

Art & Finance Report 2011.



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Maxime WEISSEN

Head of Private Banking
Wealth Management
ING Luxembourg

T : +352 4499 5850
E : maxime.weissen@ing.lu
I : www.ing.lu

Annabelle BIRNIE

Director Sponsoring,
Art Management & Events
Certified Valuer Modern
& Contemporary Art

T : +31 2056 39243
E : annabelle.birnie@ing.com
I : www.ingartcollection.com

A Security Standard for the Art Market



Interview with Yan Walther
from the Fine Arts Expert Institute
(Geneva)

As the recent "Jägers collection" scandal demonstrated, the art market is less safe than ever from fakes and forgeries. What solutions does science offer nowadays to lower these risks?

Since the 1970s, science has added a completely new and complementary element to the study of works of art: technical art history. Just as the traditional art historian defines and puts into context the iconography and "style" of a painting, the technical art historian investigates its materiality. More recently we have arrived at a point where we can examine and characterize, using essentially non-invasive techniques, the materials, techniques and conservation conditions of a work of art – techniques that have now been thoroughly tested. They are universally acknowledged by the scientific community and allow in most cases problems, anachronisms and incompatibilities to be detected based on objective, measurable data.

And is this technology available to the private sector?

Yes, the democratization of this technology and highly qualified scientific staff allowed for instance an independent laboratory like the FAEI to produce remarkable results in the fields of technical condition reports, object identification and technical examination and documentation of paintings and sculptures. These services, available in the past to only a select few, are now available to all art collectors, insurance companies, art banking services and artwork logistics companies.



What does this «standard» look like and is it affordable to any art collector?

We are talking about state-of-the-art technology: stereomicroscopy, infrared reflectography, digital X-radiography, X-ray microfluorescence, etc. We have come a long way since the magnifying glass of the traditional art expert – and it goes without saying that this sophisticated technology comes at a price. In general, technical examination will not be of interest for a work purchased at a flea market – but the cost of technical expertise becomes insignificant when we talk about works of art worth hundreds of thousands, or millions. Nobody would want to take any risks when dealing with figures of such magnitude.



More specifically we developed our **Technical Reference Document** at the request of banks, insurers and service companies looking for a practical standard. It includes the results of six acknowledged non-invasive analyses that can be reproduced and double-checked by any competent laboratory in the world. In one document, you have a detailed technical condition report with advice on preventive conservation issues, a guaranteed science-based means to identify a work of art (thereby protecting it from fraudulent exchanges), professional high-resolution images and a set of objective analytical data indispensable for any expert or attribution committee to confirm the authenticity of the work. We strongly believe this document will soon represent a fundamental security standard for all transactions involving works of art (sale/purchase, insurance, transport and storage, valuation, investment, etc.).

Fine Arts Expert Institute SA

6A, route du Grand-Lancy | PO Box 1370

CH-1211 Geneva 26 | Switzerland

Tel.: +41 22 706 19 80 | Fax: +41 22 706 19 88

info@faei.org | www.faei.org



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Foreword



Thierry Hoeltgen

Lead Partner
Deloitte Luxembourg

Adriano Picinati di Torcello

Directeur
Deloitte Luxembourg

Anders Petterson

Managing Director
ArtTactic, London

Deloitte Luxembourg and ArtTactic are pleased to present their inaugural 2011 Art & Finance Report.

In the last year, our two firms have been working together to increase the understanding and potential of art as an asset class among the wealth management community. This research was initiated as a result of the feedback we have received over the last 12 months, and the need for more information on topics such as art investment funds, art lending and art and wealth management.

This annual report aims to act as a barometer for the emerging Art and Finance industry, to highlight the main trends and developments, but also to capture and measure the changing motivations and perceptions among its participants. One of the key roles of the report is to better understand how the wealth management sector is currently responding to art as an alternative asset class, and whether this is likely to change in the future. The research also looks at the main obstacles that wealth managers are faced with when dealing with the market for art and collectibles, and what can be done to overcome this.

We would like to express our most sincere thanks to all the individuals and institutions that agreed to kindly contribute to this report. Without their support, this report would not have been possible.

We hope the findings of this report will stimulate interest and contribute to the on-going debate on how the art and finance market should evolve in the future.

Introduction

The growth of the art market and its infrastructure in the last 10 years is fuelling an increasing interest in art as an asset class, which means we now can start talking about the early stages of an Art and Finance industry

The growth of the art market and its infrastructure in the last 10 years is fuelling an increasing interest in art as an asset class, which means we now can start talking about the early stages of an Art and Finance industry.

The lack of institutional interest in art as an alternative investment, and the reluctance of private banks and wealth managers to get involved in something as esoteric as art, have often been used as arguments as to why this market will not evolve beyond its current form. However, this report suggests that this could change in the next two to three years, as private wealth managers surveyed by Deloitte Luxembourg and ArtTactic, are showing an increasing interest in offering wealth management services related to art and collectibles.

The positive performance and growth of the global art market in the last 10 years have coincided with a dramatic increase in the global High Net Worth Individual¹ (HNWI) population, which was estimated to be 7.2 million in 2000 and has increased by 51% to 10.9 million in 2010². With art investment accounting for 22% of HNWI's investments of passion³, it is likely that the art market will continue to grow in line with the global population growth of HNWI. But how is the private wealth management industry responding to this change? What are the challenges and how could they be addressed? These are some of the important questions we have attempted to highlight in this report.

Methodology and limitations: Deloitte Luxembourg and ArtTactic conducted the research for this report between July and October 2011. We surveyed 19 large private banks predominantly in Luxembourg, employing more than 900 private wealth managers. Our aim was to establish the perception, motivation, as well as the current and future involvement with art as an asset class. At the same time, we conducted a similar survey among 140 international art professionals (galleries, auction houses and art advisors) and 48 top international collectors to establish whether the issues and concerns in the art market were of a similar nature as those experienced in the wealth management community. We have also been in contact with 34 art investment funds during this research process.

We are delighted to be able to publish three interviews with some of the key figures behind new Art and Finance initiatives in Europe: the freeport in Luxembourg, SplitArt™ (the planned, new art exchange in Luxembourg) and recent research findings from Tutela Capital on the financial performance of the art market.

Testing a new approach: Deloitte Luxembourg and ArtTactic recognise that the findings are only indicative. They may be influenced by the fact that the focus was largely on private banks and wealth managers in Luxembourg. However, due to the global nature of these banks, we still believe that the findings reflect a broader perception within the global wealth management sector. In the future, we will expand the sample of private banks and wealth managers to capture not only general trends, but also how these trends vary from region to region.

1 HNWI's are defined as those having investable assets of US\$1 million or more, excluding primary residence, collectibles, consumables, and consumer durables.

Ultra-HNWI's are defined as those having investable assets of US\$30 million or more, excluding primary residence, collectibles, consumables, and consumer durables. 'World Wealth Report 2011', Cap Gemini and Merrill Lynch

2 World Wealth Report 2001' and 'World Wealth Report 2011', Cap Gemini and Merrill Lynch

3 World Wealth Report 2001' and 'World Wealth Report 2011', Cap Gemini and Merrill Lynch

Key findings

Art market

- **Major transformation in the art market:** the art market is going through a major transformation, in terms of its geographical reach and structure, the way that the internet, technology and information are changing how art is promoted, valued and transacted and last, but not least; the increasing recognition of art as an asset class.
- **Art outperforms equities:** research published by Mei Moses and other art index providers show that art outperformed equities in all the periods between 2000 and 2011.
- **Recovery:** the global art market sees further strong recovery in 2011, helped by strong Asian demand, and recovery in the post-war and contemporary art market.
- **Art market 2.0:** online art fairs, online auctions and other initiatives such as, Art.sy, Artbinder and Collectrium suggest that the art market is about to properly embrace the digital age and the world of social networking.

Art as an asset class

- **Art investment funds:** The global art investment fund market will reach a conservative estimate of US\$960 million in 2011, up from US\$760 million in 2010, and we have seen more new art funds coming to the market in the last 3 months.
- **China's love for art investment:** The art fund and art investment trust market in China reached just over US\$320 million in 2011, with US\$182 million of new investment raised in the first half of 2011, and another US\$300 million in the pipeline for 2011.
- **Increasing demand for art loans:** Traditional banks are increasingly taking an interest in offering art loans as they become more comfortable with art as a form of collateral.
- **Art exchange boom in China:** China is seeing a boom in art and cultural exchanges, with six exchanges already up and running and at least a further 30 exchanges reportedly in the planning process.
- **Planned art exchange in Luxembourg:** SplitArt™, a Luxembourg-based art exchange is in the process of acquiring regulatory approval and, if successful, will be the world's first regulated art exchange.

Art and wealth management

- **Increasing interest and awareness:** Private wealth managers are showing an increasing interest in offering wealth management services related to art and collectibles, and are likely to adapt their service offering in the next two to three years.
- **Art as a wealth management product:** 83% of the private banks in the survey felt that there are strong arguments for including art and collectibles in traditional wealth management. 78% of the private wealth managers are already offering art-related services to their clients predominantly in the form of client entertainment (67% of the banks), philanthropy (39%) and art advisory services (39%). A large majority (83%), of the banks are expecting to outsource their art-related services in the future.
- **Industry competition and client demand:** 83% of the private banks stated that increasing competition in the private banking sector and the focus on new ideas, products and solutions were a primary reason for including art in their future offering.
- **Changing motivations:** Although the emotional benefits associated with buying art is still a primary motivation for buying art, 48% of the art advisors said their clients were primarily driven by investment returns, 49% of the collectors said the same, and a further 39% of the collectors saw art as a key component in their portfolio diversification strategy.
- **Art investment funds:** 39% of the private banks are looking at providing art investment fund related products or services to their clients in the next two to three years. However, 83% of the private banks said that the difficulties in assessing the viability of the art funds were the main reasons for advising their clients not to invest at the moment.
- **Art loans:** 22% of the private banks surveyed currently offer advice to their clients on using their art as collateral for loans. 33% of the private banks said it was very likely or likely that they would offer art lending as part of their private banking service platform in the next two to three years. 78% of the wealth managers said that the problem of valuation and difficulties assessing the downside risks were the biggest hurdles against offering these types of loans.
- **Art philanthropy:** 44% of the wealth managers are offering their clients advice on art and philanthropy related issues. 41% of the private collectors said they would like to see this service provided as part of a wealth management offering.

The Art & Finance market is still in its infancy, and a number of areas need to be addressed to move the industry forward

Valuation

Industry benchmarks: Although valuation of art and collectibles will never be an exact science, the market is lacking widely accepted industry benchmarks. The current market for art indices and benchmarks is fragmented, without any being universally accepted. The indices created by Prof. Mei and Moses seem to be gaining wider acceptance because of its robust repeat sales methodology. Recently they added data from art transactions in China and historical information from The European Fine Art Database created by Prof. Rachel Pownall. Their launch of a broader family of indices covering a larger number of sectors and geographical art markets is likely to broaden the appeal of these indices. However, in the months to come we are likely to see the launch of further art indices, with Artnet launching a beta version in mid-December, and the official launch planned for March 2012.

Risks

Liquidity: Although price volatility (risk) has been widely measured using many of the above index methodologies, liquidity risk is often ignored or overlooked in many of these studies. The greatest risk of an art investment is not that the price might fall, but the fact that there is no market for the artwork at all. This is particularly relevant to research studying the contemporary art market, where fashion often plays a big role, but also art markets in general, particularly in times of crisis. Understanding liquidity risk is particularly important when using art as collateral for a loan and in deciding the appropriate loan-to-value ratio.

Academic research: A recent conference organised by Sotheby's Institute of Art and Cambridge University in London in September 2011 entitled *'Exploring Risk and Uncertainty: Metaphors from the Art World'*, highlighted a number of interesting research initiatives on the understanding of risk and uncertainty across a number of academic disciplines. The art market and the wealth management sector would greatly benefit from tapping into research related to other areas that have similar characteristics to art, such as the real estate market.

Due-diligence

Independent due-diligence: Whilst the due diligence in other alternative investment fund businesses is often heavily reliant on the track record of the management team, most art investment funds coming to the market have no track record at all, which makes it hard to assess the viability and potential of the art fund. The success of an art fund is heavily reliant on the management's reputation in the art market, the quality of the art experts, and the level of market access. The wealth management sectors and the art investment fund market need independent third parties with in-depth knowledge about the art market to carry out the due diligence.

Track record: Two art funds today, The Fine Art Fund and the Art Collectors Fund have managed to build up a six to seven year track record so far, demonstrating resilience during the 2008/2009 downturn. Although the final outcome will only be known in three to four years' time, it is important that the industry develops a model of best practice based on the experience of the more established art funds.

Advocacy: The establishment of art investment industry associations in the United States, such as the Art Fund Association and the recently established Art Investment Council, will help to create further transparency, set standards and promote best practice.

Education, information and knowledge

Information and education: It is clear from this research that wealth managers want more information (87% said this was very important), and education (67% said this was critical) about the art market and the market for art investment.

Bridging the gap: Going forward, it is crucial that knowledge-sharing between the art and wealth management industries improves. One way for the art wealth management industry to grow is for art advisors to become more aware and increase their understanding of the financial opportunities associated with art as an asset class. The wealth management industry also needs to be educated about art and the art market, and how this alternative asset can fit with their clients' needs. Both set of advisors act as channels into their respective markets—it is important that these two groups increasingly join forces.

Support and knowledge: Investment managers are constantly innovating to create tailored investment solutions for their clients, adapting to changing investor behaviour, preferences and greater pressure on prices. There is increasing focus on alpha-generated returns through investment in non-traditional products like real assets, structured products, and commodities. However, one of the important implications of the above trends is that investment managers need additional support infrastructure and resources, with specific knowledge to underpin these products.

Recent survey findings show that **87%** of wealth managers want more information about the art market and the market for art investment



Section 1: The art market

Global art market growth creates opportunities for art as an alternative asset class

Highlights

- **Art market outperforms equities:** According to recent research by Mei Moses[®], their annual art index values outperformed the S&P 500 Total Return Index for equities between 2000 and September 2011.
- **Market recovery:** The global art market has recovered from the crisis in 2010, and despite the negative economic outlook, 2011 is on track to exceed last year's total sales.
- **Economic uncertainty** is creating more interest for tangible assets, where art, particularly at the high end of the market, is increasingly being viewed as a 'store of value'⁴.
- **Post-war and contemporary art market recovery:** The United States and European market for post-war and contemporary art has increased from US\$254 million in 2000 to US\$2.1 billion in 2011⁵.
- **New global order:** China has become the second largest art market in the world, accounting for 23% of global art sales by value⁶, and number one in terms of fine art auction revenue⁷.
- **Art fair market expands globally:** Art fairs have become a global phenomenon, and an increasingly important platform for selling art. Art Basel, TEFAF and the Frieze Art Fair exhibited US\$5.3 billion worth of art in 2011⁸ and attracted more than 200,000 visitors.
- **Online art transaction market expands:** A number of new online auctions and virtual art fairs have been established in the last two years, which suggest an increasing confidence in the online market⁹.

Art market outperforms equities between 2000 and 2011

According to recent research by Mei Moses[®], their annual art index values outperformed S&P 500 Total Return equity index between 2000 and September 2011, as illustrated in Figure 1. The art market decline of the first two years of the decade was shallower and the succeeding growth from 2003 to 2008 much more rapid than the equity index. The art indexes declined dramatically in 2009 but were followed by a good recovery in 2010 and a comparatively better performance so far in 2011, such that even with the positive results achieved by the equity indexes for those years, the art indexes obtained a substantially higher end value.

Table 1¹⁰ clearly indicates the strength of the art market over this period especially the traditional Chinese and post-war collecting categories. They both show double-digit returns over this period and post-war even has lower risk than the S&P 500. All collecting categories have low or negative correlation with the S&P 500 and therefore may play a positive role in optimal portfolio allocation. See also interview on (p.44) for recent findings from Tutela Capital.

Global art market sales double from 2002, only 10% off previous peak in 2007

According to a TEFAF¹¹ report published in March 2011, the global market for art and antiques saw a significant recovery in 2010, after two years of decline. The market rose 52% from its low point in 2009 to reach a total of €43 billion (US\$60 billion); only 10% below the previous peak in 2007. The recovery was especially driven by the growth in China and the United States. The strong performance for the first half of this year suggests that

4 ArtTactic, 'US and European Art Market Confidence Survey – October 2011', published on 10 October 2011

5 ArtTactic Ltd.

6 Source: 'The Global Art Market 2010 – Crisis and Recovery' – TEFAF, Maastricht, published in March 2011

7 Artprice Art market report trends 2010

8 Based on insurance value estimated by Hiscox plc, fine art insurance underwriter

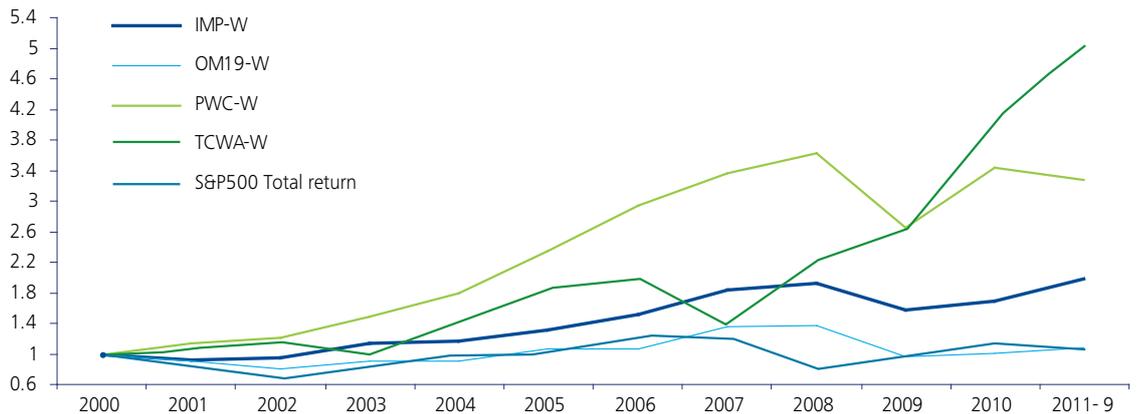
9 According to a recent report by Artprice; in five years, more than half of the world's art transactions could be traded over the internet.

10 The return is measured by the compound annual return (CAR) over the period, risk by the standard deviations (STDEV) of the annual returns and diversification potential by the correlation (CORR) of the annual returns

11 Source: 'The Global Art Market 2010 – Crisis and Recovery' – TEFAF, Maastricht, published March 2011

Fig.1 and Table 1 correlation, risk, return

Mei Moses® world collecting category art indexes vs. S&P 500 total return index since 2000®



Source: Mei Moses®

Table 1. Comparative Performance Table 2000-2011 September

Mei Moses® world collecting category indexes

	IMPMOD	OLM19C	POST WAR	TRAD CHINESE	S&P Total Return
CAR	6.44%	0.71%	11.38%	15.82%	0.47%
STDEV	11.84%	15.18%	15.98%	27.51%	20.46%
CORR-S&P	0.11	0.03	0.02	-0.28	1.00

2011 will be another strong year for the art market, despite the increasingly uncertain economic outlook. Figures from a recent report published by Artprice showed that the first half of 2011, the global art market surpassed the previous peaks achieved in 2007/2008, with a total of €4.3 billion¹².

Post-war and contemporary art auction market sees explosive growth in the last 10 years

The increasing interest in art as an asset class has coincided with explosive growth in the global art market since 2000, particularly in segments such as the post-war and contemporary art market. The United States and European market for post-war and contemporary art market has increased from US\$254 million in 2000 to US\$2.1 billion in 2011, down from US\$2.7 billion in 2008 (see Fig 2 on p.10)¹³.

The gloomy economic outlook shakes art market confidence in the West, although Asia maintains its cool

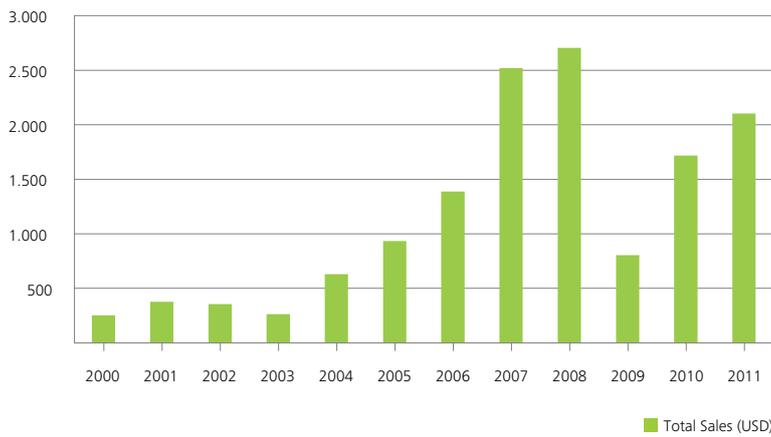
The risk associated with the sovereign debt crisis in Europe has magnified this autumn, and with growth stalling, there is heightened risk that Europe could be pushed into another recession. The United States economy is also hurting with an increasing unemployment rate and slowing growth. Recent art market surveys¹⁴, suggest that confidence in the art market could be affected in the next six months, one of these indicators, showed that the United States and European Art Market Confidence Indicator dropped 55% between June 2011 and October 2011, with the majority of the respondents turning negative towards the six-month outlook for the United States and European contemporary art market (See Fig 3 on p.11). However, similar research conducted for the Indian and Chinese art markets, show that the art market outlook is much more optimistic, which signals a further strengthening of the Asian art markets vis-à-vis the United States and Europe in the next six to twelve months.

¹² The Artprice Annual Report 2010/2011

¹³ ArtTactic estimate based on the low-estimate for Post-war and Contemporary sales in New York in November 2011

¹⁴ ArtTactic US and European Art Market Confidence Survey – October 2011

Fig 2: United States and European Post-war and Contemporary Art Market (by auction sales US\$ in Millions)



Source: ArtTactic

Global shift as China becomes the second biggest art market in the world in 2010

In 2010, the Chinese art market increased its presence, overtaking the UK as the second largest art market in the world in terms of the overall art trade¹⁵ and the largest based on auction sales¹⁶. The growth in this market has been phenomenal, with aggregated sales up more than 10 times since 2000, reaching a total of US\$8.2 billion in 2010¹⁷. Despite increasing economic uncertainty in Europe and the United States, and the potential for slower growth in China, 2011 is set to become another milestone year for the Chinese art market, as the spring 2011 auction season was the best season in history.

Record prices for Chinese modern and contemporary art have been established in 2011, with a work by Qi Baishi selling for US\$65 million through the Beijing-based auction house China Guardian in May 2011. According to auction results in the first half of 2011, China's top two auction houses Poly and China Guardian

have overtaken both Christie's and Sotheby's in terms of total sales of Chinese art¹⁸ and China now has seven of the world's top 10 auction houses by revenue¹⁹. While the domestic auction houses have been focusing on their home market, there are signs that some of them have their eyes on the international market, with Poly International Auction looking to open an office in New York this year²⁰ and China Guardian having established a representative office in New York and Vancouver, and also reportedly looking to open an office in London.

However, the rapid growth of China's art market is not without its problems. A number of forgeries and fakes are finding their way onto the auction market²¹ which runs the risk of undermining market confidence. Also, recent figures released in September 2011 by Chinese Association for Auctioneers suggest that 40% of the US\$1 million-plus works remain unpaid after six months (which by law is the longest credit period allowed). This questions the credibility of the domestic auction data as a source for estimating the size of the Mainland Chinese auction market since there is a high probability that many of these works will never be paid for.

Middle-Eastern art market enters the international stage

Since Christie's inaugural sale in Dubai in 2006, the Middle-Eastern art market has become a regular feature in the international auction calendar with auction sales increasing from US\$1.7 million in 2006 to US\$29.8 million in 2010²². Large museum infrastructure investment in Qatar and Abu Dhabi has raised the profile in the region and internationally. The Dubai Art Fair and the Abu Dhabi Art Fair have played key roles in educating and generating interest in art buying and investment in the region.

As the Middle-Eastern art market expands, and the interest in art as an asset class develops, art investment funds could potentially be an attractive addition to the current range of sharia-compliant alternative investment products.

15 'The Global Art Market 2010 – Crisis and Recovery' – TEFAF, Maastricht, published March 2011

16 Artprice Art market report trends 2010

17 'The Global Art Market 2010 – Crisis and Recovery' – TEFAF, Maastricht, published March 2011

18 ArtTactic

19 Artprice Annual Report 2010/2011

20 Forbes, 'Big Chinese Auction House Looks To Open Office In New York', 5 May 2011.

21 *The Daily Telegraph*, 'Almost half of £1 million Chinese auction bids unpaid six months after they were lodged', 11 October 2011

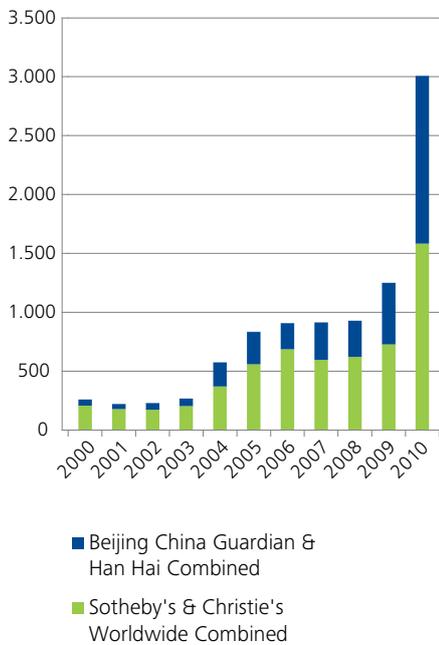
22 Source: ArtTactic

Fig 3: ArtTactic art market confidence indicators (United States and Europe, China and India)²³



Source: ArtTactic

Fig 4: Chinese art market: International Chinese art market vs. Mainland Chinese art market (US\$ in Millions)



Source: ArtTactic

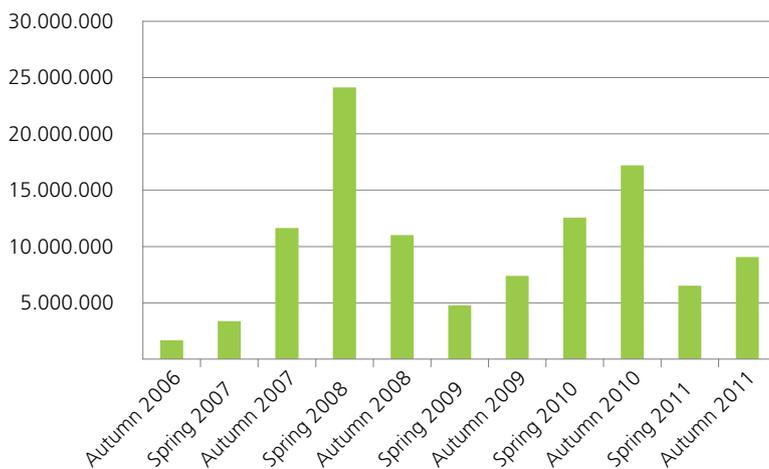
Fig 5: Sotheby's and Christie's Chinese sales by collecting category (US\$ in Millions)



Source: ArtTactic

²³ The ArtTactic Confidence Survey was established in May 2005. It is released semi-annually, measures both past and future market sentiment from 'experts' across the art market (buy-side (collectors, dealers), sell-side (galleries, auctions, dealers), institutional/ non-market side (museums, curators, critics). Electronic 6 monthly-survey going out to 125 experts in the US and European Art Market

Fig 6: Growth of the Middle-Eastern Modern and Contemporary market²⁴ (US\$ in Millions)



Source: ArtTactic

Primary market: The art fair market has become a global phenomenon

It is not only the auction market that has experienced rapid growth in the last decade; the number of international art fairs has also expanded significantly. Virtually every single art market from Bogota to Delhi has now got its own art fair, catering for both a domestic as well as international art buyers.

The market is still dominated by a few major international fairs such as Art Basel and Art Basel Miami, FIAC and the Frieze Art Fair for modern and contemporary art, and TEFAF mainly for old masters, antiquities and contemporary art.

In 2011, Art Basel exhibited works with a total estimated value of US\$1.75 billion and TEFAF a further US\$3.2 billion. In October 2011, the Frieze Art Fair, London’s premier contemporary art fair, had a total of US\$350 million worth of art on display²⁵.

Private banks are increasingly realising the potential of the art fair market as a way of engaging their clients. Deutsche Bank and UBS have become the biggest sponsors of art fairs including Art Basel, Art Basel Miami, Frieze Art Fair, and Art HK (Hong Kong)²⁶. The top five art fairs drew in more than 300,000 visitors in 2010, and with extensive VIP programmes these events are becoming important platforms for Ultra and High Net Worth Individuals to engage with the art market.

Online art market sees growth in sales transactions

In the last 10 years, the Internet has increasingly become an important platform for promoting, buying and selling art. Online art auctions have now been taking place for more than 10 years, with pioneering auction houses such as Heffel in Canada starting up in 1999, and Saffronart in India a year later. Both Christie’s and Sotheby’s have seen increasing bidding activity online in the last two years, with 28% of Christie’s bids²⁷ being placed through Christie’s online bidding platform.

The successes of the online auction market have recently encouraged a number of new entrants such as Artnet.com, Paddle8 and Blacklots. Even the primary art market has now got its own online art fair platform with the launch of the VIP Art Fair in 2011. A number of similar initiatives have sprung up such as Art.sy, Artbinder, Collectrium, and the India Art Collective. This suggests that more and more art businesses are seeing the potential for significant growth in the online art market, as buyers’ confidence in this market is growing.

The increase in confidence is also linked to the increasing transparency and access to information offered by specialist information providers such as Artinfo.com, Artnet.com, Artprice.com, ArtTactic.com, ArtFacts.net, Artvalue.com, Mutulart.com, and numerous e-zines and web blogs such as Art Daily, Art Market Monitor, and Art Radar Asia. More mainstream newspapers such as *The Financial Times*, *The New York Times* and *The Wall Street Journal* are increasingly dedicating more space to their coverage of the art market, as are financial news agencies such as Bloomberg and Thomson Reuters.

24 Includes: Christie’s, Sotheby’s and Bonhams

25 Source: Hiscox Plc, fine art insurance underwriter

26 Art Basel announced on 6 May 2011 its acquisition of Art HK

27 *The Financial Times*, 7. February 2011

Section 2: Art as an asset class

The art fund industry is gradually building a track record and confidence in art as an alternative asset class is on the increase

Highlights

Art Fund Market Growth: the Global Art Investment Fund market has reached an estimated US\$960²⁸ million in 2011, up from US\$760²⁹ million in 2010. In 2011, an estimated 44 art funds and art investment trusts are now in operation, 21 of these have been set up in China since 2010. In 2011–2012, at least 8 new art funds are planning to launch in places such as Luxembourg, the United States, Switzerland and Singapore. The art fund market has become a global phenomenon, no longer limited to a specific geographical region.

Investment appetite for art in Latin America: the Latin American art market has seen two art funds; Artemundi and the Brazilian Golden Art Fund raising close to US\$100 million between 2009 and 2011.

China's art investment boom: The Chinese art fund and art investment trust market was worth an estimated US\$320 million by the first half of 2011. A further US\$300 million was in the pipeline for the second half of 2011 and first half of 2012.

New specialist art finance companies have entered the market: two new United States-based asset-based lenders, Art Assure and Montage Finance entered the Art Finance market in 2010, as the need for non-recourse financing in the art market has grown. A new, European-based lender, PlatinumArt Funding, is planning to launch its business in mid-December 2011.

Traditional banks offer art-related financing: Non-specialist lenders are increasingly taking an interest in offering art loans as they get more comfortable with art as a form of collateral. More and more clients are also using the liquidity from an art loan to back their businesses or other investments.

China sees boom in Art Exchanges, with six exchanges already up and running and at least a further 30 exchanges rumoured to be in the planning process. Europe might soon see its own art exchange, as the Luxembourg-based, SplitArt™, is in the process of getting regulatory approval.

Institutional investors are still hesitant when it comes to investing and promoting art investment funds, mainly for lack of a track record, size of the funds, lack of liquidity and valuation issues.

Luxembourg a new hub for art investment: with the new freeport facility planning to open up in Luxembourg in 2014 (see p.40), there is a growing recognition of Luxembourg as an important centre for art and collectible investment fund administration and other art and finance-related activities.

New regulation could affect the art investment fund industry: Alternative investment funds in Europe will potentially face increased regulatory pressure, with the Alternative Investment Fund Managers Directive (AIFMD) entering into force on 21 July 2011³⁰, to be implemented by member states by 22 July 2013.

The emergence of art investment industry associations: As interest in art as an asset class increases, the need for a strong industry voice is becoming important. Two industry associations have been established in the United States. The first one to set up was The Art Fund Association in 2009, and recently the Art Investment Council was established in New York. Both organisations aim to establish standards, promote best practices and encourage knowledge-sharing.

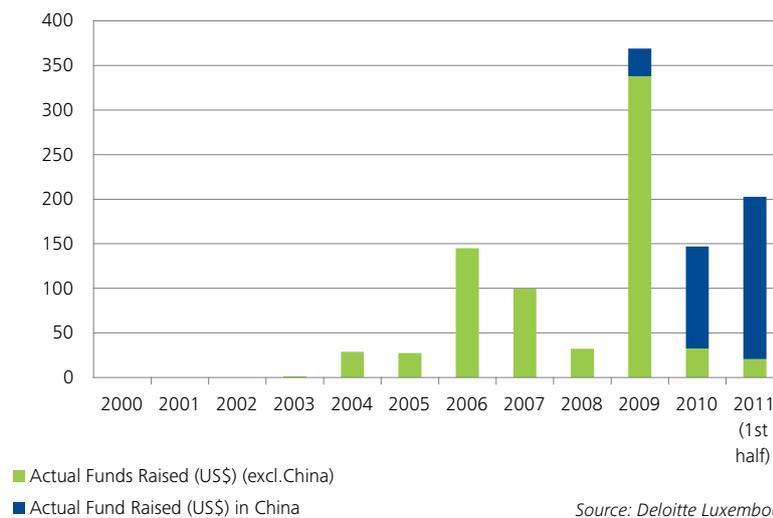
²⁸ Deloitte Luxembourg and ArtTactic

²⁹ Ibidem

³⁰ The AIFMD contains an extensive set of implementing measures on which the European Securities and Markets Authority (ESMA) is due to provide advice to the European Commission by 16 November 2011



Fig 7: Global art fund market—Annual fund raising (US\$ in Millions)



Source: Deloitte Luxembourg and ArtTactic

Art investment: the art fund market

With a conservative estimate of US\$960 million under management³¹, the global art fund industry remains a niche investment market. But recently, with a second bout of economic turmoil, attention has again turned to hard assets, such as art, wine, and other collectibles. Many of these emotional assets have proved to be remarkably resilient during the 2008–2011 economic downturn, generating renewed interest in art as an asset class. Even investment professionals are now talking about SWAG³² (silver, wine, art, and gold) investments as the new thing, which implies that art and collectibles could be about to enter the mainstream spectrum of alternative assets. The global art fund market has gone through a number of cycles in the last 10 years. The first cycle of art funds emerged between 2000 and 2005, which included the emergence of art funds such as Fernwood, the London-based The Fine Art Fund Group and a fund-of-funds structure spearheaded by ABN Amro. Few of these early attempts materialised, with The Fine Art Fund being one of the few survivors.

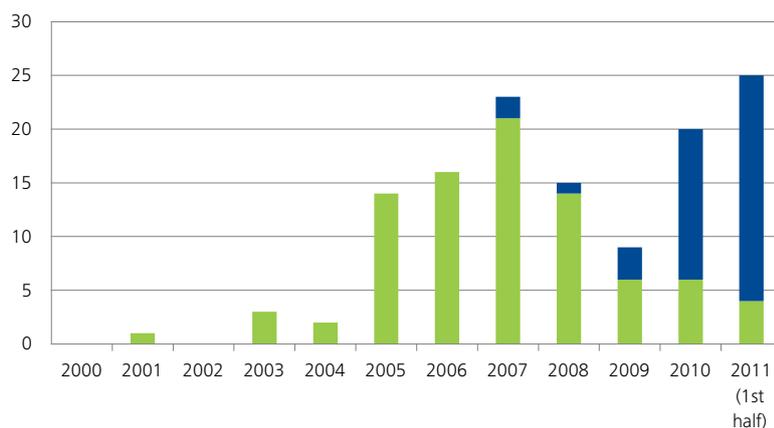
A second cycle of art funds emerged between 2005 and 2008, many of these in emerging markets such as India and South Korea. By 2007, India had become one of the markets with the largest density of art funds, with a conservative estimate of US\$65 to US\$75 million under management. However, the Indian financial regulator (SEBI) issued an advisory against unregistered art funds in 2008, which said they should fall under the regulation of Collective Investment Schemes (CIS), with which none of the funds had registered. The collapse of the Osian Art Fund, the largest Indian art fund in 2009, raised a number of issues about the sustainability of the art investment fund market in India. The combination of lack of art market growth, closer scrutiny from the regulators and the collapse of the country's biggest art fund put the brakes on further development of the Indian art fund industry.

31 US\$640 million of this total are based on art investment funds in Europe, US, Korea and Brazil. The Chinese art fund and art investment trust market was worth an estimated US\$320 million by the first half of 2011. A further US\$300 million was in the pipeline for the second part of 2011 and first half of 2012. The total art fund market figure does not include a number of large art funds announced in the press, such as Aurora Art Fund (Russia), Sobranie Photoeffect (Russia) and Motif Art (US/Asia). If the reported amounts in the media are correct, these funds would add a further estimated US\$1.05 billion to the art fund industry total. Fine Wine and Collectibles Funds are also excluded. Private, family-wealth oriented art funds, which do not raise funds from external investors are not included in the calculations.

32 *Investment Week*, 'SWAG: the industry's latest acronym', 23 September 2011



Fig 8: Global Art Fund Market - Number of Art Investment Funds³⁴ coming to market



■ Total Number of Art Funds coming to market in China
 ■ Total Number of Art Funds coming to the market (excl. China)

Source: Deloitte Luxembourg and ArtTactic

During the same period a number of South Korean art funds also emerged, such as Star Art Fund, Seoul Art Special Asset Fund, and two SH Luxury Art Funds. However, the Korean art market was rocked by a number of internal scandals in 2007, which knocked the confidence out of the art market. To our knowledge, no major Korean art funds have come to the market since then.

The third re-incarnation of the art fund industry has taken place in the last three years. It consists of the survivors of the previous two cycles including the Fine Art Fund Group, which has now managed to establish a seven-year track record and launched three more funds since 2004. The Luxembourg-based fund, Elite Advisors has launched two collectible funds for fine wine and collectible watches and launched its third investment fund for precious stones and jewellery in November 2011. In Austria, the Art Photography Fund launched in 2008 and in the United States, the Texas-based Collectors Fund launched in 2005. These funds have been instrumental in demonstrating the viability of art as an alternative asset class, particularly during the financial crisis of 2008/2009.

While only half of the funds coming to the market in 2008 actually launched, the last 3 years have seen a number of successful launches, such as Artemundi (2009), Dyonisos Art Fund (2009) and the Brazilian Golden Art Fund (2011). Together they have managed to raise a total of US\$340 million, which accounts for more a third of the global art fund market.

However, the biggest growth in terms of art investment has been in China, coinciding with the rapid growth in the Chinese art market since 2008. The interest in art as an investment among Mainland Chinese investors and HNWIs are on the increase (see p.24). China's art fund and art investment trust market reached just over US\$320 million in 2011, with US\$182 million of the new investment raised in the first half of 2011³³. According to our research, a further estimated US\$300 million is in the process of being raised in the second half of 2011 and first half of 2012. It is questionable if the current growth rate is sustainable in the long run, particularly if the Chinese art market were to cool off. We could also see stricter regulation of these types of investment vehicles, if the government feels that these funds are fuelling speculation and potentially destabilising the art market.

³³ Deloitte Luxembourg and ArtTactic

³⁴ This includes the Chinese Art Investment Trusts

Art finance and lending

While art financing has existed in some form since at least the 1970s, it is really only in the last 10 years that new dedicated lending sources are becoming widely available. This trend is coinciding with the rapid growth of the global art market, and as more capital flows into the art market, the need for financial services, such as financing seem to be growing.

As Ultra-HNWIs are tying an increasingly larger portion of their wealth to artworks, art loans can be seen as an effective way of enabling collectors to access the equity value in their artwork without selling their collection. Art lending makes it possible to redeploy their capital into other art acquisitions or investment opportunities. For galleries and dealers, art loans offer the financial flexibility to respond to opportunities when they arise.

New specialist art lenders have entered the market to tap into the increasing need for financing, including three new art-based asset lenders in 2010 and 2011. Two of these were U.S.-based; Art Assure Ltd set up by Asher Edelmann, and Montage Finance established by James Hedges. Europe has also seen a recent addition to the specialist art finance industry, with the launch of PlatinumArt, established by Eyal Levi. Art Assure, PlatinumArt and Montage Finance provide secured lending and guarantees for works sold at auction to high net-worth art collectors, established gallery owners, auction houses, and other art world investors. The aim is to provide more financial flexibility for the art industry. At the same time, as we have seen increasing activity on the specialist art lending side, with traditional banks also getting more aggressive in offering art-related financing for their Ultra-HNW clients. Deutsche Bank has been particularly active in 2010 and 2011, and reportedly has US\$400 million of art-backed loans on its books³⁵.

While art financing has existed in some form since at least the 1970s, it is really only in the last 10 years that new dedicated lending sources are becoming more available



³⁵ *Financial News*, 'Art becomes a serious business for banks', 14 January 2011

Two Types of Art Lenders:

Traditional art lender (recourse lending): Most major banks would accept art as part of the collateral for a loan, but very few would do this on a non-recourse basis, meaning accepting the art or the art collection as the only collateral, with no right to claim on any of the client's other assets. The bank would normally require the artwork or art collection to be in their possession.

Asset-based lender (non-recourse lending): A number of specialist lenders have entered the market to offer loans against the collateral of a single artwork or a collection. Within the family of non-recourse lenders, there are lenders who are happy to 'loan to own', which means that a default situation would trigger the lender to take ownership of the work at around 50% loan-to-value. The second type of non-recourse lender would be an auction house, which could offer its client a loan, against an artwork or a collection that they will sell at a later date. This is a tool often used by auction houses to win the right consignments. A third type of non-recourse lender is a company, similar to the auction houses, that provides a loan against property that will be put up for sale at a later date. The lender would sometimes allow the artwork or art collection to remain in the possession of the borrower.

Why borrow against art?

- Generate liquidity from individual artworks and art collections for personal or business use
- Increase buying power for new art acquisitions
- Create liquidity in advance of a sale
- Provide orderly liquidation of assets for estate planning purposes
- No requirement to sell underlying collateral
- Could be an effective way of managing tax on capital gains

Different types of financing needs:

- Acquisition Financing to increase buying power
- Dealer Inventory and Consignment Financing
- Fixed term and bridge loans secured by a dealer's art inventory
- Finance existing inventory or new acquisitions;
- Financing solutions can be utilised by auctions and dealers to encourage consignments
- Bridge loans and auction advances

What are typical loan characteristics?

- Loan size varies from as low as US\$250,000 to over US\$100 million
- Duration: normally a couple of months up to five years
- Spread: 2% to 5% above LIBOR for traditional lenders
- Spread: 6% to 35% over LIBOR for asset-backed lenders (non-recourse)
- Collateral parameters:
 - Art collateral typically includes paintings, sculptures and drawings
 - Normally the lender takes possession of the art
 - Independent value appraisal(s) is required
 - Loan-to-value will typically be 30%–50% of the market value



Who are some of the main providers of art loans and art-related financing?

Asset-based lenders

Art Capital Group
Art Finance Partners
Montage Finance
Art Assure
PlatinumArt

Traditional lenders³⁶

Deutsche Bank
JP Morgan
Citibank
Bank of America
ABN Amro Luxembourg
Emigrant Bank Fine Art Finance

Auction houses

Sotheby's Financial Services
Christie's Financial Services

Art Exchanges—A securities market for art

As the interest in art as an investment gains momentum, the first regulated multilateral trading facility (MTF)³⁷ is in the process of acquiring regulatory approval from the Luxembourg financial authority, the *Commission de Surveillance du Secteur Financier* (CSSF). The MTF, called SplitArt™, is a specific type of European financial trading system for art³⁸, which allows investors to trade in art certificates (the first liquid and tradable art financial instrument on a regulated market) backed by a single artwork. The due diligence and auction of the artwork is done by a fiduciary bank, an international bank which has a presence in Luxembourg, and the public can only trade through market members (financial institutions). The market is supported by market makers who will ensure daily liquidity. For more information about the exchange, see the interview page 38.

According to the findings in the Private Wealth Management Survey conducted by Deloitte and ArtTactic, 44% of the banks said they would consider

trading art certificates (shares) on a liquid trading platform on behalf of their clients.

While the first art exchange is yet to launch in Europe, China has rapidly adopted the art exchange model, with the launch of the first cultural exchange in Shanghai in June 2009. Since then a number of art and cultural exchanges have been started. In June 2011, six art exchanges were operating in China, while four months later, another 30 artwork exchanges were, according to media reports, in the process of being set up.

Some of the exchanges, like the Shanghai Exchange, engage in a range of art-related business, from art and cultural property rights transactions and artwork investment and financing to art stock trading. Other exchanges, like those based in Tianjin and Zhengzhou, focus only on shares in artwork.

However, as these Chinese art exchanges are operating in a largely unregulated environment, they are still lacking clear policy and industry standards, which could undermine the current growth and confidence in this type of exchange. On the 24 November 2011, the Chinese State Council published a notice³⁹ announcing a campaign to 'clean up and consolidate' the exchange market, launching a crackdown on hundreds of unregulated electronic equity and futures exchanges that have sprung up in recent years to trade everything from fine art and commodities to insurance products.

Market manipulation has been a major problem in the first stage of the evolution of these new exchanges. One of them, Tianjin Art Exchange saw the shares in two of its paintings by Bai Gengyan increase 1,700% in only a couple of months. That valued the canvas by the artist at 103 million yuan (US\$15.7 million), nearly 52 times the highest price that Bai's paintings had ever fetched in a public auction. Trading of the two paintings was suspended on 17 March 2011 following an order from Tianjin municipal regulatory bodies, in order to reduce the risks and protect investors' interests. Since then, a number of rules have been put in place such as daily price limits, and a threshold for investors to open a trading account from 50,000 Yuan (US\$7,500) to 500,000 Yuan (US\$75,000).

36 Many other banks are offering this service to their clients on a stand-alone basis, but it is not regarded as a specific product or service

37 The concept was introduced within the Markets in Financial Instruments Directive (MiFID), a European financial law, and describes a trading venue that brings together buyers and sellers in a non-discretionary way according to a defined set of rules resulting in trades

38 Art exchanges are an innovation combining cultural property with financial tools, where trading in artwork shares can be seen as a form of asset securitisation

39 <http://edition.cnn.com/2011/11/24/world/asia/china-exchanges/index.html>



One of them, Tianjin Art Exchange saw the shares in two of its paintings by Bai Gengyan increase 1700% in only a couple of months. That valued the canvas by the artist at 103 million Yuan (USD 15.7 million), nearly 52 times the highest price that Bai's paintings had ever fetched in a public auction

China—a rapidly growing market for art investment

Art investment funds and art trust companies: The earliest art funds in China emerged around 2005 on the back of the first boom in Chinese contemporary art. There are now an estimated 21 art funds and art trust companies operating in Mainland China. However, with an estimated US\$300 million of art trust companies in the pipeline for second half of 2011 and first half of 2012, this market is set to grow rapidly.

Art trust companies: A trust company in China should not be confused with the way the term is used in the West. These financial institutions combine aspects of private equity, asset management and banking sectors, and have rapidly evolved after regulatory changes were implemented in January 2007. This new regulation aims to create certain standards to reduce uncertainty in the sector, caused by a number of defaults and scandals during the late 1990s and early 2000. Since 2007 and the government’s re-licensing of the trust fund sector, the range and scope of trust products have expanded considerably. Trust companies are increasingly looking at alternative investments—including those with a more emotional character such as wine, art, antiquities, etc. Since 2010, we have seen in excess of US\$300⁴⁰ million raised through these investment vehicles.

Art funds and trust companies are now frequent participants in the domestic auction market, and are showing significant spending power at the high end of the art market. It was reported in the Chinese media that the anonymous winner of the bid for the Song

Dynasty calligraphy work Dizhuming by Huang Tingjian (1045–1105), which sold for a staggering US\$68.25 million in Beijing last year, sought financing from an art trust fund to make the payment. The top auction price in May 2011 was Qi Baishi’s ink painting and calligraphy, which sold for US\$64 million at China Guardian in Beijing. It was rumoured in the media to have gone to the Zhong Yi Da Cheng art fund, a fund recently launched by Hunan TV and Broadcast Intermediary Co. Ltd. The current focus of many of the Chinese art funds is the modern Chinese ink painting market and partly explains the surge we have seen in prices in this sector. However, these trust structures do not come without risk. One of the main issues is the short maturities, which are often between 12–18 months, and with an industry average of only two and a half years. These structures work well as long as the art market keeps going up; however, they leave little room for manoeuvre if the Chinese art market were to start falling. Short-maturity funds will be restricted in their ability to ride out a potential down-cycle.

Art Exchanges: The growth of art exchanges comes largely on the back of a change in cultural policy. The Chinese government has identified the cultural industries as a new driver for the country’s economic growth. The State Council approved the plan to adjust and reinvigorate the culture industry in September 2009, making it a national strategic industry. In the country’s 12th Five-Year Plan (2011–2015), the top leaders have set a target to raise the industry’s percentage of national economic growth from about 2.5% to 5% or 6%.

Table: Examples of Art and Cultural Exchanges in China*

Name	Location	Launch date	Type of assets	Art sector	Number of artworks/ artist portfolios	Website
Tianjin Cultural Artwork Exchange	Tianjin	2009	Artwork	Ink painting, jewellery	20	www.tjcae.com
Zhengzhou Cultural Art Exchange	Zhengzhou	2011	Artwork	Sculpture, oil painting, ink painting	8	www.zzcae.com
Shenzhen Culture Assets and Equity Exchange	Shenzhen	2010	Equity and Arts	Ink painting, jewellery	NA	www.szcaee.cn
Chengdu Culture Equity Exchange	Chengdu	2010	Equity and Arts	Equity, ink painting	16	www.cdcee.com
Shanghai Culture Assets and Equity Exchange	Shanghai	2010	Equity and Arts	Contemporary art	6	www.shcaee.com
South Cultural Equity Exchange	Guangdong	2010	Equity and Arts	Equity, ink painting, jade	9	www.cnscee.com

*Information in the table was updated 24 November 2011

⁴⁰ Source: Deloitte Luxembourg and ArtTactic

However, the part-closure of the Tianjin Art Exchange signals that this industry might grow too fast. The unregulated nature and lack of uniform standards for these exchanges could lead to market abuse and manipulation, which could have a damaging impact on the wider Chinese art market. However, the Chinese government has already started to crack-down on these exchanges, and it is likely that this rapidly growing industry will be cleaned up and consolidated. One of the problems with these exchanges is that the investors lack knowledge about the artwork itself and its intrinsic value. Few investors currently have the ability to assess the underlying value of the artwork and will trade on the basis of confidence in rising prices.

Risks in the Chinese art market

In a recent conference organised by Deloitte in Luxembourg⁴¹, Prof. Liu Shuangzhou from China Auction Research Centre in Beijing and Jiang Yingchun, Board Chairman Poly International Auction Co. Ltd, outlined a number of risk factors in the Chinese art market at the moment:

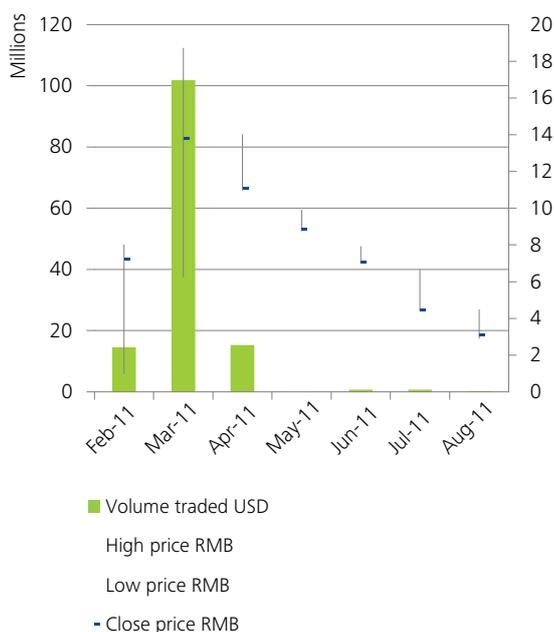
1. The market structure lacks diversity, and relies heavily on the auction market and domestic buyers
2. Legal and regulatory frameworks remain underdeveloped
3. Art valuation and appraisal skills are lacking, making it easy for fakes to find themselves into the market
4. Insurance: fine art insurance market underdeveloped
5. Market integrity: trust and credibility need to be improved
6. Lack of experts:
 - 1) art appraisers and 2) market experts
7. Financially engineered art market needs regulatory guidance and legal frameworks, such as the popular art exchanges, and the art investment funds and trust market
8. The Chinese art market bubble is expanding

Trading examples

Artist: Bai Gengyan, ink painting 'Huang He Pao Xiao' (Roaring Yellow River) in Tianjin Art Exchange



Artist: Cui Ruzhuo, ink painting 'Huang He Pao Xiao' in Tianjin Art Exchange



Source: Tianjin Art Exchange

41 'EU-China Cultural Dialogue', Luxembourg, 26 October 2011

Section 3: Art and wealth management

Key findings

Stronger demand for real assets: 56% of the private banks that were surveyed said they had experienced stronger demand for 'hard', tangible assets.

Competition in the wealth management industry drives interest in art as an asset class: 83% of the private wealth managers in the survey felt that there are strong arguments for including art and collectibles in traditional wealth management, largely because of client demand and increasing competition in the industry.

Majority of private banks already offer art-related services, although with strong focus on client entertainment: 83% of the private banks offer art-related services to their clients, with a majority (67%) of these activities focusing on client entertainment. A large majority, (83%) of the banks are expecting to outsource their art-related services in the future.

Private banks realise the need for client education: 50% of the private banks said they would focus on client education as part of their strategy to introduce art-related services to their clients in the next two to three years. Currently, 28% of the private banks said they offer art market related education.

The private banking industry also needs to be educated: A total of 72% of the private bankers said they would be interested in seminars related to Art and Finance topics and issues, with a further 88% of the respondents saying they would like to have more information and research on the subject.

Unregulated art market a major hurdle: 72% of the private banks said the unregulated nature of the art market was a major obstacle against offering art investment related services. A further 61% said that the lack of transparency in the art market also was a major hurdle for the industry to overcome.

Private banks are warming to the art investment market: Although 67% of the banks are currently using art as a platform for client entertainment, 39% of the private banks are looking at providing an art investment fund product to their clients in the next two to three years.

Investment return is a major motivation among art buyers: 49% of the art advisors said their clients were driven by the potential investment returns, 39% said portfolio diversification and 29% said art as a hedge against inflation. The emotional value associated with buying art was still the primary motivation given by 84% of the art advisors.

Introduction

Art and collectibles represent a sizeable portion of total assets for many high net worth individuals. With the global art and antiques market reaching US\$60⁴² billion in annual turnover last year, it suggests more and more HNWI and Ultra-HNWI are involved in the art market. This trend is supported by recent findings from the Merrill Lynch–Cap Gemini Wealth Report 2011, which reported that 22% of 'investment of passion' is allocated to art, with the share being higher among European HNWIs (27%) and highest among Latin American HNWIs (28%). However, much of this art-related wealth is not yet effectively served by financial institutions. There is an opportunity for asset managers, private banks and family offices to integrate the concept of collectible assets into the overall wealth management and asset allocation strategy

According to the Cap Gemini survey 2010, art is also most likely to be seen as a form of financial investment, with 42% of financial advisors saying they believe their HNWI clients invest in art primarily for its potential to gain value. This is similar to the findings from Deloitte Luxembourg and ArtTactic's own surveys, which show that 48% of the art advisors said that financial return was one of the primary reasons for their clients investing in art. Also when we surveyed major international collectors, 49% of these said that investment return was a primary consideration for buying art. With growing amounts of capital flowing into the art market, the need for products and services to protect, maintain and enhance the value of these art assets will increase. This is a trend that the global wealth management sector cannot ignore. With increasing competition in the sector, a call for innovation and new thinking will be required.

The findings in this section are based on three surveys conducted by Deloitte Luxembourg and ArtTactic between August and October 2011. The first survey focused on 19 large private banks, primarily based in Luxembourg. The two other surveys were directed towards the art market, where we interviewed 140 international art advisors and 48 top international art collectors, in order to gain a better insight into the perceptions and attitudes towards art as an investment.

42 TEFAF 'The Global Art Market 2010 – Crisis and Recovery'. TEFAF, Maastricht, published March 2011

Part 1

General motivation and perception among wealth managers, art advisors and collectors

A. Wealth managers

Motivation: Why include art and collectibles as part of your future private banking service?

Increasing competition in the private banking sector drives need to differentiate: 83% of the private banks in the survey felt that there are strong arguments for including art and collectibles in traditional wealth management. A large majority; 83% of the private banks stated that increasing competition in the private banking sector and the focus on new ideas; products and solutions were a primary reason for this.

Economic uncertainty drives demand for diversification and capital preservation: 56% of the private banks felt that the demand for art and collectibles will be driven by the external economic environment, where HNWI's are seeking a more balanced portfolio and asset diversification. A further 28% of the sample felt that art is increasingly perceived as a 'store of value' or capital protection.

The need to protect, enhance, and monetise the value of art: 28% said it was because of the increasing value of art, which has triggered a need for bank related services to protect, enhance or monetise the value.

Current involvement: How do you currently engage with art?

Existing art related offer: A significant majority, (83%), of the private banks already offer art related services to their clients, either in-house or through third parties. The most common art related service, is client entertainment, such as private views, sponsorship of exhibitions and art fairs (67% of the respondents) as well as art advisory (39%) and help with art valuation issues (39%). A minority of 17% of the private banks would describe themselves as frequent users of the above services; whilst 44% would say they are infrequent users.

Entertainment value of art features high; however, the investment characteristics of art are likely to become more prominent in the next two to three years: 67% of the banks are using art as a platform for client entertainment, with only 11% of the private banks offering art or collectibles investment funds to their clients at the moment. However 39% of the private banks are looking to provide such an investment product to their clients in the next two to three years, predominantly through third-party art investment funds.

More than 56% of the private banks have been offering art-related services for more than three years, 19% of the banks have started to offer these services in the last three years, with 25% of these only in the last year. This suggests an increasing interest and focus on art since 2008.

Survey Fig 1: What do you consider the strongest arguments for including art and collectibles in traditional wealth management and private banking?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

22% of the private banks expect to include art and other collectible assets in their wealth reports to have a consolidated view on their client wealth and have a better view on the client exposure. The main obstacle to including art and other collectibles in the wealth report stems largely from a valuation issue. Some suggested that the value of assets in art could be included in a one-off global asset allocation proposal based on customer-assessed value but not regular reports.

Challenges: What do you see as the biggest challenge in offering art-related services as part of your wealth management service?

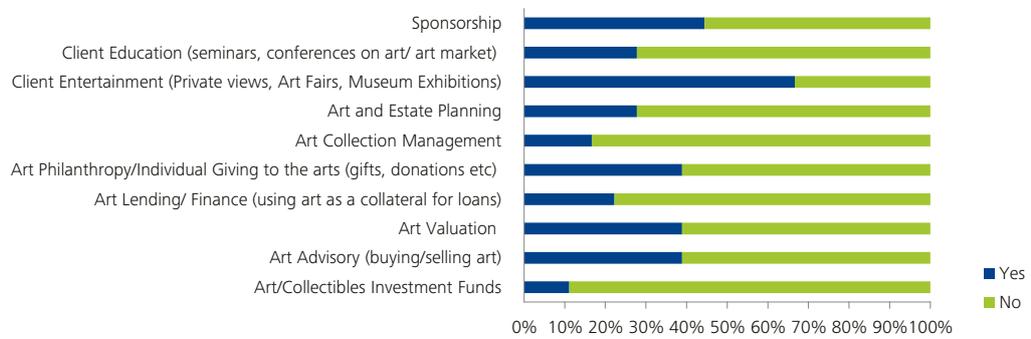
Lack of transparency and the unregulated nature of the art market are seen as the biggest hurdles for banks in offering art-related services. 61% of the private banks said

the lack of transparency in the art market was a major hurdle to overcome. 72% felt the unregulated nature of the art market made it difficult for the banks to fully embrace such a product or service.

Difficult to find the right expertise: 50% said they felt it was very hard to find the right expertise. With a large majority (83%) of the banks expecting to outsource their art-related services, there will be substantial opportunities for art advisors and art experts to service this market in the future.

Cost vs. benefits: 39% said it was easy to measure the costs but difficult to assess the benefits.

Survey Fig 2: Which of the following art-related services do you offer?



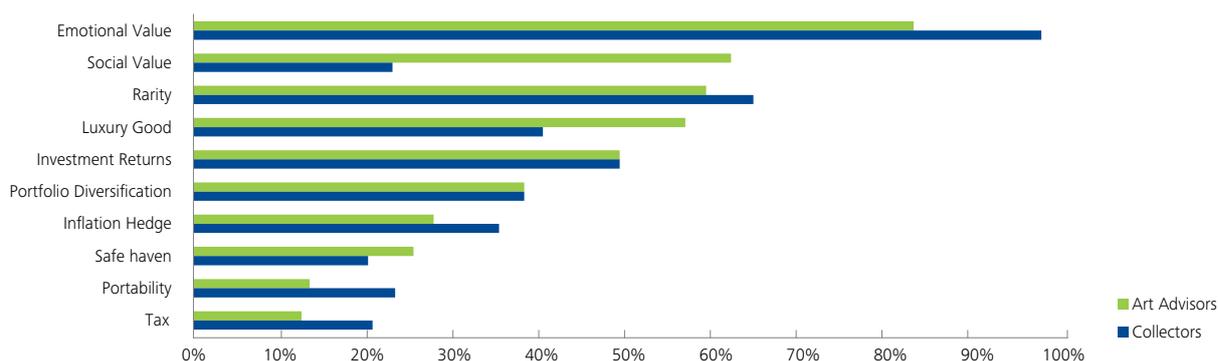
Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Survey Fig 3: What do you see as the biggest challenge in offering Art related services/products?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Survey Fig 4: Which of the following motivations are most important in buying art?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

B. Art advisors

Art advisors believe we will see an increase in art investment related activities in the next two to three years

What are your clients' motivations for buying art?

According to a recent survey among 140 art advisors⁴³, 84% of the advisors say that the emotional value of art was the primary driver for investing in art, followed by 61% stating the social value (status, prestige, social network), and 60% the sense of rarity (exclusivity). However, while these are mostly intangible non-financial characteristics, one cannot ignore the fact that 57% of the art advisors surveyed by Deloitte and ArtTactic viewed art as an investment and a viable asset class. This suggests that there is an increasing recognition among art advisors that art offers more than an emotional and aesthetic dividend. Almost half of the art advisors (49%) said their clients were driven by the potential investment returns, 39% said portfolio diversification, and 29% said art as a hedge against inflation. A quarter (25%) of the art advisors considered the primary motivation to be art as a 'safe haven' or a 'store of value' in times of economic uncertainty.

Among the art advisors, more than half (56%) already work with the wealth management sector, which suggests there is significant engagement between the art market and the wealth management industry. As one would expect, the majority of services currently offered

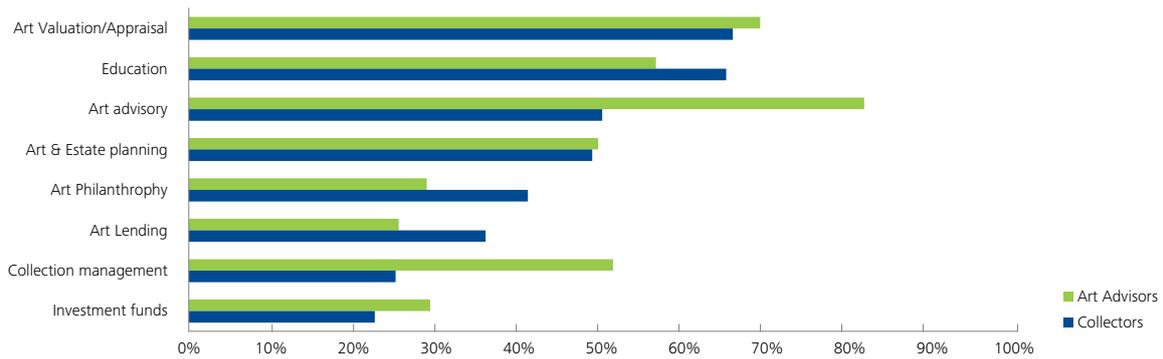
by art advisors are related to **advice on buying and selling art** (82% of the art advisors said this was their main engagement) and **art valuation** related services (69% of the advisors). Education, in terms of speaking engagements for client events and seminars, was another common collaboration with the wealth management industry (59% of the art advisors).

However, when asked about their involvement in the more financial or investment aspect of art, such as art lending and art investment funds, only 25% of the art advisors had been involved in these types of discussions or transactions, which suggest that the relationship between the art market and the wealth management sector is still focused around the art object, and less about the potential financial services associated with art as an asset class.

Nevertheless, 39% of the art advisors would advise their clients to invest in an art investment fund, and 55% of the art advisors believe we will see an increase in art investment funds in the next two to three years. This suggests that 'hostility' towards the art investment funds is on the decrease, and that the art market itself increasingly accepts these investment-driven vehicles as part of the existing eco-system. In terms of art lending and financing, almost half of the art advisors would recommend that their clients consider such a product or financing solution.

⁴³ Includes: art consultants, auction houses, dealers, and galleries

Survey Fig 5: What type of Art Wealth Management services does the art investor or buyer want?



Source: Deloitte and ArtTactic Art & Finance Survey, October 2011

C. Art collectors

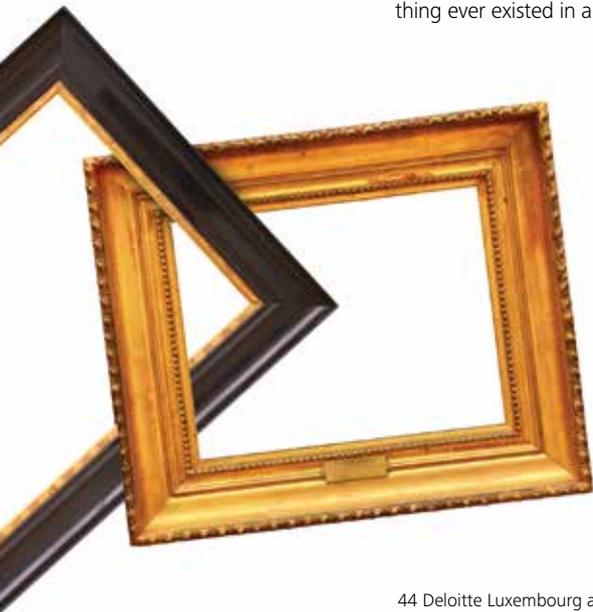
Art collectors are increasingly motivated by investment returns

What motivates collectors to buy art?

The emotional aspect of buying art still ranks as the most important motivation for collecting art, with **97%** of the collectors surveyed⁴⁴ mentioning this as one of their primary motivations. However, one cannot ignore the fact that **49%** of the art collectors are also strongly driven by investment returns and a further **39%** see art as a key component in their portfolio diversification strategy. This suggests that a more investment- or value-oriented collector is replacing the ‘passionate’ collector, if such a thing ever existed in a pure form.

What type of art wealth management services are collectors interested in?

In terms of art wealth management services, art collectors are most interested in art valuation or appraisals (66% of the collectors ranked this as the most important) and educational services (65% of the collectors), followed by art advisory services (50% of the collectors) and art and estate planning (49% of the collectors). Art investment funds only ranked as important among 22.5% of the collectors, which indicates that these art investment vehicles are less attractive to someone who is already active in the market place, and who also ranks the emotional aspect of buying art of great importance. 12% of the collectors have invested in art funds already with a further 24% of the collectors saying they would consider investing in an art fund; 53% said no, and 23% said they don’t know. More than half of the respondents (57%) said that the number of art funds is likely to increase in the next two to three years.



44 Deloitte Luxembourg and ArtTactic Collector Survey in September 2011. Survey based on the findings of 48 international collectors

Part 2

Art and finance products: opportunities and challenges

A. Art investment funds

Since the last economic downturn in 2008/2009, **56%** of the private banks surveyed said they had experienced stronger demand for 'hard' tangible assets. However, despite this increasing demand, the art fund market seems to be some distance away from being able to tap into this.

Only **11%** of the private banks offer advice on art investment funds to their clients at the moment. However, **39%** of the private banks are looking at providing advice on this type of investment product in the next two to three years.

The question of the extent of institutional interest in art investment funds has been tabled for a number of years and still seems to be largely unanswered. This private banking survey shows that there is still considerable resistance within the sector towards this type of alternative investment vehicle, with none of the private banks intending to include art investment funds as part of the **bank's product platform** in the next two years, nor was there a willingness to inject **seed money** in new art investment funds. However, the banks do realise their existence and potential, and **56%** said it was very likely they will look at art investment funds on requests from their customers in the next 12 months.

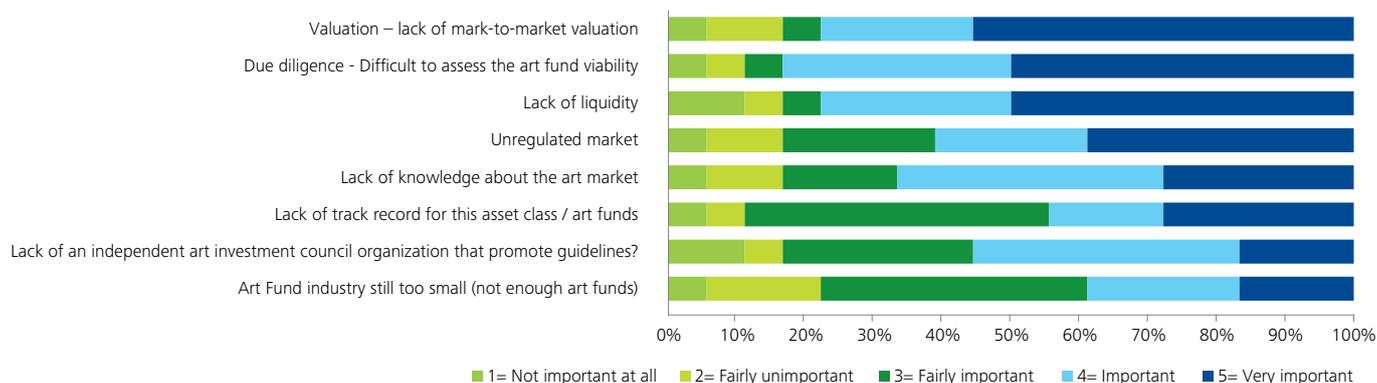
It is clear from the survey responses that art investment funds are rarely a topic of discussion, with **78%** of the private banks saying they do not know if their clients are looking for these investment products. Despite the low interest in art investment funds among the private banks, a small minority (**11%**) currently offer advice on investment in this type of structure.

67% of the private wealth managers expect more art and collectibles funds to be set up in Luxembourg in the next two to three years, on the back of a flexible legal environment and onshore regulation. The new freeport in Luxembourg, planned to be ready in 2014, will also play a major role in drawing future art investment funds to Luxembourg.

Challenges: What do you see as the biggest challenge in endorsing or advising your clients to invest in art funds?

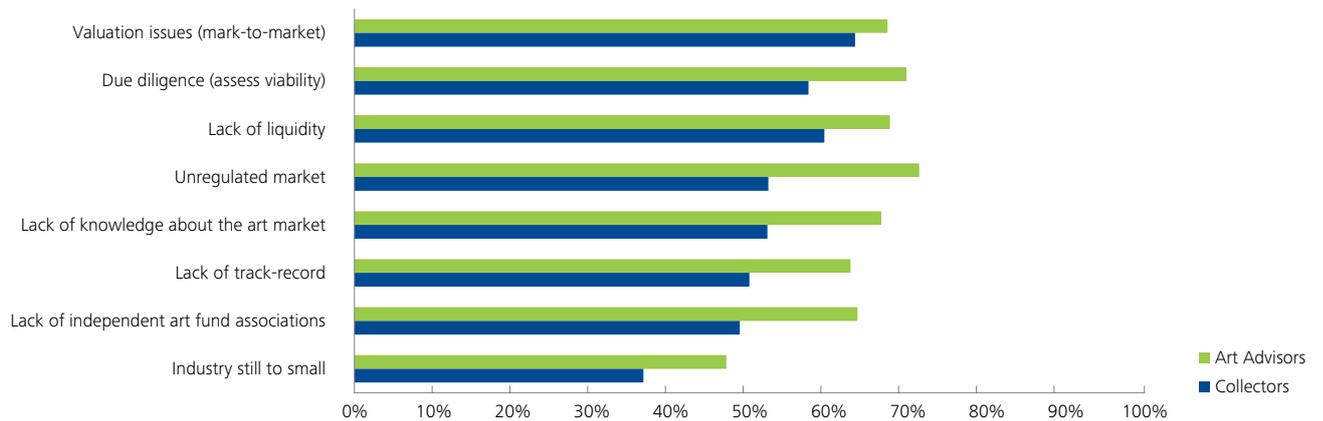
The biggest hurdle for private banks in including art investment funds as part of their product and service portfolio is largely linked to the difficulties of assessing the viability of the funds (83% of the respondents saying this was very important or important), lack of liquidity in the art market (78%), and issues related to valuation (78%) of these funds. Another major hurdle for the private banks was their own lack of knowledge about the art market (67% of respondents saying this was very important or important). A further 44% said that the lack of an industry track record made it difficult to argue in favour of considering these alternative investment vehicles internally.

Survey Fig 6: What do you feel is the main hurdle for incorporating art investment funds as part of the bank's current client offering?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Survey Fig 7: What do you think are the main hurdles for developing an art investment fund?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

These concerns are also shared by the art advisors, who attributed the main hurdles to the art fund market to the unregulated nature of the art market (72% of the art advisors), due diligence and assessing the viability of the art fund (70% of the art advisors), followed by difficulties related to valuation (68% of the art advisors) and a lack of liquidity (68% of the art advisors).

It is interesting to note that many of the hurdles seen by art advisors and private wealth managers seem to be less of an issue for collectors. Only 52% of the collectors felt that the unregulated nature of the market was an issue and only 50% felt that lack of a track record was an obstacle. Clearly, their main concern was related to valuation issues (63% of the collectors) and lack of liquidity in the art market (60% of the collectors).

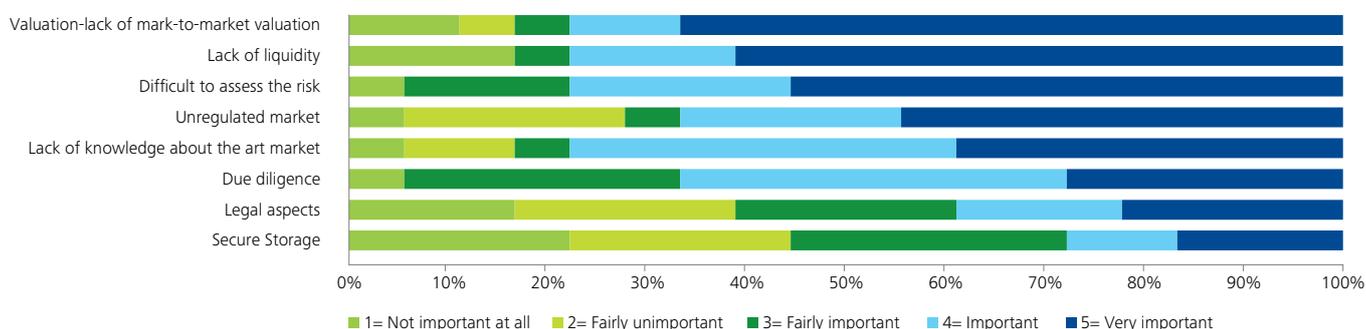
Lack of information and benchmarks in the art fund market is a main issue slowing down the uptake among the private wealth management community. 72% of the private banks expressed a strong interest in knowing more about the art investment funds that currently exist.

B. Art lending and finance

The growth of the non-recourse lenders in the art finance market, such as Art Capital Group, Art Finance Partners, Montage Finance, Emigrant Bank, Platinumart and Art Assure suggests there is an increasing demand for using artworks as collateral for loans. With art prices having increased exponentially over the last 10 years, many art buyers and collectors experience a greater desire to unlock some of the value of the works on the wall without going for an outright sale. Most lending against art in the private banking sector is on a recourse basis, which means that the loans are secured against other assets of the borrower, not only the artwork or art collection itself.

Asset-backed lending using art as part of the collateral is often mentioned these days. However, only 22% of the private banks surveyed currently offer advice to their clients on using their art as collateral for loans. However, 33% of the private banks said it was very likely or likely that they would offer art lending as part of their private banking service platform in the next two to three years.

Survey Fig 8: What do you see as the biggest challenge in offering your clients a loan against their art works?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Challenges: What do you see as the biggest challenge in offering your clients a loan against their artworks?

The biggest hurdles for private banks in offering loans against art are the problems of valuation (78% said this was very important or important) and difficulties in assessing risk (75%). These issues were closely followed by related issues such as lack of market liquidity (74%), lack of art market knowledge (71%), and the difficulties in performing due diligence (67%).

C. Other Art Services

Art advisory: The survey findings show that 39% of the private wealth managers already offer their clients art advisory services. 83% of the wealth managers said they would be likely to outsource this service in the future. However, 50% of the private wealth managers said they felt it was very hard to find the right expertise and to assess the quality of the art advisor. It is clear from the collector survey that art valuation and appraisal ranks high among the type of services that collectors would like to be offered, followed by education (65%), advice on buying and selling (50%), art and estate planning (49%), and art philanthropy (41%).

Art and philanthropy: 44% of the wealth managers offer their clients advice on art and philanthropy related issues. On average, [6%] of the private banking clients are involved in philanthropic activities. 41% of the private collectors said they would like to see this service provided as part of a wealth management offering.

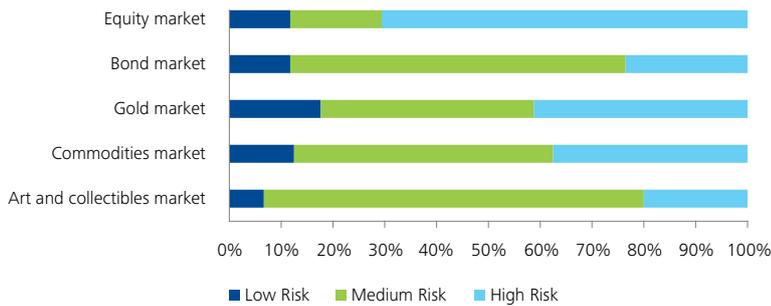
Education: Only 28% of the private banks currently offer art and finance related education to their clients. However, 50% expect to implement this in the next two to three years. It is clear that this is an aspect that the banks should focus on, as 65% of the collectors surveyed said this was a service they would like to see as part of their wealth management offer.

Part 3

Confidence indicators: market uncertainty could slow down developments

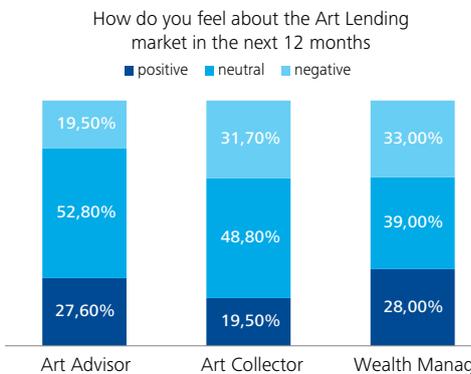
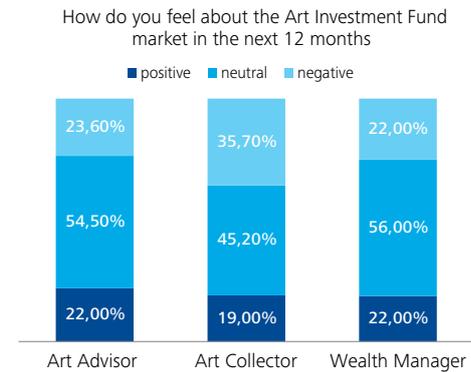
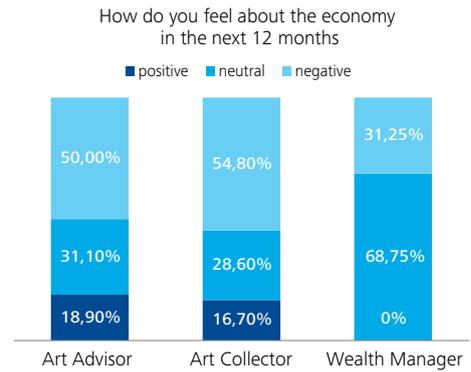
Tougher market conditions and a negative outlook for the economy could prevent private wealth managers from focusing on new investment products such as art. 22% of the wealth managers feel positive about the art investment fund market, with 22% being negative with regard to the 12-month outlook. A majority (56%) of wealth managers said they were neutral or indecisive about the outlook, suggesting a 'wait-and-see' attitude among wealth managers. In terms of art lending and financing, a larger proportion (28%) of private wealth managers were positive, but this was offset by a larger share of negative (33%) responses, which also points to a degree of resistance in getting involved in art lending activities.

Survey Fig 10: What level of risk do you attach to the following markets in the next 12 months?



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Survey Fig 9: Art market confidence



Source: Deloitte Luxembourg and ArtTactic Art & Finance Survey, October 2011

Section 4: Valuation and risks

Lack of market transparency, low liquidity, and valuation standards make it difficult for wealth managers to engage in art as an asset class

Until recently, it has barely been possible to securitise individual artworks. To date, there is no publically traded art fund, which has made it difficult to provide a market value for works of art. As we mentioned in the earlier sections, this could be about to change. A number of new art exchanges have recently been launched in China, and SplitArt™ is aiming to launch in Luxembourg in the near future. However, it could take some time before confidence in these exchanges is established. The early performance of some of the Chinese exchanges shows erratic trading patterns and valuations far above the real, physical market for the artwork. This suggests that these exchanges have been targets for manipulative and speculative behaviour.

The biggest challenge of valuing art is linked to its intrinsic characteristics as a heterogeneous or unique good, which implies that every work of art is perceived differently and could command a very different market price to a comparable work. This means that as an asset class, art is non-fungible, or in other words cannot be exchanged freely with a similar or identical asset.

We are often faced with the complex task of identifying the economic value of art because of issues such as lack of liquidity (low frequency of transactions) and a large private art market with no or little transparency (where prices are not known to the public).

However, this does not mean that one cannot put an estimated value on an artwork or a portfolio of artworks based on the auction price data that are available. In the last 10 years, we have seen increasing interest from academics and practitioners in the art market in testing and improving the tools related to the performance and valuation of art. Below is a short summary of some of the methods and techniques that are frequently used in assessing both the value and risks associated with investment in art.

Valuation methods

Index-based valuation:

Using indices to value an illiquid and heterogeneous asset is not uncommon and is often applied to the real estate market. In the art market a number of indices have been developed in the last 10 years, some of those frequently quoted are included in the table below:

Index	Description
Mei Moses Index	Database has over 27,000 repeat sale auction pairs ⁴⁵ . Mei Moses uses repeat sales methodology to create the index which is similar to that developed by Professors Case and Schiller for their residential real estate index published by Standard and Poor's. Mei Moses have nine (more now) index categories: (American before 1950, Latin American, British after 1850, Impressionist and Modern, Old Master and 19th century, Post-War and Contemporary (PWC).
Artprice Artist Index	Artist with enough data points will have an artist index. These indices use a hedonic pricing model and take into account all the distinguishing characteristics of a work. Besides the signature, size and medium, the hedonic pricing model also takes into account, where possible, the period the work dates from, the materials and technique used, and where the sale takes place. The Artprice Indicator® has been developed to value individual works by an artist.
Art Market Research (AMR)	More than 500 indices showing trends in markets ranging from Old Masters, Impressionist and contemporary art to Vintage Wines, Art Deco Jewellery, and Pop Memorabilia. The indices use based on average price changes for a fixed basket of artists.

⁴⁵ Since 2007, Mei Moses has expanded its on-going data collection to include Europe and recently added data from art transactions in China and historical information from THE EUROPEAN FINE ART DATABASE created by Prof. Rachel Pownall. Together these additions expanded the original database by more than 11,000 repeat sale pairs for objects resold in Europe and China. The new combined database now contains a total of over 27,000 repeat sale pairs for approximately 20,000 individual works of art

Art price index methodologies

Repeat-sales index: The use of repeat auction sales is considered the most consistent and reliable method to estimate price changes in the art market. The repeat sales approach averts the need to deal with the many issues associated with the heterogeneous nature of art. In essence, repeat sales measures the price change of the same work of art over time.

Hedonic price index: This is a model frequently used in real estate economics, as it adjusts for the problems associated with heterogeneous assets or goods. Like real estate, most unique works of art are perceived differently, and hence it is difficult to estimate the demand for art generically. Hedonic models assume that a work of art can be decomposed into characteristics such as name of the artist, size, medium, year of production, provenance, sales location etc. It can also be used to assess the value of artworks, in the absence of specific market transaction data.

Average price index: Is a methodology often used to measure the average change over time in the prices paid by consumers for a market basket of consumer goods and services. There are two types of average price index methodologies; the arithmetic mean price index and the geometric mean price index, such as the RPI—Retail Price Index (arithmetic mean) and CPI—Consumer Price Index (geometric mean). Similar methodologies have been adopted for the art market, where the index is based on auction prices of a basket of artists. However, as the works in the basket tend to keep changing from period to period, the percentage changes based on averages would reflect not only changes in prices but also differences in the sizes, year of production, medium and other characteristics of the art included in the calculation. Critics would therefore say that this index methodology is not an appropriate basis for reaching general conclusions about changes in the underlying market itself.

A study made by Chanel, Gerard-Varet and Ginsburgh (1996) showed that over long periods the results of the respective methodologies are closely correlated⁴⁶.

46 <http://arno.unimaas.nl/show.cgi?fid=15904>



General Weaknesses often associated with the Price Index-based Valuation approach:

- 1) *Missing price data:* The index valuation methodology does not account for primary or private sales (auction and dealer), which means about 50% of the market transactions are not taken into account when calculating these indices.
- 2) *Selection bias or survivorship bias:* As bought-ins (unsold) lots are often not accounted for in the index calculations, data could also be subject to survivorship bias. This means stressing winners over losers, and can lead to overly optimistic beliefs because failures are ignored.
- 3) *Ignoring transaction cost:* Most indices do not take into account the transaction costs in an auction house setting (which is up to 25%). This would significantly reduce short term holding period returns, making short-term investments in the art market a risky business.
- 4) *Lack of predictive powers:* An index is a reflection of historic prices, and is good at telling us about past performance—however, often tells us little about the future value of an art object.

Although index-based valuation can offer a good proxy value for heterogeneous assets such as real estate and art, it is far from a precise method when it comes to valuing individual art objects, particularly in art markets where public data is lacking. In these circumstances one would use more traditional, expert-based valuation.

Expert-based valuation: Whilst art indices are becoming increasingly popular as a means of assessing the performance of the art market, and also the value of individual objects, there is still a great deal of distrust among experts towards these index-based techniques. The main objection is that the indices fail to take into account the actual qualities of the object and the environment in which these objects are transacted. They would argue that the competitive nature of the auction process often leads to higher than 'fair-value' prices as a result of wealthy, non-price sensitive buyers paying significantly above the going market and has little to do with the intrinsic qualities of the object itself. Whilst most experts are fully aware of past comparable prices (auction and private) and would even use readily available art price indices, they would ultimately rely on their experience in handling and seeing thousands of artworks when assessing the intrinsic qualities of the object and its monetary value.

Market-based valuation: This is a hybrid approach between the index-valuation and the expert-valuation, with more emphasis on the market context, such as the level and the nature of support from galleries, collectors, curators and museums. The market-based valuation is a sentiment-based model, and particularly useful in dynamic markets such as the contemporary art market, where the artist's historic importance is still not decided, and where there might be a lack of price data.

Other examples of non-price related databases:

Provider	Country	Type of data
Artfacts.net	Germany	Artist exhibition data
ArtTactic.com	UK	Market sentiment and confidence data
Findartinfo.com	Panama	Artist signatures
Art Loss Register	UK	Database of stolen or lost art

Section 5 - Industry voices: Interviews with leaders in the art and finance industry

New art exchange in Luxembourg

Interview with **Dror Chevron**,
General Manager, SplitArt™



Mr. Chevron was born in Jerusalem, Israel on 4 January 1964. He was raised in Israel and the United States of America. Following a three-year mandatory service in the Israeli Army he completed his BA in economics and business at the Hebrew University, Jerusalem. He began working for the Israeli Ministry of Finance, Department of the Budget and then continued to the private sector where he has held positions of VP Finance, VP Business Development, CEO, MD, and Board Member in companies including companies in the fields of communications, IT services and products, infrastructure, investments, real estate, and high-tech. Also, Mr. Chevron has served as Board Member in two publicly traded companies on the Tel-Aviv Stock Exchange.

Mr. Chevron has an Executive MBA from a joint programme by J. L. Kellogg School of Management (Chicago, USA) and the Tel Aviv University (Israel).

Q: Tell us about SplitArt™?

SplitArt™ is a new exchange, based in Luxembourg, which will allow qualified investors from around the globe to invest in shares of valuable artworks. As the name suggests, artworks will be 'split' into shares, or Art Certificates, making it possible for many more investors to participate in the exciting cultural world of art while diversifying their portfolios for greater financial security and gain.

Q: Why invest in Art Certificates (shares of artworks), when you could buy artwork outright?

We are not advocating not buying artwork but for the vast majority of people, buying high-end artwork is not an option. With SplitArt™, investors will have the possibility of buying part of a valuable artwork, whereas previously this was the exclusive privilege of the very wealthy. SplitArt™ will change that, opening up the market to a broader range of investors at a much lower entry point.

Q: How does SplitArt™ work?

The 'mechanics' of SplitArt™ are easy to understand, especially for those already familiar with other financial exchanges. Art owners who would like to sell their artwork get in touch with a Fiduciary bank, a leading bank that acts as the trustee according to Luxembourg fiduciary law. The Fiduciary starts the securitisation process by bringing in independent art experts who examine the artwork and set the price. This is the preliminary due diligence process; and if the art owner agrees with the price range assigned to the artwork, a detailed due diligence process begins.

The Fiduciary takes care the whole due diligence and securitisation processes through third-party partners who value, insure and store the artwork, carry out any needed restorations, and provide other services. All the art owner needs to do is sign the agreements and deliver the artwork to the Fiduciary in exchange for the Art Certificates. The securitisation process ends when the art owner has the Art Certificates and an Offer Memorandum (prospectus) is prepared.

The Offer Memorandum and the Art Certificates are then admitted to SplitArt™ and following a period of preview of the artwork an auction is then held for a period of 'blind bidding'. Once bids have been made for the total number of Art Certificates offered by the art owner, the auction is closed. Everyone whose bid was placed before closure will pay the same price for each Art Certificate: the lowest bidder whose bid was accepted in the auction sets the overall price, provided that the minimum price per Art Certificate has been surpassed.

All the pertinent market information will be in the public domain at the auction and trading phases, with the exception of the value and number of Certificates coming in during the blind bidding period. During and following the preview period, artworks (represented by Art Certificates) will be posted as easily accessible real-time information. Investors can then research the artwork or consult their own curators or advisors.

Once the auction is concluded successfully, trading of Art Certificates in the real sense begins. Although anyone can access information on SplitArt™, Art Certificates can only be purchased and sold through Market Members (banks and financial institutions).

The time to market is always consistent at SplitArt™, which is especially advantageous for anyone who wants to liquidate assets quickly. The time between when the artwork owner decides to sell and the artwork is actually listed can take a few weeks or a couple of months, but it begins immediately with the art owner's decision to sell. This differs from previously available 'art liquidation' options, which may have involved waiting for seasonal auctions or searching extensively for the right individual buyer.

To recap in brief, an art owner who wants to sell an artwork contacts the Fiduciary, who handles the entire securitisation process and 'pays' the owner with Art Certificates. These Art Certificates are put up for auction and then listed for trade. The investors have complete access to real-time market information and if interested in bidding and trading, can do so through a Market Member.

Another advantage offered through SplitArt™ is that buyers can easily delist an artwork through a squeeze-out or a tender offer for Art Certificates. When and if someone has 100% of the Art Certificates, they can give them back to the Fiduciary and claim the physical work of art. This makes SplitArt™ appealing to art collectors who would very much like to physically own art as much for its inherent aesthetic value as for its financial worth.

Liquidity is provided by a Market Maker, who is obliged to provide bid and ask quotes on the trading platform, thereby ensuring that there are always Art Certificates available to buy and sell.

Although there are numerous steps to the whole process, which provide built-in security for both buyers and sellers, market participants can take advantage of the 'one stop shop' approach and do not have to deal with anything except deciding to buy or sell Art Certificates. Everything else is taken care of for them. Arrangements will even be made to place the artworks on exhibition in leading museums, bringing art back to the public (up to 90% of valuable art is currently in vaults or storage). It is straightforward, regulated and financially compelling. Again, one of the most alluring aspects of using Art Certificates as liquid, transparent financial instruments is that neither buyers nor sellers need to buy or sell a whole work of art.

It's straightforward, regulated and financially compelling. Again, one of the most alluring aspects of using Art Certificates as liquid, transparent financial instruments is that neither buyers nor sellers need buy or sell a whole work of art.

Q: Why would a seller list an artwork on the exchange vs. putting it in an auction?

There are many reasons to do this, including the fact that the process has a short and fixed term from beginning to end; you can liquidate part of your artwork and keep a part (via Art Certificates)—this is very important when you have more than one owner of an artwork and there is no consent on selling or when a single art owner decides to liquidate but does not need all the proceeds immediately; the total transaction costs are lower compared to the alternatives; also, there are other financial planning situations for which Art Certificates are acceptable but physical artwork is not.

Q: When does SplitArt™ expect to launch?

Currently, SplitArt™ is working to obtain the necessary licence to operate the exchange from the Luxembourg financial regulator. Once the exchange is open, interested artwork owners and investors can simply go online to find out more about SplitArt™ or locate a Fiduciary or Market Member in order to participate.

Go to www.splitart.com, and sign up to receive updates about the launch.

New Freeport in Luxembourg

Interview with Yves Bouvier, Natural Le Coultre (Freeport Luxembourg)



Born in 1963 and of Swiss origin, Yves Bouvier has always been devoted to entrepreneurship and innovation. He has spent most of his professional life within the art industry, working for companies such as SLED Services SA, EXPOSITIONS NATURAL LE COULTRE SA (consultancy and brokerage services for the handling, packing and shipping of state and private museum exhibitions), FINE ART TRANSPORTS NATURAL LE COULTRE SA (consultancy and brokerage services for the handling, packing, shipping and storage of private art collections), ART CULTURE STUDIO SA (organiser of the Moscow World Fine Art Fair from 2004 to 2008 and the Salzburg World Fine Art Fair from 2007 to 2008), THE SINGAPORE FREEPORT Pty Ltd (partnership with the Singapore Government, responsible for the management of the freeport at the Singapore airport) and THE SINGAPORE FREEPORT REAL ESTATE Pty Ltd (real estate company, owner of a new 25,000 m² building located at the international Changi Airport). In 2011, Yves Bouvier created NATURAL LE COULTRE LUXEMBOURG SA, the company in charge of the new Luxembourg Freeport project at Luxembourg Airport to be opened in 2014.

Last September, Natural Le Coultre (www.nlc.ch) a world leading company specialising in storage, packing and shipping of artworks and valuable items announced the expansion of its freeport activities to Luxembourg. The group already operates offices in numerous locations around the world including Geneva, Paris, Singapore, Beijing, Shanghai, Hong Kong, etc.

Q: Your announcement to open a freeport zone in Luxembourg might have been a surprise for many, as Luxembourg doesn't have a particular reputation in storage and conservation of artworks and other valuable items. So why did you choose Luxembourg?

It is true that we want to develop a business, which is new for Luxembourg—and by the way also for the whole European Union. But the country has many intrinsic characteristics that make Luxembourg very attractive to us.

In fact, not many countries offer such a central position, a high-security living environment, a stable political climate, a reactive and accessible government, an international finance centre specialised in funds and wealth management, as well as a competitive logistics infrastructure, including an airport, which is one of the biggest for the European air cargo industry and which can accommodate the freeport within its area. Luxembourg has also proved its capacity in the past to mobilise and attract new talents for the creation and development of innovative activities.

Finally, Luxembourg recently adapted its V.A.T. legislation to enable the setup of a freeport in full compliance with EU legislation. More precisely, this means that valuable items can be stored in suspension of V.A.T. and customs duties, as is already possible within existing industrial freeports. Our freeport will be the first one of its kind within the European Union.

Q: Natural Le Coultre's operates such freeports in Geneva and Singapore. What will the Luxembourg freeport look like?

In Luxembourg, NLC will offer a high-end security, state-of-the-art storage environment with all types of storage facilities for fine arts, antiques, precious metals and all other types of valuable goods, including vintage cars, jewellery or fine wines.

The Luxembourg freeport will consist of an innovative, environment-friendly, low-energy facility of 15,000 m² in phase 1, respecting international sustainable development standards and certifications, to be built within the Luxembourg airport area. The facility will be operated by specialised, duly licensed agents, with expertise in the handling and forwarding of valuable goods.

Q: Who will be your customers and your business partners?

We will work exclusively with professional clients. These are specialised and pre-approved companies, not individuals such as art collectors. This will help us avoid any risk of tax fraud.

As for the items to be stocked at the freeport, we'll offer numerous configurations (storage capacity, temperature, humidity), among the most effective and sophisticated in the world. Furthermore, the whole area will be extremely secure.

This will allow us to stock fine art, antiques, precious metals and all other types of value items such as collectors' cars, jewellery and rare wines.

We believe that Freeport Luxembourg will attract new companies and activities to Luxembourg, including the logistics and art industries. Many contemporary artworks have huge dimensions and it can be difficult to find adequate space to store them. Major galleries, art experts and auction houses may all find Luxembourg of interest.

The airport is well located strategically, has easy access and some major players in the freight industry. For example, Cargolux would be a natural partner for the Luxembourg Freeport.

Q: You have hired the Cargolux C.F.O. as general manager. Why?

Yes, David Arendt, former Executive Vice President and Chief Financial Officer of Cargolux Airlines International is the General Manager of the Freeport Luxembourg Project. With David Arendt on board, I'm confident that the project will be rolled out to plan and bring value to our customers.

David will be a key person in building up the whole structure. The Luxembourg Freeport is expected to start its activities early 2014 and should create around 100 direct, highly specialised jobs. I'm sure the freeport will boost Luxembourg's image as a dynamic and innovative service-oriented country.

We believe that the Luxembourg Freeport will attract new companies and activities to Luxembourg, including the logistics and art industries.



New price and risk dynamics in the art market

**Interview with Fabien Bocart,
Quantitative Research Director,
TUTELA CAPITAL**



Fabien Bocart is co-founder of Tutela Capital S.A., a Brussels-based company specialised in managing art as an alternative asset. The company deploys cutting-edge quantitative methodologies and uses insider knowledge of the market to turn art into a safe and profitable investment. Fabien Bocart is also a member of the scientific body of the Faculty of Sciences of the Catholic University of Louvain. As such, he is author of several scientific publications on methods to measure volatility and returns of art investments. Before the launch of Tutela Capital, Fabien Bocart worked as an interest rate options trader at BNP Paribas Fortis. He graduated with distinction from the Solvay Business School and holds an MSc in Statistics with distinction from the Catholic University of Louvain.

Q: Tell us a bit about the context for the research you are conducting on art as an investment?

For professional investors and serious art collectors, mastering the risks and rewards of investments in art is a prerequisite to sound management of their portfolio. Once art is considered as an investment rather than a pure consumption good, it is logical to fully integrate it in an asset allocation scheme and to best exploit art in a portfolio management framework. In this context, as for all financial investments, rigorous methodologies are necessary to best appreciate opportunities offered by the art market.

Q: What methodology have you been using in your recent study?

This study focuses on artworks that can be considered as liquid assets, that is, artworks sold in the secondary market (i.e. auction houses) and belonging to one of the 40 most liquid artists⁴⁷, such as Pablo Picasso, Andy Warhol, Gerhard Richter, Willem de Kooning, Henri de Toulouse-Lautrec, Pierre-Auguste Renoir, etc. This 'blue-chips' approach increases robustness of results as it only concerns artworks that can truly be considered as financial investments and not ordinary consumption goods. The analysis is based on 30,325 paintings brought at auction between 4 February 1987 and 13 September 2011. Tutela Capital's proprietary 'Sanofa'⁴⁸ model is used to infer returns while volatility metrics are computed using stochastic filtering techniques. These models reflect the complex intricacies of the art market and are designed to avoid unrealistic assumptions common to repeat-sales or classical hedonic methods⁴⁹. For instance, bought-ins and buyers' premiums are taken into account to avoid upward biases while robust techniques are deployed to cope with extreme events in the market (such as record prices or extraordinary sales). Models achieve a daily precision and automatically adjust their parameters as time goes by so as to reflect changes in the market's behaviour. Tutela Capital's unique stochastic approach allows an exact estimation of risk (in its strictest financial sense) and can be directly used to build optimal investment portfolios.

⁴⁷ The 40 artists who had the biggest volumes of paintings sold at auction in 2009 and 2010

⁴⁸ Sample Selection Non Parametric Hedonic Fat Tailed

⁴⁹ Such as normality assumptions, sensitivity to outliers or the use of discrete time variables

Q: In terms of your findings, what new insights can you provide?

At first sight (Table 1), art seems to underperform other US\$-denominated asset classes over the long term. Over the last 25 years, an investment in art has yielded, on average, +6.42% per year. This is even less than the +6.92% yield offered by a diversified portfolio of U.S. corporate bonds.

Nevertheless, art prices were at an all-time high in September 2011 (see Figure 1). The rapid expansion of prices compared to the previous decades suggests that price dynamics of art investments have recently changed. In other words, there is a new behaviour of art prices compared to historical standards. Table 2 compares the performance of art between 2005 and 2011 against competitive asset classes. Despite a violent drop in art prices following the collapse of Lehman Brothers in 2008, an investment in art has offered an annual return

of +12.86% over the last six years. This compares with a nominal annual return of +3.07% for the S&P 500. The first three quarters of 2011 kept on benefiting from this continuing bullish trend in prices with a +15.51% return between January and September 2011.

Such changes in market dynamics are actually directly related to the meltdown endured by financial markets since 2007. In fact, the relative performance of art against traditional asset classes can be explained by an extraordinary feature of art prices: volatility (i.e. risk) stays more or less constant through time, regardless of economic conditions. At the contrary, equities have seen a significant and prolonged increase in risk between 2005 and 2011. As a consequence, art that once was considered a risky asset is now a safe haven in an unusually volatile economic environment. Figure 2 illustrates this recent inversion of risks between the S&P 500 and art.

Table 1: Yearly return in the art market compared to the other asset classes: 1987-2011

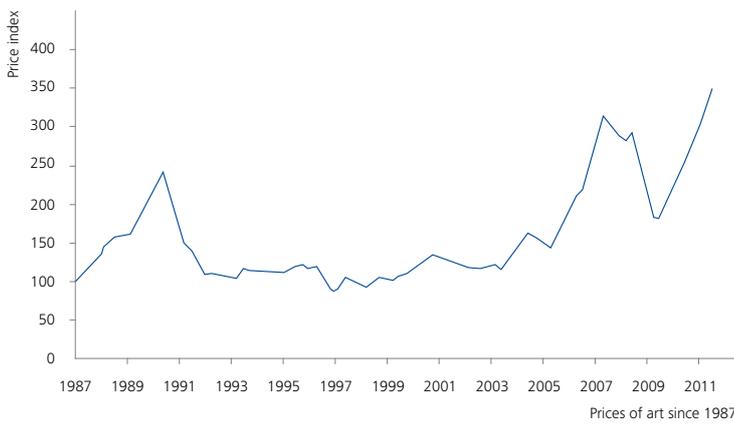
1987-2011	Asset	Nominal return	Real return	Volatility	Correlation with art
	WTI (oil)	14.63%	11.68%	44.59%	6.79%
	S&P GSCI Commodity	9.06%	6.12%	26.47%	14.34%
	S&P500	8.13%	5.19%	18.16%	10.42%
	Gold bullion	7.35%	4.41%	16.00%	4.73%
	US Credit bonds	6.92%	3.97%	1.50%	-15.82%
	Art	6.42%	3.48%	14.79%	100%
	10-Year US note	5.50%	2.56%	1.76%	-0.05%

Table 2: Yearly return in the art market compared to the other asset classes: 2005-2011

2005-2011	Asset	Nominal return	Real return	Volatility	Correlation with art
	WTI (oil)	23.98%	21.37%	49.4%	20.05%
	Gold bullion	21.03%	18.42%	12.4%	6.46%
	S&P GSCI Commodity	17.49%	14.88%	34.2%	25.64%
	Art	12.86%	10.25%	15.8%	100%
	US Credit bonds	5.13%	2.52%	1.7%	27.78%
	10-Year US note	3.58%	0.97%	1.9%	-32.13%
	S&P500	3.07%	0.46%	21.4%	33.72%

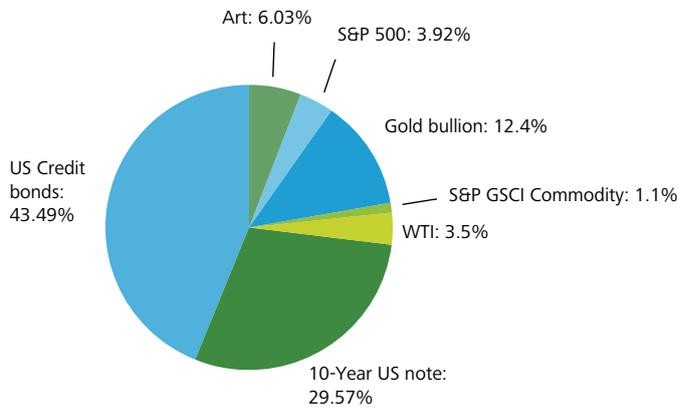
Source: Tutela Capital S.A.

Fig 1: Nominal price index of art from 4 February 1987 through 13 September 2011



Source: Tutela Capital S.A.

Fig 2: An optimal portfolio that minimises risk and maximises returns



Source: Tutela Capital S.A.

Q: What conclusions can we draw from your research findings?

A major consequence of shifts in risks and returns is the necessary re-allocation of assets in a well-balanced portfolio. While the overall diversification benefit⁵⁰ of art did not outweigh its poor performance over the past 25 years, the situation seems to have drastically changed since the financial crisis began. Financial theory states that a riskier asset should yield a higher return. From this observation it is possible to define a set of 'efficient portfolio', that is, portfolios with optimal allocation of risks. Such an ideal portfolio is presented in Figure 2. This portfolio is designed⁵¹ to achieve an expected annual nominal return of 8% while taking minimum risks. Interestingly, according to modern portfolio theory, art should play a bigger role in asset management than commodities (except for gold) or even equities. As a matter of fact, computations show that an optimal portfolio should be constituted of at least 12.4% of gold and 6.03% of art investments, much more than the 3.92% suggested for equities. This confirms that art has become a solid building block of optimal investment strategies, mainly thanks to its low correlation with other assets and a relatively low risk. This new paradigm is likely to continue as long as traditional financial markets will exhibit higher volatility. However, these conclusions should not be blindly drawn for any art investment. In practice, the optimal selection of artworks for asset management requires a thorough understanding of risks (and expected returns) of the underlying collection used as investment vehicle.

50 That is, the low correlation of art with other financial assets (Table 1 and Table 2)

51 Optimisation of the portfolio is based on the fast MCD algorithm of Rousseeuw and Van Driessen (1999)

Conclusion

It is evident from this research that the Art & Finance market is developing at a much faster rate than even just a few years ago

The art fund industry is growing and is starting to establish a track record, which will help future art funds. As more capital moves into the art market, the need for financial services (such as financing) is already on the increase with a number of specialist asset-lenders emerging in the last two years. Even art exchanges, the equivalent of a stock market for art, have become a reality. The interesting thing is that none of these finance-related art market activities has originated in the wealth management sector, which is the cause of

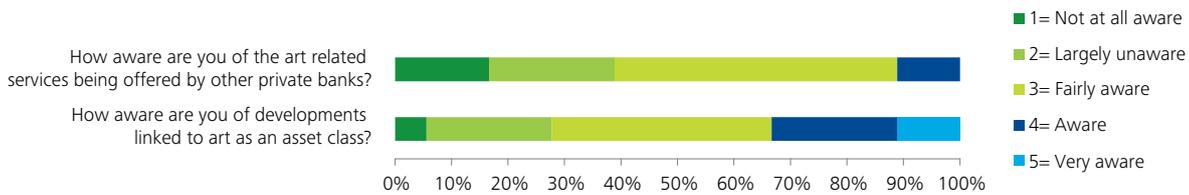
one of the problems. While the art market embraces new ideas and investment structures, wealth managers are less willing to embrace art. It seems that in the early evolution of the art and finance market, the art market has somehow developed a number of relatively complex products, without spending enough time and resources in educating the potential users. We firmly believe that this is where the focus needs to be channelled in the years to come and we hope that this report is a small contribution to this process.



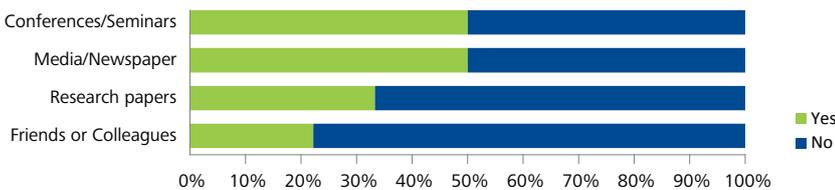
Appendix 1 – Deloitte/ArtTactic – Art and wealth management survey

General awareness

Q1. Awareness around art as an asset class:



Q.2 If 'aware or very aware' through what channels did you learn about this?

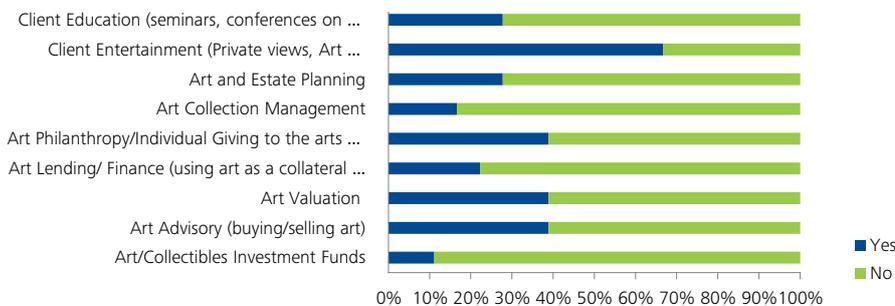


Current involvement

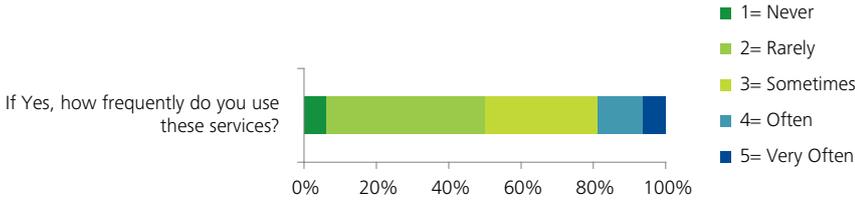
Q.3 Does the bank currently offer any kind of services to its clients when it comes to Art and Collectibles (including entertainment), either provided by the bank or a third party?

Yes: 83%
No: 17%

If YES, which of the following services do you offer (please specify whether internal services or third party):

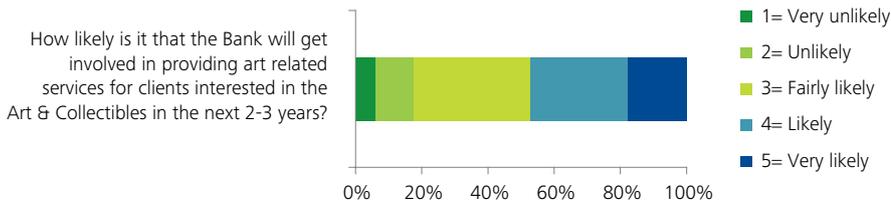


Q4. If YES, how frequently does the bank use these services?

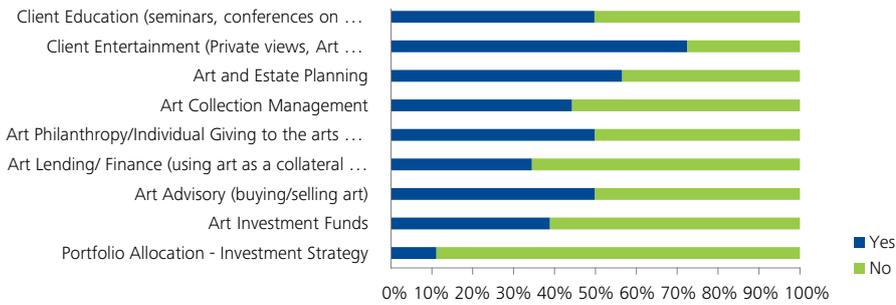


Future involvement

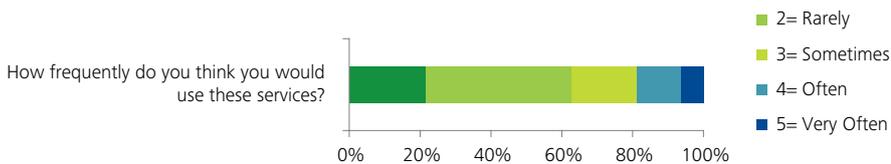
Q5: How likely is it that the bank will get involved in providing art-related services for clients interested in art and collectibles in the next two to three years?



Q6: What type of services would these be?



Q7: How frequently would you use these types of services?

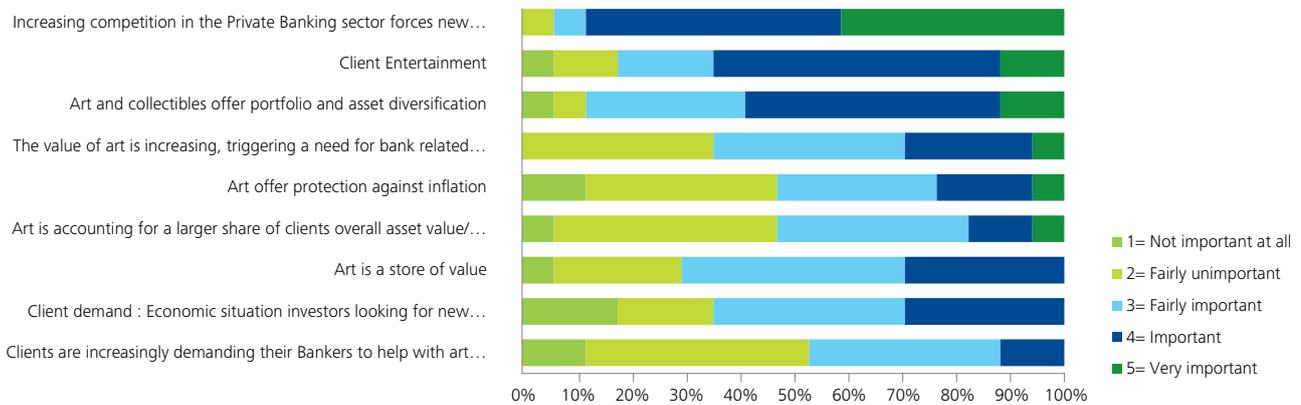


Why include art in traditional wealth management?

Q8. Do you feel that there are strong arguments for including art and collectibles in traditional wealth management?

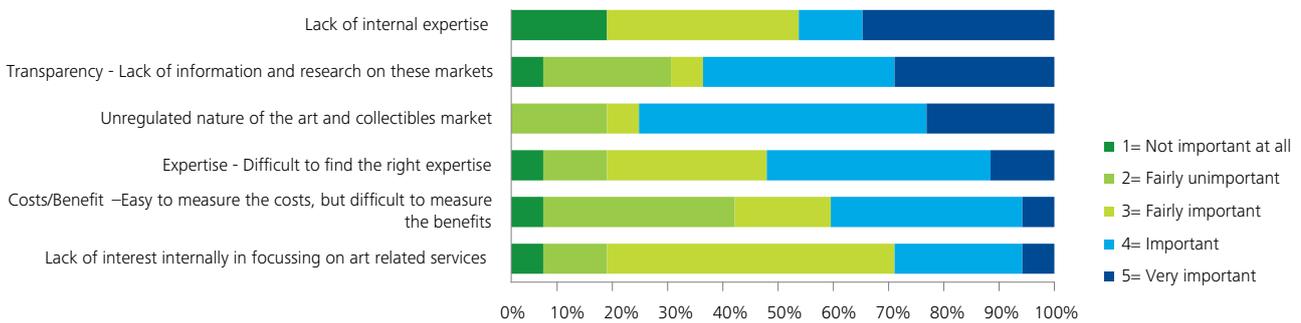
Yes= 83%
No = 17%

Q9. What do you consider the strongest arguments for including art and collectibles in traditional wealth management or private banking?



What are the challenges?

Q10. What do you see as the biggest challenge in offering art-related services or products?



What are the challenges?

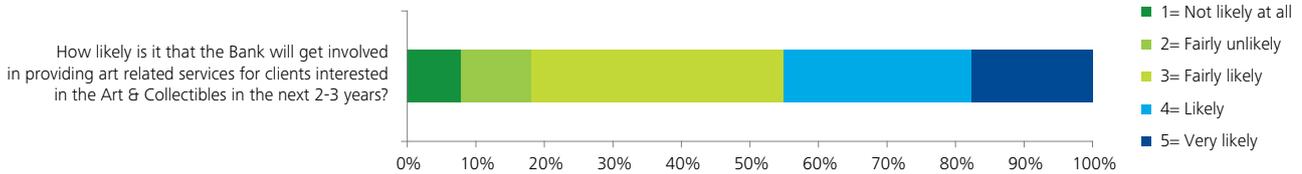
Q11. Future trend: Do you expect more funds to set up in Luxembourg in the next two years?

Yes: 67%
No: 11%
Don't know: 22%

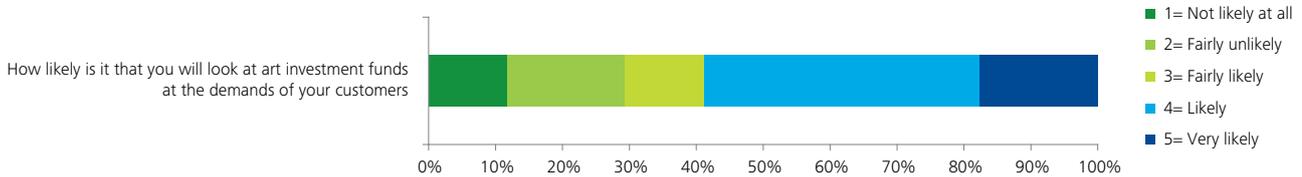
Q12. Does the bank currently offer advice to its clients on investment in these types of funds?

Yes: 11%
 No: 67%
 Don't know: 22%

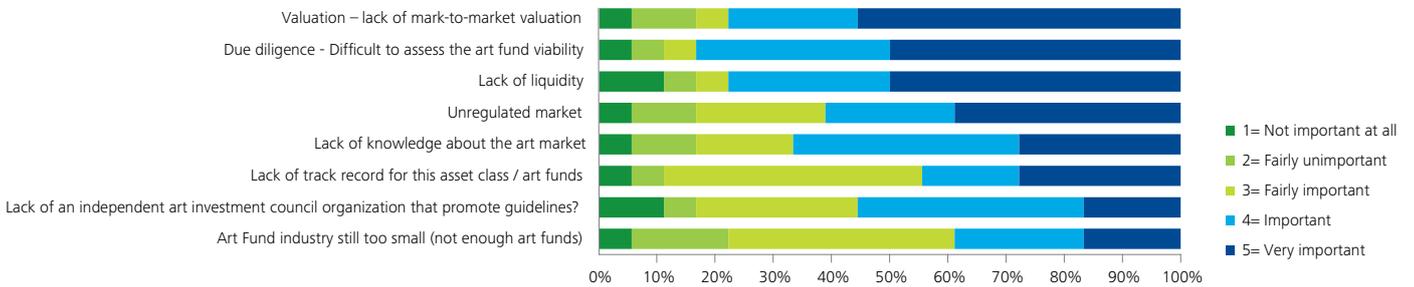
Q13. How likely is it that you will include art investment funds as part of the bank's product platform in the next two years?



Q14. How likely is it that you will look at art investment funds following customer demand?



Q15. What do you feel is the main hurdle for incorporating art investment funds as part of the bank's current client offering?

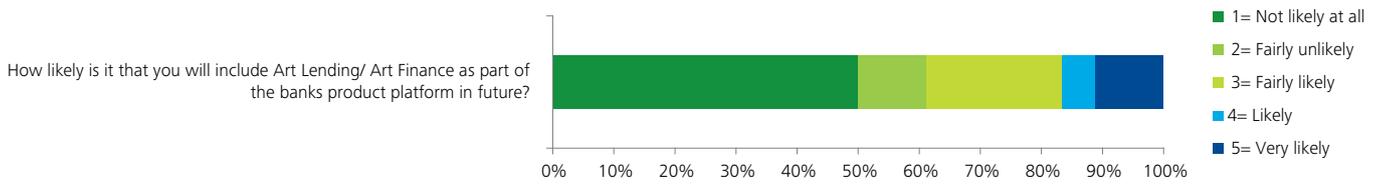


Art lending & finance

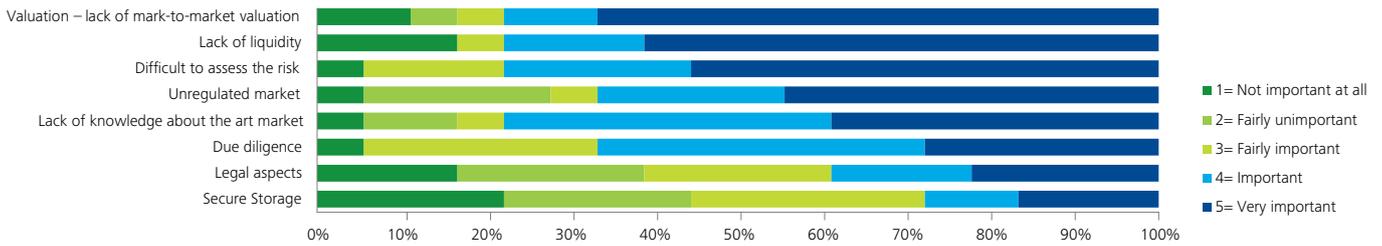
Q16. Do you currently offer advice to your client on using their art as collateral for loans?

Yes: 17%
 No: 83%

Q17. How likely is it that you will include art lending or art finance as part of the bank's product platform in future?



Q18. What do you feel is the main hurdle for providing art lending or art as collateral to the bank's current clients?



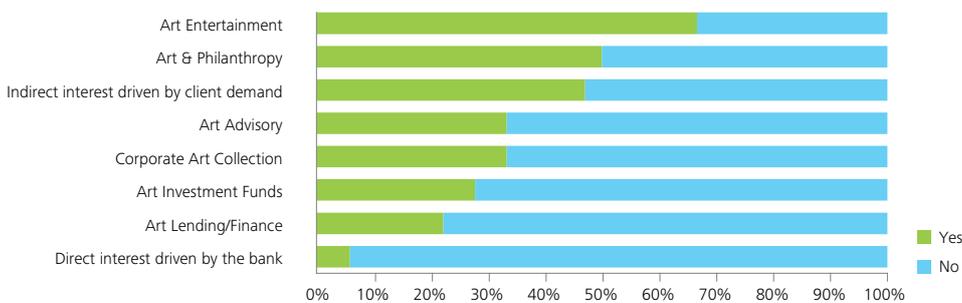
Art and philanthropy

Q19. Do you currently offer advice to your clients on art and philanthropy?

Yes: 44%
 No: 50%
 Don't know: 6%

The future

Q20. In what areas do you expect to increase your presence and/or focus in the coming 12 months, if any?



The future

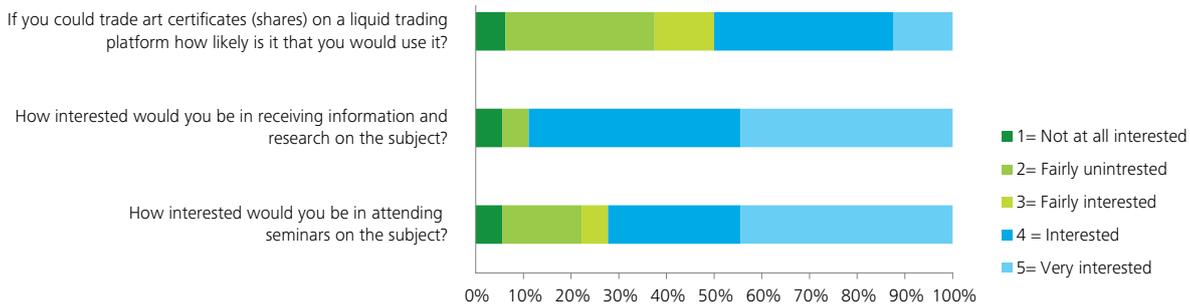
Q21. If you are considering any of the above services, how do you intend to implement and deliver them?

- a) Build expertise internally: 38% of the respondents
- b) Outsource to third parties: 83% of the respondents

Q22. Do you expect banks to include art and other collectible assets in their wealth reports to have a consolidated view of their clients' wealth and a better view of their clients' exposure?

- Yes: 22%
- No: 50%
- Don't know: 28%

Q23. How interested would you be in the following?

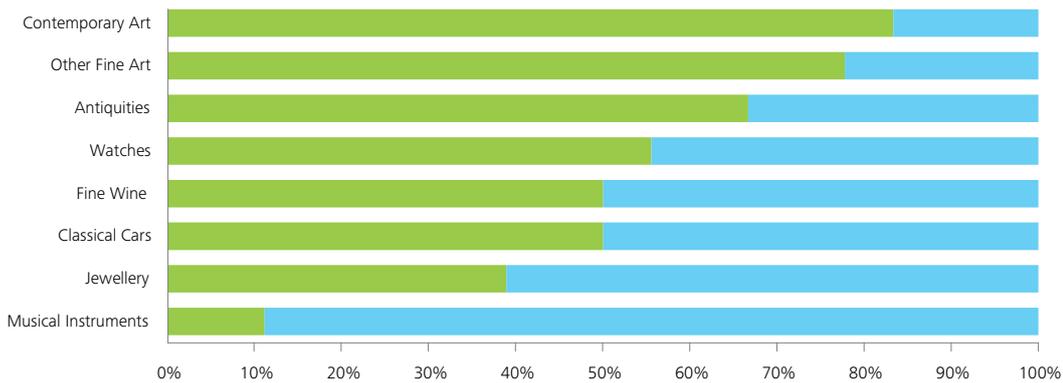


Q24. Are your clients likely to increase their focus on art as an asset class in the future?

- Yes: 28%
- No: 17%
- Don't know: 56%

Client collecting interest

Q25. What categories of art and collectibles are your clients investing in as far as you are aware?



Appendix 2 – Deloitte/ArtTactic – Art Advisor and Art Collector Survey

General perception of art as an asset class

Q1. Do you view art as an asset class?

Art Advisors	Art Collector
Yes: 56%	Yes: 57%
No: 9%	No: 17%
Don't know: 35%	Don't know: 27%

Q2. Do your clients view art as an asset class?

Art Advisors
Yes: 51%
No: 16%
Don't know: 33%

Motivations for investing in art

Q3. Which of the following motivations are most important in buying art?

Art Advisors

% of respondents saying important or very important?

Emotional Value	79.4%
Social Value	73.7%
Investment Returns	48.8%
Inflation Hedge	27.5%
Portfolio Diversification	41.8%
Rarity	58.7%
Luxury Good	56.3%
Safe haven	25.2%
Tax	12.4%
Portability	13.3%

Art Collectors

% of respondents saying important or very important?

Emotional Value	97.5%
Social Value	22.5%
Investment Returns	48.8%
Inflation Hedge	35.0%
Portfolio Diversification	29.3%
Rarity	64.1%
Luxury Good	40.0%
Safe haven	20.0%
Tax	20.5%
Portability	23.1%

Art and wealth management

Q4. Which of the art wealth management services do you consider most relevant?

Art Advisors

% of respondents saying relevant/very relevant?

Art Valuation/Appraisal	69.1%
Education	56.5%
Art advisory	81.7%
Art & Estate planning	49.5%
Art Philanthropy	28.8%
Art Lending	25.4%
Collection management	51.3%
Investment funds	29.2%

Art Collector

% of respondents saying relevant/very relevant?

Art Valuation/Appraisal	65.8%
Education	65.0%
Art advisory	50.0%
Art & Estate planning	48.8%
Art Philanthropy	41.0%
Art Lending	35.9%
Collection management	25.0%
Investment funds	22.5%

Q5. Art Advisor: Are you currently supplying any of the above services to private banks or family offices?

Yes: 56.1%
No: 43.9%

Q5. Art Collectors: Have you been offered any of the above services by your private bank?

Yes: 30.0%
No: 70.0%

Which ones?

Art Advisors

% of respondents saying YES

Art investment funds	14.3%
Art advisory	75.7%
Art valuation/appraisal	51.4%
Art lending	15.7%
Art philanthropy	25.7%
Collection management	44.3%
Art and estate planning	21.4%
Education	42.9%

Art Collectors

% of respondents saying YES

Art investment funds	61.5%
Art advisory	76.9%
Art valuation/appraisal	46.2%
Art lending	38.5%
Art philanthropy	53.8%
Collection management	46.2%
Art and estate planning	46.2%
Education	61.5%

Art investment funds

Q6. Art Advisors: Would you advise your clients to invest in art investment funds?

Yes: 42.3%
No: 23.6%
Don't know: 34.1%

Q6. Art Collectors: Would you advise your clients to invest in art investment funds?

Yes: 46.3%
No: 34.1%
Don't know: 19.5%

Q7. Do you believe we will see an increase in the number of art investment funds in the next two to three years?

Art Advisors

Yes: 55.4%
No: 19.8%
Don't know: 24.8%

Art Collectors

Yes: 57.2%
No: 21.4%
Don't know: 21.4%

Q8. What do you think are the main hurdles for developing an art investment fund?

Art Advisors

% of respondents saying important/ very important?

Valuation issues (mark-to-market)	67.5%
Due diligence (assess viability)	69.9%
Lack of liquidity	67.8%
Unregulated market	71.5%
Lack of knowledge	66.7%
Lack of track-record	62.8%
Lack of independent art fund associations	63.7%
Industry still too small	47.1%

Art Collectors

% of respondents saying important/ very important?

Valuation issues (mark-to-market)	63.4%
Due diligence (assess viability)	57.5%
Lack of liquidity	59.5%
Unregulated market	52.4%
Lack of knowledge about the art market	52.3%
Lack of track-record	50.0%
Lack of independent art fund associations	48.8%
Industry still too small	36.6%

Art lending and finance

Q9. Have you been involved in using art as collateral for a loan?

Art Advisors

Yes: 24.4%

No: 75.6%

Art Collectors

Yes: 9.8%

No: 90.2%

Q10. Art Advisors: Would you recommend your client to use art as collateral for a loan?

Yes: 42.3%

No: 23.6%

Don't know: 34.1%

Q10. Art Collectors: Would you consider using art as collateral?

Yes: 46.3%

No: 34.1%

Don't know: 19.5%

Q11. Do you believe we will see an increase in the art lending market in the next two to three years?

Art Advisor

Yes: 50.4%

No: 14.6%

Don't know: 35.0%

Art Collector

Yes: 67.5%

No: 15.0%

Don't know: 17.5%

Contacts

ArtTactic



Anders Petterson
Managing Director
Tel: +44 778 866 1049
anders@arttactic.com

Deloitte Luxembourg



Thierry Hoeltgen
Lead Partner
Tel: +352 451 452 559
thoeltgen@deloitte.lu



Adriano Picinati di Torcello
Directeur
Tel: +352 451 452 531
apicinatiditorcello@deloitte.lu

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