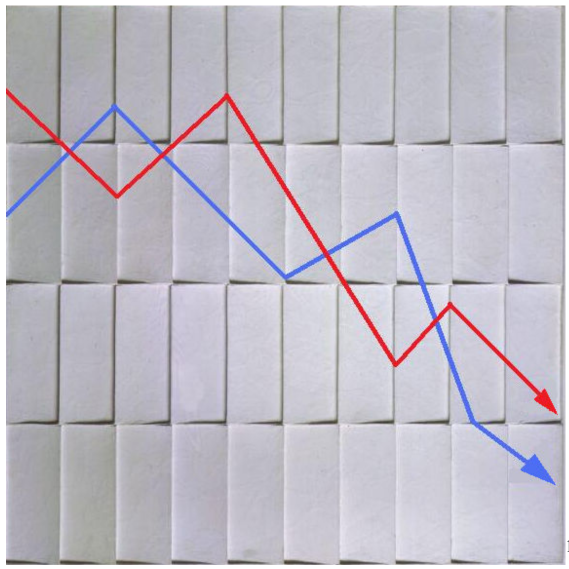
Erasmus University Rotterdam

Faculty of History and Arts

Master Programme Cultural Economics and Cultural Entrepreneurship

‘Is the Future of the Art Market at Stake? The Effects of the Financial Crisis On the Secondary Art Market in Amsterdam’

[1]

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[1] Work of art by Jan Schoonhoven, Title: R69-16, 1969 HGM
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Abstract

'The World of contemporary art is as complex as the art itself' (Davies, P. J. E. et al. 2007: 1105).

Collectors, galleries and auction houses all play their part. These key actors however change constantly making the art market as complex as Davies stated. The current economic crisis forced the actors to change. Regarding demand and supply of the art market most visible of these actors are the auction houses. This report focuses on the influence of the crisis on the auction houses. As representative examples this research will concentrate on auctions for Modern and Contemporary art at Christie's and Sotheby's Amsterdam.

The research starts with the existing literature. Examples like Italy in the 16th century, The Netherlands in the 17th century and Japan in the 20th century show that throughout history economic crises significantly influence the art market. The opposite also seems true as periods of exceptional artistic output in the past have been connected with positive economic trends. Many studies have compared the art market to the stock market resulting in numerous art market indices. Most of these indices focus on 'hammer price'. Two significant factors are mostly neglected: pre-sale estimates and the number of 'bought in' lots. Pre-sale estimates fluctuate directly with changes in the art market. 'Hammer prices' and pre-sale estimates are related but can be very different. Focussing on 'hammer price' therefore can at best give a partial and indirect interpretation of the actual situation. The number of 'bought in' lots is another important indicator of the state of the art market.

This research aims to prove the hypothesis that it is necessary to study and compare with each other the 'hammer prices', pre-sale estimates and 'bought in' rates to fully understand the effects of the crisis on the auction houses Christie's and Sotheby's Amsterdam. An effort was made to show that the proposed method makes the effects more clear than the traditional method focusing on a separate factor like 'hammer price'. In addition, it was expected to see the auction houses react to the increasing 'bought in' rates by trying to supply more top quality works. This would confirm that all factors need to be considered as they can work against each other.

Having taken multiple factors into account the effects of the crises on the auction houses became clear. During the past decade the 'hammer prices' in The Netherlands was already in decline[2]. Compared to this trend the recent drop was not that significant that it could be attributed to the crisis. In stead of looking at 'hammer prices' only, they were now compared with the pre-sale estimates. It became apparent that mainly in times of crisis the total 'hammer prices' drop below the total of lowest estimates as was seen during the recent crisis. The 'bought in' rates seem to be another good indicator of the state of the art market as steep inclines were mainly seen in turbulent times. As a result the supply of top quality works increased. Being low in numbers but high in price total 'hammer prices' stay artificially high disguising the effects of the crisis.

This study has shown that when asked for a full explanation of the state of the art market one can not rely on single factors only but multiple factors must be considered and compared.

[2] The explanation of this decline is outside the scope of this report.

Preface

In 2004 I decided to choose a study that could bring education and enthusiasm together. Now, five years later I know that it was the right choice.

During my study of Cultural Economics and Cultural Entrepreneurship and art history I developed special interest in the secondary art market for modern and contemporary art. As a 'cultural economist' I have been educated to look at the art world from an economic perspective. When the financial crisis seemed to affect the secondary art market a subject for my thesis presented itself.

To obtain the degree of Master in the Arts I have been investigating the consequences of the financial crisis on the secondary art market in Amsterdam. My research is based on a thorough study of existing literature, my practical experience in the art business and a number of interviews with influential figures in the art world. I have quantified my theory with data from a number of recognised sources.

As part of my research I wanted to be able to experience the art market. To be able to get this exposure I worked at Christie's Amsterdam for half a year. This was an unforgettable experience. The Post-War and Contemporary Art department of Christie's Amsterdam was an enlightening, warm and friendly environment to learn more about the art market. Everyone at Christie's Amsterdam reserved some time to explain the ins and outs of the secondary art market.

Furthermore I have interviewed a selection of significant art market researchers. Hereby I would like to thank Sarah Thornton, Willem Baars, Bert Bakker and Richard Bionda. I would like to confer a special thanks to James Goodwin for his help, enthusiasm and encouraging words. Finally I would like to thank Filip Vermeylen for his scientific and educational guidance and friendly support during the process of writing this thesis.

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1 Introduction

Between 2003 and 2008 the modern and contemporary art market inflated to an art market bubble. This bubble exhibited classic features of earlier bubbles (like the South Sea Bubble of 1720 or the tulip madness of the 1630's)[3]. Between 2006 and 2007 Contemporary art prices doubled. Contemporary art in new emerging countries did even better[4]. Modern and contemporary art became 'fashionable' to buy. Typical for a fashion is the speculative interest and the over-pricing that followed.

Rising prices encourage less experienced investors to enter the market, speculations become more diffuse and spread to other types of investments like art. Art is interpreted as a good investment since works of art are (commonly) unique portable and confidential[5] forms of wealth. In the last decade the boom in the art market was driven primarily by a global class of emerging new rich people. Modern and Contemporary art was collected for a number f reasons: as a status symbol (conspicuous consumption), as (solid) investment, since good old master works will not enter the market soon or simply for aesthetic pleasure. The collecting features of contemporary art stimulated extraordinary prices for art when the art market boomed.

In the 1980's the art market transformed the role of art dealers by providing them unprecedented control as market makers. Especially modern and contemporary art was fashionable. The demand, supply and the prices for modern and contemporary art increased. 'Asset-inflation' became visible in the financial markets and in the art market. Bakker (2004) describes this phenomenon as a result of a much higher increase of asset value than the normal inflation percentage. This happened in the art market in the late 1980's (Bakker, 2004: 56) and during 2003-2008. Investors increasingly see the significance of art as an asset. This goes on until the balloon bursts and 'asset-deflation' takes place.

In the 2003-2008 art market boom demand was stimulated by the interest of new wealthy economies and high prices in the art market. New collectors from all over the world, like for instance Brazil, Russia, India and China (the BRIC-countries) enter the art market. The new financial interest has been invested predominantly in modern and contemporary art. The art world became more globalized, modernized and commercialized. It is questionable whether these changes made the art world resistant to the financial crisis or merely able to survive it.

The following section will sketch the global art market trends between 1990 and 2009. Then the hypothesis on specific modifications in the Dutch art market will be presented. Figure 1 shows the

[3] For further information see '*A second tulip mania*' by Ben Lewis and Jonathan Ford December 2008.
[4] In China prices increased 983 percent between 2005 and 2006 and in Russia the prices rose 2,365 percent in five years (2000-2005) (while the stock market in Russia only increased by 300 percent).
[5] Buying art is a private and confidential activity. Dealers and auction houses preserve their supply and demand lists secretively.

global art price indices between 1990 and 2009 for different art market niches. Although the graph starts form the 1990s we can still see the postponed effect of Black Monday (the start of the 1987 crash) on the performance of prices in the art market. The time lag between the financial crash and the drop in the art price index can be explained by a stimulated demand. Mainly speculative Japanese investors interested in Modern and Impressionistic art, were responsible for this stimulation.

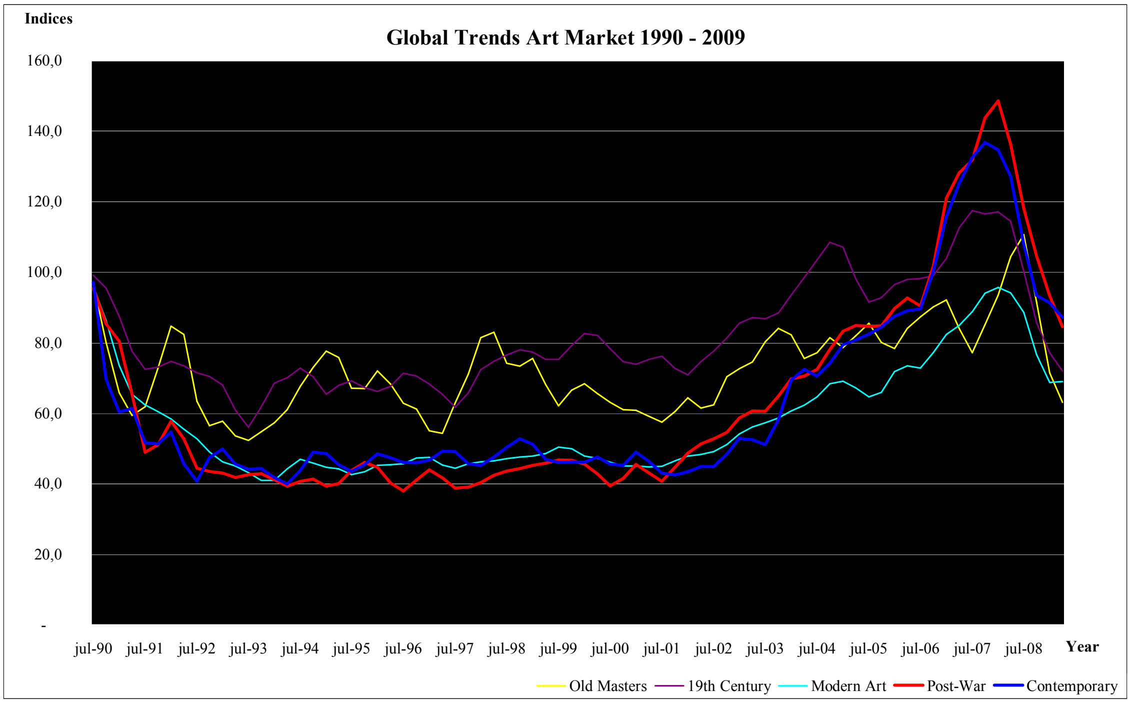


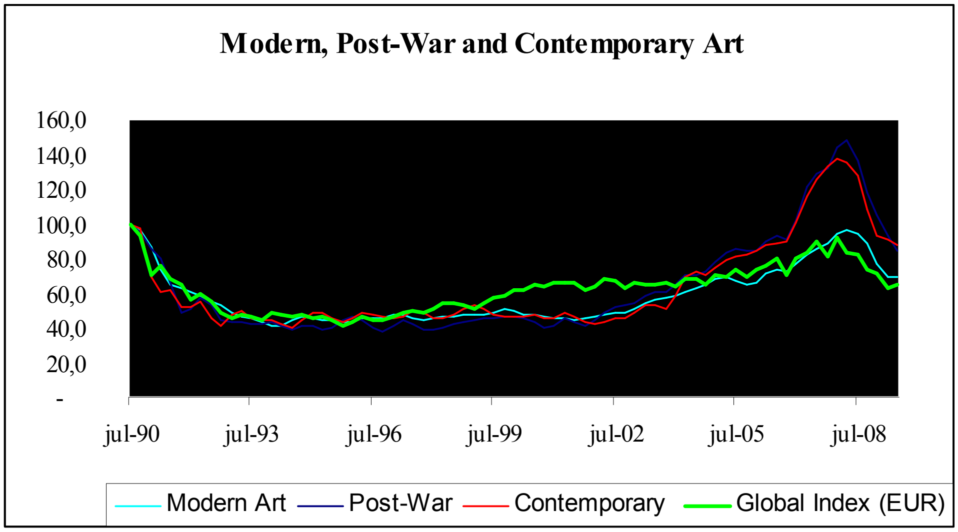
Figure 1.1: Global trends AGI

Source: AGI Artprice

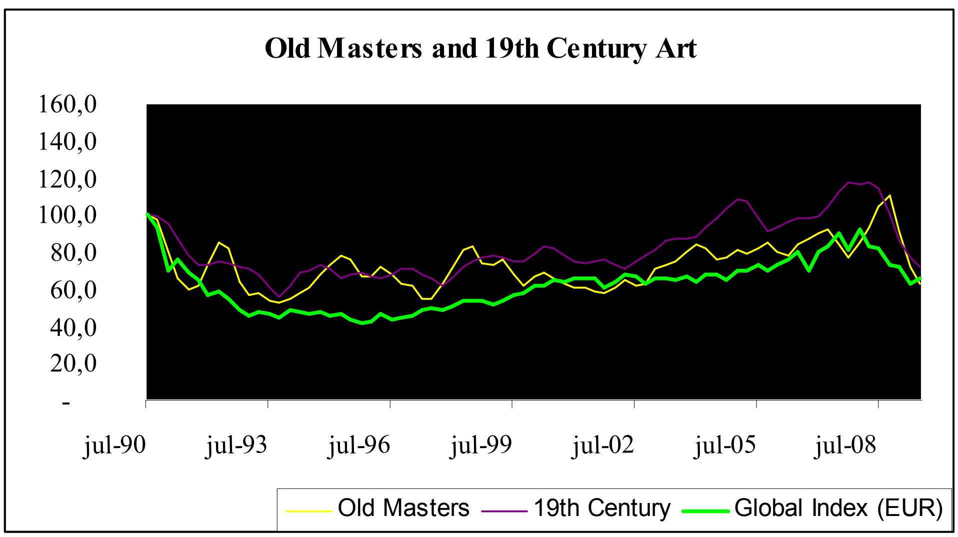
Japanese investors bought Modern, Post-War and Contemporary work of art with bank loans (art-backed loans). When the financial crisis of the 1980’s spread all over the world, Japan, although with a delay, had to bail out. As an affect the demand for modern art dropped, while supply still went up. The steep downward slope indicates the exit of Japanese investors. In 1999 and 2000 however the economy had mostly recovered from the impact of Black Monday, figure 2 shows the upward slope in the Euro Art Index. The financial world recuperated and as can be seen Modern, Post-war and Contemporary art follow the financial shifts upward. A delay can be seen of two to three years since investors needed to accumulate new confidence before investing in art.

In figure 1 and 2 the shift in art price indices in 2008, particularly for Post-War and Contemporary art, shows the burst of an art market bubble. The deterioration of the global economy and the collapse of the European and American stock markets in 2008 pulled the art market into a downward spiral (Art Market Trends 2008, 6). There are two niches reacting anti-cyclic to the global index: the old masters and nineteenth century art. People seem willing to invest in old masters when financial circumstances are uncertain. On this, Jetske Homan van der Heide[6] said; 'save investors invest in art by buying anti-cyclic[7].'

Figure 2 indicates the similarities of the decline and growth of the Post-War and Contemporary art indices after the 1990's. The exorbitant increase can be seen as an effect of 'asset-inflation' in the art investment market with art as an asset stimulated by the (new) financial wealth.



a.



b.

Figure 1.2a and b: Old master and 19th Century Art and the Global Euro Index versus Modern, Post-War and Contemporary Art and the Global Euro Index

Source: AGI Artprice.com

6 Senior Specialist and Senior Director Christie's Amsterdam

7 This is contra-dictionary to the outcomes of the research on the financial rates of returns on old masters (Mei & Moses, 2002).

Previous studies mainly express the demand and supply within the art market as increasing or decreasing modifications in indices. However the exact changes within the art market are still unclear. This study will look at the different modifications within the market structure of the secondary art market as an effect of the financial crisis. To be able to endure the crisis the Modern and Contemporary art market had to deal with renewed conditions. These new conditions start with shaping the structure of the art market to a new point of reference with a shift in demand, supply and (pre-sale estimated) prices.

Modifications in the art world are of all times. In the Middle Ages the decoration of houses and the architectural demand in Italy decreased as an affect of diminishing wealth in the upper classes. In the Netherlands, in the financial turbulent times in 1660's, the demand and supply for art changed in size, genre and detail. In the late 1980's the demand for impressionist art dropped dramatically when the Japanese investors left the market scene.[8] This thesis will study the period following the 2003-2008 art market boom. It starts by studying historical examples of financial downturns and its influences on the art world. Adaptations in the art world can be measured through adjustments of demand and supply with financial modifications. This thesis will examine the presence and adaptation of a new market structure in the secondary art market in the Netherlands. Also the effects of the financial downturn in 1980 and the effects of the current crisis on demand, supply and estimated prices within the secondary art market in The Netherlands will be studied.

1.1 Hypothesis

Whilst studying the consequences of the financial crisis on the art market it is essential to start with describing the specific characteristics of the art market. Former research will be taken into account but a new method for research will be introduced. The history of the art market and the effects of financial crises in general will be explored prior to making statements on expected consequences for the art market of the current financial crisis.

As a starting point of this thesis it is assumed that the current secondary art market of Christie's and Sotheby's Amsterdam will be influenced by the transformation of the (macro-) economic conditions. Secondly, it is assumed that the art market depends on the financial market. The financial market works as an engine, boosting or slowing down the performance on the art market.

To confirm the relation between the art market and the financial market multiple scientific researches were done. Within these cultural economic studies art is often handled as an asset. Numerous art market indices have been designed (for instance by Goetzmann, 1993; Stein, 1973, 1977; Bryan, 1985; Singer 1989 and 1990; Chanel et al. 1990; Frey and Pommerehne 1989; Mei and

[8] Extended information and details on historical examples are described in appendix A.

Mosses 2002). The indices are used as indicators of art market performance. Art market indices show a time lag with stock and bond indices. This thesis aims to overcome the time lag impediment by approaching the issue from a different point of view. This will study will focus on the influence of the financial crisis on the art market while looking at multiple secondary art market characteristics. The research looks at reorganisations within the supply and demand at auction houses. This is seen as characteristic for a relation between the art market and the financial market. The changes to the internal auction house structure was studied to show the correlation between the positive or negative effects of an upset in the financial world. It is assumed that the research based on secondary art market characteristics indicates positive or negative modifications within the art market without a time lag. As hypothesis the research prospects:

- that it is necessary to study and compare with each other the 'hammer prices', pre-sale estimates and 'bought in' rates to fully understand the effects of the crisis on the auction houses Christie's and Sotheby's Amsterdam.
- In addition, it is expected to see the auction houses react to the increasing 'bought in' rates by trying to supply more top quality works. This would confirm that all factors need to be considered as they can work against each other.

Chapter two summarises the important literature on research in the secondary art market. The third chapter contains an introduction into the secondary art market. Although the art market is like other markets influenced by demand and supply, several other factors are unfamiliar to traditional (financial) markets. The art world has unique characteristics (art markets' essentials) that have to be taken into account like heterogeneity, irregularity of trade and high various costs. To be able to investigate the influence of the financial crisis on the art market it is essential to understand the differences and similarities between the financial market and the art market. That is why the fourth chapter will elaborate on the current state of the economy and its expected effects on the art market. The fifth chapter continues with a quantitatively study on the state of the secondary art market for modern and contemporary art in Amsterdam. The last chapters (6 and 7) conclude the study by describing the results of both the qualitative and quantitative study.

2 Literature Review

2.1 Introduction

The influence of common financial wealth on the art market has been the subject of many analyses. The way fine art has been consumed and produced in wealthy and depressing periods indicates a relation between the art market and the financial market. Studies of art market indices and art investments show the level of correlation between the separate worlds. Specific periods of financial up and downturns have been investigated, for instance the art market crash in the late 1980's. The different studies give an insight in the influence of financial wealth on the performance of the art market.

The study by Baumol (1986) is the first commonly known research on the rate of return of art and price movements in the art market. He concludes that art prices behave randomly. This is an unsatisfactory outcome for a cultural economist. His goal is to be able to indicate art price movements and to understand these movements. Academics try to get a grip on art price behaviour and understand the art market in a broader sense. In the late 1980's many studies followed Baumol..

The study will lead to a new method to confirm effects of financial crises on the art market performance. This study concentrates on the influence of the changes within the internal structure of auction houses during a financial downturn.

2.2 Empirical Findings

Although studies on the art market are now relatively well established, the understanding of the art market is still in its infancy (Ginsburgh, 2000). The question remains if culture is just a new issue to add to existing economic literature. Should the economist take for granted that prices are the main determinants of demand? Or should he or she understand the anomalies influencing the heterogeneous art markets, define and measure them as variables in their studies?

It is difficult to analyse the art market by only looking at supply and demand. Work of art are heterogeneous and unique. The high prices reached in the art market have led cultural economists to study (a) what can be said about the characteristics that determine values, and (b) whether the returns obtained on work of art outperform those of financial markets (Ginsburg, 2000: 6-7). Definitive and satisfactory answers on these issues have not been found yet. The media tends to nourish the believe that art is a good investment, especially in times of booming art prices. However, academic studies provide little support for art being a superior investment (especially on the long run). The rates of return on art seem modest and encounter a great risk. However some studies have an optimistic approach. Although results differ, depending on methodology, time period and the art portfolio considered, general conclusions can be drawn. The studies that focus on periods similar to our time are comparable to the current bubble and burst.

The development of art prices and the rates of return in the art market have been systematically investigated since the 1960's (Rush, 1961; Reitlinger, 1961, 1963, 1970; Wagenführ, 1965; Anderson, 1974; Stein, 1977 and Baumol, 1986). Research has been often based on data drawn for Reitlinger (1961, 1963, and 1970). Anderson (1974)[9] shows substantial fluctuations in the rates of returns across different time periods. Anderson observes that particular time periods yield returns far above the long run average and similar to those offered by common stocks. However, generally returns on art in the long run appear to be only half of those on common stocks. Involving the risk and the low liquidity of art in the long run paintings do not seem to be an attractive financial investment.

The paper by Baumol (1986) stimulated further research in the returns on work of art and a revival of interest in art as an investment (Worthington, et al., 2004:258; Oleck and Dunkin, 1999; Peers and Jeffrey, 1999). Baumol's study is commonly known mainly because of the timing of the publication. The art market boom was at its top in the late eighties, when Baumol's study was published. Baumol concludes that the rate of return on art in the long run is lower than that on bonds (British government securities). This would mean that art is not a good financial investment[10].

Frey and Pommerehne (1988, 1989a) extend the period studied to 1987[11] and try to overcome limitations of previous works. Frey and Pommerehne look at different sub periods like 1635-1949 and 1950-1987. The separate periods have a slight difference in their annual rate of return. This was attributed to a substantial increase in inflation after the 1950's rather than a better financial performance of art. In line with Baumol's (1986) findings, Frey and Pommerehne (1988, 1989a) conclude that large gains can only be realized with short term (20-39 years) investments. Longer investment horizons bring lower returns. The random behaviour of art prices (Baumol, 1986) however is not entirely confirmed. Frey and Pommerehne (1988, 1989a) claim that under certain circumstances, superior knowledge could allow an investor to predict art price movements and enhance the returns. Both researchers agree however that changes of taste and fashion may undermine the predictability of art prices.

In 1993 Goetzmann[12] claims a positive rate of return in art's possible even in the long run. He identifies long-term price trends on the art market with three bull- and bear markets in the period

[9] Anderson (1974) constructs a hedonic price index for the period 1780-1970, and calculates the annual rate of return. Additionally he applies a repeat-sales regression on two different periods and on different submarkets. By the disaggregating of the data Anderson is able to show fluctuations between rates of return across different artistic schools and time periods.

[10] Nevertheless Baumol (1986) attributes, similar to Anderson (1974) and Stein (1977), positive returns of art purchase to the aesthetic profits provided by owning a work of art.

[11] Frey and Pommerehne (1988, 1989a) use the Reitlinger data and additional data on the period till 1987. They apply a double-sale approach to calculate the annual rate of return for work of art that exceed a holding period of twenty years. In their rate of return they also include transaction costs (0.4 % annually) to overcome some limitations of earlier studies.

[12] Goetzmann combines Reitlinger data with information from Mayer International Auction Records. With a repeat-sales regression he constructs an art price index.

studied. Goetzmann shows that the art market flourishes and declines in a cyclical manner similar to other financial markets. For instance, he estimates the annual nominal rate of return to amount to 3.2% for the entire period. This is fairly higher than the rate of return on British stocks (1.5%), but lower than the British consol bonds (4.3%). For the short periods 1850-1986 and 1900-1986 the annual nominal rate of return on art appears to outperform both British equities and consol bonds. However Goetzmann still only considers art in interesting financial investment for brave investors, because he recognizes the shortcomings of art investment and the high volatility of art prices.

Another research done by Buelens and Ginsburgh in 1993 accept Baumol's (1986) negative rates of return but conclude that there are opportunities for higher rates of return on art. Buelens and Ginsburgh, together with Frey and Pommerehne (1988 and 1989a) and Goetzmann (1993), observe that rates of return vary strongly across different sub markets and sub periods. Positive rates of return are possible. Similar to Anderson (1974) the authors argue that some schools (like Impressionist) work of art and some periods (1950-1961) yield above average returns. The high positive rates of return are explained by slow changes of taste within certain periods[13]. As referred to by Baumol (1986) the changes in taste and fashion cause random behaviour of art prices making it difficult to predict prices. Buelens and Ginsburgh state that it takes a long time before those shifts actually take place and that the holding period might overcome this random behaviour. Fase (1996) designs a composite price index based on the Sotheby's Art Index. He finds for the periods 1972-1992 and 1982-1992 a general lower return for paintings than other forms of investment. He finds a considerable higher rate of return for paintings in the period 1946-1966[14].

Landes (2000) concludes after his study that skilful collectors can beat the stock market. The high rates of return on the Ganz-collection are an example. Interesting is his conclusion that art yields financial and psychological returns[15].

Mei and Moses (2002a) designed a general art price index as well as 4 disaggregated indices[16]. In their study art yields higher returns than fixed-income securities over the whole period (1875-1999). The outcome of the research seems to contradict with most previous findings in which art in the long run underperforms alternative forms of investment. Mei and Moses also calculated rates of returns on artworks for the period 1900-1999. Goetzmann studied a similar period. Goetzmann (1993) finds

[13] Buelens and Ginsburg (1993) exclude the turmoil period between 1914 and 1949, and show a rate of return of 2.5%, which is equal to the returns on bonds. This indicates art as an attractive investment even if aesthetic returns are ignored.
[14] The estimated annual nominal rates of return amount of 10.6% and 8.6 %, this is in general less than on other forms of investment (.i.e. 11.2% and 16% for U.K bonds, 14.8% and 19.2% for stocks, 12.9% and 0.5% for gold and, 11.8% and 8.2% for real estate). Contrary the period 1946-1966 a considerable higher nominal rate of 11%, relative to stocks and gold (6.7% and 1.8%).
[15] The Psychological returns of art and the contradicting financial returns will be further explained in appendix E page 121-125.
[16] Mei and Moses (2002a) construct a data set that records repeat sales of paintings in the period 1875-1999 with a number of 4,896 repeated sale observations.

returns on art that are higher than stocks and bonds, whereas in the study by Mei and Moses artworks only outperform bonds.

Hiraki et al. (2005) investigate the influence of the growing 'wealth' in Japan in the late 1980's and the international art prices. The study indicates that an increase (and decrease) of Japanese land prices caused an increase (and decrease) of Japanese stock prices and increased interest in international art. Hiraki et al. interpret the accelerated appreciation of land prices ('wealth effect') in Japan as stimulation for demand for international art and Japanese stocks especially in the late 1980's[17].

Studies comparing the art, stock and bond markets over long periods of time repeatedly hardly gives optimistic views on the rates of return of art as an investment (Singer, 1989, 1990; Frey and Pommerehne 1989 a, b). However, art is sometimes considered to be a good investment, especially in times of great wealth[18]. Frey and Pommerehne (1989a) attribute this to the 'representation bias' of our memory. The high auction records published will be remembered whereas the human mind tends to neglect less striking sales.

Some studies indicate the positive relationship between art and the stock market over short time periods (Bryan, 1985; Stein, 1973, 1977; Chanel et al., 1990, Singer, 1990; Goetzmann, 1993). The extraordinary gains and losses made during short periods, particularly in times of booming markets are furthermore by Baumol (1986), Frey and Pommerehne (1989a), and Hiraki et al. (2005). Two periods in particular, the 1950s - 1960s and the end of the 1980's have seen returns on art investment which rivalled financial assets (For additional information on the 1980's period see appendix A 10.1.3). Returns of art in these periods were high enough to compensate the high volatility of art prices and the high risks. For these periods researchers observe low correlations between returns on art and other assets.

The financial analysis of investment opportunities in the art market has several drivers. Firstly the interest is triggered by the growing number of art objects selling at very high prices. This continually draws media attention to the art market (Renneboog and Spaenjers, 2009:2). Secondly, the interest is triggered by the increased availability of accurate data on the art market enabling financial analyses. Thirdly the interest is driven by a growing number of 'high net worth individuals' (Renneboog and Spaenjers, 2009:2). Part of the investment portfolios of these wealthy individuals is often invested alternatively like in art (For further details on the influence of new wealthy individuals, see Chapter 3.6 Demand and New Economies).

[17] The 'wealth effect' is stimulated by the Japanese lending practice between banks and borrowers which is based on the collateral value of the land (which had never declined until the point of the bubble burst in the late 1980s, years after the burst in other countries). The wealth effects is an economic term used to refer to an increase in spending that accompanies an increase in perceived wealth (Jelvev, 2008)

[18] This explains the increase of art investment businesses in financial wealthy times and booming art markets.

2.3 Historical Relationship between Economic Downturns and the Art World

Especially the art market burst after the booming 1980's increased the interest for studying the art market. Characteristics influencing the art market are taste, fashion, politics, financial situation, artists, art types, art sales and art prices (Goodman, 2008: 3). Sarah Thornton states that people developed appetites for more culturally complex goods (Thornton, 2008:xv). This will influence the interest in the art market. Buyers and suppliers are separately influencing the art market.

Goetzmann (1993) states that there is evidence for a strong relationship between the demand for art and aggregate financial wealth over the long term. He claims that the demand for art increases with the wealth of art collectors (1993: 1370). This can be seen as an indication of a possible relation between the financial world and the (investments in the) art world. Burnham (1975) referred to the relationship between art and money as: 'The ambition and materialistic greed people have that drives them 'to subordinate great art to their quest for fame and money'.

Before the cultural economists art historians already studied certain shifts within the art market related to changes of wealth. A relationship was found between periods of exceptional artistic output and economic trends. The '*Lopez Thesis'* for instance describes this relationship by looking at the economic expansion in the Middle Ages and the influences the revolution had on the financial and the artistic situation in Italy. Israel (1997) refers to the '*Lopez Thesis'* originally published in 1953. R.S. Lopez suggested that the 'increased value of humanistic culture, including art, as an economic investment during the Italian Renaissance, coincided with and, to an extent, was a response to, a long economic depression.' (1997:449). A more recent example of a connection between finance and culture can be found in the financial boom and crisis in Japan in the late 1980's and its influences on the international art market for impressionistic art.

Several characteristics influence an increasing (or decreasing) demand for art. A booming economy followed by a financial downturn and the related effects on the art market will be the focus of this study. To understand the influence of the financial crisis in October 2008 on the artistic world the historical developments of the market for artistic goods was investigated. The shifts during large economic changes will be highlighted in Appendix A. The historic examples will be the Middle Ages and Renaissance Italy, the Dutch recession in 1621-1645, and the financial crisis of 1987 with the effects Japanese investors had until the early 1990's.

Historians did numerous studies to find sufficient relationships between causes and effects of synchronized economic and cultural progress in history. They described economic and cultural developments as parallel and interlocked steps. Historians expect that an economic peak creates an intellectual and cultural peak as well. A cultural peak was visible as an effect of the growing wealth between 2003 and 2007 on the worldwide art market. The last few years this was clearly seen in the United States. People started buying art as an investment all over the world. Lopez describes in the 'Lopez thesis' a similar phenomenon. Financial wealth was invested in cultural wealth stimulating a cultural peak. This is similar to the wealthy people in the Renaissance who invested in beautiful architectural houses, decorated with the beautiful ceiling paintings.

The interest in arts and culture revitalized first in Italy in the transition period between the Middle Ages and the Renaissance. This revival is mainly attributed to a shift in several points of view; religious, economical and political. Goldthwaite (1993) researched the demand side of the art market for the period 1300 and 1600. He investigates what specifically influenced the demand for Renaissance art in Italy. Art consumption in Italy was influenced by the great amount of existing financial means. The art consumption between 1300 and 1600 in Italy is explained in more detail in the appendix A 9.1.1 '*The Effects of the European Economic Expansion in 1300-1600 Italy'*.

In the Netherlands we can refer to a shift within the supply and demand for art in 1621-1645. The Netherlands enduring the effects of a recession. Artists started to produce art on demand less complicated, colourful and time consuming. The shift in the art market in the Netherlands is further discussed in appendix A 9.1.2 '*The Effects of the Period of Crisis and Restructuration in the 1621-1645 Art Market in the Netherlands'*.

The Japanese example shows a different shift. In Italy and the Netherlands the whole art market and its supply and demand was affected. In Japan the art market suffered especially in the impressionistic art genre. More details are however described in appendix A 9.1.3 *'The Effect of the Japanese Financial Crisis in the late 1980's on the Art Market'*.

2.4 Research on the Contemporary Art Market

Before periods of depression in Italy, the Netherlands and Japan it can be seen that the art markets experience a booming period (Chapter 2.3). The art market also experienced an extreme boom period between 2003 and October 2008. Prices, in particular for contemporary art, seem artificially high. Sotheby's and Christie's obtain free publicity caused by the record prices for auctioned works. The bought in rate (the amount of works not being sold at auction, later mentioned as BI's) diminishes, the amount of lots[19] increases and the variety of buyers increases. All these characteristics indicate a booming period.

To indicate art market trends in certain periods, art market indices are widely used. Indices provide an attempt to measure the art market's volatility as well as its correlation with other financial indices. According to Ginsburgh, Mei and Moses (2005) , indices allow examination of social and economic factors that affect art market price movements and provide a simple way of appraising the value of work of art. The art market indices have been indicating delays in art market movements compared to indices on financial movements. Constructing an art market index based on the shifts in the art market resulting from the current financial crisis is in that sense not possible. The art index delay will be

[19] 'Lot' is the description of a work of art in an auction. When an auction contains 300 lots, 300 works of art are put up for auction.

bypassed by looking at the shifts of the supplier in the art market. The primary art market is not transparent and information of supply is not publicly available. The art supplied at auction in the secondary art market however is published. Auction houses print pre-sale catalogues, provide information on their websites and publish through online-databases. The information contains details; like for instance the size of the work of art, date, description and estimates. Within this study the estimate prices for works of art, the supply of high-end quality works and the 'bought in' range (representing demand) will be used to indicate the direct effect of the financial crisis on the art market structure. Although the results only refer to the secondary art market, a broad interpretation of the effects on the art market as a whole can be done[20]. As many art dealers purchase works at auctions, auction results serve as an indication for art prices on the secondary and primary market (Candela and Sorcu, 2001).

Auction estimates are based on what the in-house experts believe a work of art might sell for. The expected 'hammer price' (between the low and high estimate) is used as a reference point for art valuation and drives investment decisions (Bruno and Nocera, 2008). Ashenfelter (1989, 2002) claims that the prices estimated by experts can be considered accurate and good predictors of 'hammer prices'. However not all information on unique work of art are always taken into account. Czujack and Martin (2004) show no significant difference between Christie's and Sotheby's in predicting prices. In this study pre-sale estimates are used as predictors of art market movements forced by financial downturns. Together with the supply of high end quality works and the 'bought in' rates they will be used as predictors of art market shifts. By looking into the internal secondary art market features as predictors of art market structure a new method to analyse the art market is introduced.

[20] Galleries will change their structure as an effect of shifting demand as well. The specific shifts can not be attributed, though it is expected that they will similarly have less exhibitions, lower number of offered artworks and higher unsold rates.

2.5 Limitations and Shortcomings within Art Market Research

2.5.1 The Division of the Art Market

The structure of the art market is not transparent. Especially about the primary art market little is know. Velthuis and Rengers (2001, 2005 and 2007) are pioneers in the primary art market research. These studies encourage further interest in the primary art market and its price setting mechanism.

The secondary art market has been studied since the 1960's and research took a flight after Baumol (1986) in the early years of the art market boom in the late 1980's. Nevertheless secondary art market studies still contain limitations and shortcomings which makes it difficult to compare with each other. Research on the secondary art market relies on auction data. This means that the studies draw conclusions on only part of all sales performed on the art market (Sagot-Duvauroux, 2003). Due to its nature contemporary art sales are expected to take primarily place in the primary art market. The structure changed during the last boom and the time-lag to the secondary art market changed from 5 years to less than half a year. This shift was caused by the increased demand for contemporary art.

2.5.2 Study Criteria

One of the overall shortcomings of studies on the secondary art market is that the individual studies use diverse and partial information. Different methodologies, time periods, art categories, investment portfolios considered are used. The auction data are biased by subjectively selected sample criteria, like 'important' art categories, reputation of artists or influencing periods for the art market. As a consequence the results of studies may not be representative for the art market as a whole.

No consistent approach towards measuring returns on art investment has been developed. Indices constructed use different methodologies, concentrate on different sub-markets and diverse time periods. These disparities make generalizations or comparability of results difficult. Ashenfelter and Graddy (2003) stated that the problem of using average prices (index prices) is that price swells may be intensified during booms as 'better' paintings may come up for sale.

2.5.3 Transaction and other Costs

Transaction costs subsist in every market, though they need further explanation in the art market. The art market is characterised by its high transaction costs. The transaction costs in the art market are constructed by the seller's commission and the buyer's premium. The height of the seller's commission and buyer's premium in the transaction costs vary with auction houses, countries and time period. It also changes with the estimated value for an work of art and the identity of the seller. These alterations influence the use of transaction costs in academic studies and thwart the outcome of research in the art market[21]. Frey and Pommerehne (1989a), Pesando (1993), Pesando and Shum (2007), and Landes (2000) take them into account but most studies do not. Instead they work with the 'hammer price'[22].

Further specific costs related to the art market are greater then those encountered on traditional financial markets; the insurance, maintenance and restoration costs for works of art (Frey, 1997). The inability to correctly identify the extent for earlier periods forces researchers to leave them out of their calculations. The additional costs in the art market are believed to less alter results on returns on the long run (since they can be spread over the long holding period) than on the short run (e.g. Frey and Pommerehne, 1989a).

The financial benefits or losses concerning taxes play an important role in the art market as well (Frey, 1995: 214). Art purchases are private; the value they contain might not be taken into account when possessions are measured to indicate the level of tax that has to be paid. Positive tax regulations stimulated art purchases through all times.

2.5.4 Art Historical Research

Art historical studies are mainly qualitative researches. They are mostly biased by personal preferences drawn in the choice of sample period, art category and artists involved. Quantitative studies are less subjective. The social historical studies are less relevant for comparison to the quantitative changes in this study. However, they are included to illustrate the (cyclical) appearance of the relation between financial wealth and poverty to cultural and artistic booms and collapse.

[21] Renneboog and Spaenjers (2009; 28) explain, that 'the high buyer's premiums and seller's commission at auctions would reduce the reported art returns much more than transaction costs would alter the returns on financial investments.'
[22] The 'hammer price' is the price a work of art obtains during the auction. This is the price mentioned by the auctioneer while closing the bidding. The 'hammer price' does not contain the seller's commission, the 'buyer's premium' and the 'Droit de Suite'. Further information on these matters will be given in chapter 3 The Art Market.

2.6 Conclusion

Previous studies can still not fully overcome certain limitations and shortcomings on art market research. Conclusions still have to be drawn with caution. The historical insight in financial downturns and the reactions of the art world sets the scene. This is mainly used as a framework for comparison of the situation in the art market rather than as a ground for conclusions.

This research will describe changes in the art market from a rather different perspective. Similar limitations and shortcoming remain, but nevertheless a broad understanding of the art market can be gained.

The crisis might influence niches of the art market in different ways. Investments in art will be influenced. The area of investment will probably shift from the risky and hyped Post-war and Contemporary art to the settled and proven value of old master pieces. This study will focus on the special effects of the financial crisis that started in 2007 and became visible in October 2008. This study shows the visible shifts at Christie's and Sotheby's Amsterdam (Chapter 9). The influence of specific buyers and bidder's behaviour on the art market was left for future research[23]. Before researching the secondary art market in Amsterdam, the structure of the art market will be explained in the next chapter.

[23] The shift at Christie's and Sotheby's (supply-side) can be indicated with data publicly and widely available on the internet, whereas the information on the shift for buyer's (demand-side) is secretive. Research at these changes should be more qualitative and focus on interviews with the actors involved.

3 The Art Market

3.1 Introduction

The art market can be characterized by a number of specific factors. These factors relate to characteristics of work of art and its market (3.1.1), the structure of the art market (3.2), supply art (3.3), the demand for art (3.4 and 3.5) and the value of art in an art price index (3.6). The peaking global economy of 2003 till 2008 caused a consistent demand, boosting the value of art ('wealth effect'). The art market was 'on the verge of the greatest increase in value since the Renaissance' (Gordon, 2002). This art market boom was visible in the primary, secondary and dealers market. The changes in the supply of art show in the increase of worldwide biennales, an exploding number of 'important' art fairs, galleries crossing borders, auction houses owning galleries (including some overlap between the primary and secondary art market), auction houses establishing sale rooms in new emerging countries and auctions reaching high prices. These changes in the art market can be seen in the shift of demand to a new market structure. Buyers (established and new) start investing in art funds. These seem to out perform stocks and bonds in the short term. Buyers show a willingness to pay high prices for works of art.

This chapter will start by clarifying the art market specific characteristics. Then the structure of the whole art market will be explained. The chapter concludes with an explanation of supply and demand in the secondary art market.

3.1.1 Characteristics of the Art Market

The art market distinguishes itself by behavioural anomalies (Frey, 1995: 212). These anomalies are larger and wider spread in the art market than in traditional financial markets. The art market has to cope with challenges like the uniqueness of work of art, the irregularity of art trades and with special transaction costs.

3.1.1.1 Heterogeneity of Art

It is commonly agreed that art is heterogeneous. This makes pricing and predicting prices difficult. Every work of art is different in several ways. For instance the artist, theme, quality, style and aesthetic value for the owner differ. All different aspects influence the position of an artwork in the art market. Next to the financial value, art an aesthetic value for the owner influencing the actual value of the work of art for that owner.

The heterogeneity of the art market makes it difficult to design of reliable art market indices (see paragraph 3.6 *The Art Market Index*). The heterogeneity of the art market forces the researcher to focus on the prices of individual works of art and to compare them to the prices paid in the past[24]. This method was explained by Candela and Sorcu (1997). They designed an index for resale prices for work of art. Candela and Sorcu explain the rate of return of investments in art with their index.

More homogeneous groups of art can be created by looking at work of art of certain styles, periods or artists (Knebel, 2007). The trouble with this neutralization is that it is based on assumptions rather than scientifically based. Heterogeneity in art objects can also be found between works of the same artist, style or school. This explains why investing in art is normally done by buying a collection of works, rather than individual, by a certain artist or school.

The heterogeneity however can be seen as a positive characteristic if investors are interested in diversifying their portfolios with art as the alternative investment. Diversified portfolios spread the financial risk of an investor. Spreading one's risk in (financial) investments is part of modern portfolio theory. Martin Fase indirectly refers to this theory in his book *Beleggen in schilderkunst* (2001). Fase describes the investment rule of the Rothschild family, who invested in stocks, real-estate and art to spread their risks of investment. Art as an Investment will be further explained in Appendix A *Art as an Investment*. The modern portfolio theory is the solution for art investors. They consciously seek the heterogeneity of the art market. Because works of art vary in quality and demand changes due to trends the need of portfolio diversification even in a portfolio solely investing in art is wise (Rush, 1961: 227).

3.1.1.2 Irregular Trade in Art

Besides that predicting the performance of art as an asset seems impossible because of the heterogeneous characteristics of art, it is an illiquid commodity and reacts inelasticly. Art is purchased predominantly for the long-term. Art trades did not occur regularly. The length of the holding period of art as an investment is crucial for its return. In reaction to the art market boom with its rapid rising prices, the average holding period became shorter. Art was traded more frequently. Investors in the booming art market were often aware of the 'financial' value of art. They were less interested in the intrinsic value and quality of the objects invested in. As a result the work of art changed owners after short periods of time. Timing became crucial and high returns could be gained. It can be said that a booming art market tends to making art trading more regular.

If art is indeed an illiquid good it should be able to compare it to another illiquid asset. But it is difficult to find a proxy asset for art (Robertson, 2005: 231). The art market (in particular the primary and dealer market) is an inefficient and non-transparent market. This makes it an obscure market to invest in. Despite this and the fluctuating prices, arbitrage in the art world is still seen as a common and lucrative activity (Robertson, 2005: 243) (For details see appendix A *Art as an Investment*).

[24] Indices based on repeated sales regression. However the quality of the work might have changed over time.

3.1.1.3 Transaction and other Costs

Characteristic for the art market are the high and inconsistent transaction costs. In the primary art market the transaction cost can be defined as costs that have to be made to obtain information on artists and artworks. The transaction costs in the secondary art market are consist of the seller's commission and the buyer's premium. The seller's commission and buyer's premium vary with auction houses, countries, and time. In addition, costs change with the estimated value for an work of art and with the identity of the seller.

The transaction costs are different from those in financial markets in height and build up. In the art market costs for insurance, conservation, restoration and transportation for works of art surpass costs for objects purchased in traditional markets.

3.1.1.4 Dependence problems

Work of art are affected by political and administrative interventions; these interventions hinder successful arbitrage (Frey, 1995: 213). The European Union did not too much for the international trade in art. The 'unidroit convention' signed by many countries restricts the international trade of art by making art trading more risky. France initiated another relevant change in art market policy called the 'droit de suite' (Frey, 1997). 'Droit de suite' is a paid royalty to an artist or the artist's heirs each time a work is re-sold during the artist's life and during the 70 years following the artist's death[25].

It would be interesting to measure the specific effects of the above mentioned policies and their affect on the art market. This is unfortunately outside the scope of this report.

[25] 'Droit de Suite' is obligatory for art trading in Europe, not (yet) in the United States.

3.2 The Structure of the Art Market

The structure of the art market is divided in two separate markets; the primary and the secondary art market. In the primary market work of art are offered for sale for the first time. In the secondary art market works of art are offered for sale a 'second' time, they are resold. Dealers operate as independent advisers and traders on both markets. Statistically 95 % of all art purchases take place in the primary market. Of these only 5 % will eventually appear at auctions. Although the secondary art market only covers a small percentage of the art market's transactions, the importance of the secondary art market is significant. The quality of work of art traded in the secondary art market is known to be high.[26] A large number of work of art are labelled as 'blue chip[27] securities' (Robertson, 2005: 24). This means that these work of art are of high quality and have a high potential as an investment vehicle. This paragraph will expand the constitution of the art market as a whole.

3.2.1 The Primary Art Market

The primary art market offers work of art coming directly from the artist's studio or exhibition space. Galleries facilitate the majority of the deals within the art market. Galleries act in the primary art market often trading work of preferred of artists to their clientele. For the work of art this is the first time that they enter a market. The price of such a work of art then has to be set for the first time. In the last decade mechanisms for price setting of works of art in the primary art market have been studied continuously. Velthuis (2003) developed a pricing script to determine the economic value of contemporary art in the primary art market in Amsterdam and New York. The script consists of a set of art pricing rules. These rules are used as a cognitive manual for art dealers.

Table 1: Pricing Script Velthuis (2003)

Event	***Pricing Rule***
New Artist	Set low and compare to similar work
Artist with Price History	a. Adopt and extrapolate
	b. Size, medium, reputation
Price increases	a. Reputation-based
	b. Sales-Based
	c. Time-based
Price decreases	Avoid

Source: Velthuis (2003)

Purchasing art in the primary art market can time-consuming. In the primary art market the price is fixed. A consumer might be willing to pay more, but this does not implicate the work of art is

[26] The secondary art market is often seen as a representation of the high-end of the art market.
[27] A 'blue chip' stock is a stock that sells at a high price because of public confidence in the long record of steady earnings of that particular stock. In the art market this means that exchanged works of 'blue-chip artists' have a steady high and growing monetary value.

his or hers. Galleries work with particular collectors to whom they then provide special privileges. This certainly is the case in a booming art market. Galleries can then steer the market, because demand outperforms supply.

Prices at galleries do not always tally with those in auction rooms. Galleries hesitate to lower prices during a downturn in the art market. The resistance to lowering the prices results in a lower volatility of prices at galleries compared to prices at auctions. In a booming market secondary art prices are stimulated by the high demand. Buyers are willing to pay high prices.. In such a market galleries limit an increase of prices by stretching quality. In times of crisis auction prices usually drop. Galleries will then put higher-quality work of art on the market (Ashenfelter, 2003)[28]. It is hard to compare prices obtained for works of art in the primary art market to prices fetched at auction, where price is based directly on demand and supply. Galleries restrict rather than enhance the liquidity of works of art. They even construct boundaries to prevent free purchasing accessibility. Galleries seek for stability in their prices. The resistance to changing prices and preference for price stability makes the primary market react different from a market governed solely by demand and supply.

The number of actors in the primary art market ten to rise rapidly during an art market boom. Galleries have been expanding their trade preceding the art market boom from national orientated trading inside their own gallery to international orientated trading at art fairs[29]. The primary suppliers have anticipated the globalization of the art world by positioning themselves internationally. The art fairs are important places to meet other galleries and (new) collectors. The increase in art fairs world wide seen during 2003 and 2008 illustrates the economising of the art world and the primary art market in particular. Wealthy buyers flew to fairs to visit the congregated galleries, instead of travelling to each gallery separately. Galleries focus on advising on art and their dealership activities. They sometimes even stimulate re-sales through galleries[30]. The more reluctant and observing actors in the booming art market were the dealers and galleries who already experienced a bull market with the following bear market in the 1980's and 1990's. New galleries and investors tended to believe that the art market had significantly improved since the last crash. These new art market actors believed that the 'new' art market was able to make constantly compensate, without losing market strength in a financial downturn.

The primary art market is opaque; the dimensions of the primary art market are indefinable, the information on transactions is secretive and the exact constitution of the market is non- transparent.

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[28] The secondary art market will also focus on quality works, nevertheless prices will in the overall secondary art market decrease more than in the primary art market.

[29] The two major auction houses, Christie's and Sotheby's, have been anticipating on the expending boundaries of galleries and their market places by operating on the primary art market through their own galleries, namely for Christie's '*The Haunch of Venison'* and for Sotheby's '*Noortman Master Paintings'*. Both auction houses take-part at several fairs; for example 'The Pan' in Amsterdam and the 'TEFAF' in Maastricht.

[30] The primary and secondary art market has increasing overlaps. Auction houses posses galleries, galleries provide works of art at auction and galleries resell art within their galleries.

3.2.2 The Secondary Art Market

Within the secondary art market art is traded for a second time[31]. In the secondary market art is put up for auction. An art auction is a process of buying or selling art by offering the art up for bid and selling the item to the highest bidder. Bidders may participate at auction in person or remotely through a variety of means (including telephone and internet). Auctions have a long history, having been recorded as early as 500 BC (Krishna, 2002). However the first auction houses were established only in 17th century in Sweden. In recent decades the major auctions were held at salesroom of Sotheby's and Christie's worldwide, established in respectively 1744 and 1766[32].

Since a few decades the auction houses take since a few decades an important role in directing contemporary taste and setting prices for art; as described by Burnham in 1975 'An interesting feature of the new class of art buyers is their heavy dependence on the auction room to direct their taste' (p. 197). Collectors buying on the secondary art market prefer the 'democracy' of the bidding and the buzz of being in the salesroom. In 1958 Sotheby's, with Peter Wilson as Chairman, started to promote art sales and present art as having an endless rising value (Burnham, 1975: 193). The corporate world became introduced to the possibilities of art as a profitable investment. The inflation of art prices at auction, especially between 2003 and 2008, convinced people to buy art immediately. Particularly the post-war and contemporary art genre was 'hot'. The state of the art market is an important factor for investors or collectors to time their sells (Fikkel, 2009). Work of art will obtain a better price if the market for that specific work is good, or in other words if demand is high. The auction houses fear the effects of a financial crisis on the structure of the art market. Collectors are more spread worldwide than ever before. The same is true however of the impact of the financial crisis. New wealthy investors are hit by the financial crisis and leave the risky art market[33]. Auction houses strive to neutralize the effect of a loss in demand by publishing lower price estimates. The lower pre-sale estimates stimulate buyers to bid in auctions. In fact auction houses stimulate supply and demand for themselves; 'The Company lends money secured by consigned art in order to facilitate clients' bringing property to auction.' (Sotheby's Filing in 1995: 1)

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[31] Exceptional was the primary art sale auction held by Sotheby's in New York of the new work of art of Damien Hirst in 2008. Twenty years ago the recent works of living artists never appeared at auction, now they can appear in less than 5 years. The sale of contemporary art at auction though helps to provide useful cash within the primary market.

[32] Until 2001, when the United States established a 47 percent global share of auction turnover, the secondary art market has been dominated by Europe. The United States in spite of financial crisis dominates the secondary art market with successful sales in New York. As an affect of the financial crisis, however, they might lose their leading place to the strong and possibly less financially affected emerging economies.

[33] This explains the fact that buyers' wealth, connected to the overall state of economy, affects the demand side of the art market (Schneider and Pommerehne, 1983).

Auction houses are specialized in the art historical area's, like; Old Masters, 19th Century paintings, Impressionist and Modern Art and Post-War and Contemporary Art[34]. A pre-auction catalogue is published before every sale. The catalogue contains details of the works of art (size, genre, year, artist, provenance etc.) and its estimated values. The estimates in the catalogue are used as an indicator for the final price of a specific work of art. The catalogue must be available for potential consumers as they use it as guide for their bids during the auction.

3.2.3 **The Dealer Market**

The existence of independent dealers is commonly known. Dealers were, until recently, often part of the secondary art market or active in the 'back rooms' of the primary art market. However art dealers became more important as art advisers. This was clearly visible in the art market boom between 2003 and 2008. In general dealers operate in general independently. Dealers do business with an established group of clients for whom they purchase or sell art. Art is traded within the primary and secondary art market places and through private sales. The activities of independent dealers are even more secretive and less transparent than the transactions in the primary art market.

Baumol (1986) elaborates on the difficulties of calculating the true value and price of a work of art. He focused on the development of the price for a work of art. Art investment advisers and dealers steer buyers in specific directions. They make a trend happen. Ben Lewis (*The Big Art Bubble*, Documentary 2009) states that dealers influence on the art consumers significantly. Dealers also purchase and sell works of art through auctions[35]. The art market is not only influenced by the characteristics of works of art, but also by the characteristics of dealers. High demand influences the availability and 'scarcity' of art. Dealers in the contemporary art market were accused of creating artificial scarcity and high prices for artists they represent. Dealers do this by buying works of 'their' artists for high prices (Ben Lewis, 2009). For instance, dealers like Saatchi are able to buy many works of an artist. This stimulates scarcity and prices. Artificially, demand then outperforms supply. The dealer is also able to influence demand by the 'superstar dealer' effect. This means that the dealer in this way causes branding art of a specific artist (Thompson, 2008). The 'superstar dealer' effect increases demand for a specific artist even further. Dealers increasing the demand do this for the 'demonstration effect'. They hope to increase prices of works of specific artists. In conclusion dealers influence both sides of the art market. They influence demand and supply in both the secondary and the primary art market.

[34] Auctions houses additionally trade antique and lately furthermore design. The supply in the art market depends on the separate art departments. The market for contemporary art is elastic, whereas the market for old masters is inelastic.

[35] Not commonly known is the fact that dealers consign one-third of the contemporary art offered at auction (Thompson, 2008: 125).

3.3 Supply in the Secondary Art Market

As stated in the previous paragraph, works of art are traded in numerous different ways. Similar to every trade is that the transactions take place between dealers[36] and consumers of art. The focus of this study is on the secondary market more specifically the auctions houses Christie's and Sotheby's as dealers in a changing market environment.

3.3.1 Christie's and Sotheby's

Christie's and Sotheby's went through up and downturns in the art market. The relationship between the two archrivals changes during history.[37] Throughout the years the auction houses extended their influence by opening departments all over the world. They looked at new and emerging art investing countries and growing financial possibilities.

The auction houses continue to follow their vision to commercialize the art world. Christie's and Sotheby's focused on bringing new people into the auction room. They convinced them that they would be able to afford art (Burnham, 1975: 192). In the 1950's with Sotheby's in the lead, the auction houses started to sell impressionistic and modern art (Rush, 1961).

Auction houses like Christie's and Sotheby's primarily earn money from commissions charged to buyers and sellers. The commission for buyers is called the 'buyers premium'. The total price paid for a work of art bought at auction is the sum of the 'hammer price'[38]' and the 'buyer's premium'. Usually the buyer's premium is between 10 and 17.5 percent of the 'hammer price'. Seller's commission is also around 10 percent of the 'hammer price'. In booming markets the seller's commission is often open for negotiation. Sometimes even, minimal sale prices will be guaranteed. By contract sellers are forbidden to bid on their own work of art at the auction. Prospective buyers are thus protected. The buyer can be confident that the art prices was not artificially 'bid up' (Ashenfelter, 2003). Since the 18th century Sotheby's and Christie's use the English auction system in their auctions.

[36] Dealers should be understood here as; the primary art dealers at galleries, private dealers and auction houses as dealers.
[37] The changing relationship between Christie's and Sotheby's for one refers to the conspiracy of the two auction houses in a price-fixing scandal following a period of aggressive competition. The entire background of the price fixing scandal is explained in '*The Art of the Steal'* by Mason in 2005.
[38] The 'hammer price' is the final price fetched during the auction. This is the price the auctioneer mentions when the bidding ends.

3.3.2 The Auction System

The value for most important works of art is established by auctions. This can be by an actual sale, or indirectly, by reference to other sales (Ashenfelter and Graddy, 2003). The efficiency of the auction system is a key determinant of the cost of creating and distributing works of art (Ashenfelter and Graddy, 2003). There are two main systems to establish a 'hammer price' in the secondary art market; the Dutch auction system and the English auction system[39]. With the Dutch auction system the auctioneer starts at a high price and calls out lower prices until a bidder is found. The English system is more commonly used. With open biddings the price rises (Ashenfelter, 2003). The major English auction houses, Christie's and Sotheby's, have practiced, refined and developed the auction protocol (Ashenfelter and Graddy, 2003). Both work with the English auction system in all their auctions around the world.

Within the 'English auction system' the bidding often starts below the low estimate published in the pre-sale catalogue. It moves up as bidders continue to overbid each other. This goes on until one bidder wins. During an auction it is the auctioneer's job to get the bidding started. The bidding can be started by accepting fictitious bids ('off the chandelier' or 'from the order book'). These bids are always below the reserve price[40]. Once actual bids exceed the reserve price the bidding process will be taken over by potential buyers. The moment that bidding stops the item for sale is said to be 'knocked down'. Then the 'hammer price' is established. Not all works of art that are 'hammered down' have been sold. Consigners (sellers) of individual works of art can set a (secret) reserve price. If the consumers' bidding on an work of art does not reach the reserved price level the work of art will not be sold. The auctioneer will then say that the work of art has been 'bought in' (further details on the 'bought in' phenomenon will be described in Chapter 4 page 57 and Chapter 5 page 79).

3.3.3 Secondary Art Market Anomalies

Numerous empirical studies on auctions have led to different findings and lead to further theoretical research. The 'price fixing scandal', 'pre-sale estimate bias', 'law of one price' and the 'declining price anomaly' will be addressed later in this paragraph. The 'death effect', the 'master piece effect' and the 'burned painting' anomaly are out of scope for this particular study.

[39] Less common other auction types are for instance; Sealed first-price auctions, Sealed-bid second price auctions, Chinese auctions.
[40] Technically the auctioneer is bidding on behalf of the seller.

3.3.3.1 Price Fixing Scandal

In March 1995 the competition between the archrivals Christie's and Sotheby's had ended abruptly. One month after each other Christie's and Sotheby's announced a nonnegotiable sliding-scale commission for sellers. The abrupt change in strategy was due to a price-fixing conspiracy (Ashenfelter and Graddy, 2002). In 2001 Christie's and Sotheby's settle the civil suit that followed on the price-fixing scandal. Both auction houses paid $ 256 million to the plaintiffs. Sellers and buyers active during the conspiracy period had most likely paid too much and were thus compensated. Christie's and Sotheby's are now believed to estimate prices for art individually and fairly [41].

3.3.3.2 Pre-sale Estimates

Auction prices at Christie's and Sotheby's[42] can be used to determine and compare art price movements. In the ideal case these prices reflect the 'true' value of a work of art and they should be independent from different pricing mechanisms. Unfortunately the auction institutions themselves, can have a profound influence on the price of art through their commissions, experts, pre-sale estimates, reserve prices and sequential sales (Ashenfelter and Graddy, 2002: 24).

The auction estimates should take varying and intangible factors into account when predicting the expected high and low estimates of the art price. The factors are amongst others subjective auctioneers' characteristics, objective artworks' features and history of previous sales (Bruno and Nocera, 2008). However this is not always the case.

Several studies find frequent over- and undervaluation[43] or use sold lots instead of all lots. These studies ignore the influence of bidder's behaviour[44] (Chanel et al., 1996; Beggs and Graddy, 1997; Ekelund, Ressler and Watson, 1998; Bauwens and Ginsburg, 2000; McAndrew and Thompson, 2004; Mei and Moses, 2005). Czujack and Martin (2004) claim that pre-sale estimates do not significantly vary between auction houses. Christie's however used conservative pre-sale estimates during the crisis to stimulate bidding.

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[41] Extensive information on the price-fixing scandal can be found in the book by Mason (2005), 'The art of the Steal', and Ashenfelter and Graddy (2002).

[42] The secondary auction data available of Christie's and Sotheby's are commonly used in academic research. Although the secondary auction data of other auction houses could be used as well, using the data by Christie's and Sotheby's makes comparison to former studies more reliable, since the data should contain the same construction.

[43] The frequent over- and undervaluation of estimates confirms the result by Bruno and Nocera (2008) that pre-sale estimates are not good predictors of the realized prices. Though the positive results on the accuracy of estimation by Ashenfelter (1989, 2002) drives me to use the estimates as indicators of art market movements along with financial market movements.

[44] Bidders' behaviour is more predictable in certain markets, which further biases the outcomes.

3.3.3.3 Law of one Price

Czujack (1997) finds systematic differences in price levels between countries, not between salesrooms[45]. Other authors observe systematic price differences obtained by the same or similar works of art sold at different auction houses. From this it can be concluded that the 'law of one price' does not hold for the art market (Ashenfelter and Graddy, 2006; Pesando and Shum, 2007). Using secondary art market prices in research has to be done with caution. Differences between prices at Christie's and Sotheby's are not always clear. Discrepancies are mainly distinguished between the high-end and the low-end of the art market and the influence the major auction houses have on the 'hammer price'.

3.3.3.4 Declining Price Anomaly

The 'declining price anomaly' (Ashenfelter, 1989) was first discovered at wine auctions. Later it was seen in the sale of many other items, for instance within the market for paintings. When identical or similar works of art are sold at auction, prices are likely to decline as more similar lots are offered[46]. Auctioneers are aware of this phenomenon, but keep it to themselves. To counteract the impact of the 'declining price anomaly' when trying to sell a number of similar works, auctioneers will usually offer smaller sized lots first. Then the larger sized works are offered. Large works usually are sold for higher prices than smaller works. There for it seems that the prices for these similar works go up. Bidders then do not sense the 'declining price anomaly' that much, although if sold in separate auctions higher prices would probably be reached for individual works (Ashenfelter, 2003: 36).

[45] Differences in prices between different countries will not be clarified in more detail in this thesis, since price will not be compared between countries. Prices fetched at Christie's and Sotheby's Amsterdam will be compared, these prices are fetched in the same country, no systematic price differences should exist (Ashenfelter and Graddy, 2002). Further details on price differences between location can be found in Pesando (1993), Mei and Moses (2001).

[46] The 'declining price anomaly' does not always occur, though far more common than would be expected by chance alone (Ashenfelter, 1989)

3.4 Demand in the Secondary Art Market

Fine art is a luxury good. Its consumption normally increases or decreases with economic growth or decline. Goldthwaite (1993:7) presents in his book *Wealth and the Demand for Art in Italy 1300-1600* the economic background of demand for Renaissance art. In his book Goldthwaite assumes that greater wealth in 1300-1600 Italy was a permissive cause for the rise in consumption of art. Goetzmann (1993) states that the demand for art increases with the wealth of art collectors. He states that the demand for art is likely to shift with the fashion of the buyers and the financial means available to these buyers. In addition a process of cultivation of taste influences the demand for art. This means that the consumption of art increases over time with exposure to art (Lévy-Garboua & Montmarquette, 2002: 201).

Demand can be divided into several groups: demand by museums, investors (e.g. hedge funds), dealers and collectors (anonymous or well-known). These separate buyers with their different goals when buying art continuously influence prices. When wanting to buy art in a specific niche in the art market it is important to be informed about this niche.

As mentioned before the art market distinguishes itself by behavioural anomalies (Frey, 1995: 212). These anomalies are larger and wider spread in the art market than in the traditional financial markets. The diverse buyer groups all have behavioural anomalies that affect their participation and the price construction in the art market (Chanel et al, 1996).

3.4.1 Museums

Formal institutions like private and public museums are important for the demand for art. Museums have always bought at least part of their stock at auctions (Pommerehne and Feld, 1997). In the US museums are often owned privately. For their financial support these museums often depend on the generosity of firms and private persons. Acquiring funds is particularly successful during economic growth (Pommerehne and Feld, 1997) and for the hyped contemporaries (Singer and Lynch, 1994: 215). Generally in Europe museums are publicly owned depending on subsidies from the government.

Museums often buy art at auctions when demand is at its peak. This means that the 'hammer price' is likely to be above average (Pommerehne and Feld, 1997). Ceteris paribus, Public museums improve the financial position of the seller (Pommerehne and Feld, 1997). Another explanation for the high prices paid by museums at auction is the fact that quality art bought by museums rarely appears at auction (Pommerehne and Feld, 1997). Furthermore the willingness to pay high prices is explained by the irrelevance of high rates of return on art as a museum does not see the purchase of art as a investment.

The demand of museums is highly inelastic since they are concentrating on particular top-quality works. The effect of museum purchases on demand and the high 'hammer price' refers mainly to the high end of the art market (Pommerehne and Feld, 1997).

3.4.2 Investors[47] and Speculators

'*There are no rules about investment. Sharks can be good. Artist's dung can be good. Oil on canvas can be good. There's a squad of conservators out there to look after anything an artist decides is art.'* (Charles Saatchi)

When wealthy collectors or investors enter the art market the demand for art increases. Collectors start investing in art at particular times. New collectors mostly invest for the duration of financial booming periods. Established and conventional investors also invest during financial downturns (see chapter 2). The major difference between the different periods is the niche people invest in. During economic booms, risky investments in contemporary art are seen more often, while in economic downturn 'safe' investments in for instance old master pieces are more common[48].

As early as in the 1950's art collecting became a 'profitable pastime of big business men and a raison social for their wives' (Burnham, 1975:192)[49]. The belief that the art market yields huge profits in comparison to other investment markets resulted in a growing number of published studies that examined the financial characteristics of the art market (Worthington, et al., 2004:258).

Speculations on the art market are always seen as a mysterious way of investing. Explicit speculators are believed to leave the art market as soon as unpredictable financial risks increase. Investors and speculators are influenced by the media headlines on extraordinary sales. For investors and speculators information about the art market is of great importance. Costs for information on the art world are high, but easily paid. Before investing in art extensive knowledge of art and the art world is required (Worthington et al., 2004:259). Investors need to be aware of the fact that the art market differs significantly from the traditional stock markets. There are three key differences between art and traditional assets like stocks and bonds. Firstly, the fact that art provides the owner with aesthetic pleasure. Secondly, the same art object is not traded continuously but rather rarely. Thirdly, owning art contains additional risks and costs related to these risks (Elsland and Kraeussl, 2008:2).

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[47] Additional information on art as an investment will be given in appendix D.

[48] Investments in work of art by established artists are common and seen as safe in financial downturns. For further details see Chapter 2 Literature review and the appendix A about the art boom the late 1980s and appendix D *Art As Investment.*

[49] This reason of purchasing art - as a means of attaining or maintaining social status- is described as conspicuous consumption. The term conspicuous consumption was introduced in 1899 in '*The Theory of the Leisure Class'* by economist and sociologist Thorstein Veblen.
Further details on conspicuous consumption in the art market can be derived from the paper by Mandel (2009).

In general these costs and risks are not calculated in rates of returns on art[50]. Apart from the hidden risks and costs it is still difficult to find a sensible relation between the rate of inflation, traditional financial markets and the art market.

A collector who speculates or a collector who wants to gain publicity will prefer auction sales over private sales, because of the joint product (Towse and Khakee, 1992). Auction sales generate ‘free’ publicity if work of art up for sale go for record prices, are rare or have been in private collections for several years. The publicity elevates the reputation, the demand and the price for the work of art. Some work of art outperform the art market predictions, even in the current downturn. Exceptional art objects and extraordinary quality work of art will always obtain top prices. ‘In a softer market or a connoisseur’s market, people seek out earlier work because they think it is safer.’ (The Economist, 16 May 2009). Investors need to be aware of the state of the art market to be able to acquire work of art that convey a positive rate of return higher than traditional assets[51]. This explains why collectors investing in art as an asset follow the auction results as they would follow stock market listings (Thompson, 2008: 256).

However the most important consideration when buying art as an investment is the willingness to take a risk. It is as Houlihan said at the Symposium *Art as an Investment* in 1990; ‘Investing in art is an art’. Investing in art can be big business. It is essential to be aware that a total investment portfolio becomes less risky and volatile when supplemented with art assets. Investing in art should be a part of every investment portfolio (Modern portfolio theory). Diversification is needed to optimize the total profit of the investments and to spread the risk.

As a consequence of the financial crisis a growing number of investors fails to secure the required cash for their art funds. Not being able to secure the projected amount of money is one of the problems the funds have to deal with during the financial downturns. Another problem is to find new investors. Especially since funds are often specialised in market niches. The problem to find new investors is also connected to the art market confidence[52]. Investors hesitate to put money in ‘long-term investment vehicles’[53] especially in something as inexplicable as art. Next to the decreased confidence in the art market, recently disclosed scandals in the financial world do not encourage investors to take risks.

[50] The extensive costs of purchasing or owning a work of art are often not calculated in the rate of return since the exact costs are hard to obtain and should be divided over the holding period.
[51] Sotheby’s took in 1990 the opportunity to explain why and when investing in art can be effective. To distribute knowledge about art as an investment to potential investors Sotheby’s organised a symposium in 1990.
[52] For detailed information on art market confidence see Appendix D Art as Investment.
[53] Baumol (1986) and Goetzmann (1993) refer in their study to the fact that art may be dominated as an investment vehicle.

3.4.3 Dealers and Star-collectors

The influence dealers have on the art market was described earlier (paragraph 3.2). Here more examples will be given to indicate their influence on demand.

The art advisor of Pinault explains in the book by Thornton (2008) that work of art obtain extra value if they are bought by the right individuals: 'Any piece of art acquired by Pinault receives the value-added stamp of his provenance. The artist is the most important origin of the work, but the hands through which it passes are essential to the way in which it accrues value.' (Thornton, 2008: 9-10). The occurrence that the buyer is a value adding factor in a provenance is also confirmed in the book The Twelve Million Dollar stuffed Shark by Thompson (2008: 261) and by Davies et al. (2007): 'Today one of the strongest influences on an artist's career is representation by a prestigious dealer with a reputation for selecting 'important' artists.'

3.4.4 Corporate Collectors

Corporate collecting is often undertaken in a profit oriented surrounding, but is purposely managed outside the realm of profit making (Frey, 1995: 212). The value of the collection is more socially than monetarily orientated. This means that the art is owned for its aesthetic value. The purchase of art can be interpreted as the top managers exerting their discretionary power (Pommerehne and Feld, 1997).

3.4.5 Private Collectors

Private collectors are generally not profit orientated. Private collectors mostly buy art to consume not as a financial investment (Pommerehne and Feld, 1997). However, today's private art collectors can be expected to earn a well above average income (Sager: 1992). The demand for art will increase with the increasing number of wealthy art collectors (Goetzmann, 1993). Private collectors are prone to anomalies. They are subject to the endowment effect[54], the opportunity cost effect[55], the sunk cost effect[56] and the bequest aspect[57] (Frey, 1995: 212). All these effects have no direct monetary impact. 'The more pure collectors dominate the market, the lower is the financial return in equilibrium; the major part of the return is made up of psychological benefits' (Frey, 1995: 214).

The characteristics of the private collector suggest that their demand is not driven by economically factors. This explains why economical downturns hardly affect the demand by private collectors in the

[54] The endowment effect means that a work of art owned is evaluated higher than one not owned (Frey, 1995: 212).
[55] The opportunity cost effect means that most investors isolate themselves from considering the returns of alternative uses of the funds (Frey, 1995: 212).
[56] The sunk cost effect means that past efforts to build up a collection play a large role (Frey, 1995: 212).
[57] The 'bequest aspects' means that the collector will have the opportunity to donate the owned work of art to relatives or friends by his or her will.

art world. However the demand of certain private collectors will change as some depend on getting loans at private banks backed with art (art-backed loans). Art-backed loans are especially accepted during booming period in the art and financial markets. Due to the financial crisis banks are reluctant to give loans. This was reflected in a quote; ‘If you came to me [a few years ago] with your family collection of Picasso’s or Chagall’s, the were more banks and institutions willing to provide you with a loan based on your art as collateral’, says Viola Raikhel of London based art advisory 1858 Ltd. ‘When the global financial crisis kicked in, several of these loan providers completely disappeared.’ The decrease of financial loans by banks is partly compensated by the financial systems auction houses provide; ‘Auction houses are hoping to boost their current business via art-backed lending.’(Art and Auction, July/August 2009: 28).

3.5 Demand and New Economies

The nationalities of major buyers vary throughout art market history. In an art market boom specific buyers will be drawn to the art market. Hiraki et al. (2005) show that Japanese investors had an enormous influence on art prices during the late 1980’s stimulating a speculative art market boom (see appendix A). In the latest boom the art market especially bears the influence of the BRIC countries on the prices for art. Prices are stimulated by the fact that the purchases are often driven by speculative or patriotic motives (Mamarbachi et al., 2008). This results in a market where virtually any price level is accepted (Adamowska, 2008: 39). Consistent high prices cause the ‘demonstration effect’, which in turn causes an even higher demand and higher prices.

The art market is influenced by consumers’ income or wealth (‘wealth effect’). The inflow of new wealthy collectors in the art market made the market more stable than before (Financial Times 2008). The blow of decreasing prices after the financial crash in 2007 and 2008, was softened by ‘a wave of new acquisitions by buyers from China, the Middle East, Russia and India’ (The Economist 2008). Kraeussl and Logher (2008) analysed the performance and risk-return characteristics of three major emerging art markets: Russia, China and India. Kraeussl and Logher (2008) explain how the emerging markets come to invest in art as a shield for economic downturn. Prices for Russian art were impacted by both Russian and global stock market movements. Renneboog and Spaenjers (2009) illustrated the specific impact on the art market from these fast developing economies. The new emerging economies simulate demand and supply on the art market.

Auction prices are influenced by buyers. These prices can rise high when more than one collector decides to ‘bid to get’. ‘Bidding to get’ means that the collector tells his agent or dealer to keep bidding on a specific work of art until the bidding is won. During the boom ‘bid to get’ was not an exception, Russians often ‘bid to get’; ‘Heaven is two Russian oligarchs bidding against each other’ (Thompson, 2008: 139). The influence of Russian bidders is twofold. Firstly, they increased the amount of bidders and buyers, thereby increasing demand. Secondly, they were less experienced and took more risks. Even visible in the last auction at Christie's Amsterdam (September 6, 2009) when a Russian buyer interrupted the auctioneer and said that the bidding was not over yet since he was willing to pay more.

Established collectors were nudged sideways on the market for contemporary art by activities of the new rich. The Contemporary art hype however could only last as long as the financial bubble lasted. When the money used to speculate vanished, the bubble in the art market, the correlating high prices -especially visible in London and New York- and the new collectors vanished with it.

3.6 Art Market Performance

3.6.1 The Macroeconomic Environment

Macroeconomic factors include 'the state of the economy and the economic upswings and downswings which the art market follows' (Post, 2007). Macroeconomists[58] deal with the performance, structure and behaviour of a national or regional economy as a whole. Part of their work is to design price indices as means to understand how the whole economy works. If the world economy is depression the regional economies will also be influenced. In times of a poorly performing economy, there is a demand for assets with a low correlation to traditional assets, like stocks and bonds. Art as an asset is believed to have that low correlation. The deflation of art prices as a reaction on negative stock market returns is a field of study in itself. Art price indices are calculated and compared to stock and bond indices. When stock markets fall art prices tend to respond with a time lag. Art prices usually react positively for a short period of time before deflating (Robertson, 2005:242).

Prices paid for art have been relatively high between 2003 and 2008. Especially for contemporary art prices escalated. These high prices can be derived from the growing number of wealthy collectors and investors (as described in the previous paragraph). The increase in prices was a consequence of growing wealth. Grampp (1989) indicated the rapid succession of contemporary art styles in the late 1980's due to the rapid increase in consumers' income. In the last decade a similar rise of income and a globally growing wealth could be observed. Unfortunately is not always easy to forecast the specific effect of the grown wealth (Sagot-Duvauroux et al., 1992). Nevertheless the influence of the growing wealth during 2003 and 2008 as part of the macro economy needs some clarification. Because the estimated secondary art market prices change as a function of

[58] 'The study of whole economic systems aggregating over the functioning of individual economic units. It is primarily concerned with variables which follow systematic and predictable paths of behaviour and can be analysed independently of the decisions of the many agents who determine their level. More specifically, it is a study of national economies and the determination of national income.' *Dictionary of Economics* (Bannock, G., Baxter, R.E and Davis, E.)

macroeconomic variables, like quotations on the stock exchange (Sagot-Duvauroux, 2003), this paragraph will explain the specific influences of a changing (macro)economy.

In this report the relationship between the economy in a downturn period and the organization of the secondary art market will be examined.

3.6.2 The Use of the Art Market Indices

‘*Constructing [a price] index is a preliminary step to any sensible study of returns’* (Chanel, Gerard-Varet & Ginsburgh, 1996:2)

Due the financial interest in the art market, measuring data to analyse the rate of return of art became a field of interest. Usually the first step for economists in art performance research is the design of an art market index. The calculated art market index enables researchers like Goetzmann and Spiegel (1995) and Mei and Moses (2002) to compare effects in time between the art market and the stock and bond markets.

Most art price indices focus on secondary art market results. Robertson (2005) is sceptical about the use of art market indices. Nevertheless he does see some use of an art market index for retrospection. The ultimate index should be able to show and predict the time lag between a declining stock market and falling art market. It should also give insight in the whole art market, for all categories. Until now studies have not be able to construct such a broad index[59].

With the index investors in the art market try to predict the volatility of the art market. The art market index should show a low correlation with financial assets if art were to be an attractive alternative investment.

During a slowdown in the economy, demand for traditional financial assets will drop and the supply will rise. As an effect there will be forced asset selling for lower prices. Whereas with an art market enduring a bubble it is most likely that before or after the burst of the bubble the effects of a bull or bear markets are clear. We often see bull or bear market figures coexisting with bubbles or downturns in the art market. Goetzmann (1993) believes that when the market endures a boom the art index moves up and when the market crashes the art index drops. However the art market reacts with a delay on the traditional market index crashes. This became visible through the auction records in 1987[60], when Sotheby’s and Christie’s achieved records prices during the financial crisis of the late 1980’s.

[59] Mainly because of time constraints, a lack of data in the primary art market and the complexity of the art market.

[60] The year 1987 was the beginning of the economical crisis of the late 1980’s in which the art market was booming thanks to Japanese investors (See also Chapter 2.3).

3.6.3 The Need of Art Market Indices

Art market indices are used as an indicator for art investors. The indices measure price changes in the art market. The indices should indicate how the art market reacts on macroeconomic changes and whether there is a delay. Former financial crashes have shown a postponed reaction in the art market indices. Since the 2003 – 2008 art market boom the financial world seems entangled with the art market. The intertwinement of the financial and art world suggests a shorter delay to be seen in the art market indices. This will be illustrated by comparing the Sotheby's Index to the S&P 500 index (Chapter 4).

The need for an art index still remains unclear. The time lag plays an important role. The indices designed during earlier downturns showed a time lag and a low correlation between the art index and traditional indices. However, the art index for the current downturn is expected to have less of a time lag and a higher correlation.

In order to explain delays in the response of the art market to the traditional financial markets and to justify the need for an art market index as an indicator of art market performance[61] the correspondence between bear and bull markets in the financial world and the bubbles and crashes in the art world needs to be studied in greater detail.

3.7 Conclusion

The contemporary art market is driven by several work of art related characteristics. The art market is a special market characterised by the heterogeneity of art, the irregularity of trade, high and unpredictable transaction costs and the dependence on policies. The demand and supply in the art market are influenced by the distinct characteristics of the art world.

The primary and the secondary art market adapted to the booming economy. Benefiting from the increased wealth in their market, dealerships are expanded until the financial crisis in 2008 ended the wealth in the (financial) world. Luxury goods like art could no longer be afforded. Buyers' attendance at art fairs was lower, dealers and galleries could no longer afford participation in (high-end) art fairs and auction houses saw a decline in demand and supply. The art market adapted its structure again, a reshuffle took place.

Comparing the effects of the current financial crisis on the primary art market to previous crises is almost impossible. The information about the primary art market is limited and the exact formation of businesses, sales, prices and profits are non-transparent or unavailable. The financial crisis that hit the

[61] Goetzmann (1993) describes three apparent bull markets in art: 1780-1820, 1840-1870 and 1940-1986 and the following bear markets in art in 1830-1840, 1880-1900, and 1930-1940. Goetzmann indicates a correspondence with the bear markets and broad economic recessionary periods in Britain and the United States.

art market must be studied by comparing former studies on the secondary art markets in certain periods of times (see chapter 2). Comparing the results might indicate similar shifts in the market[62]. Some findings might be valid for to the primary art market, although this should be done with prudence.

Supply on the secondary art market is focused on the art consigned to and sold by the major auction houses Christie's and Sotheby's. Christie's and Sotheby's have been strong players in the art market since the 18th century. During their existence they have spread world wide[63].

Demand in the secondary art market can be described by different types of buyers. The type of buyer will influence specific elements of the art market. The buyers influence price, scarcity but also each other.

The art market is influenced by several factors. The performance of prices in the secondary art can be studied using art price indices. The macroeconomic effects of stock and bond exchange rates on the art price index are explored in numerous researches. Art price indices are used as indicators for investors in art as an asset. Nevertheless, indices should only be seen as an 'indicator' for future investments in art. The effects visible in the art market indices are still more influenced by unpredictable human behaviour and less clear compared to traditional financial assets like stocks and bonds.

[62] The results will be biased though, since the secondary art market represents the top 5% of the work of art sold in the art market, 95% of the work of art will not come up for auction. The study will reflect only the influence of the financial crisis on the top-end of the art market.

[63] Trading opportunities in the secondary art market are even said to spread wider than conventional stock markets.

4 The Relationship between the State of the Economy and the Art World

4.1 Introduction

‘There are opportunities in virtually every collecting field right now. If you want to play it safe, concentrate on established secondary-market artists, negotiate well, and take a long-term view’

Abigail Asher, Art + Auction, March 2009.

When comparing the economic expansion in Italy in 1300-1600 to the current situation the resemblance is the organisation of the financial world. During the economic expansion in 1300-1600 banks also became more efficient. At the same time banks increased in size and diminished in number. Financial capital was used as premise for higher loans to invest in land and real estate. In the years before the crash of 2008 the financial world made a shift from customer focus to a focus on trading benefits. This was driven by the more global and America orientated financial world. Lent money was yet again deliberately used to make money. Financial means on loan were used to speculate.

In times of a flourishing economy the art market can profit from the growing wealth and speculation. This is clear for a bull market or ‘bubble’ in the art market. When the financial situation changes, art market actors are interested in its effects. This is even more important now as art is more than ever an elementary component of investment portfolios. This means that the art world is intertwined with the financial world. The effects of a financial crisis are likely to harm financial investors as well as art investors.[64] This chapter expands on the financial world in booming times (4.2) followed by the development of the crisis (4.3). The question throughout this thesis is in what way the secondary art market will be affected by the financial crash. Paragraph 4.4 will describe several characteristics to be used as indicators of a change of the art market caused by the financial rupture. Paragraph 4.5 will describe expected effects on demand and supply in the secondary art market.

4.2 Booming Period

Stimulated by the FED in the United States in 2001, financial means seemed inexhaustible until late 2007. New ways of investing were developed. Not only had real estate become an object for speculation so had the contemporary art market. Millions of dollars were paid for sometimes even still wet paintings. It became an extraordinary active market for speculators. Part of the gains made in the financial markets were allocated to art (Chanel, 1995). The portfolio tactic of investors was broadened with art as an asset. Hedge funds were investing a few percent of their portfolio in art. Millions, in all

[64] Taking into account that the interdependence of the affects of a financial crisis on the financial products and the art products is not exclusively positive or negative confirmed.

currencies, were invested in the art world. Christie's and Sotheby's earned billions. The demand for art seemed eternal.

Next to this inexhaustible demand the role of the supplier became more importance. On the one hand the supply was flourishing as numerous individuals were willing to consign works of art for auction, on the other hand supply was intentionally held back by dealers to incite scarcity and stimulate prices.

The money to invest in the art market, real-estate and traditional assets during the booming period was often on loan. This investment strategy was lucrative as long as the financial world did not collapse and the rate of return on the investment was higher than the interest on the loan. With this specific set of circumstances the final result would have been positive.

During the boom more art investors came from a new wealthy business population. These new wealthy investors often originated from the new emerging economies (e.g. BRIC countries). They could be financial advisors earning money by exploiting loans or owners of oil and gas fields. (For more information on the affect of new economies on the art market see paragraph 3.5.)

During the boom in 2002-2007 the financial 'bubble' was inflated. In response art prices and demand increased between 2006 and 2007 (Art Market Trends, 2007). The bubble in the art market parallel to the financial bubble was bound to burst.

4.3 Development of the Crisis

Art market bubbles go hand-in-hand with booming financial markets. All markets have benefited from the positive times. The global financial system however had to reconsider their strategy as trust and believe in the system diminished.

The development of a suitable ground for a financial crisis on an international scale started in 2001 in the United States. One of the influencing factors on the crisis can be seen after 9/11, when the Federal Reserve [65] tried to prevent a recession by cutting the interest rates. This 'positively' affected the real estate business. Another influencing factor was the gained liquidity in the financial system caused by the injections of the Federal Reserve and the availability of investment resources mostly stimulated by financial means from Asia.

The current crisis became visible in the United States of America in 2007, when the overheated real estate branch collapsed. House owners were no longer able to pay their debts. The fact that 'subprime'[66] mortgages were sold to other depositories all over the world explains why the global monetary financial system was affected by the 'real estate bubble' collapse in the United States of

[65] Central banking system of the United States often referred to as FED.
[66] A subprime mortgage is a loan given to borrowers of low credit ratings. These borrowers will not be eligible for normal mortgages. The lenders will have a larger-than average risk while loaning money to low credit borrowers, and that is why they charge higher rates for the mortgages to compensate for the risk. For more information please look at http://www.bankrate.com/finance/mortgages/subprime-mortgages.aspx.

America. Bear Stearns was the first bank to face liquidity problems and dropping consumer confidence. In March 2008 the first bank that filed for bankruptcy was the business bank *Lehman Brothers*. Disbelieve and fear erupted in the international financial world. Financial support could no longer be given. Worldwide governments and central banks had to step in to prevent more financial businesses from bankruptcy. The financial system had failed to maintain the trust of investors. The following financial crisis was a crisis of consumer's confidence in the (financial) world.

At the end of 2008 the financial crisis hit the stock and bond markets. This meant that the real economy was affected by the financial crisis. An increasing number of countries was officially in recession. It was a recession of which analysts say that it might be the worst since the 1930's[67]. The new and speculative (art) investors were hit by the financial crisis as well. Economic barriers for international trade emerged, loans could no longer be paid and even owners of oil and gas fields lost part of their wealth.

The loss of wealth starting in the end of 2008 had a substantial effect on the performance of the art market. Auction houses adjusted their strategies between 2003 and 2008 to the booming demand, supply and prices. In the last part of 2008 the auction houses had to readjust to the new changes in the art market to survive the financial crash. The next paragraph will elaborate on how the specific readjustments can be measured.

4.4 How to Measure the Crisis

4.4.1 Art Market Index

Art market indices were used in several studies on the performance of the art market. Especially the performance of art prices was used. It could give an indication of the rate of return and was used to inform art investors about the state of the art market. Indices were used to compare the art market with other financial markets. By comparing the different markets the connection between the art market and the financial market becomes visible. Assuming a connection the index can be used as an indicator of the effects a financial crisis has on the art market. To show the global trends and the effect of the financial crisis on the art market in the introduction the Artprice Global Index (AGI) was used[68]. In 2005 Hiraki et al. studied the crisis on the art market in the 1990's with art price indices.

[67] To give an insight in the extent of the crisis the loans to banks in the Japanese crash in the late 80's early 90's contained an estimated loan of $263 milliard, where as at the moment an estimated loan of $1480-4000 milliard is given.
[68] For further details look at the introduction and the literary review.

4.4.2 Number of Sales

The total amount of auctions in a year gives an indications of the state of the art market. If the art market endures a boom the supply and demand are likely to be higher. Consigners and buyers seek high profits in the booming art market. New trends in demand and supply will be developed and the auction houses will participate in this shift by organising sales around these new trends. This means that the auction houses react to the state of the art market by having the right amount of sales. They follow specific trends encouraged by the increased wealth, resulting in the contemporary art boom between 2003 and 2008. The focus of this study is the change within the modern and contemporary art department at Christie's and Sotheby's Amsterdam.

4.4.3 Total Amount of Lots per Sale

The level of demand and prices paid for art causes shifts in the amount of lots offered at auctions. Art collectors are willing to consign work for auction when the demand and the price for these works are high. This can be perceived in a positive shift in total amount of sales. In a boom the art market is driven by supply. The consigners 'make the rules'. Auction houses compete for consignments by offering special deals.[69]

For instance, in the early 1990's the total amount of lots per modern and contemporary art sale at Christie's and Sotheby's Amsterdam were high. The total amount of lots was high because a special collection of CoBrA[70] works was included in these auctions. The special section was included for two reasons. The first reason is that the demand for CoBrA art was high. The second was that the CoBrA movement celebrated a jubilee.

4.4.4 Percentage of Works of Art 'bought in'

In general not all lots are sold during an auction. Some lots fail to reach the reserve price set by the seller of the work of art. As a consequence the work of art will not be sold during the auction. If a work fails to establish the not publicly known reserve price the work of art will be 'bought in' (BI) and hammered down as 'passed'. The work might be reoffered in another auction if agreed with the

[69] In these deals the auction houses might decide to reduce the transaction costs, to be specific in auction house terminology the seller's commission.

[70] Cobra stands for Copenhagen, Brussels and Amsterdam. The CoBrA group was formed by Karel Appel, Constant, Corneille, Christian Dotremont, Asger Jorn, and Joseph Noiret on the 8th November 1948 in the Café Notre-Dame, Paris. CoBrA was a unifying doctrine searching for complete freedom of colour and form, and has had a great importance on modern art.

owner. The work can also go back to the owner. In some cases the work of art will be sold after the auction where people can leave 'after sale bids'. This sometimes even ends with bids above the low estimate and the reserve price[71]. What exactly happens after the auction often stays secret.

The influence of unsold lots is widely overlooked by the majority of econometric studies of the art market. Unsold lots are normally not taken into account in art market research[72] especially when art price indices are designed. The reason is likely to be that an unsold lot has no final price. The outcome of these researches and the designed art price indices are biased since BI's are left out of the calculations. This thesis states that the art price indices give skewed image of the impact of a financial crisis on the art market. In this study the percentage of works that is 'bought in' is expected to fluctuate with the state of the art market. The BI rate is expected to be lower in booming art markets and higher when the art market is down. In a booming art market demand is thought to outperform supply. This causes a higher rate of sold lots and a lower rate of BI's per auction. (For more information and further detail on the BI rates in financial downturn of 2008 see chapter 5.)

4.4.5 The Level of Estimates and Reserve Price

The intent of setting estimates by auction houses is to level the playing field for the wholesale and retail customers in the art market and to attract individual collectors (Mei and Moses, 2005). The price for each unique work of art is affected by inconsistent and intangible factors. Auction house experts' estimates are expressed as forecasts for the range of the final price (Bruno and Nocera, 2008).

It is expected that the estimates for works of art put up for sale are unbiased. However the seller of a work of art wants a high pre-sale estimate with a related high reserve price. The high pre-sale estimates published in the pre-sale auction catalogue may discourage buyers (Bauwens and Ginsburgh, 2000). As it is calculated by experts the pre-sale estimates are expected to reflect all available information about a work of art like quality, 'beauty', demand and the described information in the pre-sale catalogue[73]. However the estimates will be biased by the sellers, potential buyers and the auction house.

The pre-sale estimates set by Christie's and Sotheby's are not always in line. Christie's has the tendency to underestimate systematically, while Sotheby's overvalues inexpensive pieces and undervalues expensive ones (Bauwens and Ginsburgh, 2000).

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[71] The reserve price of a work of art will not be published; auction houses are very secretive about the seller's reserve price for a work of art. Nevertheless research by Ashenfelter et al. (2001) found that auction houses commonly set the 'secret' reserve price between 70 % and 80 % below the low estimate.
[72] Some research does take sale rates (including bought in rates) into account, for instance the research by Ashenfelter et al. (2002).
[73] The characteristics described in the sale catalogue are not fully taken into account by experts in their pre-sale estimates (Bauwens and Ginsburg, 2000).

Ashenfelter (1989) remarks that 'the auctioneer's price estimates are far better predictors of the prices fetched than any hedonic price function.' Bauwens and Ginsburgh (2000) however would advice experts or auctioneers to take the hedonic price functions into account for less biased the results.

Christie's works with 'conservative' estimates in financial downturns. The conservative estimates are set to stimulate demand. However if the art market is booming the art prices can not be high enough so estimates and reserve prices are stimulated to go up. The totals of pre-sale estimates published in the pre-auction catalogue for contemporary art sales at Christie's were used to study the shift in estimates with financial downturns (see Chapter 5). Information about reserve prices is confidential[74]. This means that the effect of the financial crisis on reserve prices can not directly be calculated. It must be traced trough the changes in estimates, since the reserve price is expected to be between 70 or 80 percent of the low estimate (Ashenfelter et al., 2001).

4.4.6 Holding Period

There is a stationary long-run relationship and significant short and long run causal linkages between various painting markets and between the equity market and the painting markets (Higgs and Worthington, 2003). The holding period is often connected to art as an investment. The rates of return are either positively or negatively correlated with the time that passes since the last auction (see Frey and Pommerehne, 1989; Goetzmann and Spiegel, 1995; Candela and Sorcu, 1997; Ashenfelter and Graddy, 2006; Adamowska, 2008). Different studies indicate diverse recommendations into long or short term holding periods. The impact of the holding period is influenced by many factors. It there fore makes a generalization of the effect of the holding period difficult. There are no specific studies yet about the holding period (purchase and sale date) of specific investment groups. However it is expected that art market booms and the time lag effects of financial crises influence the holding period. It would be interesting to investigate the interdependence between the holding period, the rate of return and the state of the art market at the purchase and sales date of an work of art. The boom in 2003-2008 is said to have shortened the holding period significantly.

[74] Revealing reserve price information tends to remove uncertainties and make lower bidders more aggressive (Ashenfelter, 2003).

4.5 Expected Effects of the Financial Crisis on the Art Market

'*Cash is king at the moment, and there will be great buying opportunities.*'
Andreas Szanto (The Art Newspaper, January 2009)

The financial crisis will affect the art market in several ways. Some measurement criteria for the effects of the financial crisis on the art market have been listed in the previous paragraph. This paragraph describes the effects influencing the measurement methods, and its consequences. Expected effects on demand and supply will also be described. Finally, suggestions for further research will be shortly introduced.

4.5.1 Demand

Demand will get back to normal. A certain 'sense of balance' in the art market will return (Baars, Interview 27-7-2009). The art market will get back to its traditional values. Prices will be revised to meet the new market structure. The art market will disappear out of media headlines. This will bring a 'more conservative look upon the art market again' (Goodwin, Interview 27-7-2009). It will also bring back the traditional private collectors. The art historical background of artists will be again. As an effect the trading conditions in the art market will change.

The art market boom brought more conspicuousness and an enormous increase in small and medium scale collecting. In times of crisis new art collectors will no longer stimulate the demand for art since they tend to follow the hypes. The demand for quality products will increase. Demand and supply will be influenced by this shift. Buyers will come to places where top quality work of art are provided. The 'market will slow down as art purchases will be considered more cautiously' (Baars, interview 27-7-2009). For buyers the financial crisis has a positive effect because negotiations no longer need to be rushed. Buyers now have time to investigate what art is available and supply is downsized to quality works only.

In general the adjustment in demand can be interpreted from the changing sale totals and the rate of works of art 'bought in'. In financial downturns the sale totals are expected to be lower, and the rates 'BI' to be higher (and vice versa in financial upturns).

4.5.2 Investment

The positive effects of the financial crisis on the art market can be found in several different fields. Crises in the financial sector are the best periods to invest in certain areas within the art market. 'It was in the 90's –the bottom of the market- that some important collectors like Si Newhouse and

Leonard Lauder built their collections.’ (Stefano Basilico, Art and Auction March 2009: 69). In times of crisis and a falling stock market there will be a deflation of art prices, though Robertson (2005) cites; ‘it seems, art eventually succumbs to the general economic gloom but, as we shall see, fares a great deal better and recovers much quicker.’ (p. 243). Investors participating in the art market endure exiting times in the art world. In ‘*The Economics of Taste’* Reitlinger (1961) states that even a depression as the one of the 1930’s will not slow down all niches of the art market. Investors will try to find the profitable niches in the art market. ‘If economic recovery is followed by increased risk of financial investments, people are more interested in non-financial assets and as a result, in investing on the art market (for instance Japanese investments in Impressionist paintings in 1987 at the time of the crash on the stock exchange). However, the links between financial and non financial investments are still not clear.’ (Reitlinger, 1961: 97)

4.5.3 Supply

During a crisis consigners will be reluctant to put their works up for auction. Estimates for works will be set lower, as will the reserve price (Ashenfelter and Graddy, 2002). The fact that the auction houses are working with lower estimates is confirmed by Guy Bennett from auction house Christie’s, ‘Estimates are down by 15-25 per cent compared to last year but we believe that the market is still there for the right works of art at the right price’ (The Art Newspaper, May 1 2009).

Art collectors who are willing to sell their works will be looking for the best distribution channels. Despite the fact that consigners might be reluctant to sell their works of art, what is offered at auction is expected to be of higher quality. Auction houses will, more than in booming periods, be looking for quality works of art to sell. Although less art is put up for public auctions the supply for private sales at auction houses will most probably be positively affected. The presence of a strong market for the right works is confirmed by Baars and Goodwin (interview 27-7-2009). Works of quality, rare works and works new to the market will still be able to establish auction records.

Adjustments in supply at auction houses can be interpreted from the modifications of pre-sale price estimates, amount of lots per sale and number of sales per season. All characteristics are expected to decline in financial downturns (and vice versa in financial upturns).

4.5.4 Christie's and Sotheby's

4.5.4.1 Business Related Effects

The effects of the crisis on the secondary art market are mostly in line with the business related results of the art world. The art market has globalized. Prices were rising from 2003 until September 2008. Due to the crisis the profits of auction houses, art dealers, galleries and artists dropped, and 'less people will be employed in the art market' (Goodwin, Interview 27-7-2009). Auction houses are restructuring to cope with new supply and demand in the market. The effect of restructuring world wide is visible at for instance Sotheby's Amsterdam. Sotheby's Amsterdam fired two thirds of its employees and will mainly focus its activities on the high-end art market. As an alternative for organizing auctions the remaining staff of Sotheby's Amsterdam is now looking for art to sell at other Sotheby's sale rooms all over the world[75].

4.5.4.2 Publicly Traded Company

Sotheby's may possibly be more directly affected by the crisis than Christie's. This can be explained by the fact that since 1989 Sotheby's was (again) quoted on the stock exchange. Sotheby's had to present their profit and loss in an annual report to the world. In 2008 Sotheby's stock declined with 87 percent, as can be seen in the figure 4.1.

Sotheby's BID Index versus S&P 500 Index

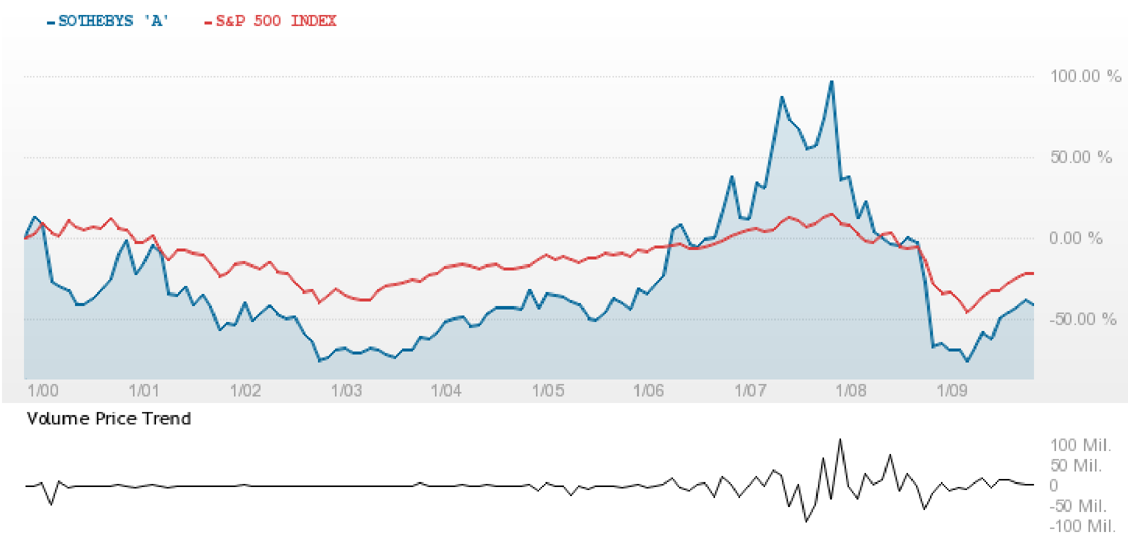

Figure 4.1

Source: information from http://caps.fool.com/Ticker/BID/Chart.aspx?source=icasitcht0000001 (27-10-2009)

[75] Private sales and private collection auctions will continuously be held in Amsterdam.

The figure shows a downward slope between 2000 and 2001. This negative slope can be explained by the turmoil in the financial world at that time (explained in Paragraph 4.3 *The Development of the Crisis*). The period between 2007 and 2009 in the chart shows a rather turbulent image. This is when the bubbles in the art market and the financial market burst. The Sotheby's stock was affected even more than the S&P 500.

Christie's being privately owned, since 1999, does not have to inform the world about its yearly profits. Christie's is less exposed to the unpredictable behaviour of their shareholders. This makes Christie's look less vulnerable in times of crisis. Nevertheless Pinault, Christie's owner, is reported to have said to the Sunday Times on the 28th of December in 2008 to be 'considering' selling the auction house. There has been no sale yet.

In response to the reorganization of the current financial market both auction houses were restructured as well.

4.5.4.3 Location of Sale[76]

Exchange rates can make the purchase of art cheaper for certain buyers. For instance, in the 1930's the art market in London became cheaper. This was caused by a weakened GBP (Reitlinger, 1961: 209). Rush (1974: 17) refers to the positive effect of currency drops on demand for art. Rush explains a collectibles boom with low exchange rates. Collectors will exchange their weak currency for art objects. The collectors are stimulated by the idea that the art objects will retain or even increase their value (Rush, 1974: 17).

The crash of October 2007 affected the world economy and in particular the economy in the Unites States. The dollar lost its position which made selling art in America less profitable. London became a more attractive place for Americans to sell their works of art. On the other hand the American art market was a perfect place to buy.

Renneboog and Spaenjers (2009) describe the impact of currency changes by taking the USD and the GBP as dependent variables. Most art market research is mainly based on USD because of the strength of the currency. Another reason to use the USD is because the buyers in the international art market trade or report in USD. This was at least the case before the financial crisis.

[76] For further detailed information the graphs in Appendix C can be used.

4.5.5 Research

The market structure is best analyzed in times of crisis. Shaede (1991: 39) explains this in his text about the financial crash in the late 80's. He also explains relevance for further studies on art investment and the performance of the art market.

The art market will shift from a market powered by supply to a market powered by demand; the so called 'buyers' market'. Buyers will have more time to consider their future purchases, 'a phenomenon that was already visible at Art Basel 2009' (Baars, Interview 27-7-2009). The shift from a supply driven market to a demand driven market in times of crisis justifies a separate dedicated study.

4.6 Conclusion

The specific development of the present financial crisis shows similarities to historic crises. The financial bull market preceding the crash stimulated the art market. However, the effects of the financial crisis are also visible in the art market. The specific influence of the financial crisis on the contemporary art market can be measured using different methods. The most familiar method in scientific research is the construction of an art market index. The impact of a financial crisis can also be investigated by looking at the number of sales, the amount of lots, the 'BI' rates, the reserve prices set and by the changes in holding period. These characteristics are subjective to movements in the financial market, changes in demand, supply and art prices. In the next chapter these criteria will be applied. Their contributions to the expected effects of the financial crisis on the art market will be explained.

5 The Secondary Art Market for Modern and Contemporary Art in Amsterdam

5.1 Introduction Art Market Amsterdam

'With fewer lots and lower estimates, the May sales are solid, but combined totals for both houses ' [Christie's and Sotheby's] Imp/mod and contemporary sales are down 68% from May 2008.'

(Art and Auction, July/August 2009: 35)

Amsterdam as an art marketplace has remained relatively important given the size of the country (Bakker & Campbell, 2008).[77]Although the Netherlands is not a big actor in the international art market (the United States and the United Kingdom dominate the worldwide art sales) its art market is significant. Of the global top 50 artists ranked by auction turnover in 2006, 6% was Dutch (Bakker & Campbell, 2008: 221). The Netherlands also hosts the world's most important fine art and antique fair, the European Fine Art Fair, TEFAF. In addition, the country has an enormous number of museums for the size of its population. The interest and the comparative importance of The Netherlands in the fine art world explain why Christie's and Sotheby's have opened sales rooms in Amsterdam. The focus of this study is on the changes within the secondary art market for modern and contemporary art at Christie's and Sotheby's Amsterdam as a consequence of the crisis.

To be able to comment on the influences of the financial crisis on the secondary art market in Amsterdam it is important to collect data about the local art market. The study will focus on data collected from the sale rooms of the two major auction houses in Amsterdam.[78] The secondary art market worldwide is dominated by Christie's and Sotheby's. They have an 80 percent share in the global art returns. Christie's and Sotheby's form a duopoly. Although the most important auctions by Christie's and Sotheby's are generally held in London and New York[79] the duopoly is also visible in the secondary art market in the Netherlands. In the 1970's Christie's and Sotheby's opened salerooms in Amsterdam. Sotheby's made a promising start by buying the biggest auction house already operating in Amsterdam. The auctions in Amsterdam are split into different departments specializing in certain art historical periods. For Christie's there are: Old Masters, Impressionist and Modern Art and Post-War and Contemporary. For Sotheby's there are: Old Masters, 19th century Paintings and Modern and Contemporary Art[80].

[77] This website is a contribution to the book 'International Art Markets' (Goodwin, 2008) http://www.koganpage.com/Documents/Downloads/inter_art_markets.pdf

[78] These auction houses both had an active sale room in Amsterdam at the start of the research. Sotheby's Amsterdam will in the future develop its activities as an outsourcing office rather than a sale room. The amount of auctions is scaled down since the end of this study, auctions will in the future be held as an exception.

[79] Although Christie's in 2008 had the Yves Saint Laurent auction in Paris as a major form of income.

[80] Christie's Amsterdam changed its departments divisions in March 2009 into the listed categories. Before March 2009 Christie's had a modern and contemporary art department like Sotheby's Amsterdam.

This research will focus on data collected from the Modern, Post-War and Contemporary art auctions at Christie's and Sotheby's Amsterdam.

The Japanese art market boom had little effect on the Dutch painting market (Bakker & Campbell, 2008). A similar neutral effect should be visible in the contemporary art boom until 2007. The price explosion during the early 1990's in London and New York was not visible in the prices for Dutch paintings. This lack of effect should also be visible in the art market figures since 1985. Therefore, this study will look into auction data from Sotheby's and Christie's Amsterdam dated back to 1985.

5.2 Data

Looking for the effects of the global financial crisis on the contemporary art market one starts by studying the supply and the demand for art. Data about consigners supply is confidential and not available. This research will focus on the demand visible in auction data selected from 1985-2009[81]. The demand is represented by the sale totals and BI rates. The demand side is particularly interesting because the art market shifted from a supply driven to a demand driven market. The supply side of the auction house is represented by lot numbers and pre-sale estimates.

5.2.1 Source

The source for the collected data was an online database of art auction prices[82]. The website was referred to as the world's leading cultural media group. It provides detailed information on auction results. Auction price data are seen as reliable sources of information about the art market (Goodman, 2008). In addition to the online art price database, auction data and estimated prices were taken from pre-sale catalogues and the online databases provided by Christie's and Sotheby's. Prior to an auction information on the individual works of art coming up for sale are published in a pre-sale catalogue. The pre-sale catalogue contains information like the title of the painting, the artist, the size and the medium. Furthermore, the catalogue will include a low and a high price estimate for the works of art. In this study the listed estimates will be used as indicators of the state of the secondary art market.

[81] When looking at the specific data for Christie's Amsterdam the period is 1987-2009. Unfortunately before 1987 no data could be collected, though this will not significantly bias the results. The data still start within the art market boom and before the effects of the crisis in the late 1980s becomes visible.
[82] Artsalesindex.artinfo.com

5.2.2 Auction data

Data was acquired for a period of 25 year. It starts with the data collected from the auctions in 1985. Certain artists were selected. The development of estimated prices set for works by these selected artists was examined. The influence of the 1990's art market downturn on fetched prices, auction totals, estimates and BI rates was also taken into account. All parameters were compared with the downturn in the current art market. The purpose of this study is to see how the Dutch secondary art market was influenced by the current international financial crisis.

Auction data were collected for auctions twice a year. This is because 80 percent of the auction house results are made in the second and the fourth quarter of the year. The data collection for this research goes until July 2009. The most recent auctions taken into account are the 17th of June at Christie's and the 1ste of July at Sotheby's.

A summary of the specifics of the data used:[83]

- Auction data from Christie's and Sotheby's Amsterdam
- Period 1985-2009
- Total value of auctions in Euros
- Estimated value of auctions in Euros
- Total amount of lots per sale
- Total amount of works 'bought in' (BI)

[83] A CD with the collected auction data will be enclosed in the cover of the Thesis.

5.2.3 **Inflation and Conversion**

The online databases provide auction sale prices. To be able to draw conclusions from the data the study should include paintings that where sold before and after the depression (Rush, 1961: 367). In this report data on auctions in the last 25 years was used. Certain artists and auction houses were selected. Sales prices were given in USD and in nominal value of the day of sale. Because this research focuses on selected sales in the Netherlands from Christie’s and Sotheby’s in Amsterdam prices are converted to the current Euro. Exchange rate figures were used to convert data to Euros. Inflation figures were used to calculate what the nominal value in Euro would be today.

The following assumptions were made:

- Inflation figures used were taken from Measuring Worth (http://www.measuringworth.org/exchangeglobal/index.php, 29-7-2009, see table 1: Inflation and Conversion).
- The guilder was converted using a fixed factor of 2.20371 gulden/$.
- For inflation figures were taken from CBS (Centraal Bureau voor de Statistiek, 29-7-2009, see table 1: Inflation and Conversion).
- Per year 1 average value was used.

The following formulas were used.

$\mathbf{P_{2009}}$	**=**	$\mathbf{P_y}$	*****	$\mathbf{F_y}$	(see table 1)
F_y	=	$f_{exc;\,y}$	*	$f_{inf;\,y}$	
$f_{exc;\,y}$	=	e	/	2.20371	(before 1999)
	=	e			(1999 onwards)

$f_{inf;\,y}$ was calculated as follows:

$f_{inf;\,2009} = 1$

$f_{inf;\,2008} = 1 * (1+i_{2008})$

$f_{inf;\,2007} = 1 * (1+i_{2008}) * (1+i_{2007})$

.

.

.

$f_{inf;\,1986} = 1 * (1+i_{2008}) * (1+i_{2007}) * \ldots * (1+i_{1986})$

$f_{inf;\,1985} = 1 * (1+i_{2008}) * (1+i_{2007}) * \ldots * (1+i_{1986}) * (1+i_{1985})$

P_{2009}	=	price converted to Euros and money of 2009
P_y	=	price from database in USD in money of day of sale
y	=	year of sale
F_y	=	total conversion factor for year of sale
$f_{exc;\,y}$	=	exchange rate at year of sale
$f_{inf;\,y}$	=	inflation factor for year of sale
e	=	exchange rate from source
i	=	inflation from source

Inflation and Conversion

Year	Inflation in NL [%]				Year	Guilders	2,20371	Year	Euro		total factor
1985	2,3	1,023	1,636		1985	3,3184			1,506	1985	2,464
1986	0,2	1,002	1,600		1986	2,4485			1,111	1986	1,777
1987	- 0,5	0,995	1,596		1987	2,0264			0,920	1987	1,468
1988	0,7	1,007	1,604		1988	1,9778			0,897	1988	1,440
1989	1,1	1,011	1,593		1989	2,1219			0,963	1989	1,534
1990	2,5	1,025	1,576		1990	1,8215			0,827	1990	1,303
1991	3,9	1,039	1,537		1991	1,872			0,849	1991	1,306
1992	3,7	1,037	1,480		1992	1,7587			0,798	1992	1,181
1993	2,1	1,021	1,427		1993	1,8585			0,843	1993	1,203
1994	2,7	1,027	1,398		1994	1,819			0,825	1994	1,154
1995	2	1,02	1,361		1995	1,6044			0,728	1995	0,991
1996	2,1	1,021	1,334		1996	1,6863			0,765	1996	1,021
1997	2,2	1,022	1,307		1997	1,9525			0,886	1997	1,158
1998	2	1,02	1,279		1998	1,9837			0,900	1998	1,151
1999	2,2	1,022	1,254		1999	2,3476		1999	0,9387	1999	1,177
2000	2,6	1,026	1,227					2000	1,0832	2000	1,329
2001	4,5	1,045	1,195					2001	1,1171	2001	1,335
2002	3,4	1,034	1,144					2002	1,0578	2002	1,210
2003	2,1	1,021	1,106					2003	0,8833	2003	0,977
2004	1,2	1,012	1,084					2004	0,804	2004	0,871
2005	1,7	1,017	1,071					2005	0,8033	2005	0,860
2006	1,1	1,011	1,053					2006	0,796	2006	0,838
2007	1,6	1,016	1,041					2007	0,7293	2007	0,759
2008	2,5	1,025	1,025					2008	0,6791	2008	0,696
2009	0	1	1,000					2009	0,7	2009	0,700

Table 1: Total conversion factor for year of sale.
Own calculations [84]

[84] Sources: © Centraal Bureau voor de Statistiek, Den Haag/Heerlen 29-7-2009
© Measuring Worth, 29-7-2009

5.2.4 Population

To acquire a better understanding of high end artists appearing at auction in Amsterdam auction results were studied in detail for two important Dutch Artists: Karel Appel (1921-2006) and Jan Schoonhoven (1914-1994). Both artists have had an impact on the current Modern and Contemporary art market and especially on the art market in Amsterdam.

Recognized artists have an established value and enjoy a monopoly. Demand for their work is often transparent for suppliers. The buyers of specific artists are often acquainted with the sellers in the art market. For the high end artists the auction houses often know in advance who is going to bid and even how high they are willing to bid. Quality works of high end artists are traded on a 'very thin market' (Frey, 1995: 213). Moreover these works are traded even during downturns in the art market.

The relationship between the financial crisis and the performance of high end artists on the secondary art market in Amsterdam was studied. The research started by comparing the auction records at Sotheby's and Christie's Amsterdam for Karel Appel and Jan J. Schoonhoven between 1985 and 2009. The data on Appel and Schoonhoven will be analyzed in paragraph 5.5.

5.3 Secondary Art Market: Christie's Amsterdam

5.3.1 Sale Totals

The effect of a depression can be directly seen in the decline of total prices of all the paintings taken together (Rush, 1961: 367)[85]. In figure 5.1 the sale totals for modern and contemporary art auctions in the period 1987-2009[86] show an interesting picture. Although art market specialists stated that the Dutch art market was not that much affected by the crash in the 1990's the sale totals in figure 5.1 in 1990-1991 seem to show a steep decline.

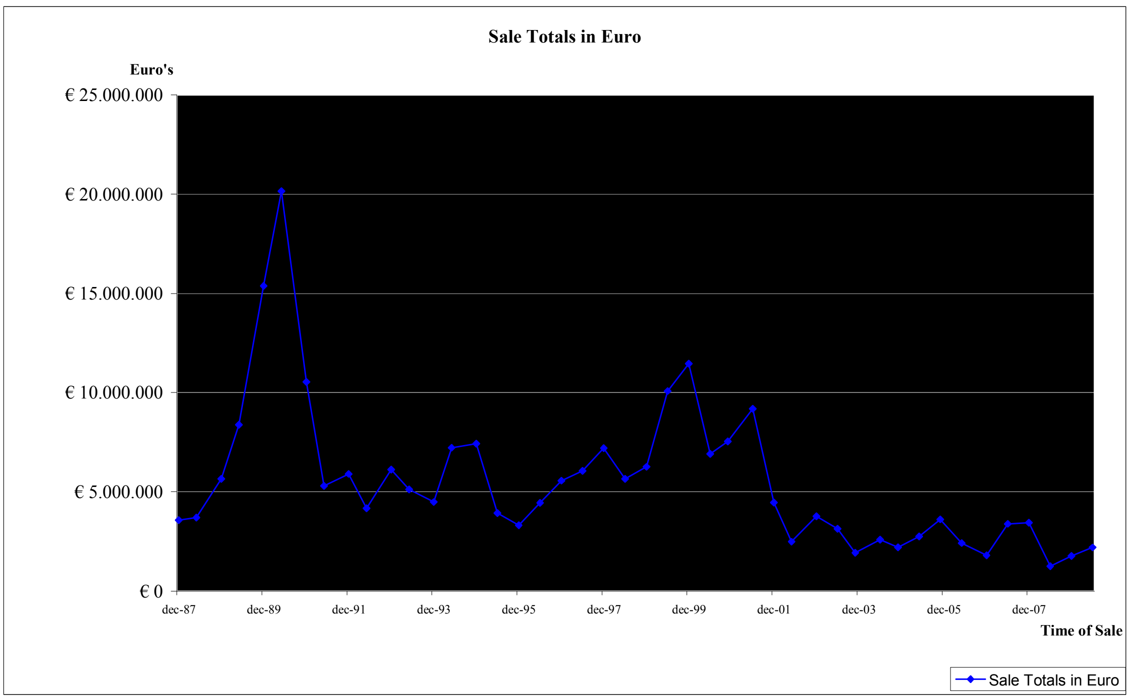

Figure 5.1: Sale Totals Christie's Amsterdam 1985-2009

In 1990 a special section in the auction was dedicated to the Cobra movement[87]. Therefore the sale in Euros in 1990 is not per se representative for the art market bubble.

In 1999-2001 there is another peak in the sale totals. This could be the recovery of the early 1990's crash. The high sale totals are stimulated by a high amount of lots and extra categories of art offered in the specific auctions. In a booming market the amount of auctions per season increases.

[85] Rush looks at the effects of the depression in the 1930s
[86] Unfortunately before 1987 no data could be collected, though this will not significantly bias the results. The data still start within the art market boom and before the effects of the crisis in the late 1980s became visible.
[87] As mentioned in chapter 4; Christie's and Sotheby's were celebrating the existence of the Cobra movement in 1990. Both auction houses offered a high amount of Cobra artists in their auctions.

However, the comparability of the sales for research decreases.[88] The global art market boom between 2003 and 2008 is not directly visible in the data collected from Christie's Amsterdam. However after 2007 the sale total fell sharply. This indicates a direct response of the art market to the financial upset. The deflated sale totals can indicate a decrease in number of lots, sale rates, estimations or an increase in BI rates. The following paragraphs will look at the different parameters.

5.3.2 Amount of Lots

The spring and the winter auction indicate an increase and decrease in lots offered per auction visible in figure 5.2. The first peak noticeable is the auction in 1990 where an extra category 'The Cobra-movement', was offered. The total amount of lots offered during 1991-2008 show no other extreme peaks. However, shows a steady decline. Between 2001 and 2003 the amount of lots is some what higher. In this period a Belgian art section was included in the auctions.

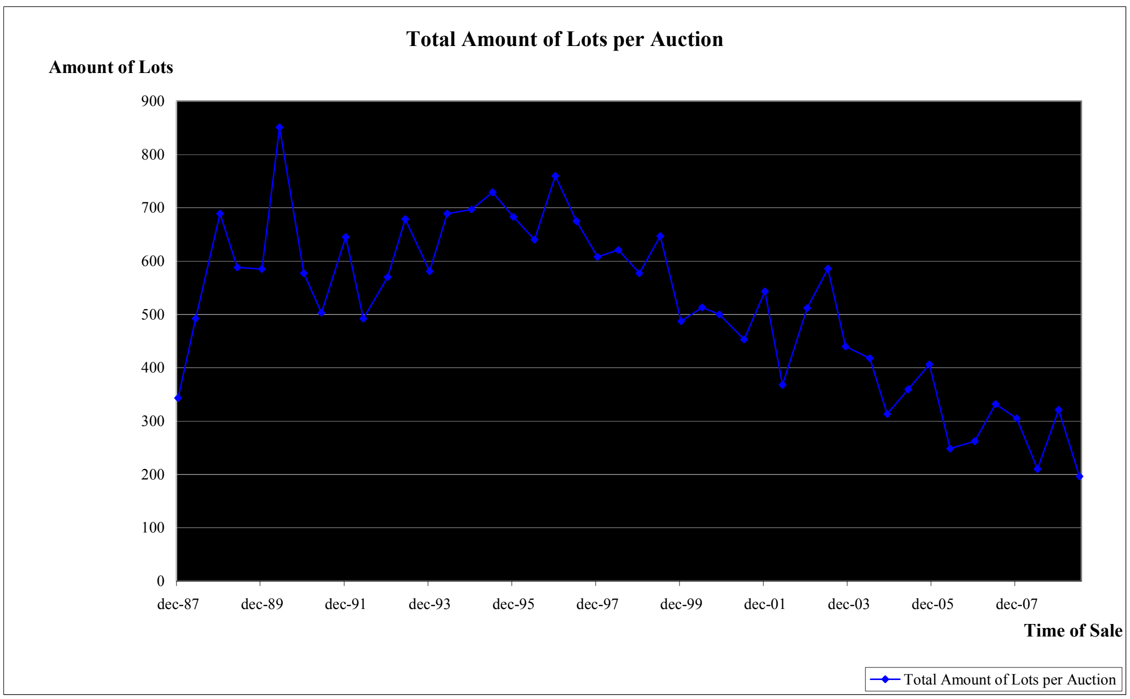

Figure 5.2: Total Amount of Lots Christie's Amsterdam

The 1990 peak might be the response of consigners on the art market boom. They provide more art to the secondary art market because they believe to sell at high prices. This is visible in the increased amount of lots supplied to the secondary art market.

The decrease in number of lots at auction during economical downturns is twofold. Auction houses are more selective when accepting works of art. The quality and the rarity of the works of art is more important again. Secondly, consigners will be reluctant to put their art up for auction. Figure 5.2

[88] The extreme segmentation of auctions by Christie's and Sotheby's in a booming art market influence the construction of the supply in each separated auction.

indicates a steady decline of the amount of lots in the Modern and Contemporary art sales in Amsterdam. This can be explained by the fact that more works of art were sent to salerooms in London or New York as during the boom the prices there were higher.[89] The total amount of lots declined in parallel to the decline of sale totals. This is a strong indication of the dependence between number of lots and sale totals.

5.3.3 **Amount of Lots 'Bought In'**

The secret reserve prices and the high 'buy in' rates (or BI rates) have some interesting implications for theoretical study of auctions (Ashenfelter, 2003: 33). In times of an art market boom the BI rates are low and the level of sold lots is high. This is because demand then exceeds supply. In 1987-2009 the slope of the BI trend expressed in percentage of total sales at Christie's Amsterdam confirms that demand exceeds supply in booming times (and vice versa in crisis). In 1989 when the art market was still booming the BI percentage was low. From the moment the art market started to show cracks BI rates increased. The BI peak in 1995 can be ascribed to lasting effects of the crisis in the late 1980's. As described in an 'Art Price' research no stable recovery was seen until 1995 (*The Contemporary Art Market Recent Trends*, 2008/2009). Another clarification is the fact that 1995 was the year that the price fixing scandal between Christie's and Sotheby's came out. The commission for buyers and sellers changed significantly.

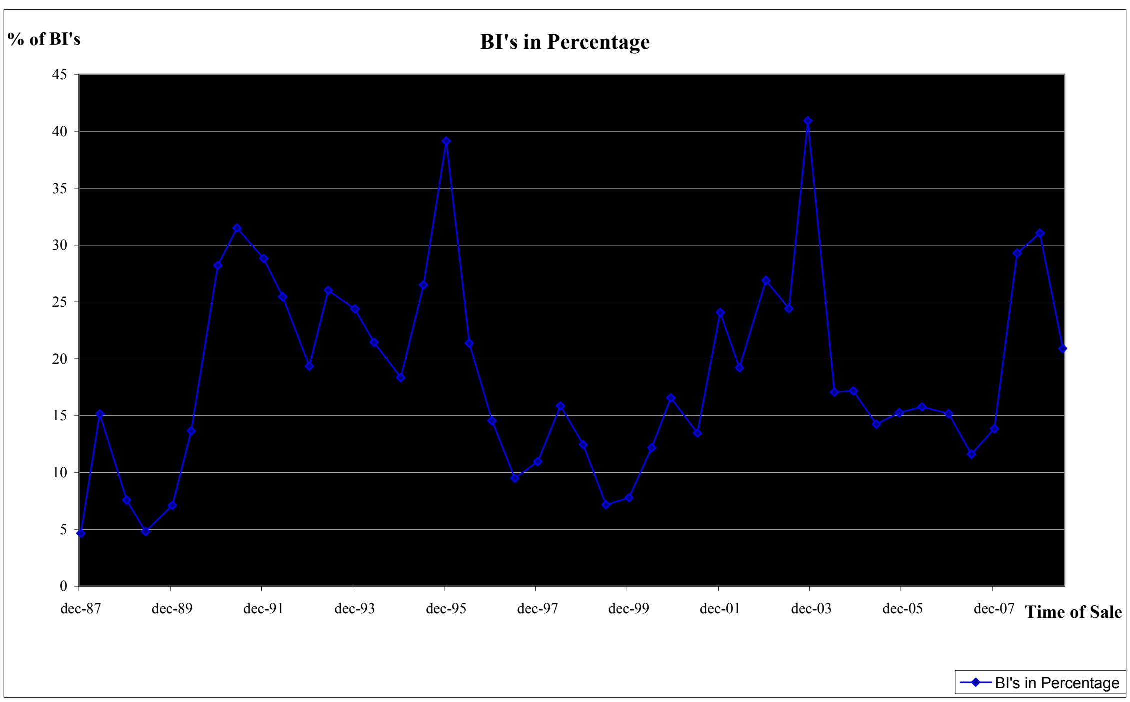

Figure 5.3: BI rate Christie's Amsterdam

[89] Only lots of high quality and for an international market will be sold in London and New York. This means that the consigners should have the right work to be able to have it sold in London or New York.

In 2001 the world economy was hit by the 9-11 attack in the United States. The Federal Reserve in the United States designed a stimulation plan to prevent a recession. Worldwide however the economy took a step back. It is interesting to see a rising BI rate between 2001 and 2003 in Amsterdam. It shows a fear for economic downturn in the Netherlands.

During the booming period between 2003 and 2007 the BI percentage was low. This confirms the theory of low BI rates in booming art market periods. From 2007 to 2009 the BI rates rise sharply. This rise is a response to the financial turmoil. The last auction of the spring season 2009. It shows a new confidence as the BI percentage drop.

5.3.4 **Estimates**[90]

Auction houses have been unwittingly overestimating consumers demand and their willingness to pay for recent Contemporary Art (Ashenfelter and Graddy, 2002). In response to the slowdown of the art market the estimates were scaled down. The low estimates were to encourage investors and buyers to stay active in the art world. An example from Christie's during their 17 June auction 2009 shows that this tactic can work. A sculpture by Jan Fabre (Belgium, 1958) was conservatively estimated between € 25.000-35.000. It was sold for € 194.020 (more than five times the high estimate).

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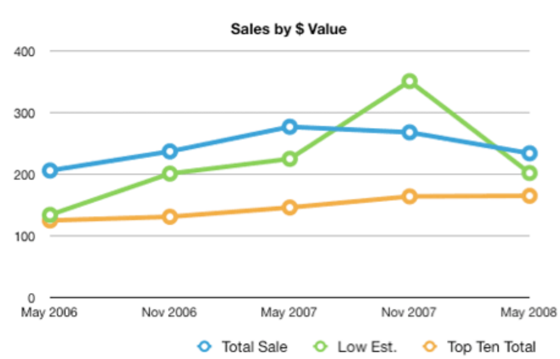
[90] A figure from Sotheby's indicates a similar change as with Christie's due to the financial crisis. However data to confirm this have not been collected for Sotheby's in this study. And further research is needed to compare the results of both auction houses. Christie's has a tendency to underestimate systematically, while Sotheby's overvalues inexpensive pieces and undervalues expensive pieces (Bauwens and Ginsburgh, 2000). Although sale totals at Christie's do not confirm this. Unfortunately sale numbers at Sotheby's will not be taken into account in this chapter. In that sense it will not be possible to confirm the statement by Bauwens and Ginsburgh (2000) and more extensive research is recommended.



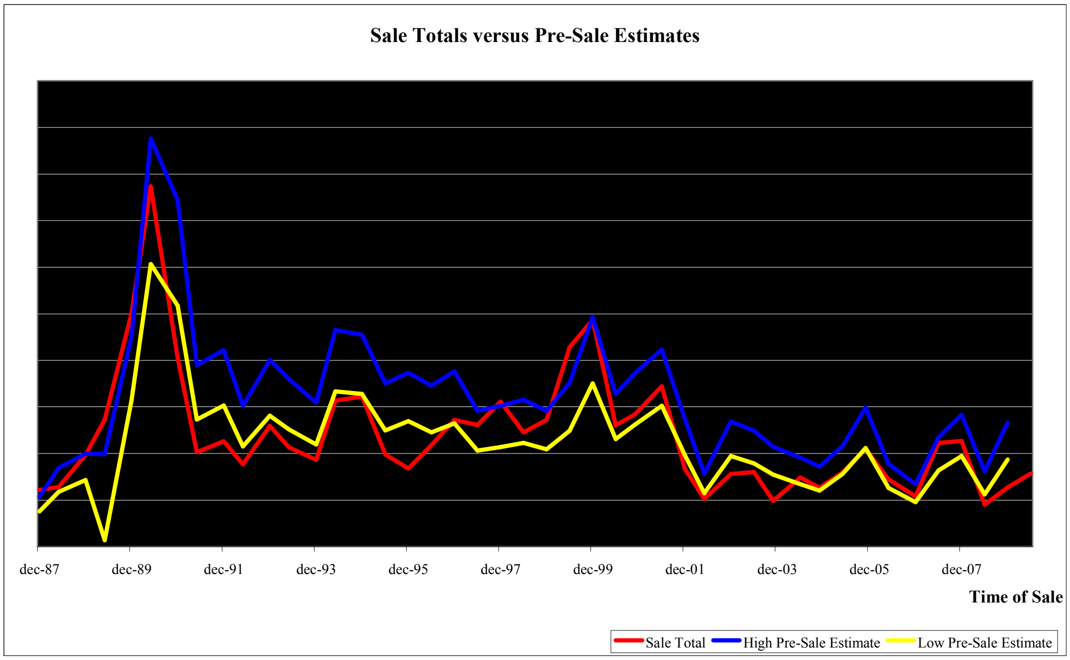


Figure 5.4: Sale Estimate Total Christie's Amsterdam

The first art market boom of the late 1980's was followed by a period of sale totals lower than the total of the low estimate. This also happened in 2003 and 2008. The sale total seems to respond directly to financial changes. In financial booming periods the sale totals are between or above the pre-sale estimates. During financial downturns the sale totals are below the low pre-sale estimate.

5.4 Blue-Chip Artists at Christie's and Sotheby's Amsterdam

Christie's and Sotheby's auctioned 972 works of art by Appel and Schoonhoven between 1985 and 2009 (see table 2). During the recent crisis works by Appel and Schoonhoven were consistently sold for high prices. The high prices can represent different buying reasons. It can for instance relate to the demand for works of specific artist seen as save investment. A second reason for high prices can be that the buyers of these particular works are not (yet) affected by the recession. Overall demand for these works will not drop as rapidly as for works by other artists. This might mean that the demand will not decline. A third reason can be that during a recession more high quality works of art are sold at auctions, while overall the number of lots drops. The personal information concerning the demand side of the art market is not transparent and the information is often furtive. This makes the data collection complicated. And in addition measuring the quality aspect in economic research on the art market is still a challenge.

*Artist * Price * Christie's and Sotheby's 1985-2009*

		Price					Total
Christie's & Sotheby's 1985-2009		BI	Price >0-10.000	Price > 10.000-100.000	Price > 100.000-200.000	Price > 200.000	
Christie's	Jan Schoonhoven	1	81	15	1	0	98
	Karel Appel	1	180	247	17	7	452
	Total	2	261	262	18	7	550
Sotheby's	Jan Schoonhoven	7	70	29	2	1	109
	Karel Appel	10	125	159	14	5	313
	Total	17	195	188	16	6	422

Table 2: Artist * Price * Christie's and Sotheby's 1985-2009
Own Calculations

5.4.1 **Karel Appel (1921-2006)**

'Not many Dutch artists play a significant role in the international art world, as can be seen in their [low] prices' (Bakker, 29-7-2009). This makes it difficult to use the Dutch art market as an indicator for the effects on the international art market. Most Dutch artists will only appear at Dutch auctions. Karel Appel however is an example of an artist having national and international esteem.

Karel Appel is the most famous Dutch artist of the 20th century. In Paris in 1948 together with Asger Jorn (Copenhagen), Joseph Noiret en Christian Dotremont (Brussels) en Constant, Corneille (Amsterdam) Appel started the CoBrA movement. CoBrA became an international association of artists and writers. The CoBrA movement fell apart in 1951. During his life Appel travelled around the world searching for important art centres and influences. Eventually he settled in New York and never returned to The Netherlands. Appel is said to have continued working from a Dutch tradition. His works are still sold worldwide and many national and international museums show works by Appel in their collection. Appel earned approximately 29 million Euro with his art. In 2005, 199 works by Appel changed from owner through global auctions. The CoBrA movement has done extremely well since the 2000's compared with other major sectors in the art market. 'Since 2000 the returns have been in line with the especially hot markets for Modern and Contemporary art, and from 2004 to 2006 returns averaged a staggering 15.5 per cent' (Bakker & Campbell, 2008).

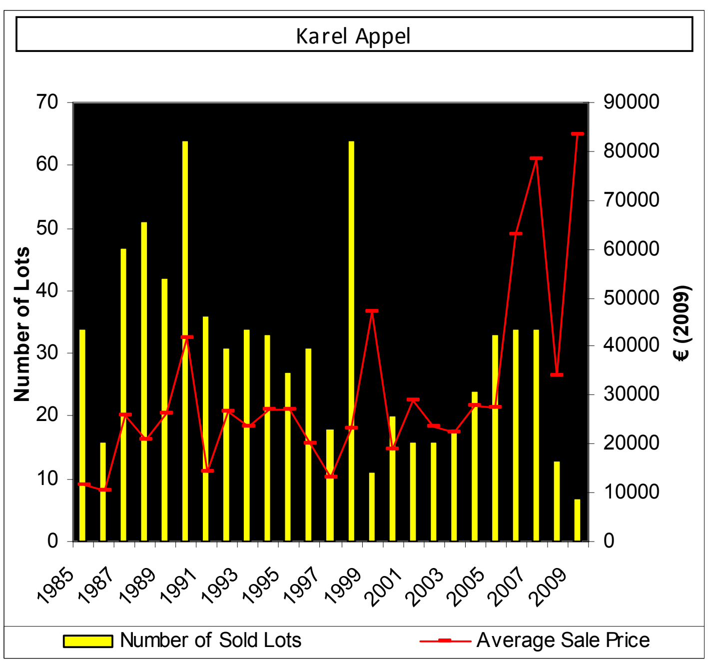


Figure 5.5: Karel Appel Christie's and Sotheby's Amsterdam

The top end of the market seems immune for deflation spirals that affect the stock markets (*Art Market Trends*, 2008). Karel Appel is such a top end artist in the secondary Dutch art market.

Figure 5.5 shows two effects. Firstly, it shows the numbers of sold lots per year and secondly it shows the average price per sold lot in a specific year[91]. The number of lots indicates the supply of works of art. In 1991 the amount of lots is very high. That year Christie's and Sotheby's included special sections on Cobra art in their auctions. This explains the high lot number. The timing of Christie's and Sotheby's to include these works was influenced by the art market boom. It was their way to respond to the increasing demand. The average price for works of art (the red line) in 1991 is relative high, despite supply being high. This phenomenon makes the declining price anomaly introduced by Ashenfelter (1989) invalid for Appel. The high prices indicate that the demand still exceeds the supply. Following that year the average price falls. Works by Appel are affected as well.

In 2003-2007 the average price for Appel inflates rapidly with the art market boom. In 2007 prices fall sharply in response to the financial downturns. Works by Appel recover in 2009 following the growing consumers' confidence. The amount of lots is low and the average price is high. These two aspects indicate that the art market is selective in what it supplies and that there are less works offered for sale. Secondly it means that if certain works of quality enter the art market demand is always there. This confirms that there is always a market for the right works. The high prices indicate that fro these works the supply is low and the quality is high. Demand for these works therefore still exceeds supply[92].

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[91] All prices are calculated in 2009 € rates.

[92] Karel Appel died in 2006. Karel Appel's death biases the results that indicate an interrelation between the performances of the art market for works made by Karel Appel and financial up- or downturns. The death of an artist influences demand and supply. The 'death effect' of an artist on the art market will unfortunately not be further investigated in this research.
For further information on the 'death effect' look for instance at the working paper by Ursprung and Wierman (2008), http://www.SSRN.com/abstract=1102963 of Twww.CESifo-group.org/wp and to the article by Ekelund JR et al. (2004)T.

5.4.2 Jan Schoonhoven (1914-1994)

In the 1950's Schoonhoven was in contact with the Cobra association. In 1960 Schoonhoven initiated the 'Nul-groep' a Dutch version of the international 'Zero movement'[93]. This was a movement focusing on 'objective' art. The Zero movement belongs to the Modern and Contemporary art between 1958 and 1966. The works of art by Schoonhoven changed during his career. He started with geometrical patterns and evolved to more random forms. From the 1960's works by Schoonhoven caught the attention of international museums and from international collectors (Bakker & Campbell, 2008). In addition, Schoonhoven won international art prices, exhibited and was traded worldwide.

The graph of Jan Schoonhoven shows the total amount of lots supplied to the art market between 1985 and July 2009 and the prices paid for his works. The graph shows a downward slope during the art market boom period. The amount of lots increased and the prices dropped. The decreasing prices can be explained by the fact that the supply of Schoonhoven works surpassed demand on the market. This confirms the presence of the declining price anomaly for works by Jan Schoonhoven. The increase in supply can lead to lower auction results. Fewer buyers will bid against each other and prices will not rise as high. Another explanation for a declining price is that the quality of the works supplied went down.

[93] Important artists of the Zero movement are: Arman (FR), Armando (NL), Bernard Aubertin (D), Hermann Bartels (D), Pol Bury (B), Enrico Castellani (I), Giani Colombo (I), Dada Maino (I), Piero Dorazio (I), Lucio Fontana (I), Hermann Goepfert (D), Gerard von Graevenitz (D), Gotthard Graubner (D), Hans Haacke (D), Jan Henderikse (NL), Oskar Holweck (D), Akira Kanayama (J), Yves Klein (FR), Yayoi Kusama (J), Walter Leblanc (B), Francesco Lo Savio (I), Adolf Luther (D), Heinz Mack (D), Piero Manzoni (I), Almir Mavignier (I), Christian Megert (S), Sadamasa Motonaga (J), Saburo Murakami (J), Henk Peeters (NL), Otto Piene (D), Uli Pohl (D), Hans Salentin (D), Jan Schoonhoven (NL), Kazuo Shiraga (J), Shozo Shimamoto (J), Jesus Rafael Soto (Ve), Daniel Spoerri (S), Atsuko Tanaka (J), Jean Tinguely (S), Günther Uecker (D), Jef Verheyen (B), Nanda Vigo (I), herman de vries (NL), Tsuruko Yamazaki (J), Jiro Yoshihara (J), Michio Yoshihara (J).

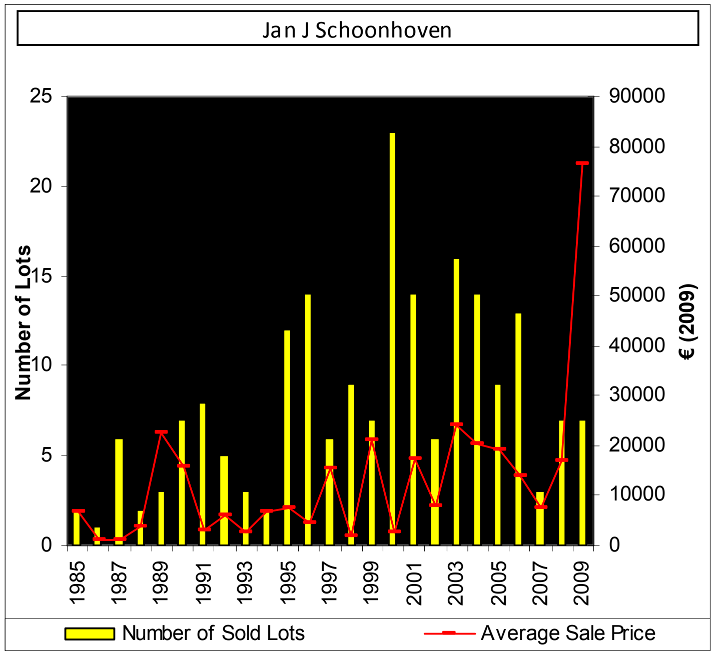

Figure 5.6: Jan Schoonhoven Christie's and Sotheby's Amsterdam

The price for works of art by Schoonhoven since 2007 shot up. Interestingly, 2007 was also the beginning of the recession. A work of art by Schoonhoven at Sotheby's Amsterdam estimated at € 120.000-150.000 was sold for € 540.750. The auction room applauded and the recession seemed far away. Baars (27-7-2009) referred to the quality and the rareness of the work of art to explain the high price. This is another confirmation of the fact that the right works will sell at a high price in every market. In times of crisis, consigners only put quality works up for sale.

The figures for Appel (5.5) and Schoonhoven (5.6) are not the same. For instance the declining price anomaly is not valid for Appel, it is for Schoonhoven. However, there are similarities. During the recent recession, prices for works by both artists shot up. This confirms a flight by investors to safe top end works.

5.5 Conclusion

The effects of the financial crisis on the secondary art market in Amsterdam can be represented by the sale totals, the total amount of lots sold, the pre-sale estimates and the BI rates. After the crisis in 1991 the auction sales worldwide were considerably lower (Art Market Trends 2008). In the Dutch art market the difficulties are visible in the graphs of auction results of Christie's Amsterdam 1987-2009. The recent crisis has a different effect and implies a greater degree of selectivity on the Post-War and Contemporary Art markets (Art Market Trends 2008). In the data of the secondary art market in the Netherlands signs of a booming art market at Christie's Amsterdam are difficult to see[94]. The sale totals and the total amount of lots did not rise as sharply as expected between 2003 and 2008. However, the BI rate did indicate a direct correlation with the situation of the art market.

The examples of Karel Appel and Jan Schoonhoven show that auction houses become more selective regarding the works they offer. The 2009 results for both artists are high. However, works of Appel seems to react in parallel with financial downturns, where Schoonhoven responds anti-cyclic. The works by Appel and Schoonhoven are traded in an identical market still then react differently to art market fluctuations. The study of separate artists illustrates the complexity of designing 'one' art price index as an overall performance indicator. It shows that works of art by different artists react on crises in different ways.

[94] The separate departments at Christie's Amsterdam have been restructured in 2008, which might bias the outcomes.

6 Conclusion

‘Between the multi-million dollar sales of the spring and the extreme wariness of buyers in the autumn, the art market fell victim to the economic and financial crisis as it spread round the globe.’ (Art Market Trends 2008)

The relationship between art and economy will remain a field of scientific research. As described in this report the secondary art market is influenced by different factors. The art market depends on the demand and supply of art in several specific art market niches. All niches have their own rules and investors. The contemporary art market has especially been a field of financial interest between 2003 and 2008. Art market indices are designed for investors to calculate the rate of return in specific fields of the art market or even specific artists. In the period from 2003 to 2009 the demand for contemporary art became specifically influenced by financial rather than art historical motives.

Since art became part of investment portfolios the rates of return on art were calculated and investment periods became shorter. People buy and sell works of art to make short term gains. Previous research compares indices and calculated returns. Nevertheless there is still no index that can provide information on the art market as a whole, let alone give consistent information on future returns.

In the 1990’s the art market depended on the financial impulse of the Japanese investors. In 2008 and 2009 the secondary art market, especially for Modern and Contemporary art, was driven by the fluctuations of the global stock markets and the financial drive of the new economies. Both dependencies made the art market vulnerable; globally all art price indices dropped. The crisis that started in 2007 made the art world aware again of its dependence on the real economy.

In the secondary art market for Contemporary Art the inflation and deflation of the art market bubble is particularly visible. As steep as the Contemporary Art index increased, so steeply did it drop. The global percentages of sold art lots dropped with almost 50 percent (in other words: the ‘bought in’ or BI rate rose with 50 percent), the total value of the auctions fell with 84 percent and buyers rationale changed with the transformations in the art market. The Contemporary Art market in Amsterdam however showed a less extreme increase in the whole Modern and Contemporary Art niche. In the 1990’s the boom and bust were more obvious than today. The art market in The Netherlands showed a moderate response to the financial downturn. This research shows that the overall impact on the market seems to be less in Amsterdam than elsewhere. One of the main reasons is the fact that the Dutch market has a strong national orientation. This makes the art market in The

Netherlands robust during times of crisis, or put less pretentiously by Anneke Oele: 'The Dutch art market will not fall as hard since it did not fly as high'[95].

As a consequence of the financial downturn the salerooms of Christie's and Sotheby's Amsterdam have adapted to a new art market structure. The structure of the art market is influenced by demand and supply. The composition of demand in the secondary art markets is often a well kept secret. This means that the demand can only be interpreted by looking at the secondary art market results for the supplied art. The supply in the secondary art market by Christie's and Sotheby's is less secretive as auction houses publish pre-sale catalogues. Interdependence exists between the supply of work of art and the state of the art market. The quantity of supply has declined during the recession. The consignment number indicating the supply of art is indirectly dependent on the state of the financial market. Supply by consigners to Christie's and Sotheby's has decreased. The retreat of consigners from auctions reflects the influence of the changing rules in the auction world. The low pre-sale price estimates at Christie's influences the confidence and willingness to contribute art for auction. The quantities of works of art necessary to sustain auction houses are diminishing.

The current art market has become more dependent on the financial market. The financial crisis shows in the estimates of work of art. They are kept low to stimulate demand. The pre-sale estimates in 2008-2009 confirm this. The sale totals have been affected by the lower supply, the lower pre-sale estimates and the falling demand. The recession is visible in the whole modern and contemporary art section. The numbers indicate a lower willingness to consign and in general a lower willingness to buy or invest. The most obvious indicator of the tendency of the (art) market is the BI rate. In economic downturns the BI rates rise sharply, the amount of lots decreases as does the variety of buyer's. Employees of the auction houses need to approach the supply and demand side differently. Private sales became more core business in the auction houses than ever before[96].

As the hypothesis on the response of the secondary art market in the Netherlands to the crisis was twofold, so is its conclusion. As a conclusion the research indicates that in Amsterdam **Christie's (and Sotheby's) have adapted to new art market structures. In this structure financial downturns are indicated by lower sale totals per auctions per season, less lots per sale and lower pre-sale estimates per lot, all with a correlating high BI rate along with the new tendency of the market. The opposite is true for financial booms, which will show higher sale totals per auction, higher amounts of lots per sale and higher pre-sale estimates per lot, all with a correlating low BI rate along with the tendency of the market.** There is however one exception: the high-end of the Dutch art market. Data for Appel and Schoonhoven show the lower willingness to consign. The total amount of lots per artist is low. However willingness to invest or buy art of extraordinary quality remains high. At the last auctions at Christie's and Sotheby's a number of works obtained prices far

[95] A comparable comment has been made by Lopez (1976) 'they fell harder since they climbed higher'.
[96] The advantage of private sales is that the stigma of a BI at auction is avoided and that the sale is undisclosed.

above its estimates. This confirms the conservatism applied to the pre-sale estimates. More importantly it shows a buyers shift to top quality. **In times of crisis, the high-end of the secondary art market in Amsterdam maintains high sale rates and high prices per sale. Its steady behaviour makes the high-end of the Dutch art market a safe haven for the art investor.**

7 Recommendations

Research often leads to new studies. In this chapter some recommendations for future research on the secondary art market will be given. Here the quantitative aspects of the art markets was studied. Number of lots, sale prices and BI rates were key factors. The actual quality of the sold lots was out of scope. It would be interesting to see whether it is possible to conduct a similar study on the qualitative aspects of art markets. The big challenge then is to find an objective measure for the quality of works of art.

The information available about the shifts of art styles, content and size in artists' genres during former crises (chapter 2 and Appendix A) suggests similar changes took place in the art market during 2009. It would also be interesting to focus on the artistic change to overcome the effects of a crisis instead of looking mainly at the economical aspects.

This research focuses the secondary art market. For the secondary art market quantitative data are available. The data are used to design indicators that are 'comparable' with the financial market indices. The primary art market is often omitted. There are hardly data available on the art prices, the sale numbers and the amount of exhibitions in the primary market. For future research on the relationship between the art market and economic cycle it would be interesting to compare the performance of the secondary and the primary art market with the shifts in the economy. In addition, the comparison between the secondary and primary art market would increase the knowledge of the art market in the Netherlands as a whole.

This research looked at the long run of the art market performance. Data are collected from 1985 till 2009. The period of 25 years is interesting because it covers two recessions; a big one in the late 1980's, visible in the art market from the 1990's and the recession starting in 2007. This makes comparing results between the two recessions possible. A study concentrating on a shorter time period could be interesting as well. The observations should focus on the specific changes within the short run. This can increase the awareness of shifts in the art market performance affected by minor changes in the economic climate.

It is challenging to find good quality and comparable data. Shifts in the art market are influenced by multiple factors characteristic to the art market. It is complicated to explain significant shifts in the art market when looking at one of the characteristics. Because all factors need to be taken into account researching the art market will always remain a challenge.

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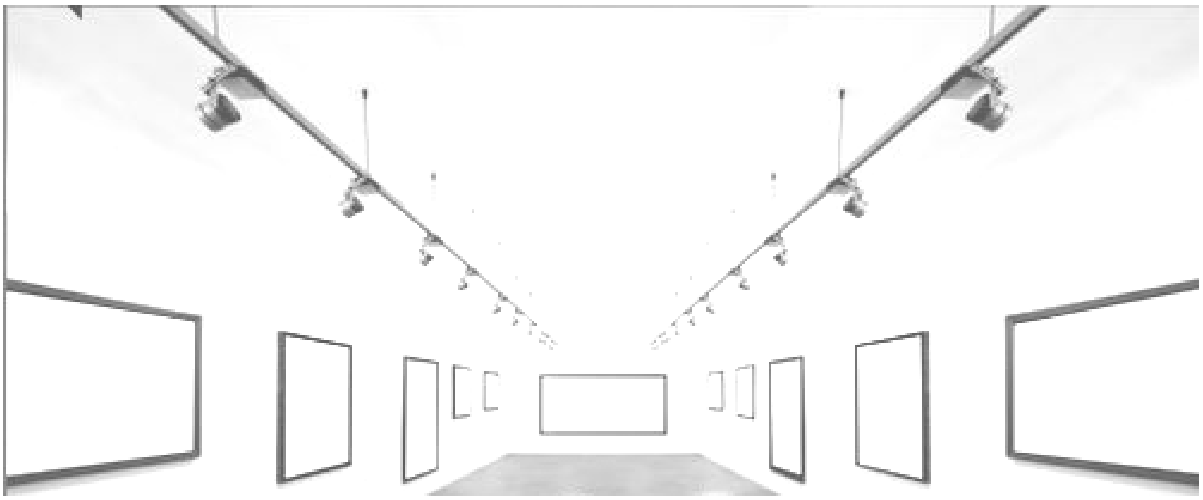
I. APPENDICES



9 Appendices

9.1 Appendix A: Historical Relationship between Culture and Economics

9.1.1 The Effects of the European Economic Expansion in 1300-1600 Italy

Lopez points out that there was a relationship between economy and culture can be indentified in the Middle Ages and the Renaissance. The influences of the so called commercial revolution impacted on this relationship. The commercial revolution can be recognized by an increase in general commerce and by the growth of non-manufacturing pursuits such as banking, insurance, and investing. Italy experienced several forms of professionalization and economical progress. International banking systems came to Italy to do business. This new economical system stimulated the art market. The financial motivation for the art market changed when politics and economics changed globally. Successful trading became a product of logistics instead of the geographic location. Bronger (1997) describes the relation between demand for art in Italy in the early days and the proportional rise of financial means (the commercial change).

The commercial epoch was an era of ‘great opportunities and great hope, […], and of growing tolerance and interchange of ideas among persons of different classes, nations, and beliefs’ (Lopez, 1976:97). The transformation Italy experienced resulted in a fruitful base for a flourishing art market.

After the Middle Ages the situation in Italy changed. In the Renaissance land prices and landlord’s profits were at their lowest since centuries. The effect was a growing gap between the rich and the poor. A more important consequence was a growing dullness of European markets caused by the loss of many eastern markets. This increased dullness depressed the economy.

The centre of artistic renaissance, Italy profoundly felt the impact of the economic recession. Lopez explains that Italy was most heavily affected since they had done so well, ‘they fell harder since they climbed higher’. Although Lopez (1953) does not believe that the Renaissance proves that art is born of economic decadence, he hints at a relation between the two. The connection between economic conditions and artistic achievements ‘is a complicated harmony in which innumerable economic factors and innumerable cultural factors form together a still greater number of chords. That some of them are incongruous or dissonant should not surprise us. Every age is full of contradictions.’[97] In the following the relationship between the changing society and the importance of culture in the new society is visible.

> ‘[…] That culture was placed so high – higher, perhaps, than at any other period in history- is the undying glory of the Renaissance.’ (Goldthwaite, 1993:114)

[97] http://www.archive.org/stream/renaissancemedie009915mbp/renaissancemedie009915mbp_djvu.txt

> '…: they elaborated a formula which vaguely anticipated the Renaissance notion that humanistic culture is the true noblesse.' (Goldthwaite)

When Italians lost their role as intermediaries in international trade (Goldthwaite, 1993:63), Italy failed to integrate itself into the expanding European state system. Therefore Italy failed to take a place in the new economic world order. The Italian flourishing economic context changed but the Italian entrepreneurs kept focussing to luxury products, like art. Italy was committed to luxury products by the market within Italy itself.

Increasing disposable wealth explains the rise of the material culture of Renaissance Italy. According to the 'Lopez thesis' disposable wealth increased due to hard times after the mid fourteenth century discouraged entrepreneurs from reinvesting capital in business enterprises (Goldthwaite, 1993:66). The following quotes show the importance of Italy for investing in culture. 'Architecture was by far the most important expenditure the rich Italians made' (Goldthwaite, 1993:61), also big expenditure in religious art, visible in the history of chapel decoration. Consumption in Renaissance Italy was a creative force to construct cultural identity. 'The Renaissance represents much more than just a change in style: it marked the very discovery of art and the imperial expansion of the realm of art into new worlds. Consumption was thus a dynamic cultural process.' (Goldthwaite, 1993: 250).

9.1.2 The Effects of the Restructuration in the 1621-1645 Art Market in the Netherlands

The retreat into sobriety can only be understood in the context of the 'specific problems facing the Dutch economy in the years 1621-45'. Visual art of the 1621-45 period is in literature characterized as smaller, cheaper, subdued subjects and styles in contrast to the more exuberant art of the Truce period.

> 'This unprecedented and crucially formative spurt of growth in Dutch urban society and art was followed by a prolonged and deeply unsettling economic recession, not least in Baltic trade, which affected nearly every branch of maritime commerce and which began rather abruptly in the spring of 1621 with the resumption of the Dutch-Spanish conflict on land and at sea. This recession, in my view, rapidly came to exert a profound impact on every aspect of the Dutch art world, leaving no single genre or niche of the art market unaffected.' (Israel, 1997: 450).

The citation explained how Israel saw the influence of the recession on the art world. The crisis was not so devastating that there were no possibilities for creative adjustment to the new situation. In the previous years the art market had been expanding rapidly and paintings were produced for a broader span of society than ever before.

Swings and shifts in commerce and the business climate affected artists and those who collected art more than the rest of the population. It was inherent to the art market to react more strongly to general economic developments than markets for other commodities (Israel, 1997: 451). The change of interest in specific kinds of commissioned work of art could not be totally attributed to a change of taste. 'What had changed was that there was simply nothing like the money available to pay the handsome fees that had been offered for large paintings for public use before 1621.'(Israel, 1997: 453). The market for sizeable and expensive paintings was heavily affected by the deepening recession. Even the rich people had to cut back their expenses in art.

> 'In the gloomy business and the financial context of the 1620s and early 1630s, they were forced to cut back drastically so that demand for all sizeable Biblical, mythological and 'history' paintings as well as demand for other kinds of time-consuming meticulous work, such as flower pieces and elaborate still-lives-paintings which in the early seventeenth century were often very costly- shrank substantially, creating much hasher conditions for the artists who had been accustomed or trained to execute such works.' (Israel, 1997: 454).

Artists started changing their style. Painting small, simplified pictures with large area's bathed in shadow and more restricted colour ranges. For instance Rembrandt painted in an almost monochrome style in this period. Rembrandt moved away from 'history' painting to a style that offered fewer possibilities for developing his genius as an artist, but more possibilities to serve demand. With the positive monetary rewards for Rembrandt's portraits, he could maintain his independence. This is an example of how artists looked for creative solutions in economic depressing times. They looked for to demand constantly and steady income to remain an independent artist. Rembrandt's shift to an entirely other genre was exceptional. Marine painters were more likely to change from grand detailed paintings to smaller simpler and general cheaper 'atmospheric' seascapes. Some of this can be explained by a change of taste, but for instance Israel (1997), influenced by the 'Lopez Thesis', explains this shift furthermore as an effect of the economic depression.

The shift away from flower paintings is explained by Israel as 'the harsh circumstances, and the pressure to expend the art market, sufficiently explain the new tendency to avoid intricate, time-consuming work and develop more rapid methods of working, as well as the trend to smaller canvases, …' All genres of the Dutch art market were fundamentally influenced by structural changes in the Dutch maritime economy. Landscapes, seascapes, still lifes and flower pieces all were affected.

9.1.3 The Effect of the Japanese Financial Crisis in the late 1980's

The example of Japanese investors is different form the Italian and the Dutch example. In Italy and the Netherlands the art market was affected as a whole. Artists changed their genre. Works of art became smaller and less complicated. Whereas in Japan especially the impressionist niche perceived a negative price reaction in the late 1980's.

The 'Eighties boom' was especially visible at Christie's and Sotheby's. Modern and Contemporary Art was increasingly popular. Auction houses were able to increase the supply of Modern and Contemporary Art. The demand exceeded the supply. High prices were paid for Modern and Contemporary Art. The late 1980's can be seen as a change to social-economical proportions. The change stimulated the demand for art and the innovativeness of artists (Bronger, 1997).

At the end of the 1980's the flourishing economy collapsed. Key players (auction houses, collectors, dealers, investors) were concerned about the impact the 1987 financial crisis would have on the art market. The early concerns were largely unfounded. Just after the financial crash record prices were fetched at auctions.

Japan seemed to be unharmed by the crisis in October 1987. Japan even started to invest large amounts of corporate money in art. The Art market adjusted rapidly to the new price level (Watson, 1992: 391). The Japanese investments in Modern and Contemporary Art showed that they were not blind for non-Japanese and non-Oriental art. After WW II (late Sixties early Seventies), the Japanese were ready to collect Western art. The huge increase in Japanese wealth became immediately visible in the art market (Watson, 1992:394).

On Black Monday (1987), the New York stock exchange dropped 300 points and another 300 the next day. This was the 'most catastrophic collapse of the world's financial market since 1929 (Watson, 1992: 398). The, now obsolete, 1987 financial crash hit the global art market in the 1990's. However, art sales in Japan still set records. Impressionist paintings fetched millions of dollars. Van Gogh and Picasso paintings were favourites, good for \$24 to \$54 Million. Despite the worldwide crisis the Japanese enthusiasm for the Modern and Contemporary Art was clear. The enthusiasm is often related to the Japanese economic prosperity. Although their enthusiasm can be explained by other historical reasons as well, the financial reasons will be most important for this thesis. The flourishing economy encouraged new Japanese art collectors. This became visible in the increasing numbers of Japanese imports of art compared to worldwide auction sales (Watson, 1992: 412) in figure 9.1.

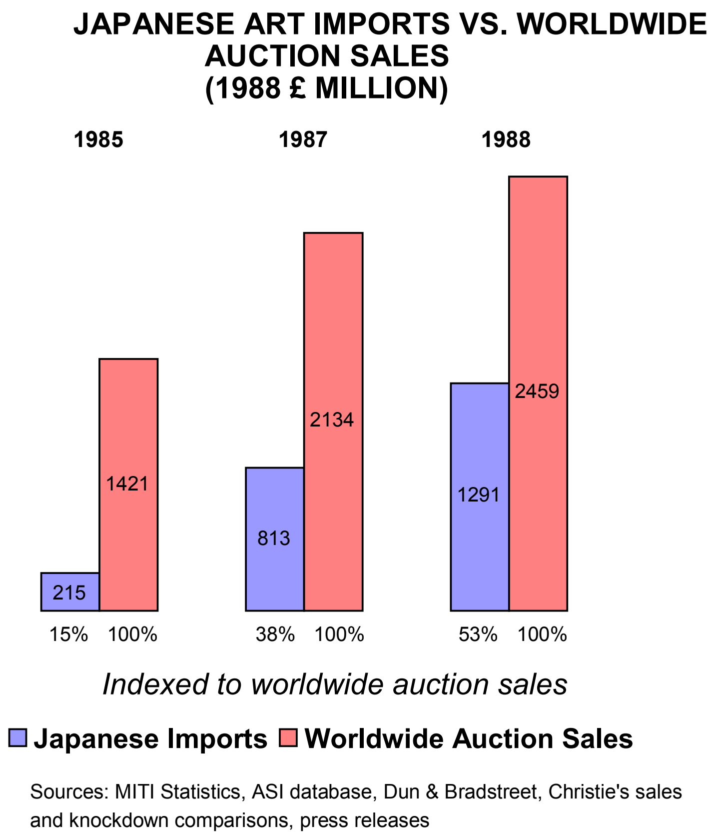


Figure 9.1: Japanese Art Import 1985-1988

Art sales and the value of art seemed 'immune from the yo-yoing of more mundane articles of commerce' (Hayden-Quest, 1996: 165). The effect of this supposed immunity was that speculators kept interested in the art business. The real art boom of the 1980's started after Black Monday.

The abovementioned responses of the art world on a financial crisis seem controversial. The art world consisted of different art niches. These niches all reacted in a different way on financial downturn. The concerns about the art market are relevant for a number of art market niches. The impressionistic art market however kept booming from 1987 onwards. Record after record was broken. Companies were investing in art with money borrowed against companies' landholdings (Watson, 1992: 24-26). Sotheby's even loaned money to art investors to make the overheated deals possible. A problem occurred when Japan started to suffer from financial problems. The sky high prices could not be paid any longer. Thus, the demand for Modern and Contemporary Art dropped immediately. The new Japanese buyers had a leading effect on the global art market in the late 1980's. The Japanese were accused to 'use the auction system for money laundering operations of glassy transparency' (Hayden-Guest, 1996: 200).

At the point when Japan got affected by the financial crisis corporate loans could no longer be paid. Investments in art could no longer be done. Corporations had to sell part of their art collections. As a result the supply of impressionistic art surpassed demand. The financial problems in Japan sparked the collapse of the art market prices for Modern and Contemporary Art worldwide. The consequence of the over-supply and the decreased demand results in a spectacular drop in art prices.
Three years after black Monday (19 October 1987) the dramatic results on the art market became visible (Robertson, 2005: 247, Mei and Moses, 2002 and Hayden-Guest, 1996: 205). In January 1991 Lucy Mitchell-Innes[98] is cited in Hayden-Guest (1996: 205) ‘There had been cracks in the art market, but people were buying paintings. Then the war started, it [the art market] switched off like a light.’

[98] Lucy Mitchell-Innes is a former employee of Sotheby’s. At the moment she is a private art dealer and advisor.

9.2 Appendix B: New Economies and Collecting Contemporary Art

(Summary of a number of discussions with Post-War and Contemporary Art Specialist: Peter van der Graaf, Christie's Amsterdam)

There are always hypes in the art market. Contemporary art for instance was hyped. People were investing in the Contemporary Art World as if it were assets. Investors were trying to earn money, while looking for positive rates of return. Shifts in taste and believes in art as an investment can catapult value for specific types of art and leave other categories destitute. (Robertson, 2005: 251)

The contemporary art market hype was not the first hype. To understand the situation of an art style that is stimulated by fashion or the prospect of earning money, it is important to look at least two extra markets. The market for Indonesian art and the market for Chinese art have been driven by fashion or money just like the Contemporary Art market. All markets react slightly different.

The market for Indonesian art has been driven and stimulated by the fact that Indonesian collectors started to buy back all the important exported work of art. The Indonesians were establishing a new market ground for their own art style. The auctions houses learned about the developed interest for Indonesian art. Christie's participated on this renewed interest for Indonesian art. Christie's was the first auction house to establish an Indonesian sale in Singapore. The sale was a success and other auction houses and dealers followed.

The Indonesian art market therefore was still operating although demand has decreased. The hype around the Indonesian art and the financial interest of investors diminished. Nevertheless there are still investors and dealers active in the Indonesian art market, and the blue-chip Indonesian artists still make their prices.

The Indonesian hype was followed by a second Asian art hype; the hype around Contemporary Chinese art. Various assumptions made the Chinese art market interesting for investors. The fact that every year more Chinese people became millionaire and that they would invest their money in buying contemporary Chinese art really got the art market enthusiastic. The big auction houses started opening salerooms in important Asian cities. The art market was more and more simulated. One of the problems for this hype was that Americans started to see the Contemporary Chinese art as a good investment. They would buy the art for a high price, and hoped to resell the art for an even higher price shortly after. They started speculating with art if it were an asset. The prices escalated, but the investors in the end lost. The wealth of China did not increase as much as they would have hoped and the demand for Contemporary Chinese art stagnated.

The hype that led to the recent Contemporary Art bubble worldwide is another example of overconfident believe in the wealth of buyers and investors. Loans with which art was bought for speculative purpose could not be repaid when the financial world collapsed in 2008.

In addition artificial scarcity was created by dealers. The scarcity stimulated high prices on the art market. The prices for specific artist would grow when a work would appear at auction. The scarcity was stimulated even more with waiting list system. Art buyers could register on a waiting list for certain works sols in galleries or through dealers. When the auction would outperform the estimates the dealer had another reason to increase the price for a work of art by specific artists.

Some time later it even worked the other way around. Dealers would buy works of their own artists to stimulate high prices[99] at auction and raise their gallery prices (Lewis, Documentary 2009).

[99] The stimulation of high prices by dealers when buying back or storing work of art by represented artists can be seen as artificial scarcity also referred to in Chapter 3 on page 18-19.

9.3 Appendix C: The Locations of the Sale and Exchange rates

The exchange rates against USD changed significantly during the crisis. The Euro was not hit as bad. From an European perspective the US art market therefore dropped even more.

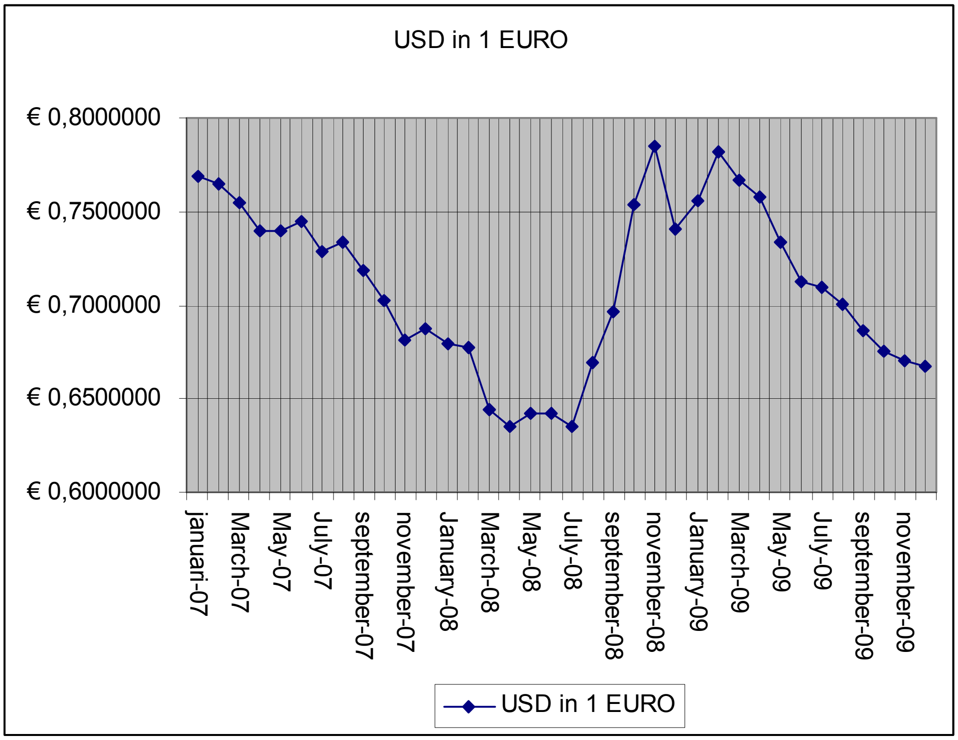


Figure 9.2: Average Rates[100]

The Euro index also includes conversions from USD sale prices to Euro prices. With the falling USD Art market indices then falls as a result of exchange rate. The parallel between the Modern, Post-war and Contemporary art and the Global Index in Euro demonstrates its dependence. With the availability of money demanded for luxury goods like art, escalates. This is visible in the figure 9.2 between 2002 and 2004. The demand for art increases with an upward slope of the Euro index. The bubble is inflated by Modern, Post-War and Contemporary Art doubling in comparison to the Euro-index.

The art market is spread all over the world. The activities of Christie's and Sotheby's are prime examples. The art market constitutes truly international 'currencies' (Symposium Art as an Investment, Eckstein, April 1990: 3). That is why works of art are believed to offer far wider trading opportunities than conventional stock market securities (Eckstein, April 1990: 4).

[100] Source: http://www.x-rates.com/d/EUR/USD/hist2009.html (9-12-2009)

The currency of the location where art is traded influences the performance measured in an index of that specific art market. Figure 9.3 and table 1 show the correlation between the Art Index in USD and EUR to the Global Art Index. Art is seen as an attractive alternative investment if the correlation between financial products and the art market index is low. The correlation between the USD and the GAI hovers between the 0.9 and 1, but the correlation between the EUR and GAI fluctuates more around the 0.8. Therefore, investing in the European art market is the more attractive option.

Correlation - Contemporary Art vs USD

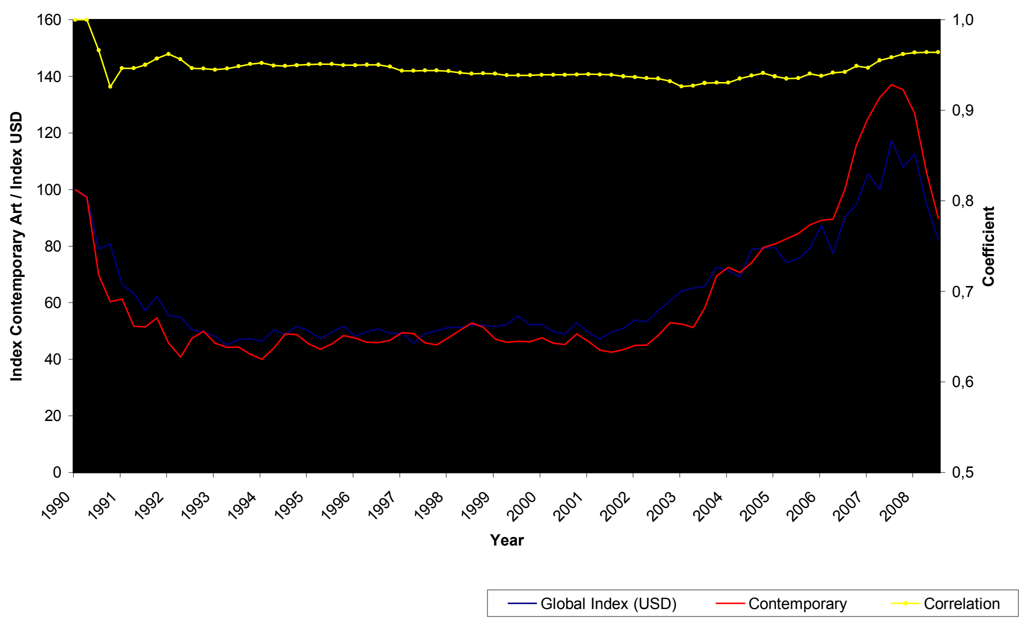


Figure 9.3

Source: AGI Artprice

Table 1: ***Correlations***

		Contemp	USD
Contemp	Pearson Correlation	1	,964(**)
	Sig. (2-tailed)		,000
	N	75	75
USD	Pearson Correlation	,964(**)	1
	Sig. (2-tailed)	,000	
	N	75	75

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

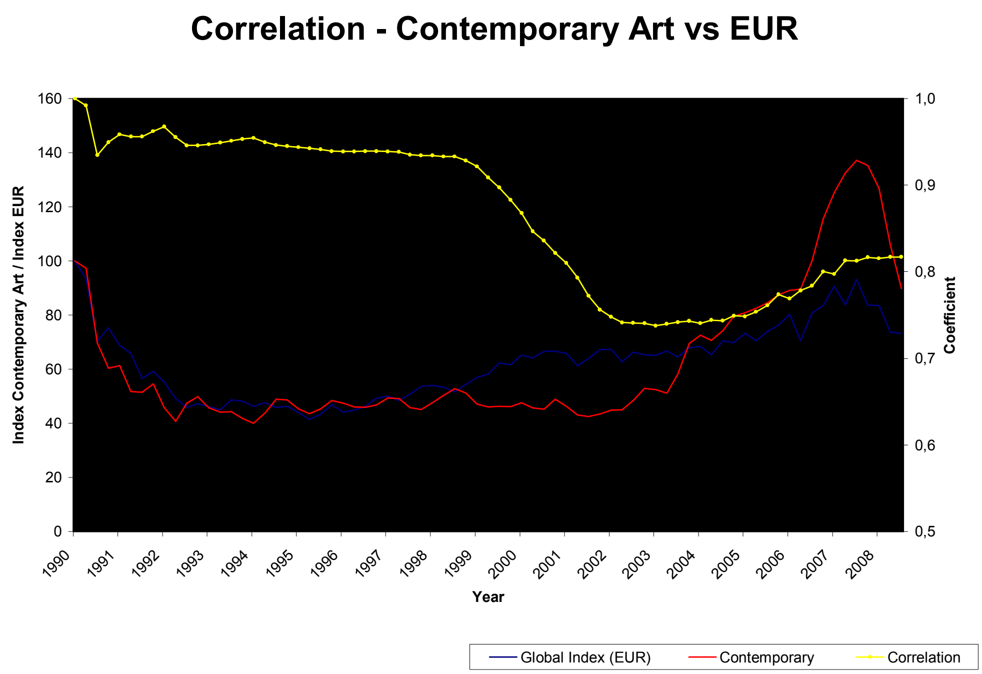


Figure 9.4

Source: AGI Artprice

Table 2: Correlations

		Euro	Contemp
Euro	Pearson Correlation	1	,817(**)
	Sig. (2-tailed)		,000
	N	75	75
Contemp	Pearson Correlation	,817(**)	1
	Sig. (2-tailed)	,000	
	N	75	75

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

Pearson Correlation Formula

Returns the Pearson product moment correlation coefficient, r, a dimensionless index that ranges from -1.0 to 1.0 inclusive and reflects the extent of a linear relationship between two data sets.

PEARSON(array1,array2): Array1 is a set of independent values, and Array2 is a set of dependent values.

- The arguments must be either numbers or names, array constants, or references that contain numbers.
- If an array or reference argument contains text, logical values, or empty cells, those values are ignored; however, cells with the value zero are included.
- If array1 and array2 are empty or have a different number of data points, PEARSON returns the #N/A error value.

- The formula for the Pearson product moment correlation coefficient, r, is:

$$r = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}}$$

Where x and y are the sample means AVERAGE(array1) and AVERAGE(array2).

9.4 Appendix D: Art as an Investment

9.4.1 Psychological or Financial returns on Art Investments

Art is experienced in two different manners. First, one looks at art from an artistic point of view, is interested in at art for its aesthetic appeal and not primarily in its intrinsic economic[101]. The second way is being interested in art as a financial instrument. These two approaches characterise the division between buyers in collectors and investors. Because art prices have increased significantly, art collectors can no longer ignore the financial implications of their dealings.

Contemporary art became an interesting field for investment portfolio diversification. The positive financial returns for collectors where calculated. Buying contemporary art became interesting in terms of its financial return. This change took place in October 1973 at the auction of the Estate of Robert Scull facilitated by Parke Bernet (an auction house owned by Sotheby's since 1960's) in New York. Scull often bought works directly from the artists for good prices. He resold the works during several auction for instance at the Sotheby's auction on the 11th of November 1986 for even better prices. The timing of the sale was crucial for the returns. The sale was held during a booming market. Demand was encouraged and prices were high. Velthuis (2005) explains several reasons why this sale is remembered. One is that the high prices established for the works of art at auction supposedly changed the atmosphere at auctions, 'and turned it from an art market proper into a commodity or investment market' (p. 142). Apart from the investment opportunities the sale was remembered because the high prices did not reach the artists. From then onwards the art world became less intimate, less like a community old dealers commended (Velthuis, 2005: 144). More and new uneducated buyers, sellers and artists tried to profit from the changing market.

9.4.2 Art Market Research as an Indicators for Investors

Numerous authors investigated the phenomenon of art as an investment with the corresponding risks and rates of return. The results of the diverse researches conflict with each other when advising about the prospects to use art for a portfolio diversification. Baumol (1986) and Pesando (1993) for instance are not convinced about the positive effect art might have on the portfolio diversification. Baumol's negative recommendation on integrating art in an investment portfolio can be explained by his finding that the rates of return on art were low (0.55% real return). Buelens and Ginsburg (1993) see art as a good investment at particular intervals in time. Although Goetzmann (1993, 2009) found that sometimes returns on art investments exceeds inflation he does not advise that art should be part

[101] Art for aesthetic satisfaction proves, especially in times of financial crisis, to be a good investment, accounting the pleasure of owning art. Another indirect financial gain can be found if employees are positively stimulating when confronted with art at work. Additionally cultural knowledge about the bought art can be seen as a positive incentive to purchase art (Goetzmann, 2009).

of any investment portfolio given the risk art represents. *'Art is uncertain and risky and volatile. I just don't think the return compensates for the risk.'* (Goetzmann in Art and Auction, July/August 2009: 23). Goetzmann (1993) and Chanel (1995) found a relationship between the demand for art and financial wealth. This is another reason why Goetzmann (1993) and Chanel (1995) would not positively advise art for the purpose of portfolio diversification. The correlation is too good between art and stock and bond markets for art to be a good alternative investment vehicle. The researchers Mei and Moses (2002) and Campbell (2007) find a lower correlation and a lower volatility in art compared to traditional investment markets. That is why Mei and Moses and Campbell see art as an attractive diversification of an investment portfolio. Finally Worthington and Higgs (2004) focus on the inferior risk return characteristics of art compared to financial assets. They conclude that inclusion of art as an asset for diversification purpose cannot be supported.

The seasonally updated Mei and Moses All Art Index is often used by art investment funds to show the profitability of art as an asset. What goes against their index is that the index is only based on resale prices for high end works of art. This means that a biased data set of sold work of art is used to design the index. The index does not even include all the sold works in the secondary art market. The index gives a partial view, a view only on the top of the secondary market at big auction houses. Nevertheless even the Mei-Moses All Art market index shows a decline of 35 per cent in response to the global financial crisis that started in 2007.

9.4.3 **Art Investment Funds**

Art funds can be described as a revolution of the value of the relationship between art and commerce. Investors are looking for art as an alternative asset; the aesthetic pleasure people used to get form buying art is no longer the primary reason to buy art. This is not often publicly admitted. Economic benefits seem to surpass the psychological gain. A growing number of art market analysts design indices and market measurement tools. The increasing problem is that these instruments bring methodological difficulties. Every index focuses on specific niches and the data used is often incomparable.

Although all means and indices have limitations they do suggest a better understanding of the art market. Art investment funds want to give investors insight in the art market to lower transaction costs and stimulate availability to art for lower prices.

Throughout history art funds did well. The British Rail Pension Fund is one of the best examples. They invested money in art to compensate for inflation. The overall rate of return was 6 percent (for further detail see Frey and Eichenberger, 1995). It outperformed bonds in the UK (Pesando and Shum, 1999). The success was subscribed to the timing of the sale (Buelens and Ginsburg, 1993). As with traditional investments, timing of sale is the most important aspect.

Following the booming art market, starting in 2001, numerous art investment funds were formed between 2005 and 2007. These new funds were mainly focused on the most popular niche of the art market, Contemporary Art. The success of the separated funds differs extremely. Funds proved to be popular in times of the art markets golden days. The art advisors still struggle to cope with the current state of the market.

9.4.4 Art Investment and the Confidence in the Art Market

Whether art is a good investment is influenced by the confidence investors have in artists and the art market. Auction market performance influences the art market confidence for a specific artist significantly (Art Tactic Survey, May 2009). Burnham (1975: 191) expects an even bigger role for the auction houses: 'The most important entrepreneur of art as investment has been the auction house. In developing new methods for commercializing art, the auction has become both a powerful stimulant of the continuing inflation of art prices, and a strong agent in directing contemporary taste.' Josh Baer is quoted in the book by Thornton (2008: 26) about the fact that the art world would not have the financial significance now if it was not for auctions. The auctions are supposed to give the illusion of liquidity in the art market.

Investors look at the performance of auction houses for their confidence. The website Artprice.com helps the investor to visualize the art market confidence from 2008 onwards. The website estimates the confidence the visitors of their website have in the art market and show the results in a graph.

Museums are interested in particular artists. This is important for the art market confidence as well. When strong curatorial museums buy certain artists, it is likely that the prices at auctions will rise. Not in the least because the museums will be bidding[102].

Art investment can be profitable. Important for a positive rate of return is the holding period, the time of the sale and the quality of the work of art. The investment should be able to survive economic downturns. When aesthetic value is taken into account it becomes a different story. Theoretically art can be extremely profitable. Art collectors will not frequently publicly express their financial interest in the art market. Publicly they will instead emphasise on the aesthetic value, the pleasure they gain from owning an object of art. Nevertheless the rate of return will also influence their purchases and sales.

Pure speculation with art will always be risky. Art market indices show contradictory results. The results can not be compared easily because the focus of the different studies vary in time, data collection and art category. Investors need to acquire knowledge for specific art market niches. The information is expensive and contradictory. Art market indices give only a hint on the state of the market. To fully understand the market and invest profitably is a time consuming and expensive business.

[102] As can also be seen in Chapter 3.2.1.3 page 23-24, museums buy at the top of the demand curve which will stimulate demand and price even further.

9.5 Appendix E1*:* Artprice Global Indices - Quarterly data - base July 1990 = 100

	Index (EUR)	**Global Index (USD)**	Paintings	Prints	Sculptures	Photographies	Drawings	Old Masters	19th Century	Modern Art	Post-War	Contemporary
jul-90	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
okt-90	93,4	97,6	95,7	99,3	88,7	89,3	91,6	97,1	99,0	96,1	95,2	97,2
jan-91	70,2	79,0	85,5	81,8	79,6	72,8	85,7	80,4	94,1	86,5	85,0	69,7
apr-91	75,3	80,7	76,1	67,0	76,6	67,2	83,8	66,6	85,3	73,6	80,8	60,4
jul-91	68,8	66,5	67,0	62,6	81,6	75,5	75,8	60,6	75,9	65,7	66,2	61,3
okt-91	65,8	63,2	60,1	57,1	84,5	77,5	67,1	62,6	71,5	62,8	49,3	51,7
jan-92	56,6	57,1	58,9	54,5	77,6	72,0	62,1	72,9	72,6	60,4	51,2	51,4
apr-92	59,2	62,2	59,5	56,3	73,7	69,0	58,1	84,9	74,2	58,3	57,9	54,6
jul-92	55,2	55,6	56,3	53,9	71,2	69,9	57,8	82,4	72,9	55,7	52,9	45,8
okt-92	49,0	54,9	52,1	48,6	68,5	71,4	57,9	63,3	71,0	52,9	44,6	40,7
jan-93	46,0	50,4	50,0	46,9	68,2	66,1	53,3	56,5	70,0	49,3	43,3	47,4
apr-93	47,2	49,6	48,1	48,5	68,0	57,2	50,1	57,7	67,6	46,5	42,5	49,9
jul-93	46,2	48,2	46,1	49,3	70,7	56,7	47,7	53,5	60,8	45,2	41,5	45,7
okt-93	45,0	45,0	44,7	46,9	70,9	64,6	45,6	52,2	56,5	43,2	42,7	44,1
jan-94	48,7	47,0	44,2	47,4	67,3	59,1	48,1	54,8	62,0	41,1	42,8	44,3
apr-												

94	48,2	47,2	44,1	48,4	67,7	54,3	49,3	57,5	68,2	41,2	41,2	41,8
jul-94	46,4	46,3	45,7	48,4	66,7	69,8	47,2	61,0	69,6	44,6	39,6	40,1
okt-94	47,6	50,3	48,2	50,5	64,5	76,5	46,0	67,6	72,3	47,3	41,0	43,9
jan-95	45,8	48,7	47,6	53,7	69,5	86,7	47,9	72,8	69,9	46,0	41,5	48,9
apr-95	46,3	51,7	46,2	58,4	74,1	98,1	50,4	77,1	64,8	44,9	39,4	48,7
jul-95	44,0	50,1	46,4	57,9	74,8	73,0	49,5	75,6	67,5	44,6	40,2	45,4
okt-95	41,5	47,3	46,2	54,3	74,6	57,1	48,0	67,2	68,8	43,2	44,0	43,6
jan-96	43,3	49,6	47,0	53,9	74,3	67,1	49,1	67,0	67,0	43,9	45,8	45,5
apr-96	46,8	51,7	48,2	52,3	73,4	67,7	49,6	71,8	66,0	45,6	44,1	48,5
jul-96	44,2	48,2	47,8	49,9	72,3	66,6	48,1	68,0	67,4	45,9	40,2	47,5
okt-96	44,8	49,7	47,7	51,1	73,6	70,4	47,5	62,7	71,2	46,0	38,4	46,1
jan-97	46,3	50,8	48,9	51,1	73,5	79,0	46,7	61,2	70,3	47,4	41,9	45,9
apr-97	49,2	49,2	49,1	48,6	72,2	88,4	45,1	55,0	67,7	47,6	45,2	46,7
jul-97	50,2	49,2	46,8	46,5	73,4	87,3	45,6	54,3	64,8	45,4	42,5	49,3
okt-97	48,4	45,7	45,2	44,4	75,0	83,8	46,9	63,0	61,3	44,6	39,2	49,1
jan-98	50,8	49,0	46,6	44,5	74,5	86,4	48,1	71,5	65,3	45,7	39,3	45,8
apr-98	53,7	50,1	48,4	46,3	74,4	91,1	49,3	81,4	71,8	46,2	40,5	45,2
jul-98	53,9	51,2	49,3	47,8	74,1	95,6	49,2	82,6	74,2	46,5	42,5	47,6
okt-												

98	53,4	51,4	50,0	48,7	72,9	94,2	49,4	73,8	75,8	47,3	43,9	50,3
jan-99	51,6	52,1	50,7	48,9	75,0	88,1	49,4	72,8	77,3	47,8	44,8	52,8
apr-99	54,4	51,9	51,1	49,0	77,3	88,1	48,2	74,7	76,8	48,1	45,6	51,3
jul-99	56,9	51,6	50,9	48,5	78,2	91,3	48,5	66,7	74,7	48,8	46,0	47,1
okt-99	58,3	52,2	51,8	48,4	77,4	96,1	50,6	61,4	74,7	50,6	46,9	46,1
jan-00	62,2	55,3	52,3	48,7	75,5	116,5	51,8	66,5	78,4	50,2	47,0	46,3
apr-00	61,7	52,2	51,2	48,2	75,1	129,0	50,3	68,4	81,6	48,1	45,9	46,2
jul-00	65,3	52,4	50,3	46,6	75,1	117,4	48,8	65,5	81,4	47,5	43,0	47,7
okt-00	64,2	49,8	48,6	44,3	74,4	108,8	49,0	62,9	78,0	46,3	39,7	45,6
jan-01	66,6	49,0	47,9	44,1	75,1	116,4	49,6	61,0	74,3	45,3	41,6	45,2
apr-01	66,6	52,9	48,8	44,8	76,5	126,7	49,8	60,7	73,5	45,2	45,6	48,9
jul-01	65,8	49,4	48,1	43,8	74,6	117,7	47,6	59,0	74,8	45,0	43,2	46,4
okt-01	61,3	47,1	47,6	43,0	71,9	101,7	45,1	57,2	75,7	45,2	40,9	43,1
jan-02	64,0	49,5	48,6	42,9	73,4	97,3	47,3	60,3	72,3	46,4	44,8	42,5
apr-02	67,2	51,0	50,4	43,4	77,0	99,8	50,6	64,4	70,6	47,7	48,9	43,5
jul-02	67,3	54,0	52,0	44,9	76,8	112,6	51,4	61,5	74,4	48,3	51,7	44,9
okt-02	62,7	53,3	52,8	46,4	75,1	127,0	52,8	62,3	77,2	49,3	53,3	45,0
jan-03	66,3	57,1	55,0	48,9	78,2	125,1	56,7	69,9	80,8	51,4	54,9	48,4
apr-												

03	65,4	60,7	58,5	52,3	84,9	122,1	60,6	71,8	85,2	54,3	58,9	52,9
jul-03	65,2	64,2	60,7	54,2	88,6	126,3	65,6	74,1	87,1	56,4	60,9	52,5
okt-03	66,7	65,2	61,9	54,3	88,3	126,8	69,4	80,2	87,2	57,4	60,8	51,1
jan-04	64,5	65,8	64,5	56,3	90,7	129,0	70,8	84,2	88,3	58,8	65,1	58,2
apr-04	67,9	72,6	67,8	59,6	95,0	133,4	73,6	83,4	92,9	61,0	70,1	69,4
jul-04	68,5	71,3	69,4	60,7	96,2	151,7	70,5	77,6	98,2	62,6	70,7	72,6
okt-04	65,4	69,0	72,0	61,9	96,3	175,7	67,2	78,3	103,6	64,9	72,7	70,6
jan-05	70,4	79,0	76,3	64,8	101,4	175,6	72,9	81,9	108,3	68,6	78,4	74,2
apr-05	69,8	79,2	77,7	67,4	108,9	166,7	77,9	79,1	106,9	69,3	83,2	79,4
jul-05	73,3	79,5	76,3	66,7	106,8	167,1	77,3	82,4	97,9	67,9	84,8	80,8
okt-05	70,5	74,2	74,7	63,5	100,8	170,7	75,3	86,0	91,3	65,9	85,0	82,5
jan-06	73,9	75,7	75,0	64,3	99,4	176,6	74,9	80,0	92,5	67,0	85,3	84,4
apr-06	76,3	79,2	79,0	68,4	103,3	187,6	78,1	78,1	96,1	72,0	89,7	87,5
jul-06	80,3	87,4	80,9	68,7	112,7	188,7	81,2	83,9	97,7	73,2	92,3	89,1
okt-06	70,5	77,4	80,4	68,4	116,0	184,2	82,4	87,1	97,9	72,9	90,6	89,6
jan-07	80,8	90,1	86,3	71,3	121,5	190,9	86,9	89,5	98,7	77,8	102,2	100,1
apr-07	83,5	94,7	95,4	75,4	136,8	203,7	93,1	91,2	103,2	83,4	121,8	115,6
jul-07	90,7	105,5	100,2	83,0	142,9	202,0	96,0	83,4	112,2	86,9	129,3	125,1
okt-												

07	83,8	100,0	104,1	92,1	141,8	195,8	99,2	76,6	116,9	91,4	133,2	132,5
jan-08	93,2	117,2	110,7	91,7	142,5	200,4	104,0	84,6	116,5	96,4	145,6	137,1
apr-08	83,7	107,9	113,6	84,6	144,5	207,2	105,4	93,9	118,1	97,5	150,8	135,2
jul-08	83,6	112,6	109,1	78,6	144,6	201,2	104,8	105,8	116,1	95,1	138,3	126,8
okt-08	73,6	94,9	97,9	70,2	129,5	169,8	97,5	112,3	101,5	88,6	120,3	106,2
jan-09	73,2	82,2	87,6	64,0	113,5	154,1	87,8	97,4	89,2	80,0	110,7	89,9

9.6 Appendix E2: Change in Artprice Indices in percentage between 2003-2009

Date	Old Masters	% Old Masters	19th Century	% 19th Century	Modern Art	% Modern Art	Post-War	% Post-War	Contemporary	Contemporary
jan-03	74,0	100,0	85,1	100,0	54,9	100,0	58,9	100,0	51,2	100,0
jan-04	80,9	109,2	95,7	112,5	61,8	112,7	69,7	118,4	67,7	132,1
jan-05	82,3	111,2	101,1	118,8	67,9	123,8	82,8	140,7	79,2	154,6
jan-06	82,3	111,1	96,0	112,9	71,3	129,9	89,5	152,0	87,7	171,1
jan-07	85,2	115,1	107,8	126,6	84,9	154,8	121,6	206,5	118,3	231,0
jan-08	99,2	134,0	113,0	132,8	94,4	172,1	138,8	235,7	126,3	246,6
jan-09	97,4	131,6	89,2	104,8	80,0	145,8	110,7	188,0	89,9	175,4

Own calculations with the AGI

9.7 Appendix G: Interviews

9.7.1 English

Dear Mr. Goodman,

Due to my interest in the art market, and the topic of my Master Thesis I have been reading '*The International Art Markets- The Essential guide for collectors and investors'*. The book was published in July 2008 and since then things have changed in the art world. This is the reason why I am sending you an email.

To graduate in *Cultural Economics and Cultural Entrepreneurship* at the Erasmus University I am writing my Thesis on the hypothetically impact of the Financial crisis on the International Art market and in particular the secondary art market for late Modern and Contemporary art in Amsterdam. For my thesis I would like to know how art market experts think the art market will be influenced in the near future.

I was wondering if you would be willing to answer a few questions related to your own text and research topic. And related to the circumstances in the contemporary Art Market (in Amsterdam)?

Thanking you in advance for your effort.

Yours faithfully,

Alexandra Bots

Questions:

1. In an economic research I read that markets can be best analyzed in times of crisis, how would you analyze the art market for late Modern and Contemporary art (in Amsterdam) at the moment?

2. How would you describe the effects of the financial crisis on the secondary art market?

3. The secondary art market has been driven by rich new collectors, art investors and hedge funds trying to spread the risks of their investments. The new modern portfolio technique and the boom in the art world increased the interest towards art as an investment. Especially when the economy is flourishing alternative investments are explored. How do you feel about the purely financial interest in the art World?

4. When thinking about the financial crisis and the effects this will have on the secondary art market, would you be able to predict which artists might be uninfluenced, positively influenced and negatively influenced?

5. Would you be able to give some positive side effects of the financial crisis for the secondary art market?

6. Which artists should be in a population when researching the Dutch Contemporary art market?

7. How would you explain the extreme expenses in the art World from 2003 and 2008?

8. What change did you already experience since September 2008 in the contemporary art World, and what do you expect from the near future?

9.7.2 **Dutch**

Interview Scriptie: de Nederlandse secondaire kunstmarkt:
De gevolgen van een wereldwijde financiële crisis

De afgelopen maanden is er veel geschreven over de hedendaagse kunstmarkt. Wetenschappelijk onderzoek blijft echter vooral internationaal georiënteerd. De Nederlandse secondaire kunstmarkt krijgt door zijn beperkte omvang minder aandacht.

Tot en met 2008 werd record na record verbroken op de kunstmarkt voor hedendaagse kunst. Vandaag de dag ondervinden wij de gevolgen van een wereldwijde financiële crisis. In boeken over en onderzoeken naar de kunstmarkt wordt vaak verwezen naar het verband dat bestaat tussen economie en cultuur. Als we bijvoorbeeld naar de financiële crisis in eind jaren tachtig kijken, zien we dat de kunstmarkt in zijn prijzen, één tot twee jaar na de recessie extreem negatief beïnvloed wordt.

De vraag is hoe de huidige financiële crisis de secondaire kunstmarkt voor hedendaagse kunst in Nederland zal beïnvloeden. De Nederlandse kunstmarkt werd in het verleden minder geraakt dan bijvoorbeeld de kunstmarkt in Londen of New York. Ook vandaag de dag rapporteert de media wekelijks over teruglopende verkoop cijfers bij veilingen in Londen en New York in combinatie met de recessies wereldwijd. De Nederlandse kunst markt krijgt minder aandacht.

Dit is de reden dat u hierbij een korte vragenlijst toegestuurd krijgt. Graag zou ik u willen vragen om deze in te vullen. De gegevens zullen uitsluitend in mijn thesis gebruikt worden.

Hopende op een positieve reactie,

Verblijf ik,

Met vriendelijke groeten,
Alexandra Bots

Vragen

1. Ervaart u binnen uw eigen werkveld de gevolgen van de financiële crisis op de kunst markt?

   Zo ja, hoe gaat u hiermee om? (welke activiteiten onderneemt u?)

   Zo nee, hoe denkt u dat het komt dat uw werk binnen de kunst wereld niet beïnvloed wordt?

2. Welke tak van de secondaire kunstmarkt wordt vooral geraakt?

3. Mijn onderzoek gaat vooral kijken naar de laat moderne en hedendaagse kunst. Welke kunstenaars, binnen deze groep, acht u van groot belang voor de Nederlandse Kunstmarkt?

4. Welke van de door u eerder genoemde kunstenaars zullen vooral (positief of negatief) beïnvloed worden door de huidige situatie in de Nederlandse kunstmarkt?

5. Kunt u ook positieve effecten van de financiële crisis voor de kunstmarkt aangeven?

6. Heeft Nederland er baat bij gehad dat de internationale kunstmarkt een enorme globalisering heeft mee gemaakt?

7. Hoe is de Nederlandse kunstmarkt beïnvloed door het opkomen van nieuwe grote investeerders in de kunstwereld?