prints, drawings and paintings are fundamentally different sorts of art, it is questionable how valuable these characterizations of the general market are. Prints are expected to be of much lower value than drawings and in particular paintings. This is partly because of their rarity. While prints are made in certain series, drawings and painting are unique items. Furthermore, prints will be relatively often traded while the market for paintings is extremely thin. The overall picture may therefore be dominated by a lower valued category.

<sup>42</sup> Artprice (2007).

<http://web.artprice.com/CarItems.aspx?pdtype=IND&idArtist=ODg3NzEzMTQ3NDY5MzExLQ==>

interruption in 2005. In 2006, during the celebration of the 400 anniversary of Rembrandt and during a so-called boom period in art, the overall price level presents a remarkable growth. Whether these factors have a (causal) relationship remains uncertain.

**Figure 3: Price index (basis 100 in 1997 for all categories)**



Source: Artprice(2007)

<http://web.artprice.com/CartItems.aspx?pdtype=IND&idArtist=ODg3NzEzMTQ3NDY5MzExLQ==>

**Table 2: Price Index**

<i>Date</i>	<i>Index</i>	<i>Growth rate</i>
1997	100	0%
1998	75	-24%
1999	63	-16%
2000	74	17%
2001	70	-4%
2002	74	5%
2003	94	27%
2004	125	31%
2005	122	-2%
2006	221	80%
<b>feb-07</b>	<b>222</b>	<b>0%</b>

Source: Artprice (2007)

<http://web.artprice.com/CartItems.aspx?pdtype=IND&idArtist=ODg3NzEzMTQ3NDY5MzExLQ==>

Since prices of prints, drawings and painting differ widely, it is important to see which category has dominated the market. In the period 1997-2006 prints were often traded. 99% of all transactions existed of etchings. Drawings and paintings only formed 1% of the total amount of transactions.

Although prints dominated the market convincingly, they only formed 30% of the total turnover in the period 1997-2006. The drawings formed 8% of the total turnover which leaves the paintings with a percentage of 62%.<sup>43</sup>

In the following table the segmentation of prices can be seen. The highest price ever paid for a Rembrandt work at auction is the “Portrait of a Lady, aged 62, perhaps Aeltje Pietersdr. Uylenburgh” which was sold in 2000 at Christie’s. The table clearly shows the domination of the etchings: fifty percent of all hammer prices are under the amount of \$3,200 which is obviously lower than the average price of paintings.

Table 3: Segmentation of prices in USD 1997-2006<sup>44</sup>

Top hammer price	26,064,000
90 % of hammer prices are under	17,000
80 % of hammer prices are under	9,376
70 % of hammer prices are under	6,000
60 % of hammer prices are under	4,400
50 % of hammer prices are under	3,200
40 % of hammer prices are under	2,454
30 % of hammer prices are under	1,871
20 % of hammer prices are under	1,374
10 % of hammer prices are under	897

Source: Artprice (2007).

<http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=MDExMzQ4OTE3NjYyNzk=>

Since Rembrandt has made a lot of etchings, it is difficult to compare the total turnover with those of other artists. However, Rembrandt still takes the 61<sup>st</sup> position in the ranking

<sup>43</sup> Artprice (2007).

<http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=MDExMzQ4OTE3NjYyNzk=>.

<sup>44</sup> The prices Artprice has used are not corrected for inflation. This implies for instance that the top hammer price, which was sold in 2000 has an higher value when it is turned into a amount that is representative for 2007.

of Artprice. The highest rank Rembrandt has reached during the past ten years is the 9<sup>th</sup> place in 2000, the year in which the top hammer price of more than 26 million dollars was paid. The low rankings of the year before 2000 can easily be explained. In 1999 only one, relative cheap painting is sold in Copenhagen for the amount of nearly 3000 dollars.<sup>45</sup> In 2004 and 2005 not one painting is sold which corresponds with the relative low ranking in these years. In 2006, which is seen as a boom year for the art market, Rembrandt's rank considerably improves: the artist goes 178 places up. However, only one painting of Rembrandt is sold during this year.<sup>46</sup> The painting yields an amount of almost 4 million dollar, not a particular high price. Since 2006 is considered a boom year, it is expected that other artists reach relatively high prices. Rembrandt could therefore simply not become successful in relation to the other artists. Perhaps the transactions of the two drawings and the extensive number of etchings have resulted in the high rank of Rembrandt.<sup>47</sup>

Table 4: Annual growth of rank of the artist by turnover (1997-2006)

Among all artists in the art price data bank

<i>Date</i>	<i>Rank</i>	
1997	41	0
1998	22	+19
1999	208	-186
2000	9	+199
2001	21	-12
2002	151	-130
2003	25	+126
2004	114	-89
2005	239	-125
2006	61	+178

Source: Artprice (2007)

<http://web.artprice.com/CartItems.aspx?pdtype=IND&idArtist=MDExMzQ4OTE3NjYyNzk=>

<sup>45</sup> I doubt whether this work of art is really a painting. In the pre-sale catalogue the picture looks more like an etching or drawing. However, since Artprice states that it is an oil on canvas painting and I could not find more proof for my doubts, I treat it as a painting. The painting might be an oil sketch.

<sup>46</sup> Artprice (2007) <http://web.artprice.com/CartItems.aspx?pdtype=IND&idArtist=MDExMzQ4OTE3NjYyNzk=>

<sup>47</sup> Artprice (2007). <http://web.artprice.com/CartItems.aspx?pdtype=IND&idArtist=OTg1NTI2NTg4OTM1NzMxLQ==#A5>, consulted on 21 June 2007.

### 8.3 Conclusion

In the previous chapter the general market for Rembrandt works of art is seen. Taking all categories into account, the average value of a Rembrandt work has grown substantially. The year 2006 in particular shows a remarkable growth, as well in the price level as in the ranking of Rembrandt among other artists. Furthermore the nature of the market for Rembrandt works of art is presented. While the market for prints takes up 99% of all sales, the larger part of revenues is produced by drawings and paintings. Clearly, the market for drawings and paintings is extremely thin and hence, these works of art are far more expensive. Finally, the price index shows that the market for Rembrandt objects is rather unpredictable. His price goes up and down and cannot be called stable.

## 9 Prints: a quantitative approach

### 9.1 Introduction

In order to get a rough idea of the market for prints the indices and price levels that Artprice provides are used here. Since the number of transactions was rather high, this category could not be investigated more specifically. The aim of this chapter is to show the market of Rembrandt etchings during the period 1997-2006 and to see whether the “brand” Rembrandt has become more valuable. In other words, has Rembrandt become more expensive in the past years?

### 9.2 Size and nature of the market

The first transaction that Artprice records is the sale of a print on 22 April 1986. The last recorded sale is transacted on 5 May 2007. During these 21 years 5618 etchings come to the auction market. This means that approximately 268 prints a year and 22 prints a month appear on the market.

From January 2007 to May 2007, a period of just over 4 months, 77 etchings are offered for sale which means that on average 19.25 prints come to the auction market each month. Taking the average of 22 prints of the whole range into account, etchings do not seem to become scarcer.

By looking at the number of prints offered per year, the market does not seem to get thinner either. The opposite seems true. During 1986 and 1996 only 664 etchings have been offered for sale, 4954 prints have come to auction during 1997 and 2006. In 1987 and 1988 no prints were put on the auction market. The years 1997, 1998, 2000 and 2006 show the highest numbers. During these years respectively 496, 593, 540 and 656 prints were offered for sale.<sup>48</sup>

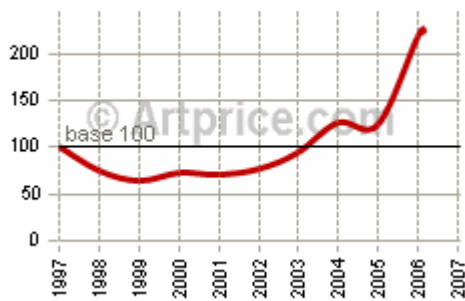
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<sup>48</sup> Artprice (2007). <http://web.artprice.com/ps/artitems.aspx?view=all&idarti=ODg3NzEzMTQ3NDY5MzExLQ==&refGenre=B&page=225>

### 9.3 Prices

The price of an average etching, however, has increased. Someone who has bought an etching for the amount of \$100 in 1997 owns a print of \$220 dollars in 2007.<sup>49</sup>

Figure 4: Price index Prints (Basis 100 in 1997)



Source: Artprice (2007).

<http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=OTg3ODU1NTg0MTAxODMxLQ==&Cur=2>

Table 5: Price Index Prints

<i>Date</i>	<i>Index</i>	<i>Growth rate</i>
1997	100	0%
1998	74	-25%
1999	64	-13%
2000	73	+14%
2001	70	-4%
2002	77	+10%
2003	95	+23%

<sup>49</sup> Artprice (2007). <http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=OTg3ODU1NTg0MTAxODMxLQ==&Cur=2>



<i>Date</i>	<i>Index</i>	<i>Growth rate</i>
2004	127	+32%
2005	124	-1%
2006	219	+75%
Feb 2007	220	0%

Source: Artprice (2007)

<http://web.artprice.com/CarlItems.aspx?pdftype=IND&idArtist=OTg3ODU1NTg0MTAxODMxLQ==&Cur=2>

Since the market for prints has not become thinner, the rise in average price cannot be explained by its scarcity. The increase in price may be due to a shift in quality. During the past decade better prints may have come to auction. However, there are no signs that indicate such a phenomenon. It is therefore highly likely that Rembrandt as a name has become more in demand. Intense media attention such as the Rembrandt Year provided can be the foundation for his grown popularity. The above table could confirm this; in 2006 a large growth is shown. Besides such events the Rembrandt research project warrants regular visibility in the media.<sup>50</sup> Each time a Rembrandt work is investigated and proven to be a real Rembrandt or not, the media are interested. The name "Rembrandt" has of course also large consequences; it is matter of million dollars. Finally, the scarcity of paintings and therefore its tremendous value could have its influence on the market for etchings. Art investors could become more eager in buying Rembrandt works of art in general since the market for Rembrandt paintings becomes thinner and thinner and might eventually disappear in its whole.

By looking more specifically at the prices, the large willingness to pay can be seen. In the last ten years the highest price was paid for a fourth state print of the three crosses. This print yielded \$811,226. Since the print has a surface area of 1729.28 cm<sup>2</sup>, \$469.00 was paid per square cm.

<sup>50</sup> The Rembrandt Research Project of course covers more than the ten years investigated here. However, the media may have become more influential. Their role may have increased due to new technologies. An article about this project in the past years could therefore have a wider reach and a larger impact than an article in 1997.

Table 6: Segmentation of hammer prices of prints 1997-2006 in USD

Top hammer price	811,226
90 % of hammer prices are under	16,427
80 % of hammer prices are under	9,006
70 % of hammer prices are under	6,000
60 % of hammer prices are under	4,319
50 % of hammer prices are under	3,200
40 % of hammer prices are under	2,421
30 % of hammer prices are under	1,857
20 % of hammer prices are under	1,366
10 % of hammer prices are under	896

Source: Artprice (2007)

<http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=OTg3ODU1NTg0MTAxODMxLQ==&Cur=2>

However, an even higher price, \$920,930 was paid in 1990 for another fourth state etching of the three crosses.<sup>51</sup> The amount has a value of more than a million, \$1,420,501, in the year 2006.

#### 9.4 Conclusion

The market for Rembrandt prints cannot be called thin, in contrast to the market for his drawings and paintings. Unless the fact that prints have not become any scarcer, the average price of an etching has increased substantially. Since there is no reason to believe that the quality of the later supplied works is higher, the rise in price must be found somewhere else. The extremely thin market of paintings and drawings might have its influence on price. Since this market is expected to get thinner and in the end is thought to disappear, investors may already start purchasing etchings. Another explanation might be that the name Rembrandt has become more famous and hence, more valuable. This could be due to increased media attention.

<sup>51</sup> Artprice (2007) <http://web.artprice.com/CarlItems.aspx?pdtype=IND&idArtist=OTg3ODU1NTg0MTAxODMxLQ==&Cur=2>

# 10 Drawings: a quantitative approach

## 10.1 Introduction

In this chapter the market for Rembrandt drawings is investigated between 1986 and 2007. In order to understand the prices that have been paid all drawings that were sold at auction were taken up in a SPSS file. Each drawing was seen as case. The hammer price was recorded as the dependent variable Y. The estimated price, the surface area, the technique, the subject<sup>52</sup> the factor whether the work was dated or not, the auction house<sup>53</sup>, the place of sale<sup>54</sup> and whether the work was sold during a boom or not were all recorded as independent variables. Both a correlation and a multiple regression analysis were done in SPSS as described in the chapter on methodology and the appendix. Unfortunately, most of the data turned out to be unsuitable to test the relationship between the price and the various characteristics of the drawings. A larger data set is probably needed to test whether and to what extent certain factors have an influence on price.<sup>55</sup> The focus will therefore lay on a univariate analysis.

## 10.2 Size and nature of the market

In the period 1986-2007 40 drawings have been offered at the auction market of which five of them remained unsold. Three of the 40 drawings were sold but did not communicate their hammer prices; these were not taken up in the SPSS file.

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<sup>52</sup> These were turned into dummy variables in order to make them computable.

<sup>53</sup> See above.

<sup>54</sup> See above.

<sup>55</sup> The results of the regression analysis are presented in the appendix.

Table 7: Number of drawings offered and sales per year

<i>Year</i>	<i>Number of works</i>	<i>Number of sales</i>
1986	4	4
1987	0	0
1988	0	0
1989	1	1
1990	0	0
1991	1	1
1992	1	1
1993	1	1
1994	1	1
1995	0	0
1996	1	1
1997	4	4
1998	1	1
1999	0	0
2000	6	4
2001	4	3
2002	6	5
2003	1	1
2004	1	1
2005	3	3
2006	3	2
2007	1	1
<b>Total</b>	<b>40</b>	<b>35</b>

Source: Artprice (2007)

If we take a look at the number of works that have been offered for sale, the market for Rembrandt drawings does not seem to become thinner. The contrary seems true. However, since the quality of these works is unknown, the market for high quality works may have become thinner.

### 10.3 Prices

If the art market is a rational market<sup>56</sup>, we expect price to be an indicator of quality. In this light it is possible to investigate whether the market for high quality drawings has become thinner. By correcting all prices for inflation and dividing them with their surface area, the price of one square centimeter can be found. By comparing the average price of one square centimeter of the first ten years, 1986-1995, with that of the period 1996-2005, something about the quality of the drawings could be said.

Table 8: Price drawings corrected for inflation per cm<sup>2</sup>

<i>Period</i>	<i>Number of sales<sup>57</sup></i>	<i>Average price per cm<sup>2</sup> in USD</i>
1986-1995	9	1843,96
1996-2005	20	2035,61

Source: Artprice (2007). Own calculations.

The average price of one square centimeter did not decrease. In fact the later buyers of Rembrandt drawings paid nearly 200 dollars more per one square centimeter and hence; the market of high quality drawings did not seem to become thinner. Of course, quality is just one factor that is expected to have an influence on price. As has been described in the previous chapter, the “brand” Rembrandt could have become more valuable. In such a case the market would still be rational, even if the quality did not rise. A closer investigation of the specific works out of these periods is needed in order to test the nature of the market and its prices. Furthermore, one must be aware of the fact that it is uncertain whether the art market is rational.<sup>58</sup>

<sup>56</sup> See also the literature review. Whether art markets are rational is a matter of debate. Authors such as Singer and Lynch (1997) have stated that art markets are rational. Baumol (1986) on the other hand stated the complete opposite.

<sup>57</sup> Although the number of sales in the second period was 23, only twenty sales have been calculated. The other three transactions did not record their auction result.

<sup>58</sup> See literature review.

## 10.4 Prices and Subject<sup>59</sup>

During the period 1986-2007 the average estimated price corrected for inflation was \$347,840.80. The auction houses expected “The bulwark and the windmill” (New York, Morgan Library & Museum, around 1650) to reach the highest price. An amount of \$2,520,561 was estimated for this landscape or architecture drawing. The drawing, which was offered for sale in January 2000, yielded \$4,080,908, the highest price that was reached for a drawing in the investigated period. The buyer of this drawing paid \$13,740.43 per square centimeter, a price that has not been reached by other drawings. The “Ramparts near the Bulwark beside the City Gate at the St. Anthoniuspoort” (accommodation unknown), another landscape picture was also expected to get a high price. The experts of Christie’s estimated the price to be \$1,920,427, an amount that was easily reached at the same auction in January 2000. The drawing yielded \$2,760,614. The third most expensive drawing was sold at Sotheby’s in November 1986 and can also be seen as a landscape drawing. The drawing was sold for \$1,640,664 which implies a price of \$7115.38 per square centimeter. It is interesting to see that the three most expensive drawings are all landscape pictures. However, since this was also the theme that was most prevalent, conclusions about subjects and price should be taken with great care.

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<sup>59</sup> I will use the prices that have been corrected for inflation here in order to make them comparable. These corrected prices are obtained by the CPI inflation calculator of U.S. department of Labor, bureau of Labor Statistics, <http://www.bls.gov/bls/inflation.htm>. The subjects are withdrawn from their names since it was impossible here to see each drawing. Drawings that were titled as “portraits” were taken as portrait pictures, except for works that seemed to be portraits of “fantasy figures”. In these cases a profession or attribute was highlighted. An example could be “portrait of a rabbi”, here it seems to be about the profession of the sitter, not particularly about the sitter himself. “Study” was attached to pictures that contained the word study, or sketch in their titles. “Religious” was attached to those drawings that contained a biblical name in their title. The name “Mythological” was given to those pictures that mentioned a mythological name in their title. “Landscape” was connected to drawings that described a certain geographical place or building in their titles. A drawing that contained the word “nude” was seen as a Nude work of art. Finally, “Genre” was given to those pictures that described a scene of everyday life. This could for example be: “Man sitting with child”.

Table 9: Subject and supply drawings

<i>Subject</i>	<i>Number of drawings</i>
Portrait	2
Head	1
Study	6
Religious	7
Mythological	1
Landscape	9
Nude	1
Genre	5

Source: Artprice (2007).

The lowest estimated price was set for the genre drawing “Standing Man with a Child”<sup>60</sup> (accommodation unknown). Only \$3178 was the expected price for this work. In the end the picture was bought for the amount of \$2533, just under its estimated price. Not even \$33.00 was paid per square centimeter.

The second lowest price was paid for “A study sheet with three figures” (accommodation unknown). It was expected to yield \$12,877 and obtained the price of \$12,234 just a little under its estimate. The purchaser paid almost \$77 per square centimeter. The religious drawing “David taking leave of Jonathan” (Paris, Musée du Louvre) yielded \$21,451 but can still be considered less valuable. Only \$61.55 was paid per square centimeter.

The average price per square centimeter for all drawings is \$1960.17. The highest amount was \$13,740.43 and the lowest amount was \$32.82. 75% of all the drawings had a value of less than \$1884 per square centimeter. 50% of the drawings did not reach a price of \$931.74 and 25% remained under the amount of \$542.34 per square centimeter.<sup>61</sup>

In the following table we can compare the average price paid per square centimeter for each subject.

<sup>60</sup> This drawing was originally sold as “Homme assis avec un enfant debout”.

<sup>61</sup> Artprice (2007). <http://web.artprice.com/ps/artitems.aspx?view=all&idarti=ODg3NzEzMTQ3NDY5MzExLQ==&page=2&refGenre=E>

Table 10: Subject and corrected price in USD per cm<sup>2</sup>

<i>Subject</i>	<i>Average price per cm<sup>2</sup></i>
Portrait	1709,18
Character	2266,19
Study	933,96
Religious	532,06
Mythological	299,31
Landscape	4580,18
Nude	579,40
<b>Genre</b>	1122,48

Source: Artprice (2007). Own calculations.

Although the amount of data is far too small to draw reliable conclusions out of these calculations, landscapes drawings seem to be the most valuable objects. Taking the number of landscapes drawings that have been offered for sale into account, these drawings are less rare than the other subjects and would therefore be expected to fetch a lower price. An explanation might be that these landscape drawings are particularly related to the name Rembrandt and hence are more valuable.

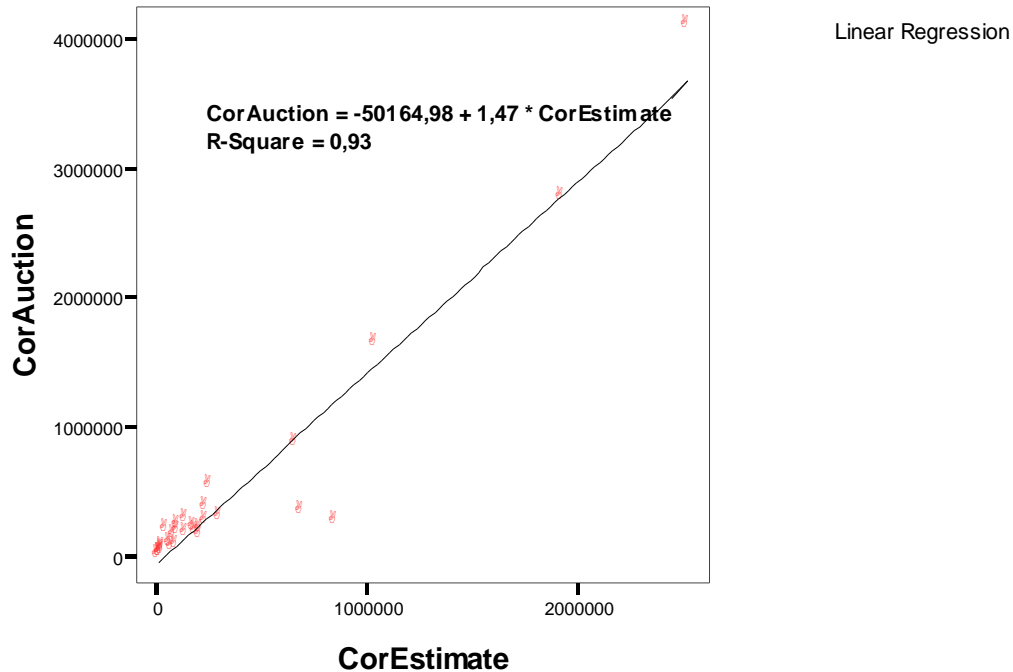
The table furthermore presents head drawings as relatively popular. However, since there was only one drawing in this category it is very high handed to state something about the value of this theme.

### 10.5 Hammer prices and estimated prices

In the drawings that already have been discussed, hammer prices clearly seem to be related to the estimated prices. This can also be seen in the following graph which shows a linear relationship between the two variables.



Figure 5: Linear regression



Since there is a linear relationship a correlation analysis could be done. The correlation coefficient obtained a value of 0,962 with a significance level of 99%. This means that there exists a strong relationship between the two variables. It looks as if auction house experts are able to judge the value of a drawing well. Furthermore buyers may be influenced by the estimated price. In all areas of the economy price has a signal value. In case of the art market a price estimated by experts may be of exceptional importance due to the fact that there exists great uncertainty about the value of art objects. Art experts are therefore extremely important. It is mainly them who produce value.

## 10.6 Prices and size

Size does not seem to have an influence on price.

Table 11: Correlations hammer price and surface area

		Hammer price	Surface area
Hammer price	Pearson Correlation	1	,142
	Sig (2-tailed)		,446
	N	31	31
Surface area	Pearson Correlation	,142	1
	Sig (2-tailed)	,446	
	N	31	31

The significance level of the above correlation analysis was too high in order to have a reasonable level of reliability. A maximum of 0.05 is accepted. Leaving the significance level out, a very weak relationship existed between the size of a drawing and the final hammer price. Although the number of cases is too small to be reliable, it does show something rather particular. All previous studies have stated that size is one of the main predictors of price.<sup>62</sup>

The experts on the other hand seem to put more weight on the factor size. The estimated price and the size of a drawing still have a weak relationship but are clearly more intense here.

Table 12: Relationship Estimated price and surface area

		Surface area	Estimated price
Surface area	Pearson Correlation	1	,215
	Sig (2-tailed)		,253
	N	32	30
Estimated price	Pearson Correlation	,215	1
	Sig (2-tailed)	,253	
	N	30	30

The correlation analysis now shows a very weak, positive relationship of 0,215 instead of 0,142. Furthermore the level of significance is improved.

<sup>62</sup> These previous studies are, however, based on paintings.

## 10.7 Price, time and location

Although it was impossible to make a correlation analysis of the factors price, year of sale and the place of sale, we can still take a look at these factors. Most of the drawings were sold in New York, which corresponds with the earlier stated idea that New York is one of the most important places if not the most important place in the market for visual arts. Almost 47% of the drawings are sold in New York. London and Amsterdam take up a second position by selling approximately 19% of the pictures. The drawings that are left are respectively sold in Paris, Madrid, Monaco and Zurich. Besides the place of sale the auction house is seen as a predictor of value. As is expected, Sotheby's and Christie's are the biggest suppliers of Rembrandt works of art. Christie's sold more than 53% and Sotheby's sold almost 38% of all the drawings. The question then is, which place and which house of sale is able to reach the highest prices? The two highest prices per square centimeter are paid at Christie's New York, both in the year 2000. The third and fourth highest prices were reached at Sotheby's New York in 1986. The fifth highest price per square centimeter is obtained at Christie's London in 2005. The sixth best price is also reached at Christie's, this time in New York and a bit later, in 2007. Clearly Christie's and Sotheby's dominate the market. Christie's New York seems to be the main leader in the market for Rembrandt drawings. Besides the place of sale and the auction house the year of sale is expected to have an influence on price. Drawings were especially expected to reach high prices in times of booms. This means that the years 1986, 1987, 1988, 1989, 1990, 2006 and 2007 should present relatively high values. Although the third, the fourth and the sixth best prices are reached in one of these boom years, the two most expensive drawings were sold in 2000. The influence of a boom year seems to exist. However, the relationship seems rather weak.

## 10.8 Conclusion

The market for Rembrandt drawings is thin, but has not become thinner during the investigated period. Prices have nevertheless increased which brings us at a same position as in the case of prints. If there was no shift in quality, the value of the name Rembrandt might have become larger.

Besides this it has become clear that there exist a strong relationship between the estimated prices and the hammer prices. This could imply that experts are able to evaluate the drawings well. It could also mean that experts have a large influence on their buyers and therefore on the prices. This would prove the idea of experts as producers of value.

Size does not seem to have an influence on price, although experts seem to give this factor more weight. The fact that price and size are independent from each other does not go along with previous studies and is therefore remarkable. However, since the significance level was too low, no statements can be made.

Finally, Christie's New York has a leading position in the market for drawings. This auction house is able to attract the most buyers and sellers of drawings.

# 11 Paintings: a quantitative approach

## 11.1 Introduction

In this chapter the quantitative data of the market of Rembrandt paintings is investigated. Just like the drawings, all paintings that were sold at auction during 1986 and 2007 were taken up in a SPSS file. Since the market for Rembrandt paintings is even thinner than the market of drawings, great problems appeared when the data was used for a correlation and multiple regression analysis. It is for this reason that there will be no multiple regression analysis, and only a partial correlation analysis. Again, the focus will lay on a univariate analysis.

## 11.2 The size and nature of the market

In the period 1986-2007 only 16 paintings were offered for sale of which two of them were not sold.

Table 13: Years and supply

<i>Year</i>	<i>Number of works</i>	<i>Number of sale</i>
1986	1	1
1987	0	0
1988	0	0
1989	0	0
1990	0	0
1991	0	0
1992	1	1
1993	0	0
1994	0	0
1995	1	1

<i>Year</i>	<i>Number of works</i>	<i>Number of sale</i>
1996	1	1
1997	1	1
1998	1	1
1999	1	1
2000	1	1
2001	1	1
2002	2	1
2003	1	1
2004	1	0
2005	0	0
2006	1	1
2007	2	2
	16	14

Source: Artprice (2007).

Obviously, the market for Rembrandt paintings is extremely thin. This is especially true for the period 1987-1991. During these years no paintings were offered for sale. Despite the fact that the market is very thin, it cannot be stated that this market has become thinner during the past years. A larger period of time is probably needed to see how this market became more and more thin.

### 11.3 Prices

In the table the years 2004, 2002 and 1999 present a certain supply. The supply should nevertheless be seen as different than the other years. In these years it seems that paintings of considerable less quality are offered for sale. The absence of high quality works is indicated by the relative low estimated prices.<sup>63</sup> The painting in 2004 was expected to reach a price of approximately 63,000 CSK, a price that turned out to be too

<sup>63</sup> Although price equals value in the economic science it remains difficult to judge a painting on the basis of its price on its quality. Uncertainty about authenticity can have a huge influence on price. Furthermore, a painting may be in a bad condition.

high: no one was willing to pay this price. In 2002 a painting of a rabbi was estimated to yield 6000 euros which is almost 7000 US dollars today. In 1999 a painting<sup>64</sup> was sold for almost 3000 US dollars, an amount that was a bit higher than its estimated price but still quite low.<sup>65</sup>

Just like the market for drawings, the pre-sale estimated price has a close relationship with the final hammer price. In the following table the relationship between the corrected estimated prices and the corrected auction results are shown.

Table 14: Estimated price and hammer price corrected for inflation

		Estimated price	Hammer price
Estimated price	Pearson Correlation	1	,733(**)
	Sig (2-tailed)		,007
	N	12	12
Hammer price	Pearson Correlation	,733(**)	1
	Sig (2-tailed)	,007	
	N	12	14

\*\* Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient presents a strong relationship between the two variables with a relatively high significance level. This implies that the estimated price can be seen as a good predictor of price. Besides this it could be stated that pre-sale estimates might have a large influence on the buyers of works of art as is explained in the previous chapter on drawings.

In the investigated period the highest estimated price was, after all the prices were corrected for inflation, an amount of \$21,500,000. The lowest estimated price was that of the year 1999: only \$2307 was expected to get from this painting.

The highest hammer price was nevertheless paid for another painting than that of the highest estimate. \$31,283,759 was paid for a painting in 2000. Strikingly, 2000 was also the year in which the top hammer prices for drawings were obtained. The average hammer price of all the transaction was \$10,036,520 against an average of \$477,315 for

<sup>64</sup> I doubt whether this work of art was really a painting. In the catalogue it rather looks like a etching. Since I could not find any proof for my idea and the object was recorded as a painting in Artprice, I considered this picture further as a painting.

<sup>65</sup> Artprice (2007). <http://web.artprice.com/ps/ArtItems.aspx?view=all&idarti=ODg3NzEzMTQ3NDY5MzExLQ==&refGenre=A&page=1>

drawings. 75% of all the prices did not reach a price of \$14,733,200, 50% remained under \$8,809,906 and 25% was sold for no more than \$2,612,354.

The average of all prices per square centimeter is \$5682.01 against an average price of \$1960.17 per square centimeter in case of drawings. The highest price per square centimeter was the incredible amount of \$45,155 which was not paid for the top hammer price painting but for a very small painting that was sold in 1997.

The highest prices are not particularly paid during the most recent years. Prices have been high since the start of the investigated period. This corresponds with the earlier outcome that the market has not become thinner in the last couple of years. The market has been extremely thin for more than twenty years. Paintings are therefore exceptional rare for more than two decades and hence, very expensive.

#### 11.4 Prices and subjects

The top hammer price was paid for a "Portrait of a lady, aged 62, perhaps Aeltje Pieterdr. Uylenburgh" (The Hague, on loan at the Mauritshuis, property of private collector, 1632) at Christie's London in 2000. The buyer paid \$31,283,759 for the work which comes down to \$7600.52 per square centimeter.

By just looking at the price per square centimeter, the "Portrait of an old man with beard" (accommodation unknown, 1633), sold at Sotheby's New York in 1997, is the most expensive painting in the investigated period. His purchaser paid \$45,155 per square centimeter. By looking only at the titles both paintings seem portraits. However, although the title states that it is a portrait, the pre-sale catalogue explains that the last painting is rather a study of an old man.

In order to compare the relative prices of the different subjects, the average price of each category could be calculated. This seems nevertheless rather useless since the low number of cases and the unequal distribution of subjects.<sup>66</sup> Besides this, the category "Study" contains both the highest value per square centimeter and the second lowest price per square centimeter. Due to the fact that there are only three study paintings, a troubled picture could easily arise. The relationship between prices and

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<sup>66</sup> The distribution is as follows: five portraits, two character paintings, one mythological picture, one genre work, one self-portrait and three studies.



subjects will be investigated more thoroughly in the next chapter which takes a qualitative approach to the research problem.

### 11.5 Price and medium

All of the pictures are oil paintings; eight of them have a panel support and six of them a canvas support. After doing a correlation analysis nothing could be stated about the relationship between price and the medium.<sup>67</sup> Relative high prices can be found in both categories. Since both categories contain extreme values, it is hard to state something about the average value. Taking the extreme values into account, an average price of \$9032.46 per square centimeter is found for the works on panel. Leaving the erratic samples out of the calculation, a price of \$4510.79 per square centimeter is found. For the oil on canvas paintings an average price of \$1214.75 (with the extreme values) and \$1817.00 (without the erratic samples) per square centimeter was found. Although it is high handed to state something about such a limited number of paintings, panel seems to be a more expensive medium. This might be due to the fact that panels can be seen as less fragile. However, it is quite easy to think of possible disadvantages for panel supports too. Panel can, for instance, be seen as less practical. Perhaps a wood support is seen as something that is easier to investigate. Dendrochronology might be considered as a better method to date paintings than canvas research. In other words, panel paintings could give the buyers more information about the authenticity. More cases and research would be needed in order to test such possibilities.

### 11.6 Price and size

The correlation analysis could not find a relationship between the surface area of a painting and price. Since the relationship was not significant too, it is hard to tell whether the two have an influence on each other.

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<sup>67</sup> Phi and Cramer's V were used as association measures.

Table 15: Surface area and hammer price

		Surface area	Hammer price
Surface area	Pearson Correlation	1	,182
	Sig (2-tailed)		,533
	N	14	14
Hammer price	Pearson Correlation	,182	1
	Sig (2-tailed)	,533	
	N	14	14

Just like the drawings, a difference exists between the relationship of surface area and hammer price and surface area and estimated price. Although the relationship is still not significant, the significance number clearly has a lower value than that of the previous table. Moreover, the relationship seems stronger which could indicate that experts take size more into account than buyers.

Table 16: Surface area and estimated price

		Surface area	Estimated price
Surface area	Pearson Correlation	1	,472
	Sig (2-tailed)		,121
	N	14	12
Estimated price	Pearson Correlation	,472	1
	Sig (2-tailed)	,121	
	N	12	12

### 11.7 Price, time and location

Just like the market of drawings, Christie's and Sotheby's are the leading auction houses. Almost 79% of all the transactions were arranged by one of the two houses of sale. In case of the paintings however, it is Sotheby's who sold the most paintings where it was Christie's in the market for drawings. It is therefore impossible to state which one of the two is has the best position in attracting sellers and buyers of Rembrandt works in general. In the market for paintings it is nevertheless obviously who is the most successful: Sotheby's sold more than 63% of all Rembrandt paintings. On the other

hand; it was Christie's that sold the most expensive painting. The most expensive painting in terms of price per square centimeter was sold at Sotheby's.

Almost 79% of the paintings were sold either in New York or London. All of these works were transacted either at Sotheby's or Christie's. New York has a leading position with almost 43% of the sales. London follows directly with a percentage of nearly 36%.

Four of the sixteenth paintings that were offered for sale are sold in a so-called boom year. Although prices are expected to be higher in boom periods, this seems not the case: The average price per square centimeter of the four paintings is \$4233.97 against an average of all the works of \$5682.01.

### 11.8 Price, resale and exhibitions

On average paintings were brought to the auction market again after nearly 59 years. 75% of the paintings were offered again after less than 63 years, 50% of the works were kept of the market for less than 50 years and 25% of the pictures were sold after no more than 36 years later. It can be expected that the average will go up as more and more works come into the hands of the museum.

The question then is whether there is a relationship between the level of price and the number of years that lay between two sales. The correlation analysis showed a weak relationship between the two variables: The correlation coefficient had a value of 0,570 which means that 32% of the variance can be explained.

Table 17: Resale and hammer price

		Hammer price	Resales
Hammer price	Pearson Correlation	1	,570
	Sig (2-tailed)		,053
	N	14	12
Resales	Pearson Correlation	,570	1
	Sig (2-tailed)	,053	
	N	12	12

Paintings that came to auction in the investigated period were on average 3.6 times exhibited. 75% of the paintings were exhibited less than five times, 50% of the works were no more than two times exhibited and 25% scored a value of 0.5. The painting that was shown most is the recently sold painting of “Saint James the Greater” (accommodation unknown, property of private collector, 1661). This painting was bought for \$23,000,000, the second highest price paid for a painting. It remains of course the question whether the value of a painting gets higher because of its exhibitions, or whether the work is exhibited often due to its high value.

The correlation analysis showed that there exists a moderately strong relationship between the variables price and number of exhibitions. However, since the significance level is too low, nothing can be stated by this analysis.

Table 18: Exhibitions and hammer price

		Hammer price	Exhibitions
Hammer price	Pearson Correlation	1	,415
	Sig (2-tailed)		,158
	N	14	13
Exhibitions	Pearson Correlation	,415	1
	Sig (2-tailed)	,158	
	N	13	13

## 11.9 Conclusion

The market for Rembrandt paintings is extremely thin. Because of this, it is very difficult to analyze the market from a quantitative perspective. In most cases, the number of paintings is too small to make reliable statements. An example is the case of the variables subject and price. Since cases are scarce, calculations get easily blurred and become unreliable. The same was true for the variables prize and size, although it seemed that there did not exist a relationship between the two.

The medium seemed to have an influence on price. Paintings on panel obtained a higher average price. Why these oil paintings on panel were in a higher demand remains uncertain.

Just like the market for prints and drawings, this market does not show a more limited supply as time goes by. The market for paintings has been very thin for more than two decades. This corresponds with the fact that prices do not particular grow as the years go by. Extreme expensive paintings have been transacted in various years, not exclusively in the past years. This also implies that the boom years and the Rembrandt year 2006 do not have a clear influence on prices.

The variable “resale”, which presents the number of years that lies between two sales of the same work, seemed to have a very small effect on price. The longer a painting was kept of the market, the higher its price.

The variable “exhibitions” also seemed to have a small influence on price. The more a work was exhibited, the higher its price.

Finally, Sotheby’s turned out to be the leading auction house. This is remarkable since Christie’s is the number one auction house in the market for drawings.

## 12 Paintings: a qualitative approach

### 12.1 Introduction

On the basis of a case study<sup>68</sup> in which I investigated the pre-sale catalogues of the paintings that were offered at auction during 1986-2007 and relevant articles and websites, the value of Rembrandt pictures has been researched again. The aim is to give a better understanding of why the prices of Rembrandt works of art can differ so much. Furthermore the factor “provenance” is investigated. Is it really true that provenance matters as the folk assumptions state?<sup>69</sup> Does the previous owner or the history of a painting in general add to or diminish the vale of a work of art? Besides this I will take a look at the recent buyers of Rembrandt paintings. Who can afford these objects and more important, who are willing to spend million of dollars on these works of art? And what does this mean for the market of Rembrandt works of art?

### 12.2 Authenticity and value

Clearly, the name Rembrandt means more than just the name of the artist. As a London dealer signaled: ‘New buyers have been coming into the market for brand names, and Rembrandt is a brand name. A rare and exclusive one too.’<sup>70</sup> It will therefore be logical that a proof of authenticity has a large influence on the price especially when you take the past into account. Thousands of copies have been made and hundreds of works have been wrongly attributed to the oeuvre of Rembrandt. As a consequence of the proofs of authenticity of the Rembrandt Research Project, the oeuvre gets smaller and hence, the proof itself becomes more and more valuable.

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<sup>68</sup> See appendix.

<sup>69</sup> See for instance the research of Czujack (1997) who tested several folk assumptions the market for Picasso works of art.

<sup>70</sup> In: Gleadell, C., 23 January 2007, Art Sales: Rembrandt returns in Style, *Telegraph.co.uk* <http://www.telegraph.co.uk/arts/main.jhtml?xml=/arts/2007/01/23/basales23.xml>, consulted on 4 July 2007.

In the case study of the paintings only three of the fourteen paintings that were sold at auction during 1986 and 2007 were not adopted by the Corpus of the Rembrandt Research Project.<sup>71</sup> The average price per square centimeter of these three works was only \$20.02 against an average of all paintings per square centimeter of \$5,219.73. Only one of the three other paintings was recorded in another corpus: “The bearded Man with cap” (accommodation unknown) was seen as an authentic Rembrandt picture by Valentiner in 1921 (Neumeister, 1996:53). This painting had the highest price of the three mentioned works. The painting was sold for \$18,534.00, while the other two only yielded \$5,648.00 and \$3,687.00. The prices seem to confirm the idea that a proof of authenticity matters, especially a proof by the Rembrandt Research Project. That a proof by for instance Valentiner does not add that much value can be explained by the fact the Rembrandt Research Project has shaken the foundation of the previous oeuvre of Rembrandt. Paintings that were considered as real Rembrandts for years by the experts suddenly turned out to be made by other artists. In this sense, the past knowledge on Rembrandt’s oeuvre did not seem to be of great value anymore. Even the most accepted and highly appreciated paintings could be swept away of his oeuvre. However, the number of cases remains small which makes it impossible to state something without doubts.

Remarkably, the three paintings that lack a proof of authenticity are also the only three that were offered at sale somewhere else than at Sotheby’s or Christie’s. In theory it could mean that Sotheby’s and Christie’s are able to generate the highest prices. This seems however rather unlikely. Sotheby’s and Christie’s are probably able to attract the most attention, the most important collectors and the most important works<sup>72</sup> due to the fact that these houses of sale are the leaders in the auction market<sup>73</sup> (Robertson, 2005: 26). Taking everything together, it seems like a proof of the Rembrandt Research Project is indeed of tremendous importance for the economic value of a painting. A work that is adopted by their corpus will therefore be transacted at Sotheby’s or Christie’s, the auction houses with the largest reach in the international art market and hence, with the best chance to find the buyer with the highest willingness to pay.

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<sup>71</sup> In these cases Artprice did not mention any of the Rembrandt Research Project investigators. Furthermore no proof of authenticity of this group was mentioned in their pre-sale catalogue.

<sup>72</sup> Since a proof of authenticity implies a huge value, works that have been proven to be a real Rembrandt are seen as the most important works.

<sup>73</sup> See also Rengers and Velthuis, 2002, in the literature review. They concluded that galleries are not able to add economic value themselves. The artists they are able to attract are the producers of economic value.

### 12.3 Signature and value

If the name Rembrandt implies a huge value, a signature of the artist may add to the potential value of a painting. On the one hand a signature may support the proof of authenticity and on the other hand the signature may carry a certain prestige value.<sup>74</sup>

Four of the investigated paintings did not show a signature. Three of these works did also lack a proof of authenticity and are already discussed in the previous part. The fourth painting that does not reveal a signature is the “Study of an elderly woman in a white cap” (New York, property of a private collector, 1632), which is sold at Sotheby's New York in 2006. The painting yielded \$3,895,867 which comes to down to \$1949.15 per square centimeter. Clearly, this price is already much higher than the other three paintings. This seems to confirm the idea that a proof of authenticity carries a large economic value. The price of this old lady is however relative low. Leaving the three unauthentic considered painting aside, this picture obtained the second lowest price per square centimeter at auction in the period 1986-2007. In this sense we might expect signatures to have an influence on price. However, it is clear that we would need more cases in order to state something with a certain level of security.

### 12.4 Subject, style and value

The relative low price of the “Study of an elderly woman in a white cap” may also be due to the subject or the style of the painting. The picture is an oil study which allowed Rembrandt to practice the effects of light and shadow on a face of an elderly woman (Sotheby's, 2006: 14). The fact that this picture is a study has consequences for the style. Since the picture was not intended for sale the painting might be less refined and “finished” than a painting that was supposed to be sold and hence, less attractive to the potential buyers.

However, the painting that obtained a lower value than this study seems to be painted in a subtle and fine way. In the pre-sale catalogue we read about the “Cupid blowing a

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<sup>74</sup> See for instance Czujack (1997) in the literature review.



Soap Bubble” (Vienna, on loan at the Kunsthistorische Museum Vienna, 1634) which was sold at Sotheby’s London in 1995: ‘Although carefully modeled, the child’s body of Cupid is painted with great fluency and confidence, so that the bold use of chiaroscuro solidifies the forms of the limbs and face, which are molded with great plasticity.’ (Sotheby’s, 1995: 1) There seems however something else in this painting that overshadows the effect of the fineness of the painting. First of all, the style in general does not seem to fit well in Rembrandt’s oeuvre. The painting represents a style Rembrandt did not particularly use (Sotheby’s, 1995: 1). Furthermore, the subject itself, a Vanitas<sup>75</sup> theme, does not belong typically to Rembrandt. Garry Schwartz did not even recognize the painting as a Rembrandt work of art because of this. ‘Cupid does not shoot his arrows in order to enhance untenable desire in his victims, but has his bow unstressed in his hands and blows soap bubbles to tell us that the desire will vanish. These kinds of allegorical messages are even that unusual for Rembrandt that Horst Gerson and other Rembrandt experts, among me, could not discover his hand in this painting. The Rembrandt Research Project that judged the painting more on its pictorial qualities recorded the work rightly in Rembrandt’s oeuvre. Still, art that “neither touches nor moves”, is not typical for Rembrandt (Schwartz, 2006: 275-276).<sup>76</sup> Taking these things into consideration, the relative low price of the picture may be explained by the fact that this work is not that “Rembrandtesque”. In other words, it is less closely attached to the brand name Rembrandt. By only looking at this case study, it seems like a typical Rembrandt style is of greater importance than a “finished” style.

The fact that a typical fine painting has obtained one of the highest prices, seem to confirm the assumption that a finished and fine style is appreciated, unless it remains close to what is seen as particular Rembrandtesque. The “Portrait of a girl, wearing a Gold-Trimmed Cloak” (accommodation unknown, 1632) which was sold at Sotheby’s London in 1986 for an amount of \$18,669,300 today, yielded the third highest price in absolute terms and per square centimeter. This picture can be seen as typical fine and finished painting due to the fact that its subject is a so-called costume tronie. In these works Rembrandt used to paint very precise in order to capture the details of the exotic clothes that played the leading parts in the picture (Sotheby’s, 2007: 19-20).

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<sup>75</sup> Vanitas points to the words vanity and emptiness. These paintings are symbolic pictures that remind us at the transience of life.

<sup>76</sup> Own translation.

Besides the finished appearance and the typical hand of the master, the specific theme or subject of the painting may play a large role in the potential value of the work. A painting that represents a subject which is closely attached to the name of the artist will logically be more popular. Just like the proof of authenticity, the signature and the style, a subject may bring a painting closer to the brand name Rembrandt.

This can be illustrated by the top hammer price painting “Portrait of a Lady, Aged 62, perhaps Aeltje Pieterdrich. Uylenburgh” which was sold for \$31,283,759 at Christie’s London in 2000. The identity of the sitter is generally seen as Aeltje who was Rembrandt’s first wife’s elder niece and who had close contacts with Rembrandt and Saskia (Christie’s, 2000: 134).

The painting that obtained an even higher price per square centimeter than the previous one is the “Portrait of an old man with beard” which was sold for \$3,476,961, \$45,155.43 per square centimeter, at Sotheby’s New York in 1997. This very small picture seems to be painted as if it were a preparatory work due to its monochrome execution. However, the presence of the signature and the intimate scale reveals that this is rather a souvenir of close friendship (Sotheby’s, 1997: 40). The high level of “intimacy” and the personal aspect of a present have probably brought the work more close to Rembrandt as a person and hence, have increased the price of the picture.<sup>77</sup>

Since a head painting is only about the specific attributes or clothes of the portrayed person and may even be a non existing figure, I expected these works to be of lower value than for instance a portrait of a Johannes Uytenbogaert (Amsterdam, Rijksmuseum, 1633) who had a significant influence on the seventeenth century Dutch society (Sotheby’s, 1992: 128-130). This picture was sold at Sotheby’s London in 1992 for an amount of \$9,619,812 which comes down to \$714.48 per square centimeter. Obviously, this painting belongs to the less expensive works. The costume tronie that was sold in 1986 and discussed previously, obtained a price of \$7191.56 per square centimeter, a much higher amount. Furthermore, “young woman with a black Cap” which

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<sup>77</sup> The “Self-portrait with shaded eyes” which was sold at Sotheby’s London in July 2003 for an amount of \$12,871,369 does however seem not particular high demanded. The price of \$2920.37 is not specifically high or low. In line with the previous part one expects a self-portrait to be relative expensive. The reason for this price may lay in the fact that self-portraits also served a practical purpose during Rembrandt’s time. Some of them were not intended for sale but served as examples for customers. Rembrandt could reveal his talent as a portrait artist by showing his own portrait (Sotheby’s, 2003: 43) The fact that this painting might not be intended for sale could say something about the quality and hence, about the price. Further research should be done on the combinations of subject, style and condition and quality in order to get a better understanding of the process of prices.

was sold at Sotheby's in 2007 and the "portrait of a bearded man, bust-length, in a red doublet" (accommodation unknown, 1633) which was sold respectively in 1998 at Sotheby's and in 2001 at Christie's, which both of them represent an unidentified sitter, yielded higher prices. This could be due to the condition or artistic value of the work. However, this cannot be studied here. Another explanation may be that the buyers of Rembrandt works of art do not particularly care about the persons and lives of those portrayed, unless these are specifically attached to Rembrandt as a person. Johannes Uytenbogaert in particular may also be of less value to most potential buyers of Rembrandt works of art. Although this man might be of great significance to Dutch culture, it does not much add to the identity of for instance an American purchaser.

Another explanation might be that a figure that has been created in the artist's imagination instead of painting a commissioner (Sotheby's, 1986: 7) may be considered as more close to Rembrandt. These persons are not only painted by the artist but have also been created in the head of the master; they are a product of his mind.

Finally, I wanted to test whether religious paintings are less demanded subjects as folk assumptions state. A few weeks before the "Saint James the Greater", the only religious painting in my case study, became sold at auction The Economist wrote: 'Such an intensively religious painting picture would appeal to a museum, but few have resources of this kind. One that does, the Getty museum in Los Angeles, is saying privately that it will not be bidding, as it has a similar picture already. That leaves private buyers. With year-end bonuses at record levels, more individuals than ever are rich enough to buy at this price. But religious subjects are not too many people's taste, which makes them especially hard to sell.'<sup>78</sup> And Forbes wrote: 'But how do you put a price on a masterpiece? At this level of the market, it is a tricky business. Buyers are few, and a Rembrandt with a religious subject does not always appeal.'<sup>79</sup> The painting of Saint James the Greater obtained \$23,000,000 which comes down to \$3334.16 per square centimeter. In absolute terms the painting reaches the second highest price of all the paintings sold at auction in 1986-2007. In prices per square centimeter the painting only reaches a fifth place. Taking the very rare period into account in which this painting was made, the price may indeed be quite low. However, since this is the only religious

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<sup>78</sup> 15 December 2006. Sotheby's in the spotlight. *Economist.com*, <http://www.economist.com/research/articlesBySubject/displaystory.cfm?subjectid=7933608&storyid=8443109> , consulted on 11 June 2007.

<sup>79</sup> 7 February 2007. Rembrandt Rally. *Forbes.com*. [http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx\\_af\\_0207pow.html](http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx_af_0207pow.html), consulted on 11 June 2007.

painting and the only work that is produced in Rembrandt's last working period, it remains very high handed to state something about the salability of the painting.

## 12.5 Scarcity

Since Rembrandt's works of art in general and painting in particular are extremely scarce, the above title seems rather strange. However, since scarcity in general is one of the most important influencers of price (Black, 2003: 416) and some paintings may be rarer than others, I investigated the level of scarcity and price.

Scarcity does not seem to matter in case of specific subjects. Portraits for example, that were made in tremendous numbers, are not particularly less expensive, in contrast. Scarcity does however seem to play a role in case of working periods. Most of the paintings sold in the period 1986-2007, in fact all of the paintings except for one, are made in Rembrandt's first Amsterdam period. In this period Rembrandt had his largest production (Haak, 1990: 332). In the most recent auction sale "Saint James the Greater", the only painting that dated from Rembrandt's last period, was sold at Sotheby's New York in January 2007. Since this exceptional period was highlighted in Catalogue (Sotheby's, 2007: 202) and in the media, it becomes clear that experts believe that this must have an influence on its clients. The vice-chairman of Sotheby's Old Master paintings department worldwide George Watcher said<sup>80</sup>: 'This is one of the most important works by Rembrandt that Sotheby's has ever handled. Over the past 20 years, the vast majority of pictures by the artist that have appeared on the market have dated to the 1630s and 1640s. It is exceedingly rare to have one that dates to the 1660s. Works of this period, the last decade of Rembrandt's life and a time of personal turmoil, are extremely intense, soulful and introspective.'

Taken everything together, scarcity in terms of subjects does not seem to have an influence on price. Exceptional rare working periods however, will probably have a price increasing effect.

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<sup>80</sup> Jury, L. 2 December 2006 'Exceedingly rare late Rembrandt set to fetch £13m', *The Independent*. [http://news.independent.co.uk/uk/this\\_britain/article2032716.ece](http://news.independent.co.uk/uk/this_britain/article2032716.ece), consulted on 11 June 2007.

## 12.6 Provenance

Provenance has an indirect effect on the price. This is due to the fact that the history of a painting can prove or support the authenticity of the work. The previous owner is also expected to have an influence on price. Those sellers that are well known collectors themselves are expected to increase the price (Czujack, 1997: 237). These collectors might be seen as experts and therefore as value producers. What they consider as “good” is adopted by the public. By connecting the prices and previous owners we are able to see whether there exists a relationship between the two.

The “Portrait of a Lady, aged 62, perhaps Aeltje Pieterdr. Uylenburgh” which obtained the top hammer price is sold by the descendants of Baron Alphonse de Rothschild (1827-1905) (Christie’s, 2000: 132), a member of the prominent banker family and considered as a collector and philanthropist. The baron donated more than 2000 works of art to various museums.<sup>81</sup> In this case it seems like there is both a collector which might be seen as important and a high price. However, if we look for example at the “Portrait of an old man with beard”, the painting that obtained the highest price per square centimeter, we cannot find such a relationship. Taken all the cases together, there does not seem to be a relationship between the previous owner and the price. This goes along with the results of Czujack (1997: 237-239) who did not find a clear correlation either.

### 12.6.1 Sellers and buyers

Besides the relationship between previous owner and price, I have investigated the sellers and buyers of Rembrandt paintings. Who are these sellers and purchasers and what does that mean for the market of Rembrandt pictures? In the following table the paintings that were transacted and their most recent sellers and buyers can be seen.

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<sup>81</sup> [http://en.wikipedia.org/wiki/Alphonse\\_James\\_de\\_Rothschild](http://en.wikipedia.org/wiki/Alphonse_James_de_Rothschild), consulted on 25 June 2007.

Table 19: Recent sellers and buyers of Rembrandt paintings

<i>Painting (year of transaction)</i>	<i>Sold by</i>	<i>Bought by</i>
Saint James the Greater (2007)	Descendants of Mr. and Mrs. Stephen Carlton Clark (1882-1960) for the Shippy Foundation.	Anonymous, Asian telephone bidder.
Young woman with a black cap (2007)	Descendants of Arthur Wiederkehr (1910-2001)	Anonymous bidder.
Study of an elderly woman in a white cap (2006)	Descendant of Howard Walsh (1913-1998)	Anonymous private collector.
Self-portrait with shaded eyes (2003)	Descendants of Paul Page.	Billionaire and casino tycoon Steve Wynn.
Portrait of a bearded man, bust-length, in a red doublet (2001)	Bellagio Gallery of Fine Art, New York.	Robert Noortman (1946-2007), art dealer.
Portrait of a lady, aged 62, perhaps Aeltje Pieterdr.Uylenburgh (2000)	Descendants Baron Alphonse de Rothschild (1827-1905).	Robert Noortman (1946-2007), art dealer.
Portrait of a bearded man, bust-length, in a red doublet (1998)	Descendants of Among Carter (1879-1955).	Alfred Bader for Otto Naumann, art dealers.
Portrait of an old man with beard (1997)	Saul Steinberg.	Unknown.
Cupid blowing a soap bubble (1995)	Descendants of Heinrich Thyssen-Bornemisza (1875-1947).	Prince of Liechtenstein, Hans Adam: director of LGT Banking Group and collector.
Portrait of Johannes Uytenbogaert (1992)	Descendants of Baron Meyer de Rothschild (1818-1874).	Otto Naumann on behalf of Alfred Bader, art dealers.
Portrait of a girl, wearing a gold-trimmed cloak (1986)	Descendants of Robert Treat Paine (died in 1965).	Alfred Bader, entrepreneur, collector and dealer.

Source: various, see case study in appendix.

Most of the sellers have inherited the work: nine of the eleven sellers are descendants of the original buyers. One of the sellers is a gallery and one an art collector. This collector, named Saul Steinberg, was forced to sell his painting due to financial difficulties. Early buyers of Rembrandt paintings seem to purchase the works of art with the intention to keep them. As we saw in the literature review, many private collectors value works of art as gifts to their descendants more than the monetary value of it. Since art objects also symbolize their personalities they rather leave art objects than money (Frey and Eichenberger 1995: 212). This bequest aspect may have played a role in the market for Rembrandt paintings. These sorts of collectors do at least indicate a certain period in which the paintings are off the market. In such a market you cannot expect paintings to return to the market within a few years.

#### 12.6.2 Conspicuous consumption

Of the eleven cases three recent buyers are anonymous, one unknown, two collectors and five dealers. The four anonymous buyers do not support the theory of Veblen directly here. If these buyers were conspicuous consumers, one would have expected them to reveal themselves. After all, since it is rather about the symbolism than the utility of the object, purchase display plays a large role (Mason, 1985: 458). However, although they remained invisible to the world, they may have displayed their wealth to a smaller circle. Furthermore, by examining the cases a few stories were found that might indicate conspicuous behavior. Richard Feigen, the owner of The Bellagio Gallery of Fine Art has illustrated the sale of the "Portrait of an old man with beard" to the collector Saul Steinberg: "Without even studying it, Steinberg called his wife. "Honey, come downstairs," he said. "We just bought a Rembrandt!" Feigen had not even told him the price. "I don't care if you're not dressed! Come downstairs!"<sup>82</sup> This story clearly adds to the idea that the name of the artist plays a significant role. Without studying the picture and even without looking at its price, Steinberg buys the painting. The prestige value of the brand name Rembrandt seemed to be the most important factor, perhaps even the only relevant one. What the work looked liked and what its utility could be, seemed insignificant. The story of the Casino magnate Steve Wynn, buyer of "Self-portrait with

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<sup>82</sup> Zeits, L. 25 January 2006. Master Dealer. *Artnet*. <http://www.artnet.com/magazineus/features/zeit/zeit1-25-06.asp>, consulted on 4 July 2007.

shaded eyes” is also remarkable. Although Wynn obtains many expensive paintings, fallen eyesight hardly allows him to enjoy the pictures.<sup>83</sup> Finally, there is the story of Baron Heinrich Thyssen-Bornemisza who obtained “Cupid blowing a soap bubble” and many other great paintings in 1930, only a few weeks before he exhibited his entire collection to the public. Obviously, the baron wanted to impress the public (Sotheby’s, 1995: II). Taken everything together, conspicuous consumption may play a role in the market for Rembrandt works, but not particularly on a large scale. It remains of course high handed to proof such a phenomenon, especially with the used sources. The articles may not always be completely objective. Moreover, only a bit of information is given, most of the information on the actors remains undiscovered.

### 12.6.3 Dealers

Five of the eleven buyers turned out to be dealers. The “Portrait of a bearded man, bust-length, in a red doublet” which has been sold at auction in 1998 and 2001 clearly shows the dominant presence of dealers in the market for Rembrandt paintings. In 1998 the picture is offered at auction by the descendants of Among Carter. Entrepreneur, dealer and collector Alfred Bader then buys the work for Otto Naumann, an art dealer. The two dealers often work together.<sup>84</sup> Somewhat later Naumann sells the picture to the Bellagio Gallery of Fine Art. This gallery of Robert Feigen then brings the painting back to auction in 2001 where it is bought by another dealer: Robert Noortman. This Dutch dealer pays \$12,656,000<sup>85</sup>. Five years later Noortman offers the work at The European Art Fair for the amount of \$32.4 million.<sup>86</sup> Although the Dutchman is unable to make a sale, the story shows how the recent market is structured. The auction market is obviously seen as a wholesale market. In this sense, the paintings are rather unfinished products that are sold to the distributors instead of the general public. As a consequence, prices are much lower at the first sale than at a later sale when they are considered as “finished

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<sup>83</sup> Bennett, W. 11 July 2003. *Casino owner pays £7m for “unmasked” Rembrandt*. <http://telegraph.co.uk/news/main.jhtml?xml=/news/2003/07/11/wremb11.xml> consulted on 11 June 2007.

<sup>84</sup> 9 March 2007, The trouble with Rembrandt, *Financial Times*. <http://www.ft.com/cms/s/c45a491e-cd01-11db-a938-000b5df10621.html>, consulted on 10 July 2007.

<sup>85</sup> This is the hammer price with buyer’s premium, not corrected for inflation.

<sup>86</sup> 21 January 2007. *Obituaries: Denny Doherty, 66, of the Mamas and the Papas, ‘60s singing group, dies*. *International Herald Tribune*. <http://www.iht.com/articles/2007/01/21/news/obits.php>, consulted on 4 July 2007.



commodities”.<sup>87</sup> A similar construction can be found in case of the top hammer price painting “Portrait of a Lady, aged 62, perhaps Aeltje Pieterdr.Uylenburgh”. Shortly after the picture was sold by the descendants of Baron Alphonse de Rothschild in 2000 to Robert Noortman, the dealer offered the work at the European Fine Art Fair. While Noortman paid \$28.6 million<sup>88</sup> for it, he offered the painting for \$36.5 million<sup>89</sup>, almost \$8 million more than his own price.

The idea of a wholesale market implies that Rembrandt paintings are bought at even higher prices than we have seen. Furthermore, the existence of the dealers makes this market more comparable with other stock markets. Dealers can be compared with the so called “pure speculators” which we have seen in the literature review. These buyers only appear on the market when financial and other risks are not too high. Pure collectors on the other hand are much more insensitive to these risks. As a consequence, the more speculators dominate the market, the higher the financial return in equilibrium (Frey and Eichenberger, 1995: 214).<sup>90</sup>

Finally, no institutional buyers such as museums were found. This could indicate that prices have become too high for these collectors and that they no longer purchase Rembrandt paintings. If this is true, the market for Rembrandt paintings will become less thin than would otherwise be the case. If buyers mainly consist of dealers and private collectors, works will appear again on the market. If buyers consist mainly of dealers, the works will probably not appear on the auction market again, but at other distribution channels such as art fairs. The prices of these works will then be much higher.

However, it could also mean that museums rather buy their art somewhere else<sup>91</sup>. As have been stated in the literature review, museums tend to buy art at the top of the information curve (Singer and Lynch, 1997). In other words; museums are willing to pay for information. Perhaps distributors are able to give them more security than auction houses do. It is, however, questionable whether other distribution channels are able to give them more information in case of Rembrandt works of art. The Rembrandt paintings

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<sup>87</sup> See for information on the wholesale market and wholesale prices Black, 2003: 503.

<sup>88</sup> This is the hammer price with buyer’s premium, not corrected for inflation.

<sup>89</sup> 21 January 2007. *Obituaries: Denny Doherty, 66, of the Mamas and the Papas, ‘60s singing group, dies. International Herald Tribune.* <http://www.ihf.com/articles/2007/01/21/news/obits.php>, consulted on 4 July 2007.

<sup>90</sup> See also literature review: The recent market for Rembrandt works can be described as a rational market as Singer and Lynch, 1997, described. In this market all relevant art historical and critical information is taken into account.

<sup>91</sup> In case of “portrait of Johannes Uytenbogaert” this seemed to happen. The picture is now adopted by the collection of the Rijksmuseum Amsterdam.

that were offered for sale at the international auction houses during the period 1986-2007, were all investigated by the Rembrandt Research Project and proven to be real Rembrandts. Information, or rather a lack of information, is therefore unlikely to be the cause here. Perhaps museums need more time and other arrangements in order to buy such expensive works of art. The needed time for museums to gather financial sources, for instance, may not be given by the auction houses.

## 12.7 Conclusion

In this chapter we have seen that a proof of authenticity matters. This is especially true for the proof of authenticity of the Rembrandt Research Project. On the basis of the limited cases, signature seems to have an influence on price too. This might be due to the fact that signatures are closely related to the name of the artists, which in its turn represents a huge value.

Both style and subject seem to play a role too. A refined and “finished” style is appreciated as long as it remains “Rembrandtesque”. Subjects that are close to the master are also valued higher than those that are not. An example for this is the portrait of Saskia’s elder niece or the very small painting that functioned as a souvenir of close friendship. Furthermore, heads or tronies might be valued more than general commissioned portraits. This could be due to the fact that tronies represent fantasy figures that have been created and painted by the artist.

Whether religious paintings are less in demand as the folk assumptions say remains unclear. This could not be proved nor disproved.

Scarcity does not seem to play a role in case of the different subjects. It does however seem to be of influence in case of the working periods. Rembrandt’s last period which is a relative rare period, seems to be in high demand.

The previous owner did not seem to have an influence on price. This is however hard to investigate due to the fact that previous owners have to be divided according to their relative importance.

Most of the Rembrandt paintings were offered for sale by the descendants of the original buyers. This implies that when private collectors buy Rembrandt works of art, these objects will be probably off the market for at least their own lifetime. It might furthermore

say something about the reasons for purchasing Rembrandt paintings. Bequest aspects may play a role here.

Displaying one's power and wealth might be another motive for buying the objects. Although some purchasers seem to consume conspicuously, Veblen's theory did not seem to play a dominant role in the market for Rembrandt paintings. However, such a theory is difficult and perhaps even impossible to test.

A lot of the recent buyers consist of dealers. They seem to use the auction market as a wholesale market. This implies that the prices we have seen are relatively low. Furthermore, because of these dealers the behavior on the market of Rembrandt works of art can be expected to be quite rational and comparable to other stock markets.

Due to the dealers it remains however often uncertain where paintings end. This is relevant information for the future of the market for Rembrandt paintings. If museums turn out to be the final owners, pictures will not return to the market again and hence, Rembrandt paintings become priceless.

## 13 Conclusion

In this thesis an attempt is made to explain the prices of Rembrandt works of art sold at auction during 1986 and 2007. Rembrandt's dazzling prices in general can be explained by different phenomena. Firstly, it was explained that only small differences in talent can result in large differences in success. Because artistic products of less quality are imperfect substitutes for better works of art, the demand for better artists rises more than proportionately. A similar phenomenon occurs in the healthcare industry: If a doctor is 10% better in saving lives than his colleagues, most patients will be willing to pay more than 10% premium for his services (Rosen, 1981). But talent is not easily determined in the visual arts. What is "good" and what is "less qualitative" art is difficult to see. For this reason people will rely on the opinion of experts. That is why it is these experts who discover extraordinary talents. In other words, they decide which artists are slightly better than the others. Once a lot of experts become convinced of the special talent of an artist, the artist becomes credible to the public and starts to generate economic value (Bonus & Ronte, 1997). The question then is what is seen as talented and what is seen as quality. The answer is for a large part given by De Marchi and van Miegroet (1996) who show that aesthetic value is close to innovation. Innovation, a certain idea, can give works of art value. Once an artist has become credible to the experts and the public, his fame may grow and grow. This is due to the fact that people like to share what they consume. They like to discuss their products with others. By choosing well-known artists search costs for discussion partners decrease (Adler, 1985).

That an idea, rather than a product, is valued in our society can also be seen in the existence of our copyright law. It can furthermore be proven by the existence of the Rembrandt Research Project that investigates which works are authentic Rembrandt pictures. By looking for the authentic maker, and therefore for the person that first expressed the idea, the importance of innovation is shown. In the market for Rembrandt works of art the authenticity question is extremely relevant. Even in his own time uncertainty existed around the authenticity of works that were attributed to him. As time went by, the issue became more and more complicated. Not only could the works of his contemporaries be mistaken for Rembrandt pictures, also later imitations and copies could be seen as authentic works. Furthermore, bad restorations may have disfigured

original Rembrandt paintings making them hardly recognizable as such (Van der Wetering, 2006).

The uncertainty, however, seems to play a role in Rembrandt's recent success. Due to the uncertainty around the attribution, Rembrandt becomes more and more attached to the pictures. The search for the authentic creator and the search for the connections between artist and work, unite Rembrandt more with the oeuvre than would ever be in case if there was no uncertainty at all (Schwartz, 2006).

Rembrandt was, however, already a successful artist in his own time. His talent was soon discovered by the experts. Connoisseurs described the young Rembrandt as "the promising artist that would surpass all his Dutch colleagues". For this reason Rembrandt was also able to work for the successful paintings-entrepreneur Hendrick Uylenburgh who introduced him to several important commissioners. Clearly, Rembrandt met the right people. Besides this, Rembrandt was born in the right place and at the right time. The Netherlands enjoyed a Golden Age during his lifetime; economical, social and artistic areas were booming (North, 1997). This climate helped Rembrandt to get his pictures adopted by many important collections all over Europe. His innovative prints that were easily disseminated facilitated his fame abroad. The fact that his works were already spread over large parts of the world at an early stage also had an influence on his later success. Because these works were adopted by many different collectors, a great number of people and institutions had an interest in keeping his fame high in later years (Schwartz, 2006). The main reason for Rembrandt's popularity however, is his talent or, in other words, the fact that he was recognized as talented by the experts. It was his innovative style that made him an icon. The large numbers of pupils that went through his hands and worked in his style have certainly added to his fame. It was these artists and later painters that made the Rembrandt-look a norm or anti-norm (Schwartz, 2006). Because he is seen as the initiator of this look, because he is seen as the person who first expressed the idea, Rembrandt's name matters to us and carries a huge economic value.

Despite his great success and the beneficial circumstances, Rembrandt died rather a poor man. How come? Historical documents show us that Rembrandt was a social misfit that did not know how to behave. Furthermore, Rembrandt lacked proper business skills and can be called an economic failure. The artist ultimately failed to realize his full economical potential (Bok, 2004). Although Rembrandt's lack of social and business skills must have had a negative effect on his own well-being, it has certainly added to his

popularity in later ages: the idea that Rembrandt was rejected by the mainstream and the market has strengthened the romantic image of the artist.

Finally, extensive marketing such as the celebration of Rembrandt's birth 400 years ago in 2006, has increased the artist's fame. The wide range of activities during this year made Rembrandt the most appreciated artist in the Netherlands. Besides, thousands of foreigners visited the Netherlands in order to see some of his works, thus showing Rembrandt's economic value in a wider sense.

After investigating the causes for Rembrandt's success in general, I have examined the recent market for Rembrandt works of art. The market for all of his categories, including prints, drawings and paintings, presented an increase in his average value. A work that was bought in 1997 for the amount of \$100 had a value of \$222 in 2007. His price index seemed, however, not stable, during some years the index showed a significant decline, during others a large growth. The year 2006 in particular presented a remarkable growth. This rise in the price level goes along with the ranking list of Artprice. In 2006 Rembrandt goes 178 places up and reaches a 61<sup>st</sup> place. Whether this increased popularity may be seen as a result of the Rembrandt year 2006, or whether it can be seen as a rise in fame in general, remains uncertain.

The general market for all categories also revealed the division of the transactions. 99% of all sales turned out to exist of etchings but formed only 30% of the total turnover. The drawings formed 8% and the paintings even 62% of the total turnover. Obviously, the unique paintings and drawings are valued much higher than the etchings which have been made in series.

By looking at the market for prints, a relative high supply was noticed. During 1986 and 2007 5618 etchings were offered for sale. The market for prints can therefore not be called thin. Besides this, the supply of prints has not become scarcer during the past years. The opposite seems true. This contradicts the assumption that the market for Rembrandt works of art has become thinner. In spite of the fact that prints have not become scarcer, the average price of etchings has increased. A print that was bought in 1997 for the amount of \$100 has a value of \$220 in 2007.

The market for drawings was much thinner. During 1986 and 2007 only 40 drawings were offered for sale at auction. The supply did however not decrease in the past years. Just like the general market, the average price increased for drawings. The average price per square centimeter in the period 1986-1995 was \$1843.96 against an average

price per square centimeter of \$2035.61 in the period 1996-2005. Landscape drawings obtained the highest prices. Since these pictures were not any scarcer than other subjects, the price cannot be explained by a rarity effect. Perhaps these drawings are seen as typical Rembrandt pictures and hence, are more connected with his brand name.

A correlation analysis showed that pre-sale estimates can be seen as good predictors of price. The question remains whether experts are able to price the objects properly or whether these connoisseurs have a large influence on the buyers' behavior.

Although the calculations cannot be called reliable, there seems to be no relationship between size and price. This is remarkable since many other studies have emphasized the importance of size.

Finally, the assumption that New York is the capital of the art market has been confirmed: most drawings were sold at Christie's or Sotheby's New York. Christie's turned out to be the leader in the drawing market: 53% of all the drawings were sold at Christie's against a percentage of 38 for Sotheby's.

The market for Rembrandt paintings was even thinner than the market for drawings. Only 16 paintings were offered at auction during 1986 and 2007. The market has, however, not become any thinner in the past two decades. This goes along with the price level: the highest prices were not particularly paid during the most recent years. The market has been thin since 1986 and hence, paintings have been scarce and expensive for more than twenty years. That paintings have been expensive can be proven by the average hammer price: \$10,036,520 against an average value of \$477,315 for drawings. Taking the surface area into account, purchasers of paintings paid on average \$5682 per square centimeter.

Just like drawings, pre-sale estimates may be seen as good predictors of price. Furthermore, Christie's and Sotheby's turned out to be again the leading houses of sale. The two houses sold 79% of all paintings. 49% of all sales were transacted in New York. But a difference appeared too. While Christie's was the leading auction house in case of the drawings, Sotheby's was able to attract the most sellers and buyers of Rembrandt paintings.

The number of years that lie between two sales of a same painting and the number of exhibitions turned out to be of minimal relevance. These factors only had a very weak relationship with price.

The medium may have an influence on price. Panel paintings obtained higher prices per square centimeter than pictures on canvas. It remains however uncertain why these works obtained higher prices.

Finally, size seemed to be unimportant in relation to price. Experts, however, seem to take this factor (more) into account.

After the quantitative analysis a case study was done in order to get a better understanding of the market of Rembrandt paintings and the formation of individual prices.

The proof of authenticity, especially the proof of authenticity of the Rembrandt Research Project, turned out to be of great importance for the economic value of Rembrandt paintings. On the basis of the limited cases, signature seems to have an influence on price, too. This seems logical since the signature is closely related to the name of the artist, which in its turn represents a huge value.

Both style and subject seem to play a role too. A refined and “finished” style is valued as long as the “hand of the master” remains visible. Subjects that are close to the artist are also appreciated more than those that are not. An example for this is the “portrait of a lady, aged 62, perhaps Aeltje Pieterdr. Uylenburgh”, a picture of Saskia’s elder niece, or “Portrait of an old man with beard”, the very small painting that functioned as a souvenir of close friendship. Furthermore, heads or tronies might be valued more than general commissioned portraits. This could be due to the fact that tronies represent fantasy figures that have been created and painted by the artist. They are in other words, products of the master’s mind.

Whether religious subjects have a price decreasing effect, as the folk assumptions state, remains uncertain. This could neither be proven nor disproved.

Rarity does not seem to play a role in case of the different subjects. It does, however, seem to be of influence in case of the working periods. Rembrandt’s last working period, an extremely scarce term, seemed to increase the potential price of paintings.

The previous owner seemed irrelevant for price. This could, however, not properly be examined in this thesis.

Most of the Rembrandt paintings were offered for sale by the descendants of the original buyers. This implies that when private collectors purchase Rembrandt works of art, these paintings will probably be off the market for at least their own lifetime. The period of time a picture is off the market may in its turn have a small effect on the price. It might



furthermore indicate that bequest aspects play a role in the market for Rembrandt paintings.

Displaying one's power and wealth might be another motive for buying the objects. Although some buyers seem to consume conspicuously, Veblen's theory did not directly seem to play a dominant role in the market for Rembrandt paintings. Such a theory remains however difficult, and perhaps even impossible, to test.

A lot of the recent purchasers consist of dealers. They seem to use the auction market as a wholesale market. This implies that the prices we have seen are relatively low. At other distribution channels much higher prices are being paid. Furthermore, because of these dealers the behavior on the market of Rembrandt works of art can be expected to be quite rational. If these individuals dominate the market, we can expect the value of Rembrandt paintings to be quite stable and rates of returns to be similar to other stock markets.

Due to the dealers it remains, however, often uncertain where paintings end. This is relevant information for the future of the market for Rembrandt paintings. If museums turn out to be the final owners, pictures will not return to the market again and hence, Rembrandt paintings become priceless.

Taken everything together, a large part of Rembrandt's recent success and high prices can be explained by phenomena out of his own lifetime. His life, time, behavior and character seem to be of great influence on his later popularity. His innovative style, or rather the fact that his style was recognized as such, must however be seen as the most important generator of value. It is because of this originality that Rembrandt could become a brand.

The individual prices of Rembrandt works of art are more difficult to explain. Although many potential factors have been tested in this thesis and sometimes seem to be proven to be relevant, great uncertainty remains in case of the formation of prices. This was partly due to the thinness of the market and therefore the limited number of cases. More art historical research on Rembrandt and his market would certainly be of value. Furthermore, studies on the markets of comparable artists would probably take some of the uncertainty around the process of pricing away. By comparing the outcomes of comparable studies on different old master painters and paintings, similarities may be found. These similarities could make some of the results of this study more reliable. Besides this, one could take the paintings of different artists together and analyze them

with the multiple regression method. The paintings of, for instance, Rembrandt and Rubens could be investigated as if they belonged together. In this way we may overcome the problem of the thinness of the market. The uniqueness of both artists may however become a problem here.

The outcomes of such market studies may be relevant for all buyers and sellers of art and Old Master paintings in particular. Auction houses may also be interested in these investigations. Besides this, the researches could add something to the science of cultural economics. Until now, the mechanisms at work in art markets remained difficult to capture.

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[http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx\\_af\\_0207pow.html](http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx_af_0207pow.html)

<http://piweb.getty.edu/cgi-bin/starfinder/28340/collab.txt?action=-2U2WD>

<http://www.iht.com/articles/1992/07/09/auct.php>

[http://www.keesings.com/search?kssp\\_selected\\_tab=article&kssp\\_a\\_id=17249n01xxx](http://www.keesings.com/search?kssp_selected_tab=article&kssp_a_id=17249n01xxx)

<http://www.metmuseum.org/home.asp>

<http://www.nationalgallery.org.uk/>

<http://www.jhm.nl/jhm/documenten/Lezing%20Gary%20Schwarz.pdf>

<http://telegraph.co.uk/news/main.jhtml?xml=/news/2003/07/11/wremb11.xml>

<http://www.vam.ac.uk/nal/catalogues/index.html>

<http://www.volkskrant.nl>

<http://zoek.volkskrant.nl/artikel?text=Alfred%20Bader>

<http://www.vosegalleries.com/history/index.cfm?HID=2>

<http://www.wf-legal.ch/>

<http://www.wikipedia.org>

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## 16 Appendix

### 16.1 Appendix I: Equation Czujack (1997) and Chanel et al (1996)

Czujack (1997) and Chanel et al (1996), use the following equation. This model attributes an implicit price to each of the time-invariant and time-varying characteristics of the works of art. The logarithm of price is used as dependent variable. This factor is regressed on the time-invariant and time-variant variables. Furthermore the logarithm of price is regressed on a vector of time dummies equal to one if the art object is sold in period  $t$  and zero otherwise (Locatelli-Biey and Zanola, 2005: 127)

$$P_{it} = \sum_{k=1}^m \alpha_k \chi^{ki} + \sum_{\tau=0}^t \sum_{j=1}^n \theta_j \tau_{wij\tau} + c(t) + \xi_{it},$$

$P_{it}$  is the logarithm of the price of a painting or drawing  $i$  sold at time  $t$ ,  $\chi^{ki}$  is a time-invariant attribute of work  $i$  with  $k = 1, 2, \dots, m$  (for example the size of a painting or the subject), and  $w_{ij\tau}$  is a time-variant dimension (for example the provenance), with  $\tau = 0, 1, \dots, t$  and  $j = 1, 2, \dots, n$ ;  $c(t)$  are the market-wide consequences.  $\xi_{it}$  is an error

term.  $c(t)$  is defined as:  $c(t) = \sum_{z=0}^T \gamma_{zt}$  where  $[0, T]$  is the time interval over which observations are available;  $z^t$  is a dummy variable. It will take the value 1 if the work is sold in period  $t \in [0, T]$  and otherwise zero. The  $\gamma$ 's are parameters to be estimated. In my research most of the  $\chi^{ki}$ 's are dummy variables taking the value 1 if a feature is there and zero otherwise. The same is true for the  $w_{ij\tau}$ 's. The hedonic regression method gives an implicit price to each of the characteristics  $\chi^{ki}$  and  $w_{ij\tau}$  that are included in the equation. The price is corrected for all the effects of other dummies (techniques, working periods and so on). As stated earlier, the logarithm of price will be the dependent variable. Therefore the coefficient of a specific dummy can be seen as

the estimated percentage change in price due to the fact that the painting or print has the particular feature described by the dummy. The other features are held constant. Finally, the parameters  $\gamma^0, \dots, \gamma^T$  can be viewed as the prices of the characteristic-free works of each period.



## 16.2 Appendix II: SPSS Analysis

Correlation and regression are two statistical techniques that are able to analyze certain relationships between different variables. In both cases a linear relationship is assumed.<sup>92</sup> A linear relationship can be checked with the help of a so-called disperse diagram. Whenever the points can be found around the straight line, correlation will exist.

In the correlation analysis it is further requested that each value of a variable means a normal distribution of another variable, and the other way around (De Vocht, 2004: 202). In the computer program SPSS one can check the distribution of the variables by: Analyze; Descriptive statistics; Explore; Plots and option Normality plots with tests (De Vocht, 2004: 137).

Besides this linear relationship, all variables need to be measured at the interval or ratio level. (De Vocht, 2004: 201).

### 16.2.1 Correlation

The correlation analysis measures the intensity and the direction of the relationship between two or more variables. The result is expressed by the so-called *Pearson's Product-moment correlation coefficient*  $r$ . Its value lies between -1 and 1. The higher the value of  $r$ , the more intense the relationship between the variables. A relationship is negative if more of  $x$  means less of  $y$ . For instance, a painting might get less expensive if the condition of the work will go down, if the damage becomes bigger. A positive link exists whenever the more of  $x$  means more of  $y$ . For example, the larger the size of a painting, the higher its price.

If  $r$  takes the value of 1, a perfect positive link exists between the variables. If  $r$  takes the value of -1, the relationship is perfectly negative. The value of 0 means that there is not a linear relationship at all (De Vocht, 2004: 201-202).

---

<sup>92</sup> If there is no linear relationship, another sort of relationship might be possible. This could be for example an exponential relationship (De Vocht, 2004: 202).

### 16.2.2 Regression

In case of a regression analysis a causal relationship between a dependent variable  $y$  and one or more independent variables  $X_i$ . (De Vocht, 2004: 202) In this case the various variables  $X_i$ , the characteristics, are expected to have an influence on the dependent variable  $Y$ , the hammer price. This means that a multiple regression analysis is suitable here.

Besides the fact that there needs to be an asymmetrical relationship between the dependent variable and the independent variable (One variable has an influence on the other), the independent variables must not correlate too much. If independent variables mutually correlate too much, the independent variables will measure the same and hence, it will be impossible to calculate the effect of each variable separately. The model could then lose its validity. For this reason it is wise to produce a correlation matrix first. If  $r$  takes a value of 0,9 or higher, one of the correlating independent variables should not be used in the regression analysis (De Vocht, 2004: 215).

Finally, as have been said earlier, the variables need to be measured at the interval or ratio level. Since a lot of factors in my research are nominal variables, these need to be transformed first in order to make a regression analysis. A dummy variable which takes the value 1 if the characteristic is present and 0 if not, can replace the nominal variables such as subject, auction house, place of sale and so on.

The regression analysis can be done by choosing Analyze; Regression; Linear. After registering the dependent variable and the independent variables the analysis can start.

### 16.2.3 Output

Four tables will show the result of the multiple regression analysis:

- Model summary
  - $R$  is the correlation coefficient of as well the dependent as the independent variables together.
  - $R$  Square shows the percentage of variance of the dependent variable as a result of the dependent variables. If the value is for example 0.70, 70% of the variance "price" can be explained by the characteristics.
- ANOVA
  - This model contains a variance analysis which is able to test whether the model is significant.

- *Regression* shows the amount of effected variance, and *Residual* gives us the amount of unaffected variance.
- By dividing the effected and unaffected variance the level of significance can be obtained. This is expressed in *F* and *SIG.* If *SIG.* expresses a value of 0,000 the zero hypothesis will be rejected with a security of 99,9%. If the *SIG.* expresses a value of 0,05 or less, the model is still significant.
- **Coefficients**
  - This model reveals the regression analysis.
  - *Constant* is the *intercept A* and is the intersection with the *Y*-axis. This factor shows the value of *Y* if all independent variables *X<sub>i</sub>* are equal to zero.
  - Each independent variable has a partial regression coefficient *B<sub>i</sub>*. The regression coefficient *B<sub>i</sub>* gives the level of effect of the independent variable on de dependent variable *Y*. The effect of the other independent variables is held constant.
  - *Beta* shows the relative importance of each independent variable. De variable with the highest *Beta* value has the most influence on *Y*, the price.
  - Only those variables that are significant should be used. Each independent variable will be tested on the level of significance. A variable is significant if *Sig.* is 0,05 or smaller.
- **Variables Entered / Removed**
  - This model is only relevant when a Stepwise multiple regression analysis is done. In this case at each step an independent variable on basis of the value of *F* is taking up in the analysis. The variable with the highest *F* and therefore the lowest *significance* will be absorbed by the model first. Only the significant variables will be used in the analysis.
  - The model shows which variables are used in the analysis (De Vocht, 2004: 201-223).

#### 16.2.4 Residuals analysis

Residuals show the difference between the predicted *Y* values and the actual values of *Y*. The cases, the works of art, with the largest residuals and hence, with the biggest deviation, are named *outliers*. These will probably have an influence on the results of the regression analysis.

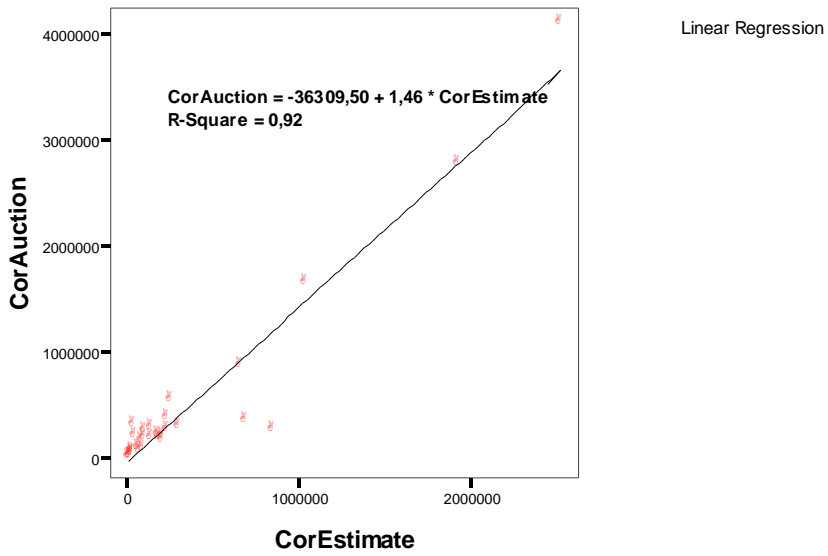
- The residuals can be found by choosing Analyze; Regression; Linear, choose Method and activate the option Casewise diagnostics.

Cases with standardized residuals of more than 5 should be left out of the model (De Vocht, 2004: 223-225).

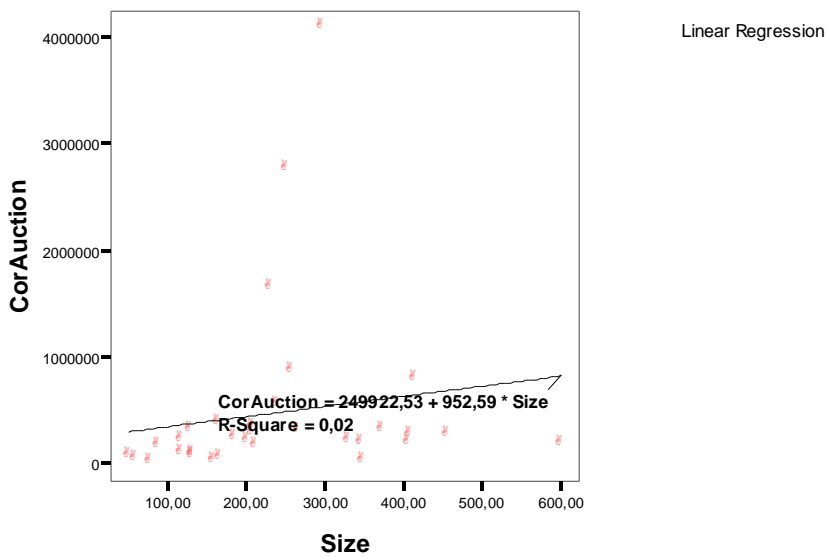
## 16.3 Appendix III: Regression Analysis Drawings and Paintings

### 16.3.1 Drawings

*Corrected auction result and corrected estimated price*



*Corrected auction result and surface*



Regression analysis drawings stepwise

**Variables Entered/Removed(a)**

Model	Variables Entered	Variables Removed	Method
1	CorEstimate		Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).

a Dependent Variable: CorAuction

**Model Summary(b)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,962(a)	,926	,923	247316,697	1,631

a Predictors: (Constant), CorEstimate

b Dependent Variable: CorAuction

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20654292119582,410	1	20654292119582,410	337,679	,000(a)
	Residual	1651469809035,591	27	61165548482,800		
	Total	22305761928618,000	28			

a Predictors: (Constant), CorEstimate

b Dependent Variable: CorAuction

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-50164,981	54189,299		-,926	,363
	CorEstimate	1,473	,080	,962	18,376	,000

a Dependent Variable: CorAuction

**Excluded Variables(b)**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
		Tolerance	Tolerance	Tolerance	Tolerance	Tolerance
1	boom	-,058(a)	-1,113	,276	-,213	,988
	Technigue	-,055(a)	-,999	,327	-,192	,905
	Size	-,058(a)	-1,087	,287	-,208	,959
	dated2	,008(a)	,142	,888	,028	,998
	Location2	-,069(a)	-1,190	,245	-,227	,802
	AuctionH2	,093(a)	1,857	,075	,342	1,000

a Predictors in the Model: (Constant), CorEstimate

b Dependent Variable: CorAuction

**Casewise Diagnostics(a)**

Case Number	Std. Residual	CorAuction	Predicted Value	Residual
31	-3,786	264015	1200263,56	-936248,557

a Dependent Variable: CorAuction

**Residuals Statistics(a)**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-45482,25	3663843,00	478389,00	858867,446	29
Residual	-936248,563	417065,063	,000	242860,175	29
Std. Predicted Value	-,610	3,709	,000	1,000	29
Std. Residual	-3,786	1,686	,000	,982	29

a Dependent Variable: CorAuction

*Regression analysis drawings enter*

**Variables Entered/Removed(b)**

Model	Variables Entered	Variables Removed	Method
1	AuctionH2, CorEstimate, boom, dated2, Technigue, Size, Location2(a)		Enter

a All requested variables entered.

b Dependent Variable: CorAuction

**Model Summary(b)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,968(a)	,938	,917	256912,265	1,744

a Predictors: (Constant), AuctionH2, CorEstimate, boom, dated2, Technigue, Size, Location2

b Dependent Variable: CorAuction

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20919679783341,860	7	2988525683334,552	45,278	,000(a)
	Residual	1386082145276,138	21	66003911679,816		
	Total	22305761928618,000	28			

a Predictors: (Constant), AuctionH2, CorEstimate, boom, dated2, Technigue, Size, Location2

b Dependent Variable: CorAuction

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-78136,235	204546,349		-,382	,706
	CorEstimate	1,500	,107	,980	14,043	,000
	boom	-99804,068	139968,993	-,049	-,713	,484
	Technigue	-59794,486	140175,409	-,032	-,427	,674
	Size	9,841	539,551	,001	,018	,986
	dated2	54017,467	129174,441	,025	,418	,680
	Location2	-8387,034	143884,762	-,005	-,058	,954
	AuctionH2	135303,674	138213,955	,077	,979	,339

a Dependent Variable: CorAuction

*Residuals analysis drawings*

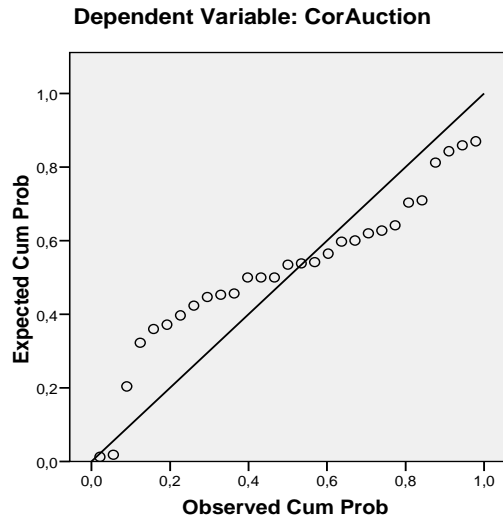
**Residuals Statistics(a)**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-76729,39	3772884,75	478389,00	864367,642	29
Residual	-766847,063	308023,250	,000	222492,548	29
Std. Predicted Value	-,642	3,811	,000	1,000	29
Std. Residual	-2,985	1,199	,000	,866	29

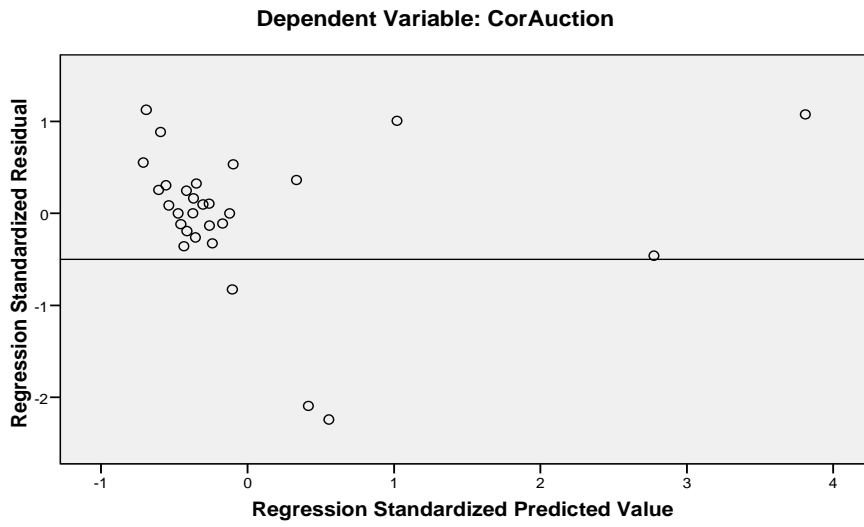
a Dependent Variable: CorAuction



**Normal P-P Plot of Regression Standardized Residual**



**Scatterplot**



## 16.3.2 Paintings

### Regression analysis Paintings

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Surface	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
2	Resales	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).

a. Dependent Variable: CorAuction

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,762 <sup>a</sup>	,580	,520	7E+006	,580	9,671	1	7	,017	
2	,909 <sup>b</sup>	,827	,769	5E+006	,247	8,544	1	6	,027	1,6

a. Predictors: (Constant), Surface

b. Predictors: (Constant), Surface, Resales

c. Dependent Variable: CorAuction

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,6E+014	1	4,609E+014	9,671	,017 <sup>a</sup>
	Residual	3,3E+014	7	4,765E+013		
	Total	7,9E+014	8			
2	Regression	6,6E+014	2	3,284E+014	14,319	,005 <sup>b</sup>
	Residual	1,4E+014	6	2,294E+013		
	Total	7,9E+014	8			

a. Predictors: (Constant), Surface

b. Predictors: (Constant), Surface, Resales

c. Dependent Variable: CorAuction

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	332798,2	4309305		,077	,941
	Surface	3695,668	1188,390	,762	3,110	,017
2	(Constant)	-2455218	3138070		-,782	,464
	Surface	2737,160	887,271	,564	3,085	,022
	Resales	114280,5	39096,680	,535	2,923	,027

a. Dependent Variable: CorAuction

**Excluded Variables<sup>c</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
1	Jaar	-,461 <sup>a</sup>	-1,557	,170	-,536	,569
	Boom	-,379 <sup>a</sup>	-1,545	,173	-,534	,831
	CorEstimate	,184 <sup>a</sup>	,316	,762	,128	,204
	Medium2	-,398 <sup>a</sup>	-1,361	,222	-,486	,624
	Dated2	-,208 <sup>a</sup>	-,578	,584	-,230	,510
	Signature	-,224 <sup>a</sup>	-,766	,473	-,299	,744
	Authenticity	-,099 <sup>a</sup>	-,333	,750	-,135	,775
	Exhibition2	-,275 <sup>a</sup>	-,813	,447	-,315	,552
	Resales	,535 <sup>a</sup>	2,923	,027	,766	,863
	Location2	,099 <sup>a</sup>	,333	,750	,135	,775
Auctionhouse2	,099 <sup>a</sup>	,333	,750	,135	,775	
2	Jaar	-,293 <sup>b</sup>	-1,319	,244	-,508	,520
	Boom	-,262 <sup>b</sup>	-1,495	,195	-,556	,781
	CorEstimate	,586 <sup>b</sup>	1,696	,151	,604	,184
	Medium2	-,247 <sup>b</sup>	-1,133	,309	-,452	,579
	Dated2	,064 <sup>b</sup>	,229	,828	,102	,437
	Signature	-,235 <sup>b</sup>	-1,249	,267	-,488	,744
	Authenticity	-,148 <sup>b</sup>	-,737	,494	-,313	,769
	Exhibition2	,024 <sup>b</sup>	,086	,935	,038	,445
	Location2	,148 <sup>b</sup>	,737	,494	,313	,769
	Auctionhouse2	,148 <sup>b</sup>	,737	,494	,313	,769

a. Predictors in the Model: (Constant), Surface

b. Predictors in the Model: (Constant), Surface, Resales

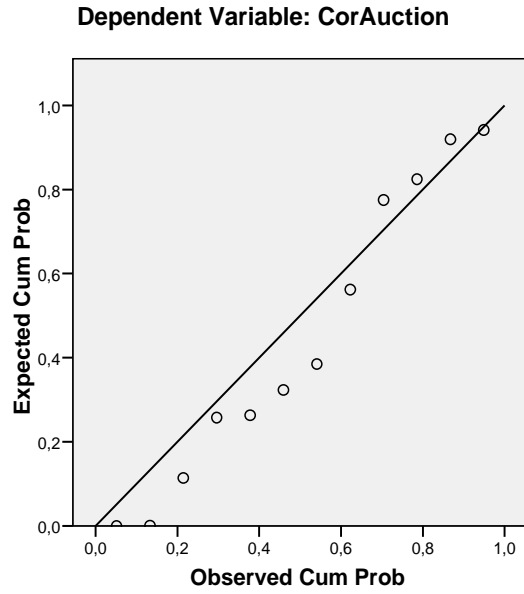
c. Dependent Variable: CorAuction

**Residuals Statistics<sup>a</sup>**

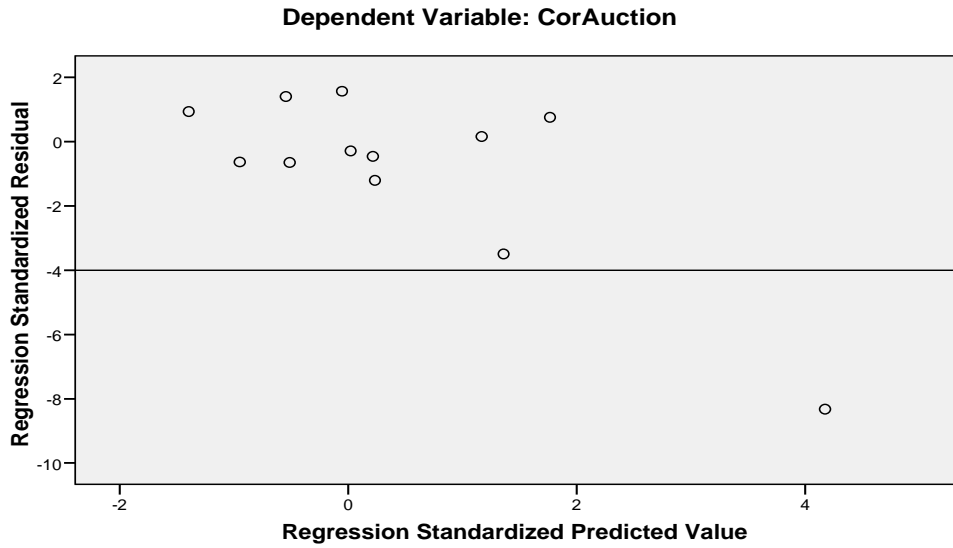
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-987372	5E+007	2E+007	13597524,60	12
Residual	-4E+007	7504863	-4091558	13011742,75	12
Std. Predicted Value	-1,396	4,174	,457	1,501	12
Std. Residual	-8,324	1,567	-,854	2,717	12

a. Dependent Variable: CorAuction

**Normal P-P Plot of Regression Standardized Residual**



**Scatterplot**



## 16.4 Appendix IV: Paintings: a Qualitative Approach

### 16.4.1 Introduction

In this chapter I will investigate the pre-sale catalogues of the art works that has been offered on the auction market during 1986-2007. Furthermore I will investigate relevant articles of newspapers.

By looking at the history of these paintings information on the market of Rembrandt paintings can be gained. Moreover, light can be shed on the buyers and sellers of Rembrandt works of art. Who are these people, how do they behave and why are they buying or selling the paintings? The first painting that will be discussed is the object that has been sold most recently. The last case I am going to discuss is the painting that has been transacted in 1986.

### 16.4.2 Saint James the Greater

In the following table the painting is briefly described.

Table 20: The painting

Title	Saint James the Greater
Date	26 January 2007
Location	New York
Auction house	Sotheby's
Estimate	\$18,000,000 – 25,000,000
Hammer price	\$23,000,000
Hammer price with Buyer's premium	\$25,800,000
Price per cm <sup>2</sup>	\$3334,16
Medium/ technique	Oil on canvas
Size in cm	92,1 x 74,9

Surface area in cm2	6898,29
Exhibitions	20
Offered for sale at auction after	51 years
Subject	Religious picture
Dated	1661
Signature	Signed at lower right <i>Rembrandt f.</i>

This painting is the most recently sold Rembrandt picture. It has been sold in the beginning of 2007, after the celebration of the Rembrandt year and in a so-called boom year.

#### *Subject matter*

Although previous experts considered the subject of this painting to be an anonymous pilgrim, later scholars such as Hofstede de Groot have regarded the figure as the Apostle Saint James the Greater. This New Testament figure was one of the twelve apostles of Christ. Saint James the Greater is viewed in profile, half length, turned to the right. Remarkable are his large hands clasped in prayer. 'The most arresting large hands of the Apostle, linked but not clinched, without tension, dominate the centre of the composition. They appear to be above life-size, as Rembrandt no doubt intended that they should. They emblemize the ascetic devotion that we see in the Saint's face.' (Sotheby's, 2007: 205) The devotion is intensified by the looks of the Apostle. His dirty fingernails, his shabby clothes and his greasy unwashed hair show that he does not care a great deal for appearance (Sotheby's, 2007: 202-205).

The painting is considered to belong to group of late religious portraits. All of them show figures from the New Testament. In this sense the paintings evoke a remarkable shift in his religious works of art. Previous paintings with bible themes represent Old Testament genres. The question then is whether his oeuvre can be related to Rembrandt's own faith. Since no evidence exist that Rembrandt changed his beliefs, commercial grounds may have encountered this shift. The reason for starting painting this and the other apostles is probably because Rembrandt was commissioned to do it (Sotheby's, 2007: 202).

### *Subject and demand*

Religious subjects are often considered to be less attractive, especially to private buyers. A few weeks before the actual auction *The Economist*<sup>93</sup> wrote: 'Such an intensively religious painting picture would appeal to a museum, but few have resources of this kind. One that does, the Getty museum in Los Angeles, is saying privately that it will not be bidding, as it has a similar picture already. That leaves private buyers. With year-end bonuses at record levels, more individuals than ever are rich enough to buy at this price. But religious subjects are not too many people's taste, which makes them especially hard to sell.'

*Forbes*<sup>94</sup> wrote something comparable: 'But how do you put a price on a masterpiece? At this level of the market, it is a tricky business. Buyers are few, and a Rembrandt with a religious subject does not always appeal. To complicate matters, the painting had been on the market last year at a higher price during Maastricht, the European art fair. At that time, it was to be sold only to a museum.' The owners of the painting consigned the work of Rembrandt in 2006 to Salander O'Reilly, a New York art dealer and asked him to sell the painting only to a museum. A number of private buyers showed interest but no museum wanted or could buy the religious picture. This may be interpreted as if the demand of museum for these kinds of works is not that high. However, one should take into account that Salander O'Reilly was instructed to sell the painting for fifty million dollars, a large amount for most, if not all, museums.

### *Authenticity*

The painting has been cleaned by the Dutch restorer Martin Bijl. The cleaning has lightened the painting and has provided new information on the history of the picture. Furthermore the picture has been studied by Ernst van de Wetering, leader of The

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<sup>93</sup> 15 December 2006. Sotheby's in the spotlight. *Economist.com*, <http://www.economist.com/research/articlesBySubject/displaystory.cfm?subjectid=7933608&storyid=8443109>, consulted on 11 June 2007.

<sup>94</sup> 7 February 2007. Rembrandt Rally. *Forbes.com*. [http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx\\_af\\_0207pow.html](http://www.forbes.com/collecting/2007/02/06/sothebys-rembrandt-auction-forbeslife-cx_af_0207pow.html), consulted on 11 June 2007.



Rembrandt Research Project and is proved to be a real Rembrandt (Sotheby's, 2007: 202-204).

Auction houses are assumed to publish these facts because they expect it may have an influence on their customers and hence, on the prices of the works offered for sale (Czujack, 1997: 230). In case of this painting a substantial amount of the pages of the catalogue is dedicated to the activities of the Rembrandt Research Project. It is therefore plausible that a proof of authenticity by the Rembrandt Research project is seen as something very important for the price of an art object.

### *Scarcity*

"Saint James the Greater" may be considered as a rare painting. The vice-chairman of Sotheby's Old Master paintings department worldwide George Watcher said<sup>95</sup>: 'This is one of the most important works by Rembrandt that Sotheby's has ever handled. Over the past 20 years, the vast majority of pictures by the artist that have appeared on the market have dated to the 1630s and 1640s. It is exceedingly rare to have one that dates to the 1660s. Works of this period, the last decade of Rembrandt's life and a time of personal turmoil, are extremely intense, soulful and introspective.' Beside the fact that paintings out of the last period only come incidentally on the market, works of art that have been dated between 1652 and 1669 are often seen as the most rich pictures. The catalogue notes: 'They bear all the hallmarks of his late style-monumentally, thickly constructed layers of paint, use of color to create tone, and above all a depth of psychological penetration that far exceeds his earlier work, and which remained unmatched in Western art for at least another two hundred years.' (Sotheby's, 2007: 202)

### *History and Provenance*

This religious painting has been part of several important private collections. Furthermore the work has often been exhibited in museums.

The provenance of the painting can be traced back to an auction in The Hague in 1749. In this year the heirs of Casper Netscher (1639-1684), a Dutch painter and a

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<sup>95</sup> Jury, L. 'Exceedingly rare late Rembrandt set to fetch £13m', in: *The Independent*, 2 Dec. 2006; [http://news.independent.co.uk/uk/this Britain/article2032716.ece](http://news.independent.co.uk/uk/this_Britain/article2032716.ece), consulted on 11 June 2007.

contemporary of Rembrandt, probably consigned the picture. Casper Netscher was a successful artist and hence received relative high prices for his works of art.

In the nineteenth century the painting was owned by two important connoisseurs. The first collector was Sir John Charles Robinson (1824-1913). Robinson was the earliest curator of the South Kensington Museum which later became the Victoria and Albert Museum. The other connoisseur was Consul Edmund Friedrich Weber (1830-1907) who was a renowned collector in Hamburg. In 1892 Weber decided to exchange the picture for another painting of Rembrandt. Weber got "Christ with the woman taken in Adultery" and the Paris dealer Charles Sedelmeyer added the "Saint James the Greater" to his collection (Sotheby's, 2007: 200, 205).

Joseph Duveen was the first who brought the painting to the United States (Sotheby's, 2007: 205) Duveen was an extremely influential art dealer. By buying works of art of European declining aristocrats and selling these works to the rich in the United States, Duveen became a rich man himself. In the United States the work was bought by the highly successful automotive pioneer John North Willys (1873-1935). After his death the painting was inherited by Isabel van Wie Willys, who was formerly the wife of John North Willys. Mrs. Van Wie Willys sold the painting in 1945 for \$75,000 to Billy Rose. This amount has a value of approximately \$866,454.17 today.<sup>96</sup> Billy Rose was a well-known, Jewish Broadway producer. After ten years Rose brings the painting to the market again where it is bought by Oscar B. Cintas, a prominent railroad a sugar magnate. Besides his work, Cintas collected Modern and Old Master paintings. His collection was considered as one of the best of Latin America. Another Rembrandt painting he owned, a portrait of a rabbi, was lent to the Masterpieces of Art Exhibitions at the New York World's fair. Moreover, Cintas collected manuscripts. In 1949 he bought a manuscript for \$54,000, which was a price that had never been reached in this category.<sup>97</sup> Only five years after the purchase Cintas sold the painting to Mr. and Mrs. Stephen Carlton Clark. Stephen Carlton Clark was the director of the Singer Sewer Machine Company, a business that was founded by his grandfather. Moreover Stephen Carlton Clark was an art collector. The picture has been inherited by the family and gave the work recently to Shippy Foundation, a United States based charitable organization that works for Social Justice, Human Service and Education. The foundation first tried to sell the painting at

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<sup>96</sup> Calculated with the inflation calculator, <http://data.bls.gov/cgi-bin/cpicalc.pl>

<sup>97</sup> About Oscar B. Cintas. *Cintas Foundation*. [http://www.cintasfoundation.org/about\\_oscar.htm](http://www.cintasfoundation.org/about_oscar.htm), consulted on 19<sup>th</sup> June 2007.

the TEFAF Masstricht Art fair in 2006, as has been noted earlier. In January the picture was brought to the market again, this time without the strict conditions<sup>98</sup>.

At January the 25<sup>th</sup> of this year the painting was sold to an anonymous telephone bidder.<sup>99</sup> Although the identity of the buyer is unknown, Artnet announces that the new owner of the painting is an Asian buyer.<sup>100</sup>

### 16.4.3 Young Woman with a black Cap

Table 21: The painting

Title	Young woman with a black cap
Date	26 January 2007
Location	New York
Auction house	Sotheby's
Estimate	\$3,000,000 – 4,000,000
Hammer price	\$8,000,000
Hammer price with Buyer's premium	\$9,000,000
Price per cm <sup>2</sup>	2176,60
Medium/ technique	Oil on canvas
Size in cm	68,7 x 53,5
Surface area in cm <sup>2</sup>	3675,45
Exhibitions	6
Offered for sale after	54 years
Subject	Head
Dated	1632
Signature	Signed at lower right <i>RHL</i>

<sup>98</sup> The painting had to be sold to a museum. Furthermore a price of \$ 50 million dollars was asked.

<sup>99</sup> 25 January 2006. Rembrandt's Saint James the Apostle sells for \$ 25,8 million at Sotheby's, Culturekiosque, [http://www.culturekiosque.com/art/artmarkt/rembrandt\\_portrait.html](http://www.culturekiosque.com/art/artmarkt/rembrandt_portrait.html) consulted on 11 June 2007.

<sup>100</sup> 30 January 2007. Old masters in New York. Artnet, <http://www.artnet.com/magazineus/news/artmarketwatch/artmarketwatch1-30-07.asp>, consulted on 4 July 2007.

This painting is sold recently. The year of sale is seen as a boom year. Besides this it is shortly sold after the celebration of the 400 anniversary of Rembrandt.

### *Subject matter*

This painting has been made shortly after Rembrandt had moved to the capital. This picture has often been seen as a portrait of his younger sister, who was named Lysbeth. His sister was thought to have accompanied Rembrandt to Amsterdam in order to keep house for him. However, a proof for this idea has never been found. The painting "Bust of a young woman" which was sold at Sotheby's in 1986, has also been seen as a portrait of Lysbeth. Both works show young women with soft faces and wavy hair. Both wear an exotic dress with rich fabrics that were not usual in that time. For these reasons the painting of the Young woman with black Cap should be considered as a head, or tronie. Tronie refers to the word "head" and something characteristics. In other words, it is not about the sitter but about a characteristic type such as the exotic dress. The painting here can be called a "costume tronie". Another sort of tronie that has often been painted by Rembrandt is so-called "expressive tronie", a portrait of a person that reveals a certain emotion or reaction (Sotheby's, 2007: 19-20).

The main difference between these tronies can be found in the style. In case of costume tronies Rembrandt rather worked in a fine and detailed style. This made it probably possible to capture the details of the characteristic attributes (Sotheby's, 2007: 20) The expressive characters reveal a more rough way of working thereby giving the emotion or reaction a certain speed. The costume tronies can furthermore be seen as finished works that were intended for sale. The expressive tronies, were Rembrandt often used himself as a model, were probably often meant as studies.

Although the painting highlights a certain characteristic type and not a specific individual, Rembrandt usually worked with real models out of his immediate circle. For this reason Lysbeth is often mentioned as the sitter of the picture. Another name that has been attached to the sitter is that of Rembrandt's wife Saskia (Sotheby's, 2007: 20). However, the identity remains a point of discussion and is, relating to the aim of the subject, perhaps not that important.

### *Subject and demand*

It is expected that most of the value is given by the artist's name and his identity. A character painting such as "Portrait of a young Woman with a black Cap" does not reveal the identity of Rembrandt as much as a self-portrait would do. A portrait of for instance Saskia or another person that came from Rembrandt's immediate circle, a picture of someone more close to Rembrandt, will logically have a higher value due to the fact that these objects are more closely attached to the "brand" Rembrandt. A portrait of a certain commissioner is also expected to be of more value than a costume *tronie*. While the first one may carry the identity of the sitter, the second one is only about the appearance, the beauty or the peculiarity of the particular characteristic.

### *Authenticity*

In 1972 the painting has been investigated by the Rembrandt Research Project where it was rejected as a work of an imitator. However, after a cleaning in 1995 the painting was again investigated and proved to be an authentic Rembrandt painting.

The rejection in 1972 might be due to the fact that the painting was firstly painted on canvas where after it was cut down to an oval form and pasted on a wood support. The incomplete signature is a proof for the fact that the painting was originally larger. A reason for this change could be the wish to let the painting serve as a pendant to the self-portrait of Rembrandt that has been sold at Sotheby's in 2003. Looking at the history of the picture, this change must have happened quite soon. It must have been done at least before 1793, when the *tronie* was already sold as "oval composition" (Sotheby's, 2007: 21). By cutting down the painting and connecting it to a self-portrait, the value of the painting could have been increased. It would have given the sitter an identity and would have brought it closer to the artist. However, this is rather speculative and difficult to test. More simple reasons for changing the size of a picture, such as certain damage or other practical problems, could also be the cause of the change.

Beside the change in size and form the picture seemed to be over-painted several times (Sotheby's, 2007: 19).

### *Scarcity*

Since the picture is produced during the first period, a period of high production the painting can be called less scarce than for instance the previous painting of Saint James the Greater. Moreover, Rembrandt has painted a high amount of tronies. Before Rembrandt moved to Amsterdam, when he shared a studio with Jan Lievens in Leiden, both painters made more head pictures than any of their contemporaries. In Amsterdam Rembrandt continued to produce tronie paintings (Sotheby's, 2007: 20).

### *History and Provenance*

The painting of the young woman was first recorded in 1793 in the auction of Paris of the collection of the Duc de Choiseul-Praslin. This man was a soldier and diplomat. After this sale it remained in two French noble collections (Sotheby's, 2007: 21)

In 1854 the painting is sold by the inheritors of Madame Gentil de Chavagnac for 3,000 francs. A few years later, in 1861 the picture is sold by a French lady for the amount of, again, 3,000 francs (Sotheby's, 2007: 17).

Sir John Charles Robinson, the supervisor of the South Kensington Museum<sup>101</sup> was probably the next owner. In 1873 Robinson sells the picture to Sir Francis Cook. However, it might also be possible that Robinson and Cook have worked together. Robinson might have been asked by Cook to advise him and buy the picture for him. Cook was a textile merchant and great art collector. He has built a collection existing of more than 500 works of art. Cook started collecting art a fairly young age. His collection stayed relatively modest in the first years. But after Cook had come in contact with Robinson, Cook started to collect more and more seriously (Sotheby's, 2007: 21-22).

After his death the collection was inherited by his son Frederick, who preserved the art works but did not make any contributions to the collection. His grandson Herbert, who inherited the collection later, was a great art lover and active buyer of works of art. However, already during Herbert's life the family started to have financial difficulties. These problems caused the collection to fall apart after the death of Herbert. The family sold the painting of the young woman in a group of six paintings for the amount of \$40,000 in 1940. The new owner was the dealer Nathan Katz. Only one year after the purchase the painting was acquired by Herman Göring. After the war the picture was restituted to Katz again with the help of the Stichting Nederlands Kunstbezit. After the

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<sup>101</sup> This museum became later the Victoria and Albert Museum.

death of Katz in 1953 the painting is sold in Basel to Arthur Wiederkehr, a Swiss collector<sup>102</sup> and founder of Wiederkehr Foster a company that provides legal services<sup>103</sup>. This new owner keeps the painting until his death where after it is sold by its descendants in 2007 to an anonymous private art collector<sup>104</sup>.

#### 16.4.4 Study of an elderly Woman in a white Cap

Table 22: The painting

Title	Study of an elderly woman in a white cap
Date	26 January 2006
Location	New York
Auction house	Sotheby's
Estimate	\$3,000,000 – 4,000,000
Corrected estimate	\$3,588,298
Hammer price	\$3,800,000
Corrected Hammer price	\$3,895,867
Hammer price with Buyer's premium	\$4,272,000
Corrected Hammer price with Buyer's premium	\$4,406,538
Corrected price per cm <sup>2</sup>	\$1949,15
Medium/ technique	Oil on panel
Size in cm	53,3 x 37,5
Surface area in cm <sup>2</sup>	1998,75
Exhibitions	2
Offered for sale after	35 years

<sup>102</sup> Gleadell, C. 23 January 2007, Art Sales Rembrandt returns in Style, *Telegraph.co.uk*, <http://www.telegraph.co.uk/arts/main.jhtml?xml=/arts/2007/01/23/basales23.xml>, consulted on 4 July 2007.

<sup>103</sup> <http://www.wf-legal.ch/>, consulted on 5 July 2007.

<sup>104</sup> Gleadell, C. 23 January 2007, Art Sales Rembrandt returns in Style, *Telegraph.co.uk*, <http://www.telegraph.co.uk/arts/main.jhtml?xml=/arts/2007/01/23/basales23.xml>, consulted on 4 July 2007.

Subject	Study
Dated	1640?
Signature	Not signed

*Subject matter*

This painting is used to be seen as a portrait. However, Ernst van de Wetering has proven that the picture is rather an oil study. Rembrandt allowed himself with this painting to practice the different effects of light and shadow upon a woman's head (Sotheby's, 2006: 10) Since the face of the woman is also largely left in shadow, it would be illogical to conceive the painting as a commissioner's portrait. Furthermore, the woman's clothes and overall appearance reveal the social class she must have belonged to. 'She is a servant and does not belong to the class that customarily had its portraits painted.' (Sotheby's, 2006: 12)

Another important aspect is the missing signature of the master. Besides this researchers have founded many copies that must have their originate in Rembrandt's workshop. These factors imply that the painting has never been made for sale. It seems like Rembrandt used the study of light and shadow on a woman's face for the education of his pupils. Another possibility may be that Rembrandt made the picture in connection with another painting, as a preparatory study (Sotheby's, 2006: 14).

*Subject and demand*

Just like the previous painting the sitter of the painting does not have her own identity. It is not about the person that has been portrayed. The picture is rather it about the effects of light and shadow. The lack of identity may decrease the value of the work. On the other hand, the effects of light and shadow can be seen as something that belongs particular to Rembrandt. His use of light is famous. Taking this into account the value of the painting may increase.

However, the painting remains a study which means that it was practice rather than a finished product. It was not intended for sale and therefore probably less refined than other paintings. Besides this, the painting lacks a signature. Since a signature carries the



identity of the artists it is considered to have certain prestige values. The picture of the old woman will therefore lose some of its potential value.

### *Authenticity*

This painting is recently, in the year 2003, re-discovered by the Rembrandt Research Project. After it was cleaned and restored by Martin Bijl, the original appearance came up. During the cleaning it became clear that the painting was extensively over painted. 'A fur collar had been painted over a wide, white collar, and standing above it a decorated shirt collar, also introduced later.' (Sotheby's, 2006: 12) The Rembrandt research project concluded that the over-painting reveals the wish to transform the study in a more formal portrait or character painting. The intention of the over-painter seems to confirm the idea that a study picture has a relative low economic value.

### *Rarity*

Experts believe that this painting must have been created around 1640 (Sotheby's, 2006: 13). Since this is certainly not a rare period in Rembrandt's career, the painting is not specifically scarce.

### *Provenance and history*

The provenance of this painting goes back to the eighteenth century. The statesman Fürst Wenzel Anton Kaunitz (1711-1794) has been the first recorded owner of the study of an elderly Woman. Kaunitz was one of the most important individuals for the Austrian Enlightenment. Kaunitz may have started collecting art during his diplomatic stay in Brussels in the period 1744-1746. In 1776 and 1777 Kaunitz traveled to Brussels and Antwerp, this time not to work as a diplomat but rather as an art collector. It was known that the statesman had a passion for, among others, Rubens works of art. After his death the extensive collection remained in the family until it was brought to auction by his nephew in 1820 (Sotheby's, 2006: 15).

In 1971 the painting was bought by Mary D. Flemming Walsh and F. Howard Walsh from New House Galleries (Sotheby's, 2007: 15). Howard Walsh Howard built one of the largest independent oil production firms and was furthermore a successful ranger in

Texas. Besides this Walsh was seen as an arts patron.<sup>105</sup> Walsh jr. inherited the painting from his parents and has sold the painting on the 25th of January 2006 (Sotheby's, 2006: 15).

The painting was bought by an anonymous private art collector who also bought a painting of Jan Steen and Gerrit Dou for respectively \$632,000 and \$1,248,000.<sup>106</sup>

#### 16.4.5 Wedding of Samson

This religious oil on canvas painting has been brought to auction on the 23th of May 2004. The picture with a relatively large size, 125 cm by 175 cm, was shown at the Meissner Neumann auction house in Prague. The price was estimated to match an amount of 55,000 to 70,000 CSK. The reserve price must have been set somewhere around, probably under the estimated price. Since the picture has not been sold one could at least state that no buyer was willing to pay 55,000 CSK for the work of art. The fact that the painting lacks a signature, and a proof of authenticity, as Artprice notes, could be an indicator of a high uncertainty in case of the attribution. This will in turn have a large effect on the willingness to pay.<sup>107</sup>

#### 16.4.6 Self-portrait with shaded Eyes

Table 23: The painting

Title	Self-portrait with shaded eyes
Date	10 <sup>th</sup> July 2003
Location	London
Auction house	Sotheby's
Estimate	\$6,555,200 – 9,832,800

<sup>105</sup> TCU Magazine, <http://www.magazine.tcu.edu/articles/1998-03-PH.asp?issueid=199803>, consulted on 4 July 2007.

<sup>106</sup> 27 January 2006. Art Market Watch, *Artnet*, <https://www.artnet.com/magazineus/news/artmarketwatch/artmarketwatch1-27-06.asp> consulted on 11 June 2007.

<sup>107</sup> Unfortunately the catalogue of this sale could not be found. It is therefore quite delicate to state something about the marketability of the painting.

Corrected estimate	\$9,197,527
Hammer price	\$10,160,560
Corrected Hammer price	\$11,413,290
Hammer price with Buyer's premium	\$11,389,004
Corrected Hammer price with buyer's premium	\$12,871,369
Corrected price per cm <sup>2</sup>	\$2920,37
Medium/ technique	Oil on panel
Size in cm	70,8 x 55,2
Surface area in cm <sup>2</sup>	3908,16
Exhibitions	1
Offered for sale after	47 years
Subject	Self-portrait
Dated	1634
Signature	<i>Rembrandt. F</i>

### *Subject matter*

This painting shows the twenty-eight year old artist. Since self-portraits are strongly connected with the name and identity of the buyer, it should be expected to match a relatively high price. The so-called name-buyers that seem to exist in Rembrandt's own time may exist these days too. A London dealer signaled: 'New buyers have been coming into the market for brand names, and Rembrandt is a brand name. A rare and exclusive one too.'<sup>108</sup>

Self-portraits were not only high demanded in the seventeenth century but also served a more practical purpose. By presenting the self-portraits to his clients his talent as a portrait painter got revealed (Sotheby's, 2003: 43).

Although self-portraits are expected to carry a large value today and certainly were of high value during Rembrandt's lifetime, the self-portraits could easily lose their value.

<sup>108</sup> In: Gleadell, C., 23 January 2007, Art Sales: Rembrandt returns in Style, *Telegraph.co.uk* <http://www.telegraph.co.uk/arts/main.jhtml?xml=/arts/2007/01/23/basales23.xml>, consulted on 4 July 2007.

'Within a few years Rembrandt's portrait and self-portrait style had changed considerably, and by the latter years of decade, a portrait such as this would have been very much out of date, not least because of the changes in the artist's physiognomy wrought by age.' (Sotheby's, 2003: 43) If a self-portrait was not sold neatly after it was made, the painting would likely remain unsold. It is probably for this reason that the Self-portrait with shaded eyes has been over painted in the past (Sotheby's, 2003: 43). By transforming it into a tronie, the work lost its direct connection with its producer and became saleable again. Moreover by adding exotic elements the painting became highly fashionable again.

### *Authenticity*

Due to the extensive over-painting shortly after it was created the portrait of Rembrandt has been hidden for a long period of time. It is for the same reason that this painting was not seen as an authentic Rembrandt work of art. After a thorough cleaning by Martin Bijl in 2002 the painting was investigated by Ernst van de Wetering and stated to be a real Rembrandt (Sotheby's, 2003: 41).

### *Scarcity*

The period in which this portrait is made, it was painted in 1634, is not a rare period. Most paintings that come to auction during the last decades are produced in this period of time.

Although Rembrandt made a lot of self-portraits, he is even famous for the mayor amount of portraits of himself; the subject can be called scarce. In the last thirty years no other self-portraits have come to auction.<sup>109</sup>

### *Provenance and History*

The provenance goes back to Christian Gottlob Frege (1715-1781) who was a Leipzig banker and a member of the Saxon Electoral chamber.

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<sup>109</sup> 10<sup>th</sup> July 2003. "Lost" Rembrandt fetches nearly £7m. BBC News. <http://news.bbc.co.uk/2/hi/entertainment/3052491.stm> consulted on 20th June 2007.

In 1935 the painting is probably owned by André de Hevesy who was a critic and collector. In the same year De Hevesy have published a book on Rembrandt. Strikingly, De Hevesy does not mention the picture.

Around the year 1956 the picture is bought by Paul Page in France (Sotheby's, 2003: 46). The painting then stays in the family until 2003 when the work is bought by the billionaire Steve Wynn. Wynn, a casino tycoon from the United States and a big art collector, obtained the painting by a telephone bid. That this business man is a large art collector can be illustrated with his purchases in May of the same year. By buying works of Renoir and Cézanne Wynn spent £25 million in 24 hours<sup>110</sup>. Whether Wynn will be able to fully enjoy the pieces is questionable. The English Telegraph writes: 'There is a tragic irony about Mr. Wynn buying a painting called Self-portrait with shaded eyes. His own eyesight is falling and he finds it increasingly difficult to see the masterpieces on which he spends such huge sums of money.'<sup>111</sup>

#### 16.4.7 A Rabbi

Table 24: The painting

Title	A Rabbi <sup>112</sup>
Date	2 <sup>nd</sup> October 2002
Location	Vienna
Auction house	Palais Dorotheum
Estimate	\$4950 – 6930
Corrected estimate	\$6866
Hammer price	\$4916
Corrected Hammer price	\$5682
Corrected Hammer price	\$6568
Corrected price per cm <sup>2</sup>	\$0,77
Medium/ technique	Oil on canvas

<sup>110</sup> 10 July 2003. "Lost" Rembrandt fetches nearly £7m. BBC News.

<http://news.bbc.co.uk/2/hi/entertainment/3052491.stm> consulted on 20 June 2007.

<sup>111</sup> Bennett, W. 11 July 2003. Casino owner pays £7m for "unmasked" Rembrandt.

<http://telegraph.co.uk/news/main.jhtml?xml=/news/2003/07/11/wremb11.xml> consulted on 11 June 2007.

<sup>112</sup> The painting was sold as "Ein Rabbiner" by Palais Dorotheum.

Size in cm	104 x 81, 5
Surface area in cm <sup>2</sup>	8475
Exhibitions	0
Subject	Head
Dated	Not dated
Signature	No signature

### *Subject matter*

It is questionable whether the painting must be seen as a portrait of a rabbi or a tronie. Since the identity of the sitter is unknown, only his profession is given, I have labeled the painting as a tronie picture.

As have been said earlier, this subject is expected to contain a relative low value. Furthermore is the rabbi closely connected with a religion which might give the painting the often stated devaluating aspects of religious works of art. It is at least expected that this painting of a rabbi must have fewer buyers than for instance a more general tronie.

### *Authenticity*

In the pre-sale catalogue of Palais Dorotheum only the lot number, the title, the technique, the medium and the size is given. No information is given about the authenticity. Since the pre-sale estimate is only a fraction of the other prices of Rembrandt works, great uncertainty must exist around the attribution.

### *Scarcity*

Rembrandt painted several portraits of rabbi, or at least of old man that received the title of rabbi. Schwartz (2006) notes that there exist a myth around Rembrandt and Jewish belief and that this may be the reason that a lot of tronies have been named as "Rabbi"<sup>113</sup> Whatever the exact subject is, this painting cannot be called scarce. If the painting is indeed not an authentic Rembrandt work of art, it is certainly not rare. Copies of Rembrandt works have been made in tremendous numbers.

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<sup>113</sup> Schwartz, G. 9<sup>th</sup> November 2006. Openings Speech for the "Jewish Rembrandt" in the Historical Jewish Museum. <http://www.jhm.nl/jhm/documenten/Lezing%20Gary%20Schwarz.pdf> consulted on 20<sup>th</sup> June 2007.

### *Provenance and History*

Unfortunately, nothing has been found on the history of this painting. Since the hammer price was exceptional low for a painting of Rembrandt, no attention is given to it by the media<sup>114</sup>. It is for this reason that no information is known about the buyer.

#### 16.4.8 Portrait of a young woman, possibly Oepjen Coppit, half length

Table 25: The painting

Title	Portrait of a young woman, possibly Oepjen coppit, half length
Date	10 July 2002
Location	London
Auction house	Sotheby's
Estimate	\$14,620,000-21,930,000
Corrected estimate	\$21,124,336
Auction result	Not sold
Medium/ technique	Oil on panel
Size in cm	65,3 x 48,6
Surface area in cm <sup>2</sup>	3173,58
Exhibitions	9
Offered for sale after	48 years
Subject	Portrait
Dated	1633
Signature	<i>Rembrandt.f</i>

<sup>114</sup> It seems that the prices of works of art carry the most news value. The more expensive a painting, the more articles seem to appear. Furthermore, prices always appear in the headlines. Melikian writes in the International Herald Tribune of 2 February 2007: 'The estimates got the attention, the actual pictures less so.' <http://www.iht.com/articles/2007/02/02/features/melik3.php>, consulted on 4 July 2007.

### *Subject matter*

This painting shows a frontal depiction of a young woman. Christie's notes that this picture is 'perhaps the most vivacious formal portrait' (2002: 100) that Rembrandt made in the 1630s.

A whole page in the catalogue is used to discuss the identity of the sitter. This may be seen as a proof for the idea that an anonymous portrait is of less value than that of a known sitter. Although there are too many uncertainties to place the identity beyond doubt, the sitter is generally accepted to be Oepjen Coppit. This lady was a member of one of the most distinguished families in Amsterdam during the seventeenth century. Oepjen Coppit and her husband Maerten Soolmans lived very near to Rembrandt's studio and home (Christie's, 2002: 108).

### *Authenticity*

The portrait of the young woman has thoroughly been studied by the Rembrandt Research Project in 1971 and its authenticity has been placed beyond doubt (Christie's, 2002: 104).

### *Scarcity*

In the years 1632 and 1633 around fifty paintings have been painted of which only four of them are not portraits. The painting is created in 1633 and is therefore not particularly rare. In no other two years Rembrandt created this much paintings (Christie's, 2002: 103). This portrait is created in 1633 and is therefore not particularly rare.

### *Provenance and History*

The provenance of the painting goes back to 1767 when it was possibly sold by Pieter van Copello in Amsterdam. This man has also been recorded in a sale of a work of Jan Steen in 1810.

In 1772 an anonymous sale in Amsterdam is recorded. Later, in 1909 the work is sold by the American gallery Knoedler & Co. It then enters several collections until it is bought by Leo van den Bergh in 1929. This man is a distinguished Amsterdam collector who also obtained pictures of Gabriel Metsu, Jacob van Ruisdael, Salomon van



Ruisdael, Meindert Hobbema, Gerard Dou and Jan Steen. Van den Bergh clearly had to be a Dutch and Flemish art lover. Six years later Leo van den Bergh brings the portrait of the young woman to auction where it remains unsold. After his death the painting is inherited by his wife Alexa. Alexa sells the painting in 1954 through Schaeffer Galleries. The work is then purchased by the father of the person that brought the painting in 2002 to the market (Christie's, 2002: 109-110).

#### 16.4.9 Portrait of a bearded man, bust-length, in a red doublet

Table 26: The painting

Title	Portrait of a bearded man, bust-length, in a red doublet
First sale	30 January 1998
Second sale	26 January 2001
Location 1998	New York
Location 2001	New York
Auction house 1998	Sotheby's
Auction house 2001	Christie's
Estimate 1998	\$3,000,000-4,000,000
Estimate 2001	\$6,000,000-8,000,000
Corrected Estimate 1998	\$4,438,042
Corrected Estimate 2001	\$8,219,328
Hammer price 1998	\$8,250,000
Hammer price 2001	\$11,500,000
Corrected Hammer price 1998	\$10,461,101
Corrected Hammer price 2001	\$13,421,167
Hammer price with Buyer's premium 1998	Unknown
Hammer price with Buyer's premium 2001	\$12,656,000

Corrected price per cm <sup>2</sup> 1998	\$3242,95
Corrected price per cm <sup>2</sup> 2001	\$4160,57
Medium/ technique	Oil on panel
Size in cm	63,5 x 50,8
Surface area in cm <sup>2</sup>	3225,8
Exhibitions 1998	1
Exhibitions 2001	2
Offered for sale after (1998)	44 years
Offered for sale after (2001)	3 years
Subject	Portrait
Dated	1633
Signature	<i>Rembrandt. Fec</i>

This painting was offered for sale in 1998 at Sotheby's New York. The experts estimated that the painting would yield \$4,438,042 on average. In the end the picture was sold for \$10,461,101. Three years later, in 2001, the painting was offered for sale again, this time at Christie's New York. The experts of Christie's estimated a price of \$8,219,328, almost twice the amount of the earlier estimated price of Sotheby's. In 2001 the picture was sold for \$13,421,167, \$2,960,066 more than the previous sale. By only looking at this picture, a clear increase in price is visible. Unfortunately, this is the only painting that has been sold twice in the period 1986-2007. If there were more works that were resold in the investigated period, a repeat sales analysis would have been possible.

#### *Subject matter*

This painting can be categorized as a portrait although the identity of the sitter is unknown. Furthermore the clothes of the bearded man are rather particular. The clothes differ strongly with the clothes that Dutch portrayed people usually worn. In that sense the portrait could be seen as a tronie showing a particular characteristic item. However, as the bearded man is turned to the right, the figure must have been married. During the seventeenth century it was normal to place the husband on the wife's right. This fact proves that the sitter was a real person, not just a fantasy figure that shows exotic

clothes. The clothes and hairstyle of the man reveal that the sitter must be a foreigner moving in the military circles (Sotheby's, 1998: 38).

The fact that this painting can be conceived as a portrait implies that the painting must carry a higher value than a comparable character painting. It may however have a lower value than a portrait painting of a known sitter, especially when the sitter was close related to Rembrandt.

### *Authenticity*

The painting had already been proven to be an authentic work of Rembrandt by its first sale in 1998. During the second sale no changes were made in case of the attribution (Sotheby's, 1998: 36 and Christie's, 2001: 118-119).

### *Scarcity*

Since the painting is a portrait that has been produced in 1633, the work is not particular scarce. The sitter however can be seen as an exceptional since most of the portrayed people came out of Rembrandt's direct circle. His foreign looks deviate strongly from the usually Dutch appearance in Rembrandt portraits. This could make the picture rarer and hence more valuable. On the other hand, the work could be called less characteristic for Rembrandt's oeuvre and therefore less demanded.

### *Provenance and history*

The portrait of the bearded man was owned by the Howard Young Galleries in 1930. In the following years the location of the painting is unknown. In 1954 the picture is sold by Among Carter (Christie's, 2001: 116). Among Carter (1879-1955), the creator and former publisher of Fort Worth Star-Telegram is described as a "legendary figure in the history of Texas". His own museum in Fort Worth illustrates this. The reason for creating the museum has been explained by Carter himself: 'As a youth I was denied the advantages which go with the possession of money. I am endeavoring to give to those who have not such advantages, but aspire to the higher and finer attributes of life, those opportunities which were denied to me.'<sup>115</sup> After his death in 1955 the painting stays in his family until

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<sup>115</sup> Among Carter Museum. <http://www.cartermuseum.org/about> consulted on 20 June 2007.

it sold at Sotheby's in 1998, the first sale we are investigating here. The painting is bought by the well-known art dealer, industrialist and chemist Alfred Bader for Otto Naumann, another art dealer. Somewhat later Naumann sells the picture to the Bellagio Gallery of Fine Art. This gallery sells the painting in 2001 at Christie's (Christie's, 2001: 80) Robert Noortman (1946-2007), an Dutch art dealer who had a large force in the market for Old Master paintings, buys the painting for \$12,6 million. In 2006 he offers the work at the European Fine Art Fair for the amount of \$32,4 million. However, Noortman is unable to make the sale.<sup>116</sup>

#### 16.4.10 Portrait of a Lady, Aged 62, perhaps Aeltje Pieterdr. Uylenburgh

Table 27: The painting

Title	Portrait of a Lady, aged 62, perhaps Aeltje Pieterdr. Uylenburgh
Date	13 December 2000
Location	London
Auction house	Christie's
Estimate	\$5,900,000 – 8,700,000
Corrected estimate	\$8,707,938
Hammer price	\$26,064,000
Hammer price with Buyer's premium	Unknown
Corrected Hammer price	\$31,283,759
Corrected price per cm <sup>2</sup>	\$7600,52
Medium/ technique	Oil on panel
Size in cm	73.5 x 56
Surface area in cm <sup>2</sup>	4116
Exhibitions	1

<sup>116</sup> 21 January 2007. Obituaries: Denny Doherty, 66, of the Mamas and the Papas, '60s singing group, dies. *International Herald Tribune*. <http://www.iht.com/articles/2007/01/21/news/obits.php>, consulted on 4 July 2007.

Subject	Portrait
Dated	1632
Signature	<i>RHL van Rijn</i>

This painting has obtained the top hammer price.

#### *Subject and demand*

Although the identity of the sitter is uncertain, the woman is generally seen as Aeltje Pieterdr. Uylenburgh, the elder niece of Rembrandt's first wife Saskia. Rembrandt and Saskia had a good relationship with Aeltje and her husband Johannes Cornelisz. Sylvius who was a Calvinist clergyman (Christie's, 2000: 134).

The fact that the sitter has an identity and that the portrayed woman was close to Rembrandt, must have added to the value of the painting.

#### *Authenticity*

The portrait was examined in 1971 by the members of the Rembrandt Research Project and described as 'an outstanding specimen of Rembrandt's portraits from his early days in Amsterdam' (Christie's, 2000: 134).

#### *Scarcity*

The year of production, 1632, does not add to the rarity of the painting. Furthermore, a lot of portraits have been produced during Rembrandt's lifetime and particularly in his early Amsterdam period. The identity of the sitter does however add to its level of scarcity.

#### *History and provenance*

This painting remained possibly in the family until the beginning of the eighteenth century. In 1828 the picture is offered for sale by William G. Coesvelt through the well-known London dealer John Smith. Coesvelt was a banker and art collector. The painting remains unsold. In 1835 the picture is sold by John Smith to Albert Brondgeest In Amsterdam. Brondgeest was not the actual buyer but sold the work as an agent for

Baron Alphonse de Rothschild (1827-1905) (Christie's, 2000:132), a member of the prominent banker family in France. Rothschild is furthermore seen as an important art collector and a philanthropist: the banker donated more than 2000 pieces of art to various museums.<sup>117</sup> This portrait of a lady stayed in the family until it was sold at auction in 2000. The purchaser of the painting was the famous Dutch art dealer Robert Noortman (1946-2007), the same buyer of the previous discussed picture. He paid \$28,6 million for it. Noortman told the press: 'You can tell that the woman in this painting must have been someone Rembrandt really liked, because it is so intimate.'<sup>118</sup> Only three month later Noortman shows the painting at the European Fine Art Fair Maastricht and offers it for sale at an amount of \$36.5 million. The picture is eventually bought by an anonymous collector from the United States, for an unrevealed price.<sup>119</sup>

#### 16.4.11 Lions hunting<sup>120</sup>

The only information that could be found on this work of art was the Pre-sale catalogue of Bruun Rasmussen, a Danish auction house that has sold this object. The catalogue is however rather sparing in giving information. The catalogue does not add any information to the databank of Artprice and can therefore not be investigated further here.

#### 16.4.12 Portrait of an old man with beard

Table 28: The painting

Title	Portrait of an old man with beard
Date	30 January 1997
Location	New York

<sup>117</sup> [http://en.wikipedia.org/wiki/Alphonse\\_James\\_de\\_Rothschild](http://en.wikipedia.org/wiki/Alphonse_James_de_Rothschild), consulted on 25 June 2007.

<sup>118</sup> 19 December 2000. Venerable 'Old Lady' gains a new record for Rembrandt. *The Antiques and the Art Online*. <http://antiquesandthearts.com/AW0-12-19-2000-11-48-24>, consulted 25 June 2007.

<sup>119</sup> 21 January 2007. Obituaries: Denny Doherty, 66, of the Mamas and the Papas, '60s singing group, dies. *International Herald Tribune*. <http://www.iht.com/articles/2007/01/21/news/obits.php>, consulted on 4 July 2007.

<sup>120</sup> This picture was sold as "Lövejagten" by the Danish auction house Bruun Rasmussen.

Auction house	Sotheby's
Estimate	\$1,500,000 – 2,000,000
Corrected estimate	\$2,253,586
Hammer price	\$2,700,000
Corrected Hammer price	\$3,476,961
Corrected price per cm <sup>2</sup>	45,155.34
Medium/ technique	Oil on paper mounted on panel
Size in cm	11 x 7
Surface area in cm <sup>2</sup>	77
Exhibitions	4
Offered for sale after	11 years
Subject	Study?
Dated	1633
Signature	<i>Rembrandt.</i>

This painting has the highest price per square centimeter. Its price is relative low in relation to the other paintings. The size is however extremely small. Another exceptional factor is its medium. This painting is the only work that is made on paper which is mounted on a panel.

#### *Subject matter*

There have been some doubts about the subject of this painting. Its exceptional small size, the unusual support and its monochrome execution make it difficult to see which purpose the painting had. Most of the monochrome paintings were done in preparation of other works. The left side of the face of the portrayed man is almost totally left in the dark which proves that it cannot be a commissioned portrait. It seems rather like a study of the effects of light and shadow on the face of a man. The study as a subject is expected to be of less quality than a work that has been made for sale and hence, less expensive. The painting however reaches the highest price per square centimeter.

The fact that this painting was so highly demanded might be due to the suggestions that have been made by the Rembrandt Research Project. In their view the picture can be seen as an independent work that was made as a sort of souvenir of a close friendship,

or as a present to someone close. This would also explain the presence of a date and signature which are usually not shown in study paintings (Sotheby's, 1997: 40) The fact that the painting might have been made especially to someone close, could also explain its popularity. The function of a gift shifts the work closer to the artist and hence, makes it more valuable.

### *Authenticity*

The work has been investigated by the Rembrandt Research Project and is proven to be an authentic Rembrandt painting (Sotheby's, 1997: 40).

### *Scarcity*

The picture has been painted in 1633 and can therefore not be seen as a particular rare work of art. The size, the support and especially its function as a gift to someone close are nevertheless exceptional. Taking these factors into account, the painting can be described as a rare object.

### *History and provenance*

This portrait was possibly owned by Mrs. Van Sonsbeeck before 1751. The first sale that has been recorded goes back to Paris in 1874. The painting then changes hands a few times until it is bought by F. Kleinberger in 1900. Later, the work is adopted by the collection of Baron Emile Janssen that lives in Brussels. In 1927 Frederick sells the picture for 32,000 florins to M. Knoedler & Co thereby bringing it to New York. In 1935 the painting is bought by Andrew Mellon (1855-1937). Mellon was an American Banker and secretary of Treasury during 1921 and 1932. Moreover, Mellon is seen as art collector and philanthropist. This is proved by the fact that Mellon spent a large part of his incomes in order to support art and research. After his death his son Paul Mellon inherits the picture. He sells the work in 1955 to a glass master and dealer, Arthur Armory Houghton Jr. In 1986 the painting is bought by the Richard L. Feigen & Co, a New York art gallery (Sotheby's, 1997: 40). This gallery sells the painting somewhat later to one of his best clients: the collector Saul Steinberg. Richard Feigen later illustrates the sale of this painting: "Without even studying it, Steinberg called his wife. "Honey, come downstairs," he said. "We just bought a Rembrandt!" Feigen had not even told him the



price. "I don't care if you're not dressed! Come downstairs!"<sup>121</sup> In 1997 Steinberg has to sell the painting at Sotheby's New York due to financial difficulties. This story clearly adds to the idea that the name of the artist plays a significant role. Without studying the picture and even without looking at its price, Steinberg buys the painting.

#### 16.4.13 Bearded man with cap<sup>122</sup>

This painting was sold at Neumeister in March 1996. Since the pre-sale catalogue does not give a lot of extra information than Artprice, an extensive qualitative investigation is impossible here.

The catalogue does however show that the work is seen as an authentic work by Valentiner in 1921, but the work lacks a proof of authenticity of the Rembrandt Research Project. This could have caused the relative low price of the picture: only \$18,534 was paid for the man with the cap which comes down to a price of \$39.60 per square centimeter.

#### 16.4.14 Cupid blowing a soap bubble

Table 29: The painting

Title	Cupid blowing a soap bubble
Date	6 December 1995
Location	London
Auction house	Sotheby's
Estimate	Unknown
Hammer price	\$5,340,000
Corrected Hammer price	\$7,242,147

<sup>121</sup> Zeits, L. 25 January 2006. Master Dealer. *Artnet*. <http://www.artnet.com/magazineus/features/zeitz/zeitz1-25-06.asp>, consulted on 4 July 2007.

<sup>122</sup> This painting was sold as "Bärtiger Mann mit Barett" by the German auction house Neumeister.

Corrected price per cm <sup>2</sup>	\$1042,79
Medium/ technique	Oil on canvas
Size in cm	75 x 92,6
Surface area in cm <sup>2</sup>	6945
Exhibitions	7
Offered for sale after	65 years
Subject	Mythological, Vanitas
Dated	1634
Signature	<i>Rembrandt/f.</i>

This picture was part of the Bentinck-Thyssen Collection which was sold at Sotheby's in 1995. Due to the fact that the picture decorated the front page of the pre-sale catalogue, we can state that this picture was seen as one of the most important paintings of that sale.

#### *Subject matter*

This painting shows a cupid blowing a soap bubble. A soap bubble is a regular used theme in Vanitas pictures in the Dutch seventeenth century painting. The painting tells its viewers that love can be compared to something as fragile as a soap bubble. Since the painting is made in the same year as his marriage to Saskia, and since the link between marriage and human mortality was an often used theme in arts and literature the question is which message Rembrandt wanted to send. Did he wanted to tells us that love is transient or rather that love is subject to the transience of life?( Sotheby's, 1995: 2)

Unless the fact that vanitas subjects were in high demand during the seventeenth century, this subject seems quite unusual in Rembrandt's oeuvre (Sotheby's, 1995: 2). But it is not only the subject which is exceptional. The plasticity of the picture, the smooth painting style, does not seem to fit in his oeuvre (Sotheby's, 1995: 1) Because of this the painting may be regarded as less "rembrandtesque" and hence, as less valuable.

### *Authenticity*

The painting was investigated by the Rembrandt Research Project in 1971 and 1982 corpus of Rembrandt works. The picture was described as 'An authentic and mainly well preserved work' (Sotheby's, 1995: 1). But the picture has often been doubted to be a real Rembrandt. Garry Schwartz for instance did not recognize the painting as a Rembrandt work of art. 'Cupid does not shoot his arrows in order to enhance untenable desire in his victims, but has his bow unstressed in his hands and blows soap bubbles to tell us that the desire will vanish. These kinds of allegorical messages are even that unusual for Rembrandt that Horst Gerson and other Rembrandt experts, among me, could not discover his hand in this painting. The Rembrandt Research Project that judged the painting more on its pictorial qualities recorded the work rightly in Rembrandt's oeuvre. Still, art that "neither touches nor moves", is not typical for Rembrandt (Schwartz, 2006: 275-276).

### *Scarcity*

The painting was produced in 1634 which is not a rare period. The subject and the style on the other hand can be seen as exceptional. It is however questionable whether these exceptional aspects will add to the price. Since these factors are not typical for Rembrandt's oeuvre it is expected that they rather have a depressing influence on the price.

### *History and provenance*

The provenance of this picture goes back to 1923 when it belonged to a private Russian collection. Around 1930 the picture was adopted by a private collection somewhere in the Netherlands. In 1930 the painting is exhibited by Goudstikker in Amsterdam. In the same year the Cupid blowing a soap bubble is bought by the Baron Heinrich Thyssen-Bornemisza (1875-1947) (Sotheby's, 1995: 3). Heinrich was the son of August Thyssen (1842-1926) who founded an iron and steel works in Germany. August's business expanded quickly and generated enormous wealth for the Thyssen family. August son Heinrich was heavily interested in the arts. Besides his study of art and history Heinrich became a passionate art collector. In 1930 the collection of Heinrich was shown to the public through an exhibition in Munich. 'Looking at the astonishing array of masterpieces included in the catalogue, one can only imagine the effect that this exhibition must have

had on those who saw it. At any rate it ensured that the Thyssen collection became famous almost overnight. This may surely have been the intention of the baron, who acquired many great paintings barely weeks before the exhibition opened.' (Sotheby's, 1995: II) It is certainly strikingly that the baron was so eager to impress the public. His quick purchases of important works of art just before the opening seem rather strange from the perspective of an art lover. It seems like the exhibition was more important than buying those pieces that really appealed to him.

After the death of the baron in 1947 part of the collection is inherited by his daughter Gabrielle. Gabrielle married Baron Adolph Bentinck van Schoonheten who was an influential Dutch diplomat. From 1970 on the baroness places her collection on loan at various museums. In 1995 however she decides to bring the collection to auction (Sotheby's, 1995: IV).

The painting of the Cupid is then bought by the prince of Liechtenstein, Prince Hans-Adam. Hans Adam owns the LGT banking group and possesses a large personal fortune. The painting is added to his extensive art collection which is partly on display in Vienna.<sup>123</sup>

#### 16.4.15 Portrait of Johannes Uytenborgaert

Table 30: The painting

Title	Poirtrait of Johannes Uytenbogaert
Date	8 July 1992
Location	London
Auction house	Sotheby's
Estimate	Unknown
Hammer price	\$6,530,000
Corrected Hammer price	\$9,619,812
Corrected price per cm <sup>2</sup>	\$714,48
Medium/ technique	Oil on canvas

<sup>123</sup> Wikipedia.com, [http://en.wikipedia.org/wiki/Hans-Adam\\_II%2C\\_Prince\\_of\\_Liechtenstein](http://en.wikipedia.org/wiki/Hans-Adam_II%2C_Prince_of_Liechtenstein), consulted on 3 July 2007.

Size in cm	132 x 102
Surface area in cm <sup>2</sup>	13464
Exhibitions	3
Offered for sale after	132 years
Subject	Portrait
Dated	1633
Signature	<i>Rembrandt ft./</i>

This painting was the first painting brought to auction after a few years where no paintings of Rembrandt were offered for sale. The last painting that was sold at auction was a portrait of a girl in 1986. This thinness might have raised the price. Collectors might have become more eager after the extreme thin years of 1987, 1988, 1989, 1990 and 1991.

#### *Subject matter*

This painting shows a portrait of Johannes Uytenbogaert (1557-1644). Rembrandt received this commission from Abraham Anthonisz. Recht who was a wealthy merchant from Amsterdam and an important member of the Remonstrants. Uytenbogaert was an advisor to the Raadpensionaris Johann van Oldebarneveld and had an important position at the court in The Hague. Here he was a preacher to Prince Maurits and tutor to Prince Frederik Hendrik. Uytenbogaert had strong connections with the Remonstrants which explains the commission of Abraham Anthonisz. Recht. However, his close association with the followers of the theologian Jacobus Arminius, caused great problems. The court, where Uytenbogaert held important posts, favored the less tolerant theological attitude of the rigid Calvinist Francis Gomar. The theological conflict divided the whole country for almost ten years into two parts and led to the fact that Uytenbogaert went into exile (Sotheby's, 1992:128-130).

In 1626, at the time the Netherlands had become more calm and steady, Uytenbogaert returned to The Hague. The more tolerant regime of the new Stadholder Frederik Hendrik allowed Uytenbogaert and other Remonstrants to live freely. It made Uytenbogaert's trip to Amsterdam in 1633 possible. It was then that Uytenbogaert became portrayed by Rembrandt. A proof of this can be found in his diary.

Uytenbogaert wrote on 13 April 1633: 'Painted by Rembrandt, for Abraham Anthonisz.' (Sotheby's, 1992: 130)

The fact that this painting represents a real person, not just a fantasy figure, may increase the potential value of the picture. The painting does not only show a picture but possesses also a deeper layer: the story of the Johannes Uytenbogaert. Furthermore does the revealed identity of the sitter add to the authenticity value of the work of art. Its authenticity can easier be proved in case of a clear provenance. The line in Uytenbogaert's diary is an example for this.

### *Authenticity*

The Rembrandt Research Project has adopted this painting in their Corpus of Rembrandt works of art. Besides the outcomes of technical research, the style and structure of the picture caused the investigators to believe that the painting is an authentic work (Sotheby's, 1992: 131-133).

### *Scarcity*

The year of production does not add anything to the rarity of the painting. However, due to Uytenbogaert's political and personal circumstances, portraits of him are scarce (Sotheby's, 1992: 130).

### *History and provenance*

As have become clear, the provenance goes back to Abraham Anthonisz. Recht who commissioned the portrait of Uytenbogaert. The painting was listed in his estate in 1664. Later the painting appears in Italy. In 1811 the portrait gets engraved by Giuseppe Longhi (1766-1831). In 1906 the portrait gets re-identified again by Bode and Hofstede De Groot. Around 1860 the work is bought by Alexander Barker on behalf of Baron Meyer de Rothschild (Sotheby's, 1992: 134-136). This Baron is part of a Jewish, international banking and finance dynasty that were ennobled by the Austrian and British government.<sup>124</sup> After the death of the baron the painting stays in the family

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<sup>124</sup> Wikipedia.com, [http://en.wikipedia.org/wiki/Rothschild\\_family](http://en.wikipedia.org/wiki/Rothschild_family), consulted on 4 July 2007.

(Sotheby's,1992: 136). The painting then gets adopted by the collection of the Earl of Roseberry who married Hannah, the only daughter of Baron Meyer de Rothschild in 1878.<sup>125</sup> In 1992 the painting is offered for sale by the inheritors of the Earl of Roseberry. The portrait is then bought by Otto Naumann who purchased the work on behalf of Alfred Bader, two figures that have already appeared in earlier discussed paintings of Rembrandt.<sup>126</sup>

#### 16.4.16 Portrait of a girl, wearing a Gold-Trimmed Cloak

Table 31: The painting

Title	Portrait of a girl, wearing a gold-Trimmed Cloak
Date	10 December 1986
Location	London
Auction house	Sotheby's
Estimate	\$2,400,000
Corrected estimate	\$4,525,971
Hammer price	\$9,900,000
Corrected Hammer price	\$18,669,300
Corrected price per cm <sup>2</sup>	\$7191,56
Medium/ technique	Oil on panel
Size in cm	59 x 44
Surface area in cm <sup>2</sup>	2596
Exhibitions	Unknown
Offered for sale after	years
Subject	Head
Dated	1632
Signature	<i>RHL van Rijn</i>

This painting was the first painting brought to auction in the investigated period.

<sup>125</sup> Wikipedia.com, [http://en.wikipedia.org/wiki/Archibald\\_Primrose%2C\\_5th\\_Earl\\_of\\_Rosebery](http://en.wikipedia.org/wiki/Archibald_Primrose%2C_5th_Earl_of_Rosebery), consulted on 4 July 2007.

<sup>126</sup> Melikian, S. 9 July 1992. 8 Million for a Rembrandt. *International Herald Tribune*. <http://www.ihf.com/articles/1992/07/09/auct.php>, consulted on 4 July 2007.

### *Subject matter*

Although the sitter has been identified as Rembrandt's younger sister Lysbeth or his first wife Saskia, the Rembrandt Research Project has stated that this must be 'a creation of the artist's imagination and not a commissioned portrait. The freedom of handling and the subtle distribution of light, make it improbable that the present picture was painted with the intention of being a likeness' (Sotheby's, 1986: 78). The painting can therefore be categorized as a Head picture. In particular this painting can be called a costume tronie, as we have seen before with the "Young woman with cap", which was sold in January 2000 at Sotheby's. In these works it was all about the exotic clothes and how to capture the details of it. In order to achieve this Rembrandt used to work in a more fine and subtle way (Sotheby's, 2007: 20). This use of style might of course have an influence on the potential value of the painting. A subtle finishing touch may more appeal than a work that is rather a study or sketch.

### *Authenticity*

The painting has been recorded as an authentic Rembrandt work of art in the Corpus of the Rembrandt Research Project (Sotheby's, 1986: 78).

### *Scarcity*

Although all Rembrandt works of art can be called scarce, this picture seems not specifically rare. The year of production, 1632, is not a rare period in the career of Rembrandt. The subject is furthermore not a rare theme in the oeuvre of the artist.

### *History and Provenance*

Searching the Internet the provenance of this painting went back to 1929. In this year a customer of the art dealer Robert C. Vose (1873-1964) convinces him to see a group of works of art in a monastery in Hollywood Hills. Although the larger parts of the collection exist of copies of old masters, Vose recognizes the Portrait of the girl as a Rembrandt work of art. The painting turns out to be sent to the monastery around 1919 by a Catholic Bishop of Switzerland, in the hope that it would appeal to a rich and prominent



man in Hollywood. Robert then buys the portrait for \$100,000, just before the stock market crash in 1929. Somewhat later Robert sells the picture for \$ 125,000 to Robert Treat Paine who is a rich Boston collector. This collector gives the painting on loan to the Museum of Fine Arts in Boston. However, in 1975 the portrait is stolen out of the museum. Fortunately, the picture is found unharmed shortly after its disappearance. In 1986 the heirs of Paine decide to offer the work for sale at Sotheby's. An anonymous buyer gets the painting for approximately \$10,000,000 which is then four times the highest price ever paid for a Rembrandt.<sup>127</sup>

Although the buyer makes an anonymous bid in 1986, the identity of this person has been revealed some years later. In another article of 1998 we read: 'Bader's bid for a Rembrandt and a Rubens are topped only by \$10,5 million in 1986 for Rembrandt's "Girl wearing a Gold-Trimmed Cloak" and \$6 million in 1980 for Rubens' "Samson and Delilah".'<sup>128</sup> Clearly, this is the well-known art dealer and chemist we have seen before: Alfred Bader.

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<sup>127</sup> Vose Galleries of Boston, Robert C. Vose's Favorite Story; Travels of a Lady, <http://www.vosegalleries.com/history/index.cfm?HID=2>, consulted on 4 July 2007.

<sup>128</sup> Dresang, J. 31 January 1998. Local art dealer bids \$14,6 million for paintings. The Milwaukee Journal Sentinel. [http://findarticles.com/p/articles/mi\\_qn4196/is\\_19980131/ai\\_n10401602](http://findarticles.com/p/articles/mi_qn4196/is_19980131/ai_n10401602), consulted on 4 July 2007.



