

Art Markets and Economics: Introduction

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1. Similarity of Art and Social Science

There are close relationships between art and social science. This is certainly one of the features which has attracted many scholars to engage in the economics of the arts. One of the striking similarities is the sequence in which an artistic or scientific “movement” develops over time.

In their contribution to this special issue, Leslie Singer and Gary Lynch (1997) distinguish three phases (and construct corresponding qualitative categories; see their Appendix 1) of the development of a major art movement as identified by art historians:

- The first phase consists in the *founders* who created innovative pictorial insights. Examples are Francis Bacon, Max Beckmann, Paul Cezanne or Pablo Picasso;
- The second phase is made up of *followers of significant achievement*. Examples are Lovis Corinth, André Derain or Raoul Duffy;
- The third phase is composed of artists who are *essentially following the main stream art movements*. Often, they are not known to the general public. This time sequence corresponds well to the typical development of fields of scientific inquiry. It also applies to the study of art markets by economists:
- In the first phase, there is the path-breaking study by Baumol (1986) who is generally recognized to be the founder of art market research in economics. While there are valuable forerunners, in particular Wagenführ (1965), Anderson (1974) and Stein (1977), Baumol’s contribution sparked off a large number of studies.
- The second phase is characterized by a number of studies which were directly influenced by Baumol but which go beyond him in clearly identifiable ways.
- The third phase is devoted to the study of particular aspects of the art market. They are often devoted to passively testing propositions advanced in the previous two phases. This, of course, does not mean that these studies are of lesser value (indeed they normally use more advanced techniques of study) but only that they devote themselves to increasingly narrow and intricate issues con-

nected with the art market. Moreover, this “late” phase provides the stepping stone for the next innovation, and is therefore a necessary part of scientific development.

This introduction to the special issue does not intend to sketch the development of the economics of art markets over these three phases.¹ It suffices to note that the contributions to this special issue belong to the third phase.

It is useful to distinguish three dimensions along which this third phase proceeds:

(1) Art as an investment

Is it rational to purchase art compared to other stores of value such as government bonds, stocks, or real estate? What is the nature of aesthetic (psychic) benefits received from owning a work of art?

The article by Guido Candela and Antonello Scorcu on “A Price Index for Art Market Auctions” included in this issue is devoted to this area. They estimate the return on the auctioned “representative painting” in Italy over the period 1983–1994 to be clearly lower than the corresponding average yield on government bonds or on Italian stocks. This corroborates Baumol’s (1986) findings of a real annual rate of return of 0.5% on paintings compared to 2.5% on government bonds over the period 1650–1960, Frey and Pommerehne’s (1989) result of a 1.5% p.a. real return on paintings and 3% on government bonds over the period 1635–1987 and a broader set of auctions, as well as Goetzman’s (1993) estimate of a 2% real return on paintings compared to a 3.3% real interest rate of the Bank of England.

As the title indicates, Leslie Singer and Gary Lynch’s paper on “Are Multiple Art Markets Rational?” deals with the issue of whether it pays to buy 20th century art from the financial point of view. They conclude that buyers of art of lesser quality (Categories 2 and 3 mentioned above) may suffer an opportunity cost in monetary terms. In contrast, (wealthy) collectors of the highest quality art (Category 1) do not suffer such a loss. They have lower purchase cost and further advantages due to informational imperfections in this market, so that the yields are as high in the art market as elsewhere.

(2) More detailed studies on auctioned paintings

There are many possibilities of analyzing special kinds of paintings. In this collection of papers, we have an analysis of particular *genres* of art (the paper by Victor Ginsburgh and Anne-Françoise Penders on “Land Artists and Art Markets”) and on *individual artists* (the paper by Corinna Czujack on “Picasso Paintings at Auction”). It is also possible to look at *particular actors* (the paper by Werner Pommerehne and Lars Feld on “The Impact of Museum Purchase on the Auction Prices of Paintings”); as well as art market in *specific countries* (the paper by Candela and Scorcu on the Italian Art Market).

(3) *Studies on multiples, other antiques, and all forms of collectibles*

There is virtually no limit to analyzing the market for further kinds of “art”. Examples are violins and firearms, antique furniture, toy soldiers, beer steins, stamps and wine.

2. Diminishing Returns or Interesting Results?

Whenever a scholarly (or, for that matter, artistic) movement is in the third phase of its development, the uncomfortable question has to be asked: Have diminishing returns set in, and if so, how strongly? On the other hand, it would be foolish to start from the premise that none of the research in Phase 3 provides valuable and worthwhile insights.

This special issue, instigated and put together by one of the managing editors, Ruth Towse, demonstrates that economists are certainly not worse than painters, or other artists, in the third phase of a movement. Indeed, this issue reveals that both *new* and *surprising* results have been gained by the research undertaken.

An example is Ginsburgh and Penders’ paper on Land Art. Beginning in the mid-sixties, artists (mostly American and British) started to work in so far “untouched” (at least by art) areas such as deserts or industrial regions. Examples range from simple walks to gigantic constructions undertaken by bulldozers. The best known, and by now world famous Land Artist is Christo. Originally, the artists involved in Land Art revealed no interest in, and were not rarely hostile to selling or even marketing their artistic products. More importantly, art experts considered it impossible to merchandise that kind of art. In some cases the artists willingly destroyed their creations, or just left it to nature to annihilate it.

Today, the view that Land Art cannot be commercialized looks rather naive. Christo, for example, is well known for earning good money. This is revealed in Table I in Ginsburgh and Penders, or Tables 6.1 and 6.2 in Frey and Pommerehne (1989) where Christo is ranked ninth among the select groups of one hundred artists prominent in auctions. It is indeed surprising how well artists are able to market a creation which appears to be a public good par excellence. This shows that top artists are not only creative in their art but also in merchandising it – though many of them would violently oppose this statement. The possibilities of making money involve selling sketches, or photographs, or using the often spectacular happenings going with Land Art to attract attention to directly saleable art. Land Art, and in particular Christo’s self-financed wrappings, should perhaps be used by economists as an example for the innovative force of markets even when the original (artistic) product has the nature of a public good.² Ginsburgh and Penders’ contribution is to document how this merchandising of Land Art has taken place. They are able to show that for the period 1972–1991 the annual nominal rates of return on Land Art of 20% are similar to those of Conceptual Art (18.9%) and Minimal Art (23.8%), and even higher than for European Great Masters (15.8%). The study thus reveals a really superb capability of marketing an originally public good.

Another example showing that the third phase of the development of economic art market research is worthwhile relates to the fact that important questions are still open. One should not expect that *any* deep question in economics is ever settled by econometric estimates (see Summers, 1991; and more generally Blaug, 1992). But continued research, especially of the empirical variety, helps to ask the right questions and to determine those questions which can or cannot be answered in a reasonable way and which therefore have to be posed differently.

One of the major open issues in art market research relates to the differences in the rates of returns observed. If varying risk is accounted for, the presumption is that due to national and international arbitrage, such differences in returns should not exist.³ Yet Pesando (1993), and in this issue Czujack, find systematic and sizeable price differences between the United States and Britain. Picasso's paintings were auctioned at a higher price in New York than in London. Pesando also finds systematic price differences for prints sold by auction houses located in the same city. In contrast, Czujack finds only a "slight difference" between Sotheby's and Christie's, and attributes the higher prices of Sotheby's New York to different dimensions and other characteristics of the Picassos sold.

Singer and Lynch's contribution to this special issue adds another difference in prices and returns of great importance. Practitioners normally admit that it may well be that art investments *in general* yield low financial returns. But they love to claim that *high quality* art is always a good investment also from the *financial* point of view. The authors corroborate this popular view in their study of the visual arts of the 20th century. The nominal annual rate of return due to price appreciation is over twice as large for high quality art (Category 1) compared to the art created by the followers with significant achievement (Category 2), and over three times as large as for art produced by more passive followers of the mainstream. This result contradicts other findings in art market research. Thus, for example, Ross and Zondervan (1989) show that the best violins built by Stradivarius did not reap higher financial returns than those which he built when he was less experienced.

Unfortunately, Singer and Lynch do not discuss well why such substantial differences in financial returns are not eroded by arbitrage. Indeed, they state that the collectors of art of Category 1 enjoy the psychic benefits of owning art at a zero price. If this were literally true we would have an example of a "free lunch". But in that case, why do other would-be collectors (and other people) not jump in to also profit from the free lunch? This, however, would drive up prices, and reduce returns to an equilibrium where *total* returns (financial and psychic) are equalized by arbitrage.

Two explanations come to mind to account for this puzzle:

(1) It cannot be determined *ex ante* which artists belong to the first category of very best painters. The classification is, as Singer and Lynch emphasize, based on an *ex post* art historic evaluation. Hence, arbitrage cannot systematically work because the most talented painters reveal themselves only after the investment has taken place. What the result of the analysis supports is the proposition that highly

ranked painters according to art historic era evaluations are indeed more highly paid. But this does not mean that the causation is established. It may well be that, at least to some extent and in the long run, art historians tend to rank highly priced painters better than painters whose work only sell at low prices.

(2) The buyers of the highest category of art can borrow at lower rates than other buyers for the purpose of buying art and are charged lower commissions and lower transaction cost by the auction houses. Therefore they are able to get higher net returns on the art market, and can prevent their erosion because only this select group can profit from these advantages.

Much more research is needed to sort out how relevant these two aspects are, and whether additional considerations are relevant.

3. Neglected Aspects

While the studies collected in this issue give a good impression of the state of the art, several important aspects were not considered but are important for art market research. The area is thus far from being exhausted.

TAXATION

There can be little doubt that investments in art are strongly influenced by taxation. Yet most studies (also in this volume) disregard it. It may well be that the possession and increase in value of art objects are less highly (or not at all) taxed compared to financial and real estate investments. Taxation is very difficult to deal with because it is generally unknown in which country the auctioned paintings will end up, and because it is not only formal tax laws but also tax practice that matter. A breakthrough is needed in order to solve this important problem.

METHODOLOGICAL APPROACHES

It is evident from reading the papers that most of them just state the hypotheses to be tested. They do not derive them by employing the economic model of behaviour based on the assumption that individuals pursue (or maximize) their own utility subject to the constraints imposed by, among others, institutional differences (Becker, 1976, 1996).

An exception is the paper by Pommerehne and Feld. They carefully identify the different constraints which actors encounter on art auctions markets. In particular, they show that the directors of public museums face substantially different conditions than private museums and collectors. Public museums are prepared to pay higher prices because of the lower opportunity cost once the funds have been granted. With resale data covering the period 1820–1970 the authors are able to show that the owners of paintings sold to public museums earn a premium real rate of return (4.1% p.a.) compared to other sales (1.1%). A regression analysis keeping other influences constant (in particular business cycle movements) suggests that the

difference in the rate of return caused by purchases by (European) public museums and all other buyers amounts to 2.7% p.a. This result strongly supports an approach emphasizing institutional differences.

All the studies included in this special issue are strongly empirically oriented and exhibit modern techniques of econometric analysis. This is one of the great strengths of economists' art market analysis. However, the empirical analysis is confined to statistical tests. It seems that additional insights could be gained by also including structured and even unstructured interviews with art market practitioners. Some of the studies informally rely on such information (e.g., Czujack) but it is not systematically integrated into the more formal analysis.

TESTABLE PROPOSITIONS

The economic studies of the art market rightly distinguish two different sources of return or utility of holding art objects. The financial return is measured by the change in the monetary value; the psychic return or consumption benefit is indirectly measured by the difference between this financial return of the art object and the returns achievable by alternative investments, in particular in government securities and stocks. This residual approach presumes that the actors behave rationally, that all markets are in equilibrium and that the risk is comparable (i.e., the risk corrected returns in all forms of investment must be equal). It does not allow the testing of any theoretical proposition except one: Provided the owners derive at least some consumption benefit, the financial rate of return of art objects should in equilibrium be *lower* than that in other markets with similar risk. This is indeed what most studies find (see e.g. Table 1 in Frey and Eichenberger, 1995a). With few exceptions, the financial rates of return calculated are much lower than those for government bonds or stocks even though the risk in terms of price variations (i.e., neglecting other forms of risk such as destruction) of art objects is larger than for financial investments.

A test of more specific theoretical propositions requires an independent determination of the psychic return of owning art, i.e., the residual approach has to be given up. So far, little research has been undertaken in this direction by economists, probably because most of them feel at a loss when it comes to evaluate psychic benefits of art. However, in other areas of art economics, in particular *cultural heritage*, such evaluations have been successfully undertaken using a variety of methods (see e.g., the forthcoming collection of essays edited by Peacock, 1998). Progress can be achieved by linking those two fields of inquiry.

BEHAVIOURAL ANOMALIES IN ART MARKETS

In financial markets, behavioural anomalies, i.e., systematic deviations from the von Neumann–Morgenstern axioms of rational behaviour, and in particular, from subjective expected utility maximisation (see e.g., Machina, 1987) have been

well established. Such “irrationalities” are, for example, the January-, Holiday-, Christmas-, Small-Firm- or Equity-Premium-effects. Arbitrage does not wipe out supernormal profits even in the (almost) perfect financial markets. Eichenberger and I have conjectured elsewhere (Frey and Eichenberger, 1995b, pp. 531–533) that for various reasons particular anomalies are likely to be even larger and more widespread in art than in financial markets. Some researchers have indeed presented empirical evidence to the effect. Thus, for instance Pesando (1993) finds striking anomalies even in the market for prints which, due to multiplicity, should be more perfect than the typically very thin markets especially from top paintings of top artists.

Up to now, there has been little systematic research to isolate specific anomalies similar to those in financial markets. However, the anomalies likely to exist in art markets certainly differ. For that reason it is not sufficient to just identify already known anomalies but one has to search for new ones. This endeavour constitutes a challenge which promises to yield fascinating results. For that search to be fruitful, it is necessary to start from a careful analysis of the behaviour of buyers and sellers on art markets, and one has to well specify the institutional conditions under which art markets operate.

IMPORTANCE FOR PRACTICE

None of the studies deals with the question of who uses the results, and for what purpose. The public, e.g., newspapers, are very interested in studies on the art market but what about dealers, collectors, speculators and artists?

In this context, the *accessibility* of the research to non-economists becomes a major issue. In modern economics, where career is contingent on publications and citations, this is of little concern to the writers of articles. Rigour tends to dominate relevance. Hence there is little point in calling for easily readable articles and a reduction of technical complexity.

A possible solution is that studies of direct use for practice are undertaken by institutions specially funded for that purpose, or by auction houses. Several of the studies included in this issue can be seen as blueprints of how to proceed, and may therefore be of considerable indirect value to practice. A pertinent example is Czujack's study of Picasso paintings. Another is the art market price index constructed by Candela and Scorcu. They compare four price indices. The Sotheby index often used in the press is based on auction house experts' personal judgements; the repeat sales regression index approach by Goetzman (1993) and Pesando (1993); the hedonic regression index originally developed by Andersen (1974) and refined, among others, by Chanel et al. (1994) and Mossetto and Lazzaro (1996); and a “representative painting” index based on a fictitious painting which is representative of the price structure of the market in all periods. The authors show that four indices trace a similar development of art prices, in particular the market bubble until 1990, and the breakdown thereafter.

POLICY

Economists' analysis of the art market bears little relationship to political developments which may have a major impact on its efficiency. The spectre of arts trade restrictions hampering arbitrage is looming large. Even the European Union which otherwise champions free trade, has made no effort to keep the international trade in art open. The "unidroit convention" recently signed by many countries (but not by all) also serves to restrict the international trade in art by making it more risky. Another issue of great relevance for policy is the "droit de suite"; it would be important to know how, and to what extent, the art market is thereby affected. It would be interesting to see serious economic studies on the effects of such measures on art markets.

4. Summary

Our discussion shows that this collection of articles contains most interesting research, and in particular extends our empirical knowledge of the art market. However, there are still issues in the economics of art markets to be confronted by serious research.

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Notes

1. This has been done elsewhere. See, for instance, most recently the first part of Agnello and Pierce (1996), or the survey by Frey and Eichenberger (1995a).
2. One is reminded of the lighthouse as the most prominent example of a public good which cannot be marketed because of the nonexcludable, nondepletable nature of the service. As in the case of Land Art, it has been shown by Coase (1974) that a considerable number of lighthouses in England were built and run by profit-making private enterprises.
3. It should, however, be noted that it should not be assumed as a matter of fact that returns are equalized by arbitrage. The "equity premium puzzle" indeed arises because the return on stocks has been systematically much higher than the return on bonds over a very long period of time (see Siegel and Thaler, 1997).

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