Chapter 3
Art Markets and Auctions

Abstract Art uses labour and capital. These resources are scarce. As a result, opportunity costs arise. Cultural consumers have to make a choice between various supplies of art. In a well-functioning market, supply and demand balance. Art markets, in particular auctions, are characterized by large risks that rarely exist in other markets. These relate to authenticity, attribution, quality, and theft. Some unexpected market changes may also occur. Behavioural anomalies such as ownership bias and home bias are prominent. Investment in art diversifies a portfolio. The most sensible strategy is to buy for love of art.

Keywords Cultural consumers · Opportunity cost · Market-makers · Auctions · Record prices · Risk · Authenticity · Attribution · Quality · Theft · Behavioural anomalies · Diversification · Taxation · Money laundering

3.1 Producers and Consumers of Art

Both works of art and art performances are produced using resources. These are most importantly the labour or human capital used and the investment in new ideas or creativity. These resources are scarce and, if not employed in the arts, they can be used elsewhere. As a result, opportunity costs arise. For instance, an artist could use his or her skills in some other function, say as a decorator.

Art production is strongly affected by the changing tastes of art consumers. To be successful, a great deal of flexibility is needed. In addition, many art producers are subject to intense financial problems. In many cases, cultural producers cannot supply their goods and services at a profit. They are in constant need of public support, a sponsor, or a donor. As a result, diverse people are engaged in the arts: cultural workers, for-profit enterprises, not-for-profit firms, and many sorts of public cultural institutions. International organizations such as the UN, UNESCO, OECD, and non-governmental organizations (NGOs) play a substantial role.

The consumers of art are also subject to limitations. They are constrained by their income and wealth, and they also have limited credit. As a result, they have to make a choice between cultural activities. Many of them have to choose whether to

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attend an opera performance or to buy a painting. In addition to the demand exerted by individuals, much demand also comes from consumer organizations and in particular from government agencies.

3.2 Equilibrium Between Supply and Demand

In a perfect market, prices lead to a balance in the quantity of supply and demand. If supply exceeds demand, price decreases; if demand exceeds supply, price rises, leading to an equilibrium between supply and demand. Many art markets are imperfect, partly because would-be consumers are ill informed, or because demand cannot be fully adjusted to supply. Some art activities are subject to discontinuities. An opera house cannot perform only part of an opera, even if the theatre is not fully occupied. Lowering the entry price is not simple and may be risky, because the customers who booked first may get angry. The theatre may then lose future customers.

Art markets are also characterized by market-makers, who are often charismatic leaders able to induce consumers to buy art objects or to attend a cultural event. They try to establish a monopoly or quasi-monopoly in the sector in which they are active. Professional arts associations endeavour to restrict entry into a market and so often support these quasi-monopolies. Market-makers try to impose restrictions, for instance by requiring theatre companies to only hire actors with a closely defined formal education in that profession. Such rules serve to restrict competition by outsiders. Regulations open the possibility of engaging in price discrimination in the supply of cultural goods. Consumers closely following the proposals made by the market leaders can be charged a higher price than others less affected.

Markets in culture are subject to a great many regulations imposed by governments and quasi-official institutions, such as professional associations. Examples include

– health and safety rules at work (for instance restricting the number of hours of work, which may conflict with artistic requirements);
– censorship (in many countries it is forbidden to perform some theatrical plays for reasons of state security or public decency);
– heritage (many museums, theatres, and monuments are closely protected so that no changes to structures are allowed);
– intellectual property (a cultural supplier must observe copyrights in works of art in both the performing and the visual arts).

3.3 Auctions

In the art world, auctions have always played an important role. This is clearly visible in the great attention received by record prices for the sales of paintings.

Table 3.1 shows most expensive works of art ever sold at an auction.

Table 3.1 Record prices for paintings auctioned, 2018

1.	Leonardo da Vinci's *Salvator Mundi* or *Saviour of the World*	$ 450.3 million	2017
2.	Pablo Picasso's *The Women of Algiers* (*Version O*)	$ 179.4 million	2015
3.	Amedeo Modigliani's *Nu couché*	$ 170.4 million	2015
4.	Amedeo Modigliani's *Nu couché* (*sur le côté gauche*)	$ 157.2 million	2018
5.	Francis Bacon's triptych *Three Studies of Lucian Freud*	$ 142.4 million	2013
6.	Edvard Munch's pastel *The Scream*	$ 119.9 million	2012
7.	Pablo Picasso's *Young Girl with a Flower Basket*	$ 115.0 million	2018
8.	Jean-Michel Basquiat's 1982 *Untitled*	$ 110.5 million	2017
9.	Pablo Picasso's *Nu au Plateau de Sculpteur*	$ 106.4 million	2010
10.	Andy Warhol's *Silver Car Crash* (*Double Disaster*)	$ 105.4 million	2013

These are high prices for single paintings. In particular, Leonardo da Vinci's *Salvator Mundi* reached an auction price of $ 450 million, more than two and a half times the previous maximum for Pablo Picasso's *Women of Algiers*.

These paintings were all traded at Christie's or Sotheby's in New York. In contrast to the exact figures officially documented at auctions, the values of private sales are often not revealed. But according to media reports, a painting by Willem de Kooning and one by Paul Gauguin were each sold for $ 300 million in 2015.

Specific aspects characterize art auctions, in particular pertaining to the risk involved. Generally, risk is higher in what has been called "alternative" markets, for instance in antiques, wine, stamps, and coins, than in stocks, bonds, or real estate. Two closely related terms are "emotional investment" and "investment of passion". These refer to jewellery, antique cars, and racehorses. Such investments have some typical characteristics: The current market value is difficult to evaluate; compared to financial assets, such objects are more illiquid; their value may be less correlated with stocks and bonds; the information needed before investing is quite demanding; and the transaction costs of purchase and sale tend to be high.

The art market shares all of these characteristics. In particular, works of art are typically unique, or nearly so. In recent decades, this market has come somewhat closer to the ideal of a perfect market. An increasing share of investors, in particular art investment funds, solely seek financial profit in the art market. Moreover, the information on art transactions and prices, freely and easily available on the Internet, contributes strongly to making the market more open and flexible.

3.4 Types of Art Market Risks

The art market is characterized by specific and large risks not existing in other markets, or at least not to such a significant degree. This is reflected, for instance, in the large differences in art investment returns between countries. The following four types of risk may be distinguished.

3.4.1 Risks Inherent in Works of Art

- *Authenticity*. A work of art bought in the art market may not be the original but a copy or an outright fake. The technical means to identify the fakes have continued to improve, but forgers have been equally quick to adapt. Not even art experts can guarantee that a painting is an original. It has been claimed that the art market is full of fakes. It is rumoured that there are 3000 authentic works by Camille Corot, yet there seem to be more than 8000 Corot paintings in the United States alone.
- *Attribution*. It is not always clear whether a work is by a master himself, was produced in his studio, belongs to the circle, is in the school, or is only in the style of a grand master, but this is crucially important for the price it fetches. An example is the painting *Daniel in the Lions' Den* attributed to Peter Paul Rubens and auctioned in 1882 for £ 1680 by Christie's London, and then resold for £ 2520. The painting was then attributed to Jacob Jordaens, and was therefore auctioned in 1963 for merely £ 500. In 1965 it was acknowledged as a work painted in the school of Rubens and was acquired by the Metropolitan Museum of Art in New York for £ 178,000.
- *Quality and material destruction*. It is important to know whether a work of art has been damaged in the past and repaired. Such interventions are often difficult to identify but have a significant effect on prices. Works of art are sensitive to all kinds of influences, such as light, temperature, and humidity. A well-known example is Damian Hirst's 4.3 m long tiger shark: immersed in formaldehyde in a vitrine, this proved difficult to conserve. Fire, earthquakes, and inappropriate handling by collectors and their employees may also destroy art works. An example is the *Fettecke* by Joseph Beuys, which he installed in the Düsseldorfer Kunstakademie in 1982 and which in 1986 was thrown away by a member of the cleaning staff, who thought it was dirt. In addition, damage can result from wars and civil uprisings.
- *Theft*. With rising art prices, the theft of art has become increasingly lucrative. Well-known examples include the theft of the *Mona Lisa* from the Louvre in 1911, the *Scream* by Eduard Munch from the Munch museum in Oslo in 2004, several important impressionist and expressionist paintings by Cézanne, Monet, Degas, and van Gogh from the Museum of the Bührle Foundation in Zurich in 2008, and paintings by Picasso, Matisse, Braque, Modigliani, and Léger from the Musée d'Art Moderne de la Ville de Paris in 2010. Less is known about thefts from private collectors, but it seems likely that they also happen quite often. They

are not publicly reported due to shame and fear of negative publicity. Little-known paintings may be sold on the black market, but today it is impossible to sell a famous painting or other work of art on an official market. Therefore, the thieves threaten to destroy the painting if a ransom is not paid.

3.4.2 Unexpected Market Changes

– *Holding costs*. The cost of owning a work of art is affected by the cost of storing, protecting, and insuring it. These changes may come inadvertently. For instance, if due to a spectacular theft a strong increase in the premiums for insuring a work of art unexpectedly occurs, investment in art becomes less attractive. The costs of insuring a work of art are substantial, and the annual premium usually lies between 0.1 and 0.5% of the artwork's value.
– *Government interventions*. The politicians in power may decide to raise property or sales taxes specifically for artworks. Both interventions reduce demand for art due to the higher costs, decreasing the returns on art. Similarly, governments can change export regulations for art works. This occurs even in well-established markets and in stable and democratic political environments; governments may also change property rights in works of art. A work of art may have been bought in the past according to then-existing legal provisions. Nevertheless, the government may later declare it to have been acquired illegally. An even more severe government intervention is to confiscate objects of art without any, or inadequate, compensation. The reasons adduced may be that it clashes with religious, racial, or national feelings.
– *Transaction costs*. The government may unexpectedly restrict international sales of works of art. In particular, the export of art may be prohibited, even for objects not clearly in the national interest. The holders of such works of art suffer a considerable loss, as they are unable to sell them outside of the country. They may fetch higher prices on the international market than on the local market. The international art market is still dominated by big players controlling large proportion in an oligopolistic competition. A rise in the commissions charged by influential auction houses and art dealers can lead to an immediate reduction in the returns on art.

The death of a painter or sculptor leads to yet another type of risk. Death has two opposing effects on art prices:

– *Scarcity effect.* The artist's oeuvre is fixed in quantity (at least if fakes are left out of account). If the demand for an artist's work increases, prices will rise.
– *Reputation effect.* Due to death, an artist can no longer advertise his or her work by showing it at exhibitions, using classical and social media, or drawing attention by purposely creating scandals of some sort.

According to empirical research, the death of young artists tends to reduce the price of their work. If their death was no surprise but was expected, this fact is already capitalized in the prices paid. Artists dying young have had fewer opportunities to engage in advertising their work. In contrast, the effect of the death of older artists on prices is positive: the scarcity effect dominates.

3.4.3 Behavioural Anomalies

Individuals do not always maximize their utility, nor do firms always maximize profits. Such anomalies exist in all spheres of life and all markets. There are good reasons to assume that they are stronger in art markets than in financial markets, where the level of information of market actors is more complete. Moreover, the personal preferences and idiosyncrasies of individuals play a larger role and are competed away by market forces to a lesser degree.

Predicting tastes and fashions accurately is almost impossible. Art experts have often erred in this regard. Art is extremely heterogeneous, personal preferences play a major role, and there are strong perception effects. Moreover, art does not have an intrinsic value. The fundamental value of financial assets usually provides a lower bound in the discounted future net earnings and in immediately saleable tangible assets such as engines, tools, and simple cash. Even more importantly, tastes in the arts are not immutable but the result of various types of discourse. This may lead to a consensus based on personal interactions rather than a personal evaluation.

The *ownership bias* is certainly of major importance in art and is often expressed by collectors. Once an art object is in their possession, they value it more highly than if it does not belong to them. Museum directors and curators are also strongly affected by it. This is partly due to the psychological effect of possessing works of art but also for institutional reasons. Many museums are prohibited by law from selling any item in their collection. Others do not want to sell because the directors fear being heavily criticized if the work sold later rises in price. They may also fear that in the future they will not be bequeathed any art collections because the givers want them to be held together.

The *home bias* has been shown to be highly relevant in the arts. Many collectors of paintings, stamps, and collectibles focus on works from their own country even if similar or better pieces of the same school from other countries are available at lower prices.

Herding behaviour of buyers and sellers certainly occurs in the art market. Actors follow the lead of well-known art experts, art dealers, collectors, and art museums, because they believe that these individuals and institutions are better informed about the market and its likely future development. Herding behaviour cannot be predicted; if it were, it would be avoided or exploited, resulting in the dissolution of the effect.

3.5 Why Do People Invest in Art?

Risk is particularly high in the art market, especially compared to financial assets such as stocks and government bonds. Nevertheless, there are various reasons why investments in the art market are undertaken, beyond considering the return on investment.

3.5.1 Diversification

One of the basic tenets of investment is not to put all the money in a single basket. Research shows that during the second half of the last century the art market was not closely correlated with the financial market. Sometimes there is even a negative relationship: when financial assets lose value, investors turn to other assets such as real estate and art. The weak positive or even negative correlation allows investors to diversify and reduce the overall investment risk.

3.5.2 Biased Information

Some people rely on media reports in which record prices are extensively discussed, such as the more than $ 450 million paid for da Vinci's *Salvator Mundi* in 2017. Such news is biased, because losses incurred on the art market are rarely reported. If a work of art is offered for sale but fails to attract a buyer at the right price, the seller will not advertise this fact for fear of lowering the perceived value of the work further. Auction houses refuse to feature works of art that are not likely to sell at a higher price than originally bought. Art price indices, of which there is a considerable number, do not reflect these aspects and therefore present an overly optimistic picture of the financial revenue to be made on art markets. As a result, would-be investors in art may well be misinformed.

3.5.3 Taxation and Money Laundering

The rates of taxation may differ between types of investment. In many countries, wealth in the form of art is subject to a lower tax rate than are financial assets. This is due to tax authorities finding it easier to monitor financial and real estate transactions than art dealings. The possession of art objects is often hidden. In addition, art investments may also serve to transform dubiously acquired money into a socially recognized form, facilitating tax evasion and even money laundering.

3.5.4 Conspicuous Consumption and Art Investment

An important motivation to buy art is to impress others and to raise one's social status. This also applies to political units and countries. It has become a common policy to found a well-regarded museum.

3.5.5 Love of Art

The most secure reason to buy and hold art objects is the intrinsic pleasure to be derived from viewing and owning them. The financial risk due to fluctuations in value is irrelevant to this motive. Indeed, many collectors, at least traditional ones, never think of selling their collections or even parts of them.

However, some of the risks discussed above may strongly affect art lovers. This is particularly true of the material destruction, theft, or confiscation of art one possesses. This holds even if an insurance company or the government "compensates" the art enthusiast with money. The former owners' feeling of psychological loss tends to be far greater. It is strongly felt because the collector has developed a personal relationship with the work of art. In this sense, true art lovers run an especially high risk when they buy a work of art.

3.6 Conclusion

The art market presents many more types of risk than investments in traditional financial products such as lacking authenticity, unclear attribution, material destruction, and theft. In addition, unexpected changes, for instance unforeseen government interventions, make it impossible to predict art prices accurately. Even if overall risk is higher than in other markets, and on average the expected financial return is low, art is a good option for diversifying a portfolio and an excellent investment for art lovers.

Related Literature

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A pathbreaking contribution is

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