

Does Artistic Value explain the performance of Contemporary Artists?

R. Rozenbaum

We examine the contemporary art market of the 100 best artists as classified by the *Kunstkompass 2006* in the German magazine *Capital* in comparison with price achieved by artworks from the same artists sold through auction sales. Using the hedonic regression method, we test whether and in which way classical information (dimensions, materials used, signature, etc.) or new parameters like *Kunstkompass* ranking play a significant role in the determination of the price. We show that an independent ranking aiming at classifying the artistic value provides a reliable estimate for artworks' value.

JEL Classifications:

Keywords: contemporary art markets, economics of art, hedonic regression

CEB Working Paper N° 07/037
2007

Does Artistic Value explain the performance of Contemporary Artists?

Ronald Rozenbaum
rozenbaum@gmail.com

Université Libre de Bruxelles, Solvay Business School, Centre Emile Bernheim
Avenue Franklin Roosevelt, 21
1050 Bruxelles/ Belgium

Abstract

We examine the contemporary art market of the 100 best artists as classified by the Kunstkompass 2006 in the German magazine Capital in comparison with price achieved by artworks from the same artists sold through auction sales. Using the hedonic regression method, we test whether and in which way classical information (dimensions, materials used, signature, etc.) or new parameters like Kunstkompass ranking play a significant role in the determination of the price. We show that an independent ranking aiming at classifying the artistic value provides a reliable estimate for artworks' value.

Key words: art markets, economics of art, hedonic regression

* We are grateful to Professor K. Oosterlinck who suggested (directly or indirectly) some of the ideas developed in this paper. V. Ginsburgh, P. Moreno from Guide Mayer and N. Taleb helped us by providing useful insights as well as J. Emonstpool for her German translating talent.

"When critics disagree, the artist is in accord with himself. We can forgive a man for making a useful thing as long as he does not admire it. The only excuse for making a useless thing is that one admires it intensely. All art is quite useless."

O. Wilde, *The Picture of Dorian Gray*.

1. Introduction

On November the 8th 2006, Christie's conducted a total of \$491.4 million auction sale in New York, well over the previous record of \$269 million at Christie's in May 1990.

According to Art Price (Figure 1) a reference in the world of Art: "In total, the global public auction Fine Art market generated a total revenue of \$ 6.4 billion in 2006 which represents double the amounts regularly posted during the 1999 - 2003 period and an increase of 52% compared with 2005." This rapid increase, as well as the interest for the artworks being sold, has led both academics and people active in the financial sector to show an increasing interest in the art market. For example, several attempts have been made to launch art investment funds. In the academic world, an increasing literature has tried determining how art markets price artistic work.

In contrast to bonds or stocks, which are homogeneous goods traded in liquid markets, paintings represent unique artwork (which makes them de facto heterogeneous goods) and are sold infrequently. Two methods have been suggested to assess the returns for heterogeneous goods: hedonic regressions and repeated sales returns.

For heterogeneous commodities with infrequent trading, it has been shown that hedonic regressions are the best way to assess return. Chanel, Varet and Ginsburgh 1996 (The Relevance of Hedonic Price Indices) apply this methodology on the art market. They assess that the price of a painting depends, to some extent at least, on its own characteristics. We can find the premises of this in Court (1939), extended by Griliches (1971) for car prices and Ridker and Henning (1967) for housing.

$$\log p_{it} = \sum_{k=0}^m \alpha_k x_{ki} + \sum_{\tau=0}^t \sum_{l=1}^n \beta_{l\tau} y_{li\tau} + c(t) + \varepsilon_{it} \quad (1)$$

However the hedonic regression gets as main constrain that it can give the same analysis for very different things. Indeed, two Picasso's painted the same year with the same proportions

can be considered equal. The artist name is not sufficient to differentiate two heterogeneous goods especially in Art.

An alternative method, commonly used to analyse homogeneous goods, has also been applied to heterogeneous goods analyses. The so-called repeat-sales regression method is based on commodities sold more than once on a specific time period. This method finds its justification in the main critic of the hedonic regression method. The correct set of characteristics describing a piece of art, is not known with certainty. This technique has been used by Anderson (1974), Baumol (1986), Goetzmann (1990, 1993) for paintings¹.

$$\ln\left(\frac{P_i^2}{P_i^1}\right) = \sum_{t=1}^T c_t (D_i^2 - D_i^1) + e_i \quad (2)$$

According to Candella (1997): “Art objects, and paintings in particular have inelastic supply and deviations from production costs are marked and persistent. In this respect, paintings are characterized by the lack of any “natural” price in the classic sense” which is one of the underlying hypothesis of the repeated sales regression.

The determinants of price in the literature have mainly addressed parameters such as the size of the art work, is it attached to a specific currant, the name of the artist, the fact that the piece of work is signed or not, dated or not, etc. No model takes into account the quality or the perceived quality. This seems however essential and can only be addressed by the hedonic regression analysis.

Insert Figure 1

Based on the hedonic regression model, we analyse the perceived value of piece of works. Previous analyses took the name of the artist as best proxy for the quality of a piece of work Buelens (1996). We suggest that a ranking (Kunstkompass) made by experts (mainly curators²) based on their judgement of the quality brings insightful information to the model.

¹ For further details regarding the comparison of the two methods we suggest “Art Auctions: A Survey of Empirical Studies.” Ashenfelter, O.C. and Graddy, K. (2002).

² One who manages or oversees, as the administrative director of a museum collection or a library. The American Heritage® Dictionary of the English Language, Fourth Edition. Houghton Mifflin Company, 2004.

Our analysis is based on an original set of data. The Kunstkompass ranking is established every year by the German magazine Capital. It ranks 100 contemporary living artists based on the number of expositions made by each artist. A weight is given to each exposition. For instance, being exposed to the Metropolitan Museum of Modern Art in New York is more relevant and therefore more rated than be exposed by a gallery in Düsseldorf. For each of our 100 artists, we have all the auctions sales and details (size, medium, age, signed/ or not, etc.) since 1987 provided by the Guide Mayer. We therefore have a good basis to investigate the perceived quality of an artist.

Insert Table 5

Insert Table 6

In this paper, we show that our proxy for the perceived value of an artist substantially improves the validity of the hedonic regression analysis. Section 2 will describe our data. While section 3 details the hedonic regression principals and our approach, section 4 describes the outcome. Conclusions are the topic of Section 5 and limitations and directions for future research are stressed in the section 6.

2. The Data

A) The Kunstkompass

I. The development of the “Kunstkompass”:

In the late sixties, Willi Bongard criticised the publisher of the “World Currency Report”, Mr. Pick, who published yearly a list of the most advisable investments, including art. Bongard didn’t agree with Pick, stating that the publisher referred to (sometimes spectacular) auction results to derive the trends in prices of art.

First published in 1970 by the “Capital” a German financial journal, Willi Bongard, the author was inspired to publish such a classification after working for the magazine “Zeit”, where he published articles referring to art as merchandise, highlighting art’s monetary value from 1968.

We can read in “Capital” October 1970: “The purpose of this system is to simplify the orientation on the market for contemporary art, one of the most obscure markets of the world. The attempt to make this market more transparent through objective criteria and to permit a fairer evaluation of contemporary artists is new.”

The first step in developing the Kunstkompass was to send a list including all major exhibitions, museum and galleries to 106 German and Swiss experts in the field of art, asking them to rank the listed items as “important”, “less important”, and “very important”. Another result of the poll was to determine the importance of various artists, the definition of “important” referring to the quality, degree of innovation and charisma of the artist. This means (also) that the artist should have some continuity in his production.

For each edition of the Kunstkompass, Bongard contacts “gallerists”, artists and exhibitors, broadens the range of parameters and gathers points.

In 1980, 1984 and 1987, the Kunstatlas appeared which was meant to include the artists younger than 40 years, as they had no chance to compete against the “older” ones with a long list of points. This idea was however abandoned later on, as it made the rankings more complex than the contrary.

From 1970 to 1984, a total of 375 artists may be found in the *Kunstkompass* and *Kunstatlas*. After Willi Bongard's death in a car accident in May 1985, the magazine "Capital" decided to continue the list with Linde Rohr-Bongard.

In 1990, for the first time as much as ten female artists appeared in the top 100 list.

During the eighties, the list changed continuously, due to the rapidly changing careers of the artists. As consequence many didn't appear more than once in the *Kunstkompass*.

In 1988, *Kunstatlas* and *Kunstkompass* were merged and the counting of the points was started in 1980 in order to give the younger artists a chance. The same was done in 1993 and 1998 in order to welcome even the more recent artists in the listing.

While in 1970, 18 international museums and seven group-exhibitions were used to draw the *Kunstkompass*, today, 160 museums are considered as well as 130 group-exhibitions. The number of considered artists has risen to around 10,000.

II. Some virulent critiques appear against the *Kunstkompass*:

Hans Platschek, working for "Süddeutsche Zeitung" compares the *Kunstkompass* to Fleischers hitlist of the ten best Boxers in the world. He says: "while I understand that a KO is a clear thing, I don't understand the criteria used for the *Kunstkompass* list." He misses Picasso, Max Ernst and Francis Bacon in this list. Moreover, he criticises that Bongard's categories don't correspond to his (Platschek's) work. He claims a higher classification because he is implicated in the "Happening in Europe". "Making a list where all intermediary activities are missing seems to be wrong to me 'from scratch'. Please leave me out."

Heinz Mack, "Kölner Stadtanzeiger", criticises the lack of humanity in the classification of artists like the *Kunstkompass* does it. "Artists tend to criticise each other in a very destructive way, but they however know about the vulnerability of the existence of the artist's existence and therefore avoid the deadly consequences of judging. Humanity is not without sense here."

Eduard Beaucamp, "FAZ"; he says that the commercialisation of art makes impressive progress. Sharp-witted attacks by a new leftist aesthetic and the investigation into the conscience of artists and critics cannot slow it down (the commercialisation). He sees that the

level in the art business declines, if even a list based on polls and statistics has the chance of being the most-discussed critical input of 1970.

Pierre Restany, “Domus”; criticises the German “over-weighting”. He says that despite good will and open-mindedness, Bongard is still bound on some sort of provincialism; local thinking, Germanic cultural “thoughts”, and the “esprit” of his generation. The Kunstkompass represents the German “esprit” of the post-war.

Clement Greenberg, an art critic from New York, doubts the objectivity of the list: “Yes, Kunstkompass is not your list, but you certainly seem to be guided by it. Otherwise, why not put Fuchs & Wyeth & Wunderlich & Hundertwasser on it? I’d love you to answer this directly & without Umschweifungen”.

Willi Bongard responds to these critics by saying that he just gathered a set of keystones for the objective evaluation of the classification. He didn’t set up a bestseller list, but rather performed some analysis of the reception of the art but with no scientific exact level of details. He also admits that the true meaning (value) of an artist and his work only shows in a longer timeframe than the one his information permits to analyse. The position of an artist in his list doesn’t mean more than a probability that the artist will survive. There is no guarantee that an artist will still be considered to be meaningful for the 20th century’s art in 50 or 100 years.

We think anyway that the Kunstkompass has considerably increased its level of standardisation (Table 7) making it a reference globally used and yearly expected by the connoisseurs.

B) The Data Set

The art price data are derived from an agreement we reached with the Guide Mayer which aims at stimulating spread of information freely on the web.

The original data set contains prices and characteristics of over 14,792 works of art, sold between 1987 and 2006 for a total amount of over \$1.3 billion. These works have been produced by the 100 artists of the Kunstkompass 2006 (Table 5) and were sold through auctioneers all around the world.

In 2002, Moses and Mei produced a paper where they said: “we have a significant increase in the number of repeated sales compared to earlier studies by William J. Baumol (1986) and William N. Goetzmann (1993). For the artworks included in the present study, we have 4,896 price pairs covering the period 1875-2000.”

The sample stays small in comparison to our 14.792 auctions used. Moreover, if we consider our used matrix of 14,792 rows (auction sales) x 91 columns (parameters) = 1,346,072 data. Our original matrix were 14,792 rows x 129 columns = 1,908,168 data. The difference between the used and original matrix is due to adjustment related to too strong correlation between some parameters or too few data for some of them.

The prices in the analysis are actual selling prices (CPI corrected), not listed prices. The data set does not contain information on unsold art works (1,514 of our 16,307 original sample).

The number of works of art used in the analysis is almost 15,000 (Figure 2). Number, Mean Price and Standard Deviation of these works are described by artist in (Table I).

Insert Figure 2

Insert Table 1

The number of works sold and the average price per year vary considerably.

The changes in quantities sold reflect trends in the world wide art market, which suffered from a slump in the first half of the nineties. Besides that the age of our artists (all alive and sometimes quite young) could also explain the trend we see in (Figure 2) or in (Table 1).

The works of art have been categorised across seven different media:

Painting – Drawing – Watercolor – Print – Photo – Sculpture – Other (Video, etc.)

Although the overall mean price of works sold via the arrangement is \$91,217, the mean price per artist was \$58,987. This implies that – on average – “expensive artists” sell more works than “cheap artists”. In other words, the distribution of success is skewed. The “best-seller” (Rauschenberg) sold for nearly \$9,700,000 in 1991.

Male artists represent approximately 79 percent of the artists.

The average age is 57 which means that even if the Kunstkompass 2006 has been updated and has taken as starting point the year 1998, some maturity is expected in an artist.

The average number of works sold by any artist between 1987 and 2006 is 145.

Many artists work in more than one medium.

There are 21 nationalities presented in the Kunstkompass 2006.

Sales at Sotheby’s and Christie’s represent 33% each.

Insert Table 2

3. Hedonic Regression Principals

Frey and Pommerehne (1988) used a hedonic model that looks like³:

$$\log p_{it} = \sum_{k=0}^m \alpha_k x_{ki} + \sum_{\tau=0}^t \sum_{l=1}^n \beta_{l\tau} y_{li\tau} + c(t) + \varepsilon_{it} \quad (1)$$

It is actually a power law distribution which perfectly describes winner-take-all⁴ strategy.

Where $i = 1, 2, \dots, N$ are paintings described in terms of some characteristics. The price p_{it} of a painting i measures how the market values the attributes of the work during the period t . We consider a function of a vector x_i of time invariant characteristics (say $k = 0, \dots, m$), and of a vector y_{it} of time varying characteristics (say $l = 1, \dots, n$). For the purpose of estimation, we use some function (stable over time) of the idiosyncratic attributes, a representation of the effects of a changing environment, a market-wide price effect $c(t)$ and some error term ε_{it} .

Even if the model is not new, it has often been used to draw some rapid conclusions. For instance, all the models that used G. Reitlinger (1961/1971), *The Economics of Taste: The Rise and Fall of the Picture Market, 1760-1960*, data face the problem of the relevance of the sample. The data covers two centuries but are not exhaustive. The question remains: is it a good sample to determine the return on the Art Market? Basically, we are confronted with some available data what about all the unknown data? We think that the conclusion they draw are however correct but for a more straightforward analysis. As in publishing, where less than 1 in 800 books represent half of the total unit sales. And even that is a sample of the published books. What about if we take all the written books? It is the same for Fine Arts. You have the sold works and for those ones a few that achieve significant returns. Those paintings are black swans⁵.

³ For more details on hedonic regression model we suggest: M. Bailey, J.F. Muth and H.O. Nourse, 1963, A regression method for real estate price index construction, *Journal of the American Statistical Association* 58, 933-942.

or O. Chanel, et alii (1996) "The Relevance of Hedonic Price Indices". *Journal of Cultural Economics* 20: 1-24

⁴ Winner-take-all "These are markets in which a handful of top performers walk away with the lion's share of total rewards." (Frank, 1994). Auction sales are typically of this kind. You just need two buyers fighting each other to have a piece of work worth more than \$ 100 million.

⁵ The metaphor of the Black Swan is historically attributed to the difficulty in inductive logic also called Hume's Problem of Induction: "That there is nothing in any object, considered in itself, which can afford us a reason for drawing a conclusion beyond it; and, that even after the observation of the frequent or constant conjunction of

In a lot of cases, researches have computerised auction sales data, missing the primary market data. We have O. Velthuis (1995) which specifically analysed the primary market. But no straightforward analysis can get done with more common secondary market analysis.

So now all our predecessors have analysed the market ex post. Trying to find some patterns and some positive returns on some specific segments, is a bit like those who try to explain the thirties Great Depression or the 1987 Crash. Ex post everything is possible but ex ante what can we see? Nothing. Crashes, Picasso, Pollock⁶, etc. are all examples of black swans. It is what N. Taleb calls Retrospective Determinism.

What we intend to do, is not to find explanation for those outliers, neither to analyse the intrinsic returns on the art market but to add some important information encompassed in the price of an artist.

objects, we have no reason to draw any inference concerning any object beyond those of which we have had experience". Hume (1748).

⁶ The New York Times, reported on Nov. 2 2006 that the Hollywood mogul David Geffen had sold the work, "No. 5, 1948," to the financier David Martinez for about \$140 million, the highest price ever reported to have been paid for an artwork.

4. The Hedonic Regression Analysis

Since all auctions are alike, auction data are relatively homogeneous and offer reliable information about the functioning of the art market.

Equation (1) was estimated for the data pooled over all artists. Experimental stratifications of price ranges, time periods, and subject matter were investigated.

Insert Table 3

In all of these equations the log of the painting price is regressed against the variables time, size, size squared, signed, dated, support, artist age, the city where the auction took place, the month and day during which the painting was sold and the Kunstkompass ranking. In addition, artist dummy variables are used and are tested by F-tests which determine whether the increase in R^2 represent significant increases.

The estimated coefficients, standard errors and p-values of the hedonic pricing regression model are presented in (Table 3). Because the null hypothesis of no heteroskedasticity in the least squares residuals was initially rejected, the standard errors and p-values incorporate White's corrections for an unknown form of heteroskedasticity.

7 categories can be defined out of our 91 parameters:

- 0 c(t) that we describe as a market-wide price effect
- 1 parameters linked with the notoriety of the artist
- 2 parameters linked with the attributes of the piece of work or the artist
- 3 parameters linked with the process of sales
- 4 parameters linked with the support of the piece of work
- 5 parameters linked with the Kunstkompass

Turning first to the artist characteristics, significantly higher values are placed on the works by Cy Twombly, Jasper Johns and Damian Hirst and are associated with percentage price

increases of 277.15, 320.65, 243.35 percent⁷ over the standard artist, respectively (not shown).

We can easily explain that artists with higher values enjoy a well established reputation on the international art scene. Damian Hirst is one of the few living artist able to achieve million dollar auctions.

In May 2007, the White Cube gallery in London presented Beyond Belief, an exhibition of Hirst's new work. A human skull recreated in platinum adorned with 8,601 diamonds weighing a total of 1,106.18 carats entitled For The Love of God. The only surviving human part of the skull is the teeth. This piece of work made history being the most expensive artwork ever created (approximately £15,000,000 worth of diamonds were used). Hirst has been quoted as saying he intended to sell the work for £50 Million other even mention £75 Million.

From our artist parameters analysis we can also stretched that from our 100 original sample of artists, we stayed with 50 reliable parameters. That can be explained by the fact that the original database encompassed some artists for whom auctions sales are either not the first canal of sales or are not sufficient established to be sold through this canal.

From our second sets of parameters, those linked with the attributes of the piece of work or the artist, we can say that:

The variables SIGNED and DATE have an unexpected, negative coefficient signs. Piece of works signed and dated lead to percentage decreases of 5.04 per cent and 0.1 per cent respectively, over those that are not. This goes against the common wisdom that there is a higher value placed on works which have characteristics associated with authenticity.

Nevertheless the T-stat associated to the parameter SIGNED cannot reject the null hypothesis at the 0.01 level. We can however find an explanation in the fact that our artists are all alive and therefore caution of the authenticity.

The size of the work H1 and H2 that stands for Height and width and H1xH2 for the area of the work in square centimetres tells us that the positive sign of the H1 and H2 coefficients and

⁷ In a semilog model (i.e. In $P = BX$), the coefficients on the zero-one dummy variables are evaluated by inserting the estimates in the formula $[100 * (e^x - 1)]$. This allows us to show a percentage effect of a unit change in the dummy variable (Halberson and Palmquist, 1980).

the negative sign of their product term indicate that contemporary art prices first tend to increase with size, then decrease as the piece of work become too large and difficult to house.

Of the remaining artist characteristics, age is significant but with a very low impact. All our artists being alive that is not as uncommon as it could first seem. The estimated coefficients of Nationality such as DEU for Germany and US for USA are negative and not significant. That answers some of the critics address to the *Kunstkompass* and the presence of too many German artists.

Turning to our third set of parameters regarding the process of sales they show that auctions at Sotheby's, Christie's and the country of sale increase significantly the standard price by 178.36 per cent and 177.47 per cent, respectively, over other auction houses. Pesando (1993), de la Barre et al. (1994), Agnello and Pierce (1996) and Renneboog and Van Houtte (2002) also found that ". . . Sotherby's typically fetches higher prices than Christie's, while both experience higher prices than all other houses" (Agnello and Pierce 1996).

The month and day during which auctions take place are significant at the 99 per cent confidence level but with a very limited impact.

More interesting are the parameters linked with the year. Besides the fact they are all significant at the 99 per cent confidence level with the exception of the year 1990, we see that they tend to decrease from 1989 till 1997 and then increase till 2006. This is something we observe on the art market with the sharp decrease following the speculative bubble peak in 1990.

The medium of execution indicates that painted works PAINTING command higher prices, with increases over the standard work of 136.63 per cent. WATERCOLOR, PRINT, PHOTO lead to 116.04, 20.68, 133.44 per cent increase. The coefficient associated with DRAWING is not relevant. The significance of oil is largely due to the permanence of oil and the difficulty of use.

Agnello and Pierce (1996) had already found a 156 percent increase in prices for US oil works as compared to all other media (including watercolour, gouache, ink, pencil, pastel, etc.).

Let's now analyse the new parameters add to the model: the Kunstkompass parameters. We see that although the meaning of the coefficients relative to the Kunstkompass ranking is weak through the years, they are significant (except for the period 1991-1988).

K06-98, K97-92, K91-88 which stand for the 3 last constant calculation periods of the Kunstkompass ranking increase the value of the work by 100% for each time period in comparison with our referral period: the Kunstkompass of 1987.

We see clearly the impact of our proxy parameters for perceived quality. If we keep in mind that evolution in the Kunstkompass ranking occurs every 5 years in general mainly by recalculating scores on a new time period, we can understand such huge impact with our referral period. The 1988 reshuffling was the most important in the history of the Kunstkompass. It followed the death of Willi Bongard in 1985 and it melted down all the previous Kunstkompass sub-rankings (Kunstatlas).

However, the meaning deeply varies from one artist to another or from one set of artists to another. For instance a regression made only on Gerard Richter who occupies the first place in the Kunstkompass 2006 results a R^2 of 81% from which 7.5% have to be attributed to the Kunstkompass parameters. The 81% R^2 is really significant and rarely achieved. The only approximated result was achieved by Cjzuzack 1997 and a R^2 of 80% for her analysing of Picasso paintings at auctions.

Insert Table 4

From this, we can conclude that parameters like the Kunstkompass ranking definitely bring their part of meaning in a hedonic regression. The impact of such kind of proxy which is very significant, is a milestone that should be used by those who want to get a very meaningful model. Some of the critics addressed to the Kunstkompass and described in section 2 part II are overwhelmed and find here their best counterarguments.

Insert Figure 3

Graph II provides an index returns by support.

But a general year impact can be seen in the general model of (table III) where we can see a significant decrease in price during the period 1989-2006. In a way, the decrease from the late eighties and the beginning of the nineties is a bit like the market of art in general seen thanks

to Artprice Global Index in Graph II. But the strong increase since 2001 still has to see its effect on our 100 artists. We can conclude that an index like the Kunstkompass is not a good way to invest its money.

5. Conclusion

We have argued here that significant improvements can be brought to the analysis of price in the fine art market. The result achieved by adding our Kunstkompass parameters can be generalised and further developed. They just tend to show that artistic value has a significant impact to explain the price of a piece of work.

By extrapolating, we can suggest that actors like collectors especially through the paradigm of the Veblen⁸ effect (1989) have a significant impact on price too. Besides that critics, gallerists and probably many more should have as well an impact that econometrical models like hedonic regressions should take care of.

This kind of parameters could reconcile the tenants of the theory which say that investing in art is not an efficient way to achieve higher returns, when compared to returns in the financial markets, and those who still see a way to be profitable on markets such as the fine art markets.

Which is also sure in regards of what we analysed, is that the Kunstkompass, is probably not a good index to invest in if such an index existed.

⁸ Wealthy individuals often consume highly conspicuous goods and services in order to advertise their wealth, thereby achieving greater social status.

6. Limitations and Directions for future research

We showed that a parameter such as the Kunstkompass, a proxy for perceived quality can bring significant information in the understanding of price formation in the Art Market. It sounds that room for improvement can be obtained by following this pace.

Other actors, such as collectors, critics, painters, etc. have influenced on Art Market and should therefore be investigated. The lack of data is probably the main issue.

Some people have a tremendous influence. Leo Castelli was a gallerist at the onset of the Pop Art current. The critic Germano Celant popularised “Arte Povera” in 1967.

Damian Hirst set up the Young British Artist (YBA) association with purpose to promote them. He is also well known for buying his own pieces of work from collectors. His relation with the well known collector Charles Saatchi is even famous.

Christie’s owner François Pinault, a famous contemporary artist collector has recently acquired the Palazzo Grassi in Venice in order to expose his collection.

Piotr Ulanski, untitled X-Rayed portrait of François Pinault (2003) (Picture 1) is probably the quintessence of the collusion between the artist and the patron. Exposed at the entrance of the Palazzo Grassi exhibition: “Where are we going?”. Who can estimate the value of this work? Moreover what can we say regarding the artistic value?

Insert Picture 1

References:

- Akerlof, George. (1970) "Market for 'Lemons': Qualitative Uncertainty and the Market Mechanism." *Quarterly Journal of Economics*, 84, pp. 488-500.
- Ashenfelter, O.C. and Graddy, K. (2002) "Art Auctions: A Survey of Empirical Studies." *CEPR Discussion Paper Series*, No. 3387, CEPR, London.
- Ashenfelter, O.C. (1989) "How Auctions Work for Wine and Art." *Journal of Economic Perspectives* 3(3): 23–36.
- Bailey, M., Muth, J.F., and Nourse, H.O. (1963) "A Regression Method for Real Estate Price Index Construction", *Journal of the American Statistical Association* 58: 933-942.
- Baumol, William J. (1986), Unnatural value: or art investment as floating crap game, *American Economic Review Papers and Proceedings* 76, 10-14.
- Bickel, P.J. and Freedman, D.A. (1981) "Some Asymptotic Theory of the Bootstrap", *Annals of Statistics* 9: 1 196-1217.
- Buelens, N. and Ginsburgh, V. (1993) "Revisiting Baumol's Unnatural Value or Art as a Floating Crap Game", *European Economic Review* 37: 135 1-1 37 1.
- Candela, G. and Scorcu, E. (1997) "A Price Index for Art Market Auctions. An Application to the Italian Market of Modern and Contemporary Oil Paintings". *Journal of Cultural Economics* 21: 175–196.
- Chanel, Olivier, Gérard-Varet, Louis-André and Ginsburgh, Victor A. (1990), Art as an investment, manuscript.
- Chanel, O., Gérard-Varet, A.L., and Ginsburg, V. (1996) "The Relevance of Hedonic Price Indices". *Journal of Cultural Economics* 20: 1–24.
- Court, A.T. (1939) "Hedonic Price Indexes with Automotive Examples", in *The Dynamics of Automobile Demand*. New York: The General Motors Corporation, pp. 99-1 17.
- Czujack, C. (1997) "Picasso Paintings at Auction (1963–1994)". *Journal of Cultural Economics* 21: 229–247.
- de la Barre, M., Docclo, S., and Ginsburgh, V. (1994) "Returns of Impressionist, Modern and Contemporary European Painters, 1962-1 99 1", *Annales d'Economie et de Statistique* 35: 143-181.
- Fama, E.F. (1991) "Efficient Capital Markets: II", *The Journal of Finance* XLVI: 1575-1617.
- Freedman, D. (1981) "Bootstrapping Regression Models", *Annals of Statistics* 9: 1218-1228.

Frey, Bruno S., and Werner W. Pommerehne. (1988) "Is Art Such a Good Investment?" *The Public Interest*, 91, pp. 79-86.

Goetzmann, W.N. (1990b) "Accounting for Taste: an Analysis of Art Returns over three Centuries", First Boston Working Paper Series FB-90-11, November.

Goetzmann, W.N. (1993) "Accounting for Taste: Art and Financial Markets over Three Centuries", *American Economic Review* 83: 1370-1 376.

Grampp, W.D. (1989) *Pricing the Priceless, Art Artists and Economics*. New York: Basic Books Inc.

Mandelbrot, B. (1965), "Information theory and psycholinguistics", in *Scientific Psychology: Principles and Approaches*, eds. B. Wolman, E. Nagel (Basic Books), pp.550-562.

Mandelbrot, B. (1982), *The Fractal Geometry of Nature*, New York: W.H. Freeman and Company.

Pommerehne, W.W. and Feld, L. (1995) "The Impact of Museum Purchase on the Auction Price of Paintings", manuscript, University of Saarland.

Reitlinger, Gerald (1961/1971), *The Economics of Taste: The Rise and Fall of the Picture Market, 1760-1960*, London: Barrie and Jenkins Ltd.

Rohr-Bongard, Linde (2006), *Kunst = Kapital. Der Capital Kunstkompass von 1970 bis heute, Gebundene Ausgabe*.

Rosen Sherwin (1974), Hedonic prices and implicit markets: product differentiation in pure competition, *Journal of Political Economy* 82, 34-55.

Taleb Nicholas Nassim (2007), *Black Swans, To be published*.

Velthuis O. (2005) "Talking prices: Symbolic Meanings of Prices on the Market for Contemporary Art" Princeton University Press.

Wilde O (1890) "The Picture of Dorian Gray"

Annexe:

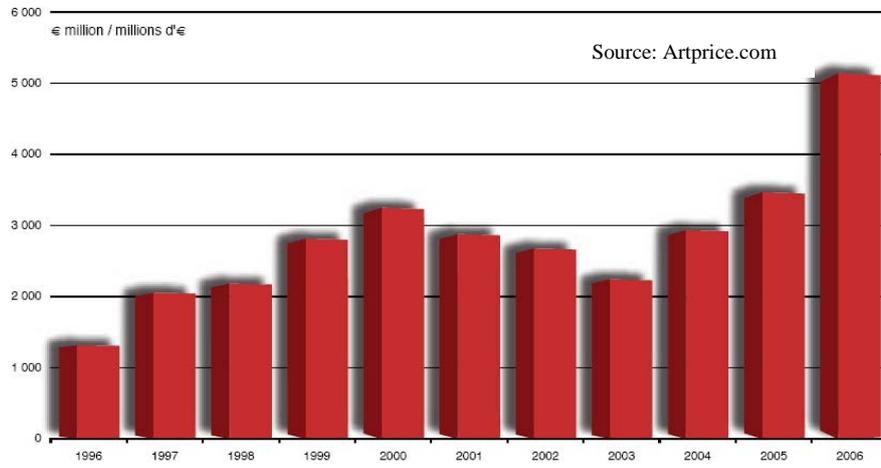


Figure 1. Annual Auction Sales Turnover -Worldwide



Picture 1. Piotr Ulanski, untitled X-Rayed portrait of François Pinault (2003)

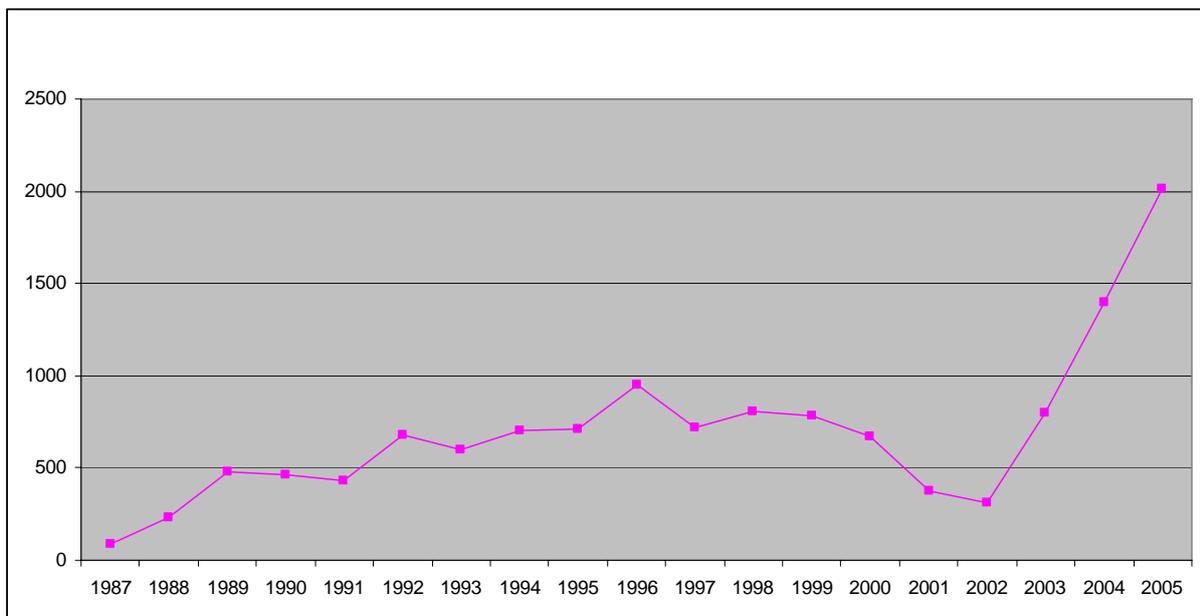


Figure 2. Number of Works sold per Year

Table 1. Number, Mean Price and Standard Deviation of works sold by artist (Auctions:1987-2006)

KK Ranking	NAME	BORN	WORK SOLD	MEAN	SD	KK Ranking	NAME	BORN	WORK SOLD	MEAN	SD
1	Richter Gerhard	1932	848	242,708	589,484	51	Buren Daniel	1938	46	29,778	64,768
2	Nauman Bruce	1941	199	95,213	270,555	52	Holzer Jenry	1950	92	28,320	25,240
3	Polkes Sigmar	1941	427	91,889	195,839	53	Becher Bernd&Hilda	1931	143	29,974	32,993
4	Trockel Rosemarie	1952	95	30,331	45,080	54	Hirschhorn Thomas	1957	12	18,279	27,089
5	Bourgeois Louise	1911	107	171,473	530,210	55	Baldessari John	1931	87	50,586	104,583
6	Baselitz Georg	1938	513	98,618	206,139	56	Tuymans Luc	1958	55	124,888	264,698
7	Sherman Cindy	1954	360	45,018	65,688	57	Tilmans Wolfgang	1968	0	-	-
8	Kentridge William	1955	26	17,386	17,352	58	Gober Robert	1954	114	98,893	170,696
9	Eliasson Olafur	1967	74	40,782	74,534	59	Ackermann Franz	1963	20	186,497	163,666
10	Kelley Mike	1954	108	110,127	287,036	60	Kounellis Jannis	1936	162	91,784	206,279
11	Viola Bill	1951	6	144,164	148,194	61	Tiravanija Rirkrit	1961	6	7,917	5,965
12	Gordon Douglas	1966	20	20,160	16,496	62	Knoebel Imi	1940	91	15,718	17,494
13	Immendorf Jörg	1945	0	-	-	63	Kelly Ellsworth	1923	312	83,510	276,173
14	Boitanski Christian	1944	0	-	-	64	Bock John	1965	10	24,463	23,772
15	Huyghe Pierre	1962	0	-	-	65	Prince Richard	1949	280	133,800	238,552
16	Schütte Thomas	1954	0	-	-	66	Calle Sophie	1953	31	13,210	8,763
17	Barney Matthew	1967	60	63,788	85,235	67	Oldenburg Claes	1929	384	54,445	130,183
18	Ruscha Ed	1937	468	104,284	310,103	68	Dijkstra Rineke	1959	61	36,822	45,795
19	Kabakov Ilya	1933	32	28,330	84,834	69	Sierra Santiago	1966	0	-	-
20	Neshat Shirin	1957	118	21,677	15,016	70	Bonvicini Monica	1965	0	-	-
21	Rist Pipilotti	1962	20	14,875	28,463	71	Hockney David	1937	1,386	42,148	222,425
22	Gursky Andreas	1955	153	158,141	298,521	72	Hamilton Richard	1922	149	21,628	78,856
23	Kiefer Anselm	1945	152	195,164	258,767	73	Dumas Mariene	1953	122	174,842	446,514
24	West Franz	1947	142	8,134	7,997	74	Walker Kara	1969	8	35,933	32,093
25	McCarthy Paul	1945	0	-	-	75	Pistoletto Michelangelo	1933	137	32,754	66,662
26	Ruff Thomas	1958	318	28,511	31,988	76	Oursler Tony	1957	6	28,029	33,577
27	Wall Jeff	1946	12	115,455	96,440	77	Graham Rodney	1949	49	16,653	21,067
28	Twombly Cy	1928	390	350,368	1,041,143	78	Darboven Hanne	1941	24	20,657	26,301
29	Demand Thomas	1964	44	64,942	57,315	79	Abramovic Marina	1946	7	24,966	25,916
30	Serra Richard	1939	177	56,939	121,099	80	Uecker Günther	1930	146	18,134	24,749
31	Höller Carsten	1961	1	4,800	0	81	Pardo Jorge	1963	16	25,299	42,811
32	Cattelan Maurizio	1960	59	295,377	497,414	82	Smith Kiki	1954	59	35,643	62,149
33	Johns Jasper	1930	898	145,480	657,086	83	Fritsch Katharina	1956	6	60,052	103,636
34	Struth Thomas	1954	193	53,743	83,232	84	Schneider Gregor	1969	5	13,676	12,732
35	Förg Günther	1952	188	17,020	28,878	85	Horn Roni	1944	60	16,226	15,473
36	Koons Jeff	1955	185	374,945	903,469	86	Oehlen Albert	1954	54	97,930	139,059
37	Fischli Weiss	1952	75	36,937	51,469	87	Meese Jonathan	1972	11	13,439	21,490
38	Christo Jeanne-Cl	1935	890	38,899	52,756	88	Cragg Tony	1949	89	28,538	24,336
39	Pettibon Raymond	1957	76	32,237	113,128	89	Lüpertz Markus	1941	228	23,354	42,695
40	Gilbert George	1943	152	80,716	120,756	90	Whiteread Rachel	1963	44	80,386	139,257
41	Graham Dan	1942	49	16,653	21,067	91	Horn Rebecca	1944	60	16,226	15,473
42	Hatoum Mona	1952	17	36,066	48,939	92	Gillick Liam	1964	1	2,086	0
43	Weiner Lawrence	1940	22	8,511	7,241	93	Rainer Arnulf	1929	455	13,022	19,439
44	LeWitt Sol	1928	537	22,101	50,674	94	Slominski Andreas	1959	1	14,700	0
45	Alys Francis	1959	31	52,169	42,925	95	Douglas Stan	1960	3	21,352	12,249
46	Rehberger Tobias	1966	1	28,008	0	96	Gerz Jochen	1940	5	4,925	2,742
47	Orozco Gabriel	1962	35	22,669	20,506	97	Kruger Barbara	1945	64	30,912	34,024
48	Hirst Damien	1965	426	150,510	320,050	98	Dean Tacita	1965	4	1,366	890
49	Rauch Neo	1960	39	105,595	171,679	99	Sala Anri	1974	0	-	-
50	Rauschen Robert	1925	672	105,736	559,168	100	Herold Georg	1947	29	8,277	9,773

all prices are in Dollar CPI corrected

Table 2. Selected Descriptive Statistics

		NBR/%	SD
YEAR			
	1987	0.00	
	1988	0.02	
	1989	0.03	
	1990	0.03	
	1991	0.03	
	1992	0.05	
	1993	0.04	
	1994	0.05	
	1995	0.05	
	1996	0.06	
	1997	0.05	
	1998	0.05	
	1999	0.05	
	2000	0.04	
	2001	0.02	
	2002	0.02	
	2003	0.05	
	2004	0.09	
	2005	0.13	
	2006	0.13	
MATERIAL			
	PRINT	0.34	
	PAINTING	0.27	
	PHOTO	0.1	
	WATERCOLOR	0.09	
	SCULPTUR	0.11	
	DRAWING	0.09	
	OTHER	0	
GALLERIES			
	SOTHEBY'S	0.33	
	CHRISTIE'S	0.33	
	OTHER	0.33	
DEMOGRAPHICS			
	AGE	57	13
	FEMALE	0.21	
	NATIONALITY	21	
N		14792	

Table 3. Estimated coefficients, standard errors and p-values for the hedonic pricing equation

Parameter	Coefficient	Std. Error	t-Statistic	Prob.	Parameter	Coefficient	Std. Error	t-Statistic	Prob.
C	55.2092	5.80651	9.50815	0	SMITH	0.043774	0.214763	0.2038	0.8385
RICHTER	0.49365	0.1086	4.54572	0	CRAGG	0.047236	0.189058	0.2498	0.8027
HOCKNEY	0.67809	0.09134	7.42405	0	LUPERTZ	-0.02506	0.112048	-0.2236	0.823
NAUMAN	0.29954	0.12397	2.41624	0.0157	RAINER	-0.08317	0.117175	-0.7098	0.4779
POLKES	0.47854	0.09862	4.8522	0	KRUGER	-0.15526	0.16747	-0.9271	0.3539
TROCKEL	-0.31554	0.14762	-2.1376	0.0326	BIRTH	-0.02281	0.002972	-7.6736	0
BOURGEOIS	-0.22508	0.17466	-1.2887	0.1975	DEU	-0.07936	0.092366	-0.8592	0.3902
BASELITZ	0.56966	0.09333	6.10389	0	USA	-0.12873	0.099687	-1.2913	0.1966
SHERMAN	0.06394	0.09903	0.64568	0.5185	SIGNED	-0.05176	0.034872	-1.4842	0.1378
ELIASSON	0.25979	0.16365	1.58746	0.1124	DATE	-0.00102	0.00037	-2.7448	0.0061
BARNEY	0.83449	0.20795	4.01296	0.0001	H1	0.00244	0.000119	20.588	0
RUSCHA	0.4622	0.07492	6.16896	0	H2	0.002099	9.64E-05	21.763	0
NESHAT	-0.06166	0.12843	-0.4801	0.6311	H1xH2	-3.10E-06	4.11E-07	-7.5308	0
GURSKY	0.92115	0.11586	7.95041	0	NEW YORK	0.69462	0.037746	18.403	0
KIEFER	1.01632	0.11734	8.66105	0	LONDON	0.528945	0.043437	12.177	0
WEST	-0.44006	0.15647	-2.8125	0.0049	SOTHEBY'S	0.578648	0.038043	15.21	0
RUFF	-0.16847	0.09736	-1.7304	0.0836	CHRISTIE'S	0.57362	0.037132	15.448	0
TWOMBLY	1.32747	0.08275	16.0426	0	MONTH	0.02101	0.003269	6.4279	0
DEMAND	0.6474	0.19416	3.3343	0.0009	DAY	-0.00605	0.001296	-4.6686	0
SERRA	0.12291	0.11057	1.11164	0.2663	PAINTING	0.86132	0.064183	13.42	0
JOHNS	1.43664	0.06893	20.8414	0	WATERCOLOR	0.148748	0.070675	2.1047	0.0353
STRUT	0.05621	0.10792	0.52088	0.6025	DRAWING	-0.09384	0.070426	-1.3325	0.1827
FORG	-0.60892	0.10828	-5.6238	0	PRINT	-1.57598	0.064686	-24.364	0
KOONS	0.57513	0.16569	3.47116	0.0005	PHOTO	0.288484	0.075744	3.8087	0.0001
FISCHLI	-0.21165	0.1763	-1.2005	0.23	KK 06-98	9.39E-06	2.05E-06	4.5828	0
CHRISTO	0.45354	0.09725	4.66351	0	KK 97-92	2.78E-05	7.31E-06	3.8086	0.0001
PETTIBON	0.11136	0.16288	0.68369	0.4942	KK91-88	5.55E-06	6.19E-06	0.8962	0.3702
GILBERT	0.03438	0.12047	0.2854	0.7753	1989	0.338169	0.103483	3.2679	0.0011
GRAHAM	-0.45809	0.17999	-2.545	0.0109	1990	0.091027	0.109869	0.8285	0.4074
LEWITT	-0.47427	0.08372	-5.665	0	1991	-0.43268	0.110747	-3.907	0.0001
HIRST	1.23358	0.10691	11.5383	0	1992	-0.85798	0.132633	-6.4688	0
RAUSCHENBERG	0.20634	0.07649	2.69765	0.007	1993	-1.02416	0.13518	-7.5763	0
BUREN	-0.17558	0.20485	-0.8571	0.3914	1994	-1.00988	0.135147	-7.4724	0
BUCHER	-0.43942	0.13625	-3.225	0.0013	1995	-1.2365	0.137795	-8.9735	0
BALDESSARI	-0.41913	0.13643	-3.0721	0.0021	1996	-1.33349	0.137702	-9.6839	0
TUYMANS	0.8118	0.17137	4.7371	0	1997	-1.35045	0.15157	-8.9098	0
GOBER	0.57996	0.17613	3.29272	0.001	1998	-0.92698	0.134291	-6.9028	0
KOUNELLIS	0.23978	0.13859	1.73018	0.0836	1999	-0.97053	0.133379	-7.2765	0
KNOEBEL	-0.60966	0.15266	-3.9936	0.0001	2000	-0.93677	0.134741	-6.9523	0
PRINCE	0.6526	0.09585	6.80852	0	2001	-0.90795	0.140764	-6.4502	0
OLDENBURG	-0.08643	0.0917	-0.9426	0.3459	2002	-0.75515	0.143884	-5.2483	0
DIJKSTRA	0.05242	0.16607	0.31564	0.7523	2003	-0.73103	0.132568	-5.5144	0
HAMILTON	0.1194	0.15304	0.78022	0.4353	2004	-0.59983	0.130488	-4.5969	0
DUMAS	0.84483	0.12791	6.60474	0	2005	-0.5542	0.130028	-4.2622	0
PISTOLETTO	0.5308	0.15221	3.48723	0.0005	2006	-0.55295	0.131122	-4.2171	0
UECKER	-0.47758	0.14649	-3.2601	0.0011					

0

1

2

3

4

5

1

3

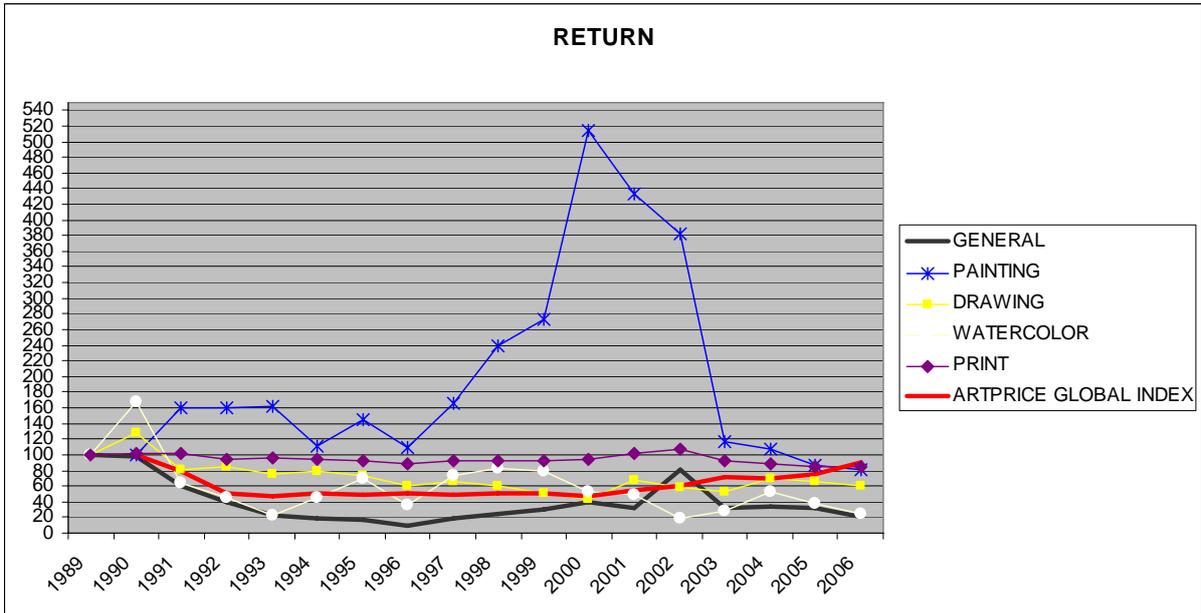


Figure 3. Return by medium and by year (1989 – 2006) (1989 = 100)

Table 4. Estimated coefficients, standard errors, p-values for the hedonic pricing equation of Gerhard Richter

Parameter	Coefficient	Std. Error	t-Statistic	Prob.
C	-147,37	56,3179	-2,6168	0,009
KK 06-98	2,19E-06	4,18E-06	0,5229	0,6012
KK 97-92	-4,11E-06	6,75E-06	-0,6089	0,5427
KK91-88	1,97E-05	7,70E-06	2,5578	0,0107
KK87	3,39E-05	1,74E-05	1,9474	0,0518
NY	4,04E-01	0,139509	2,8976	0,0039
LD	3,57E-01	0,161185	2,2128	0,272
SOTH	0,492041	0,153841	3,1984	0,0014
CHRIS	0,532698	0,153754	3,4646	0,0006
SIGN	0,184459	0,161517	1,142	0,2538
DATED	0,612393	0,231273	2,6479	0,0083
H1	0,016928	0,001546	10,952	0
H2	0,019767	0,00185	10,682	0
H1xH2	7,98E-05	7,96E-06	-10,029	0
PAINTING	1,25933	0,984515	1,2791	0,2012
WATERCOLOR	0,88772	1,015671	0,874	0,3824
DRAWING	0,139641	1,036147	0,1348	0,8928
PHOTO	-0,51312	0,998965	-0,5137	0,6076
PRINT	-1,4225	0,984617	-1,4447	0,1489
YEAR	0,07699	0,028187	2,7314	0,0064
MONTH	-0,00123	0,010903	-0,1126	0,9104
DAY	-0,00439	0,004152	-1,0567	0,2909

Table 5. Kunstkompass 2006 ranking November 2006 (source: Capital)

Rang 2006	Rang 2005	Name	Jahrgang	Nationalität	Kunstform	Gesamtpunkte 2006	Punktezuwachs 2005	Preis in Tausend Euro ¹	Galerieverbindung ²
1	1	Richter, Gerhard	1932	DE	Malerei	76870	3525	600 – 700	Goodman Marian
2	3	Nauman, Bruce	1941	US	Objektkunst, Video Art	60220	3300	450 – 550	Fischer
3	2	Polke, Sigmar	1941	DE	Malerei	58330	2175	450 – 750	Werner
4	4	Trockel, Rosemarie	1952	DE	Konzeptkunst	47350	3600	60 – 150	Sprüth/Magers
5	5	Bourgeois, Louise	1911	US	Skulptur	43150	4650	200 – 400	Hauser & Wirth
6	7	Baselitz, Georg	1938	DE	Malerei	40780	5925	250 – 400	Werner
7	6	Sherman, Cindy	1954	US	Fotokunst	40740	3900	30 – 80	Sprüth/Magers
8	11	Kentridge, William	1955	ZA	Zeichnung, Video Art	37660	5250	30 – 55	Goodman Marian
9	15	Eliasson, Olafur	1967	DK	Skulptur, Installation	37350	5850	50 – 100	Neugerriemschneider
10	8	Kelley, Mike	1954	US	Kritische Kunst	36015	3225	180 – 200	Jablunka
11	9	Viola, Bill	1951	US	Video Art	34890	2700	120 – 200	Weber Jamileh
12	17	Gordon, Douglas	1966	GB	Video Art	33195	3675	40 – 80	Lisson
13	42	Immendorff, Jörg	1945	DE	Malerei, Skulptur	33040	6900	180 – 250	Werner
14	10	Boltanski, Christian	1944	FR	Installation	33035	2100	30 – 50	Klüser
15	41	Huyghe, Pierre	1962	FR	Medienkunst	32605	7275	50 – 70 ³	Goodman Marian
16	18	Schütte, Thomas	1954	DE	Skulptur	32570	2625	170 – 200	Fischer
17	22	Barney, Matthew	1967	US	Skulptur, Medienkunst	32185	3675	50 – 400	Gladstone
18	24	Ruscha, Ed	1937	US	Pop Art	32145	4125	300 – 400	Ropac
19	16	Kabakov, Ilya	1933	UA	Installation	32085	3525	180 – 250	Ropac
20	43	Neshat, Shirin	1957	IR	Medienkunst	32055	8325	30 – 70 ³	Gladstone
21	14	Rist, Pipilotti	1962	CH	Video Art	31570	1725	85 – 125	Hauser & Wirth
22	13	Gursky, Andreas	1955	DE	Fotokunst	31360	600	100 – 250	Sprüth/Magers
23	25	Kiefer, Anselm	1945	DE	Malerei	31350	3525	350 – 400	Ropac
24	12	West, Franz	1947	AT	Objektkunst, Möbel	31295	450	40 – 60	Grässlin
25	23	McCarthy, Paul	1945	US	Kritische Kunst	30825	1950	120 – 200	Hauser & Wirth
26	19	Ruff, Thomas	1958	DE	Fotokunst	30660	1275	30 – 80	Johnen & Schöttle
27	20	Wall, Jeff	1946	CA	Fotokunst	30540	1350	75 – 390	Johnen & Schöttle
28	26	Twombly, Cy	1929	US	Malerei	30110	2100	1200 – 1600	Greve
29	35	Demand, Thomas	1964	DE	Fotokunst	29580	2850	40 – 80	Sprüth/Magers
30	21	Serra, Richard	1939	US	Skulptur	28995	1200	900 – 1 200	m Bochum
31	40	Höller, Carsten	1961	DE	Installation	28925	3900	80 – 120	Ars Futura
32	29	Cattelan, Maurizio	1960	IT	Installation	28905	900	190 – 420	Goodman Marian
33	36	Johns, Jasper	1930	US	Pop Art	28830	2175	800 – 4 000	Marks
34	27	Struth, Thomas	1954	DE	Fotokunst	28270	900	80 – 100	Johnen & Schöttle
35	28	Förg, Günther	1952	DE	Malerei, Skulptur	28110	1875	40 – 60	Fahnemann
36	33	Koons, Jeff	1955	US	Malerei, Objektkunst	27705	2025	500 – 800	Sonnabend
37	32	Fischli/Weiss	1952/46	CH	Video Art	27645	1725	50 – 100	Sprüth/Magers
38	31	Christo & Jeanne-Claude	1935/35	US	Aktionskunst	27565	1050	280 – 600	Nothelfer
39	48	Pettibon, Raymond	1957	US	Zeichnung	27425	3375	9 – 12	CFA
40	37	Gilbert & George	1953/42	IT/GB	Konzeptkunst	27355	2025	100 – 150	Fischer
41	39	Graham, Dan	1942	US	Konzeptkunst	27305	1575	130 – 170	Johnen & Schöttle
42	49	Hatoum, Mona	1952	GB	Installation, Performance	27135	3525	55 – 90	Nordenhake
43	38	Weiner, Lawrence	1942	US	Konzeptkunst	27090	2400	60 – 90	Fischer
44	30	Le Witt, Sol	1928	US	Minimal Art	26545	0	100 – 200	Fischer
45	55	Alys, Francis	1959	BE	Medienkunst	26430	2325	35 – 70	Kilchmann

1) Für mittelgroße, neuere Arbeiten. 2) Eine von mehreren Verbindungen. 3) www.artnet.de

Rang 2006	Rang 2005	Name	Jahrgang	Nationalität	Kunstform	Gesamtpunkte 2006	Punktezuwachs 2005	Preis in Tausend Euro ¹	Galerieverbindung ²
46	45	Rehberger, Tobias	1966	DE	Skulptur, Installation	26 350	2400	25 – 30	Grässlin
47	46	Orozco, Gabriel	1962	MX	Konzeptkunst	26 290	1425	50 – 100	Crousel
48	47	Hirst, Damien	1965	GB	Malerei, Skulptur	25 835	825	400 – 600	White Cube
49	62	Rauch, Neo	1960	DE	Malerei	25 255	2400	160 – 240	Eigen + Art
50	57	Rauschenberg, Robert	1925	US	Pop Art	25 165	3450	350 – 450	Mayer
51	63	Buren, Daniel	1938	FR	Konzeptkunst	24 690	4200	80 – 120	Buchmann
52	51	Holzer, Jenny	1950	US	Kritische Kunst	24 685	1575	50 – 100	Sprüth/Magers
53	50	Becher, Bernd & Hilla	1931/34	DE	Fotokunst	24 675	0	55 – 65	Sonnabend
54	53	Hirschhorn, Thomas	1957	CH	Installation, Skulptur	24 415	1350	35 – 70	Arndt & Partner
55	56	Baldessari, John	1931	US	Fotokunst	24 390	2025	75 – 150	Sprüth/Magers
56	58	Tuymans, Luc	1958	BE	Malerei	24 345	1875	150 – 300	White Cube
57	71	Tillmans, Wolfgang	1968	DE	Fotokunst	24 325	5025	5 – 30	Buchholz
58	52	Gober, Robert	1954	US	Konzeptkunst	24 250	2550	230 – 300	Marks
59	73	Ackermann, Franz	1963	DE	Malerei	23 865	3525	50 – 100	Neugerriemschneider
60	44	Kounellis, Jannis	1936	GR	Arte Povera	23 735	0	140 – 160	Greve
61	66	Tiravanija, Rirkrit	1961	TH	Skulptur, Installation	23 070	2850	45 – 80	Neugerriemschneider
62	60	Knoebel, Imi	1940	DE	Malerei, Installation	22 965	1050	70 – 90	Fahnenmann
63	64	Kelly, Ellsworth	1923	US	Hard Edge	22 505	1950	240 – 280	Strelow
64	79	Bock, John	1965	DE	Installation, Performance	22 275	2775	20 – 35	Klosterfelde
65	59	Prince, Richard	1949	US	Malerei, Collage	22 200	450	150 – 400	Becker
66	74	Calle, Sophie	1953	FR	Installation	21 995	2175	30 – 70	Arndt & Partner
67	54	Oldenburg, Claes	1929	US	Pop Art	21 910	0	260 – 300	Fischer
68	70	Dijkstra, Rineke	1959	NL	Fotokunst	21 715	1650	20 – 45	Hetzler
69	94	Sierra, Santiago	1966	ES	Kritische Kunst	21 260	2325	10 – 15	Kilchmann
70	123	Bonvicini, Monica	1965	IT	Installation	21 040	5550	40 – 80	Fontana
71	98	Hockney, David	1937	GB	Pop Art	21 025	4875	250 – 600 ³	Juda
72	68	Hamilton, Richard	1922	GB	Pop Art	20 910	600	350 – 550	Gagosian
73	95	Dumas, Marlene	1953	NL	Malerei	20 620	3900	120 – 300	Zeno X
74	100	Walker, Kara	1969	US	Kritische Kunst	20 580	3825	50 – 120	Hetzler
75	61	Pistoletto, Michelangelo	1933	IT	Arte Povera	20 330	450	50 – 90	Tanit
76	65	Oursler, Tony	1957	US	Video Art	20 295	750	40 – 60	Mayer
77	82	Graham, Rodney	1949	CA	Medienkunst	20 230	1050	30 – 100	Johnen & Schöttle
78	72	Darboven, Hanne	1941	DE	Konzeptkunst	20 205	1875	180 – 220	Fischer
79	90	Abramovic, Marina	1946	CS	Performance	20 185	3450	30 – 40	Kelly
80	84	Uecker, Günther	1930	DE	Zero	20 060	1425	60 – 80	Van der Koelen
81	69	Pardo, Jorge	1963	CU	Installation, Architektur	19 945	0	60 – 80	Capitain
82	77	Smith, Kiki	1954	US	Skulptur	19 810	1275	60 – 100	Lelong
83	67	Fritsch, Katharina	1956	DE	Objektkunst	19 700	675	60 – 120	White Cube
84	93	Schneider, Gregor	1969	DE	Installation	19 660	2175	70 – 120	Fischer
85	76	Horn, Roni	1955	US	Fotokunst, Skulptur	19 450	975	90 – 110	Jablonka
86	88	Oehlen, Albert	1954	DE	Malerei	19 180	1350	90 – 110	Grässlin
87	139	Meese, Jonathan	1970	DE	Malerei, Installation	18 995	4950	20 – 30	CFA
88	75	Cragg, Tony	1949	GB	Skulptur	18 965	1050	90 – 120	Buchmann
89	92	Lüpertz, Markus	1941	DE	Malerei, Skulptur	18 865	1725	150 – 200	Werner
90	104	Whiteread, Rachel	1963	GB	Skulptur	18 825	2925	200 – 350	Gagosian
91	96	Horn, Rebecca	1944	DE	Installation, Performance	18 725	1725	110 – 130	Schulte
92	115	Gillick, Liam	1964	GB	Installation	18 165	2325	20 – 70	Hetzler
93	81	Rainer, Arnulf	1929	AT	Malerei	18 115	525	60 – 80	M Bochum
94	91	Slominski, Andreas	1959	DE	Objektkunst, Installation	18 050	1200	20 – 50	Produzentengalerie
95	78	Douglas, Stan	1960	CA	Medienkunst	17 985	0	20 – 35	Zeno X
96	87	Gerz, Jochen	1940	DE	Kritische Kunst	17 960	1575	20 – 30	Löhl
97	102	Kruger, Barbara	1945	US	Kritische Kunst	17 950	1650	80 – 100	Sprüth/Magers
98	138	Dean, Tacita	1965	GB	Mixed Media	17 910	3975	20 – 40	Frith Street
99	131	Sala, Anri	1974	AL	Kritische Kunst	17 810	2475	9 – 45	Johnen & Schöttle
100	83	Herold, Georg	1947	DE	Malerei, Objektkunst	17 790	450	40 – 60	Grässlin

Table 6. Kunstkompass 2006 Criteria November 2006 (source: Capital)

Point	City	Museum	Point	City	Museum
800	Amsterdam	Stedelijk Museum	650	London	Whitechapel
800	Berlin	Nationalgalerie	650	Los Angeles	County Museum of Art
800	Bregenz	Kunsthau	650	Ludwigshafen	Wilhelm-Hack-Museum
800	Düsseldorf	Kunstsammlung NRW	650	Lyon	Musée d'Art Contemporain
800	London	Tate Modern	650	Maastricht	Bonnefanten Museum
800	New York	Guggenheim-Museum	650	Madrid	Centro de Arte Reina Sofia
800	New York	Metropolitan Museum	650	Magdeburg	Kloster unser lieben Frauen
800	Paris	Centre Georges Pompidou	650	Mailand	Fondazione Prada
800	San Francisco	Museum of Modern Art	650	Malaga	CAC
800	Sydney	Museum of Contemporary Art	650	Malmö	Rooseum
650	Aachen	Ludwig Forum	650	Mannheim	Städtische Kunsthalle
650	Aachen	Suermond- Ludwig-Museum	650	Marseille	Musée d'Art Contemporain
650	Antwerpen	MUHKA	650	Minneapolis	Walker Art Center
650	Baltimore	Museum of Art	650	Mönchengladbach	Städtisches Museum
650	Barcelona	Fundacio Joan Miro	650	Montreal	Musée d'Art Contemporain
650	Barcelona	Musée d' Art Contemporain	650	München	Haus der Kunst
650	Basel	Museum für Gegenwartskunst	650	München	Lenbachhaus
650	Berkeley	Berkeley Art Museum	650	München	Pinakothek der Moderne
650	Berlin	Deutsche Guggenheim Berlin	650	München	Sammlung Goetz
650	Berlin	Hamburger Bahnhof	650	Münster	Westfälisches Landesmuseum
650	Berlin	Haus am Lützowplatz	650	Nagoja	Institute for Contemporary Art
650	Berlin	Kunst -Werke Berlin	650	New York	Dia Center for the Arts
650	Berlin	Martin-Gropius-Bau	650	New York	New Museum of Contemporary Art
650	Berlin	Neuer Berliner Kunstverein	650	New York	P.S.1 Museum
650	Bilbao	Guggenheim Museum	650	New York	Whitney Museum of American Art
650	Bordeaux	CAPC	650	Otterlo	Kröller-Müller-Museum
650	Boston	Museum of Fine Art	650	Oxford	Modern Art
650	Bozen	Museion	650	Paris	Fondation Cartier
650	Bregenz	Kunsthau	650	Paris	Jeu de Paume
650	Bremen	Neues Museum Weserburg	650	Paris	Musée d'Art Moderne de la Ville
650	Brüssel	Palais des Beaux Arts	650	Paris	Palais de Tokio
650	Buffalo	Albright Knox Art Gallery	650	Pittsburgh	Carnegie Museum of Art
650	Chemnitz	Kunstsammlungen Chemnitz	650	Prato	Musée d'Arte Contemporanea
650	Chicago	The Art Institute	650	Reykjavik	Reykjavik Arts Museum
650	Den Haag	GEM Museum für aktuelle Kunst	650	Rotterdam	Boijmans-Van Beuningen
650	Dortmund	Museum am Ostwall	650	Rotterdam	Witte de With
650	Dresden	Staatl. Kunstsammlungen	650	Saint- Etienne	Musée d'Art Moderne
650	Dublin	Irish Museum of Modern Art	650	Salzburg	Museum der Moderne
650	Duisburg	Wilhelm-Lehmbruck-Museum	650	San Francisco	Museum of Modern art
650	Düsseldorf	Kunstpala	650	Santa Fe	Site Santa Fe
650	Düsseldorf	Kunstsammlung NRW	650	Santiago de Compostel	Centro Galego de Arte Contemporanea
650	Eindhoven	Van Abbemuseum	650	Schwäbisch Hall	Kunsthalle Würth
650	Essen	Museum Folkwang	650	St. Yves	Tate Gallery
650	Forth Worth	The Modern Art Museum	650	Stockholm	Moderna Museet
650	Frankfurt	Museum für Moderne Kunst	650	Straßburg	Musée d'Art Moderne et Contemporain
650	Frankfurt	Portikus	650	Stuttgart	Staatsgalerie
650	Frankfurt	Schirn Kunsthalle	650	Stuttgart	Württembergischer Kunstverein
650	Frankfurt	Städelsches Kunstinstitut	650	Sydney	Art Gallery
650	Genf	Centre d'art Contemporain	650	Sydney	Museum of contemporary Art
650	Gent	Museum van Hedendaagse Kunst	650	Sydney	Museum of Contemporary Art
650	Goslar	Mönchehaus - Museum für Moderne Kunst	650	Tilburg	de Pont
650	Grenoble	Le Magasin	650	Tokio	Hara- Museum of Contemporary Art
650	Grenoble	Musée de Grenoble	650	Turin	Castello di Rivoli
650	Groningen	Groninger Museum	650	Valencia	IVAM-Centre del Carme
650	Halle	Staatliche Galerie Moritzburg	650	Valencia	IVAM-Centre Julio González
650	Hamburg	Deichtorhallen	650	Venedig	Museo Correr
650	Hamburg	Kunstverein	650	Warschau	Zacheta National Gallery
650	Hannover	Kestner-Gesellschaft	650	Washington	Hirshhorn Museum
650	Hannover	Sprengel-Museum	650	Washington	National Gallery of Art
650	Houston	Contemporary Arts Museum	650	Weimar	Neues Museum
650	Houston	The Menil Collection	650	Weimar	Neues Museum Weimar
650	Humblebaeck	Louisiana Museum	650	Wien	Albertina
650	Karlsruhe	Museum für Neue Kunst	650	Wien	Klosterneuburg
650	Koblenz	Ludwig Museum	650	Wien	Kunsthalle
650	Köln	Museum Ludwig	650	Wien	Kunsthalle Wien
650	Krefeld	Haus Esters/Haus Lange	650	Wien	Museum Moderner Kunst Stiftung Ludw
650	Krefeld	Kaiser Wilhelm Museum	650	Wien	Wiener Secession
650	Leipzig	Galerie für zeitgenössische Kunst	650	Wiesbaden	Museum Wiesbaden
650	Leipzig	Museum der Bildenden Künste	650	Wolfsburg	Kunstmuseum
650	London	Hayward Gallery	650	Wolfsburg	Kunstmuseum Wolfsburg
650	London	ICA	650	Wuppertal	Von der Heydt- Museum
650	London	Serpentine Gallery	650	Zürich	Migros Museum
650	London	Tate Britain			