

Investment in Art - Specificity, Risks, and Rates of Return

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Abstract: The paper presents art as a special object of investment. The features of works of art and art market are presented in comparison with characteristics of securities and stock exchange market. The author takes into account the following criteria: commodity features, ownership characteristic, markets' classification, liquidity, access to information on prices (market values), kinds of values, incomes, time horizon of investment, market indexes used for art market and stock exchange indexes. The paper takes up the issue of the most important characteristic connected with any type of investment i.e. risk and rates of return. The author presents different kinds of risks related to art investment. Moreover, the multidimensional aspects of rates of return are discussed. Financial rate of return in art, as in case of securities, can be calculated on the basis of monetary fluctuations in value in time. The methods available for estimation of rates of return in art are presented: price indices, repeat sales regression, hedonic regression, hybrid model, 2-step hedonic approach. Apart from financial rates of return the importance of non-financial rates of return in art is strongly emphasized.

Keywords: art, art investment, art finance, art risk, art rate of return
JEL: D14, G1, Z1

1. Introduction

Taking the perspective of financial economics, works of art may be treated as investments. In this approach the purchase of a work of art is aimed at achieving positive return rate of the investment in the future. Investments in works of art may be viewed in relation to other forms of investment, i.e. investing in securities or investing in real estates, precious metals (gold, platinum, silver), precious stones (diamonds), alcohols (wine, whisky), numerous collectors' items. The issue of investing in works of art gains special significance at the times of economic crisis¹. Downturn of economy results in reduction of confidence in intangible financial instruments, and thus investment in works of art may gain on importance. However financial crises negatively influence art market, it is better time to buy the works of art. Works of art, as tangible investment, represent a value storage mean; they have the ability to maintain the value in unfavourable external conditions.

The purpose of this paper is to present the specificity of investment in works of art in comparison with traditional investments in securities. Special attention will be paid to basic categories related to investment, namely risk and rates of return. The paper proceeds as follows: The next section presents characteristic features of works of art as objects of investment. In section 3 the specificity of art investment is described. A special attention is paid to kinds of risks related to art investment. Sections 4 and 5 are devoted to financial and non-financial rates of return from art. In Section 6 the conclusions are drawn.

2. Characteristics of works of art

Works of art are characterized by many features that give specific character to art market, and also to investments in art. In table 1 the most important of the features have been listed.

¹Influence of global crises on Chinese art market has been described by Ma Jian (Ma Jian, 2010), on Australian art market by H. Higgs (Higgs, 2012).

Table 1: List of features characterizing works of art

Features of works of art	Description
heterogeneity and indivisibility	diversity, uniqueness, economic goods, which don't have close substitutes, no possibility of standardization, as in case of stock exchange commodities
uniqueness, originality,	extent to which particular work of art is independent from the other ones
authenticity/attribution	creation by a specific artist/attribution of authorship by experts (taking into account historic, stylistic, and technical context, as well as analyses of signature),
aesthetic items	capable of bringing out aesthetic feelings in a consumer: thrill, shock, pleasure
singular goods, singularities	features: multidimensionality, uncertainty and incomparability, goods, which represent the matter of interest for <i>economics of singularities</i> ,
luxury goods	as viewed by E. Engel goods with high level of income elasticity of demand, higher than 1 (with the growth of income the demand for works of art grows more than proportionally), there are no limits to the demand for luxury goods, Tornquist's curve of demand for luxury goods crosses x-axis at certain, relatively high, level of income, it does not have saturation level (horizontal asymptote),
prestige goods	bringing esteem, respect in social environment, being evidence of wealth and high social status of the owner, goods of strong symbolic meaning, representing a symbol of social status, richness and power
goods of culture, often a national heritage, sometimes world heritage,	goods of cultural meaning, timeless, may be a subject of special protection, including legal protection,
cultural products	they are components of so called cultural capital
multidimensionality of value	artistic value, aesthetic value, historical value, value in use, estimate value, symbolic value, religious value, ideological value, emotional value, cultural value, cognitive value, value for the customer in marketing approach, market value (price)

Source: author's own work

When treating art as object of investment, it is noteworthy that art market has many features differentiating it from the securities market. Table 2 lists characteristic features of works of art and securities as objects of investment, as well as art market and stock exchange market for selected comparative criteria including: features of objects of investment, necessity to ensure special maintenance conditions, classification of objects of investment (Blue chip, Midcap, Smallcap), character of ownership, market classification (primary, secondary), institutional markets (auctions, stock exchanges) and informal markets, frequency of organizing auctions and stock exchange sessions, availability of information on prices of concluded transactions, price indices used for art markets and securities markets.

Table 2: Comparison of characteristic features of investment objects and their markets

Criterion	Works of art	Securities
Features	Rare, unique, unrepeatable (works of art, even if created by the same artists, are not perfect substitutes), wide range of goods, heterogeneity	Large number of homogenous and perfectly substitutionary securities, replaceability, homogeneity
Special maintenance	Ensuring proper storage for the items: temperature, humidity, lighting, protection against theft	Not applicable
Classification of objects of investment	Blue chips – paintings of most globally recognized painters, whose works had an impact on development of global painting (Monet, Renoir, Picasso)	Blue chips – shares of renowned companies with stable foundations, high capitalization, high level of dividend, stable prices.
	Midcap – paintings by authors considered belonging to so called “second league” – of national significance	Midcap – shares of companies with medium capitalization, weaker foundations, higher variability of price levels
	Smallcap – paintings by painters classified into so called “third league”, i.e. artists of regional or local significance.	Smallcap – shares of companies with small capitalization, rather unstable financial situation, high variability of price levels
Freedom	Owner of a work of art may be considered a monopolist, who does not face any competition.	Owners of securities act on a competitive market.
Market classification	Primary market Secondary market	Primary market Secondary market
Type of market	Elite, luxury market	Mass market
Institutional market	Yes - auctions	Yes – stock exchange
Informal market	Yes, e.g. purchase in artist’s workshop.	No
Frequency of sessions	Auction sessions are organized less frequently, seasonality of auctions, less number of concluded transactions.	Frequent stock exchange transactions; in a continuous trading system - continuous, higher frequency of concluded transactions
Availability of information on transaction prices	Prices of works of art (out of auction) often remain private information, known only to parties of concluded transaction.	Prices of securities are a public information– stock exchange listing.
Price indices	MM - Mei-Moses Fine Art Index, AMR (Art Market Research Price Index), Sotheby’s Art Index, Art Price Index, Fase i van Tol Index, Hislop’s Art Sales Index, Gabrius Index ² .	Dow Jones Industrial Average, NASDAQ, FTSE 100, DAX, CAC 40, PS 50, WIG

Source: author’s own work and based on (Baumol, 1986; Borowski 2007).

² MM - Mei Moses Fine Art Index is the most important group of art market indices; created by Jianping Mei and Michael Moses; its database includes more than 30 thousand works of art, which were resold (*repeat sales*) by biggest auction houses acting as agents in art trading around the world - Sotheby’s and Christie’s.

3. Specificity of investment in art

Investing in works of art is intrinsically related to change of their value in time. At this point, one should note the multidimensionality of value of art, which, besides market value of the item (price), includes many varieties of interrelated types of values discussed on the ground of different scientific disciplines, including, but not limited to: artistic value (inherent objectively in a work of art), aesthetic value (subjectively given by customer in the process of perception), historical value related to passage of time, value in use related to usability and satisfying human needs, estimate value specified by experts in history of art, symbolic value, religious value, ideological value, cultural value, value for the customer in marketing approach (Hutter, Throsby, 2008; Bialynicka-Birula 2013). When making a decision, investor expects an increase in value of the object of investment (positive return rate), whereas time horizon of investment is not necessarily known at the moment of its completion.

Investing in art may take two forms:

1. direct, based on making direct purchases of works of art on primary or secondary market, it always involves actual purchase and going into possession of a work of art;
2. indirect, not related to possession of a work of art, including in particular:
 - purchasing shares of companies functioning on the art market (e.g. Sotheby's Holding Inc., Artnet AG, Artprice S.A., Art in Motion Income Fund),
 - purchase of share units in specialized art investment funds (e.g. Fine Art Fund, Collectors Fund).

Table 3 includes a list of features of direct and indirect investments in art and traditional investments in securities. Comparative criteria are as follows: type of investment, liquidity, time horizon of the investment, possibility of providing fixed income, goal of purchase (investment).

Table 3. Comparison of the features of investments in art and investments in securities

Criterion	Works of art		Securities
Investment type	direct material investments, where the object of investment has a material character	indirect investments e.g.: through art funds, or by purchasing shares of art market companies	financial investments, where the object of investment has an intangible character (financial instrument).
Liquidity	very low, low	higher	higher
Time horizon of the investment	very long, long	variable	variable
Fixed income	they are not a source of fixed income	yes, e.g. dividends in case of shares	yes, interest in case of bonds, dividends in case of shares
Purpose of purchase/investment	rather non-financial purpose, (aesthetic, psychological, and social in particular), with less significance of financial purpose	financial purpose, positive financial return rate, with less significance of non-financial goals (psychological or social)	financial purpose, positive financial rate of return, with less significance of non-financial goals (psychological and social)

Source: author's own work

In the case of direct investments, works of art are characterized by low liquidity, i.e. significant level of difficulty to exchange them for cash. In the case of indirect investments, liquidity is higher. With respect to direct investments, works of art should be considered a long-term investment, whereas in the case of indirect investments time horizon of such investment is shorter, comparable with investments in securities. Works of art in the case of direct investments do not provide fixed income (the exception might be payable renting of works of art for exhibitions). Indirect investments in works of art, like investments in securities, may bring fixed income (e.g. dividends). Taking into account the purpose of investing in works of art, just like in the case of purposes of investments in securities, financial and non-financial goals may be differentiated. It seems that financial goals are characteristic in particular of investments in securities and indirect investments in works of art. Non-

financial goals have less significance. On the other hand, with respect to direct investment in works of art, non-financial goals (aesthetic, psychological, and social in particular) may play more important role than solely financial purpose. In such a case the owner may obtain non-financial benefits from possessing a work of art as long as he/she remains its owner. Only at the moment of its sale he/she may get financial returns (positive or negative) from the investment.

When considering works of art as objects of investment, two basic dimensions related to any investment should be discussed: risk and rate of return from a work of art. First distinguished aspect of an investment in works of art is risk that concerns all types of investments, both material and financial. Many types of risks can be singled out as far as works of art are concerned, and some of these risks are specific to these objects. Types of risks will be identified with respect to the concept of art market with system approach applied (Bialynicka-Birula, 2013)³. Risk of investment in art may be related to the art market system itself, as well as its immediate and distant environment.

Among risks related to objective element of the market – i.e. work of art – the following types are included: risk concerning authenticity of a work of art, risk of work of art’s provenance, quality risk as well as physical risk. Authenticity risk related to work of art may result from incorrect attribution, uncertain attribution, lack of certificate proving the authenticity of the object, purchase of non-authentic object, or it may be a problem of forgery (of a work of art, entirely) or falsification (of signature). Risk of provenance is related to the possibility of purchase of an object having uncertain or false origin. Quality risk of a work of art concerns technical aspect of artistic workmanship (durability, resistance to external conditions). Physical risk is inherent in material side of a work of art and its potential damage, destruction, devastation, vandalism or loss. It emerges as a relationship between subjective elements of art market system and work of art itself. Risk related to transaction parties (sellers/buyers) is for instance a risk of legal nature, selection of agent in transaction, risk of change concerning parties to a transaction (change of material situation, change of taste and preference of the owner). Moreover, risk to become a collector (Jureviciene, Savicenko, 2012) is related to buyers. Risk related to institution of auction or other agent in transaction (agency risk) may relate to potential manipulations of auctioneer or other agent, insufficient knowledge of intermediary, “winner’s curse” risk during English auction. Types of risks related to investment in art have been listed in Table 4. Figure 1 presents discussed types of risk in the system of art market and its environment.

Table 4. Kinds of risks related to works of art

Element	Kind of risk	Risk characteristics
Works of art	risk of authenticity and attribution of a work of art	incorrect attribution, uncertainty of attribution, lack of certificate proving the authenticity of object, purchase of non-authentic (false) object, risk of purchasing an object with altered signature (falsified)
	risk of provenance of work of art	purchase of an object with uncertain or false origin
	risk of work of art’s quality	technical aspect of artistic workmanship, durability, resistance to external conditions in case of proper maintenance
	physical risk	damage, destruction, consequences of incorrect storage (loss of colours, significant cracks of paint, mould etc.), deliberate devastation, vandalism, loss of item having different causes
Parties to transaction sellers/buyers	legal risk	seller without property right, risk of cheating, other violation of legal regulations
	risk of changes in attributes of the parties to transaction	change of non-material situation of the owner, change of taste of the owner, change of owner’s preferences,

³ In the concept of system approach to art market the following elements have been distinguished: sellers, buyers, auction (agent), works of art and relations between them. Market system is situated under the impact of immediate environment (directly or indirectly related to art market) and distant environment (economic, cultural, social, and religious).

Auction /agent	agency risk	selection of agent in transaction, agent’s level of knowledge, manipulations by auctioneer or other agent, “winner’s curse” at English auction
Immediate environment	market risk	change of art market tide, liquidity risk – difficulty to sell work of art if necessary, substantial change in costs of concluding market transactions, substantial change in costs of information, substantial change in fees, taxes, export licences etc., changes of legal regulations, e.g. in the extent of legal protection of works of art against their exportation, change of tastes, trends (fashion) on art market e.g.: regarding painting school, trendy artist
Distant environment	economic risk	change of market tide, situation on stock exchange, markets of alternative investments (gold, real properties, precious stones, alcohols),
	legal risk	property right, nationalization, purchase of work of art from unauthorized person, substantial changes of legal regulations covering art trading, substantial changes of regulations concerning possibility to export, restitution issues
	political risk	armed conflicts, social unrest
	Force Majeure risk	destruction, loss as a result of natural disaster (flood, fire, hurricane),
	crime risk	theft, illegal exportation abroad, etc.

Source: author’s own work

Figure 1. Kinds of risks in the art market system and its environment



Source: author’s own work

Moving to the issue of types of risk related to art market system environment it should be noted that risks assigned to immediate environment include change of art market tide, low liquidity – difficulty to sell work of art in case it is necessary, substantial change of costs of market transaction, substantial change in information costs, significant change of fees, taxes, export licences, etc., changes in the extent of legal protection, e.g. against exportation, change of tastes, trends (fashion) on the art market: as concerns painting school, trendy artist. In distant environment of auction art market system the following have been identified: economic risk (change of market tide, situation on stock exchange, situation on alternative investment markets), political risk (armed conflicts, civil unrest), legal

regulation risk (property right, purchase of a work of art from the unauthorized person, substantial changes in legal regulations concerning art trading, substantial changes of regulations concerning exportation abroad, issues of restitution), Force Majeure risk (flood, fire, hurricane) and crime risk (theft, illegal exportation). To recapitulate the discussions presented so far the attention must be paid to substantial diversity of the nature of risks related to works of art.

4. Financial Returns from Works of Art

Another dimension of an investment in work of art, besides risk, is profitability, specified through establishing of financial rates of return from investment in works of art. As mentioned earlier, rate of return from work of art may be considered in two aspects: financial, related to market value (price) of art, and non-financial (social, psychological, sometimes also functional). Rate of return from works of art in financial approach is captured only in monetary fluctuations in value in time. Basic problem in setting rate of return from investment in works of art is heterogeneity of the objects of exchange and lack of systematic appearance of a work of art on the market.

Since 1970s economists have attempted to specify profitability of investments in art. The following methods of setting returns from investments in art may be differentiated:

1. art index method, price index created based on prices of a set of works of art sold in a given period, in specified auction houses; index may be based on “market basket”, which is variable and includes different sets of objects in different time periods, or else it can be set based on a fixed set of objects;
2. repeat sale regression (RSR), based on data from sales of objects that were sold at least twice; in this approach, due to rare repeated appearance of an item on the market, long-term collection of data is necessary;
3. hedonic regression (HR), works of art, as heterogenic goods, are treated as an aggregate of their characteristic features, price is a sum of (non-observable) partial utilities of respective features;
4. hybrid model, which treats RSR as a nested case of HR, follows the same principles as RSR model, but uses the structure of HR model;
5. 2-step hedonic approach: enables using every single auction record, instead of only those auction records that belong to a sub-sample of selected artists.

Table 5 presents the most important features of the mentioned methods to define return rates from works of art.

Table 5. Characteristics of methods of defining return rates from art

Method	Characterictcs	Advantages/Disadvantages	Publications
naïve price index	uses the averaged and median auction prices, the distribution of quality of the paintings is relatively constant over time, similar to a CPI (Consumer Price Index), a basket of representative paintings is created and the price of constituting paintings, which are not sold in the subsequent period, can be periodically re-evaluated by experts or they can be replaced with close substitutes (preferred substitute - a painting of the same artist and of the same quality and size).	subjectivity in determining substitutes.	Renneboog and van Houtte (2002)

Repeat Sales Regression	uses prices of individual objects traded; analysis of change in prices of the same object at two distinct moments in time	does not require the measurement of quality, art characteristics (medium size etc.), do not change over time, art heterogeneity is bypassed, difference between transaction prices at two dates is a function solely of the intervening time period, does not use any data on single sales, uses only a small percentage of all transactions, needs pairs of data	Anderson (1974), Baumol (1986), Goetzmann (1990), Locatelli, Pesando (1993), Biey and Zanola (1999), Mei and Moses (2002)
Hedonic Regression	generates index values based on artwork characteristics (artist's name, size, medium, subject matter), places less importance on the value change of a specific object over time. allows to consider how different characteristics affect the value of an artwork	constructed from all sales, not from an (often small) subset of the available transactions, larger sample size are available, depends on the characteristics used to describe the objects, and on the functional form of the equation, avoids the problem of selecting items of the same quality for comparison at different times	Frey and Pommerehne (1989), Buelens and Ginsburgh (1993), Chanel et al. (1996), Seckin, Atukeren (1999), Agnello (2002), Worthington and Higgs (2005), Campos and Leite Barbosa (2009), Renneborg and Spaenjers (2009), Higgs (2012)
Hybrid model	follows the same principles as a RSR model, but adopts the structure of a HR model; instead of considering price changes of comparable items by pairing sales,	each sale is considered individually, identifying both the sale time (e.g., year) and Comparable Set membership as independent variables.	Taylor and Coleman (2011)
2-step Hedonic approach	enables the researcher to use every single auction record, instead of only those auction records that belong to a sub-sample of selected artists.	substantially larger sample available for research lowers the selection bias that is inherent in the traditional hedonic and repeat sales methodologies	Kräussl and van Elmland (2008), Kraeussl., Wiehenkamp (2009)

Source: author's own work based on (Ginsbrugh et. all, 2005; Kräussl and van Elmland, 2008; Kraeussl and Lee, 2010).

The level of financial returns from works of art does not solely depend on the levels of purchase and sale prices. At this point it is worth reminding that the art market is characterized by high transaction costs, significantly higher in comparison with transactions concerning other items or financial instruments. The following may be listed among the costs related to transaction of sale/purchase of works of art: commission of auction house, additional fees and taxes related to purchase (e.g. municipal taxes, VAT), fees pertaining to object's exportation (export licences, exportation permits), *droit de suite*, potential costs of advertisement, costs of exhibition, costs of photographs in auction catalogue, transport costs). Costs of proper maintenance of the object should also be considered (storage of a work of art in suitable conditions, e.g. as it comes to ensuring proper

level of temperature, humidity, lighting, insuring the object, protection against destruction and theft (anti-burglar systems), sometimes a necessity of preservation. All the aforementioned kinds of costs significantly reduce financial return rate from investment in works of art. Considering the investment in terms of costs, attention should be paid to the costs of lost opportunities – lost chances to invest in other material objects or financial instruments. It must be noted here that the studies of subject literature indicate low correlation between return rates from art and other financial instruments (Agnello, 2002; Bakhouché, 2007; Mamarbachi, Day, Favato, 2010; Higgs, 2012).

5. Non-Financial Returns from Works of Art

Besides financial returns, with respect to work of art we can consider non-financial returns. Non-financial returns from works of art may stem from different sources: social, cultural, psychological (psychic rate of return from work of art), and sometimes also functional. Taking into account social context of investment in works of art a series of aspects of social significance are noteworthy, including: manifesting affiliation with particular social group (social mimicry phenomenon, mimicking “important persons” in a society), Veblen effect (Veblen, 1971)⁴; wish to emphasize one’s identification with a nation (works of art of national, or historical theme, showing elevated moments in the history of nation), or with a group of followers of a given religion (works of art of a religious theme); aspiring to belong to specific group (comparing oneself with a reference group); using imagery of works of art related to reference groups. Possession of works of art may emphasize social status of the owner, may be a source of prestige and respect for the owner in a community as a collector, art lover, person supporting artists and art development. When discussing social significance of investing in works of art, what deserves attention is the fact that these objects, even if representing private investment, also have a public value (Srakar A., Copic V., 2012), value for a given local or regional community, nation, followers of a given religion, and in the widest context - a value for the humanity. Social benefits, or returns, from the ownership of works of art are also displayed by their ideological and cognitive values.

Besides social returns from investment in works of art, psychic (individual) return plays a very important role⁵. Investment in works of art may bring individual benefits attributed to positive image of oneself, increase of self-esteem (in relation to ideal “I”, being a consequence of possessing specified items; or as a result of endowing others with luxury goods), development of one’s interests. Investments in works of art may induce positive feelings related to making the right purchase, possessing a collection of items, completing the collection by adding precious item, participation in art auctions, or being a regular customer of art gallery. Works of art also contribute to satisfying needs that arise from personality features of individuals, such as: vanity, greed, lust for wealth and power (Kelly, 2003), a sense of one’s superiority and elitism towards others. Investing in works of art also brings benefits of a satisfaction-seeking/hedonic nature (life according to the *carpe diem* principle). Contact with a work of art may be a source of pleasure in itself. Work of art may call up pleasant moments through its theme or by bringing back places, events or persons associated with it. Furthermore, the process of art’s purchase may be a pleasure in itself, a pleasure may be a consequence of prior experience of success, i.e. making an investment of a relatively high positive rate of return, and a wish to experience success once again.

Aesthetic experience may be singled out as one of the non-financial benefits of investment in works of art. Works of art are capable of bringing out aesthetic experiences, i.e. different types of positive and negative emotional states in recipients e.g.: contemplation, elation, thrill, excitement, passion, fear, shock, or disgust. It is worth indicating that all human beings do not share aesthetic needs, and thus capability to experience aesthetic emotion in contact with a work of art, of the same intensity. Finally, when discussing non-financial benefits from work of art, functional and utilitarian gains should be mentioned as the ones that could be considered in case of some of the works of art.

⁴ T. Veblen points to two psychological aspects of purchasing prestige goods, first of which is a wish to equal somebody, and the second one is a desire to outstrip others (Veblen, 1971).

⁵ Psychic return from art is considered by Fase 2001, Atukeren, Seckin, 2007, Candela et al. 2013..

6. Concluding remarks

Recapitulating deliberations on art as an investment object, it should be noted that there exist two forms of investing: direct and indirect. Taking into account direct investments in art, a few characteristic features may be distinguished. First, direct investments in art are characterized by long time horizon. Furthermore, investments in works of art have low liquidity. In the third place, the costs of transactions concluded on the art market are high and they significantly reduce financial rate of return. In addition, investments in works of art are marked by highly variable and high level of risk. What is more, returns from investments in art correlate low with returns from other forms of investment. Finally, works of art bring non-financial returns (social, psychological).

The paper points to the existence of financial and non-financial returns from art. The analysis of returns from the investment in art, in terms of finance, is a more difficult task as compared to analysis of rates of return from financial investments. The main reason for this is heterogeneity of goods and irregular appearance of respective items on the market. The paper points out that financial goals of investment are characteristic of indirect investments in art (like in the case of investing in securities). However, with respect to direct investing in art, non-financial goals of different kinds (social, psychological) may play greater role than goals of purely financial nature.

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