



THE EUROPEAN  
FINE ART FOUNDATION

PREPARED BY  
PROF. DR. RACHEL A.J. POWNALL

# TEFAF ART MARKET REPORT 2017

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Auction data provided by

**artnet**<sup>®</sup>

# TEFAF ART MARKET REPORT 2017

## COLOPHON

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## FOREWORD TEFAF

Since 2002 the TEFAF have been involved with providing a programme of independent research into the art market. Typically published on an annual basis. The art market report released during TEFAF Maastricht has become an industry standard. As an authoritative report our aim is to maintain the position and stance that TEFAF has taken as a leader in providing an independent overview of the art market, trade and trends in 2016. Annual trade data on art and antiques, sales at auction and through private sales and by art and antique dealers help provide a picture of how the art industry is performing, and the amount of art traded.

2016 saw headline sales, staggering numbers of visitors to art fairs, and almost a day does not go by without an auction sale, art fair, or mention of activity at the top end of the art market, with the art market expressing their opinions and concerns with geo-political issues in a rapidly changing environment.

In this report we take a look beyond the top stories that dominate the global art market. What is the overall state of the art market in 2016? How is the art dealer market fairing in comparison to sales made through global art auction houses?

Which countries are dominating and which countries are accelerating their pace? Which areas of the market are flourishing? Where is trade moving? What are the trends?

As TEFAF celebrates 30 years, in this year's annual TEFAF art market report we take an insightful look into the figures behind the analysis made in previous years to get to grips with the dynamics that are shaping and influencing the world art market in 2016, and give some insight into the trends ahead for 2017.

### **Willem van Roijen**

Acting President TEFAF Board of Trustees  
Chairman TEFAF Executive Committee



## FOREWORD ARTNET

Artnet is proud to partner with TEFAF to present the TEFAF Art Market Report 2017. Widely regarded as the most comprehensive summary of the art market, the annual TEFAF report offers collectors, professionals, and art lovers a global perspective on economic trends in the market. To complement those insights with reliable quantitative facts, we provide the most recent auction data based on our Price Database, which includes over 11 million art auction records dating back to 1985 and is the foundation for an accurate analysis of the market's fluctuations and future trends.

We have collaborated with TEFAF to produce the annual report for more than a decade and are delighted to be working with the esteemed fair once more on this invaluable report.

Artnet is the leading resource for the international art market. Established in 1989, artnet is dedicated to bringing transparency to the art world with a range of products that ensure easy access to latest art market information and news online. With our suite of services, such as the Price Database, Gallery Network, and artnet Auctions, we empower anyone with an interest in collecting or understanding art.

**Jacob Pabst**

Artnet Chief Executive Officer

JACOB PABST - ARTNET CHIEF EXECUTIVE OFFICER



## ACKNOWLEDGEMENTS

*This report by Maastricht University, artnet and TEFAF, is written in partnership with the Maastricht Centre of Arts and Culture, Conservation and Heritage (MACCH) at Maastricht University. The report has been prepared by Professor Rachel A. J. Pownall, who holds the TEFAF Chair in Art Markets at the School of Business Economics at Maastricht University. She also holds the Van Gogh Chair on Art Finance and Museum Management at TIAS School for Business and Society.*

A wide variety of data sources have been collected and analysed for this report, primarily based from art dealers and experts in the art trade. The data have been gathered and analysed by Maastricht University. Thanks goes to all the art and antique dealer associations around the world who helped to facilitate this survey and to all art dealers and galleries who participated in this annual survey. As in previous years, the analysis is complimented with data from artnet on global auction sales data. Their presence as a leading provider of art auction sales data is an asset to the report. I am extremely grateful to Dr. Fabian Bocart, for his dedication and help in providing auction sales data, and for enabling us to categorise and provide a detailed breakdown of their global auction data across a number of art categories, to enable us to gain greater insight for our analyses on auction sales across the three main continents. I am grateful to Dr. Anita Schiller for compiling the dealer location heat maps, and to Kristie Pladson for help with the infographics.

I am particularly grateful to Dr. Anna Dempster, from the Royal Academy who provided continual support. The report forms an integral part into positioning TEFAF with Maastricht University and the Royal Academy, providing a platform for joint academic and educational initiatives.

**Prof. Dr. Rachel A.J. Pownall**  
TEFAF Chair in Art Markets

# A YEAR IN REVIEW

A LOOK AT THE ART WORLD IN 2016 REVEALS SHIFTING MARKETS AND CHANGING TASTES: THE EUROPEAN MARKET GREW, THE AMERICAS DECLINED, AND THE ASIAN MARKET WAS STABLE, WITH HIGH GROWTH OUTSIDE OF CHINA. ART PRICES ARE STEADY.

Auction sales declined in the U.S. and the U.K. amid an increasingly fragmented political landscape; buyers and sellers alike are seeking privacy and opacity in their transactions, to the benefit of art dealers. The industry's success remains rooted in its ability to function according to the principles on which successful societies are built—quality, credibility, stability, and resilience. Discretion is an ironic trend this year, as TEFAF strives for exceptional transparency in estimating the size of the global art market. Looking ahead dealers are optimistic; how the changing landscape influences the picture in 2017 is just about to unfold.

## Market Share of Top 3 Art Countries

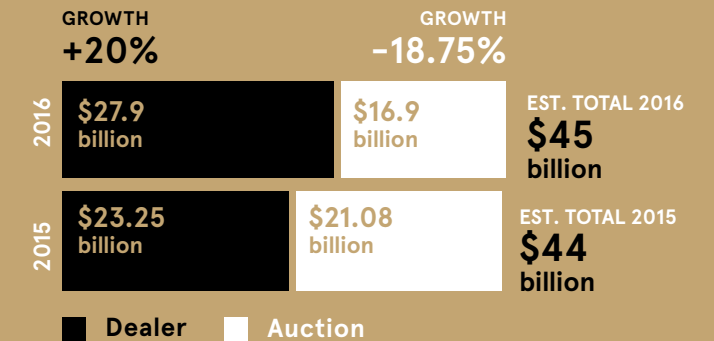


## A Done Deal

Buyers are embracing the support, transparency and discretion that dealers and galleries provide. Dealer sales now account for **62.5%** of global art sales. Reputation is everything: art fairs remain a vital channel for client relations, and over **70%** of dealers report actively encouraging a strong work ethic in their staff.

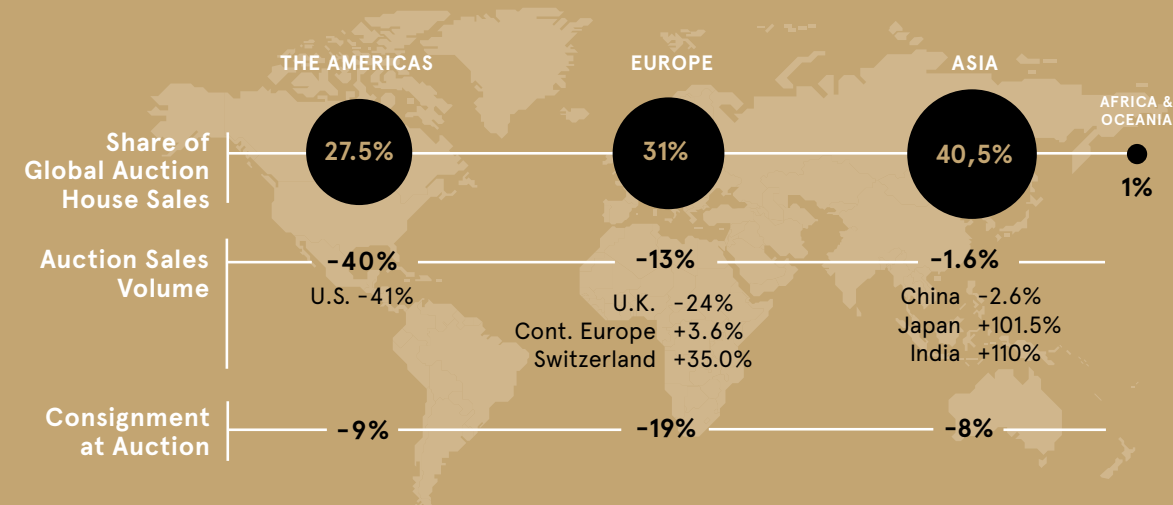


## Global Art Market Sales

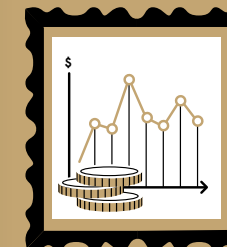


## Under the Hammer

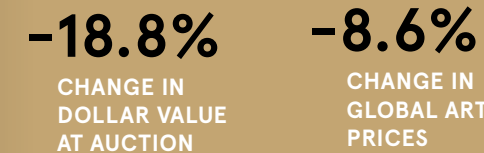
While auction houses are losing their clientele to art dealers, auction sales growth was robust throughout Asia, though China still accounts for nearly **90%** of Asian auction sales. The growth in the Continental European auction market reflects the overall health in the region.



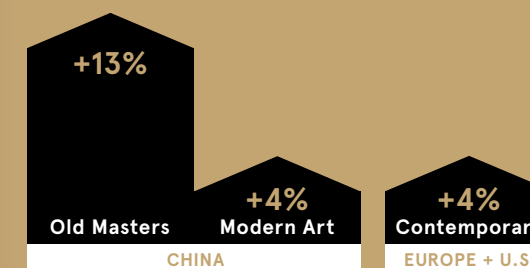
## The Price of the Priceless



Global art prices remained healthy in spite of market changes. The strong dollar had a negative effect on international sales out of the U.S.



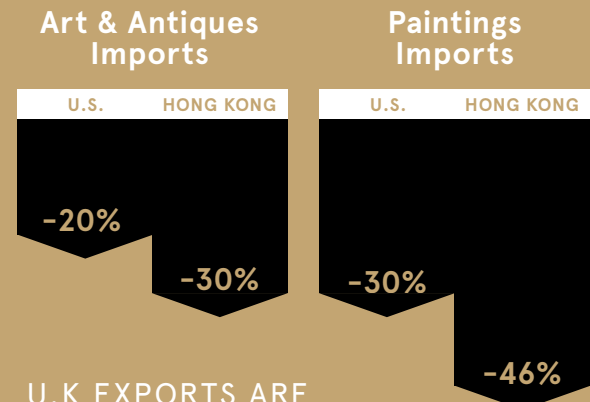
## Price Changes at Auction



## Tricks of the Trade



Europe is the largest global exporter of Art & Antiques. Slowing trade rates into Hong Kong reveal a decline in Chinese imports.



U.K EXPORTS ARE DOWN BY A THIRD, IMPORTS DOWN BY A FIFTH.

## WORLD ART MARKET HIGHLIGHTS IN 2016

1. Total sales in 2016 were \$45 billion dollars, up 1.7% on 2015. We adopt a focused and specific definition of art dealers and art galleries, representative of the industry at hand. The provision of detailed data and an improved classification of art dealers and galleries results in comprehensive data on the art dealer sector from national statistics offices. The focus has the outcome that the industry estimates are smaller, yet we consider this to be more representative of the art and antiques market globally.
2. The report paints a picture of a stable and resilient market, experiencing positive growth. Sales moving away from auction houses to the private sector, both to private sales by auction houses and to dealers. In 2016 public auction sales of works of art, high-end Jewellery and decorative arts reached \$16.9 billion globally, down from \$20.8 billion in 2015.
3. Despite a 18.8% fall over the year in the dollar value of art and antiques sold at auction, prices on aggregate have not fallen as far, down 8.6%. A drop in the price of paintings sold at auction in Europe and Modern Art sold in the U.S; auction prices 4% higher for Modern Art, and 13% higher for paintings in China. Contemporary Art prices are 4% higher on average over the year, in Europe and the U.S.
4. The value of auction sales decreased dramatically in the U.S. (41%), far exceeding the 9% drop in consignments. Auction sales in dollar values fell in the U.K. (24%), in line with the 16% drop in the number of lots offered, and the fall in Sterling. Auction sales in Continental Europe are up 3.6%. Whilst Asia has remained strong and stable over 2016; now with the largest share of auction sales globally.
5. The Asian auction market remained buoyant in 2016 with auction sales down -1.6%, whilst China is down 2.6%. Asia now accounts for a 40.5% share of world auction sales, up from a 31% share in 2015. China dominates Asian auction sales with almost 90% share. Auction sales in Europe and the Americas are fairly equally balanced; Europe attracting 31% of world auction sales, and the Americas with 27.5%; down from 37.5% in 2015. With Africa and Oceania together only representing 1% of auction sales.
6. The value of auctions sales across the three continents becomes more evenly distributed once privately brokered sales at auction are taken into the picture. The respective shares over the main continental players are China 36%, Europe 33%, and the Americas with 30%.
7. Taking into account retail sales from art and antique dealers, Europe, with over half of world's dealers, is by far the largest continent for art and antiques sales in the

world in terms of share of sales volume in 2016. Including the dealer market, the U.S. remains the largest country in the world art market, with a 29.5% market share, followed by the U.K. with 24%, and by China with 18%.

8. Art auction and dealers' sales are reflected in cross-border trade figures, with Europe remaining the largest global exporter of artworks, collector pieces and antiques, as defined by the United Nations. Full trade figures are not yet published for 2016, comparable trade during 2016 to trade in 2015 for the same period indicate that U.S. export trade remains strong, but imports in art and antiques are down 20%. U.K. trade has fallen during 2016 and Hong Kong trade data reveals imports are also slowing into China.
9. Private sales through dealers and galleries have been strong. Asia, in particular the Middle East showing strong growth. Traditional centres for art dealers are still very much flourishing and alive. Europe's dealer market is 20% larger than last year. With healthier financial profits and the highest number of dealers, the European dealer market is the largest globally, with 54% of all dealers residing in Europe.
10. A larger proportion of dealers (62.5%) to auction (37.5%) market sales, globally underpins the structure of the art market. Traditionally opaque, the dealer market is benefiting from buyer confidence stemming from greater access to information and transparency on prices, preferring to buy through dealers than at auction. Privacy and anonymity, cherished in the Western world, in times of austerity and political tensions.
11. Art Fairs, both local and global, are the most important point for acquiring new buyers, which is the largest concern of art dealers and galleries reporting to our annual survey. Encouraged actively, by over 70% of dealers surveyed, for a strong work-ethic, reputation and credibility remain key drivers for survival and longevity in the market. Once hesitant about the online market, the industry appears to have reached a level of acceptance for online sales as an important channel for lower-end art and antiques sales.
12. The building blocks of the art market depend fundamentally on quality, and trust; key to this are maintaining reputation and credibility, to ensure longevity, stability and resilience. The world's art markets are anchored into the fabric of our society, historically and socially. How resilient they are, depends on the foundations of trade, rather than on the terms of trade. There has been a resilient recovery since the 2008 financial crisis. There is much optimism for 2017.





# CONTENTS

## INTRODUCTION

- 19 INTRODUCTION
- 20 DEALER MARKET FOR ART AND ANTIQUES
- 22 AUCTION MARKET FOR ART AND ANTIQUES

## WORLD ART MARKET OVERVIEW IN 2016

- 26 WORLD ART SALES
- 42 WORLD ART TRADE & TRENDS
- 64 DATA COLLECTION AND VALIDATION

## EUROPE

- 72 EUROPE ART MARKET HIGHLIGHTS
- 78 EUROPE ART SALES
- 99 EUROPEAN COUNTRIES ART TRADE & TRENDS

## THE AMERICAS

- 136 THE AMERICAS ART MARKET HIGHLIGHTS
- 141 THE AMERICAS ART SALES
- 165 THE AMERICAS ART TRADE & TRENDS

## ASIA

- 182 ASIA ART MARKET HIGHLIGHTS
- 187 ASIA ART SALES
- 203 ASIAN REGIONS ART TRADE & TRENDS

## APPENDIX

- 213 DATA & METHODOLOGY

# INTRODUCTION



## INTRODUCTION

To reflect the position of TEFAF, as a global player for dealers and galleries in the market, with the complete range across the history of art being on show at the fairs, we have maintained the global stance in this report.

The focus and flavour has evolved this year to reflect a number of important changes; a new CEO at TEFAF since 2015, Patrick van Maris, a renewed strategy, and a new author preparing the report. We have attempted to maintain as much consistency with the style and content of the Art Market Reports commissioned by TEFAF in previous years. Consistency as far as possible is vital in maintaining the comparative style of the report such that year-on-year figures can be analysed, and developments and changes in the art market can be interpreted.

This year represents an exciting year in the market. Auction sales were much lower during the first half of 2016, reflecting a turbulent and uncertain world. Sales picked up during the second half of the year. The number of consignments at auction dropped dramatically. The United States has experienced much fewer sales at auction. Overall auction prices are down slightly. Yet in 2016 dealers have reported a jump in sales and growth.

2016 has been a year of change. A shift in tastes. Not just in the types of artworks sold; sales channels have also gradually been changing. Overall the art market, in terms of value, the art market globally is larger than a year ago. There are many differences that need recognition.

## DEALER MARKET FOR ART AND ANTIQUES

Our focus in this year's report is on the structure of the art dealer market and the numerous art dealers and galleries worldwide. Auction houses figures are readily available, yet the dealer side of the market is opaque and lacks transparency.

Simply because the majority of art dealers and galleries worldwide are small establishments, sole traders without employees, some trade goes unreported. Micro businesses are the beating heart of the retail sector in national economies, and art dealers and galleries form the fabric of the art trade. At the higher priced end of the market, profitable private dealers operate as 'arts establishments'. Needless to say, some sales go unrecorded into tax havens or through off-shore arrangements, or in a temporary period of flux, whilst located in one of the world's, increasing in number, Freeports.

We do not attempt to incorporate the size of the informal art market. It is therefore near impossible to put an exact number on the size and volume of sales made privately in this sector of the market.

In an attempt to determine the size of the dealer market, we gain a fresh perspective of the size of the art dealer market using the lens of employment, establishment, and sales data on retail trade for the largest trading countries in art and antiques. Data are drawn from offices of national statistics. Financial data on private companies are drawn from Orbis, a database which prides itself in having information on over 200 million private companies worldwide. The industry classifications for art dealers, commercial galleries, antiques and retail trade, including auction houses, have been gathered.

The art market, is a broad term, and has been broadly described to include other areas of the arts. Central to the definition used in this report are the definitions associated with the commodity codes for art, collectors' pieces, and antiques. Both in line with tax regimes and definitions of tariffs, as well as for export and import data.



## AUCTION MARKET FOR ART AND ANTIQUES

Data for auction sales is predominately from artnet. The artnet database provides end of year information on auction sales from a total of almost 30,000 auction houses worldwide. Only 216 auction houses short of 30,000, the database has extended its coverage of global auction houses considerably since 2010. Data over the past five years are comparable in terms of volumes and values. Before then, as artnet extended its own database, volumes naturally increased; in particular prior to 2012. Since then the number of auction houses comprising the artnet data have remained relatively stable with over 28,000 auction houses.

So how representative is artnet data currently for the whole auction sales market for art and antiques? We have extensively assessed the coverage of missing data, using information on the number and size of the world's auction houses. In conclusion, we can say with a high degree of accuracy, that auction houses not covered by artnet currently account for an extremely small fraction of the overall distribution. In the past this may have been higher, and therefore a multiple may have been appropriate to account for auction house data not covered. The auction data coverage by artnet captures more than 95% of art and antiques auction sales data globally. Smaller auction houses that are not currently included in the data represent at most 1% of the sales distribution. The lack of representation in Japan, and some other countries by artnet result in an under-representation of at most 4% of sales value. Errors in reporting by auction houses themselves can have a more significant influence on the size of the market; particularly for countries not reporting prices including buyers premiums, when other countries do.

Considering that the top 10 auction houses account for almost 60% of all auction sales in the artnet database, and the largest 100 cover over 93%; it becomes easier to comprehend that as long as the world's major auction houses are covered - currently thousands in the artnet database - then even if a large number of smaller auction houses will only contribute to a marginal, less than 1% at most, increase in sales volume. We therefore refrain from using any additional multiple on the auction data to represent any missing auction houses, preferring instead the conservative approach, to include the margin of error on our world auction sales figures of 5% instead.

## THE CATEGORIES ARE DEFINED AS FOLLOWS FOR ARTWORKS SOLD AT AUCTION

### Ancient Art

- Sculpture, Design, La Haute Joaillerie and Installation pre 1250

### Antiques

- Decorative Art and Antiques
- Sculpture 1250-1874

### Paintings

- Old Master 1250-1820
- Impressionists, and Post Impressionists, 1821-1874
- Drawings pre 1875
- Installation

### Modern 1875-1945

- Paintings, Sculpture, Prints

### Postwar and Contemporary

- Paintings and Drawings post 1945
- Prints post 1945
- Photography post 1945
- Sculpture post 1945

### Paper

- Prints pre 1875
- Books, Maps, Manuscripts

### Design

- Design

### La Haute Joaillerie

- La Haute Joaillerie post 1250

The categories are defined as follows for artworks sold at auction to keep in line with the types of artworks sold in the various categories in the TEFAF sectors, as well as in consideration with the United Nations trade data. Paintings is broader than Old Master Paintings, by including Impressionist and Post-Impressionist Art, Drawings pre 1875, and a small number of Installations. Classical Antiquities is referred to using the TEFAF categorisation as Ancient Art.

# WORLD ART MARKET OVERVIEW IN 2016

# WORLD ART SALES

This report presents a critical and temporary examination of the art industry. Alongside auction house results, the dealer market is analysed in detail, so that the overall size of the art market industry at the year-end 2016 can be established. Our focus is on artworks, collector pieces and antiques of a minimum value, in terms of quality and price.

The pattern that emerged for art retail trade, is that trade by art and antique dealers is a large share of the market. In spite of limitations, the available data shed irrefutable light on the importance of the dealer segment of the market. Our analysis leads us to present the dealer market as significantly larger than the auction sales market in the world. The larger share of dealer sales to auction sales is undeniably the case in Europe, both in Continental Europe and the United Kingdom. Using year end 2016 data we are able to put a (minimum) value on the size of the art dealer market across continents in terms of auctions house sales and dealer sales. We distinguish here between dealer sales and sales made at auction, in the traditional sense, and later we will include privately brokered-sales by auction houses, which blur the distinction between the private and public sector, yet form an integral part in the picture of how the market is changing.

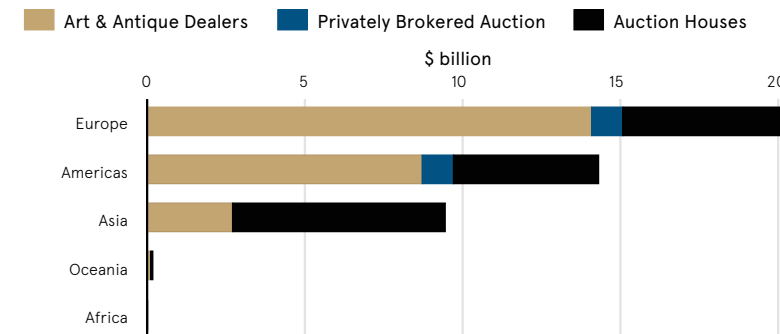
Art and antiques sales in 2016 by dealers in Europe is at least \$14.2 billion, with \$5.22 billion being sold through auction houses. Including conservative estimates for privately brokered sales saw the European market reach over \$20.5 billion.

The Americas now fall behind both Europe and Asia in terms of auction sales during 2016. Including privately brokered sales which are reported separately to us, results in \$5.7 billion in sales, and an additional \$8.8 billion sold by art and antique dealers. Totaling \$14.5 billion in art sales during 2016 for The Americas.

Asian auction houses have by far the largest reported sales during 2016, with \$6.81 billion dollars, including as far as we are aware privately brokered sales in their reports. The dealer market is estimated to be a smaller fraction of overall sales, although in some countries art and antique dealer activity is flourishing and showing strong performance for 2016. The art market in Asia is just short of \$10 billion dollars. Sales are reported globally in U.S. dollars, having gained in strength against the Chinese Yuan Renminbi, the Euro, and Sterling over 2016.

Sales in the world art market reached at least \$45 billion dollars over the year.

FIGURE 1: WORLD ART MARKET TOTAL SALES BY CONTINENT IN 2016



Maastricht University Graphic  
Sources: artnet, Auction Houses, Orbis & MACCH Global Dealer Survey 2017



TOP 20 ARTWORKS SOLD AT AUCTION DURING 2016

Artist	Work	Auction house	Month	Price incl. premium
CLAUDE MONET	MEULE	CHRISTIE'S NEW YORK	NOVEMBER	\$ 81,447,500
WILLEM DE KOONING	UNTITLED XXV	CHRISTIE'S NEW YORK	NOVEMBER	\$ 66,327,500
PABLO PICASSO	FEMME ASSISE	SOTHEBY'S LONDON	JUNE	\$ 63,537,444
PETER PAUL RUBENS	LOT AND HIS DAUGHTERS	CHRISTIE'S LONDON	JULY	\$ 58,002,713
JEAN-MICHEL BASQUIAT	UNTITLED	CHRISTIE'S NEW YORK	MAY	\$ 57,285,000
AMEDEO MODIGLIANI	JEANNE HÉBUTERNE (AU FOULARD)	SOTHEBY'S LONDON	JUNE	\$ 56,547,723
EDVARD MUNCH	PIKENE PÅ BROEN (GIRLS ON THE BRIDGE)	SOTHEBY'S NEW YORK	NOVEMBER	\$ 54,487,500
REN RENFA	五王醉归图卷 FIVE DRUNK LORDS COMING BACK	POLY INTERNATIONAL AUCTION CO., LTD.	DECEMBER	\$ 44,117,647
CUI RUZHUO	飞雪伴春 THE GRAND SNOWING MOUNTAINS	POLY AUCTION (HONG KONG)	APRIL	\$ 39,564,634
CY TWOMBLY	UNTITLED (NEW YORK CITY)	SOTHEBY'S NEW YORK	MAY	\$ 36,650,000

Artist	Work	Auction house	Month	Price incl. premium
FU BAOSHI	云中君和大司命 THE GODDESS OF CLOUD AND THE GOD OF LONGEVITY	POLY INTERNATIONAL AUCTION CO., LTD.	JUNE	\$ 35,024,669
FRANCIS BACON	TWO STUDIES FOR A SELF-PORTRAIT	SOTHEBY'S NEW YORK	MAY	\$ 34,970,000
ZHANG DAQIAN	PEACH BLOSSOM SPRING	SOTHEBY'S HONG KONG	APRIL	\$ 34,906,633
GERHARD RICHTER	A B, STILL	SOTHEBY'S NEW YORK	NOVEMBER	\$ 33,987,500
HENRY MOORE	RECLINING FIGURE: FESTIVAL	CHRISTIE'S LONDON	JUNE	\$ 32,766,732
MARK ROTHKO	NO. 17	CHRISTIE'S NEW YORK	MAY	\$ 32,645,000
ZENG GONG	肩事帖 JU SHI TIE	CHINA GUARDIAN AUCTIONS CO., LTD.	MAY	\$ 31,686,745
ORAZIO GENTILESCHI	DANAË	SOTHEBY'S NEW YORK	JANUARY	\$ 30,490,000
WU GUANZHONG	周庄 THE ZHOU VILLAGE	POLY AUCTION (HONG KONG)	APRIL	\$ 30,434,334
RAJA RAVI VARMA	RADHA IN THE MOONLIGHT	PUNDOLE'S	NOVEMBER	\$ 29,446,450



The art market in 2016 is stable and robust. There are two major trends taking place. The total revenue generated by dealers is 20–25% higher than in 2015. Whilst auction houses are taking more in privately brokered sales, resulting in less reported sales at auction. With some major auction houses selling almost as large a fraction of their auction sales privately, at an estimated global figure of over \$2 billion. Taking these two trends together we find that despite a \$3.91 billion fall in reported sales at auction, the private sector more than compensates for this lost revenue. As we review the year at the end of 2016 we find that the world’s art markets are larger and optimistic.

High-end artworks are selling through privately brokered sales to wealthy collectors, who are less willing to reveal their willingness to pay at auction openly. Privacy, financial opacity, and the ability to remain anonymous, appears more prevalent in the Western world. At a time where austerity has resulted in much cited global inequality, and revelations about the enormity of hidden financial wealth, buyers at the top-end of the market are preferring privately brokered deals to the traditional auction setting of bidding by open outcry. With record numbers of guarantees being offered by auction houses, experts and the role of expertise are changing the landscape at auction houses.

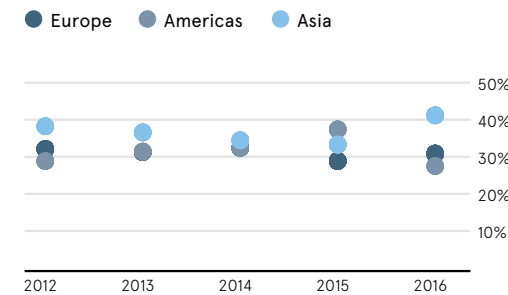
The growth in the dealer market is a natural reaction to the cultural and societal changes experienced in the economy, post financial crisis. A market shift has occurred. Only partially at the expense of reported auction house sales, as buyers move more towards the private sector. In 2016, reported auction sales totaled \$16.9 billion, down 18.8% globally from \$20.8 billion in 2015. Evidence of these market shifts comes primarily from the fact that auction volumes have also decreased, by 21.5%, whilst prices have remained strong. Auction sales volume decreased most dramatically in the U.S. (41%), falling also in the UK (24%) as measured by the number of consignments or lots offered. Secondly the rise in reported retail sales from offices of national statistics, and the strong observed rate of growth in the art and antique dealer market, depict a market shift.

This shift from auction to private sales has been less significant in Asia, with Asia’s auction market now at the level it was at the start of 2015 down 1.6% on the year, with stable sales volume and value sold at auction during 2016 of \$6.81 billion dollars. Relative to the fall in the Americas with sales of \$4.65 billion and certain sectors of European auction sales, where sales in total were \$5.22 billion explains why auction sales are now in Asia a much larger segment of the market than in Europe and the U.S.

Asia has the largest continental share of auction sales globally with 40.5%. Europe accounts for 31% of auction sales in terms of U.S. dollar values, and the Americas 27.5%. Africa and Oceania together only representing 1% of world auction sales.

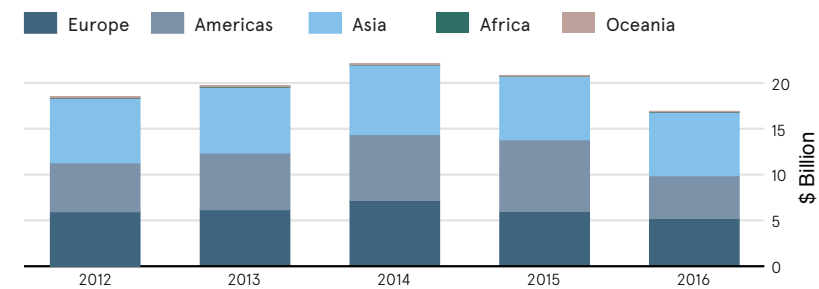
The observed shift towards auction sales growth to Asia is a phenomenon of structural market change between sales channels from auctions to private sales within Europe and the U.S. and not an indication of markets shifting Eastward.

FIGURE 2: WORLD AUCTION SALES MARKET SHARE ‘CONTINENTAL DRIFT’



Maastricht University Graphic | Source: artnet

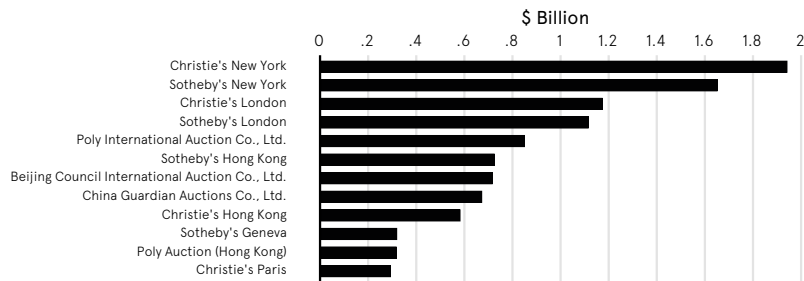
FIGURE 3: WORLD AUCTION HOUSE ART SALES BY CONTINENT



Maastricht University Graphic | Source: artnet

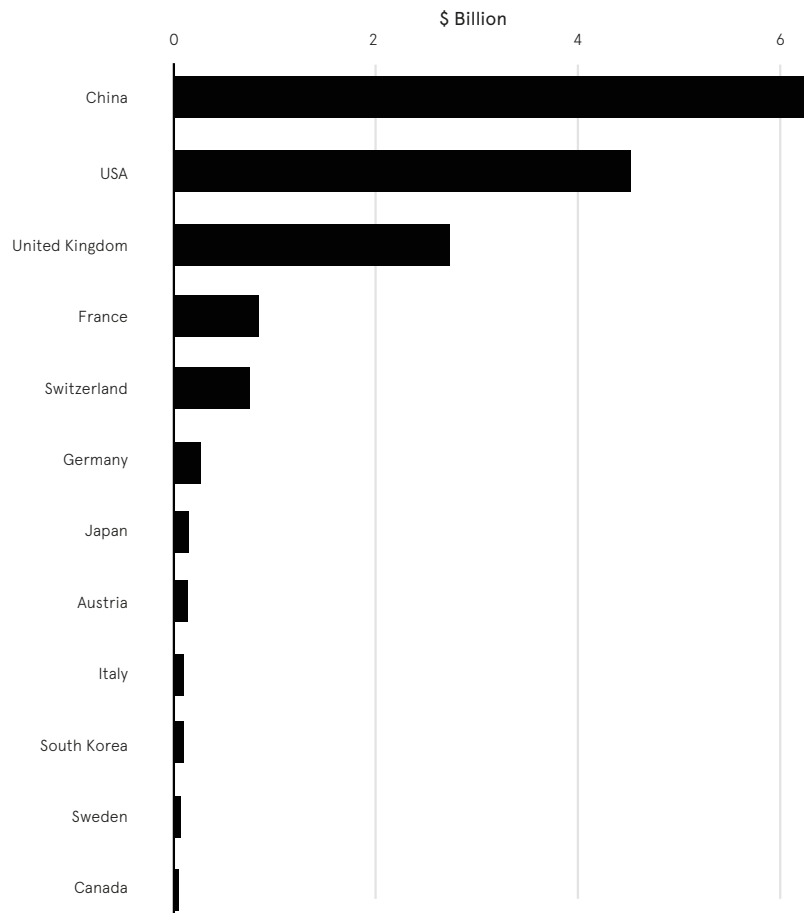
WORLD GROWTH IN ART SALES IN 2016 IS STEADY WHEN ACCOUNTING FOR BOTH DEALER AND AUCTION MARKETS TOGETHER.

FIGURE 4: WORLD AUCTION SALES TOP 12 AUCTION HOUSES IN 2016



Source: Maastricht University Graphic | Source: artnet

FIGURE 5: WORLD AUCTION SALES TOP 12 COUNTRIES IN 2016



Source: Maastricht University Graphic | Source: artnet

Looking back over 2016, the two most expensive sales occurred at Christie's New York, during the November sales, as sales at U.S. auction houses had a resurgence towards the end of the year. A record best for Claude Monet was reached at the Rockefeller Center, for one of the artist's later paintings in the Grainstack series during the Impressionist and Modern Art sale.

Christie's New York recorded the highest dollar value in auction sales during 2016 with sales just shy of \$2 billion. A large fraction of sales are additionally reported privately by the major auction houses, with Christie's posting a value of private sales of \$0.936 billion, over the whole year. The second half of the year recording more private sales than during the first six months. Sotheby's in New York, sold the Amedeo Modigliani in June, taking its top spot of the year. Overall sales at Sotheby's New York were \$1.65 billion dollars for the year. Privately brokered sales at Sotheby's are not publicly released until February 27th, after the report has gone to press, but are forecast to be between \$0.6 and \$1 billion annual across the U.S. and UK.

London sales, in pounds did well during July, following the drop in Sterling after the shock to the economy from the outcome of the advisory U.K. referendum to leave the European Union. 'Lot and His Daughters', by Peter Paul Rubens became the highest Old Master painting to ever sell at Christie's, throughout its entire 250-year history.

The Old Master was narrowly tipped in London by the Evening sale on June 21st, just days before the referendum, when Pablo Picasso's 'Femme assise', attained the highest price for a painting sold in London for over five years. Also setting a record for Cubist Art.

Central London sales by both Christie's and Sotheby's at auction each surpassing the one-billion-dollar mark; \$1.17 billion at Christies' London and \$1.15 billion at Sotheby's London.

Poly International Auction Company sold the highest priced Chinese work of art during 2016 by Ren Renfa in December. Poly, the largest Asian auction house, in terms of sales, totaling \$850 million in 2016. The sixth largest auction house was Sotheby's Hong Kong Sales, followed closely by Beijing Council International Auction Company, and China Guardian Auctions Company. Whilst Christie's Hong Kong, the ninth largest auction house in terms of auction sales value, was followed this year by the Swiss auction house, Sotheby's Geneva, for the tenth spot. Sales by Swiss auction houses are up 34.6% on the year. Sales at Sotheby's Geneva have lifted Switzerland to the fifth largest country in terms of auction house sales by country. France also gained ground on other leading countries, with a boost in the price of art and antiques sold at auction. Overall auction sales in France were only down by 1.3%, whilst taking Continental Europe as a whole, auction sales were up 3.6%.

In terms of auction sales, it is China, which includes sales in Hong Kong, that has become the country with the highest reported sales in 2016, despite a 2.6% drop in reported sales to \$6.33 billion dollars in 2016. The Chinese auction market is at a similar level as at the beginning of 2015. With sales occurring predominately in the auction market in China, Asia has experienced less of a market shift in sales from the auction market to the dealer market as in other countries.

In 2016 the United States lost its position as the largest seller of art and antiques at auction, with a 40.7% drop in sales value occurring at auction. With such a large fraction of auction house sales now occurring privately in terms of privately brokered auction house sales, rather than sales at auction, the drop in U.S. sales is not as dramatic as at first sight. However, the strong dollar is making the U.S. less attractive to foreign buyers.

Sales that occur online through platforms and are explicitly included in our auction house and dealer sales. The Hiscox online art sales report, prepared by ArtTactic, gives a breakdown of online platforms and sales, during 2015, this was reported to be \$3.27 billion, and set to rise given the indication of our dealers in the survey that just over two-thirds of dealers reporting that online sales channels will increase in future (both through their own websites and also through 3rd party sales). Sales at Heritage Auction, Auctionata, Christie's online, Saatchi Art and Artsy together total less than half a billion in sales, and the revenue generated appears in the total turnover reported by auction houses to artnet, and by dealers in their annual reports, as well as to us in our 2017 annual survey. We refrain from aggregating online sales platforms to our world sales figures to avoid double counting.

Similarly, sales stated to have taken place via Instagram, and other social media sites which act as a medium for marketing, are incorporated in our dealer sales as they contribute to art dealer and galleries' annual sales figures. What is important to mention is that the internet and social media are changing the way that information is obtained. Empowering buyers and another factor driving sales to the private sector. It is a game changer. Paddle8 filed for bankruptcy to restructure its own business, at a time when the market is also in restructure.

Artsy, a platform facilitating sales for galleries and dealers, has also experienced a growth in the total number of known sales of more than 120% year on year for 2016. Half of their traffic comes from people in the U.S., and their representation is predominately in North America and Europe, reflecting the location of the majority of dealers worldwide. All galleries represented on Artsy were surveyed in this year's annual report, as well as all galleries attending one of the world's top 50 art fairs. From those, 37% of over 300 respondents said that 10% of their sales occur through a 3rd party website, and over 50% responded that 10% of sales occur through their own website.

However, the fraction of sales, in terms of value sold online is much less than the 10% of sales. Since sales occurring online are predominately sales at the lower end of the price range. In 2015, as estimated in the Hiscox online art sales report, over 75% of fine artworks sold are less than \$5000 in value, and over 25% are less than \$500. For wine and stamps over 70% sold online is less than \$500. eBay sells over 800 million items, and a large fraction of art and antiques. We refrain from including sales through eBay directly into the report, and other online platforms with sales values below \$500. Once hesitant about the online market, the industry appears to have reached a level of acceptance for online sales as an important channel for lower-end art and antiques sales.

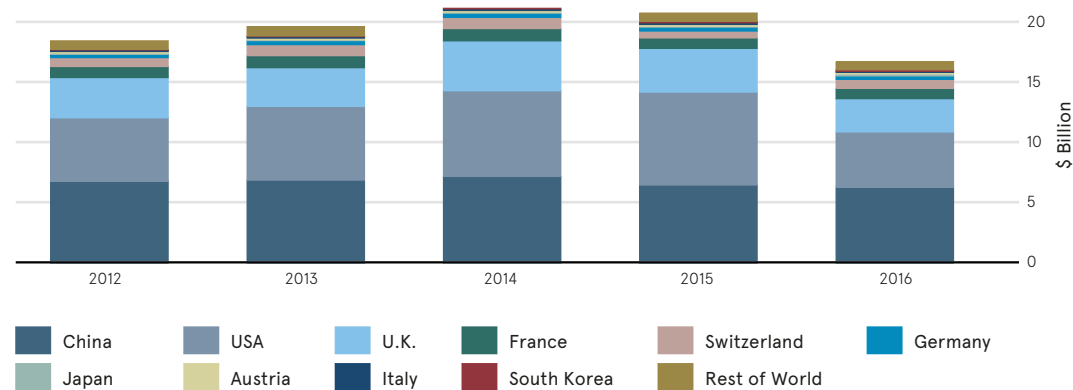


With the fraction of auction sales reported by the top 10 auction houses in 2016 now 58%, 6% less than in the year preceding, according to the TEFAF report 2016, market share has been further creamed off by private sales; both towards privately brokered auction house sales, as to private art dealers and galleries. The distinction between dealer and auction markets becomes more blurred in the intersection between these two market areas. Regarding privately brokered sales at auction, as dealer sales, renders the dealer market as an even larger fraction of the overall market.

Private sales at auction notwithstanding, the share of the dealer market globally is just under 60%. When including privately brokered sales as part of the dealer market, the share of auction house sales globally, represents even less than 40% of art market sales in 2016.

Taking a look at auction sales by country with largest sales.

FIGURE 6: WORLD ART SALES AT AUCTION BY COUNTRY



Maastricht University Graphic | Source: artnet

In 2016, public auction sales of works of art, high-end Jewellery and decorative arts reached \$16.9 billion globally, down from \$20.8 billion in 2015. In China, the untried world leader in terms of public auction sales, the slowdown of economic growth coincides with a contraction of auction turnover by 2.6%. In the contemporary market in China, collectors moved away from young Contemporary artists to embrace more experienced Post-War artists, who were also their generational counterparts. As a noticeable change, Chinese collectors of antiques also turned their interest to Old Master drawings and paintings and away from decorative objects.

Nevertheless, the storm that is reshaping the landscape in the art world has come from the U.S. and Europe. Auction houses have drastically shifted their strategy towards private deals in lieu of public auctions. Collectors too, have completely reshuffled their cards in 2016, by losing their appetite for traditional blue chip artists. For example, Andy Warhol, traditionally a heavy-weight Post-War artist, experienced a 68% drop in auction sales volume, from \$525 million in 2015 down to \$168 million in 2016 worldwide. Pablo Picasso, a definitive representative of Modern Art, saw his global auction sales drop 50% from \$652 million in 2015 to \$327 million in 2016. Modigliani, Bacon and Twombly also saw their auction sales drop by more than 60%.

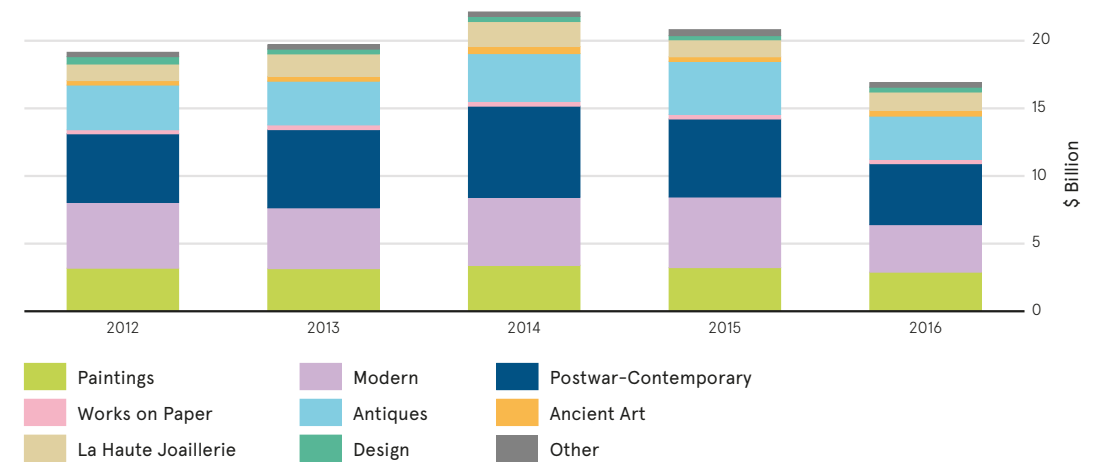
Naturally, the surge in dealers' activities and private sales in the U.S. and in the U.K. are in part to blame for the apparent collapse of auction sales. However, the fall from fashion of artists who once used to be considered rock-solid investments is also confirmed by a drop in their auction sales prices. It seems 2016 shook the foundations of many in the market, flipped the odds against the blue chip status quo, and raised interests for Old Masters and different types of objects (Design, Precious Books, and Prints, to name a few). It is of interest to see the trends of artists selling at auction in terms of value sold during 2016. The indication of the change in value at auction needs to be taken with discretion, depending on prices of these artists attained through dealers. This is when an index of artists' prices becomes useful, as it distinguishes between artists and takes into account the characteristics of artworks.

In trends across the globe, most strikingly in the US, collectors are more inclined to secure deals away from auction publicity as auctioneers facilitate a greater number of exclusive sales for those in the know. Public auction houses are globally repositioning their auctions in a primary role: selling estates publicly. Curatorial expertise is shifting more to dealers who have been steadily and surely reshaping the market landscape; securing in the process a significant share of the art market away from auction houses.

TOP 20 ARTISTS BY SALES VOLUME AT AUCTION

2016 Rank	2015 Rank	Artist	Volume at auction (\$)	Change in auction sales
1	1	PABLO PICASSO	327,847,720	-50%
2	8	ZHANG DAQIAN	324,047,476	46%
3	13	QI BAISHI	225,269,913	21%
4	20	WU GUANZHONG	196,266,790	71%
5	12	GERHARD RICHTER	189,626,783	-8%
6	3	CLAUDE MONET	177,232,236	-48%
7	18	JEAN-MICHEL BASQUIAT	172,084,240	30%
8	2	ANDY WARHOL	168,012,729	-68%
9	22	FU BAOSHI	153,980,124	49%
10	26	CUI RUZHUO	124,214,064	33%
11	35	WILLEM DE KOONING	116,598,338	54%
12	16	ALEXANDER CALDER	101,853,933	-26%
13	29	JEAN DUBUFFET	100,518,878	19%
14	21	ZAO WOU-KI	90,323,393	-21%
15	24	MARC CHAGALL	89,906,663	-10%
16	5	AMEDEO MODIGLIANI	86,872,166	-65%
17	6	FRANCIS BACON	85,990,706	-63%
18	42	HUANG BINHONG	82,068,408	32%
19	7	CY TWOMBLY	77,972,795	-65%
20	17	LI KERAN	72,604,031	-46%

FIGURE 7: WORLD AUCTION HOUSE SALES BY CATEGORY



Maastricht University Graphic | Source: artnet

The overall fall in sales value is partially due to the number of consignments at auction dropping. This reduced supply to auction houses for public auctions is particularly apparent in the U.K. and the U.S. Consignments in the U.K. and the U.S. have moved away from the auction houses, to the private sector.

Modern, and Postwar & Contemporary, have consistently accounted for fifty percent of sales value at auction in recent years. In 2015 this fraction was 53%. Despite the fall in sales at auction worldwide, 2016 also shows a drop in the fraction of Modern, and Postwar & Contemporary, accounting for 47.5% of auction house sales worldwide.

A foundation of the art market sales, paintings at auction remain strong, particularly in Asia, with prices 13% higher. The U.S. has also experienced a 4.85% increase in the price of Old Masters and Impressionist Art over 2016.

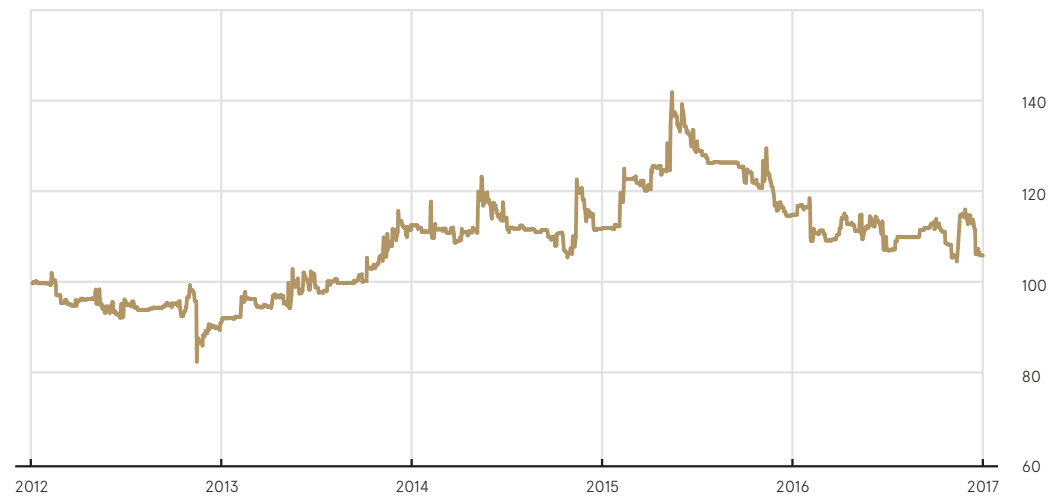
Only in Europe have the prices of paintings fallen; over the past five years Old Masters and Impressionist prices have dropped 10% since 2012, with a 3.75% fall in 2016. At the global level, Paintings, have fallen only slightly in total sales value, with fewer consignments, but strong sales in China and the U.S. at auction have kept this area buoyant. The fraction of paintings within world trade has increased from 15.5% in 2015 to over 17% in 2016.

In 2016 the sales of Ancient Art, La Haute Joaillerie and Design exceeded the value sold at auction in 2015. The fraction of world sales having increased to 2.5% for Ancient Art, to 8% for La Haute Joaillerie, and to 2% for Design. The fraction of antiques is still 19% of world sales. Over the past five years prices for Modern Art in Europe have fallen by 16%, yet 2016 showed a rebound, with a 2% increase in prices. Prices have increased for Contemporary Art globally.

A daily world art price index, constructed by artnet, shows that over the year, prices are only down 8.63%. This differs across the three main continents, Europe, the Americas and Asia, and in terms of category, is further analysed in the individual chapters in the report.

The overall picture is one of general prices having peaked during July 2015, and by the start of 2016, they were back to the level seen at the beginning of 2014. Over 2016 prices have fallen to the level they were at between 2014 and 2015, roughly 15% higher than the market trough in November 2012, and still 6.25% higher than five-years ago.

FIGURE 8: WORLD DAILY ART INDEX



Maastricht University Graphic | Source: artnet

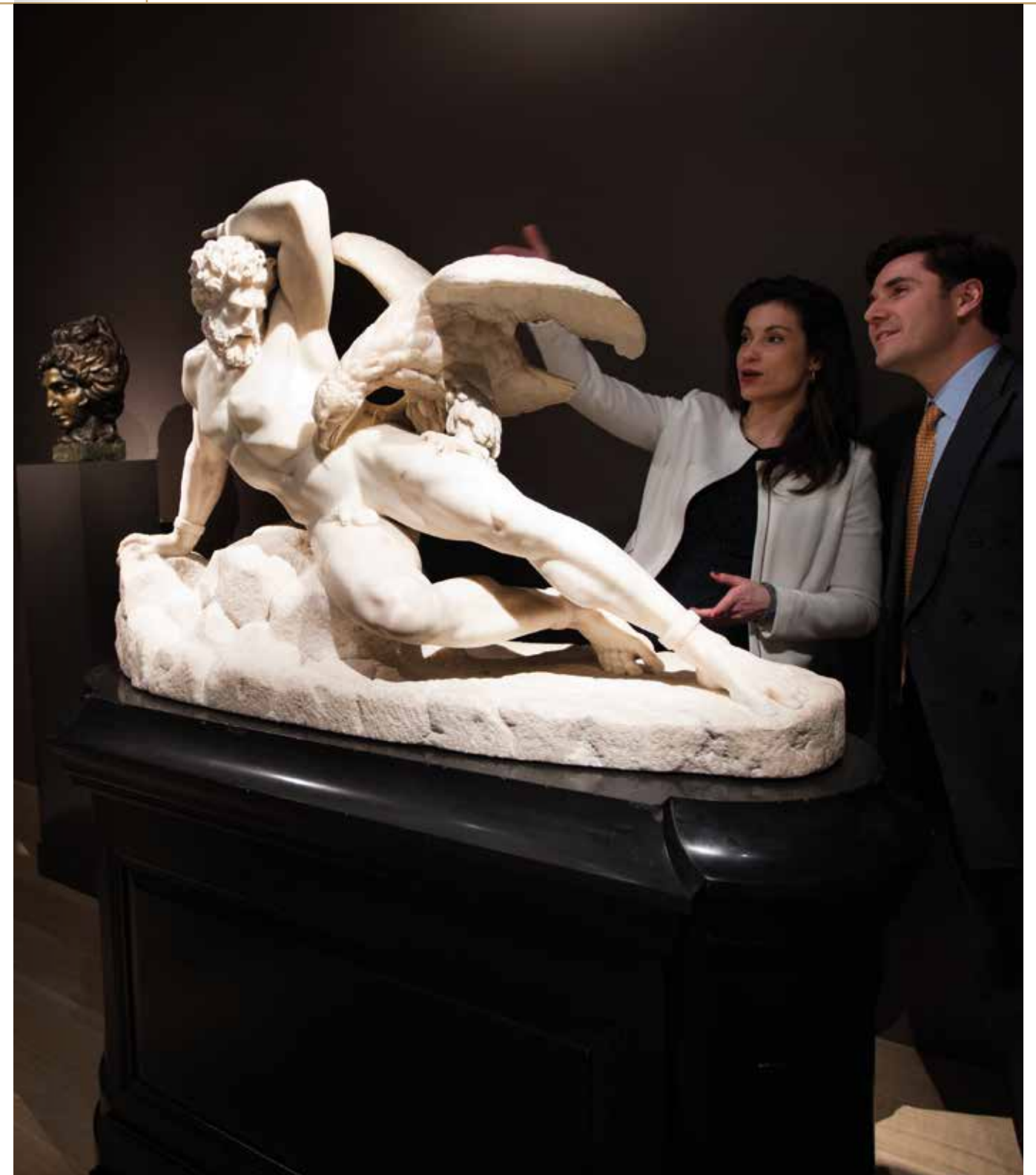


## WORLD ART TRADE & TRENDS

To establish the relative size of the art dealer industry we use as a starting point economic census data. This type of aggregate data provides an indisputable measure of the number of dealers registered and active in the art and antiques trade. These data are available for many mature markets. For some countries this is up-to-date, and for others this reflects the not too distant past. It is important to highlight that this type of data provide a rich and comprehensive guide to the size of the dealer market, and the structure and state of the art industry from the dealer share of the market. Economic data on the art dealer industry is retrieved from the most recent source, and at most within the last five years.

A final estimate for the size of the art market at the end of 2016 is given based on the structure and distribution of dealers in the art trade and using average growth figures posted by dealers worldwide from company reports and from our survey. For the countries well represented in this year's art dealer survey we further compliment this data and provide a deeper analysis into the current trends and concerns related to some of the key issues in the art dealer industry. These results will naturally be reflective of those countries who responded. To those art dealers who responded we thank you for your input.

Needless to say, it is the art and antique dealers in this market, who hold the key to the developments and the true size of this market, likely to remain opaque in nature, in a market where information is decisive.



In terms of numbers of establishments, the number employed and the influence globally, at art fairs and beyond, the art dealer segment of the market takes the lead. The movement of high level executives moving from auction houses, and auction houses themselves, moving more into the private sales space is blurring the line even more between traditional auction house and art dealer segments. Their focus on high-end private sales reflects the attractiveness of this segment of the art market in terms of profitability.

The world over, how the dealer segment relates in terms of size and influence to the auction houses is different. There is a large degree of variety and scope across regions, countries and continents, in terms of the number of dealers, and the average number of people employed. The share of art dealers and galleries is much higher in Europe and The Americas, where much retail trade flows through smaller establishments. In China there are over 4400 galleries and art dealers, which is much smaller than the 21,000 reported by the Bureau of Labor Statistics in the United States. Central Europe has a large number of art dealers and galleries, far outweighing sales made by auction houses in those regions. Detailed employment data by sector is not available for many Asian countries.

It is important to understand that the dealer market remains the pivotal axis for bringing together buyers and sellers, for sales to established collectors and for nurturing new collectors. Dealers facilitate. They provide a great service to the industry bringing people in the retail sale sector together, and disseminating expert information, in both the primary and secondary markets.

Auction houses provide an additional important service to the industry in revealing information on prices. The transparency of the open outcry auction system, supported by in-house expertise in setting pre-auction estimates is a valuable function underlying the well-functioning of the art market.

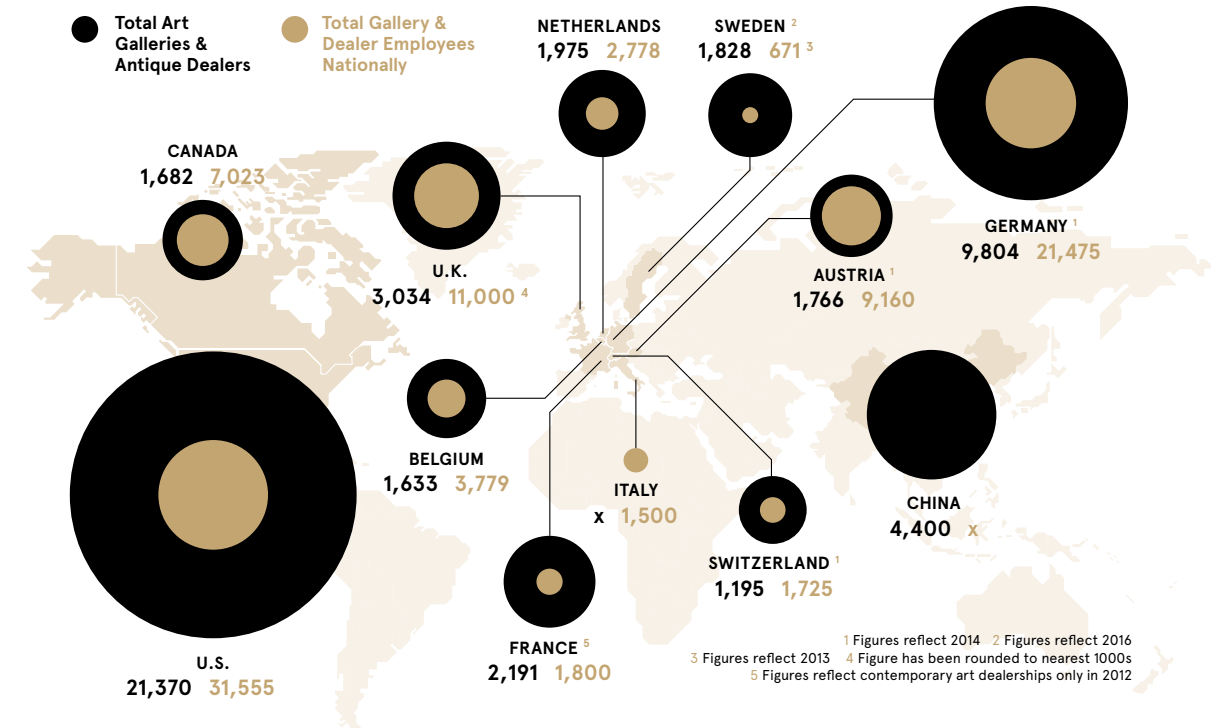
Dealers are gaining from the greater transparency of art price data, and the flow of information to buyers, empowering buyers and collectors to purchase through private sales. Auction houses gain from the superior relationship to art that collectors obtain through directly dealing with galleries, dealers and the artists they represent.

# The Art of the Job

Turning a work of art into revenue takes more than just the artist.

Sales, finances, curation and more—whether handled by one devoted proprietor or a whole team of professionals, there are many duties vital to the smooth running of a gallery. In the graph below, we see that Austria has the highest employment rate relative to the number of art and antique dealers nationally. This norm of large galleries stands in contrast to, for example, the United States, where sole traders account for around 15,000 dealers, or three quarters of American dealers. Amongst these selected countries, Austria is also credited with the largest number of dealers per capita, suggesting a robust market for artistic goods at this time.

## Art Industry Employment in Selected Countries in 2015



### SHARE OF GALLERIES AND DEALERS BY CONTINENT



Sources: U.S. Bureau of Labor Statistics, U.K. Office of National Statistics, Statistisches Bundesamt, Bundesanstalt Statistik Österreich, Belgian National Statistics, Central Bureau of Statistics, Government of Canada, Schweizerische Eidgenossenschaft, Statistiska Centralbyrån, Ministère de la Culture et de la Communication, Italia Creativa, artnet.



Privacy and anonymity, in combination with greater access to information, is a driving force behind the growth in the art dealer segment, relative to auction markets. Whilst the availability of auction sales price data at first felt like a threat to art dealers, the world over, that very information that auction houses offer, provides a tremendous service in having reduced the information asymmetry between the dealers and their clients. Paving the way for new collectors.

Smaller dealers showed the highest growth rates during 2016, and are projecting even higher growth rates for the year ahead in 2017. The critical force of those dealers able to maintain their comparative advantage through the crucial qualities and skills, with esteemed attributes such as reputation, credibility and ultimately taste, provide a dominate force in the art dealer market today.

To gauge the outlook for the future, our analysis is supplemented by a comprehensive survey. Targeted to representative art and antique dealers globally. Results from this survey, and interviews with dealers provide support that the size of the dealer market is also more likely to grow as a proportion of art sales in future.

A large number of art dealers' views and opinions have been incorporated into the report. Delving deeper into how art dealers and gallerists are maintaining their competitive edge, and obtaining business acumen is an essential part of this year's report. The specific focus this year was in assessing the significance of the art dealer segment of the world art market. In doing so, we hope to have been able to reveal a little more than the tip of the iceberg in terms of sales occurring through private channels.

The art market is at times dogged for its informality, financial opacity, the connection to safe-havens, and countries with favourable financial regulations across the world; it may be unsurprising that the world's largest auction markets, where cross-border trade is at its highest, occur where Freeports are strategically situated. The link to the hidden wealth, and offshore accounts, that have been all too familiar during 2016, struck a chord when the Panama papers were revealed during a time of global austerity.

Total world art exports in 2015 reached \$28.91 billion and imports \$28.05 billion dollars. World trade is dominated by art sales made in the Americas and in Europe. In particular the U.S. and historically in the U.K. The U.S. is the world's largest trading partner in art, collectors' pieces and antiques, according to United Nations trade data. Imports into the Americas reached \$12.11 billion in 2015. As seen from the figure here reported exports from the Americas reached \$11.4 billion dollars in 2015.

In the art trade, the U.S. is by far the predominate country in the world, accounting for 41.5% of world trade in imports, and 38% of exports, and 96% of trade to and from the Americas. Europe is the largest trading continent of exports in art, totaling \$14.60 billion, just over half of all recorded world exports in art, collectors' pieces and

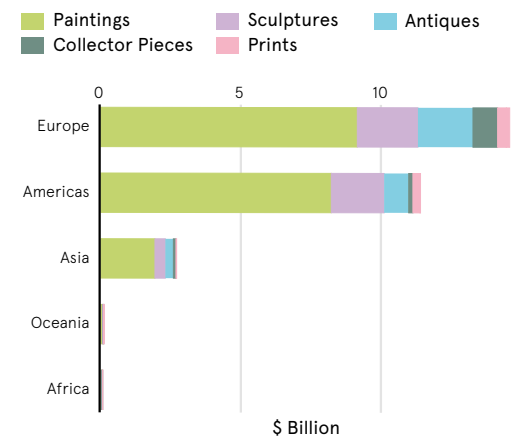
antiques. Of these art exports leaving Europe 63.5% are from the United Kingdom, resulting in almost a third of world exports with a 32% share of export trade. Up 4% on the year.

Europe is the second biggest trading area in terms of imports, with a similar fraction to the U.S. alone, with 41.25% of art imports, at a value of \$11.57 billion U.S. dollars. The U.K. share is 22.4% of world trade, down 1.5% on the year prior. Imports into and between European countries were \$11.5 billion U.S. dollars in 2015. Over half of this was into the U.K., with the U.K. importing \$6.275 billion in value of art, collectors' pieces and antiques. Whereas exports in Europe were \$14.59 billion in 2015, those from the U.K. totaled \$9.24 billion, almost two-thirds of European exports.

With Asia importing more art, collectors' pieces and antiques than it exports, it is the third largest ranking continent in terms of world trade. The fraction of trade through Asia, was 15% of world imports, valued at \$4.08 billion U.S. dollars. Asian exports of art were less totaling in 2015, \$2.71 billion dollars; just under 10% of world art exports.

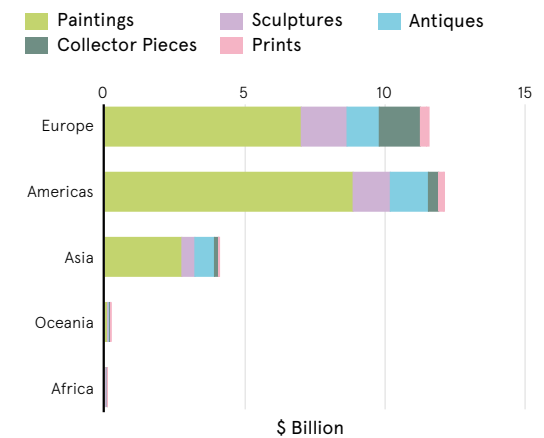
Oceania and Africa represent a tiny fraction of world trade. Trade in Oceania, as a fraction of world trade was 0.4% and 0.7% for exports and imports in 2015. For Africa these fractions are 0.2% and 0.3% respectively.

FIGURE 9: WORLD ART TRADE EXPORTS BY CONTINENT



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 10: WORLD ART TRADE IMPORTS BY CONTINENT



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

How do these fractions change over time? The demand for artworks, collectors' pieces and antiques, depends on tastes, but also since denominated in dollars, depends on the strength of the U.S. dollar. Trade has been rising in Asia, but it is still far from its peak, when in 1990 Japan imported over \$4.3 billion worth of U.S. dollars in art, collectors' pieces and antiques according to the United Nations, at the time two-thirds of the \$6.5 billion-dollar global art traded.

Trade in art and antiques enables a global picture of the economic activity in art, antiques and collector pieces, and how much value moves across international borders. Data are available from institutions such as the United Nations and national statistic offices. Calculated in U.S. dollars, world art trade represents around \$30 billion dollars in terms of nominal value traded across borders. As reported by the United Nations, and not adjusted for inflation, exports in 2015 reached \$28.9 billion dollars. Recorded world imports were \$28.5 billion dollars. On a global scale, world exports should equal world imports. Discrepancies will arise between the amount of world trade reported, due to exchange rate differences, data aggregation, and due to any informal market practices.

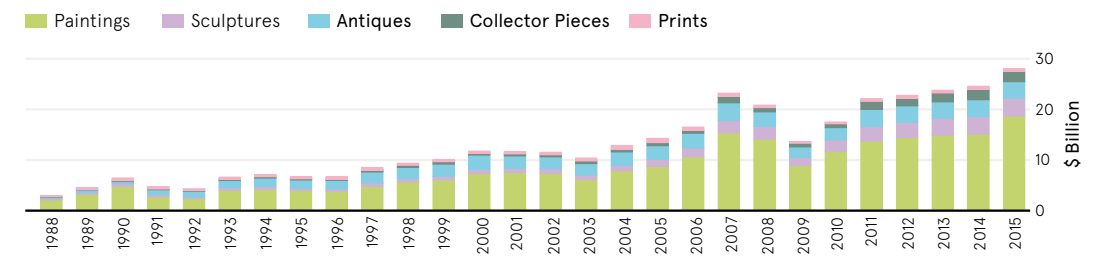
Total trade globally in 2015 reached \$1.85 trillion dollars, so trade in art, collectors' pieces and antiques, as recorded by the United Nations represents a very small fraction of world trade, at just under 0.2%. This fraction has been slowly increasing since 2011 when the fraction was just 0.11%; having reversed the steady decrease since the Millennium when the fraction of art trade to global trade was similar to its current level. This u-shape growth bodes well for growth in art trade relative to the overall economy in future.

Over the past 30 years, there has been a steady rise in the value of the art, antiques and collector pieces traded globally. Comparable with the rate of purchasing power. A sharp rise between 2006 and 2007 was followed by a significant drop during the years of the subsequent financial crisis. The market over the last five years from 2011 to 2015 has shown a similar level of cross border trade, with 2015 exhibiting a 5.2% increase in export trade than the previous year.

In 2015 trade in paintings as defined by the United Nations comtrade database showed an increase over the previous year. Paintings represent almost twenty billion in trade, at \$19.4 billion in 2015. The fraction has grown as a proportion of overall trade, whereas for antiques and collector pieces and the small fraction in stamps in recent years have remained more stable.

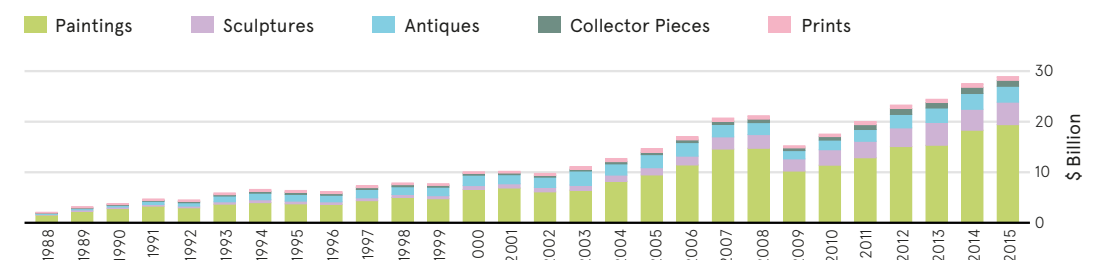
In spite of limitations with cross-border trade data, transaction data helps shed some light on the size of the art market, and the most important hubs, and places of international trade. At the time of press, trade data for 2016 are available until August for the U.S., and until October for the U.K. and some European countries and for Hong Kong. Data for the rest of Asia, including China, are not yet available. Available data reveal strong export trade similar to 2015 for the U.S. and down slightly in Hong Kong, but down substantially in the U.K, in part due to the weakened British Pound. Later in the analysis per continent, we look more specifically at the trends in the 2016 trade data.

FIGURE 11: WORLD ART TRADE IMPORTS BY ART AND ANTIQUES CATEGORIES



Maastricht University Graphic | Source: DESA/UNSD United Nations Comtrade database

FIGURE 12: WORLD ART TRADE EXPORTS BY ART AND ANTIQUES CATEGORIES



Maastricht University Graphic | Source: DESA/UNSD United Nations Comtrade database

The United Nations records six distinct groups of trade, which are detailed in the appendix, and more generally can be classified as paintings, sculptures, antiques older than 100 years, collector pieces, prints, and stamps. The majority of art, collectors' pieces and antiques, in terms of value, are traded in paintings, representing two-thirds of trade.

Taking a look at the six sectors representing the art and antiques trade. There has been a general increase in global cross border trade in all categories. The 2008 global financial crisis affected paintings and antiques mostly, with liquidity drying up at that time, and less Old Master paintings being sold.

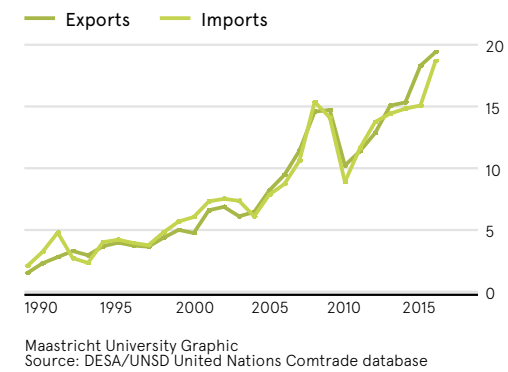
The export of Sculptures and Collectors' Pieces remained strong throughout the period of economic crisis. Whilst stamps, representing a very small segment of trade had fallen sharply before the crisis, following the 2002-2005 boom.

The apparent divergence between reported exports and imports: \$1 billion in Sculptures, yet \$1.75 billion dollars imported Collectors' Pieces. As alluded to earlier, differences largely depend on definitions and exchange rate conversion rates used. The large majority of trade that occurred during 2016 does not end up in the informal hidden world.

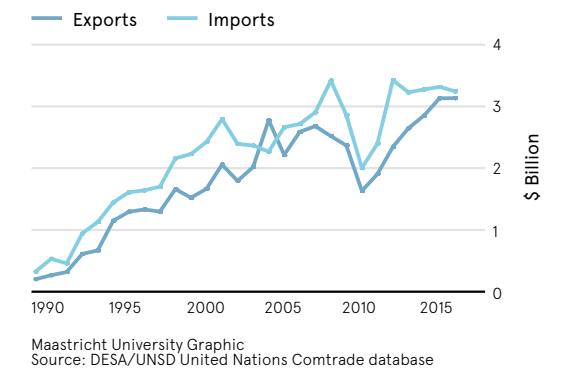
The bulk of trade in terms of volumes occurs from the very high proportion of micro businesses operating in this industry. Most prevalent are small or sole retailers, with no employees, generally with low annual turnover. 75% of the art dealer industry in terms of number of establishments is made up from sole traders. Many in Northern America do not employ additional labour at all. On average more mid-size dealers operate in Europe, where the fraction of dealers with employees is higher.

To analyse the state of the retail trade sector for galleries and art dealers during 2016, we use a range of enterprise and financial data. Data from national statistics offices are supplemented by financial data from Orbis and the Maastricht University, Centre for Arts and Culture, Conservation and Heritage (MACCH) annual dealer survey, in the following analysis.

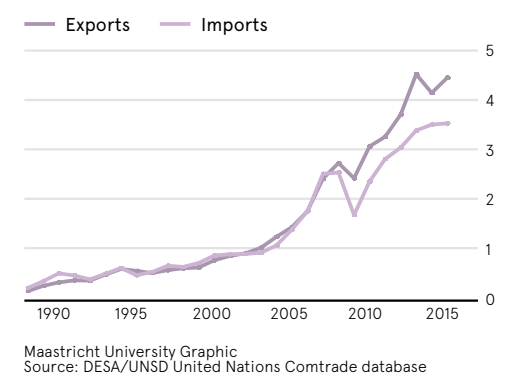
**FIGURE 13: ART AND ANTIQUES TRADE: PAINTINGS**



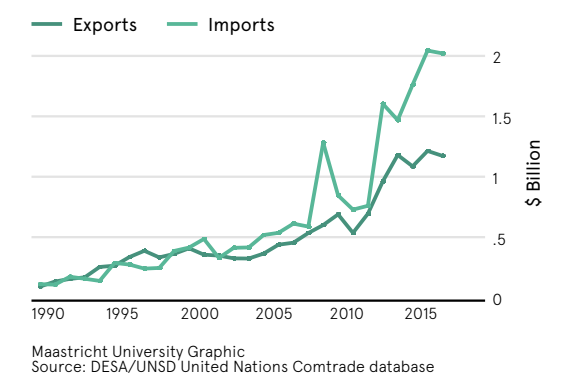
**FIGURE 14: ART AND ANTIQUES TRADE: ANTIQUES**



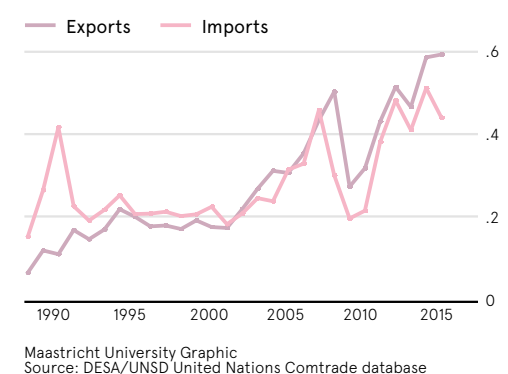
**FIGURE 15: ART AND ANTIQUES TRADE: SCULPTURES**



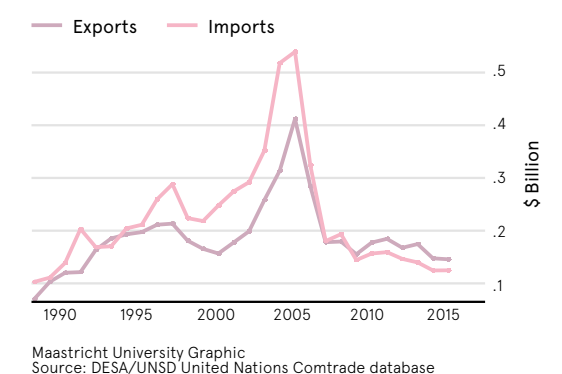
**FIGURE 16: ART AND ANTIQUES TRADE: COLLECTORS' PIECES**



**FIGURE 17: ART AND ANTIQUES TRADE: STAMPS**



**FIGURE 18: ART AND ANTIQUES TRADE: PRINTS**

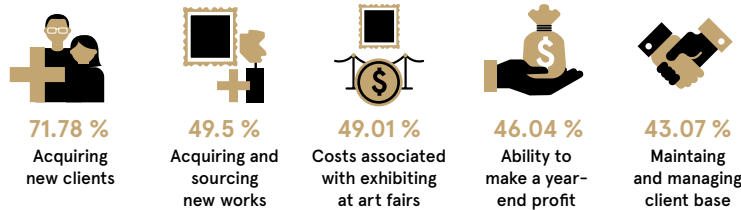


DEALER SURVEY 2017

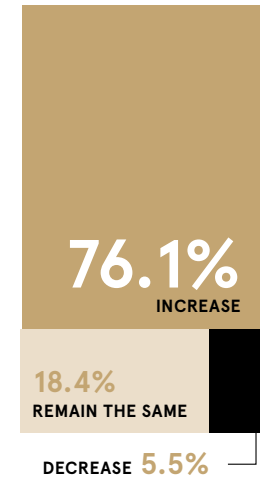
# Key Takeaways

What did dealers have to share this year? The vast majority are optimistic about 2017, though client acquisition remains by far their number one concern. Many are looking online for support: nearly three quarters of those surveyed expect the internet to have a larger impact on their bottom line than in years past. Until now the art world has been relatively slow to embrace e-commerce, but the tide appears to be turning.

## Top 5 Business Concerns



Looking ahead, you expect the number of your buyers to...

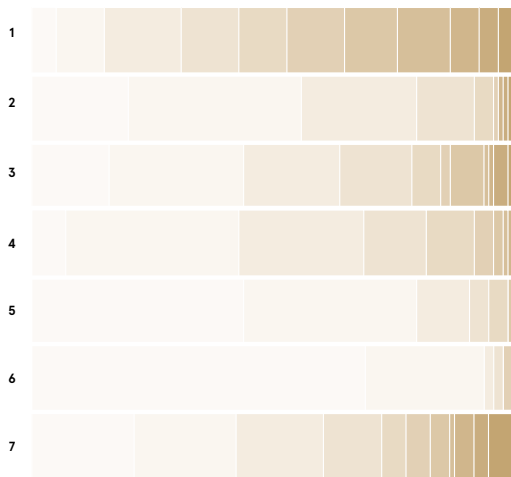


## Where do you meet your new and prospective buyers?

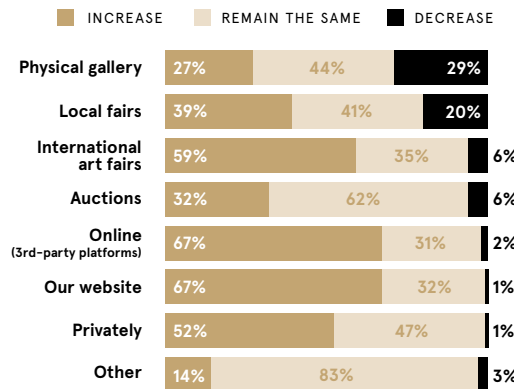
1. Art and trade fairs
2. Through colleagues
3. Internet / online forums
4. Through other buyer clients
5. Industry associations
6. Collector clubs
7. Other



### SHARE OF DEALER RESPONSES



## For the following sales channels, how do you expect the transaction volume to change in the future?

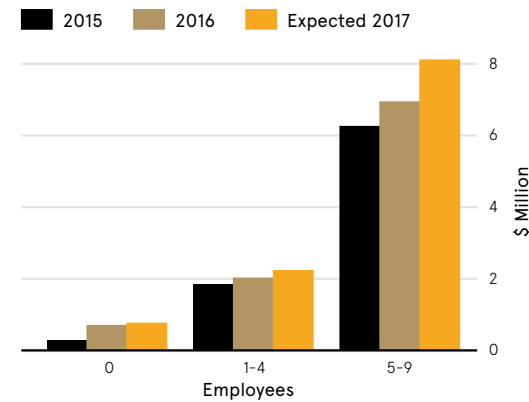


Source: MACCH Global Dealer Survey 2017.

Sole traders, with no employees, experienced a large increase in annual turnover between 2015 and 2016 and expect this high rate of growth to increase for the year ahead. Annual turnover was on average up by 24% for global art dealers. In particular those dealers who had initially less turnover in 2015, posted large growth figures. Looking ahead to 2017, the turnover generated by sole traders looks to rise in the year ahead. The performance of art dealers and galleries reporting to the MACCH survey showed an extremely positive outlook. The average forecast for 2017 is only smaller for mid-size dealers with between five and nine employees. These growth forecasts are accurate like-for-like comparisons, from dealers and galleries reporting over all three years from 2015 through to 2017. The highest growth looks to come from sole traders with no employees.

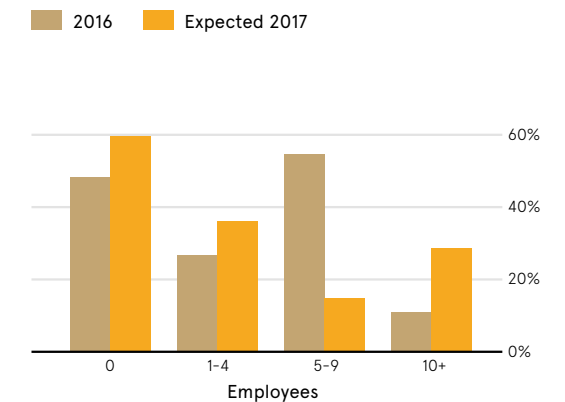
For art dealers with more than five employees there is a difference in expectations between the dealers with between five and nine employees, and the larger dealers. Dealers with over ten employees expect turnover in 2017 to increase by nearly 30%. Whereas, dealers with between five and nine employees have lower expectations on the expected growth in sales for 2017 than during 2016.

FIGURE 19: WORLD ART DEALER SALES AVERAGE TURNOVER



Maastricht University Graphic  
Source: MACCH Global Dealer Survey 2017

FIGURE 20: WORLD ART DEALER SALES GROWTH IN TURNOVER



Maastricht University Graphic  
Source: MACCH Global Dealer Survey 2017

Sole traders are still finding it hard to make a profit. 27% of traders who run their business alone made a year-end loss during 2016. Of those 15% made a slight loss, whilst 12.5% made a more significant loss. Another 20% just broke even; with more than 50% making a healthy profit. Given that the proportion of sole traders globally is large, in the U.S.alone, roughly 75% of commercial galleries and art dealers are run as sole proprietors and such a large fraction end up in the red is concerning.

Those galleries and art dealers who have been able to grow larger, and employing between one and four paid employees are only slightly less likely to be in the red. 10% made a loss, and with 12.5% making a slight loss, the fraction in the red is just under one in four galleries. Three quarters end up in the black, with over 30% making a healthy profit.

Less than 10% of larger galleries, employing five or more staff on their books were in the red at the end of 2016. 28.5% broke even, and almost 80% were in the black. A much larger fraction, 43% make a healthy profit.

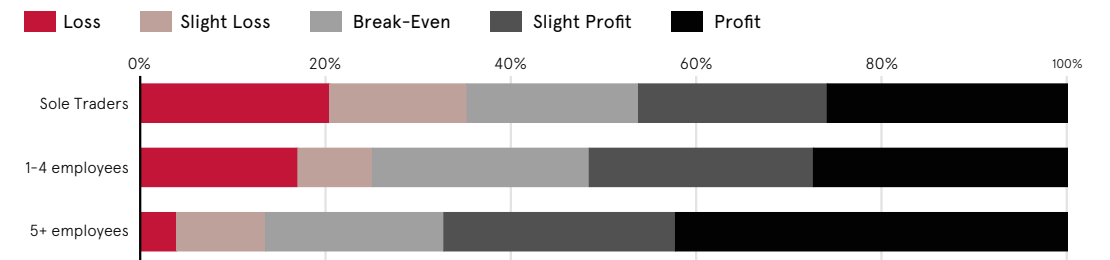
How competition is affecting profit margins depends on the firm size. When dealers were asked if their profit margins are likely to increase or decrease in the year ahead, the larger art dealers reported to expect on average a decrease in profit margins, whereas smaller dealers with less than ten employees all expect their profit margins to increase. Reassuringly, this includes sole traders, aiming to move towards a financially healthy position, further into the black in the year ahead than in 2016.

During 2016 art dealers and galleries with no employees felt the squeeze. From the global survey, 25% of sole traders experienced a decrease in their profit margins over the year. Those with between one and four employees experienced an increase in their profit margin. Whereas larger dealers, with more than five employees experienced either a slight decrease, or no change in their profit margins over 2016.

2016 saw strong growth in the UK, as well as strong expected growth Southern Europe, in the Middle-East, and South America. Pockets in Asia, in particular Japan and South Korea, also expect good growth in sales and turnover in the year ahead.

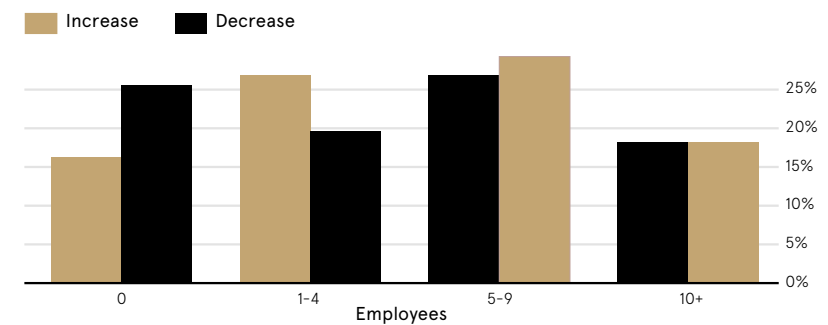
## LARGER ART AND ANTIQUE DEALERS ARE MORE LIKELY TO END THE YEAR IN THE BLACK.

FIGURE 21: WORLD DEALER PROFITS 2016 BY ART AND ANTIQUE DEALER SIZE



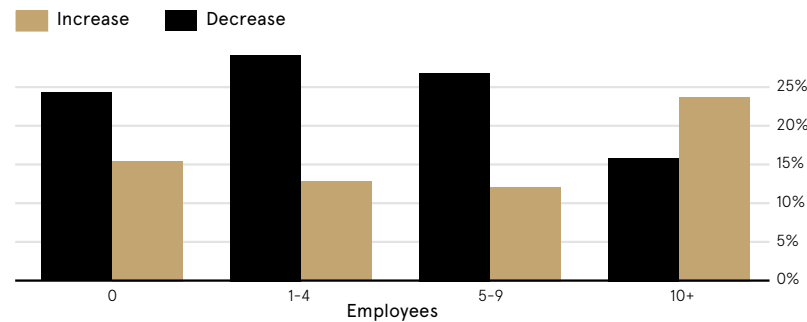
Maastricht University Graphic | Source: MACCH Global Dealer Survey 2017

FIGURE 22: WORLD DEALER PROFIT MARGINS 2016



Maastricht University Graphic | Source: MACCH Global Dealer Survey 2017

FIGURE 23: WORLD DEALER PROFIT MARGINS EXPECTED 2017



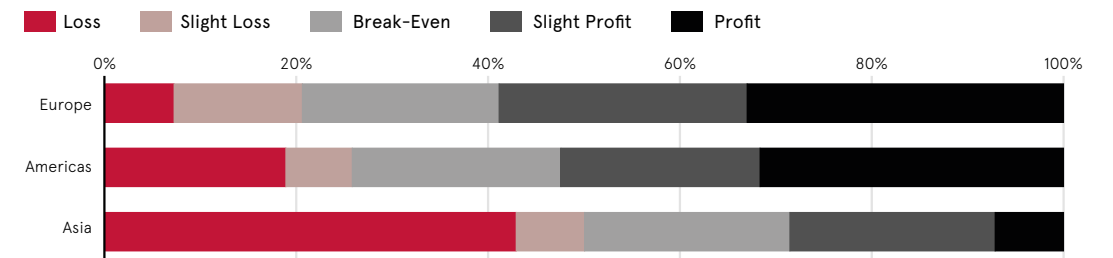
Maastricht University Graphic | Source: MACCH Global Dealer Survey 2017

Across continents, we find that in 2016 European galleries are financially healthier, than in The Americas, and in Asia. 45% of Asian dealers who reported their financial situation stated that they turned a loss in 2016; with 56% of dealers in the black. The fraction in the red in the Americas is just under one in four galleries, at 23%. In Europe the fraction in the red drops to 15%. 85% of dealers reported to make a profit in Europe. This is an average statistic that covers all sectors and sizes<sup>1</sup>.

Growth is larger in Asia, so for those dealers turning a profit, they have seen their profits increase over the past year. The number of dealers in Asia is far lower than in both the Americas and in Europe. Combined with a smaller fraction of dealers making a healthy profit, at roughly 40% rather than the 60% than in the Americas and Europe, total aggregate sales by Asian dealers is much lower. Expectations for growth in Asian dealer markets are higher for 2017.

<sup>1</sup> In a study by Zürich University, Dr Magnus Resch found that in a sample of predominately Contemporary galleries, 30% were unable to generate a profit.

FIGURE 24: WORLD DEALER PROFITS 2016 BY CONTINENT



Maastricht University Graphic | Source: MACCH Global Dealer Survey 2017

To reflect the European flavour of the fair, hosted in Maastricht, the Netherlands, and also 25 years following the signing of the Maastricht Treaty and the introduction of the European single currency, this year we additionally focus on the European art trade. How the Internal Market has influenced trading and the art market. This comes at a pivotal point in time when the people of the U.K. have voted in favour of leaving the European Union and potentially also the Internal Market, with a leaning away from the political elite in many European Countries. A natural question raised is how this will affect the art trade in Europe, and in the UK, and between the rest of the world? Some see this as an opportunity with Sterling trading at a lower level; others see this as a potential hindrance with the possibility of tariffs and the terms of trade not clearly known. Museums, art fairs, and exhibitions have reacted since the wave following the Brexit motion to confront and question the political change and resulting policies. Engagement from the general public in support of such activities, and for reaction and involvement from institutions such as the MOMA to replace Modern and Impressionist artworks to reflect artists from countries embroiled in political tensions with the West serve to illuminate and magnify the role and value of art in the world, as well as bring attention to artists from these regions.

As TEFAF celebrates 30 years, the European Union marks its anniversary of 25 years of the European Internal Market. Advocates of the benefits from the Internal Market, and a period of globally reducing tariffs and taxes look likely to be reverted to more protectionist laws by the Republican regime in the U.S. and the requirement of a U.K. post Brexit having to revert to the terms of the WTO, before new trade deals are made. The 30% tariffs on art could become more prevalent, as the new era on a geo-political front plays out between countries in the West and the rest of the world.

Geo-political instability, and the potential movement away from free-trade zones, single markets, and the possibility of greater barriers to trade in the form of tariffs on trade, have large implications for the cross border trade flows in artworks, collector' pieces, and antiques. Will this serve to encourage a greater flow of exports into tax-havens, and off-shore funds? In the spirit of the G20 agreements, will international bodies encourage countries to refrain from encouraging low tax environments and curtail movement to off-shore havens? Explicitly revealed through the Panama Papers in 2016.

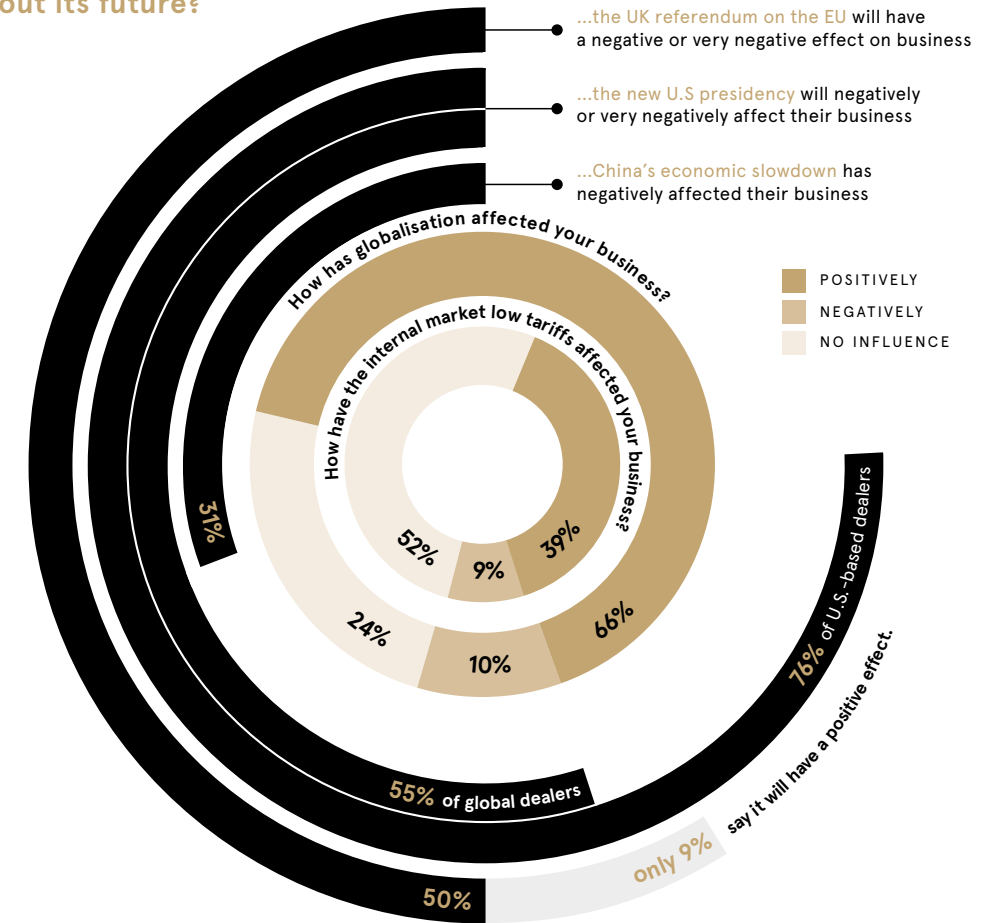
What is certain, is that there is a level of uncertainty not seen for a long time. With this uncertainty surrounding global trade in art, comes the importance of resilience and stability within the art market itself.

# Picturing the Future

In this age of political volatility, how does the art world feel about its future?

## Dealers say..

- ...the UK referendum on the EU will have a negative or very negative effect on business
- ...the new U.S presidency will negatively or very negatively affect their business
- ...China's economic slowdown has negatively affected their business



2016 left us behind to sort out countless political upsets, spelling uncertainty for the future of the arts. Growing populist unrest in Europe could lead to policy changes that affect tax rates and artistic collaboration should borders close. In the U.S., incendiary art is all the rage, but the new president already has funding for arts on the chopping block. On the other hand, the art world may stand to profit from his tax plan's increase in after-tax income for the rich, as the wealthy seek stable investments in works of art. If the president makes good on his promises of American isolationism, there will be plenty of political holes around the globe for China to fill. The Chinese government has serious international investments in the works, and, should their economy improve, the country will be well-positioned to achieve a global influence not unlike the U.S. post-World War II, with unknown consequences for the art world.

Sources: MACCH Global Dealer Survey 2017.



### TEFAF DEALER PALETTE AS AN EXAMPLE

Over 600 exhibitors have passed through TEFAF's doors over the last 30 years. What trends are revealed when we look back on their participation? Which countries have been represented at TEFAF over the past thirty years? How has TEFAF changed to reflect the global patterns in the art industry? In the following graphic representing the Exhibitors' palette over the past 30-years, we take a closer look.

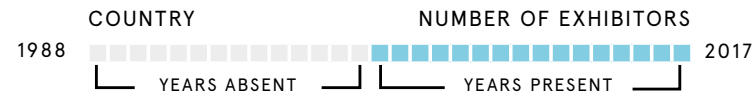
Currently the Fair showcases predominately European dealers, and reflect the fractions of dealers within Europe in a consistent manner with the size of the dealer markets around Europe. The most dealers are from the U.K, with 67 exhibiting in 2017, up from only 14 when the Fair began in 1988. There was only one French dealer when the Fair began thirty years ago, and now the French Art Scene is well represented with over forty dealers, across all seven categories of artworks. The analysis also shows a trend of consistency: once an exhibitor attends the fair once, they tend to come back year after year.

Antiques and paintings exhibitors have been the dominant categories by far at TEFAF, while La Haute Joaillerie and Design have only been more extensively represented more recently. The vast majority of exhibitors hail from Europe, unsurprisingly, followed by a strong showing from the United States. There are currently 20 dealers from the U.S. in 2017 present at Maastricht. Exhibitors from Asian countries are fewer and farer between, with China, Hong Kong, Japan, and Korea. Other recent newcomers are Argentina and Uruguay, representing South America, rebalancing the proportion of the Fair in line with global national dealer numbers. With the outreach to TEFAF New York, the Americas and Asia will be even more represented on the global stage.

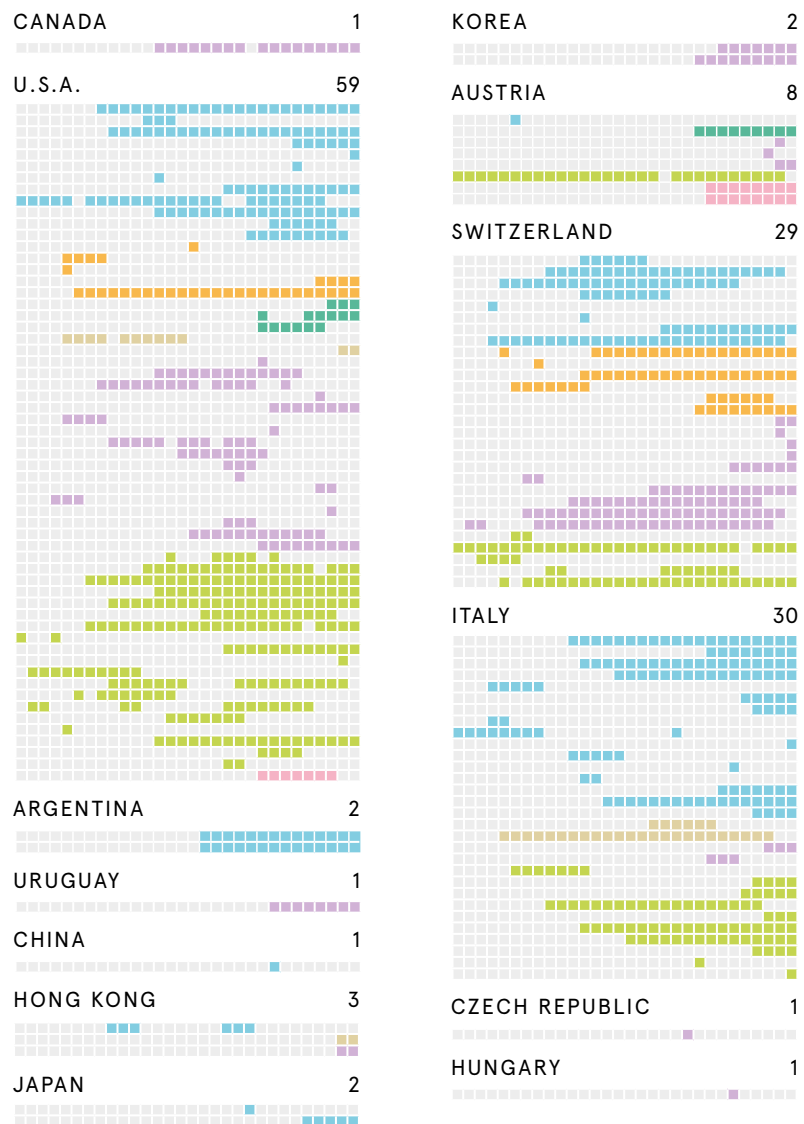


# 30 YEARS OF TEFAF Exhibitors' Palette

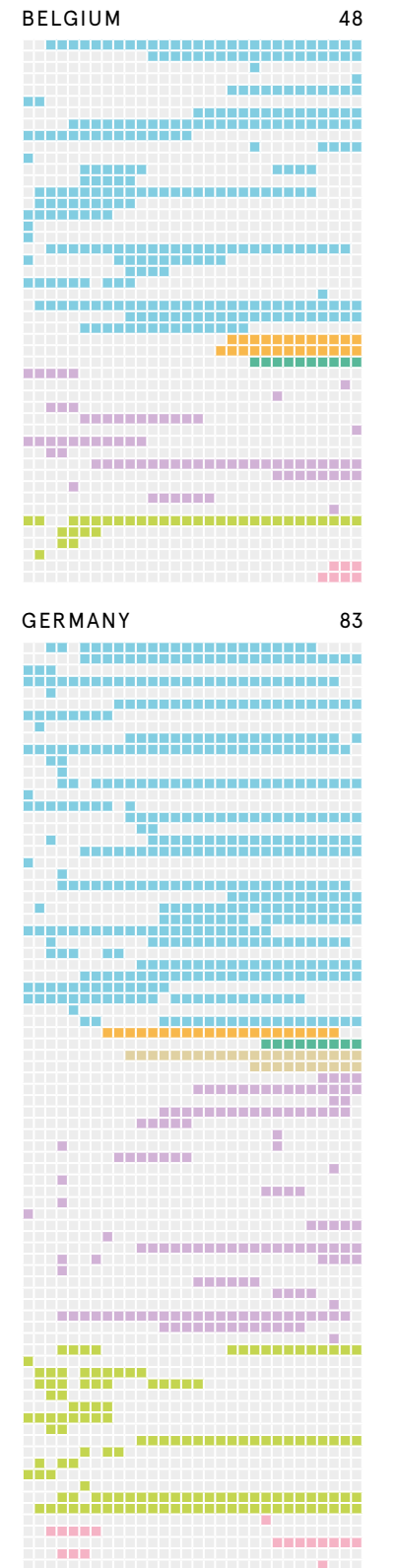
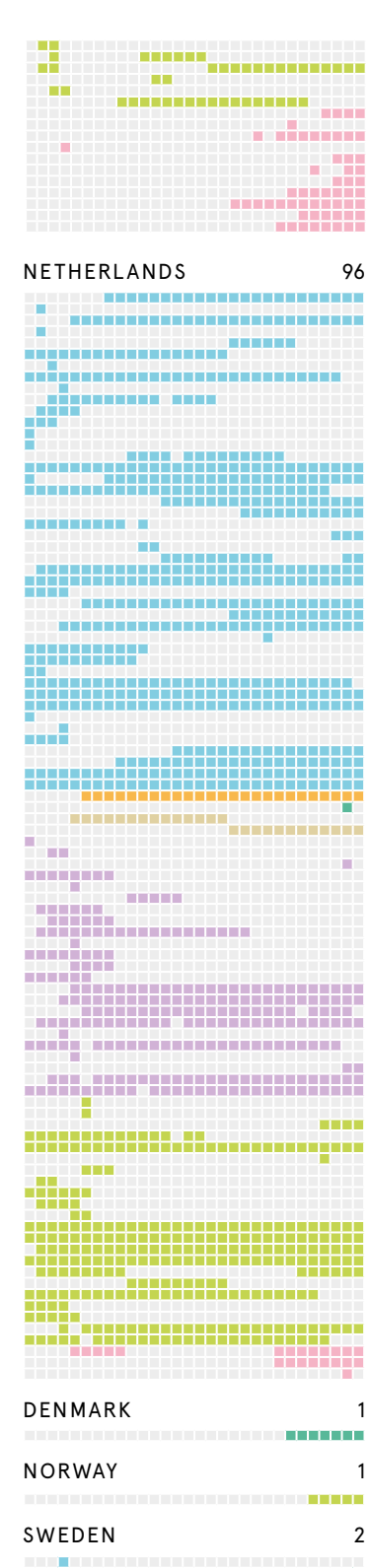
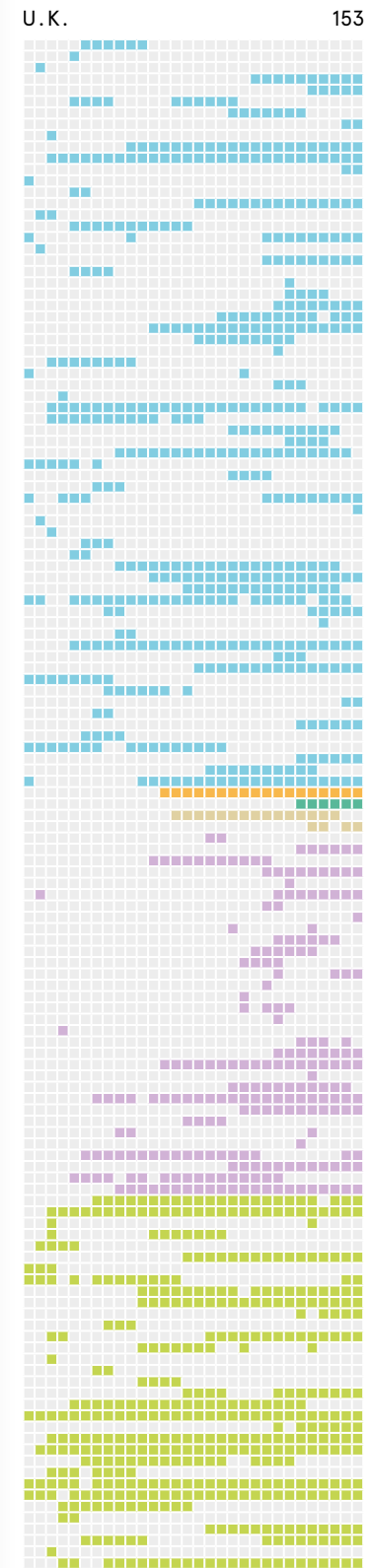
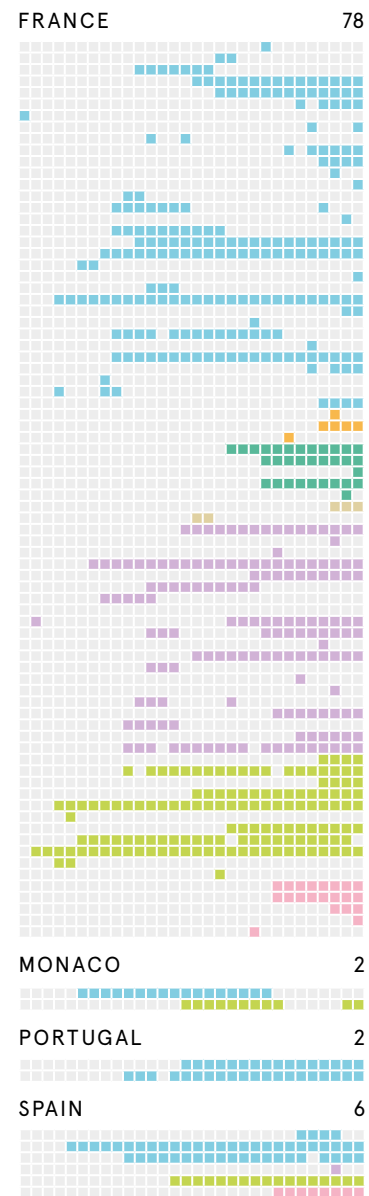
Exhibitor attendance at TEFAF Maastricht from 1988 to 2017, broken down by country and artistic focus.



Each row of pixels represents one exhibitor's years of attendance. A total of 30 pixels horizontally represents the 30 years of TEFAF.



- ANTIQUES
- CLASSICAL ANTIQUITIES
- DESIGN
- LA HAUTE JOAILLERIE
- MODERN/CONTEMPORARY
- PAINTING
- WORKS ON PAPER



## DATA COLLECTION AND VALIDATION

Data on art dealers are limited. Art dealers by their nature tend to operate as small private businesses and a large fraction of establishments do not employ any other person other than a director to work alongside them. For such small enterprises, regulations on disclosure and the necessity of being included and listed as part of the body of various national statistics offices is not a generic requirement across countries. This level of opaqueness means that to accurately estimate the number of art dealers and galleries globally is a challenging task. This is a natural point of contention for any researcher trying to gauge the size of an industry, where only larger establishments, often those employing paid labour are included by national statistics offices. How large the market is, depends on the definition used and criteria set for operating as an art dealer or a gallery specialising in art.

Art dealers and galleries, in the sense that we are interested in defining here within the scope of this report, often belong to a subsection, or niche market as part of a broader definition on retailers and trading stores. Furthermore, it is not always clear how large the sector is in many countries across the globe. Some countries provide more detailed descriptions and breakdown in the information provided. For example, the North American Industrial Classification System (NAICS) introduced in 2006 provides a specific category for art dealers and galleries, replacing the Standard Industrial Classification (SIC) system. This is not the case in all countries, and art dealers and galleries fall within a broader classification system of retailers. Non-generic classification systems across countries is one of the more problematic issues in determining the size of the industry in terms of numbers of establishments, and thus the overall size of the art dealer market.

The classification criteria chosen is a crucial factor when estimating the size of an industry. Depending on the classification of the art industry the outreach of the industry may be more encompassing as to the type of establishment, and therefore the market is larger; yet in so doing, a broader definition is less representative of the art and antique dealer trade. This challenge has become apparent whilst undertaking this research. There are many other types of dealers and retailers often considered when taking a broader definition. For example, floristry and automotive dealers and auction houses are included in many segments of trade statistics. We have been careful to only consider economic data when the sub-class division was high enough to eliminate dealers and establishments in other industries. This is very often the case for auction houses, where art is auctioned along with other collectibles. Online platforms for art and antiques sold on eBay have large trading volumes, with low average prices.



One would like to include any auction house, or online market place, that offers art for auction. However, this only serves to mislead the reader if sales volumes and figures are derived by aggregating statistics from too broad a description of both auction houses and dealers.

Where should the line be drawn on including a particular auction house as part of the industry? To what extent is Contemporary Art sold in galleries included, when contemporary Jewellery and watches are not? What constitutes a collectible? The answers to these questions on definition of categorisation are largely subjective, but imperative to the task at hand. Our stance is to provide an estimate of the market, representative of the type of art and antiques represented at TEFAF and other leading art fairs. This also reflects the categories sold at auction. Many of the art dealers represented in this report and the art dealer survey fielded are aimed specifically to be as representative of the art and antiques industry as possible. This results in trade above a minimum item value of \$500. The figures are not inflated through aggregation, and the methodology outlined in the appendix is aimed at providing a transparent approach to how the art industry figures have been calculated and can be replicated. This approach allows for accurate year-on-year comparison to be made over the five-year period between 2012 and 2016.

We adopt the definitions for art, collectors' pieces and antiques used by the United Nations. Sub-categories include paintings, sculptures, antiques, collectors' pieces and stamps, which we match to the TEFAF sectors and create categories using auction data from artnet.

We use the five-digit industry classification codes where possible to include the subsection of art dealers and galleries. This year, we focus our attention more specifically to art dealers and art galleries, as classified by the various global offices for national statistics. The research here is based on the assessment criteria provided by the world's national statistics offices. Specifically, how individual nations define the art dealer and gallery industry may differ, some include sole traders, whilst others do not. We take this approach as far as possible, to provide us with an unbiased and independent approach in classifying the art market in this global industry report.

Adopting more specific assessment criteria, in order to be considered as part of this year's report, has consequences on the estimated size of the industry. This, will by definition result in a more conservative figure for the number of art dealers and art gallerists globally. However, we believe the figure estimated is representative and reflective of the art and antiques market that art dealers at TEFAF consider themselves a part of, and therefore the market that we are aiming here to describe.

Micro establishments are often excluded from national statistics. They are high in number and represent a very long thin tail when considering the distribution of retail sales. The number of art dealers and galleries we consider globally are those recorded in national statistics, under the representative industry classification classes under the division of retail trade. Although in reality the number of establishments could be much larger, the sales volume that this tail-end of the distribution of the number of establishments, accounts for is astonishingly low, less than one percent. Our choice for a more stringent criterion is less problematic therefore from the perspective of accurately estimating the industry in terms of value rather than volume.

Similarly, adopting this approach such that only auction houses with a significant amount of art sales are included also results in the number of auction houses being more conservative as well. Buyers premiums are not always included by all countries, resulting in an over-representation of some countries, and an under-representation of others.

Our approach has as an advantage that comparative statistics and analysis on the market are consistent over the years included in the report; we trust that we can provide an informative description of the art and antique dealer market for readers.

Only a handful of the largest establishments in most industries generate a very high proportion of the revenue. This is also the case for the art industry. For both art dealers and for auction houses this perhaps natural phenomenon is also well established in the market. Although ignoring smaller establishments will alter the number of establishments in the industry, since the very small establishments do not typically generate large values, in general ignoring them will not have a significant effect on the size of the market in terms of value. Of course in the art dealer world a very small dealer or gallery can generate a very large amount of sales revenue with only a very small number of expensive transactions. In some countries, such dealers may not fall prey to national statistics offices or financial databases for private companies. Such occurrences are hard to avoid.

This is less likely to be the case for auction houses, since expensive artworks are much less likely to be sold at smaller auction houses. The scope of artnet data has increased substantially over the years prior to 2012. Hence an increase in the size of the art market may merely have reflected a growth in the number of auction houses included in the database over time. Since 2012 their improved data has resulted in a comprehensive database. A limitation is that their database does not include lots under \$500. These lots create a very long and thin tail of the auction sales distribution, thus, we can confidentially and conservatively say that there is only a margin of error of at most 2% on the overall aggregate auction sales values that artnet provides. Furthermore, the artnet database does not include lots that did not sell, otherwise resulting in an



inflated market size. The estimate on the industry size can therefore be considered an accurate, lower bound, on the size of the art and decorative art and antiques market, represented at TEFAF.

Another more recent development is the improvement of economic data on enterprises. We have detailed information on the numbers and regions of classified art dealers and galleries, so we can map and trace the trend of the firms established in the art industry. We aim to provide a detailed and we hope also a representative and comprehensive study using this approach.

Art dealers represent small and medium sized enterprises (SMEs) since they employ between 1 and 249 persons, according to Eurostat. The majority of art and antique dealers fall into the category of sole-owners, with no employees. In the U.S. for example this fraction is around 75% of the numbers of establishments considered art and antique dealers and galleries in the art industry. Around 20% are micro enterprises with less than 10 persons employed. Only a small fraction, 5% are considered small enterprises employing between 10-49 people. From the economic censuses we have data, literally only a handful of dealers that can even be considered medium sized, with between 50-249 persons employed.

We supplement our national statistics using a network analysis for countries where the breakdown into subclasses is not sufficient, for example, in many Asian countries.

From our network analysis using the survey data we find that in Europe and the Americas the estimate of the average number of dealers globally is 2780 for dealers based in Europe, and a slightly lower number for those based in the Americas, 2344. Those based in Asia have a larger perception of the number of dealers globally with the average estimate being 6707.

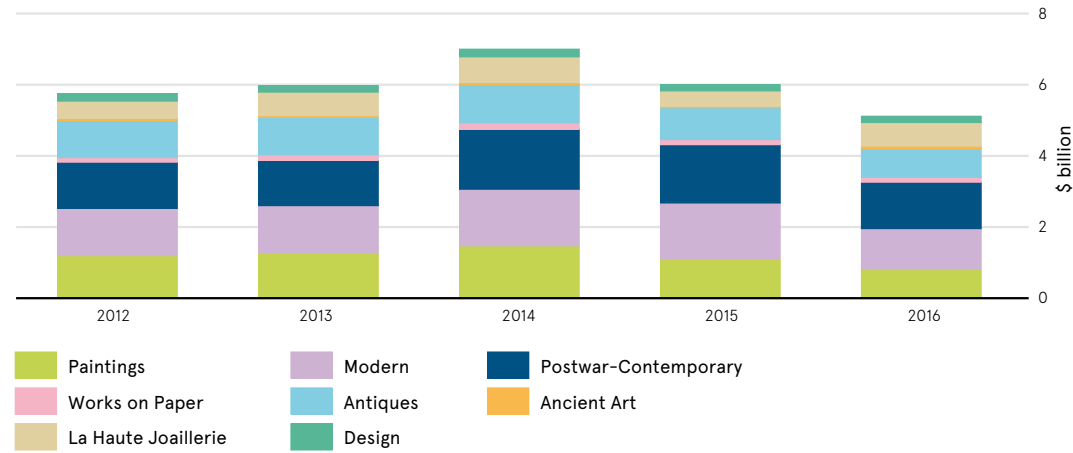
The number of art dealers and galleries globally, according to economic business data is much higher. It is revealing that the art dealers and galleries perception of which type of galleries and art dealers constitute to the industry is much lower, or therefore skewed to those at the top-end of the market, since their estimates are lower than the global estimate of art dealers and gallerists from retrieving data from national statistics offices.

**EUROPE**

## EUROPE ART MARKET HIGHLIGHTS

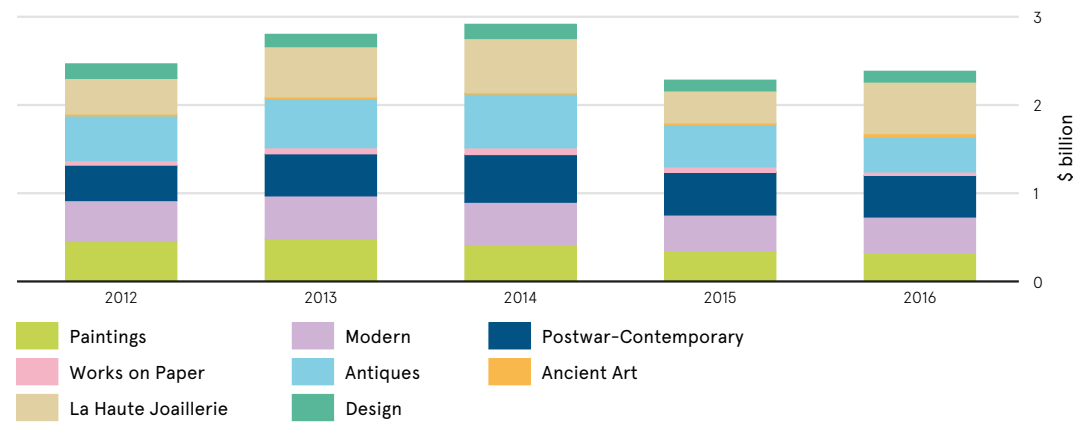
1. As a continent Europe is the largest art market in the world, in terms of art sales made through auctions, private sales and dealers. At the end of 2016, Europe as a whole remains the largest segment in terms of U.S. dollar values.
2. European auction market for art and antiques is the second largest in the world at \$5.22 billion. Auction sales in 2016 in Europe is 31% of world auction sales of art and antiques.
3. In Europe sales are down for the second consecutive year at auction from \$6.0 billion in 2015, and from \$7.2 billion in 2014. Consignments are down more than the fall in auction sales values with the number of lots offered for sale at auction similar to those seen in 2012. With art prices stable, lower sales value is reflected by the large drop in lots offered.
4. There is large divergence within Europe in the growth of auction and dealer segments. Switzerland saw auction sales grow by 34.6%. Sales at auction in Continental Europe grew by 3.6%, whereas the U.K. saw a 24% fall in auction sales. France's auction market remained stable in value, with the dealer segment experiencing growth of over 10%.
5. Private sales through dealers and galleries have been extremely strong during 2016, with retail sales values up on average 24% over the year. Europe's larger dealer market, accounting for over half of the world's art dealers with healthier financial profits than in other regions, maintains Europe prominence on the world's art industry stage.
6. Dealers and private sales gained significant market share in top end of the market, particularly in London. High growth in retail trade in London dominated by commercial art galleries. 2016 saw a large increase in annual turnover for many of Europe's larger dealers, accounting for the overall growth in the market. Switzerland experienced growth in the dealer market of 13.75%.
7. 2016 saw prices rise for Modern and Contemporary Art sold at auction in Europe, 1.81% higher for Modern and 2.35% higher for Contemporary Art. At the end of 2016 prices for art and antiques sold at European auctions are lower for Old Masters and Impressionist Art by 3.78%.
8. French auction houses are leading the high-end markets for antiques, classical antiquities and design. Switzerland dominated Haute Joaillerie, boosting the whole European auction market for Jewels by 54%.
9. In terms of recorded cross border trade Europe remains the largest continent in terms of art, collectors' pieces, and antiques crossing European borders. Europe remains the largest global exporter of artworks, collector pieces and antiques, as defined by the United Nations.
10. Total exports continue to exceed total imports in Europe, having resulted in a continual outflow of art, collectors' pieces and antiques over almost every consecutive year over the past 30 years, in particular to the Americas and to Asia.

FIGURE 25: EUROPE AUCTION HOUSE SALES BY CATEGORY



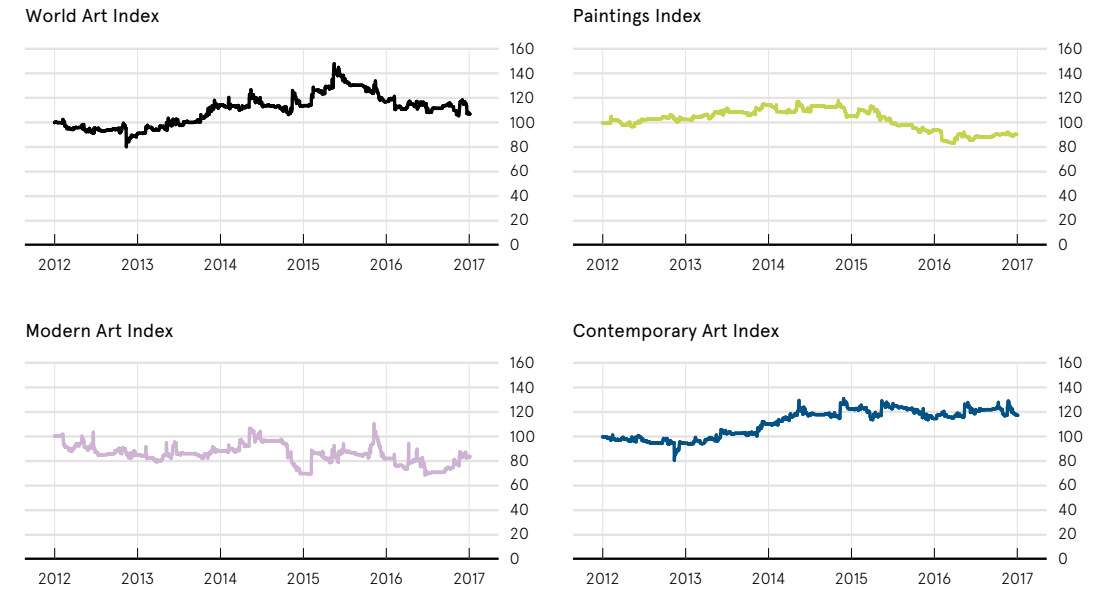
Maastricht University Graphic | Source: artnet

FIGURE 26: CONTINENTAL EUROPE AUCTION HOUSE SALES BY CATEGORY



Maastricht University Graphic | Source: artnet

FIGURE 27: EUROPE

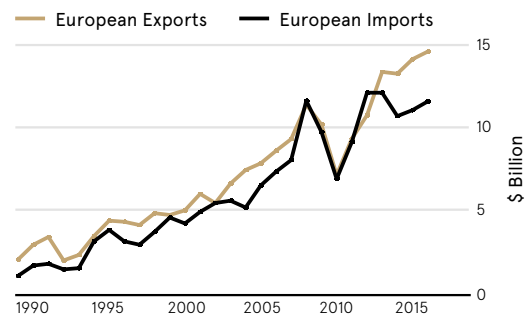


Maastricht University Graphic | Source: artnet

Trade flows in art and antiques generate a picture of how and where the cultural value of the world's art and antiques are being stored. Where art is bought and sold is a major piece of this picture. How trade flows across borders, and which countries, regions, and continents have a greater desire, demand and propensity due to economic conditions and wealth, shapes how we view the art and antiques trade in terms of cultural importance. Exports are good for the economic health of a nation. Exporting art and antiques may help economic output through greater gross domestic product (GDP) but if this represents cultural heritage going abroad rather than new products and services, then greater exports over imports may represent a trade surplus in terms of economic prosperity, but may result in a loss of cultural heritage. Laws and regulations in Europe have aimed at restricting this outflow of cultural heritage, and have resulted in areas of reduced export trade.

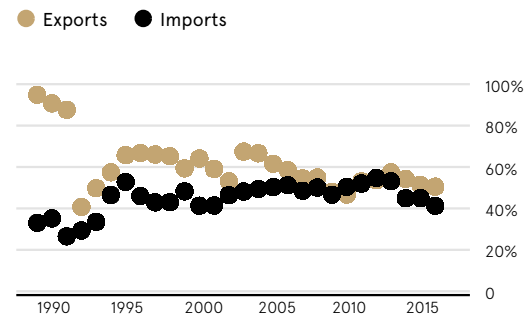
Europe is the largest trading continent of exports in art, totaling \$14.59 billion, and the second largest in terms of imports after the Americas, with \$11.5 billion of art and antiques imports into and between European countries. Over half of this was into the U.K., with the U.K. importing \$6.275 billion in value of art, collectors' pieces and antiques. The next largest trading country is Switzerland with 6% of global trade. France with 5%, and Germany with 3%. Trade with Italy represents 1.5% of global trade, and Austria, Belgium, Spain and The Netherlands each roughly 0.5%.

FIGURE 28: ART AND ANTIQUES TRADE EUROPE



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 29: WORLD ART TRADE SHARE EUROPE



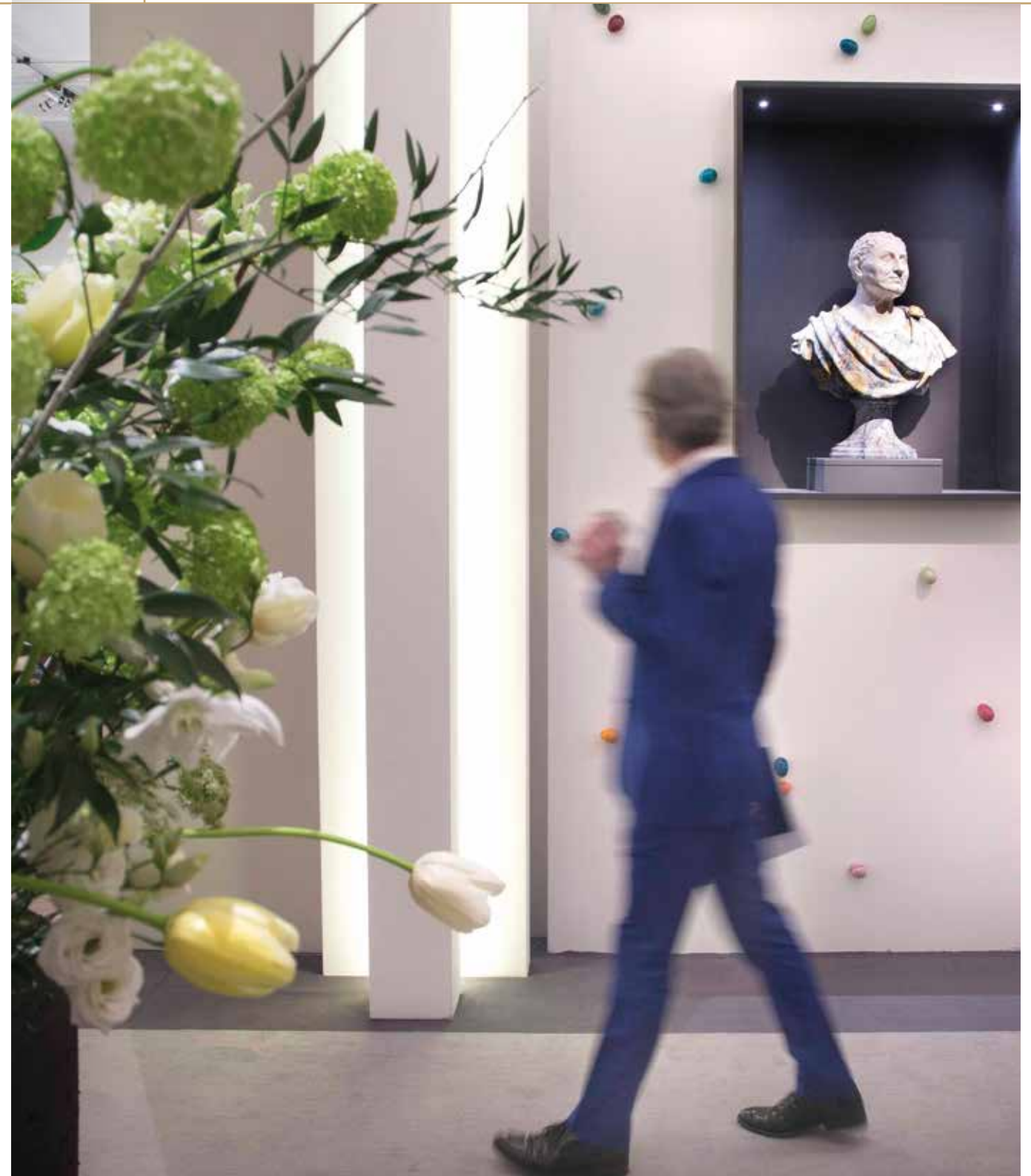
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

It is of interest to see the pattern of how fractions in world art trade have changed over the past 30 years. The high value of Impressionist Art flowing to Japan in the late 1980s resulted in Europe taking global dominance in terms of export trade 30 years ago, with a 95% of the value of exports of artworks, collector pieces and antiques in 1988. Since the mid-Nineties, Europe has remained the continent with the largest share of the world's exports of art and antiques.

The amount of exports over imports was much higher between 1995 until 2004. In most years up until 2007 the fraction of exports on the world stage was over 60%.

In Europe, imports of artworks, collector pieces and antiques rose in the 1990s to 52.8% in 1994; having remained at a consistent level between 40 and 50% of global import trade. In 2011 European trade remained strong with imports peaking as a share of world trade, representing a 54.7% share of all trade in the sector.

Over the past five years there has been a gradual drop to today's share, with exports continuing to exceed imports by around 5% to 10% of global trade. As a share of global trade European exports are currently 41.3% and imports 50.5%.





# EUROPE ART SALES

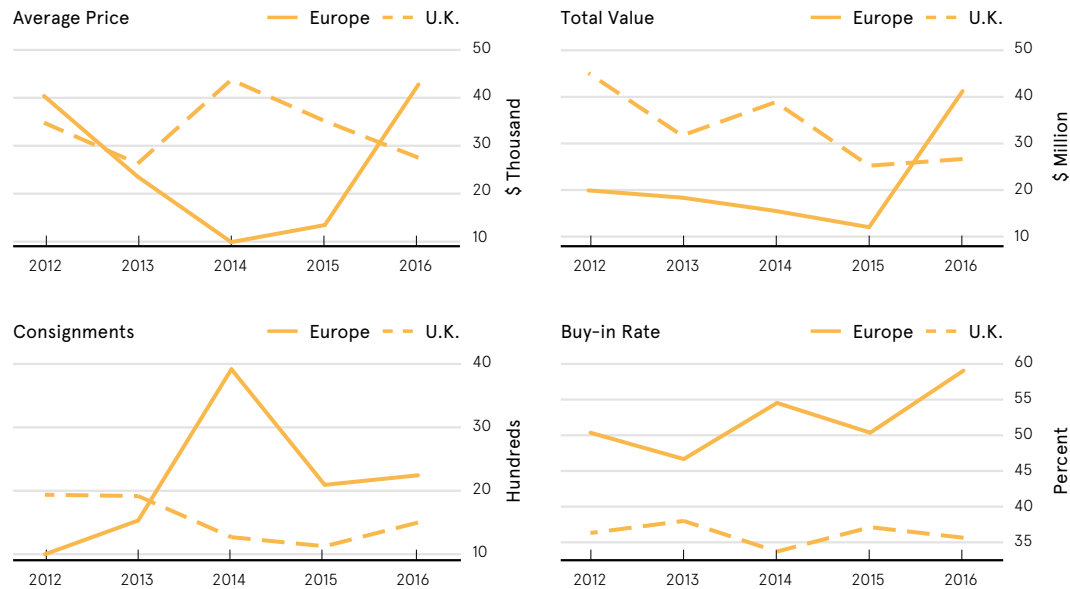
## CLASSICAL ANTIQUITIES AND ANCIENT ART

### HIGHLIGHTS:

- Paris is the most prominent place for high end Classical Antiquities in Europe
- Positioning on Asian art helped lead a 190% increase in auction sales in 2016
- Roman, Egyptian works of art eclipsed by ancient Chinese art

At \$66.7 million, the auction market for Classical Antiquities in Europe is small compared to its Chinese counterpart (\$295 million) but still larger than the U.S. market (\$51.56 million). European dealers have a strong hold on transactions in the high-end sector of Classical Antiquities compared to local auction houses. In 2016, Continental Europe saw an uptick in activity at auction, with important Asian works being offered in Paris in December. In the U.S. auction market, Roman and Ancient Egyptian works of art have definitely been evolving in the shadow of Asian-themed auctions, with 6 out of the top 10 lots sold at auction in 2016 in Europe originating from the Far East. Asian Art is an excellent way for European auction houses to position themselves, since the average price of lots consigned in Continental Europe surged to \$43,109 in 2016 from \$13,168 in 2015, leading to a 190% increase in auction sales despite a five-year low sell-through rate of 42.3%.

FIGURE 30: CONTINENTAL EUROPE AND U.K. ANCIENT ART



Maastricht University Graphic | Source: artnet

## TOP 10 CLASSICAL ANTIQUITIES AND ANCIENT ART LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
RARE STATUE DU BOUDDHA VAIROCANA EN BRONZE DORE CHINE, DYNASTIE LIAO, XIEME SIECLE	Christie's Paris	14-December	\$ 14,462,858
RARE ET IMPORTANTE STATUE DE GUANYIN EN BOIS POLYCHROME ET DORE CHINE, DYNASTIE SONG (960-1279)	Christie's Paris	14-December	\$ 5,510,498
RARE ANIMAL FABULEUX EN JADE JAUNE DYNASTIE SONG OU ANTERIEUR / A RARE SMALL YELLOW JADE FIGURE OF A SEATED MYTHICAL BEAST, SONG DYNASTY OR EARLIER	Sotheby's Paris	15-December	\$ 4,364,174
COUPE POLYLOBEE EN PORCELAINE A GLACURE CRAQUELEE CHINE, DYNASTIES YUAN/MING (1271-1368/1368-1644) OU PLUS TARDIF	Christie's Paris	14-December	\$ 1,435,042
A LARGE EGYPTIAN BRONZE ISIS AND HORUS THIRD INTERMEDIATE PERIOD, 25TH DYNASTY, CIRCA 747-656 B.C.	Christie's London	06-December	\$ 1,378,653
RARE ET IMPORTANTE STATUE DE BOUDDHA SHAKYAMUNI EN PORCELAINE QINGBAI CHINE, DYNASTIE YUAN (1279-1368)	Christie's Paris	14-December	\$ 897,900
JALAL AL-DIN RUMI (D. AH 672/1273 AD): MATHNAVI SIGNED AHMAD AL-KATIB AL-SHIRAZI, STUDENT OF ZAYN AL-'ABIDIN BIN MUHAMMAD AL-KATIB, TIMURID HERAT, DATED AH 869/1464-65 AD	Christie's London	21-April	\$ 554,281
A RARE AND FINELY DECORATED QUR'AN LEAF IN EASTERN KUFIC SCRIPT, PERSIA OR CENTRAL ASIA, CIRCA 1075-1125 AD	Sotheby's London	20-April	\$ 542,056
IMPORTANTE STATUE DE BOUDDHA AMITABHA EN BRONZE DORE CHINE, ROYAUME DE DALI, PROVINCE DU YUNNAN, XIEME - XIIIEME SIECLE	Christie's Paris	14-December	\$ 514,228
ROMAN, 1ST CENTURY B.C INTAGLIO WITH A STANDING YOUTH CONVERSING WITH A SEATED MAIDEN	Sotheby's London	06-December	\$ 506,671

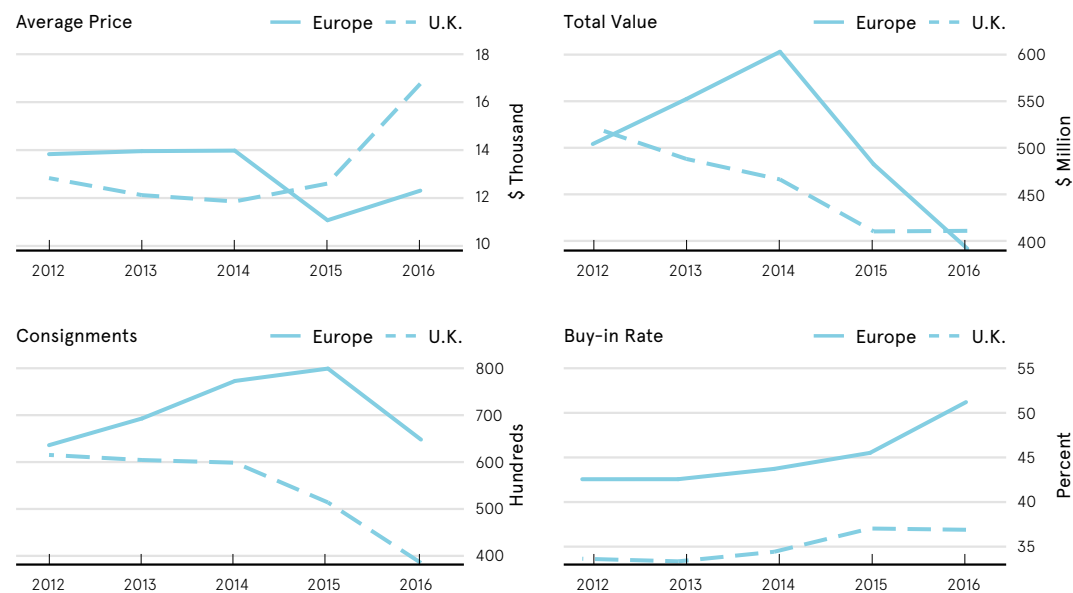
## ANTIQUES

### HIGHLIGHTS:

- Drop in consignments led auction sales to drop from \$899.1 million to \$807.5 million
- Collectors in Continental Europe snubbed sales, pushing sell-through rate to less than 50%
- Focus on high quality

The European market has been extremely choosy in 2016 when it comes to important antiques sold at auction. The amount of consignments dropped, triggering an increase in price on average, especially in the U.K. where auctioneers could attract lots which were, on average, 32% more expensive than the previous year. However, auction houses in Continental Europe struggled to improve the sell-through rate, with less than one piece out of two brought to auction finding a buyer in 2016. Compare that to the two-thirds of works that found buyers in the United Kingdom, on par with 2015. The European market as a whole generated \$807.5 million in auction sales in 2016, down from \$899.1 million in 2015. The European auction market for high-end antiques in 2016 was extremely eclectic, at times mixing Chinese Art with European Sculptures from the Middle-Ages and important scientific instruments from the High Renaissance. Paris clearly dominated over London with three out of the five top lots hammered in 2016 being presented in the French capital. German auction houses, traditionally strong in the high-end antiques market, could not place a lot in the top 10 in 2016.

FIGURE 31: CONTINENTAL EUROPE AND U.K. ANTIQUES



Maastricht University Graphic | Source: artnet

### TOP 10 ANTIQUES LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
AUGUSTE RODIN (1840 - 1917), IRIS, MESSAGÈRE DES DIEUX, BRONZE, 1890	Sotheby's London	03-February	\$ 16,661,388
DEUX PLEURANTS EN MARBRE SCULPTE PROVENANT DU CORTEGE FUNERAIRE DU TOMBEAU DE JEAN DE FRANCE (1340-1416), DUC DE BERRY, 1396	Christie's Paris	15-June	\$ 5,648,533
RARE BOL COUVERT EN PORCELAIN DE LA FAMILLE ROSE CHINE, DYNASTIE QING, MARQUE A SIX CARACTERES EN CACHET EN BLEU SOUS COUVERTE ET EPOQUE QIANLONG (1735-1796), 1644	Christie's Paris	14-December	\$ 2,048,918
AUGUSTE RODIN (1840 - 1917), LE BAISER, BRONZE WITH BROWN PATINA, 1885	Binoche Renaud-Giquello & Associés, Paris	16-February	\$ 1,949,426
THE CELEBRATED KING FAROUK MAGICIAN BOX A SUPERB FOUR COLOR GOLD AND MUSICAL AUTOMATON MAGICIAN SNUFF BOX ATTRIBUTED TO PIGUET & MEYLAN GOLDSMITH'S MARK OF CHENEVARD JOUVET & CIE GENEVA CIRCA 1820	Sotheby's London	08-June	\$ 1,760,000
A RARE FRUIT MEIPING MING PORCELAIN VASE DECORATED IN UNDERGLAZE BLUE, YONGLE PERIOD 1403-1424. H. 29 CM., 1403	Bruun Rasmussen Auctioneers	30-November	\$ 1,692,943
清 粉彩八仙四棱笔筒 (一对) QING A PAIR FAMILLE ROSE 'EIGHT IMMORTALS' BRUSHPOT, 1644	Chinroot Auction	18-June	\$ 1,535,859
A KIRMAN 'VASE' CARPET, SOUTH EAST PERSIA, LATE 17TH CENTURY, 1675	Christie's London	19-April	\$ 1,385,690
SOUTHERN GERMAN, AUGSBURG, CIRCA 1600, THE ROTHSCHILD ORPHEUS CUP	Sotheby's London	06-July	\$ 1,369,916
LAURENT DELVAUX (1696-1778) SOUTHERN NETHERLANDISH, CIRCA 1776, CARITAS ROMANA (ROMAN CHARITY), WHITE MARBLE, ON A WOOD BASE	Sotheby's London	06-December	\$ 1,352,922

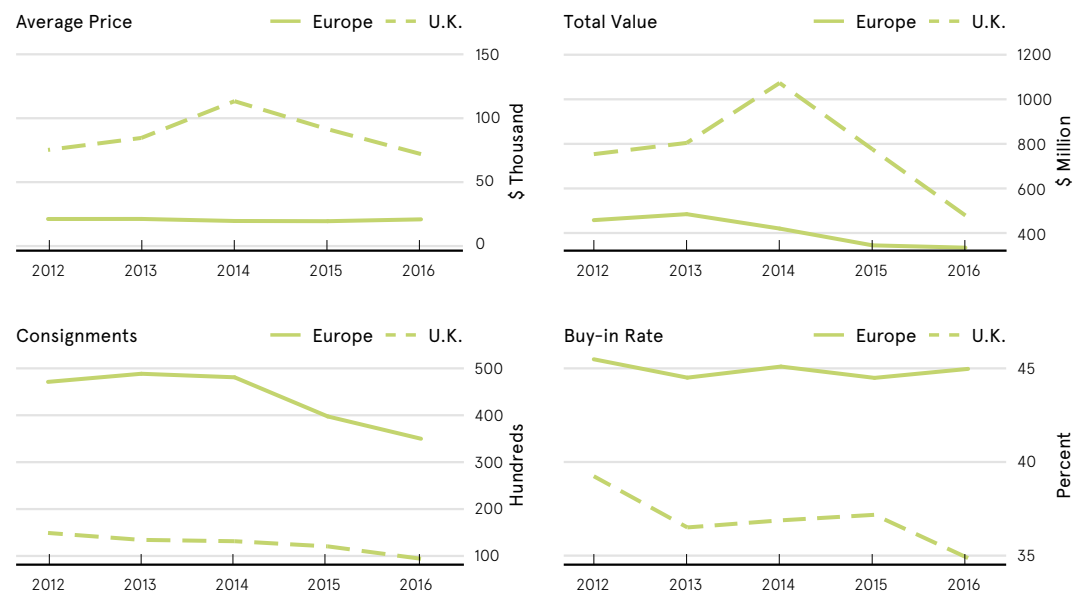
## OLD MASTERS, 19<sup>TH</sup> CENTURY AND IMPRESSIONISTS WORKS (EUROPE)

### HIGHLIGHTS

- Auction sales of Old Master works dropped 25% in 2016
- London auction houses account for 9 of the top 10 works sold
- Consignments at auction continue to drop for third consecutive year

Auction sales of Old Master works in Continental Europe dropped 2.9% despite significant higher average prices (+11.2%) amid consignments (-12%) and a lower sell-through rate. In the UK, on the other hand, mean prices for Old Master works consigned at auction followed the same trend as in the U.S. and suffered a 23% drop. Continental Europe is slowly bridging the gap with the United Kingdom when it comes to aggregated public auction sales of Old Master works (\$331 million v. \$472 million). Sotheby's Paris, Koller Auktionen, Christie's Paris, Grisebach, Dorotheum, Antik and Bruun Rasmussen hold the bulk of the market share for Old Master Paintings on the continent. Nevertheless, the United Kingdom is positioned in a different market than its continental counterpart: thanks to the London sales that attract high-end pieces, the U.K. stays undoubtedly a major international platform for Old Master works. This was further highlighted in 2016 with the sale of Peter Paul Rubens' 'Lot and his Daughters' at Christie's London, a \$58-million work.

FIGURE 32: CONTINENTAL EUROPE AND U.K. PAINTINGS



Maastricht University Graphic | Source: artnet

## TOP 10 OLD MASTERS, 19<sup>TH</sup> CENTURY AND IMPRESSIONISTS LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
PETER PAUL RUBENS (1577-1640), LOT AND HIS DAUGHTERS, OIL ON CANVAS	Christie's London	07-July	\$ 58,002,714
JOHN CONSTABLE (1776-1837), VIEW ON THE STOUR NEAR DEDHAM, FULL-SCALE SKETCH, OIL ON CANVAS, 1821	Christie's London	30-June	\$ 18,664,679
CLAUDE MONET (1840-1926), LE PALAIS DUCAL VU DE SAINT-GEORGES MAJEUR, OIL ON CANVAS, 1908	Sotheby's London	03-February	\$ 16,661,388
PIETER BRUEGHEL III (1589-1639), THE FOUR SEASONS: SPRING; SUMMER; AUTUMN; AND WINTER, OIL ON PANEL, 1624	Christie's London	07-July	\$ 8,356,811
JAMES ENSOR (1860-1949), SQUELETTE ARRÊTANT MASQUES, OIL ON CANVAS, 1891	Sotheby's Paris	07-December	\$ 7,913,843
PAUL CÉZANNE (1839-1906), FERME EN NORMANDIE, ÉTÉ (HATTENVILLE), OIL ON CANVAS, 1882	Christie's London	02-February	\$ 7,374,748
JEAN ÉTIENNE LIOTARD (1702-1789), A DUTCH GIRL AT BREAKFAST, OIL ON CANVAS	Sotheby's London	06-July	\$ 5,735,677
PIERRE-AUGUSTE RENOIR (1841-1919), FEMME NUE À SA TOILETTE OR FEMME S'ESSUYANT, OIL ON CANVAS, 1913	Christie's London	02-February	\$ 5,601,065
JOSHUA REYNOLDS (1723-1792), PORTRAIT OF LUCY LONG, MRS GEORGE HARDINGE (D. 1820), OIL ON CANVAS, 1700	Christie's London	30-June	\$ 5,007,952
JAN BRUEGHEL THE ELDER (1568-1625), STILL LIFE OF FLOWERS IN A STONEWARE VASE, OIL ON OAK PANEL	Sotheby's London	06-July	\$ 5,006,510

## MODERN ART (EUROPE)

### HIGHLIGHTS

- United Kingdom holds 65% of the auction market
- Continental Europe held ground but U.K. auction sales collapsed
- In total, public sales of Modern Art in Europe dropped 27% to \$1.15 billion

In Continental Europe, supply of Modern Art at auction dropped 10% to 38,459 consignments in 2016, leading to a 9.3% surge in price to satisfy demand on the continent. Nevertheless, the United Kingdom captured the bulk of top-end lots, holding 65% of the European auction market for Modern Art in sales volumes with only 7,694 lots. While the Continental market held ground with a small 3% drop, public sales in the U.K. shrank 35% under international pressure on the high-end market and substitution to dealers and private sales. In total, the European auction market for Modern Art dropped from \$1.57 billion in 2015 to \$1.15 billion in 2016.

FIGURE 33: CONTINENTAL EUROPE & U.K. MODERN



Maastricht University Graphic | Source: artnet

### TOP 10 MODERN ART LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
PABLO PICASSO (1881-1973), FEMME ASSISE, OIL ON CANVAS, 1909	Sotheby's London	21-June	\$ 63,537,445
AMEDEO MODIGLIANI (1884-1920), JEANNE HÉBUTERNE (AU FOULARD), OIL ON CANVAS, 1919	Sotheby's London	21-June	\$ 56,547,724
HENRY MOORE (1898-1986), RECLINING FIGURE: FESTIVAL, BRONZE WITH A BROWN PATINA, 1951	Christie's London	30-June	\$ 32,766,733
PABLO PICASSO (1881-1973), TÊTE DE FEMME, OIL ON CANVAS, 1935	Sotheby's London	03-February	\$ 27,142,240
HENRI MATISSE (1869-1954), LA LEÇON DE PIANO, OIL ON CANVAS, 1923	Sotheby's London	03-February	\$ 15,532,681
AMEDEO MODIGLIANI (1884-1920), MADAME HANKA ZBOROWSKA, OIL ON CANVAS, 1917	Christie's London	22-June	\$ 12,121,679
MAX ERNST (1891-1976), THE STOLEN MIRROR, OIL ON CANVAS, 1941	Christie's London	02-February	\$ 11,002,735
PAUL DELVAUX (1897-1994), LE MIROIR, OIL ON CANVAS, 1936	Sotheby's London	03-February	\$ 10,663,072
EGON SCHIELE (1890-1918), SELBSTBILDNIS MIT GESPREIZTEN FINGERN, OIL AND METALLIC PAINT ON CANVAS, 1909	Christie's London	02-February	\$ 10,438,382
MARC CHAGALL (1887-1985), LES MARIÉS DE LA TOUR EIFFEL, OIL ON CANVAS, 1928	Christie's London	02-February	\$ 10,115,894

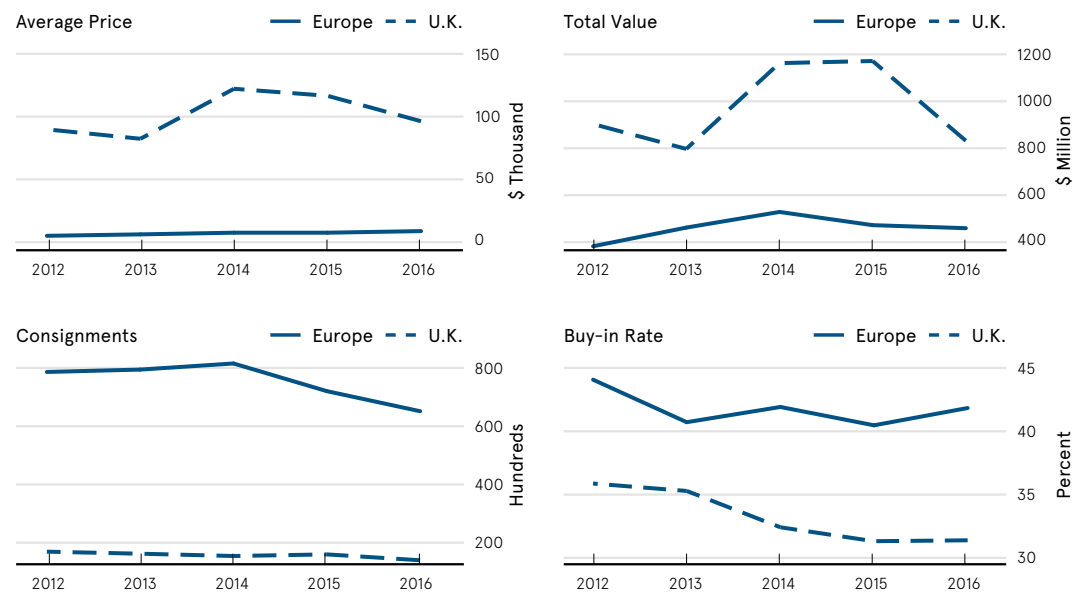
## POST-WAR AND CONTEMPORARY (EUROPE)

### HIGHLIGHTS:

- 14% less lots consigned at auction in the UK
- Private sales, dealers, blurring market for top end works
- Market favours European artists

London has been dominating the Post-War and Contemporary auction market in Europe for a decade, and 2016 is no exception. Following the American trend, the market moved away from Contemporary Art sold at auction in 2016, pushing average prices 17.7% down year on year. Sotheby's and Christie's favoured private sales to auction sales for important pieces, blurring tracks on demand for top-end works. In general, collectors hooked to their most important pieces and avoided public auctions, triggering a 14% drop in the amount of lots consigned in the UK. Even though the situation is not as dreadful as in the US, the Contemporary Art auction market is clearly far away from its glory days. In 2016, collectors preferred turning to dealers or private sales and avoided consigning blue chip works at public auctions. The market has shown less appetite, in general, for American blue chip works. Artists like Alberto Burri, Peter Doig, Jenny Saville and Adrian Ghenie made the top 10 lots sold in Europe, whereas Twombly, Warhol, Wools and Koons stayed out of the regional auction landscape.

FIGURE 34: CONTINENTAL EUROPE AND U.K. POST WAR & CONTEMPORARY



Maastricht University Graphic | Source: artnet

## TOP 10 POST-WAR & CONTEMPORARY LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
FRANCIS BACON (1909-1992), VERSION NO. 2 OF LYING FIGURE WITH HYPODERMIC SYRINGE, OIL ON CANVAS, 1968	Christie's London	30-June	\$ 26,829,026
LUCIAN FREUD (1922-2011), PREGNANT GIRL, OIL ON CANVAS, 1960	Sotheby's London	10-February	\$ 23,234,911
PETER DOIG (1959), THE ARCHITECT'S HOME IN THE RAVINE, OIL ON CANVAS, 1991	Christie's London	11-February	\$ 16,304,191
ALBERTO BURRI (1915-1995), SACCO E ROSSO, ACRYLIC AND BURLAP ON CANVAS, 1959	Sotheby's London	10-February	\$ 13,184,252
JEAN-MICHEL BASQUIAT (1960-1988), HANNIBAL, ACRYLIC, OILSTICK AND PAPER COLLAGE ON CANVAS MOUNTED ON TIED WOODEN SUPPORTS, 1982	Sotheby's London	07-October	\$ 13,125,854
GERHARD RICHTER (1932), GARTEN, OIL ON CANVAS, 1982	Sotheby's London	07-October	\$ 12,708,411
JENNY SAVILLE (1970), SHIFT, OIL ON CANVAS, 1996	Sotheby's London	28-June	\$ 9,056,228
ADRIAN GHENIE (1977), NICKELODEON, OIL AND ACRYLIC ON CANVAS, 2008	Christie's London	06-October	\$ 8,993,042
JEAN-MICHEL BASQUIAT (1960-1988), UNTITLED (HEAD OF MADMAN), OILSTICK ON PAPER LAID DOWN ON CANVAS, 1982	Sotheby's London	10-February	\$ 8,969,460
JEAN-MICHEL BASQUIAT (1960-1988), AIR POWER, ACRYLIC AND OILSTICK ON CANVAS, 1984	Sotheby's London	10-November	\$ 8,880,681



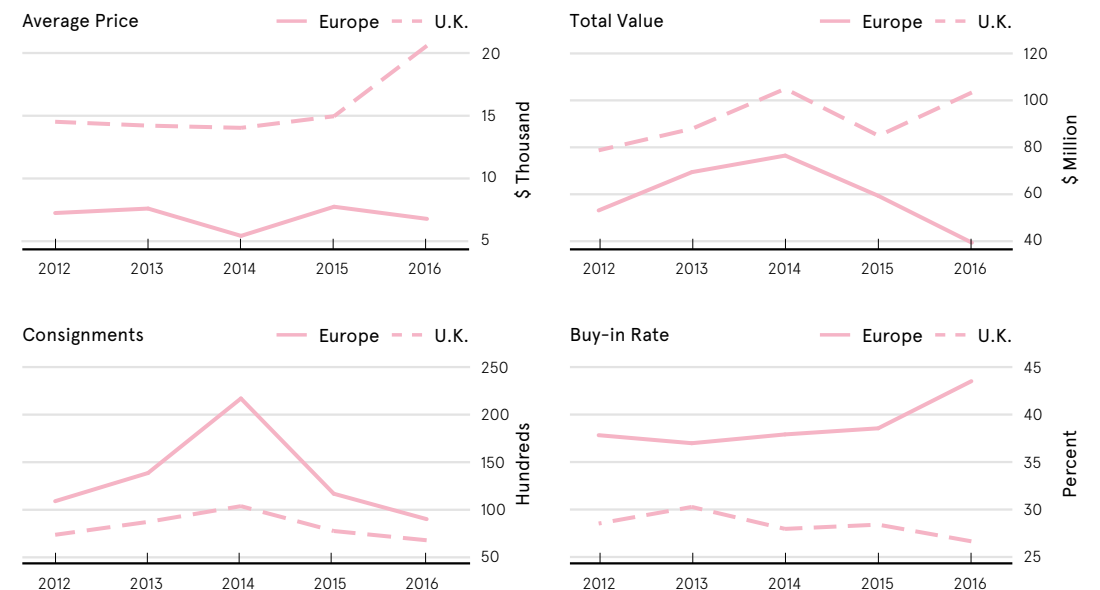
## PRINTS, PRECIOUS BOOKS AND MAPS (EUROPE)

### HIGHLIGHTS:

- Market holding breath as world's largest collection may eventually hit the auction block
- London leads the way with extraordinary consignments

The market for high-end Precious Books and Manuscripts in Europe has been nervous since 2014 when the world's largest collection (135,000 manuscripts and documents) was placed under seal by the French judiciary. Since then, the prospect of this massive collection hitting the market has been weighing on market participants and collectors. Nevertheless, average prices in the U.K. in 2016 went up (+36.8%), driven by fewer consignments (-12%) but of higher quality, of which some are extraordinary lots, such as the autograph manuscript of the second symphony by Gustav Mahler that reached \$5.7 million at Sotheby's London. A manuscript by Bach fetched \$3.3 million at Christie's London. Two major works also placed London at the center of the bibliophiles' universe in 2016: a first edition of the 1687 version of the remarkable "Philosophiae naturalis principia mathematica" by Sir Isaac Newton left for \$4.72 million, while a 1623 edition of "Comedies, Histories, and Tragedies" by William Shakespeare was acquired for \$2.75 million, both at Christie's London.

FIGURE 35: CONTINENTAL EUROPE AND U.K.  
PRINTS, PRECIOUS BOOKS AND MAPS



Maastricht University Graphic | Source: artnet

TOP 10 PRINTS, PRECIOUS BOOKS AND MAPS LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
GUSTAV MAHLER, THE AUTOGRAPH MANUSCRIPT OF THE SECOND SYMPHONY ("THE RESURRECTION"), THE COMPLETE WORK IN FIVE MOVEMENTS	Sotheby's London	29-November	\$ 5,681,392
SIR ISAAC NEWTON (1642-1727, KNIGHTED 1705). PHILOSOPHIAE NATURALIS PRINCIPIA MATHEMATICA. [EDITED BY EDMOND HALLEY (1656-1743)]. LONDON: JOSEPH STREATER FOR THE ROYAL SOCIETY [AT THE EXPENSE OF EDMOND HALLEY], TO BE SOLD BY SAMUEL SMITH AND OTHER BOOKSELLERS, 1687.	Christie's London	14-December	\$ 4,717,783
JOHANN SEBASTIAN BACH (1685-1750). AUTOGRAPH MUSIC MANUSCRIPT, TITLED AND SIGNED IN AUTOGRAPH 'PRELUDE [-- FUGA - ALLEGRO] POUR LA LUTH. Ô CEMBAL. PAR J.S. BACH', THE COMPLETE COMPOSING MANUSCRIPT FOR THE PRELUDE, FUGUE AND ALLEGRO FOR LUTE OR KEYBOARD IN E FLAT MAJOR, BWV 998, N.D. [C.1735-1740]. IN KEYBOARD NOTATION, THE CONCLUSION OF THE ALLEGRO COMPRESSED IN GERMAN TABLATURE INTO THE LOWER MARGINS OF PP.4 AND 1, THE SECOND AND THIRD MOVEMENTS TITLED 'FUGA' AND 'ALLEGRO' IN AUTOGRAPH, APPROX. 18 AUTOGRAPH CORRECTIONS, MARKED 'FIN.' AT THE CONCLUSION; THE NUMBERING 'NR. 22' INKED OVER A PENCIL ANNOTATION AT THE HEAD (PERHAPS A CATALOGUE NUMBER OF THE COLLECTION OF THE COUNTS VON VOSS OF BUCH), A FEW ADDITIONAL MUSICAL NOTES IN ANOTHER HAND AT THE FOOT OF P.1, POSSIBLY INTENDED TO BE READ IN INVERSE ORIENTATION AND SUGGESTING THAT BACH MAY HAVE REUSED THE PAPER. FOUR PAGES, FOLIO (APPROX 345 X 213MM), ON A BIFOLIUM (THE TWO LEAVES NOW SEPARATED, LIGHT EVEN BROWNING AND LIMITED INK ACIDIFICATION, A FEW MINOR SPLITS AND HOLES, TRACES OF OLD RESTORATION AT MARGINS).	Christie's London	13-July	\$ 3,320,369
WILLIAM SHAKESPEARE (1564-1616). COMEDIES, HISTORIES, AND TRAGEDIES, EDITED BY JOHN HEMINGE (D. 1630) AND HENRY CONDELL (D. 1627). LONDON: ISAAC JAGGARD, AND EDWARD BLOUNT AT THE CHARGES OF W. JAGGARD, ED. BLOUNT, I. SMITHWEEKE, AND W. ASPLEY, 1623.	Christie's London	25-May	\$ 2,753,378

Item description	Auction house	Date of sale	Price
BASILIIUS BESLER(1561-1629). HORTUS EYSTETTENSIS. [NUREMBERG]: 1613.	Christie's London	13-July	\$ 2,545,155
GEORG JOACHIM RHETICUS (1514-1574). DE LIBRIS REVOLUTIONUM ERUDITISSIMI VIRI...DOCTORIS NICOLAI COPERNICI... NARRATIO PRIMA. GDANSK: FRANZ RHODE, 1540.	Christie's London	13-July	\$ 2,397,495
JERUSALEM AND THE HOLY LAND IN PHOTOGRAPHS: 1850 TO C.1930, A MAGNIFICENT COLLECTION OF EARLY PANORAMAS, PHOTOBOOKS AND INDIVIDUAL PRINTS, TOTALLING OVER 1700 IMAGES	Sotheby's London	28-April	\$ 1,407,526
LITERATURE OF THE HEROIC AGE	Christie's London	01-December	\$ 852,537
OLIVIER DE LA MARCHE (C.1422-1502), LE CHEVALIER DÉLIBÉRÉ, ILLUMINATED MANUSCRIPT ON VELLUM, BRUSSELS, 1547	Christie's London	09-March	\$ 720,996
NOËL DE FRIBOIS (D.1467-8), MIROIR HISTORIAL ABRÉGÉ DE FRANCE OF ANTHONY OF BURGUNDY, IN LATIN AND FRENCH, ILLUMINATED MANUSCRIPT ON VELLUM [PARIS, C.1490]	Christie's London	25-May	\$ 691,099

## LA HAUTE JOAILLERIE (EUROPE)

### HIGHLIGHTS:

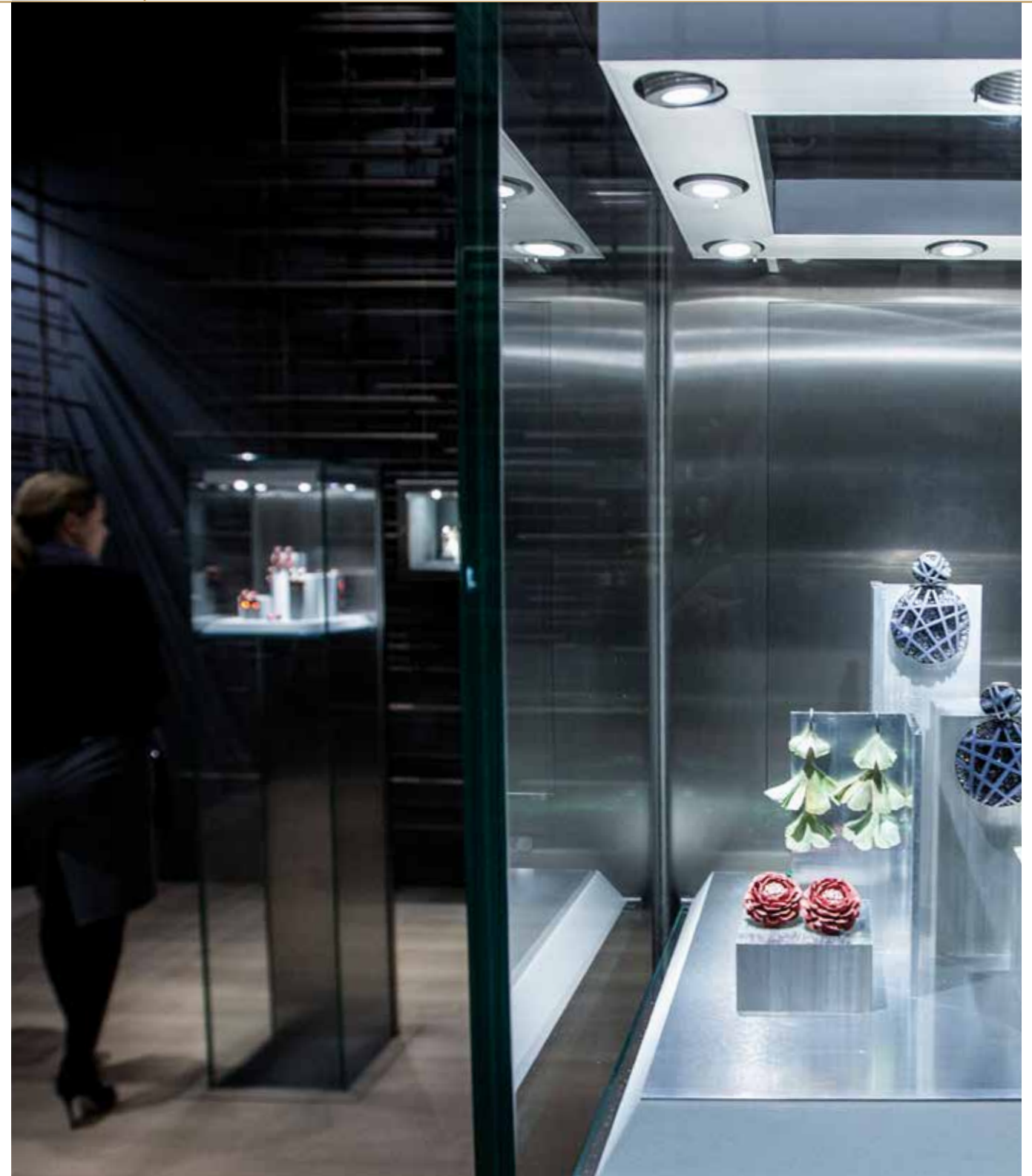
- In 2016, Switzerland scooped 50% of the \$663 million European auction market for La Haute Joaillerie
- Drop in consignments more than compensated by increase in price
- Strong demand for coloured diamonds

Switzerland is at the center of the high-end Jewellery trade in Europe. In 2016, most of the top sales took place in Geneva, including the most expensive Jewellery ever sold at auction – the Oppenheimer Blue. The diamond ring sold for \$57.9 million. Many other high valued sales occurred in Geneva this year; this caused total sales in Switzerland to triple over the past year, going from \$110 million to \$330 million or almost 50% of the European's \$663 million auction market for high-end Jewellery. This drastic increase in sales led to a 54% increase of the entire European market. Furthermore, all across Europe, a drop in supply has led to higher prices at auction, with strong demand for pink and blue diamonds in particular.

FIGURE 36: CONTINENTAL EUROPE AND U.K. LA HAUTE JOAILLERIE



Maastricht University Graphic | Source: artnet





TOP 10 LA HAUTE JOAILLERIE LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
THE OPPENHEIMER BLUE A SENSATIONAL COLOURED DIAMOND RING SET WITH A FANCY VIVID BLUE RECTANGULAR-CUT DIAMOND, WEIGHING APPROXIMATELY 14.62 CARATS, FLANKED ON EITHER SIDE BY A TRAPEZE-SHAPED DIAMOND; ALSO ACCOMPANIED BY THE ORIGINAL 'EIGHT BLADES' MOUNTING FROM VERDURA, RING SIZE 6, MOUNTED IN PLATINUM 'EIGHT BLADES' RING SIGNED VERDURA NG TO THE RARITY AND PROVENANCE OF THE OPPENHEIMER BLUE.	Christie's Geneva	18-May	\$ 57,855,252
'THE UNIQUE PINK' SUPERB FANCY VIVID PINK DIAMOND RING THE PEAR-SHAPED FANCY VIVID PINK DIAMOND OF OUTSTANDING COLOUR WEIGHING 15.38 CARATS, MOUNTED AS A RING, SIZE 51.	Sotheby's Geneva	17-May	\$ 31,584,016
MAGNIFICENT FANCY INTENSE PINK DIAMOND RING SET WITH A STEP-CUT FANCY INTENSE PINK DIAMOND WEIGHING 17.07 CARATS, BETWEEN TRIANGULAR DIAMONDS WEIGHING 3.07 AND 3.13 CARATS RESPECTIVELY, SIZE 51.	Sotheby's Geneva	16-November	\$ 20,785,508
A RARE COLOURED DIAMOND RING SET WITH A FANCY VIVID PINK PEAR-SHAPED DIAMOND, WEIGHING APPROXIMATELY 9.14 CARATS, BETWEEN TAPERED BAGUETTE-CUT DIAMOND SHOULDERS, RING SIZE 6, MOUNTED IN PLATINUM	Christie's Geneva	15-November	\$ 18,102,157
MIROIR DE L'AMOUR A SENSATIONAL PAIR OF DIAMOND EARRINGS, BY BOEHMER ET BASSENGE EACH PEAR-SHAPED DIAMOND PENDANT, WEIGHING APPROXIMATELY 52.55 AND 50.47 CARATS, TO THE PEAR-SHAPED AND MARQUISE-CUT DIAMOND CLUSTER SURMOUNT, 7.0 CM, MOUNTED IN GOLD SIGNED BOEHMER ET BASSENGE PARIS	Christie's Geneva	15-November	\$ 17,542,940
SUPERB FANCY VIVID BLUE DIAMOND RING SET WITH A PEAR-SHAPED FANCY VIVID BLUE DIAMOND OF EXCEPTIONAL COLOUR WEIGHING 7.32 CARATS, SIZE 51	Sotheby's Geneva	17-May	\$ 17,125,000

Item description	Auction house	Date of sale	Price
'THE SKY BLUE DIAMOND' SUPERB FANCY VIVID BLUE DIAMOND RING, CARTIER SET WITH A SQUARE-CUT FANCY VIVID BLUE DIAMOND WEIGHING 8.01 CARATS, THE GEOMETRIC MOUNT SET WITH BRILLIANT-CUT AND BAGUETTE DIAMONDS, SIZE 51, SIGNED CARTIER, NUMBERED, FRENCH ASSAY AND MAKER'S MARKS.	Sotheby's Geneva	16-November	\$ 17,080,048
MAGNIFICENT FANCY INTENSE PINK DIAMOND RING SET WITH A PEAR-SHAPED FANCY INTENSE PINK DIAMOND WEIGHING 13.20 CARATS, SIZE 52	Sotheby's Geneva	16-November	\$ 16,237,898
MAGNIFICENT FANCY DEEP BLUE DIAMOND RING SET WITH AN OVAL FANCY DEEP BLUE DIAMOND WEIGHING 7.74 CARATS, BETWEEN SHIELD-SHAPED DIAMOND SHOULDERS, SIZE 51, MAKER'S MARK FOR JACQUES TIMEY.	Sotheby's Geneva	16-November	\$ 13,711,448
IMPORTANT FANCY INTENSE BLUE DIAMOND BROOCH, ALEXANDRE REZA SET WITH A MARQUISE-SHAPED FANCY INTENSE BLUE DIAMOND WEIGHING 6.64 CARATS, HIGHLIGHTED WITH TWO PEAR-SHAPED FANCY INTENSE BLUE DIAMONDS WEIGHING 2.01 AND 1.01 CARATS, FURTHER ACCENTED WITH SIMILARLY SHAPED COLOURLESS DIAMONDS, MAY BE WORN AS A PENDANT, SIGNED A. REZA, FRENCH ASSAY AND MAKER'S MARKS.	Sotheby's Geneva	17-May	\$ 13,682,377

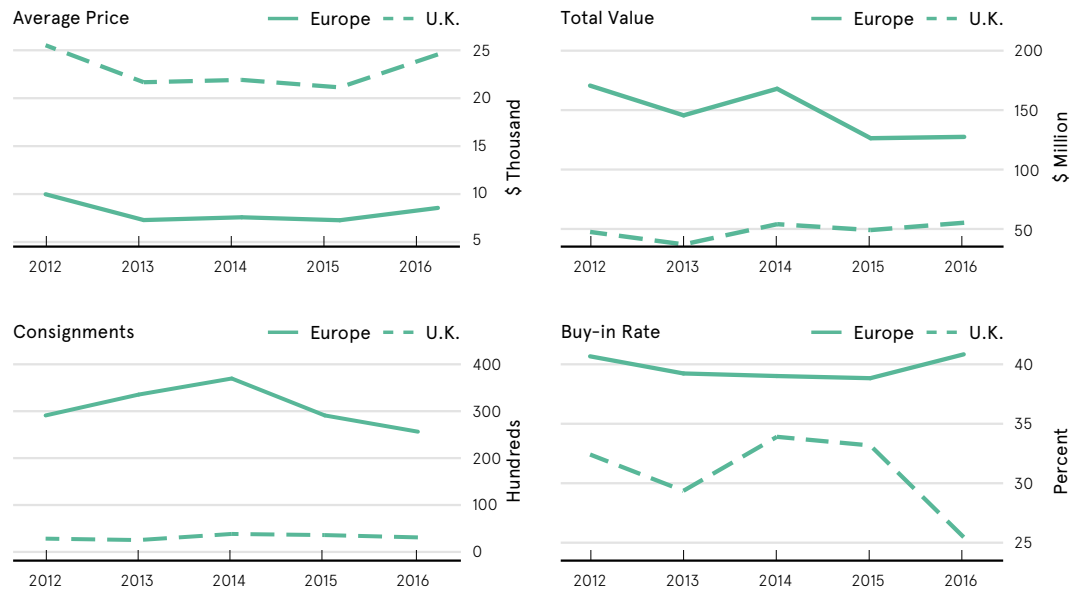
## DESIGN OBJECTS (EUROPE)

### HIGHLIGHTS:

- Prices of Design objects increase by 18%
- Supply of Design objects decreased in 2016
- U.K. buy-in rate dropped from 36% to 24% over the year

The total sales volume of Design objects in Continental Europe stayed relatively unchanged at \$124 million in 2016 against \$123 million in 2015. However, a 12% increase in sales in the United Kingdom pushed the total sales in Europe to \$179.6 million, ahead of the U.S. and China. France overwhelmingly dominated sales in the top end with Diego Giacometti and Claude Lalanne's works taking the lead at auction in Paris. In particular, Artcurial placed four out of the top 10 Design objects lots sold in Europe during its autumn sales. The good performance of Design market is reflected by an increase (+18%) in average prices across Continental Europe following a drop in supply in the region (-12% in consignments). The United Kingdom positioned itself on more expensive items highly in demand, also generating successful auctions. Indeed, 74% of Design objects auctioned in London found a buyer. This is significantly higher than in Continental Europe, where the sell-through rate was 59%.

FIGURE 37: CONTINENTAL EUROPE AND U.K. DESIGN



Maastricht University Graphic | Source: artnet

## TOP 10 DESIGN LOTS IN EUROPE IN 2016

Item description	Auction house	Date of sale	Price
MARC NEWSON (1963), RARE CHIFFONNIER DIT "POD OF DRAWERS", FIBERGLASS, POLYESTER RESIN, ALUMINUM, 1987	Artcurial	25-October	\$ 1,110,409
CLAUDE LALANNE (1924), LOVE-SEAT, GILT BRONZE, GALVANIZED COPPER, 1972	Christie's Paris	25-May	\$ 804,796
DIEGO GIACOMETTI (1902 - 1985), PAIRE DE FAUTEUILS AUX POMMEAUX DE CANNE, PATINATED BRONZE, BRASS, PATINATED IRON, SUEDE, 1963	Christie's Paris	25-May	\$ 764,640
FRANÇOIS-XAVIER LALANNE (1927 - 2008), 'MOUTONS DE LAINE', UN MOUTON ET DEUX OTTOMANS, WOOL, WOOD, PATINATED ALUMINIUM AND BRONZE, 1969	Christie's Paris	20-October	\$ 658,830
JEAN ROYÈRE (1902 - 1981), PAIRE DE FAUTEUILS MOD. BOULE DITS "OURS POLAIRES", OAK, MOHAIR VELVET, 1953	Artcurial	29-November	\$ 595,668
DIEGO GIACOMETTI (1902 - 1985), TABLE "GRECQUE", VARIANTE À L'OISEAU OU AU MERLE, BRONZE WITH GREEN PATINA, 1965	Artcurial	14-September	\$ 574,808
DIEGO GIACOMETTI (1902 - 1985), PAIRE DE FAUTEUILS À TÊTES DE LIONNES, PREMIÈRE VERSION, PIEDS ANTÉRIEURS EN PATINS, BRONZE WITH BROWN-GREEN PATINA, 1970	Artcurial	14-September	\$ 560,838
CLAUDE LALANNE (1924), TABLE LOTUS ET SINGE, BRONZE WITH GOLD PATINA, 2012	Christie's Paris	25-May	\$ 537,089
CLAUDE LALANNE (1924), BANQUETTE CROCODILE, GILT BRONZE, 2007	Sotheby's Paris	24-May	\$ 511,535
JORIS LAARMAN (1979), IMPORTANT 'BONE' CHAIR, ALUMINUM, 2006	Phillips London	27-April	\$ 501,237

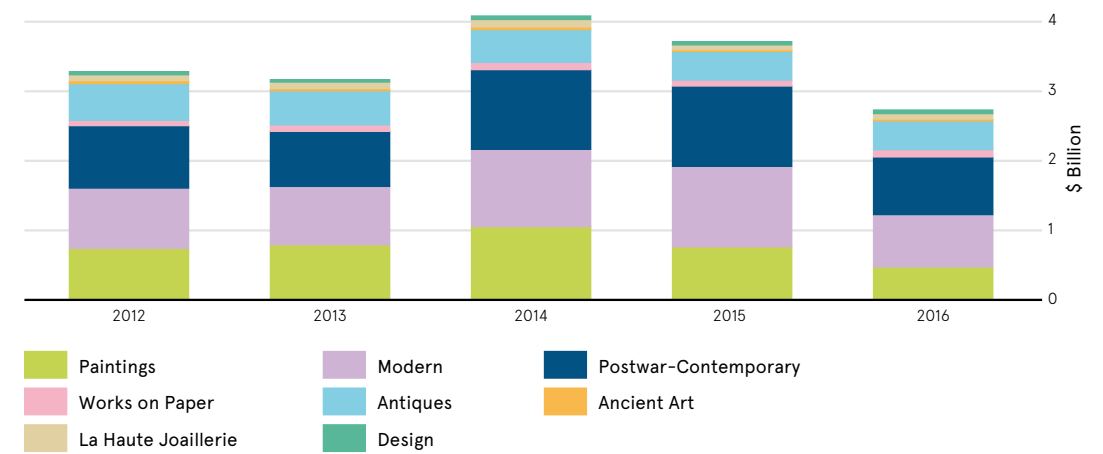


## EUROPEAN COUNTRIES ART TRADE & TRENDS

### UNITED KINGDOM

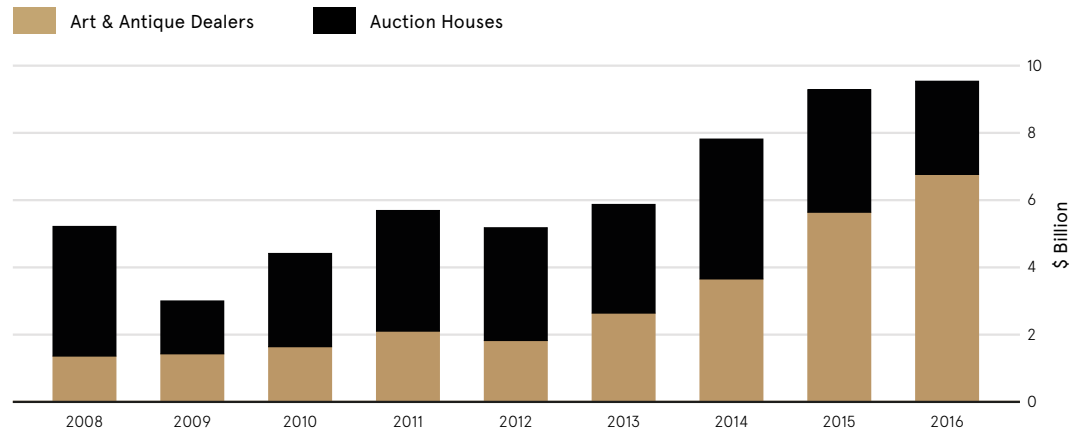
The U.K. auction market for art and antiques has experienced a significant decline over the past two consecutive years. The value of art and antiques sold at auction in the U.K. has fallen by 24% during 2016. The beginning of the section looked at auction prices in Europe compared to Continental Europe, with the difference due to the large fall in U.K. auction sales. Across the categories we have also seen an overall decline in consignments, in line with the drop in total sales generated. The number of consignments at auction are down 19.4%.

FIGURE 38: U.K. AUCTION HOUSE SALES BY CATEGORY



Maastricht University Graphic | Source: artnet

FIGURE 39: U.K. ART AND ANTIQUES SALES



Maastricht University Graphic  
Sources: U.K. Office of National Statistics, artnet, & MACCH Global Dealer Survey 2017

Art industry dynamics have been changing since 2014 causing total auction sales to fall, whilst the retail sector in the U.K. has been gaining ground. Observing the increase in art and antiques sales made by art and antique dealers in the United Kingdom, relative to the sales made at auction houses, overall we observe a fast growing art market in the U.K. The U.K. art market, in terms of auction and dealer sales is very much alive and flourishing. If it were not for the drop in Sterling for auction sales occurring from July to December and denominated in U.S. dollars and for end of year turnover by dealers also translated into dollar denominations the U.K. art market would have been considerably larger at the end of 2016.

In this figure, we do not account for privately brokered sales, which have almost doubled from the reported \$673 million in 2015 to almost \$1 billion at both Sotheby's and Christies during 2016. The growth in private sales by auction houses included as a further category, pushes overall sales in the U.K. art market into positive growth territory, despite the fall in auction sales, and the weakened Pound.

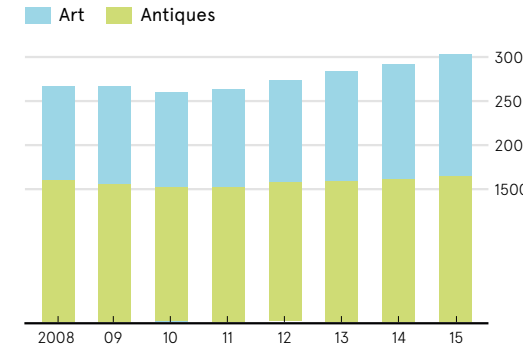
To give some insight into the retail sector, for art and antique dealers in the U.K. art market, we have accessed data provided by the Office of National Statistics. Across countries a uniform four-digit number is used for retail sales<sup>2</sup>. Four digit NACE codes provide data on retail sales of new goods in specialised stores, under which sales in commercial art galleries fall. In the U.K. we have data NACE codes at the 5-digit level,

<sup>2</sup> According to the U.K. Standard Industrial Classification of Economic Activities (2007), the U.K. SIC is based on the NACE, and a fifth digit is added to form a further subclass to the NACE four digit classes.

which means that we can analyse retail sales in commercial art galleries and also retail sales of antiques (including antique books and auction houses together). Since we have the breakdown of antiques sold at auction houses separately for the year, we can also determine just how large the retail sector is for art and antique dealers separately from auction houses. As a side note, we include retail sale in new goods for artworks, but not for other types of collectibles, such as new watches and Jewellery.

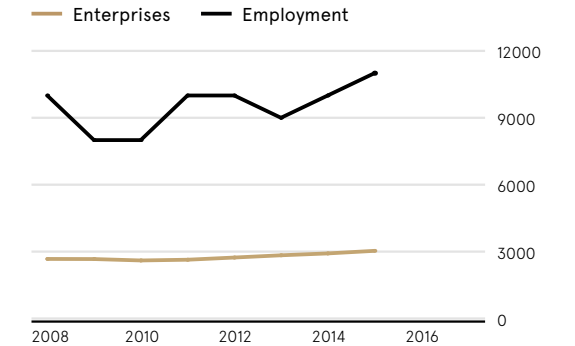
The U.K. Annual Business Survey provides detailed information on the number of commercial art galleries and second hand art and antique dealers trading and their sales volumes. This includes data on all those micro and small sized businesses that employ at least one person on the payroll.

FIGURE 40: U.K. ART AND ANTIQUE DEALER NUMBERS



Source: U.K. Office for National Statistics

FIGURE 41: U.K. ART AND ANTIQUES RETAIL TRADE



Source: U.K. Office for National Statistics

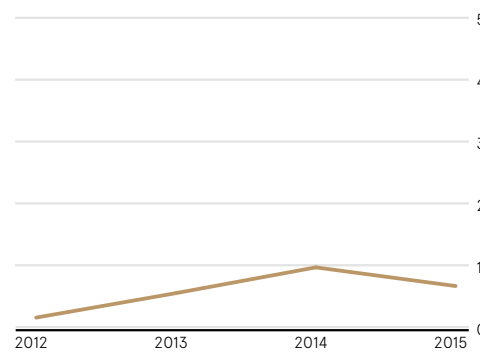
There has been a steady number of registered second hand retail store enterprises in the U.K. since 2010. In the U.K. there has been just over 1600 retail stores in the antiques market. The number of commercial art galleries has increased over the past 5 years, from 1,084 in 2010, to 1,357 in 2015. The number dropped only slightly during the financial crisis from 1,106 in 2009 to 1,084 in 2010 and then has increased ever since. Showing a resilience in the sector. Taking the art and antiques industry together this rise has resulted in over 3000 enterprises in the sector. In 2015 there were 3034 reported enterprises by the U.K. Office of National Statistics.

The numbers employed in the art and antiques sector have also increased from five to six thousand over the year 2014 to 2015. Total employment figures are rounded to thousands, and are averages during the year, taken from the U.K. Business

Register and Employment Survey (BRES). These official statistics also include sole traders<sup>3</sup>. The fraction of employment across the art and antiques sectors are fairly equally distributed, with six thousand people in employment in the art sector and five thousand in employment in second-hand antiques retail stores. Two thousand employees are part-time in each of the art and antiques sectors; however, no further breakdown is given on full-time equivalent employment as is the case in some other countries, which may inflate the employment figures slightly.

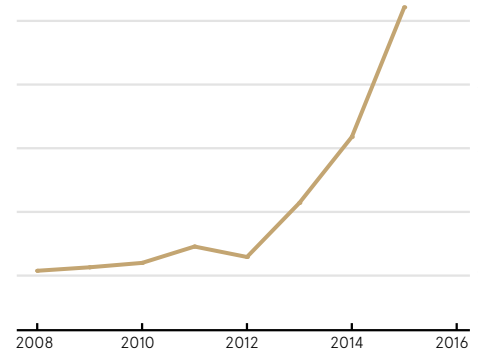
In the secondary market under the category retail sale for antiques and auction houses, sales totaled £731 million pounds – just over \$1 billion dollars using the end of year exchange rate. This includes auction house sales of antiques. Sales in the antiques sector dropped considerably between 2014 and 2015.

FIGURE 42: U.K. ANTIQUE DEALER TURNOVER



Sources: U.K. Office for National Statistics

FIGURE 43: U.K. ART AND ANTIQUES RETAIL TRADE TURNOVER



Sources: U.K. Office for National Statistics

Using recorded official national statistics, we show the reported growth in the art and antiques retail industry since 2008. There has been a staggering increase since 2012 in the art and antiques retail sector in the United Kingdom. By 2015, the total turnover in the art and antiques retail trade sector, excluding VAT was £3.537 billion, equivalent to \$5.213 billion dollars<sup>4</sup>.

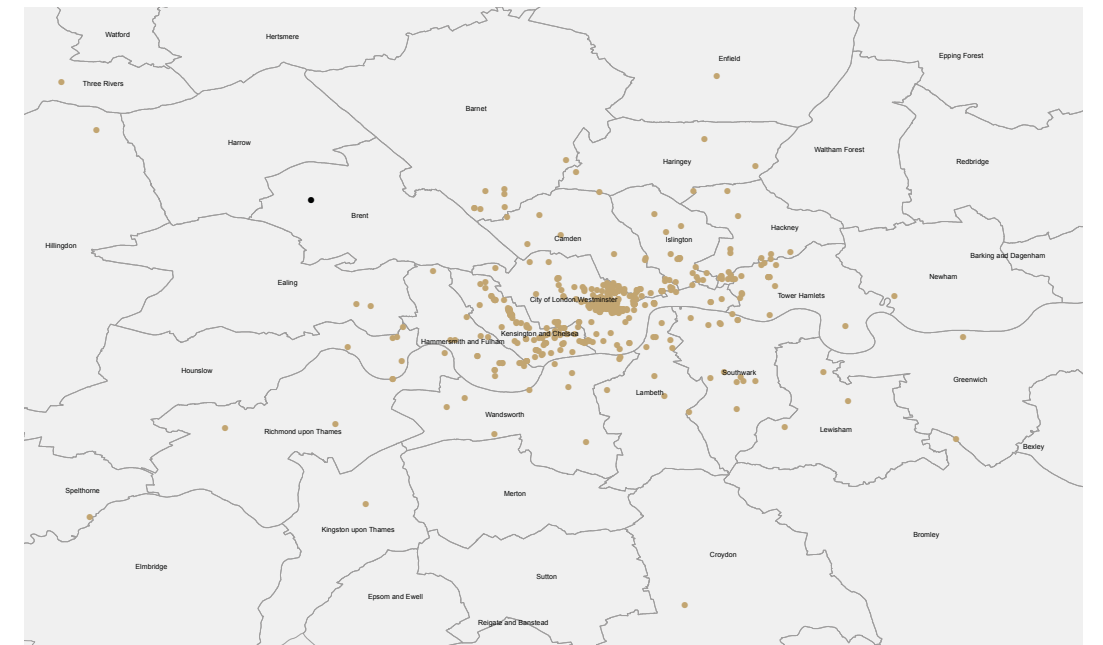
From this figure, turnover from commercial art galleries accounts for 80% of these sales. In 2015, turnover by commercial art galleries in the U.K. was £2.80 billion, equal to \$4.13 billion dollars. Although the U.K. has a much smaller number of commercial art galleries than the U.S., the turnover for the sector is much larger per art dealer. The majority of these art dealers are based in London, with over 600 dealers.

<sup>3</sup> As reported by the Business Register Employment Survey, employment here is calculated by adding the number of working owners to the number of employees employed by a business, where working owners include sole traders, sole proprietors and partners who receive drawings and/or a share of the profits, but are not paid via pay-as-you-earn (PAYE).

<sup>4</sup> All Sterling figures are converted using end of year exchange rates using exchange rate data from Datastream.

Turnover in this retail sector for commercial art galleries has grown more than five-times since 2008; with commercial art galleries taking half a billion pounds in 2008, down to just £294 million pounds in 2011. Since 2011 the dealer market has surged in the U.K. and growth in the commercial art gallery sector has been phenomenal. From £376 million in 2012, to £664 million pounds in 2013. In 2014 turnover again doubling to £1.193 billion pounds, and for the last available year in 2015 the total sector captured by the official national statistics (ONS UK) again tripled to £2.88 billion pounds. This phenomenal growth is driven mostly by the arrival of additional international dealers, who over this period opened gallery spaces in London.

FIGURE 44: U.K. DEALER LOCATIONS IN LONDON AREA

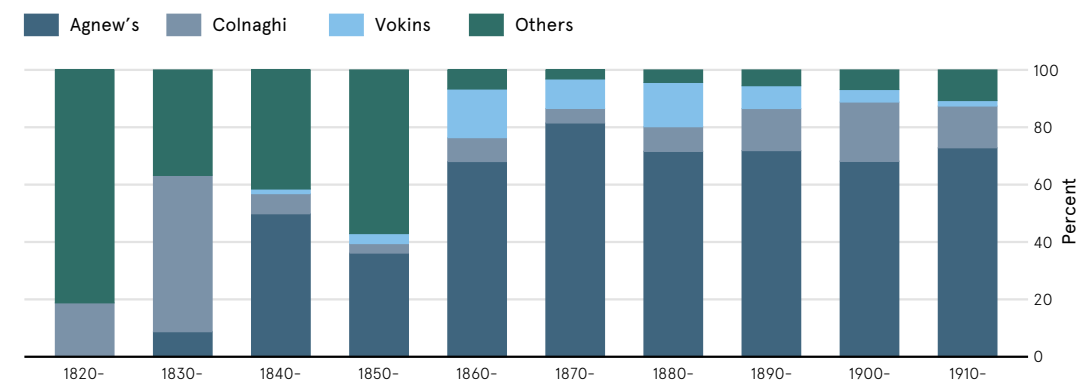


London has long been the hub of activity for art dealers. Between 1800 and 1900 the growth of art dealers in London grew at a similarly staggering rate. During the Nineteenth Century there were also a few prominent players in the market, still prevalent today. An overview of the data collected from the V&A in London, with information on the identity of buyers and sellers at auction until the first world war, gives us an impression of the market structure at the time. Vokins was then larger than Colnaghi in the decades between 1860 and 1890, and then Colnaghi grew in share relative to Vokins.



The top three dealers at the time were Agnew's, Colnaghi, and Vokins, who together had a share of between 80 and 90% of sales; defined by sales at auction. Agnew's surpassed Colnaghi in terms of market share in the 1840s; measured in both the number of transactions (volume) and also by the value of those transactions. Agnew's dominated the market from 1850 onwards.

FIGURE 45: LONDON DEALER SHARES BY VALUE (19TH CENTURY)



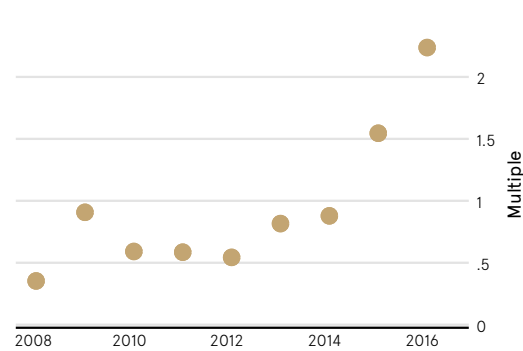
Source: Maastricht University, De Silva, Gertsberg and Pownall (2016)

This structure is still evident today, with a handful of dealers earning over 25 million per year, and the vast majority much less. Average dealer turnover was just over two million pounds per gallery, and at the end of the year this was equal to just over three million dollars. The distribution is not equal across dealers. In the data appendix we provide information on a sample of over 5000 global dealers. The histogram depicts how a handful of galleries earn a very high amount of turnover, skewing the average. Our data from Orbis database, has information on private firms, including Contemporary dealers acting as limited companies or branches in the U.K. such as The Pace Gallery Limited, David Zwirner Limited, Hauser & Wirth Gallery Limited, and Gagosian Gallery International; ordered by size of reported sales.

Employees at these galleries are typically between 25 and 49 employees, and are therefore considered as small enterprises. Less than a handful employ more than fifty employees and thus are considered medium sizes enterprises. These Contemporary galleries, have joined alongside established London art dealers, such as Ivor Braka Limited, Modern Collections Limited, Richard Green & Sons, Johnny van Haefen Limited, and Annelly Juda Fine Art Limited.

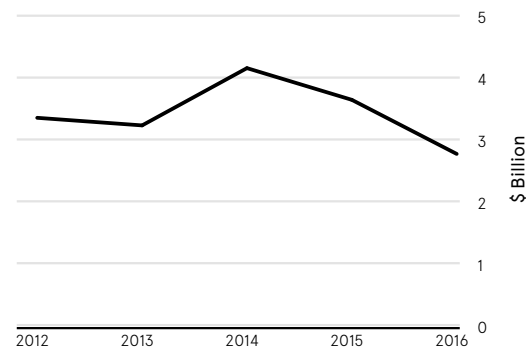
In London it becomes self-evident that private sales through the dealer market is a significantly larger proportion of sales revenue than the auction market. Without accounting for private brokered sales at auction houses, the fraction of the dealer market to the auction market is at the end of 2016 estimated at over 70%. In line with the world average. Otherwise stated the multiple of dealer to auction sales is more than twice as large by 2016, which is far greater than just two years ago in 2014 when auction sales were considered equal to sales made in the dealer market.

FIGURE 46: U.K. DEALER TO AUCTION SALES



Maastricht University Graphic  
Sources: U.K. Office for National Statistics  
artnet, & MACCH Global Dealer Survey 2017

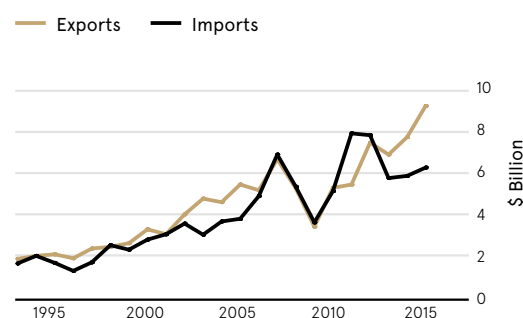
FIGURE 47: U.K. AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

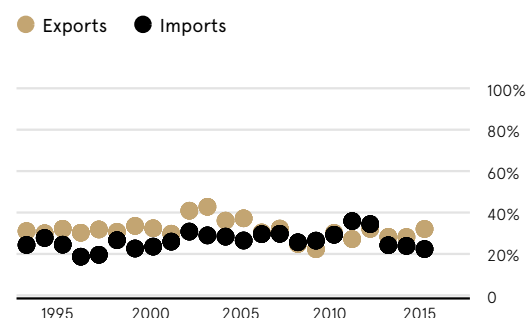
Although auction sales in the U.K. have fallen in the U.K. during 2016, the shift to the private sector has resulted in a growing market once privately brokered sales by the auction houses are also accounted for. We use the distribution for our total number of U.K. art and antique dealers, and their reported growth in the end of year sales turnover over 2016, we put a conservative estimate for U.K. retail trade at over \$6 billion U.S. dollars for 2016. Growth of 24% due to end of year 2016 results, discounted by the fall in Sterling following the U.K. referendum.

FIGURE 48: ART AND ANTIQUES TRADE U.K.



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 49: WORLD ART TRADE SHARE U.K.



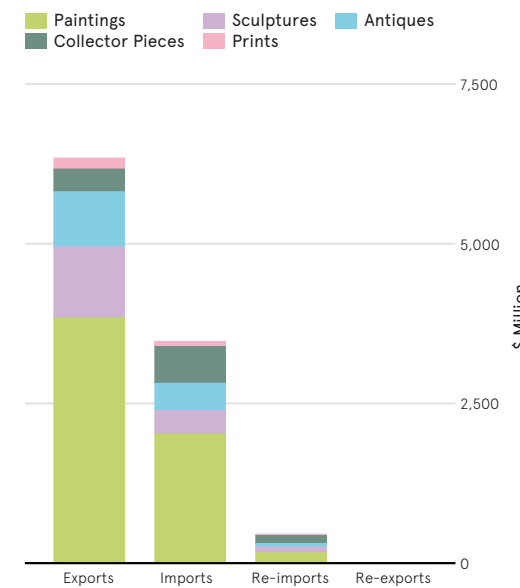
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

The United Kingdom accounts for 63.5% of art exports leaving Europe. The U.K. share in 2015 was 22.4% of world trade, down 1.5% on the year prior. The U.K. historically over the past 30 years has been a net exporter of art, antiques and collector pieces. Only in 2011 following the global financial crisis did imports pick up faster in the U.K. than exports. By 2013, the U.K. was back to being a net exporter, with the gap growing in art trade leaving the U.K. borders to the rest of the world.

Growth is expected to slow in the U.K. economy from 2% to 1.5%, as inflationary pressure from higher import prices starts to take effect. U.K. collectors and buyers will suffer in terms of Sterling.

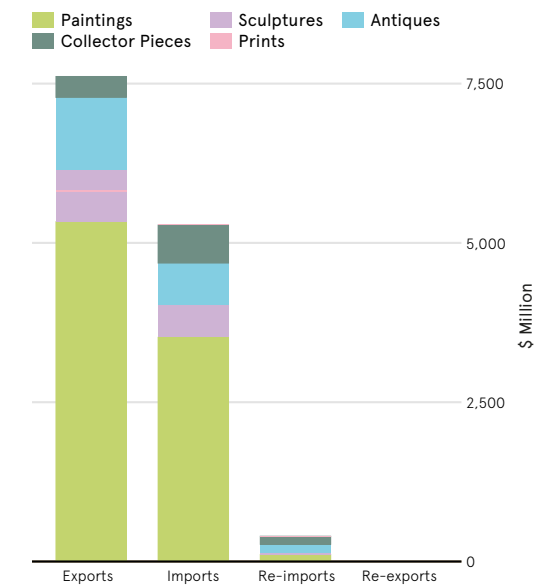
The majority of art dealers in our survey see the pending Brexit as negative. Those based in the U.K., denominated in Sterling see this as evenly distributed across very negative influence, negative influence, no influence, and positive influence. None stated that it would be extremely positive.

FIGURE 50: 2016 U.K. ART AND ANTIQUES TRADE  
DATA AVAILABLE UNTIL OCTOBER 2016



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 51: 2015 U.K. ART AND ANTIQUES TRADE  
COMPARABLE DATA UNTIL OCTOBER 2015

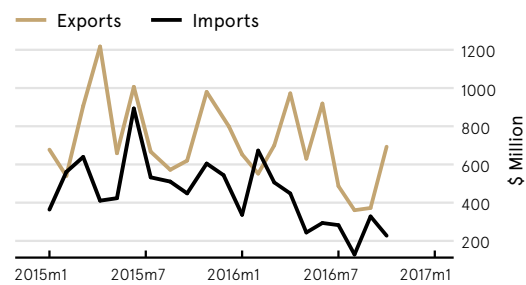


Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

How does trade fair so far during 2016 compared to year on year in 2015? In the U.K. between January and October 2015 exports of art and antiques were \$7.845 billion. Imports were \$5.387 billion. By October 2016 trade was down in the U.K. for the same period the year earlier. (Data only available until October 2016 for the U.K. at the time of press). Exports of art and antiques down 19%. Imports of art and antiques down by 36%. The impact in the Paintings category of trade is even higher. Exports of Paintings were down by 27% over the comparable year and imports down 42%.

The Pound is back to a 30 year low against the U.S. dollar. Since world trade is denominated in U.S. dollars, the drop in trade is partially a result from the fall in Sterling, post June 24th following the shock to the economy that the U.K. may leave the European Union. Both exports and imports have declined as compared to the same period in 2015. However, the year on year percentage changes indicate that the drop is more severe than the influence of just a weaker Pound. There appeared to be a less severe drop in September 2016, when analysts were speaking of a potential Brexit bounce, yet by October the negative trend in the year on year trade was back to minus 60%.

FIGURE 52: U.K. MONTHLY ART AND ANTIQUES TRADE 2015 UNTIL OCTOBER 2016



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 53: U.K. % CHANGE YEAR ON YEAR PER MONTH 2015 UNTIL OCTOBER 2016



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

How does our survey compare European and U.K. dealer expectations for 2017 sales for art dealers and galleries located in the U.K.? Particularly those in London over the rest of the U.K.? 50% of dealers say that Brexit will have a negative influence on their businesses. This concerns those based in Continental Europe more than elsewhere, with 60% of dealers saying it will have a negative influence. Those based in the U.K. itself remain marginally more concerned that it will affect their businesses negatively. The appetite for foreign buyers and a weaker pound see this a positive influence on their businesses.

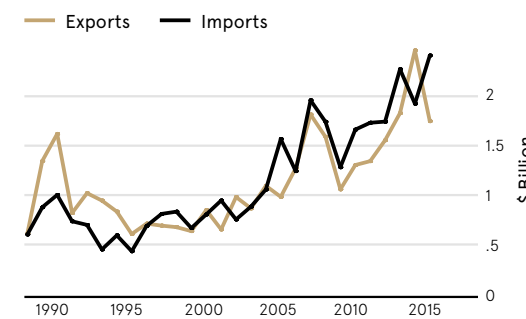
With auction sales down, and art trade in terms of dollars down for 2016 the U.K. art market relies on foreign purchasing power to keep it strong during 2017. The art dealers and galleries from our survey based in the U.K. are very optimistic for growth looking ahead. With much uncertainty surrounding the pending negotiations once Article 50 is triggered for the U.K. to leave the European Union, turbulent times certainly lie ahead.

## SWITZERLAND

The Swiss market, is an extremely important point of exchange for a large number of dealers and collectors in the art trade. Imports into Switzerland represent 8.6% of world trade, whilst exports at the end of 2015, (the last full available year statistics) were 6.0%. Imports into Switzerland are 21% of European imports, and exports are 12% of Europe's exports.

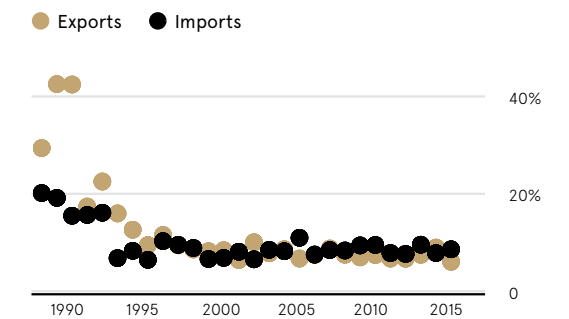
Trade in artworks, collector pieces and antiques was lower than the previous year, when imports were 7.8% and exports were 9.0% of world trade. The difference is due to the larger discrepancy in the 2014 reported figures of global imports and exports collected by the United Nations. In 2014 reported exports were \$3 billion dollars larger than imports. This can be observed in the world art trade graphs of exports and imports by art and antiques categories earlier in the report. The apparent improvement in reporting trade flows comes at a time when there was a move to clamp down on the disappearing flows of capital in the global financial system. Banking secrecy being abandoned with multinationals being asked to pay their fair share of tax.

FIGURE 54: ART AND ANTIQUES TRADE SWITZERLAND



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 55: WORLD ART TRADE SHARE SWITZERLAND



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Switzerland plays a key role in facilitating the flow of financial and non-financial wealth to offshore tax havens<sup>5</sup>. Whether the temporary political order will be able to manifest the power to combat the antics of legal tax avoidance remains to be seen. The large trade flow into Switzerland is in part due to the financial opacity that Switzerland offers collectors throughout the world.

<sup>5</sup> Professor Gabriel Zucman from Berkeley University of California estimates total offshore wealth belonging to non-residents in Switzerland to be \$2.3 trillion.

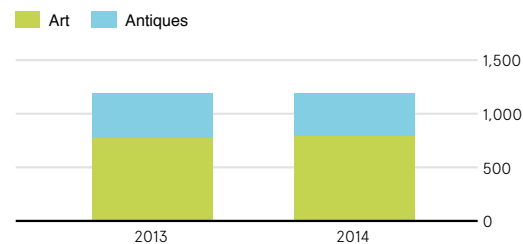


In the retail trade sector data are available from the Swiss Federal Statistics Office until 2014. The Swiss national office for statistics estimated that there were a total of 794 art dealers, employing 1174 people and 401 antique traders employing 552 people.

A study led by Professor Christian Weckerle at Zürich University on the Swiss cultural sectors found that in 2013 the art sector as a whole, consisted of a total of 5836 establishments employing 13182 full and part time people. Switzerland, typical for other European countries with a large fraction of part-time workers, in the art sector, resulted in the full time equivalent labour of 6673. The total revenue of the art sector in 2013 was 2.048 million Swiss Francs, equal to \$2.3 billion U.S. dollars.<sup>6</sup>

Breaking this down into sectors, in 2013 there were 3175 self-employed artists, 1279 art institutions, and 71 museums within these figures. Focusing in on art and antique dealers, as we have with other countries reveals that in 2013 there were 419 antique dealers, and 778 art dealers.

FIGURE 56: SWISS ART AND ANTIQUE DEALER NUMBERS



Source: Swiss Federal Statistics Office

The number of art and antique dealers in the market has remained stable over these two years for which we have full official statistics available from the Swiss Federal Statistics office. Whilst the antique dealer sector has decreased marginally in terms of the numbers of establishments and people employed the art dealer market has increased in a similar size, maintaining approximately 1200 art and antique dealers, who employ at least one person. In 2013, art and antique dealers employed the equivalent of 541 and 1122 fulltime employees respectively, with 785 jobs in the antiques trade and 1649 in the art trade.

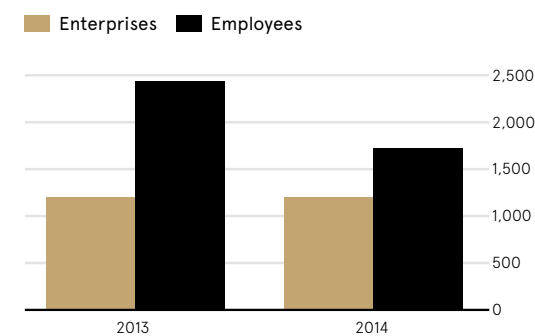
By 2014, which is the last available year with full statistics for Swiss labour data, there has been a drop in the number of full time equivalent workers employed by art and antique dealers. By 2014 the number of antique dealers had fallen by 18 establishments down to 401, with employment down 30%, employing the equivalent of only 552 full

<sup>6</sup> End of year exchange rates used from DataStream.

time employees. A similar trend occurred in employment at art dealers with a drop in the equivalent full time employees to 1174, from 1649 in 2013. However, the number of art dealers in total increased by a small fraction to 794.

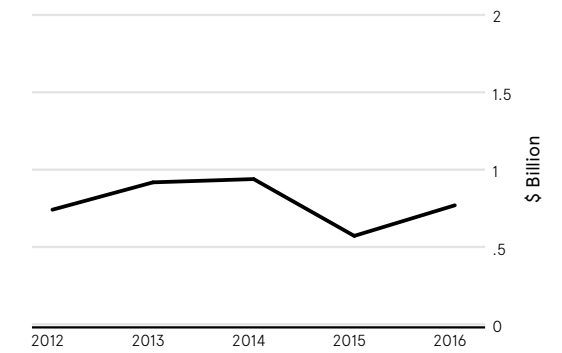
In Switzerland we saw a near 30% drop in the numbers employed by art and antique dealers, from 2013 to 2014, even whilst the overall number of art dealers increased, albeit only slightly.

FIGURE 57: SWISS ART AND ANTIQUE DEALERS



Source: Swiss Federal Statistics Office

FIGURE 58: SWISS AUCTION SALES REVENUE

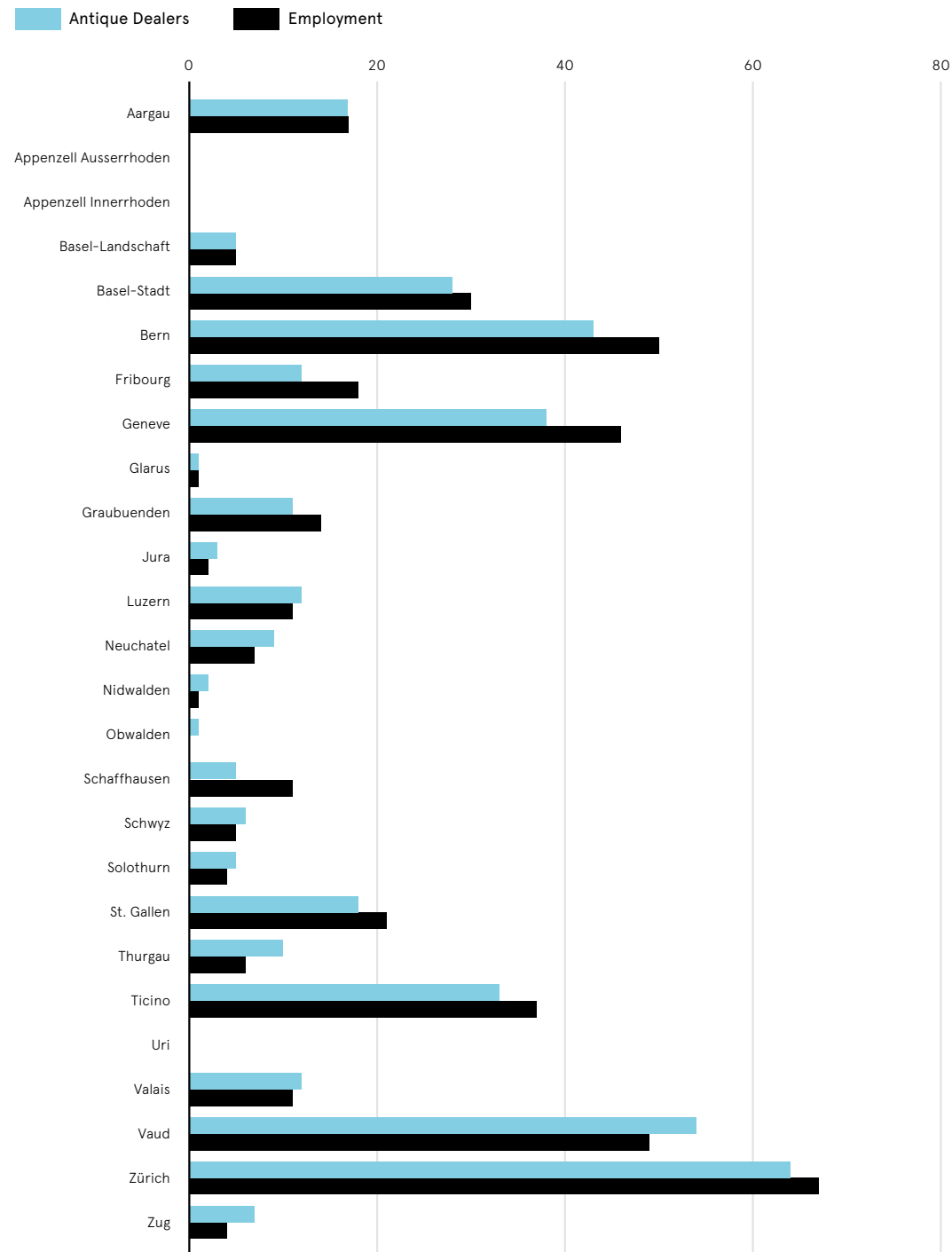


Maastricht University Graphic | Source: artnet

Genève plays host to the majority of auction house sales taking place in Switzerland, with Sotheby's Geneva the tenth largest auction house in the world by total sales value, and Christie's Genève at number fifteen. Auction sales in Switzerland totaled \$0.769 billion during 2016, the auction market having grown by over a third in sales volume since 2015, when sales were \$0.572 dollars.

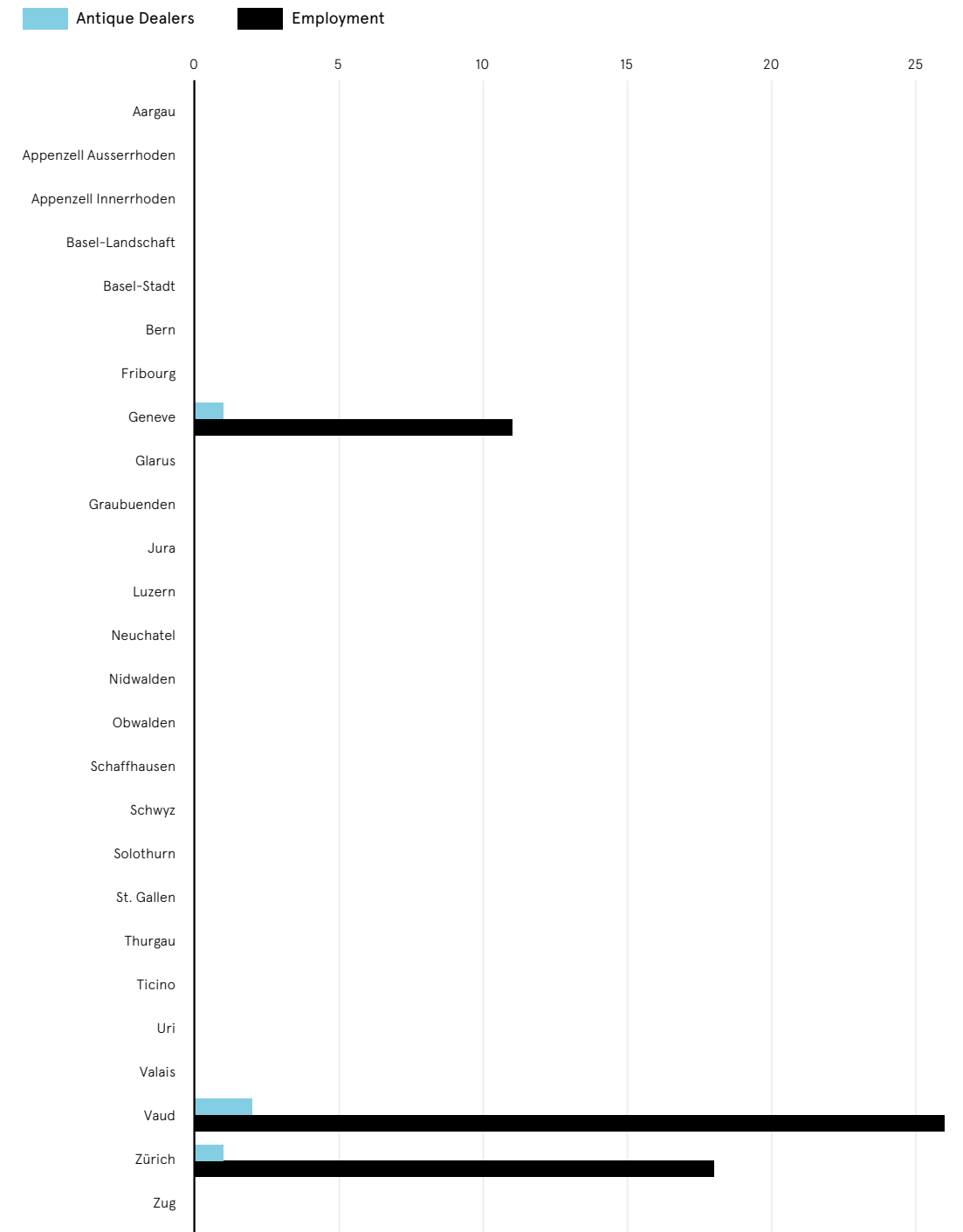
In the art dealer market, trade in Switzerland extends far beyond the hub of Genève. For a further breakdown across the Swiss regions (cantons) we have information on the number and size of dealers across the 26 cantons. There is only one reported middle-sized establishment in the Swiss Federal Official Statistics employing more than 50 full time employees in Zürich (not shown). The rest fall into either small or micro businesses, depicted in the following graphs. The majority of art and antiques retail establishments fall into the category of micro enterprises, employing fewer than 10 people on a full time equivalent basis. Small businesses are larger than micro businesses, and employ between 10 and 25 employees. Distributed across the cantons the antique dealer trade is more equally distributed across many Swiss cantons. The larger art dealers are situated in Zürich and Bern. The larger antiques and antiquities dealers are situated in Zürich, Vaud and Genève.

FIGURE 59: SWISS MICRO ENTERPRISES BY CANTON LESS THAN 10 EMPLOYEES



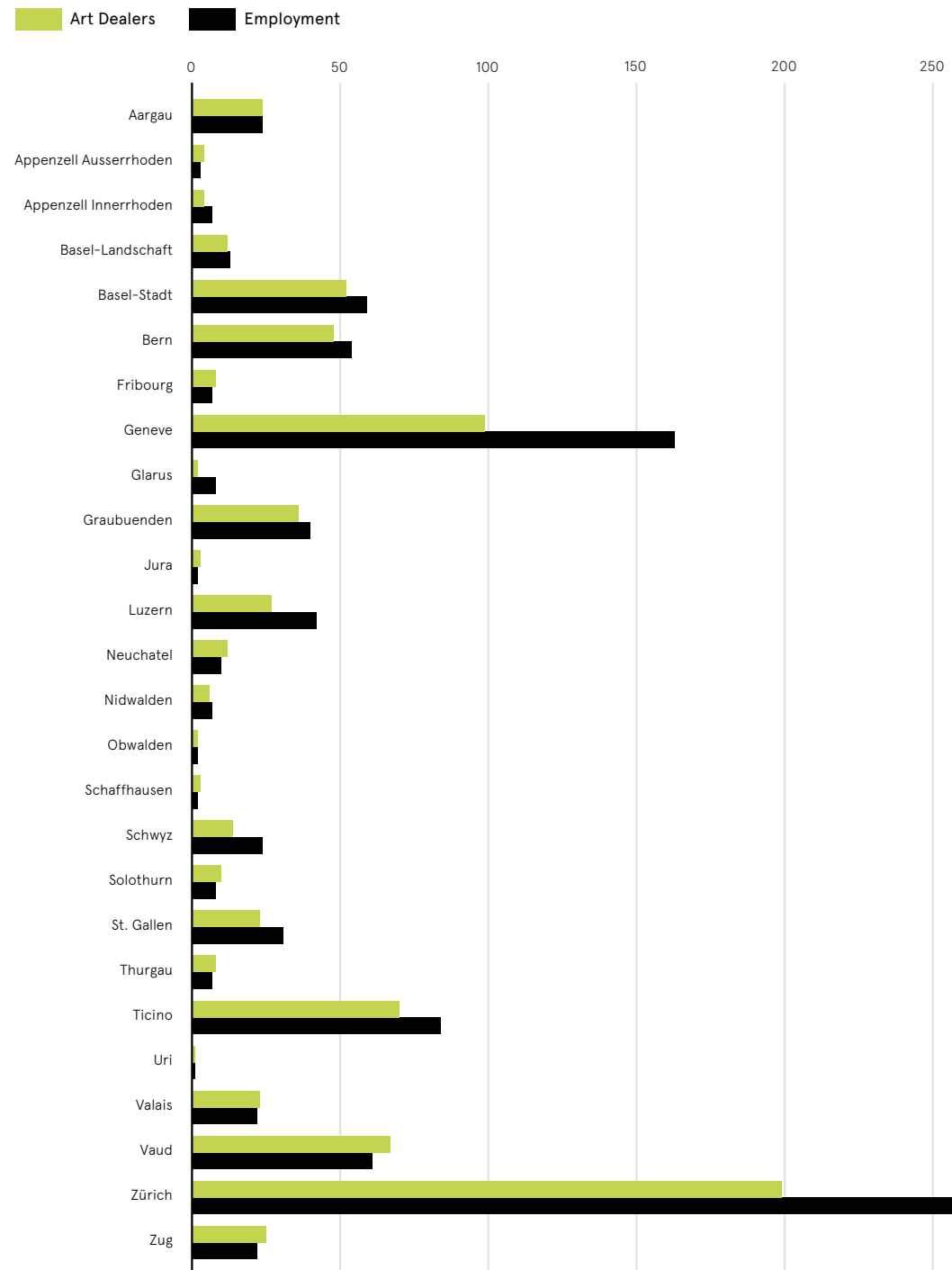
Source: Swiss Federal Statistics Office

FIGURE 60: SWISS SMALL ENTERPRISES BY CANTON 10-50 EMPLOYEES



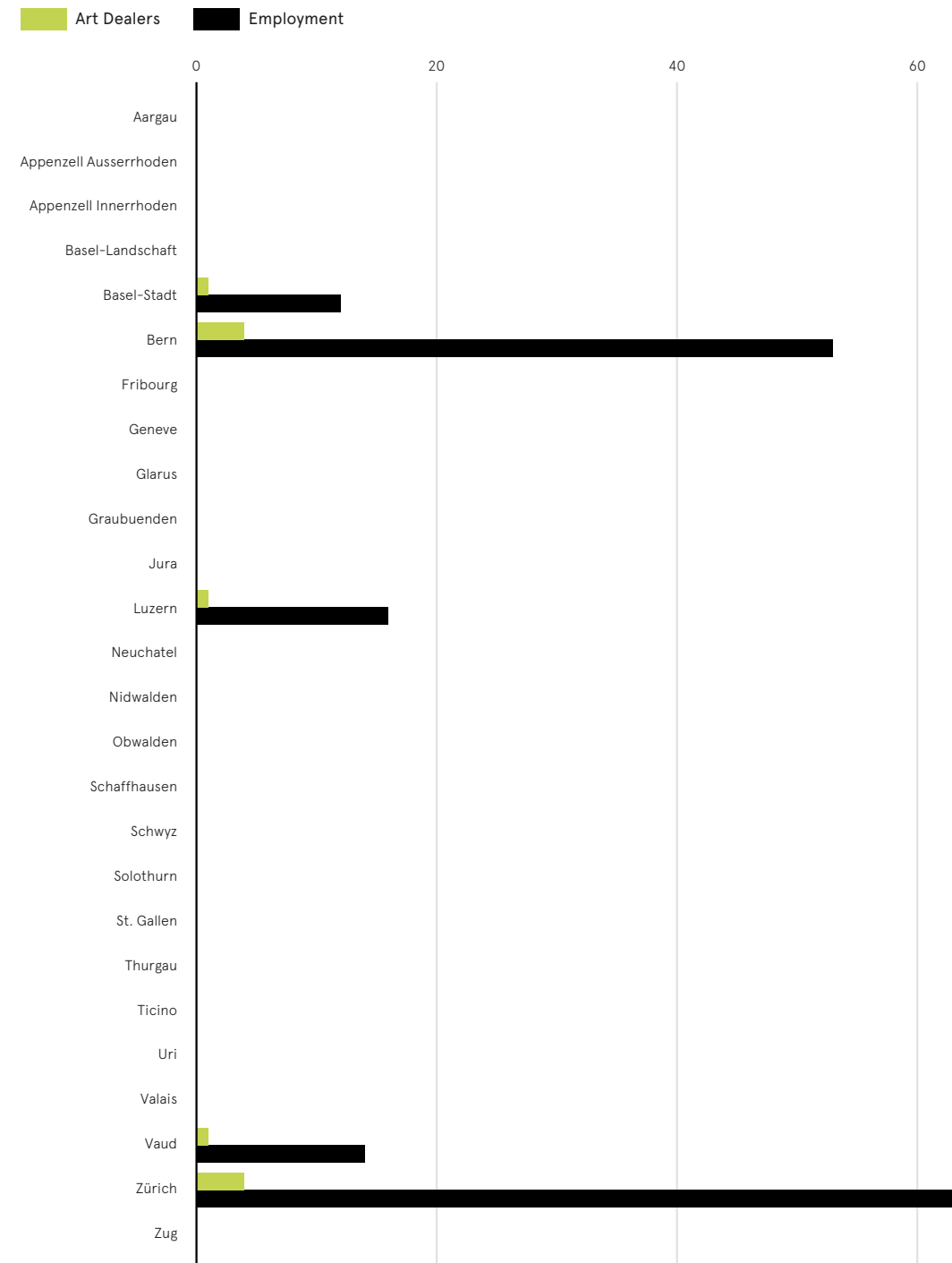
Source: Swiss Federal Statistics Office

FIGURE 61: SWISS MICRO ENTERPRISES BY CANTON LESS THAN 10 EMPLOYEES



Source: Swiss Federal Statistics Office

FIGURE 62: SWISS SMALL ENTERPRISES BY CANTON 10-50 EMPLOYEES



Source: Swiss Federal Statistics Office



Although a small fraction of the number of people in the art sector in Switzerland are employed by art and antique dealers, their combined revenue was over 94% of the revenue for the total art sector. Museums and educational institutions are typically financed by the State. Antique dealers turned over 324 million CHF and 1.611 million CHF for art dealers; totaling 1.934 billion CHF which is equal to \$2.173 billion USD. Average revenue in the antique dealer trade was 773.3 thousand CHF (\$868 thousand dollars), and for art dealers 2.07 million CHF (\$2,325 thousand dollars). This distribution is skewed towards a handful of large dealers in Switzerland. It is also likely that given the favourable tax conditions in Switzerland, that some galleries and high end art dealers make use of these conditions and are not included within the official national statistics. This could easily run into a few billion dollars.

Those dealers working closely with the sector of Swiss private sales in the industry will have an insight into how large this unreported segment of the art dealer industry is. We do not aim to reveal this fraction of the market, but merely acknowledge its existence, and highlight that the 5% fraction of global art sales that the Swiss market currently constitutes using our figures is a lower bound on reported retail and auction trade. Given the role that Switzerland plays as a tax haven globally, it is by no means a stretch of the imagination to comprehend that this figure for the Swiss art market could easily run up to figures of at least twice this size.

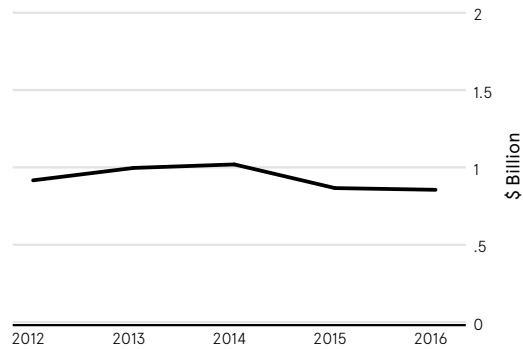
The University of Zürich report mentions that the growth in revenue across the combined art sector over the previous year of reported sales between 2012 and 2013 was 15.6%. Swiss dealers reporting to our annual survey reported average increase in turnover during 2016 to be 13.75%, and expected growth of 24% looking ahead to 2017.

It is in any case of interest to note that on average per dealership, art and antique dealers in Switzerland are, alongside those based in London, and Austria, the highest revenue generating art and antique dealer markets in the world.

## FRANCE AND GERMANY

After the UK and Switzerland, France and Germany are the next largest trading partners in art and antiques. Sales at French auction houses are the fourth largest in the world, with \$0.855 billion dollars of sales in 2016. However, as an exporter, France ranks below Switzerland in terms of cross border trade in art and antiques, with more art sales remaining within French borders. French sales at auction were only down by 1% over the year, with average prices increasing by 25%. Buy-in rates were lower during 2016, whilst consignments were down by 23%. Although volumes were down, sales at French auction houses in 2016 have remained stable. French dealers also posted positive growth in turnover during 2016 of 10.3%, and looking forward to 2017 expect growth of 14%.

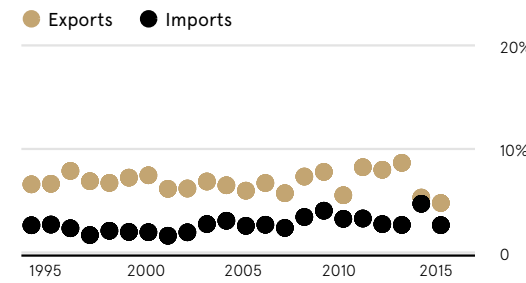
FIGURE 63: FRANCE AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

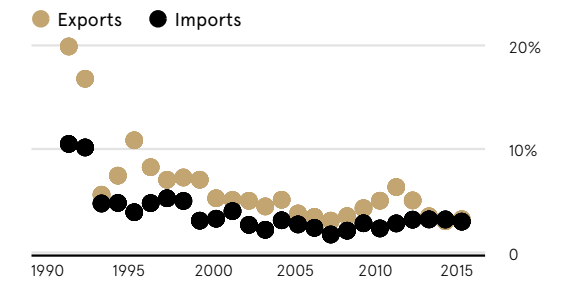
France and Germany each account for 4.8% and 3.2% of world exports, down from an 8.2% share in France and a 6.3% share for Germany in 2011. In 1991 Germany accounted for 20% of world exports, and 10.05% of imports. However, by 2015, both countries have reduced in particular exports of cultural heritage. In 2015 imports are half of just five-years ago; in France now accounting for a 2.6% fraction of world imports of artworks, collector pieces and antiques, and a 3.0% fraction in Germany.

FIGURE 64: WORLD ART TRADE SHARE FRANCE



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 65: WORLD ART TRADE SHARE GERMANY



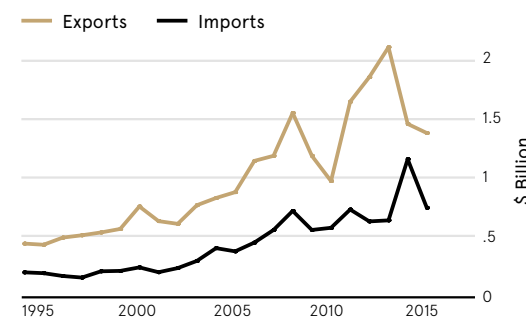
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Together France and Germany still account for 16% of European export trade, and 14% of European import trade in artworks, collector pieces and antiques.

Exports in both countries grew above the \$1 billion mark during 2011, and measures have been taken to curb the further export of cultural heritage. In 2016, the introduction of the German policy and law on restricting cultural exports.

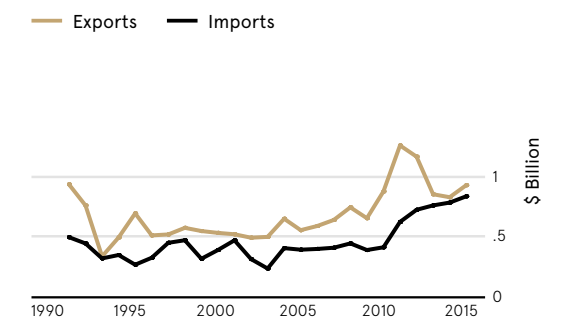
In the survey, we also asked dealers how this influences them. Of those dealers based in Germany, two-thirds say the adoption of the German law limiting exports will negatively affect their business; whilst the remaining third say it will have no influence. Overall, European art dealers share the sentiment that the Internal Market has been a positive force for the European art market.

FIGURE 66: ART AND ANTIQUES TRADE FRANCE



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 67: ART AND ANTIQUES TRADE GERMANY



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Retail trade within both France and Germany is a more important and large segment of the economy than in other countries. Private sales through dealers is a very important part of the market in both countries. In France, Paris homes 48% of Contemporary French art dealers. From the latest report from the Ministère de la Culture et de la Communication, in 2013, the number of Contemporary galleries and art dealers in France was 2191. Just over one thousand, of them, are situated in Paris. The next most dense place for Contemporary Art dealers in France is in the Provence-Alpes-Côte d'Azur, where less than 500 reside. There are no detailed breakdown of art and antique dealer figures for France and their turnover, we resort to our network analysis and survey for annual turnover figures and reported growth for 2016 to include in the aggregate art market figures. In Germany data are available with the breakdown for art and antique dealers, and retail trade, and turnover. Retail art trade in Germany showed resilience during the global financial crisis and Germany experienced a growth in both the number of enterprises in the art sector, as well as people employed over this period. It is encouraging that the numbers of people employed in the art industry has risen with a strong trend since 2010.

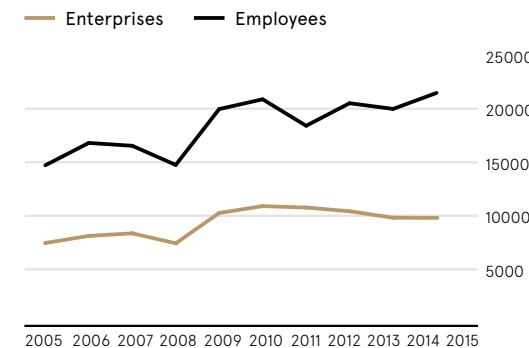
Annual statistics of wholesale and retail trade for the sale of art, pictures, craftwork, and stamps are taken from the Statistisches Bundesamt, Wiesbaden. According to their national statistics, in 2005 there was a total of 5671 enterprises employing 18,891 people. By the end of 2014 this number had reached 7984 enterprises, with almost 30 thousand employees, 27949 recorded by the statistics office. Although the number of enterprises increased during the financial crisis, when other countries were declining, the art and antique dealer market was growing. Particularly the urban hub, Berlin. The market peaked in 2010 in terms of number of enterprises, reaching 8625 enterprises, and almost 30 thousand employees, with 29953 employed. Turnover in 2010 was 2.119 billion euros. In 2011 and 2012 the market fell in terms of enterprises, with more enterprises closing than opening, however turnover increased to reach an all-time high of 2.674 billion euros.

Over the last five years turnover has remained above 2 billion dollars, and in 2014, the final year of data released by the national statistics office turnover remained high at 2.512 billion euros. Using the exchange rate at the end of 2014, this is equal to \$3.042 billion U.S. dollars.

Online sales accounted for only around 2% of sales in 2007 and 2008, and increased to 12.7% of turnover in 2014 were reported by the Statistisches Bundesamt to be 200 million euros.

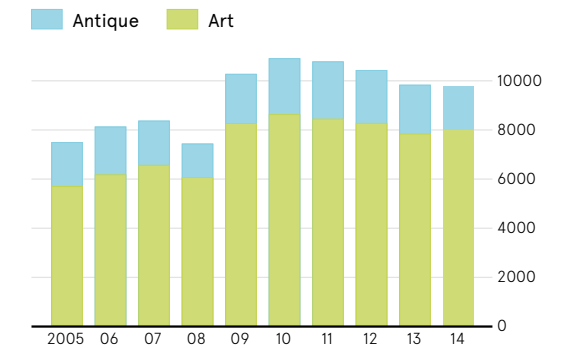
For Germany, taking official statistics from the Federal Bureau of Statistics of Germany, retail sales figures are larger, implying that the size of the German art and antique dealers market is a much more important segment of the art market than auctions sales.

FIGURE 68: GERMANY ART AND ANTIQUES RETAIL TRADE



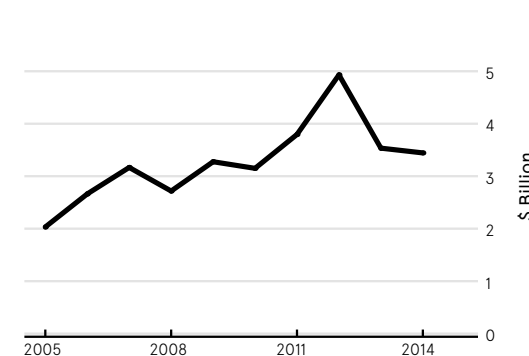
Source: Statistisches Bundesamt

FIGURE 69: GERMANY ART AND ANTIQUE DEALER NUMBERS



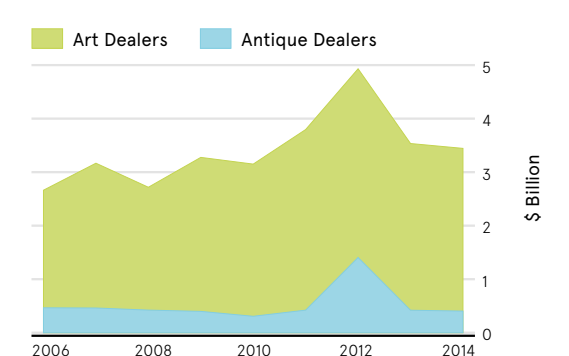
Source: Statistisches Bundesamt

FIGURE 70: GERMANY ART AND ANTIQUES RETAIL TRADE TURNOVER



Source: Statistisches Bundesamt

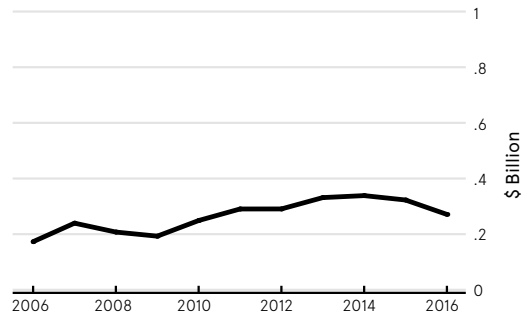
FIGURE 71: GERMANY ART AND ANTIQUE DEALERS TURNOVER



Sources: Statistisches Bundesamt & Artnet

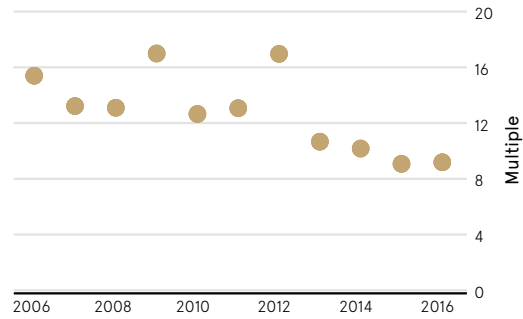
The peak in art and antique dealer turnover in 2012 occurred from the large increase in the number of dealers established prior in 2009, with a subsequent increase in employment in 2010. The increase in revenue for antique dealers created a surge between 2012 and 2013, particularly due to the turnover from antique dealers as shown. With total turnover for art and antique dealers reaching \$5 billion. This increase in antiques sold in 2012 subsided in 2013, reverting back to a similar level as seen in the past between 2006 and 2011, of just under half a billion dollars, with art trade in addition of \$3 billion. The art market in Germany in the retail sector was highly resilient to the financial crisis. Retail sales hardly dropped in 2008 with the financial crisis.

FIGURE 72: GERMANY AUCTION SALES REVENUE



Source: artnet

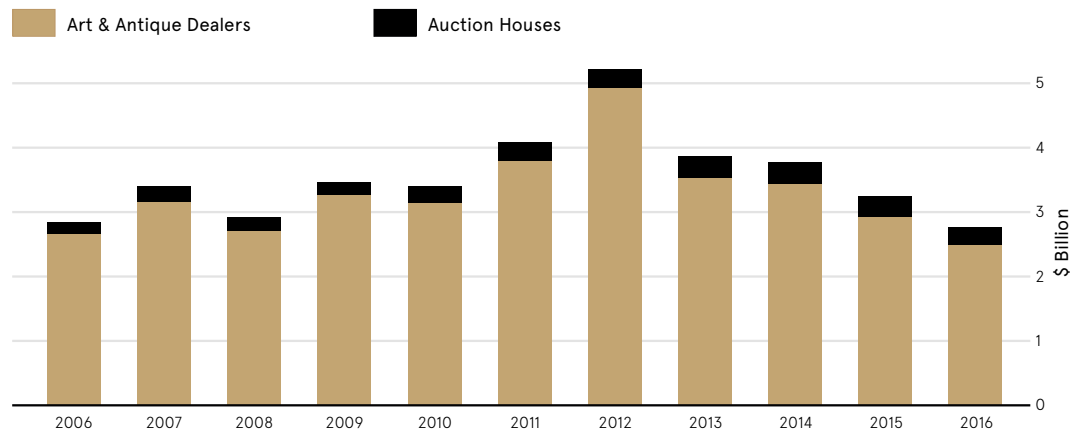
FIGURE 73: GERMANY DEALER TO AUCTION SALES



Maastricht University Graphic  
Sources: Statistisches Bundesamt  
artnet & MACCH Global Dealer Survey 2017

In 2016 auction sales have remained a small steady fraction of the art market, at a quarter of a billion U.S. dollars, down on 2014 and 2015 when they reached almost a third of a billion U.S. dollars. The auction market for art and antiques remains a less important part of the market in terms of value sold than the dealer market. However, a drop in retail growth was experienced by art dealers reporting to our annual survey. With a larger fall in retail sales than in auction sales, the multiple of dealer sales to auction sales has dropped from over 16 in 2012, when the turnover by art and antique dealers was at its peak, to 9 today.

FIGURE 74: GERMANY ART&ANTIQUE SALES

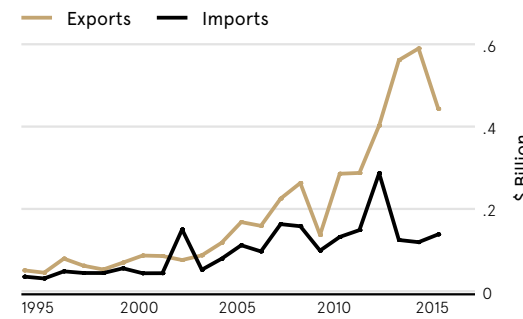


Sources: Statistisches Bundesamt, artnet, & MACCH Global Dealer Survey 2017  
Maastricht University Graphic

## ITALY AND SPAIN

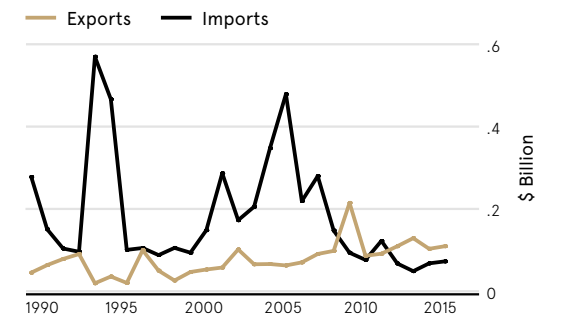
In terms of world auction sales, Italy ranks in 10th place with \$139 million of sales at auction during 2016. Auction sales in Spain are half those in Italy, with only \$77 million dollars. Cross border trade in Spain is also approximately half that seen in Italy, but previously has been larger, at three-times the current level in 1994, and also in 2005.

FIGURE 75: ART AND ANTIQUES TRADE ITALY



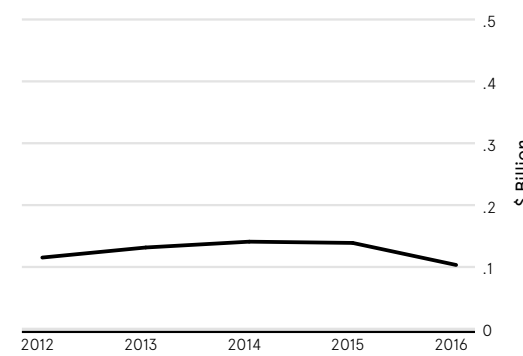
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 76: ART AND ANTIQUES TRADE SPAIN



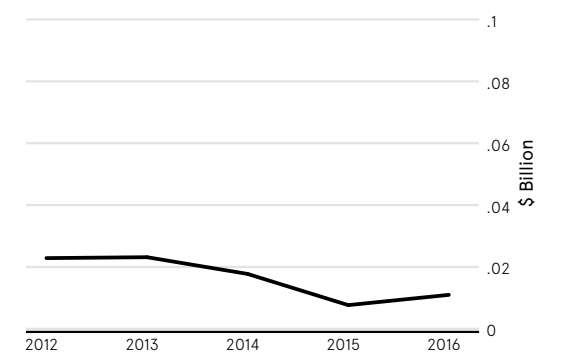
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 77: ITALY AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

FIGURE 78: SPAIN AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

Reported sales from French and Italian auction houses often do not include buyers' premiums when reporting sales. Given that premiums are up to 30%, and artnet figures do not include buyers' premiums for France, Italy and some other countries, this would result in actual sales values being under-represented.

Auction sales are a much smaller fraction of the market, where dealer sales account for a large proportion of art market sales. In both Italy and Spain there is no detailed breakdown beyond the 4 digit codes for retail sales in commercial art galleries and dealers. Retail data for Spain at the division level of retail trade in specialized goods shows that the market has been stable over time, however, without a specific breakdown for the type of retail products we are unable to use national statistics for retail trade data.

Our survey data for annual turnover figures and reported growth for 2016 in Italy and Spain is very optimistic. In Italy art dealers experience 18% growth in turnover in 2016 and 21% looking ahead to 2017.

Spanish dealers were also optimistic looking forward to 2017, with an expected increase in sales of double digit figures, and growth this year during 2016 to be 6.25%.



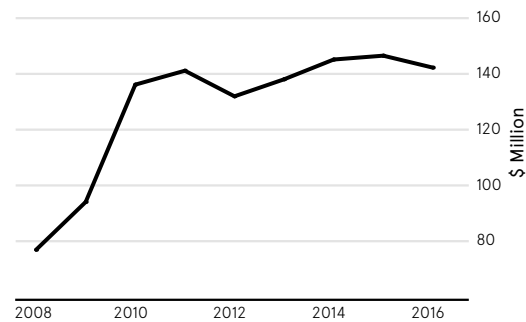


## AUSTRIA

Cross border trade in Austria has grown from less than half a percent of world trade for exports and imports in 1994 to nearly one percent today. However, for sales within Austria, activity in the art and antique dealer sector is an important part of the European market in terms of retail sales.

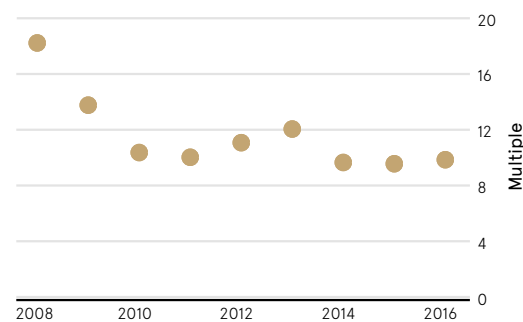
Auction sales have been very stable since 2010 at \$140 million dollars per year. Austrian auction sales have also not experienced a slow down or drop, which other countries, with more high-end share of sales have done. Another example of how it is the top end of the market where sales are moving to private sector, and less so for the mid-market sector. The art market in Austria also shows great resistance to the period consuming the world during global financial crisis. Enterprise numbers of art and antique dealers have remained consistently high over the past years from 2008, until 2014, when data on employee numbers, dealers and revenue are available from the Bundesanstalt Statistik Österreich.

FIGURE 79: AUSTRIA AUCTION SALES REVENUE



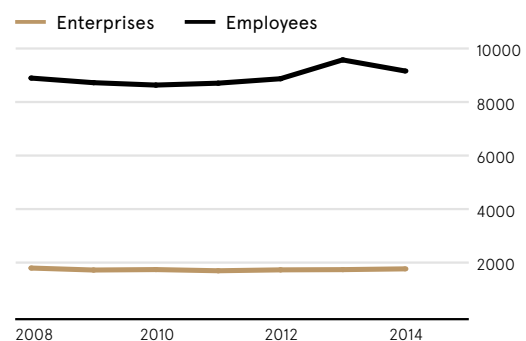
Source: artnet

FIGURE 80: AUSTRIA DEALER TO AUCTION SALES



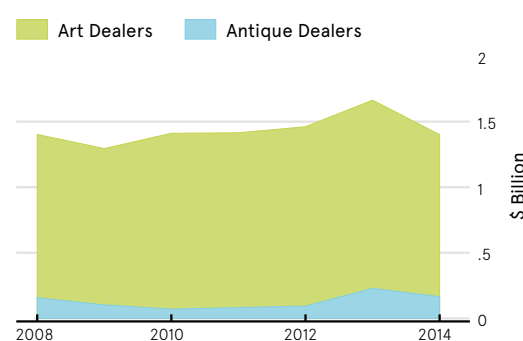
Maastricht University Graphic  
Sources: Bundesanstalt Statistik Österreich, Artnet and MACCH Global Dealer Survey 2017

FIGURE 81: AUSTRIA ART AND ANTIQUES RETAIL TRADE



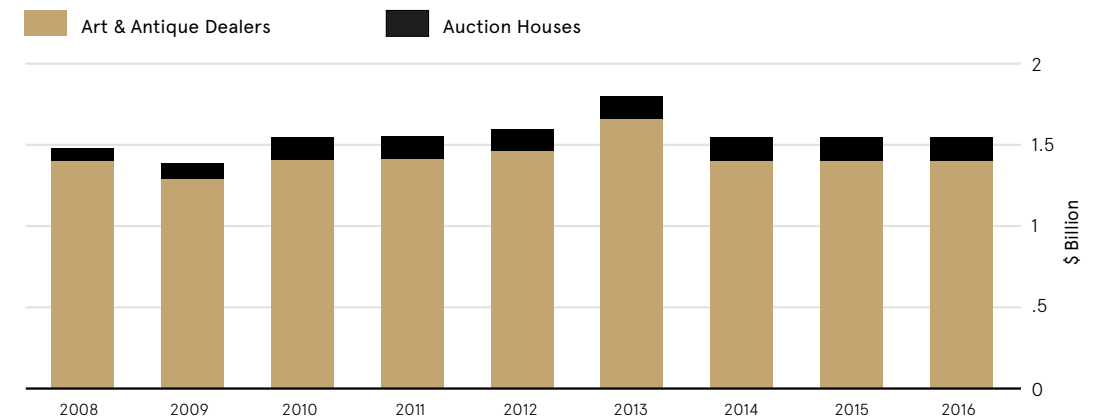
Source: Bundesanstalt Statistik Österreich

FIGURE 82: AUSTRIA ART AND ANTIQUES DEALERS REVENUE



Source: Bundesanstalt Statistik Österreich

FIGURE 83: AUSTRIA ART & ANTIQUES SALES



Maastricht University Graphic  
Sources: Bundesanstalt Statistik Österreich, artnet, & MACCH Global Dealer Survey 2017

Austrian dealers also posted almost zero growth in turnover and expectations for turnover in the year ahead, looking forward to 2017. The Austrian retail art sector appears to be very stable and less influenced by global geo-political events.

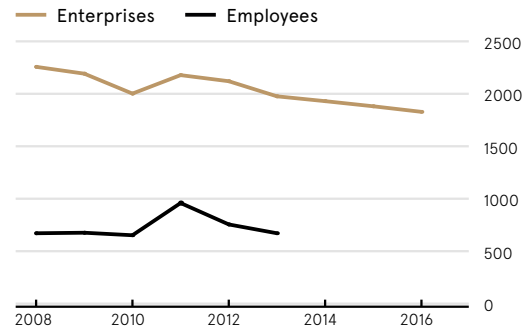
## SWEDEN

Auction sales in Sweden were \$0.7 billion in 2016, making Sweden the eleventh largest country in terms of auction sales. Slightly smaller than auction sales in South-Korea, and larger than Canada. Auction sales increased over the year by 12% during 2016. Average prices, and consignments were also up whilst buy-in rates decreased, showing a healthy and growing auction sales market.

Dealer sales have remained around a quarter of a billion since 2010, up from 200 million dollars in 2009. Retail data are available from the Statistiska Centralbyrån in Sweden for the number of art and antique dealer numbers until 2016, as well as for employees.

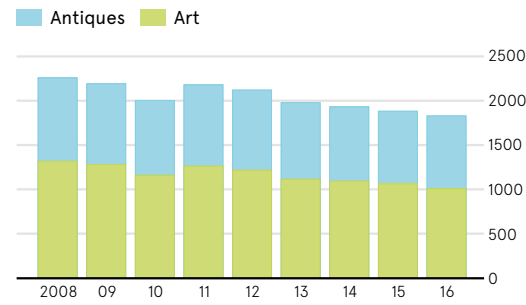
In Sweden there are currently 1876 dealers, and the last census count of labour employing 671 people. As in many other countries, there are a large number of sole traders in Sweden, making up a large fraction of the art and antique dealer industry. Cross border trade in Sweden is traditionally low, with less than one-tenth of a percent of world trade in exports and imports. With only \$50 million being exported from Sweden's borders, and \$36 million imported in 2015, according to the United Nations.

**FIGURE 84: SWEDEN ART AND ANTIQUES RETAIL TRADERS WITH EMPLOYEES**



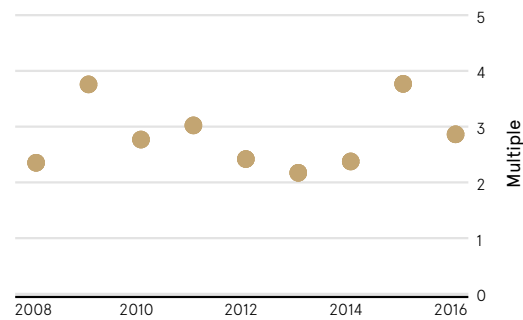
Source: Statistiska Centralbyrån

**FIGURE 85: SWEDEN ART AND ANTIQUE DEALER NUMBERS**



Source: Statistiska Centralbyrån

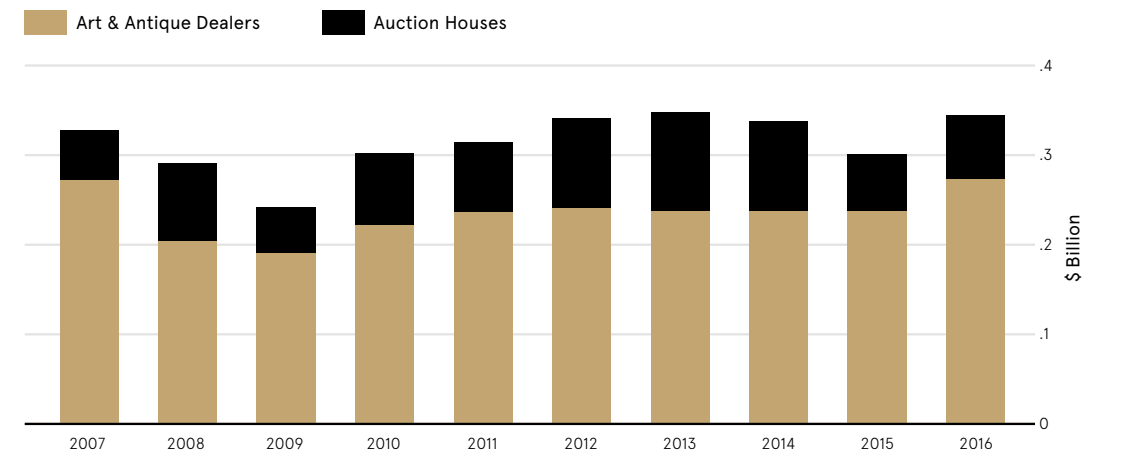
**FIGURE 86: SWEDEN DEALER TO AUCTION SALES**



Maastricht University Graphic  
Sources: Statistiska Centralbyrån, artnet and MACCH Global Dealer Survey 2017

From our survey, dealers have experienced a drop in turnover during 2016, losing out to auction houses. Looking ahead to 2017 they are optimistic with an expected increase in turnover of 8%.

**FIGURE 87: SWEDEN ART AND ANTIQUES SALES**



Maastricht University Graphic | Sources: Statistiska Centralbyrån, artnet, & MACCH Global Dealer Survey 2017

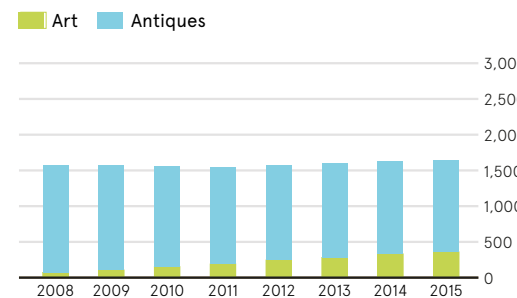
**BENELUX: BELGIUM, THE NETHERLANDS AND LUXEMBOURG.**

Although auctions sales for both Belgium and The Netherlands are less than 350 million, (ranking in auction sales at 24 and 18 respectively in terms of country sales of art and antiques at auction) both countries have a large dealer sector. Luxembourg as a financial center is also of interest, in terms of trade flows. We therefore include a brief overview of the BENELUX sector for our readers.

In Belgium, the overall number of art and antique dealers looks as though it is relatively stable and increasing over the past eight years. However, a closer inspection reveals that in Belgium the number of art dealers has increased over the period from 72 to 359, whereas antique dealers have decreased from 1510 to 1274. This includes sole traders.

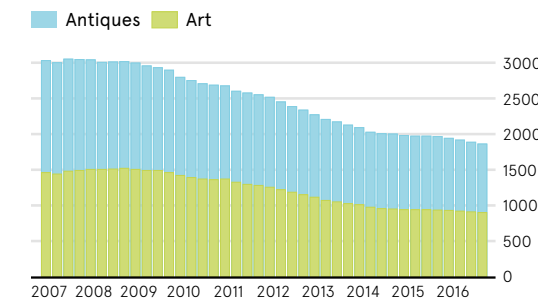


FIGURE 88: BELGIUM ART AND ANTIQUE DEALER NUMBERS



Source: Belgian National Statistics

FIGURE 89: NETHERLANDS ART AND ANTIQUE DEALER NUMBERS

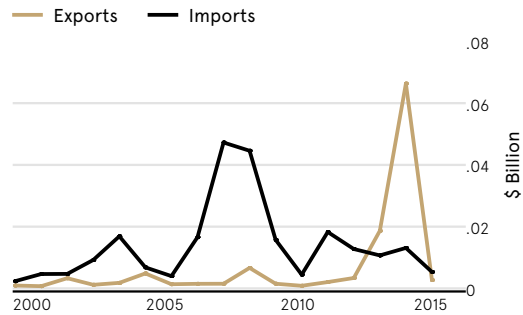


Source: Central Bureaus of Statistics

In The Netherlands, data are provided on a quarterly basis. Art and antique dealers with employees are included in the national statistics. It is not clear how many sole traders there are in The Netherlands from the National statistics, but it is clear that the Dutch art and antique dealer market is large. In 2007 there were 1460 art dealers and 1570 antique dealers, employing at least one person on the pay-role. Although there was a decrease in the number of both art and antique dealers between 2007 and 2014 by one-third, the rate of decline has slowed considerably in the last two-years. It is not clear if these dealers exited the market, or if they downsized to dealerships with no employees. By the fourth quarter in 2016 there are 900 art dealers, and 960 antique dealers in The Netherlands.

In traditional areas of the globe with favourable tax conditions reported trade flows have also become lower. Trade reported in Free Zones alone peaked in 2013 to \$2,378,000, and was still reportedly high in 2014 at just over \$2 million. However, by 2015 trade flowing through the World's Free Trade Zones dropped to less than 7% of its former trade flow to just \$166 million. Andorra experienced a peak in art trade reached in 2014 at just under \$1 million, to just \$104,000 in 2015. In other regions, such as in Bermuda, trade dropped from \$1,3 million to \$0 in 2015. Similarly, in Luxembourg, trade in art dropped from a reported \$66 million in 2014, to just \$2.7 million in 2015.

FIGURE 90: ART AND ANTIQUES TRADE LUXEMBOURG



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

There are over 70 financial jurisdictions globally of which half are linked to offshore tax havens (tax havens are distinct from free-trade zones). Many linked to the U.K, such as Jersey, the Isle of Man, Bermuda, British Virgin Islands and the Cayman Islands; or Delaware, Panama, and Puerto Rico, linked to the United States. These Overseas Territories extend the financial prowess of the global financial services industries with money flowing through the financial hubs of London, Switzerland, Hong Kong, and Singapore.

Free trade zones are designated tax free areas, where there are no customs duties levied on imports and exports of goods. Free, or Foreign, trade zones, otherwise known as Free Ports serve as repositories for valuables and collectibles, including art and antiques, as a store of wealth. There is no way to know how much is held in these warehouses, although it is predicted that 1.2 million artworks are held by Geneva Free Ports. In light of the ability to shroud financial wealth, and encourage criminal behavior, casts shadow on the anonymity that prevails at these tax havens. The collective power of supra-national institutions to alleviate some of the privacy, and encourage a financial register, would be welcomed by many in the art industry.

# Within the Vault

Art investors have embraced free trade zones ("foreign trade zones" in the U.S.) enthusiastically over the last 20 years, their use growing with a thriving art market and the rising number of wealthy individuals getting in on the game. Collectors buy, sell and trade massive wealth in the form of works of art in these tax-free zones, with the unintended consequence that priceless works can become stuck in limbo for decades at a time, stashed away from the public eye in high-security warehouses. This is happening under ever-increasing scrutiny as officials can no longer ignore the untaxed treasure troves just out of their reach.

The 2016 leak of the Panama Papers revealed just some ways these zones are used to conceal ownership of high-value objects, and while it shed light on this elusive practice, in the end we were left with more questions than answers. Namely, why are these zones so elusive in the first place?

Curiosity has been piqued and, for better or worse, collectors can count on increased attention to activity within these zones as governments aim for better oversight.

# 1.2 MILLION

works of art estimated to be held by Geneva Free Ports

SWITZERLAND 2012

COUNTRY	IMPORT TAX ON WORKS OF ART	# OF FREE TRADE ZONES
Austria	13%	0
Belgium	6%	0
Bulgaria	20%	7
China	17%	11
Croatia	25%	13
Cyprus	5%	2
Czech Republic	15%	9
Denmark	25%	1
Estonia	20%	4
Finland	10%	6
France	5.5%	2
Germany	7%	4
Greece	24%	4
Hungary	27%	0
Ireland	13.5%	2
Italy	10%	3
Latvia	21%	4
Lithuania	21%	1
Luxembourg	8%	1
Malta	5%	1
Netherlands	6%	1
Poland	8%	7
Portugal	6%	1
Romania	20%	6
Slovakia	20%	0
Slovenia	9.5%	1
Spain	10%	4
Sweden	12%	0
Switzerland	8%	345
U.S.	6.6%	174
U.K.	5%	1

### What is a Free Trade Zone?

A special economic zone where goods may be stored, bought, sold and transported, exempt from import taxes and duties until they arrive in their country of destination.

Sources: European Commission, U.S. Customs and Border Protection, Congressional Research Service, South China Morning Post, The Wall Street Journal.

# THE AMERICAS

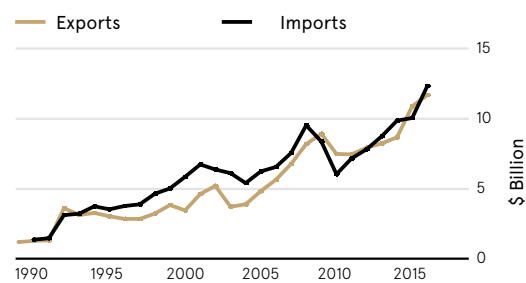
## THE AMERICAS ART MARKET HIGHLIGHTS

1. The U.S. is the world's largest trading country with imports of art and antiques at \$11.66 billion dollars recorded for 2015. Exports were slightly lower, at \$11.03 billion dollars in 2015. Export trade in the U.S. looks to remain stable in 2016, whilst imports in art and antiques have dropped by 20.5% during the first eight months of recorded trade compared to the same period in 2015.
2. The strong dollar is making the U.S. less attractive to foreign buyers.
3. The Americas auction market for art and antiques dropped from being the largest auction market by country with a share of 37.5% in 2016 to the second largest, with 27.5% of world auction sales. Primarily due to a large fall in the number of consignments at auction, lots offered fell by 9.5%. Auction sales in the Americas in 2016 totaled \$4.65 billion.
4. Dealer and private sales gained significant market share in the US. By the end of 2016, the art auction and dealer market in the Americas totaled more than \$16 billion. The share of dealers in the Americas is at least a 66% market share. The U.S. alone represents a 29.5% fraction of the world's art market.
5. In the United States, buyers are shifting to the private sector to buy art: both through privately brokered sales by auction houses and through art galleries and dealers.
6. Design objects are the only winners at auction as Americans upgrade their interiors.
7. High participation in the TEFAF art dealer survey for the U.S. reflect some wider industry dynamics, with 10% growth in dealer turnover during 2016 and high double digit growth expected in 2017.
8. At the end of 2016 prices for Contemporary Art sold at auction are up by 4.5%, following a 24.5% increase over the past five years. Modern Art has fallen by 9.2% over the past five years, with a 3.3% fall during 2016 alone. Quality lots by lesser known artists sold better than average lots by blue chip artists
9. The price of Old Master Paintings and Impressionist Art at auction in the U.S. is up by 4.85%, so although many top-end sales were made privately, that what sold at auction remains strong.
10. The U.S. still dominates in the Americas in terms of value sold at auction. Although as a fraction of the market South American countries account for less than 3% of auction sales, their representation worldwide is increasing and galleries and dealers reporting high rates of growth in Brazil, Mexico, Columbia, Argentina, and Argentina.

Taking a look over the past 30 years of trade, at how artworks, collector pieces and antiques in the art world are being bought and sold, gives a picture of how this store of wealth is being accumulated or depleted. The Americas is currently the world's largest importer of art.

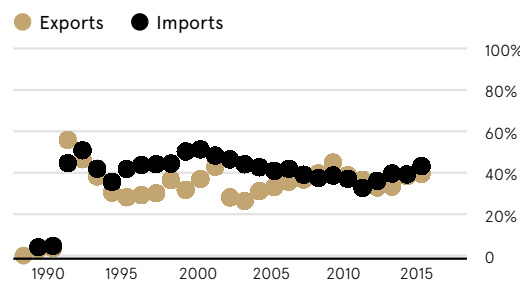
In the early 1990's the U.S. grew sharply as a trader of art and antiques, taking the major share from Europe and acquiring more artworks, collector pieces and antiques, than it exported. In more recent years, exports have closed on imports, with imports into the Americas reaching \$12.11 billion in 2015.

FIGURE 91: WORLD ART TRADE SHARE AMERICAS



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 92: ART AND ANTIQUES TRADE AMERICAS

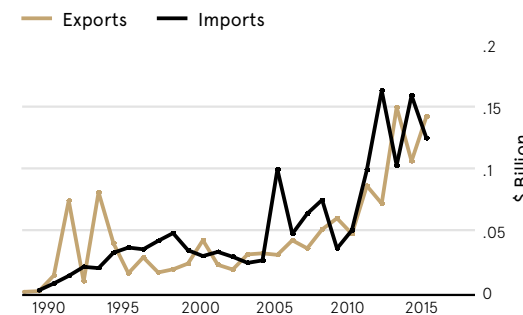


Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

In the Americas the U.S. dominates the market and is the driver of the largest fraction of the total artworks trading globally. The U.S. is by far the world's largest trading country of art and antiques with imports of \$11.66 billion dollars. Exports were slightly lower, at \$11.03 billion dollars.

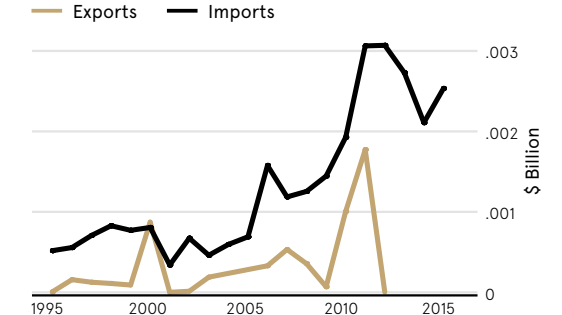
Trade of artworks, collector pieces and antiques into South America is much lower, reaching almost \$150 million in 2015. Most of this trade originates from Brazil, with trade of over \$100 million dollars in 2015. Auction sales in Brazil are \$3.583 million, and Mexico marginally higher in 2016 with \$4.276 million dollars. Although as a fraction of the market South American countries account for less than 3% of auction sales, their representation worldwide is increasing and galleries and dealers reporting high rates of growth. The impact of their financial figures is less than their global presence.

FIGURE 93: ART AND ANTIQUES TRADE SOUTH AMERICA



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

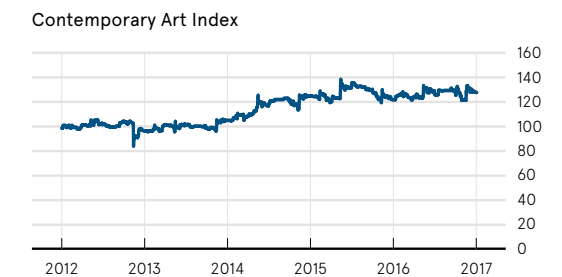
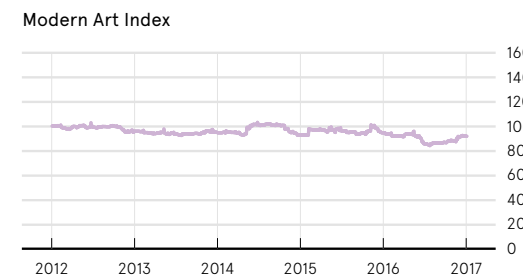
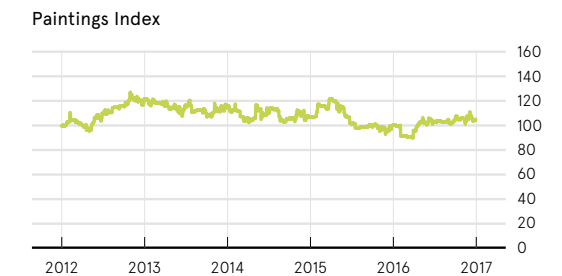
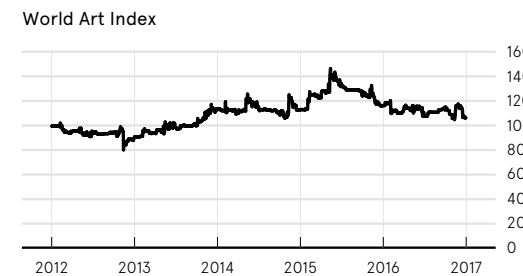
FIGURE 94: ART AND ANTIQUES TRADE PANAMA



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Exports all but dried up into Panama during 2015, when art and antiques flowed into the country as imports and remained in this safe haven. Figures for 2016 are not yet available for trade in Panama. Following the revelation of the Panama papers, traditional safe havens for storing wealth within the U.S. jurisdiction, such as Delaware and Puerto Rico may change.

FIGURE 95: U.S. INDEX



Maastricht University Graphic | Source: artnet



## THE AMERICAS ART SALES

### CLASSICAL ANTIQUITIES AND ANCIENT ART (U.S.)

#### HIGHLIGHTS:

- Auction sales of Ancient Art dropped 9.7% in the U.S. in 2016
- Total U.S. auction sales of Ancient Art were of \$51.5 million, \$16.1 million of which were captured by five Chinese items
- Auction market for Ancient Art in the U.S. in 2016 was mostly made of Chinese artifacts

Sales of high-end Classical Antiquities in 2016 dropped 9.7% following a drop in prices at auction. Two main factors explain the poor performance of the market. Firstly, American collectors have been tepid bidding on Middle Eastern Antiquities since 2014 because of the geopolitical context of the region and risks associated with acquiring Classical Antiquities from that part of the world. Secondly, dealers have captured a larger chunk of the high-end market, taking the most expensive examples out of the public eye and pushing the observable average auction prices lower. The most expensive Classical artifact sold at auction in the U.S. in 2016 was a Jian tea bowl, sold at Christie's New York for \$11.7 million. In fact, the top five most expensive Classical Antiquities sold in the U.S. are Chinese items from the Southern Song, Han or Tang period and add up to \$16.1 million out of the entire \$51.5-million market. Due to heavy regulations in China on Classical antiquities, many important Chinese collectors turn to the U.S. market to transact. The most expensive Classical item sold at auction in the U.S. that is not an Asian artifact is an Egyptian torso (the property of an English collector) that sold for \$672,500 at Sotheby's New York in December 2016.



FIGURE 96: U.S. ANCIENT ART



Maastricht University Graphic | Source: artnet

TOP 10 CLASSICAL ANTIQUITIES AND ANCIENT ART LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
THE KURODA FAMILY YUTEKI TENMOKU A HIGHLY IMPORTANT AND VERY RARE 'OIL SPOT' JIAN TEA BOWL SOUTHERN SONG DYNASTY (1127-1279)	Christie's New York	15-September	\$ 11,701,000
A RARE AND IMPORTANT SANCAI-GLAZED POTTERY FIGURE OF A COURT LADY TANG DYNASTY	Sotheby's New York	16-March	\$ 1,330,000
A MONUMENTAL GRAY SCHIST FIGURE OF A BODHISATTVA GANDHARA, 2ND/3RD CENTURY	Christie's New York	13-September	\$ 1,205,000
AN EXTREMELY RARE PAPER-CUT RESIST-DECORATED JIZHOU BOTTLE VASE SOUTHERN SONG DYNASTY (1127-1279)	Christie's New York	15-September	\$ 1,085,000
A RARE LONGQUAN CELADON BRUSH WASHER SOUTHERN SONG DYNASTY (1127-1279)	Christie's New York	15-September	\$ 1,025,000
SONG-GE YAO OCTAGON BOWL-VERY IMPORTANT AND RARE	Golden State Auction Gallery	18-December	\$ 1,000,000
A SUPERBLY CARVED MASSIVE WHITE MARBLE TORSO OF BUDDHA, EARLY TANG DYNASTY, LATE 7TH-8TH CENTURY	Christie's New York	17-March	\$ 905,000
A MAGNIFICENT SANCAI-GLAZED EWER TANG DYNASTY	Sotheby's New York	13-September	\$ 874,000
A PAINTED AND INCISED CIZHOU DEEP BOWL NORTHERN SONG-JIN DYNASTY (960-1234)	Christie's New York	15-September	\$ 785,000
A SANDSTONE RELIEF OF DURGA MAHISHASURAMARDINI INDIA, GUJARAPRATIHARA OR MADHYA PRADESH, LATE 8TH/EARLY 9TH CENTURY	Christie's New York	15-March	\$ 725,000

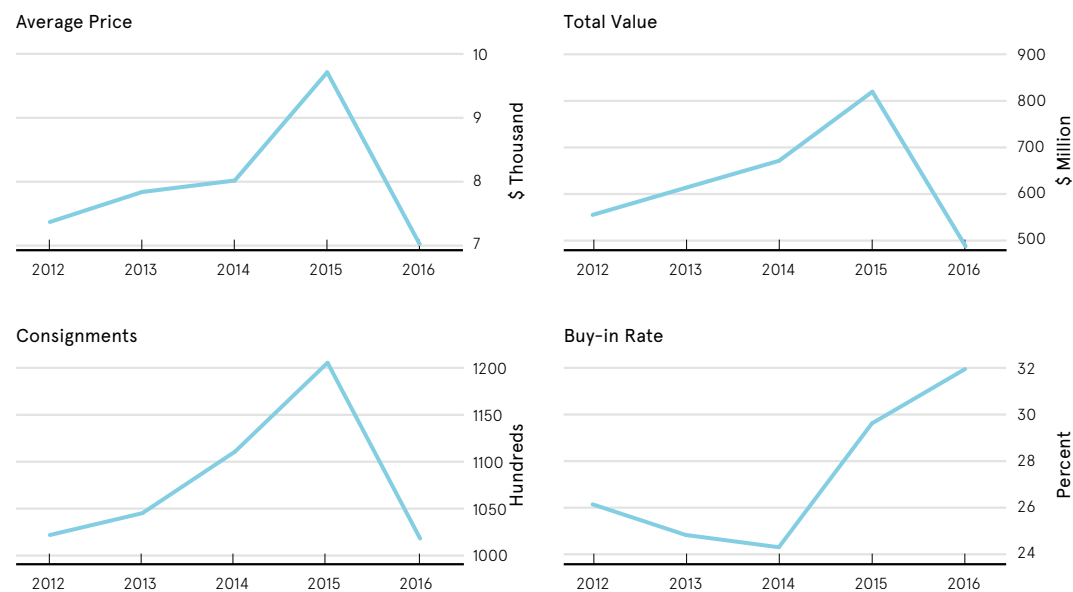
## ANTIQUES (U.S.)

### HIGHLIGHTS:

- The amount of lots consigned and the average price of antiques have drastically decreased in the U.S. in 2016
- Dealers have successfully competed with auction houses to gain market share
- Collectors' tastes have shifted away from antiques

Consigned lots of antiques have fallen 15% during 2016, and average prices of lots falling by 27%, whilst the buy-in rate has remained similar. Resulting in total auction sales volume decreasing by 40% in 2016. This has all but eradicated the growth the auction market experienced during the prior four years. The cool-down in the U.S. antiques market is also due to changes in collectors' preferences. Fairs, noticing this, have responded by stopping the use of datelines and creating new sections to satisfy collectors' interests. The trends at auction seem to reflect the melting-pot that is the US: top antiques lots in 2016 included a Qianlong tea bowl, which sold for \$3.5 million at Sotheby's New York, as well a superb marble sculpture by Auguste Rodin, which sold for \$20.4 million at the same auction house in May. Americana and historical items were in fashion in 2016. A pair of French pistols offered by Lafayette to Simon Bolivar in 1825, at the request of George Washington, sold for \$1.8 million at Christie's New York in April.

FIGURE 97: U.S. ANTIQUES



Maastricht University Graphic | Source: artnet

### TOP 10 ANTIQUES LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
AUGUSTE RODIN (1940 - 1917): L'ÉTERNEL PRINTEMPS	Sotheby's New York	09-May	\$ 20,410,000
A RARE TURQUOISE-GROUND FAMILLE-ROSE 'HUI MOUNTAIN RETREAT' TEAPOT AND COVER QIANLONG SEAL MARK AND PERIOD	Sotheby's New York	14-September	\$ 3,490,000
AUGUSTE RODIN (1940 - 1917): IRIS, MESSAGÈRE DES DIEUX	Sotheby's New York	09-May	\$ 2,890,000
A LARGE CAST AND REPOUSSÉ GILT-BRONZE FIGURE OF ELEVEN-HEADED AVALOKITESHVARA, QIANLONG PERIOD (1736-1795)	Christie's New York	17-March	\$ 2,853,000
A VERY RARE AND SUPERBLY ENAMELED PAIR OF YELLOW-GROUND FAMILLE ROSE VASES JIAQING SIX-CHARACTER SEAL MARKS IN IRON RED AND OF THE PERIOD (1796-1820)	Christie's New York	16-September	\$ 2,045,000
A MAGNIFICENT & IMPORTANT CASED PAIR OF FRENCH SILVER-MOUNTED RIFLED FLINTLOCK PISTOLS BY NICOLAS-NOEL BOUTET, VERSAILLES, THE CASE DATED '1825'	Christie's New York	13-April	\$ 1,805,000
AUGUSTE RODIN (1940 - 1917): PENSEUR, PETIT MODÈLE	Sotheby's New York	14-November	\$ 1,752,500
EDGAR DEGAS (1834 - 1917): CHEVAL AU GALOP SUR LE PIED DROIT	Christie's New York	16-November	\$ 1,687,500
A GILT-BRONZE FIGURE DEPICTING NGAWANG LOBSANG GYATSO, DALAI LAMA V TIBETO-CHINESE, 18TH CENTURY	Sotheby's New York	13-September	\$ 1,510,000
EDGAR DEGAS: GRANDE ARABESQUE, TROISIÈME TEMPS	Sotheby's New York	09-May	\$ 1,510,000

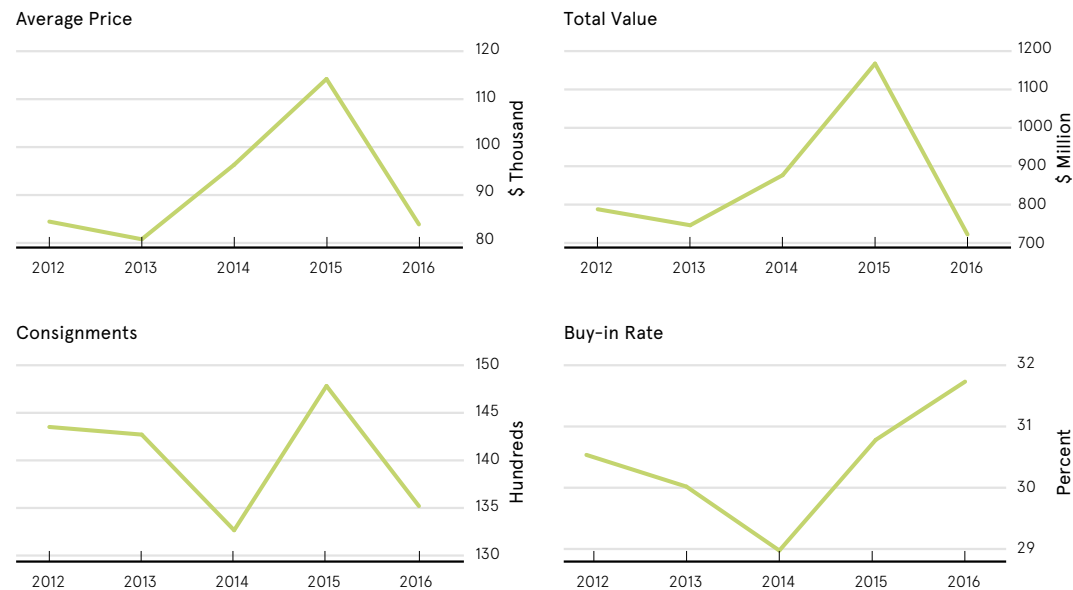
## OLD MASTERS, 19TH CENTURY AND IMPRESSIONISTS WORKS (U.S.)

### HIGHLIGHTS:

- Auction sales of Old Master works dropped 37% in 2016
- American dealers took firmer control of the high-end market

Consignments of Old Master works in U.S. public auction reached a five year low at only 13,551 Old Master works offered for sale in the U.S. for an average price of \$80,180, back to 2013's lows. On top of a smaller supply, the U.S. market had a smaller appetite for Old Master works. Examples of fiascos in the auction market are numerous, not in the least, the Taubman sales at Sotheby's New York in January, which left remarkable artworks from Jacopo Ligozzi, Albrecht Dürer, Guercino and Battistello unsold. Throughout the US, victims of the decline were the casual consignors who had not only to accept lower reserve prices, but also face higher buy-in rates due to a drop in interest by collectors. It seems dealers took a larger share of the market and were able to maintain a strong pipeline of artworks at the expense of auction houses, especially in the field of Impressionist works. The Old Master market has traditionally been a dealer-led market, and 2016 confirms the domination of niche specialists over generalist auction houses in the U.S. market for Old Master works.

FIGURE 98: U.S. PAINTINGS



Maastricht University Graphic | Source: artnet

## TOP 10 OLD MASTERS, 19TH CENTURY AND IMPRESSIONISTS LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
CLAUDE MONET (1840-1926) MEULE, OIL ON CANVAS, 1891	Christie's New York	16-November	\$ 81,447,500
ORAZIO GENTILESCHI (1562-1647), DANAË, OIL ON CANVAS	Sotheby's New York	28-January	\$ 30,490,000
CLAUDE MONET (1840-1926), LE BASSIN AUX NYMPHÉAS, OIL ON CANVAS, 1919	Christie's New York	12-May	\$ 27,045,000
CLAUDE MONET (1840-1926), AU PETIT-GENNEVILLIERS, OIL ON CANVAS, 1874	Christie's New York	12-May	\$ 11,365,000
PAUL SIGNAC (1863-1935), MAISONS DU PORT, SAINT-TROPEZ, OIL ON CANVAS, 1892	Sotheby's New York	09-May	\$ 10,666,000
CLAUDE MONET (1840-1926), MARÉE BASSE AUX PETITES-DALLES, OIL ON CANVAS, 1884	Sotheby's New York	09-May	\$ 9,882,000
WANG HUI (1632-1717), THE KANGXI EMPEROR'S SOUTHERN INSPECTION TOUR, SECTION OF SCROLL VI: FROM THE TOWN OF BENNIU TO THE CITY OF CHANGZHOU ON THE GRAND CANAL, INK AND COLOR ON SILK	Sotheby's New York	14-September	\$ 9,546,000
CLAUDE MONET (1840-1926), CAMILLE À L'OMBRELLE VERTE, OIL ON CANVAS, 1876	Sotheby's New York	09-May	\$ 9,434,000
CLAUDE MONET (1840-1926), PRÈS MONTE-CARLO, OIL ON CANVAS, 1883	Sotheby's New York	09-May	\$ 7,082,000
PAUL CÉZANNE (1839-1906), THÉIÈRE ET ORANGES (LA NAPPE), GOUACHE, WATERCOLOR AND PENCIL ON PAPER	Christie's New York	16-November	\$ 6,967,500



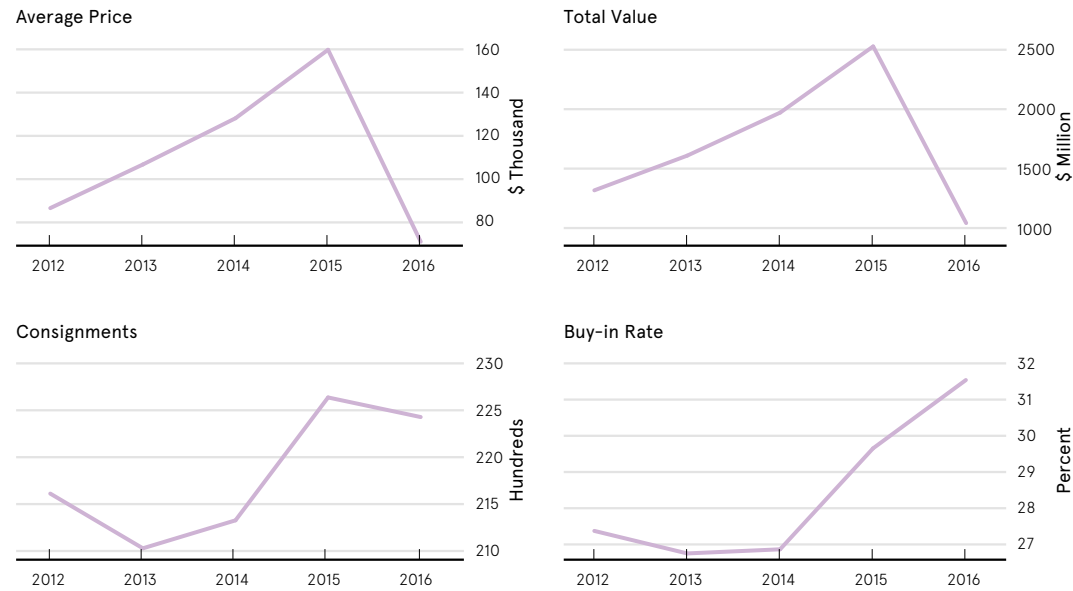
## MODERN ART (U.S.)

### HIGHLIGHTS:

- Auction sales of Modern Art dropped 56% in the U.S. in 2016
- Collectors turned to dealers for high-end Modern Art
- For the same price, higher quality works by lesser known artists were preferred to average works by blue chip artists

Modern Art auction sales in the United States dropped by a staggering 56% between 2015 and 2016, from \$2.5 billion down to \$1.1 billion. The drop comes from many different factors that pressured the auction market. First, a large substitution took place between public auction and dealers or private sales at the high-end level. This means that expensive pieces that usually would have sold publicly changed hands in private. For example, in 2016, Christie's brokered almost \$1 billion in private sales, the bulk of which was Modern or Post-War and Contemporary Art. As the most expensive items were taken away from the auction market, the average price of Modern pieces presented publicly has been 54.7% lower than the previous year. The downward trend was accelerated by a stagnation of the amount of lots being consigned and a smaller appetite by the market for Modern Art with only 68% of lots presented at auction finding a buyer, compared to 73% three years before. Most surprisingly, blue chip artists who are traditionally favoured by American collectors (like Giacometti and Picasso) were snubbed at auction and have been drastically hit by the drop in sales. Sales of Pablo Picasso works at auction in the U.S. dropped by 71%, down to \$866 million in 2016 from \$3 billion in 2015. This reflects a complex combination of trends converging: on the one hand, for popular artists, the best pieces that are in high demand are rare as collectors do not consign them at auction anymore, creating a supply squeeze on the high-end of the market. On the other hand, rather than buying artworks of average quality by popular artists, collectors preferred turning to pieces of higher quality from lesser-known artists, creating a general void in demand for average or lower quality works. Some artists clearly benefit from this substitution effect: Frida Kahlo, Auguste Rodin, and Henri Charles Manguin reached new highs in the U.S. in 2016.

FIGURE 99: U.S. MODERN ART



Maastricht University Graphic | Source: artnet

TOP 10 MODERN ART LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
EDVARD MUNCH (1863-1944), PIKENE PÅ BROEN (GIRLS ON THE BRIDGE), OIL ON CANVAS, 1902	Sotheby's New York	14-November	\$ 54,487,500
WASSILY KANDINSKY (1866-1944), RIGIDE ET COURBÉ, OIL AND SAND ON CANVAS, 1935	Christie's New York	16-November	\$ 23,319,500
PABLO PICASSO (1881-1973), BUSTE DE FEMME (DORA MAAR), OIL ON CANVAS, 1938	Christie's New York	16-November	\$ 22,647,500
PABLO PICASSO (1881-1973), HOMME À LA PIPE, OIL ON CANVAS, 1969	Christie's New York	16-November	\$ 18,391,500
MAURICE DE VLAMINCK (1876-1958), SOUS-BOIS, OIL ON CANVAS, 1905	Sotheby's New York	09-May	\$ 16,378,000
GEORGIA O'KEEFFE (1887-1986), LAKE GEORGE REFLECTION, OIL ON CANVAS, 1921	Christie's New York	19-May	\$ 12,933,000
PABLO PICASSO (1881-1973), LE PEINTRE ET SON MODÈLE, OIL ON CANVAS, 1963	Sotheby's New York	14-November	\$ 12,906,000
AMEDEO MODIGLIANI (1884-1920), JEUNE FEMME À LA ROSE (MARGHERITA), OIL ON CANVAS, 1916	Christie's New York	12-May	\$ 12,765,000
GEORGES BRAQUE (1882-1963), MANDOLINE À LA PARTITION (LE BANJO), OIL ON CANVAS, 1941	Christie's New York	12-May	\$ 10,245,000
PABLO PICASSO (1881-1973), TÊTE DE FEMME, BRONZE, 1951	Sotheby's New York	14-November	\$ 8,450,000

## POST-WAR AND CONTEMPORARY ART (U.S.)

### HIGHLIGHTS:

- Auction sales of Contemporary Art dropped 35% in the U.S. in 2016
- Market fatigue after years of expansion
- Blue chip artists such as Andy Warhol and Cy Twombly were the most impacted

In the U.S., public auction sales of Post-War and Contemporary Art are down to \$1.60 billion in 2016, a 35% drop compared to 2015. Market fatigue hit the U.S. auction market after years of expansion. An increase of market supply at auction (+4.60%) failed to compensate the drastic drop in average prices (-36% on average). A blasé market was reluctant to bid, with a buy-in rate at a five-year high of 34.5%. Dealers and private sales organized by Sotheby's and Christie's took the bulk of the high-end art market, leaving auctions with average items that were less in demand. Mainstream Post-War and Contemporary artists lost their appeal to a very demanding audience. Sales of Andy Warhol works at auction dropped 68.8% compared to 2015, down to \$163 million from \$526 million. Cy Twombly saw a 53% drop in U.S. auction sales as dealers were taking a firm grip on the high-end segment of his market, away from public auctions.

FIGURE 100: POST-WAR AND CONTEMPORARY



Maastricht University Graphic | Source: artnet

## TOP 10 POST WAR/CONTEMPORARY LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
WILLEM DE KOONING (1904-1997), UNTITLED XXV, OIL ON CANVAS, 1977	Christie's New York	15-November	\$ 66,327,500
JEAN-MICHEL BASQUIAT (1960-1988), UNTITLED, ACRYLIC ON CANVAS, 1982	Christie's New York	10-May	\$ 57,285,000
CY TWOMBLY (1928-2011), UNTITLED (NEW YORK CITY), OIL BASED HOUSE PAINT AND WAX CRAYON ON CANVAS, 1968	Sotheby's New York	11-May	\$ 36,650,000
FRANCIS BACON (1909-1992), TWO STUDIES FOR A SELF-PORTRAIT, OIL ON CANVAS, 1970	Sotheby's New York	11-May	\$ 34,970,000
GERHARD RICHTER (1932), A B, STILL, OIL ON CANVAS, 1986	Sotheby's New York	17-November	\$ 33,987,500
MARK ROTHKO (1903-1970), NO. 17, OIL ON CANVAS, 1957	Christie's New York	10-May	\$ 32,645,000
CLYFFORD STILL (1904-1980), PH-234, OIL ON CANVAS, 1948	Christie's New York	10-May	\$ 28,165,000
GERHARD RICHTER (1932), D SENJÄGER, OIL ON CANVAS, 1963	Phillips New York	16-November	\$ 25,565,000
ANDY WARHOL (1928-1987), SELF-PORTRAIT (FRIGHT WIG), ACRYLIC AND SILKSCREEN INK ON CANVAS, 1986	Sotheby's New York	17-November	\$ 24,425,000
JEAN DUBUFFET (1901-1985), LES GRANDES ARTÈRES, OIL ON CANVAS, 1961	Christie's New York	15-November	\$ 23,767,500



## PRINTS, PRECIOUS BOOKS AND MAPS (U.S.)

### HIGHLIGHTS:

- Supply and demand for Prints, Precious Books and Maps decreased
- Average price and sell-through rate remain relatively unchanged

The market for high-end Precious Books maintains an ongoing decline in the U.S. with \$76 million of auction sales in 2016 against \$103 million in 2015. Despite market prices stabilising in 2016 around an average of \$8,100 per lot after a massive drop in 2014, consignments at auction fell 24.6% to only 13,489 high-end Precious Books being consigned in the U.S. in 2016. The market is traditionally a dealer's market and the bulk of sales happen behind closed doors, away from auction rooms that usually are more engaged in estate sales of libraries and collections than specialised curatorial work like dealers can do. In 2016, in the US, the market trends amongst bibliophiles were all about Americana and history. A great example is an important manuscript copy of the thirteenth amendment of the United States constitution signed by Abraham Lincoln sold \$2.41 million at Sotheby's New York in May, or a very rich 1613 edition of "Les Voyages du Sieur de Champlain Xaintongeois, Capitaine ordinaire pour le Roy, en la marine" including eight folding maps of the Nouvelle France, sold at Christie's New York in April for \$425,000.

FIGURE 101: U.S. PRINTS, PRECIOUS BOOKS AND MAPS



Maastricht University Graphic | Source: artnet

TOP 10 PRINTS, PRECIOUS BOOKS AND MAPS LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
ABRAHAM LINCOLN, AS SIXTEENTH PRESIDENT AN EXTREMELY RARE MANUSCRIPT COPY OF THE THIRTEENTH AMENDMENT TO THE UNITED STATES CONSTITUTION, SIGNED AND ENDORSED BY ABRAHAM LINCOLN ("ABRAHAM LINCOLN"; "APPROVED. FEBRUARY 1, 1865.")	Sotheby's New York	25-May	\$ 2,410,000
ABRAHAM LINCOLN, AS SIXTEENTH PRESIDENT THE "AUTHORIZED EDITION" OF THE EMANCIPATION PROCLAMATION, SIGNED BY PRESIDENT ABRAHAM LINCOLN	Sotheby's New York	25-May	\$ 2,170,000
JOHN WYCLIFFE WYCLIFFITE NEW TESTAMENT IN THE LATER VERSION, IN MIDDLE ENGLISH [ENGLAND, 1ST HALF OF THE 15TH CENTURY]	Sotheby's New York	05-December	\$ 1,692,500
ARISTOTLE. 384-322 B.C.E. DE ANIMALIBUS [DE HISTORIA ANIMALIUM. DE PARTIBUS ANIMALIUM. DE GENERATIONE ANIMALIUM.] TRANSLATED BY THEODORE GAZA; EDITED BY LUDOVICO PRODOCATOR. VENICE: JOHANNES DE COLONIA AND JOHANNES MANTHEN DE GHERETZEM, 1476.	Bonhams New York	08-June	\$ 941,000
PTOLEMAEUS, CLAUDIUS (2ND CENTURY). COSMOGRAPHIA. TRANSLATED FROM GREEK INTO LATIN BY JACOBUS ANGELUS (FL. EARLY 15TH CENTURY). EDITED BY NICOLAUS GERMANUS (C.1420-C.1490). JOHANN REGER (D. AFTER 1499). REGISTRUM, DE LOCIS AC MIRABILIBUS MUNDI. ULM: JOHANN REGER FOR JUSTUS DE ALBANO, 21 JULY 1486.	Christie's New York	05-April	\$ 725,000

Item description	Auction house	Date of sale	Price
BIBLE IN ENGLISH. TYNDALE'S PENTATEUCH THE FIRSTE BOKE OF MOSES CALLED GENESIS [-FYFTE BOKE OF MOSES CALLED DEUTERONOMYE.] COLOPHON TO GENESIS: EMPRENTED AT MALBOROW IN THE LANDE OF HESSE, BY ME HANS LUFT, THE YERE OF OURE LORDE. M.CCCCC.XXX THE XVIJ DAYES OF JANUARIJ, [BUT: ANTWERP: JOHAN HOOCHSTRATEN, 1530]	Sotheby's New York	05-December	\$ 672,500
BRY, THEODOR DE, JOHANN THEODOR DE AND JOHANN ISRAEL DE. [THE GREAT AND SMALL VOYAGES], TEXT IN LATIN. FRANKFURT AND OPPENHEIM, 1590-1624.	Christie's New York	05-April	\$ 545,000
THE DECLARATION OF INDEPENDENCE: RARE JULY 1776 BROADSIDE PRINTING BY EZEKIEL RUSSELL OF SALEM, MASSACHUSETTS-BAY, THE COLONY'	Heritage Auctions New York	05-April	\$ 514,000
CHAMPLAIN, SAMUEL DE (1567-1635). LES VOYAGES DU SIEUR DE CHAMPLAIN XAINTONGEOIS, CAPITAINE ORDINAIRE POUR LE ROY, EN LA MARINE. DIVISEZ EN DEUX LIVRES. OU, JOURNAL TRES-FIDELE DES OBSERVATIONS FAITES ÉS DECOUVERTURES DE LA NOUVELLE FRANCE. PARIS: JEAN BERJON, 1613.	Christie's New York	05-April	\$ 425,000
BIBLE IN ENGLISH [KING JAMES VERSION] THE HOLY BIBLE, CONTEYNING THE OLD TESTAMENT, AND THE NEW: NEWLY TRANSLATED OUT OF THE ORIGINAL TONGUES: & WITH THE FORMER TRANSLATIONS DILIGENTLY COMPARED AND REVISED BY HIS MAIESTIES SPECIALL COMMANDEMENT. APPOINTED TO BE READ IN CHURCHES. LONDON: ROBERT BARKER, 1611	Sotheby's New York	05-December	\$ 396,500





## LA HAUTE JOAILLERIE (U.S.)

### HIGHLIGHTS:

- The U.S. Haute Joaillerie suffered another declining year, with sales falling by about 14%
- Drop in sales due to fall in supply (-23%) whereas prices stayed unchanged year on year
- Buy-in rates dropping from 36% down to 30% of high end Jewellery selling at auction

The U.S. Haute Joaillerie market experienced a large drop in sell-through rate from 2014 to 2015, 76% to 64%. This resulted in dealers being more cautious about selling Jewellery, and so the number of consigned lots in the following year, 2016, dropped by 23%.

The drop in supply did not impact prices though as the average price paid per lot for high-end Jewellery at auction in the U.S. stayed unchanged at \$18,600. As usual, diamonds dominated the market, but in 2016, a ring with an oval-shaped ruby, weighing approximately 15.99 carats, signed Verdura, was sold for \$14.2 million at Christie's New York.

FIGURE 102: U.S. LA HAUTE JOAILLERIE



Maastricht University Graphic | Source: artnet

TOP 10 HAUTE JOAILLERIE LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
A MAGNIFICENT COLORED DIAMOND RING SET WITH A CUT-CORNERED RECTANGULAR MIXED-CUT FANCY INTENSE BLUE DIAMOND, WEIGHING APPROXIMATELY 24.18 CARATS, FLANKED ON EITHER SIDE BY A TAPERED BAGUETTE-CUT DIAMOND, WEIGHING A TOTAL OF APPROXIMATELY 2.36 CARATS, RING SIZE 6, MOUNTED IN PLATINUM, INSCRIBED 'CULLINAN DREAM'	Christie's New York	09-June	\$ 25,365,000
A SENSATIONAL RUBY RING, BY VERDURA SET WITH AN OVAL-SHAPED RUBY, WEIGHING APPROXIMATELY 15.99 CARATS, WITHIN A CIRCULAR-CUT DIAMOND AND POLISHED GOLD SURROUND, TO THE TRIFURCATED GOLD HOOP, RING SIZE 7 1/4, MOUNTED IN PLATINUM AND 18K GOL, SIGNED VERDURA.	Christie's New York	20-April	\$ 14,165,000
A RARE COLORED DIAMOND AND DIAMOND RING SET WITH A CUSHION MODIFIED BRILLIANT-CUT FANCY INTENSE PURPLE-PINK DIAMOND, WEIGHING APPROXIMATELY 10.07 CARATS, FLANKED ON EITHER SIDE BY A TRIANGULAR-SHAPED DIAMOND, RING SIZE 6 1/4, MOUNTED IN PLATINUM AND GOLD	Christie's New York	20-April	\$ 8,845,000
A SUPERB DIAMOND THE ROUND BRILLIANT-CUT DIAMOND WEIGHING APPROXIMATELY 40.43 CARATS	Christie's New York	20-April	\$ 7,221,000
A MAGNIFICENT DIAMOND RING SET WITH A RECTANGULAR-CUT DIAMOND, WEIGHING APPROXIMATELY 51.35 CARATS, RING SIZE 6, MOUNTED IN PLATINUM	Christie's New York	07-December	\$ 5,567,500

Item description	Auction house	Date of sale	Price
MAGNIFICENT PLATINUM AND FANCY PURPLISH PINK DIAMOND RING SET WITH A CUSHION MODIFIED BRILLIANT-CUT FANCY PURPLISH PINK DIAMOND WEIGHING 12.45 CARATS, SIZE 6½;	Sotheby's New York	19-April	\$ 4,562,000
A SENSATIONAL SAPPHIRE RING SET WITH A CUSHION-CUT SAPPHIRE, WEIGHING APPROXIMATELY 75.41 CARATS, RING SIZE 6, MOUNTED IN PLATINUM	Christie's New York	07-December	\$ 3,831,500
A RARE DIAMOND RING, BY LEVIEV SET WITH A CUSHION MODIFIED BRILLIANT-CUT DIAMOND, WEIGHING APPROXIMATELY 22.72 CARATS, FLANKED ON EITHER SIDE BY A TAPERED BAGUETTE-CUT DIAMOND, RING SIZE 6 1/4, MOUNTED IN PLATINUM, SIGNED LEVIEV	Christie's New York	07-December	\$ 2,647,500
AN IMPORTANT COLORED DIAMOND RING SET WITH A ROUND-CORNERED RECTANGULAR MODIFIED BRILLIANT-CUT FANCY VIVID YELLOW DIAMOND, WEIGHING APPROXIMATELY 54.62 CARATS, RING SIZE 6, MOUNTED IN 18K GOLD	Christie's New York	20-April	\$ 2,461,000
MAGNIFICENT PLATINUM AND DIAMOND RING CENTERING AN EMERALD-CUT DIAMOND WEIGHING 19.25 CARATS, FLANKED BY TWO MODIFIED CALF'S HEAD-SHAPED DIAMONDS WEIGHING APPROXIMATELY 1.40 CARATS, SIZE 6¼.	Sotheby's New York	19-April	\$ 2,290,000

## DESIGN OBJECTS (U.S.)

### HIGHLIGHTS:

- Supply and prices of design objects increased in the U.S. in 2016
- Increased purchasing power in the U.S. for durable goods
- U.S. consumers sell their design objects to renew

The total sales volume of design objects in the U.S. increased 35% between 2015 and 2016, reaching \$164 million dollars of auction sales. The increase in volumes is mostly due to a combined increase in price (+4.2% on average) and supply (+32%) at auction. On the other hand, the sell-through rate has dropped slightly (-2%). The increased activity in the design market in the U.S. has been backed by increased income and a steady growth in general of durable goods. Indeed, durable goods in general have seen a strong acceleration in the last quarter of 2016. Supply of design objects in the secondary market has been supported mostly thanks to households upgrading their home décor and selling their existing ones at auction. In turn, this creates a virtuous cycle where more supply is put on the market, and demand increases accordingly. The focus of collectors of high-end design pieces in 2016 were on works by Claude Lalanne, François-Xavier Lalanne and Diego Giacometti who, together, account for 7 of the top 10 design lots sold in the U.S. in 2016.

FIGURE 103: U.S. DESIGN



Maastricht University Graphic | Source: artnet

## TOP 10 DESIGN LOTS IN U.S. IN 2016

Item description	Auction house	Date of sale	Price
FRANÇOIS-XAVIER LALANNE (1927 - 2008), MOUTONS DE LAINE', A SHEEP AND TWO OTTOMANS, WOOL, PATINATED ALUMINUM, WOOD, 1968	Christie's New York	08-June	\$ 1,085,000
JEAN ROYÈRE (1902 - 1981), OURS POLAIRE SOFA, FABRIC, OAK, 1950	Phillips New York	09-June	\$ 754,000
DIEGO GIACOMETTI (1902 - 1985), LAMPE AUX FEUILLES ET OISEAUX (A PAIR), BRONZE, 1975	Sotheby's New York	15-November	\$ 732,500
DIEGO GIACOMETTI (1902 - 1985), LANTERNE AUX FEUILLES ET OISEAU, BRONZE, 1975	Sotheby's New York	15-November	\$ 672,500
FRANÇOIS-XAVIER LALANNE (1927 - 2008), MOUTONS DE LAINE', A SHEEP AND OTTOMAN, WOOL, PATINATED ALUMINUM, WOOD, 1968	Christie's New York	08-June	\$ 665,000
THOMAS STEARNS, FACADES OF VENICE, APPLIED AND IRIDIZED BLOWN GLASS, 1962	Sotheby's New York	14-December	\$ 612,500
CLAUDE LALANNE (1924 - ), LUSTRE STRUCTURE VÉGÉTALE, GILT BRONZE AND GALVANIZED COPPER, 2014	Sotheby's New York	07-June	\$ 610,000
DIEGO GIACOMETTI (1902 - 1985), LAMPADAIRE AUX FEUILLES ET OISEAUX, BRONZE, 1975	Sotheby's New York	15-November	\$ 588,500
DIEGO GIACOMETTI (1902 - 1985), PIÉDESTAL AUX CHIENS, BRONZE, 1975	Sotheby's New York	10-May	\$ 562,000
CARLO MOLLINO (1905 - 1973), COPENHAGEN CHAIR, BENT PLYWOOD, BRASS, 1951	Sotheby's New York	14-December	\$ 516,500



## THE AMERICAS ART TRADE & TRENDS

### UNITED STATES OF AMERICA

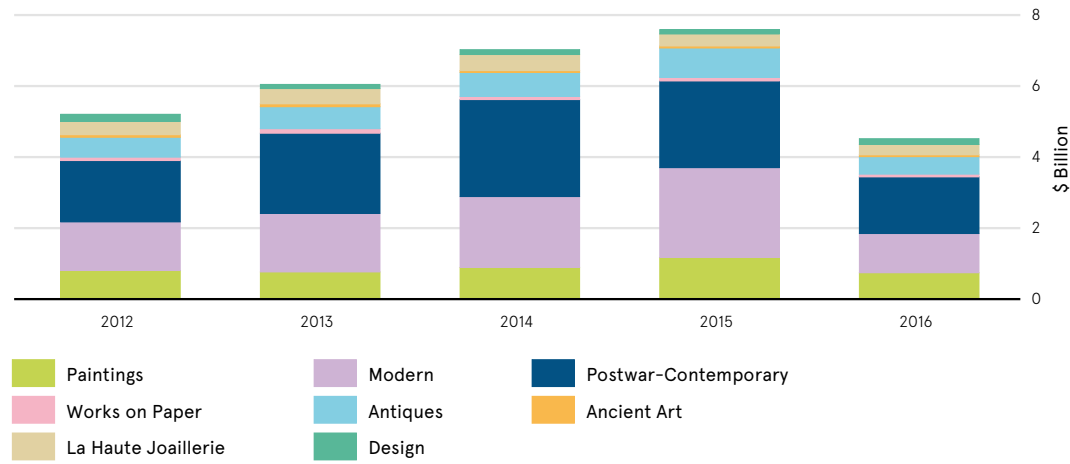
Of all the countries in the world, the United States is by far the largest trading country in art, collectors' pieces and antiques. In the last available full year of data in 2015 were \$11.66 billion, and exports were slightly lower, at \$11.03 billion dollars.

The drop in volume at auction in the U.S. during 2016 resulted in a huge drop in sales revenue by U.S. auction houses in 2016 or 41%. With the U.S. losing its top spot as the country with the largest auction sales market to China. Consignments at auction are down by 11%, and art prices are down for Modern Art. Here we give the overall drop, and the figure we can observe the large drop in auction sales across all categories. In the following section we will take a specific look at the categories for auction sales.

Dealers have not experienced such a fall in sales. Art galleries and dealers have experienced more activity during 2016 than the year before, and much larger turnover than in 2015. During 2015 sales were \$6.77 billion in the retail sector, (using private firm data from Orbis). Growing to almost \$7.5 billion in sales in commercial galleries and art and antique dealers in the U.S. in 2016. Including auction sales of \$4.58 and private sales brokered by the largest auction houses aggregates to a \$13 billion art auction market in the US. The largest art market by country in the world. The U.S. alone represents a 29.5% fraction of the world's art market.

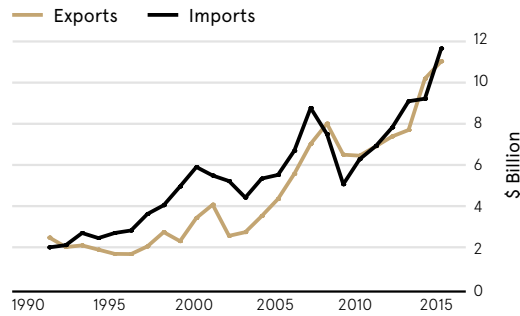
Dealers during 2016 have reported a 9.8% increase in sales during 2015. U.S. art and antique dealers are very optimistic going forward. In light of the strong dollar and political regime change, expectations for growth in 2017, at the end of 2016 looking forward for the year are for sales to grow by high double digits.

FIGURE 104: U.S. AUCTION HOUSE SALES BY CATEGORY



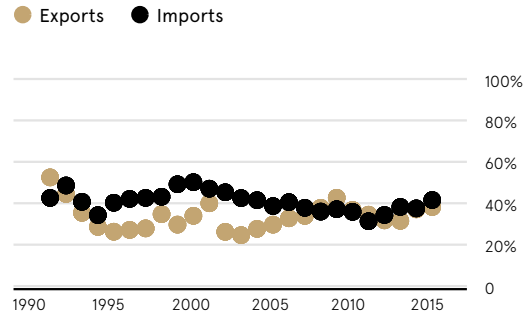
Maastricht University Graphic | Source: artnet

FIGURE 105: ART AND ANTIQUES TRADE U.S.



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 106: WORLD ART TRADE SHARE U.S.



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

The United States has had a long history of being the largest art market in the world. Its share of world trade in terms of imports has decreased gradually since 1990, when the fraction of global trade was 45% of all imports.

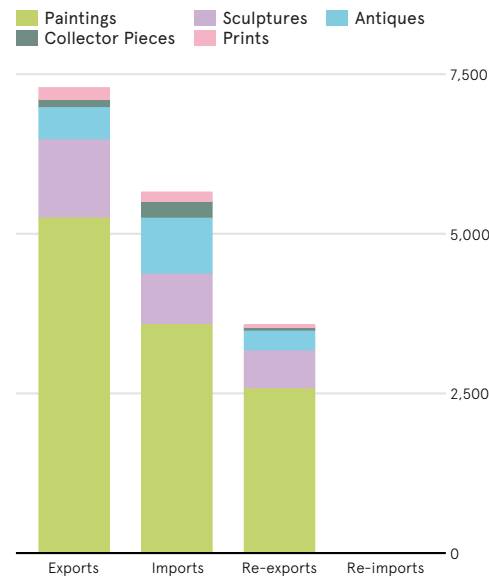
The U.S. accounted for a 52.5% share of all exports in 1991, peaking during 2000. Cross border trade between the United States and the rest of the world at the end of 2015 is still a hefty 38% share of exports and 42% of imports. Trade in the U.S. has been consistently large.

We have seen a drop in auction sales, but has that also led to a fall in trade during 2016? Using data from the United Nations trade data base in the figure we have depicted the value of art and antiques traded across the various artistic categories for the world's largest trader in art and antiques, the United States. Over the whole year, in 2015 the U.S. imported a total of \$11 billion in art and antiques and collector pieces. Since data is only available until August 2016 for the U.S. we compare the data available from January 2016 until August 2016 with the same period in the prior year, 2015.

Figures for the first half of 2016 show a similar pattern in the flow of export trade as during 2015. There is no comparable slowdown in the value of art traded exported globally, as denoted in U.S. dollars, as is the case in the UK. In fact, the value of exports are slightly larger for the comparable period, with Prints being traded more than during 2015.

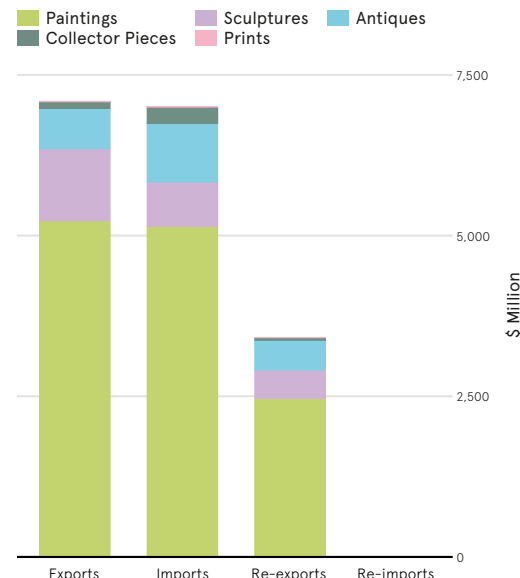
However, there is a slowdown in the value of imports, particularly in the value of Paintings imported during the first half of 2016, until August 2016, which is the most recent data at the time of press. Imports have dropped by 20.5% during the first eight months of recorded trade compared to the same period in 2015. Particularly for Paintings, with imports of Paintings down for the comparable period by 30%. One would expect the strong dollar to make imports more attractive for U.S. denominated buyers. An explanation is the drop in U.S. collector demand, despite the stronger dollar. An alternative explanation is U.S. collectors showing a preference for art sold in the domestic market, rather than importing from abroad.

FIGURE 107: U.S. ART AND ANTIQUES TRADE  
DATA AUG 2016



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 108: U.S. ART AND ANTIQUES TRADE  
DATA AUG 2015



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

How have sales channels for dealers been affected? The dealer market is up on 2015, and similar to the UK market private sales, via dealers, and through the private arms of auction houses are capitalising on lost auction sales. Dealers have reported a large increase in sales during 2016, with annual turnover 9.8% higher. Looking ahead to 2017, the forecast is for even higher growth.

To measure the size of the current U.S. art dealer market we provide information collected from the last full Economic Census on the United States economy. This provides a point of reference for the official structure of the art and antique dealer market. Such comprehensive economic surveys are only conducted on a national basis every 5-10 years.

The U.S. Economic Census, conducted every 5 years, provides the most comprehensive and an accurate source of data for understanding how the market in the U.S. is structured. It provides a complete picture of the size of the industry since it also includes art dealers with no employees. For our reference on the size of the U.S. art dealer market, the last complete census took place in 2012. The number of art dealers with or without paid employees in 2012 was 20,852, down from 24,160 firms 5 years earlier from the previous census in 2007.

Official reported sales for the art retail industry in 2012 were also down from \$9.727 billion 2007, to \$7.465 billion USD in 2012. Public auction sales at the time, as reported by artnet for 2012 were \$6.157 billion. The U.S. art market in 2012 was reported by the Bureau of Labor Statistics to be \$13.622 billion dollars. A similar size as today. Including sole traders, these official statistics revealed that an accurate assessment of the relative size of the dealer to auction market in 2012 was that dealers represented 55% of art and antiques sales in terms of dollar values of sales in the U.S. Today, with auction sales lower in proportion, the current fraction has increased to a dealer share of over 60%.

Taking a look at the jobs in the art and antiques trade. A large number of art dealers do not employ any paid labour. Around 75% of all art dealers are sole proprietary retailers in the U.S. Just over \$1 billion in sales are generated by the 20,852 sole trading dealers and galleries.

A quarter of the industry is made up of art and antique dealers with at least one employee. In 2016 this was just over 5100 enterprises. In 2012 sales by these 5000 art dealers employing at least one employee totaled \$6.5 billion.

In the U.S. the number of art dealers having a least one employee on the payroll reported in the first quarter of 2016 with art dealers was 5114. This fell to 5086 in the second quarter of 2016; the latest figure available when this report went to press. The general pattern over the past few years indicates a slight decline per year, with more exits than entrants into the market. However, a gradual increase occurs over each year itself, indicating that the larger number of dealers file for closure at the end of the year, than the gradually increase in entrants occurring over the four quarters of each year.

The map of the U.S. with the number of dealers with an employee on the payroll is given below. This gives an impression of how these dealers are represented over the various Counties of the U.S. The areas left white may have art dealers with sole proprietary trading and interns, but no official employees on the payroll.

FIGURE 109: U.S. DEALER LOCATIONS 2016  
ART DEALERS WITH MORE THAN ONE PERSON ON THE PAYROLL FOR THE U.S.

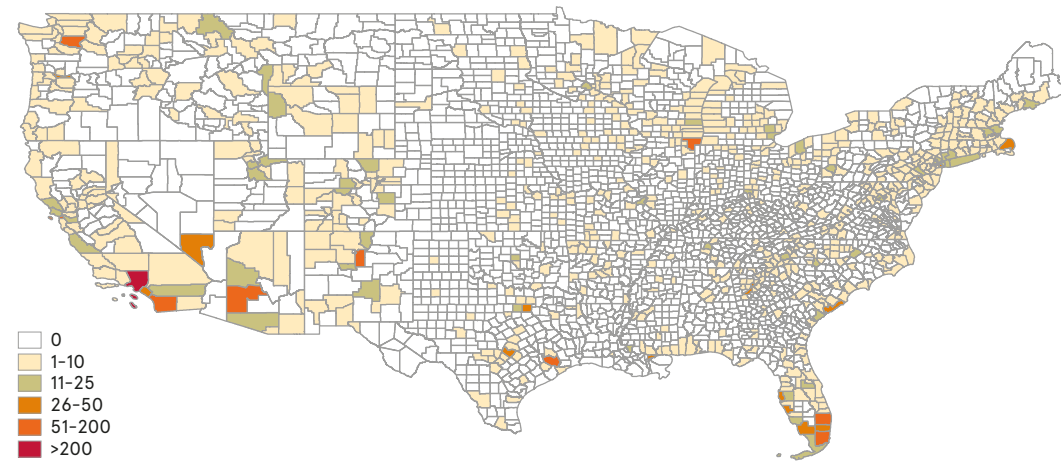
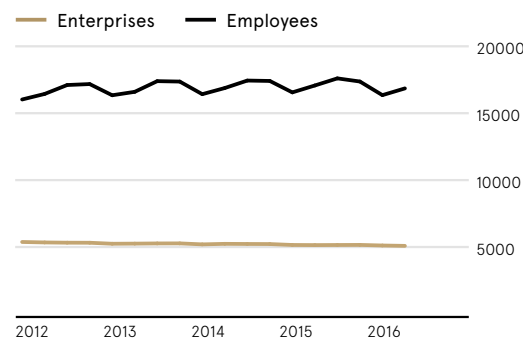


FIGURE 110: U.S. ART AND ANTIQUES RETAIL TRADE  
ART DEALERS EMPLOYING AT LEAST 1 PERSON ON THE PAYROLL AND THEIR EMPLOYEES



Source: U.S. Bureau of Labor Statistics

There has been a slight decrease in the numbers of art and antique dealers in the U.S. By the second quarter of 2016 there were just over 5000 firms reported by the U.S. Bureau of Labor Statistics.

A large fraction of these establishments are only set up for the purpose of short-term events. Many companies register during the year and then close at the year end. Roughly 20% of all establishments registered as art dealers with at least one employee exit the industry before the year end. This is due to the nature of the event industry and types of pop-up stores, as well as firms that unfortunately do not make it through the first year. In 2012 there were 1104 firms employing at least one person were also operating for part of the year, making just over 200 million in sales. The bulk of the revenue generated in the art dealer business is by the 4000 art dealers with employees. This leads to the number of employees fluctuating cyclically in the industry as shown in the quarterly statistics above.

The North American Industrial Classification System (NAICS) codes provides current information on employment number of establishments, since the 2012 census. The number of establishments under the classification code for art dealers comprises of art dealers reporting that they have at least one employee on the payroll is currently just over 5000. For these 5000 art dealers that are reported by the Bureau of Labour Statistics, since they have paid employees, we have quarterly data until the second quarter of 2016.

In 2016 the U.S. art and antiques sector employs directly 16,565 people. Including the average number of sole proprietors results in the total number of people employed in the U.S. art dealer market fluctuating between 31 and 32 thousand people working full time in the art dealer retail trade during the year.

Reporting by the U.S. Census Bureau has enabled us to put a precise figure on the size of the art dealer market in the U.S. In February, 2016 the sales figures were announced from the 2013 Statistics. It was reported that there are 4937 art dealer establishments. These figures are provided by the Statistics of U.S. Businesses, SBA Office of Advocacy and U.S. Census Bureau. In the December 2016 report by the BLS, the total sales volume in the U.S. for art dealers was \$6.5 billion

The census survey reveals that of those art dealers who employ labour, a large proportion, 82% of dealers, employ between one and four people. Only 13% employ between 5 and 9 people, and 4% between 10 and 19 staff. There are 41 dealers employing between 20 and 49 people. Only two dealers employ more than 100 people. Considering that three in every four dealers are sole traders, it may be less surprising therefore that less than 5% of art dealers in the U.S. employ 5 or more people.

This type of distribution is highly reflective of the market structure of the art and antique dealer industry in other countries.

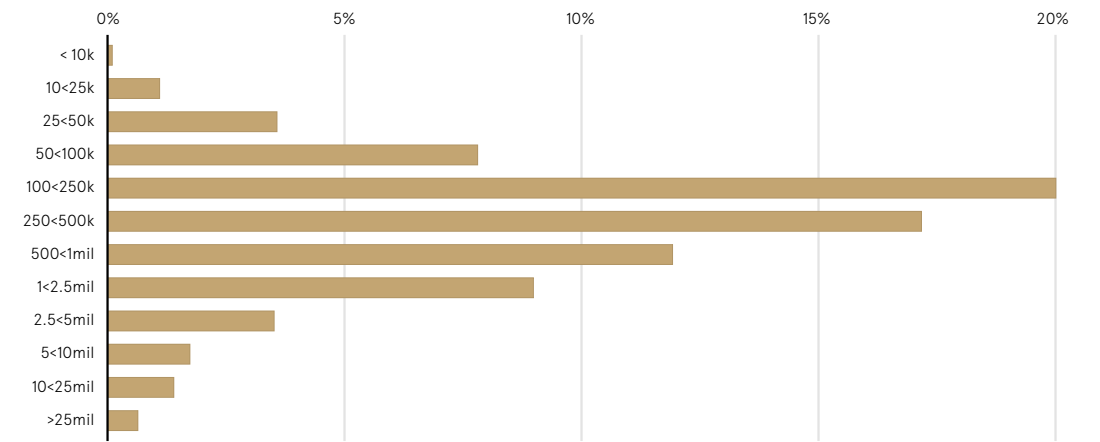
Taking the overall art dealer industry for the U.S. from the 2012 economic census data for art dealers we find that 12% of sales revenue is generated by the 16,216 art dealers without paid employees. The share of the other 88% of sales revenue for those employing at least one employee on the payroll, are distributed as shown in figure 111. Around 20% of dealers earned between \$100,000 and \$250,000 on an annual basis. At the higher end of the sales revenue distribution, only 32 art dealers had a turnover of more than \$25 million dollars. The revenue generated in 2012 across the U.S. industry by dealers was \$6.5 billion. Although a few dealers generated sales of over 25 million U.S. dollars, they only account for a small fraction of the overall market share, in terms of dealer numbers. Over half of the 25% of dealers that employ at least one person on the payroll take less than half a million in sales revenue per year. Thus only 12.5% of dealers take more than half a million in sales per year. It is this small fraction of dealers in the US, less than two and a half thousand dealers that make up the bulk of dealer trade in the U.S. These dealers have been experiencing growth over 2016, whilst sole traders have been feeling the squeeze on profits.

The distribution of market share by dealer numbers is reflective of the current situation in the U.S. art market of art and antique dealers with at least one employee. The distribution of sales revenue is given in the appendix, and is used to determine the aggregate sales in the U.S. dealer market in 2016.

From those dealers that employ at least one person on the payroll, art dealers and galleries in the U.S. employ on average 3 people per establishment. The distribution is highly skewed, since just under 25% (23.39%) of art dealers and galleries in the U.S. are very small businesses with receipts of less than \$100,000.

As reported in February 2016, there were only 10 top dealers in the U.S. who generated more than \$100 million. Only 5 took over \$75 million, and less than \$100 million.

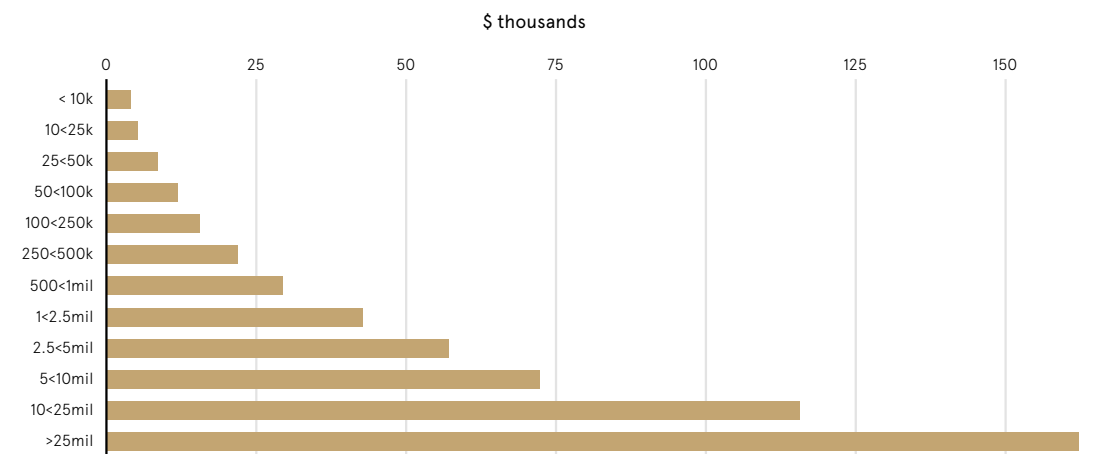
FIGURE 111: U.S. MARKET SHARE BY DEALER NUMBERS



\* Art and Antique dealers with at least one employee  
Maastricht University Graphic | Source: U.S. Census Bureau, U.S. Dept. of Commerce

The average wage for firms with between \$10,000 and \$25,000 in sales revenue is just \$5,000. Wages rise gradually for art dealers as sales revenues increase. Reaching just over \$40,000 on an annual basis when sales revenue hits the \$1 million mark. As sales revenues reach over \$10 million, then average annual sales go beyond the \$100,000 value.

FIGURE 112: U.S. AVERAGE WAGES IN THE DEALER SECTOR BY DEALER ANNUAL SALES



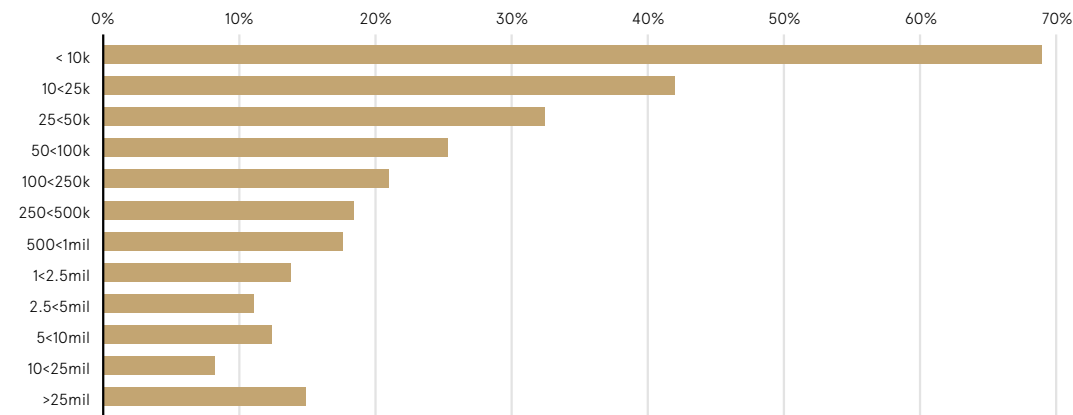
\* Art and Antique dealers with at least one employee  
Maastricht University Graphic | Source: U.S. Census Bureau, U.S. Dept. of Commerce



Wages are a large fraction of costs, and particularly so for small enterprises. On average the percentage of revenue spent on salaries is 14%. For small establishments, with sales less than \$10,000 this share is 69%. The fraction of total wages to sales revenue consistently reduces from 42% for firms with annual sales of between \$10 and \$25 thousand per year, to less than 10% for firms with sales over \$10 million. It is only for the handful of few dealers with more than 25 million in sales revenue, comprising of less than 40 dealers, where wages are on average \$160,000. Moreover, with such high salaries paid, the fraction spent on wages increases to 15% of total sales revenue. (For these few dealerships this estimate of wages comes with a large margin of error since the actual revenue figures are not known with accuracy. For the smaller firms we can be much more accurate with these figures).

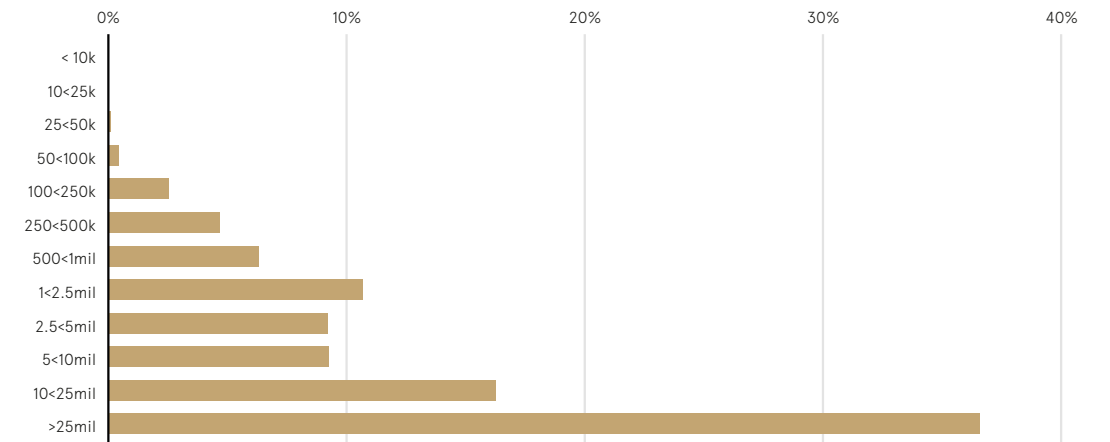
What is also very clear is that as firms get larger the fraction of their revenue spent on wages is lower. Incentives play a role in attracting talent, however, one has to be careful with interpreting causal effects. Paying higher wages will not simply increase sales revenue.

**FIGURE 113: U.S. % OF DEALER REVENUE SPENT ON SALARIES PER ANNUAL REVENUE CATEGORY**



\* Art and Antique dealers with at least 1 employee  
Maastricht University Graphic | Source: U.S. Census Bureau, U.S. Dept. of Commerce

**FIGURE 114: U.S. MARKET SHARE BY DEALER SALES PER ANNUAL REVENUE CATEGORY**



\* Art and Antique dealers with at least one employee  
Maastricht University Graphic | Source: U.S. Census Bureau, U.S. Dept. of Commerce

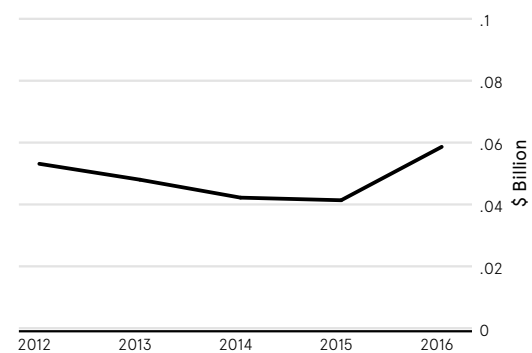
Although there are only 10 top dealers in the U.S. who generated more than \$100 million, and 5 took over \$75 million, and less than \$100 million, these handful of dealers take the lion's share of the market revenue.



## CANADA

2016 was a good year for the art market in Canada. After a few years of a decline in sales, 2016 saw the market rebound. Auction sales in Canada were up to \$0.6 billion in 2016 (\$586 million dollars). A rise of 42% from 2015 when auction sales were \$414 million.

FIGURE 115: CANADA AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

The vast majority of dealers in Canada take less than \$500,000 per year, distributed across Canada over Ontario, Quebec and British Columbia, mostly along the U.S. border, as shown in the map of dealer locations.

We have been able to collect sales figures for these dealers for 2015 this was \$1.3 billion dollars. Dealers reported turnover doubling during 2016, and expected growth of 20% ahead in 2017.

FIGURE 116: CANADA DEALER LOCATIONS

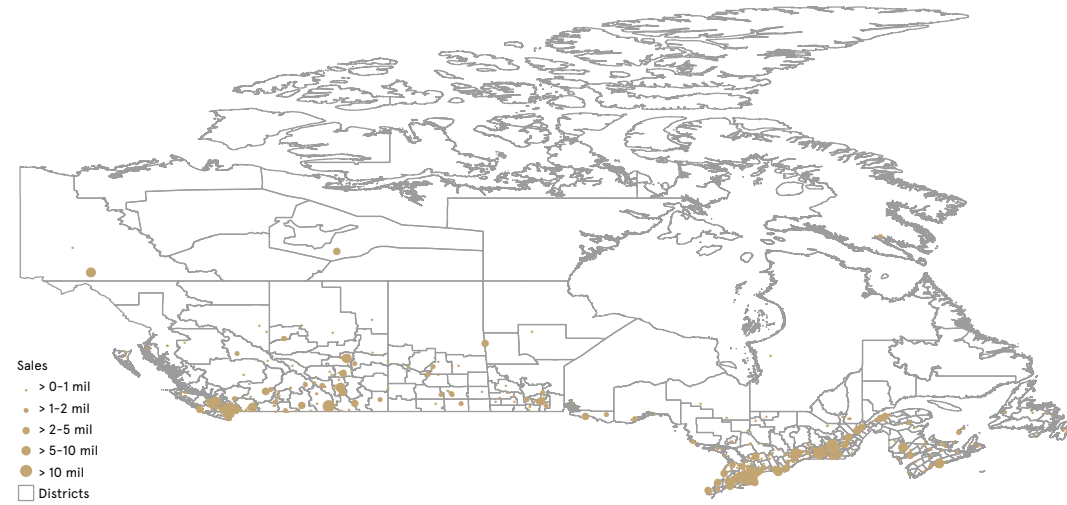
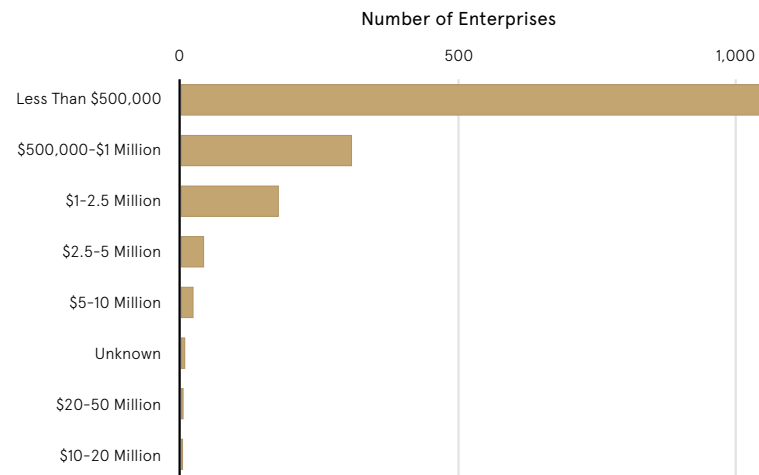
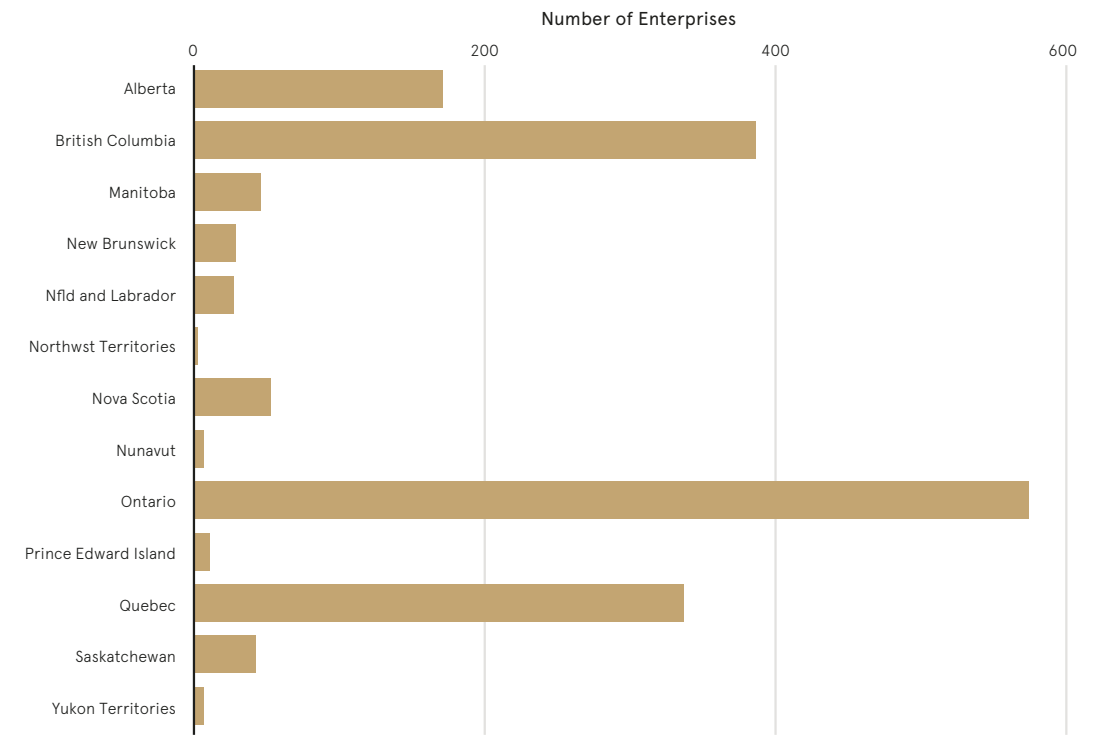


FIGURE 117: CANADA RETAIL TRADE SALES



Source: Canada NAICS Codes

FIGURE 118: CANADA RETAIL TRADE REGION



Source: Canada NAICS Codes

**ASIA**

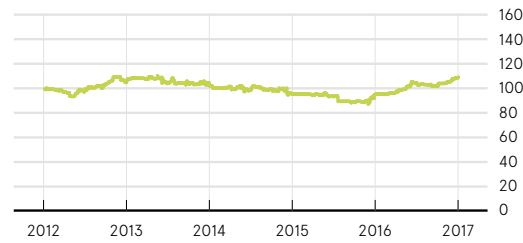
## ASIA ART MARKET HIGHLIGHTS

1. Auction markets remain the key sales channel in Asia. Asia has become the largest continent in the world for auction sales of art and antiques. Sales reached \$6.81 billion dollars, down 1.6%, despite an 8% fall in consignments at auctions.
2. China, including Hong Kong and Taiwan, dominates Asian auction sales with almost 90% of sales. Within Asia China is losing share. Sales at auction in 2016 were \$6.33 billion dollars down 2.6% on 2015.
3. Art price indexes of Chinese sales increased during 2016. Modern Art sold in China rose by 3.73%, and Old Master Paintings by 13%. The Contemporary market focused on older artists. Most successful market themes relate to Chinese history.
4. Asian tastes are shifting. The antiques market contracted by 23.3% whilst Paintings expanded by 36%. Strong growth at 21% in the market for Paper, comprising of Prints, Precious Books and Maps.
5. Auction sales in Japan grew by 101.5% during 2016, with visible growth in antiques and average prices, whilst consignments were up by 27%.
6. Auction sales have grown in India by 110%, as the number of consignments are up by 58%. Average prices in India are 57% higher, and buy-in rates dropped by over 15%.
7. There are over 4400 art dealers in China, and a growth in the numbers of dealers in Hong Kong, Singapore, and South Korean markets. Overall the dealer sector is not as financially healthy as in the West, with fewer dealers reporting profits.
8. High growth reported by dealers in Japan and India during 2016.
9. Auction sales in South Korea have slowed, with consignments and sales both down 18%, a maturing market experiences a shift to dealers.
10. Extremely high growth in dealer markets expected during 2017, in particular in UAE, Korea, India, and Japan. Moderate growth in Hong Kong and Singapore.

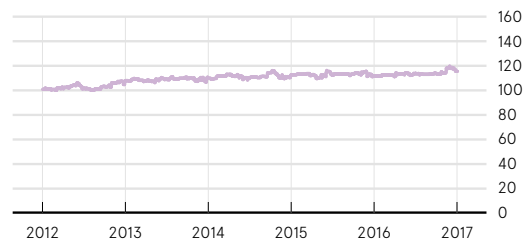
**FIGURE 119: CHINA INDEX**  
World Art Index



Paintings Index



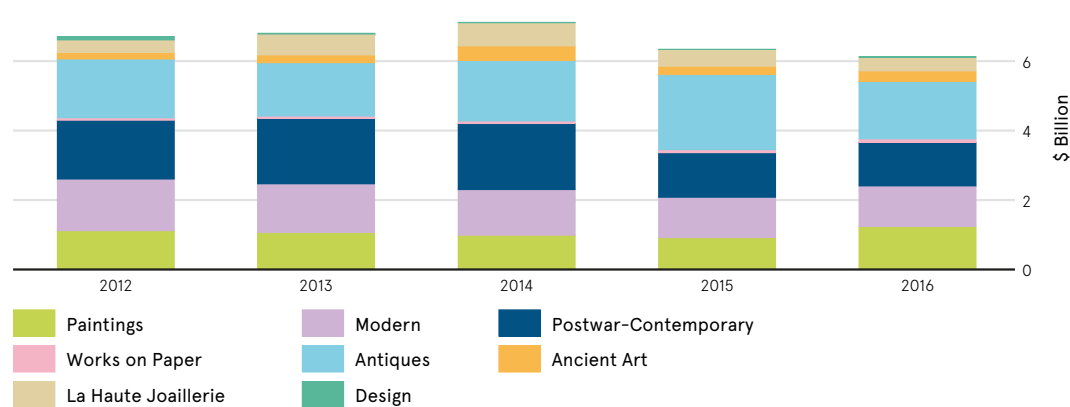
Modern Art Index



Maastricht University Graphic | Source: artnet

The auction market in China remains the main channel for sales. The largest share of trade is in the antiques market, with Paintings and modern and postwar and contemporary not having lost out to dealer channels, as has been the case in the U.S. and many European countries. Dealer markets have also reported high growth in India and a resurgence in Japan.

**FIGURE 120: CHINA AUCTION HOUSE SALES BY CATEGORY**

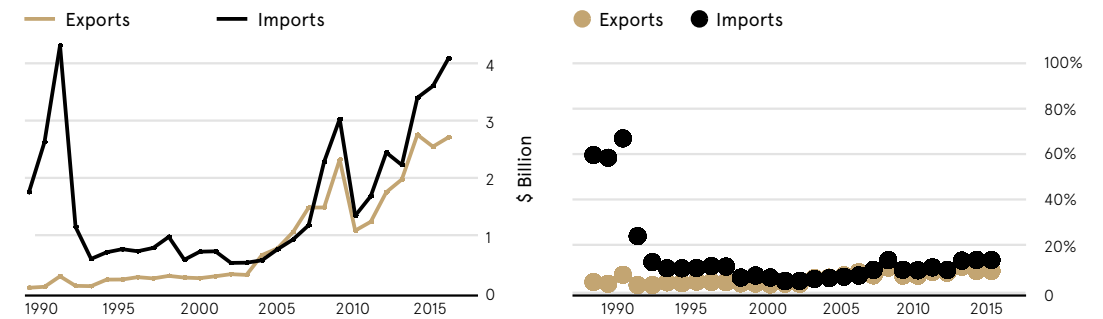


Maastricht University Graphic | Source: artnet

At the end of the 1980's there was a surge in imports to Asia, predominately to Japan. The art trade in 1990 represented \$6 billion in terms of art traded across borders, and Asia's share in 1990 reached two-thirds of global imports. Japan was importing 80% of artworks in terms of value. We do not have detailed numbers on trade volumes, but from the data we can observe that the value came from Paintings at the time, and taking into account the relative weights in terms of kilograms traded, we can observe that the import market was dominated by expensive Paintings, in line with the boom in the Impressionist Art market of the time.

The fraction of imports into Asia dropped in 1991 to 24%, and again in 1992 to 13.5% and in 1993 to 10.6%, where it has more or less remained over the past 20 years, edging up to 14.7% in 2014 and at 14.6% in 2015. Exports from Asia have been lower than imports, between 5 and 10% over the last 30 years, but never reaching above 12% of global trade. In terms of value Asian imports of art and antiques are back to the level seen in 1990. Trade in Japan during 2015 has grown, in particular in the antiques market. Japan are up 101.5% in value.

**FIGURE 121: ART AND ANTIQUES TRADE ASIA**



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database



## ASIA ART SALES

### ANCIENT ART (CHINA)

#### HIGHLIGHTS:

- Supply and total sales of Ancient Art sold in China increased in 2016
- Prices continued to drop in 2016 but the shock was less extreme than in 2015

The overall market for Ancient Art in China is not as large as the market for antiques due to the governmental protection and limited number of consignments. The Chinese stock market crashed in 2015, which had an immense effect on prices and overall sales that year. In 2016, the market began to recover. The total sales volume of Classical Antiquities saw an increase of 23.4% year-on-year, reaching \$295 million dollar in auction sales.

The number of lots sold has continued to grow since 2013 and the buy-in rate decreased from 56% in 2015 to 46% in 2016. At the same time, the decrease in the average price of lots sold slowed down after reaching a low point at \$121,000. With 16% more lots offered in 2016, people were willing to purchase more objects at reasonable prices. In 2016, the market for ancient pieces in China was mostly dominated by Song Dynasty pieces. Nevertheless, a Tibetan statue was sold at Bonhams in Hong Kong for \$6.4 million in November, setting a world record for a Tibetan sculpture. Because the market is heavily regulated locally, many important Chinese Antiquities were exchanged outside China, mainly in the United States.

FIGURE 123: CHINA ANCIENT ART



Maastricht University Graphic | Source: artnet

TOP 10 ANCIENT ART LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
宋 汝窑兽面五足洗 A SONG DYNASTY WASHER WITH FIVE FEET AND DESIGN OF BEAST'S FACE, RU WARE	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 14,518,706
南宋 修内司官窑海棠瓶 A SOUTHERN SONG DYNASTY BEGONIA VASE, XIU NEI SI GUAN WARE	Royale Auctioneers	29-November	\$ 11,861,631
宋 汝窑长颈瓶 A SONG DYNASTY LONG NECK VASE, RU WARE	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 11,852,005
宋 汝窑花口瓶 A SONG DYNASTY VASE WITH FLOWER SHAPE OPEN, RU WARE	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 11,852,005
南宋 青釉冰裂弦纹瓶 A BOTTLE WITH BLUE GLAZE AND ICE CRACKING STRING PATTERN, SOUTHERN SONG DYNASTY	Royale Auctioneers	29-November	\$ 7,413,520
A MONUMENTAL BRASS ALLOY FIGURE OF CANDI VAJRAPANI, TIBET, 13TH CENTURY	Bonhams Hong Kong	29-November	\$ 6,351,130
7/8世纪铜释迦牟尼 (错银错红铜) A COPPER STATUE OF SAKYAMUNI, 7/8 TH CENTURY	Holly International Auctions Co., Ltd.	26-November	\$ 5,316,920
11世纪 无量寿佛 A STATUE OF AMITABHA BUDDHA, 11TH CENTURY	Beijing Hanhai Auction Co., Ltd.	03-December	\$ 5,013,369
A HIGHLY IMPORTANT AND EXTREMELY RARE GUAN MALLOW-SHAPED BRUSH WASHER, SOUTHERN SONG DYNASTY (1127-1279)	Christie's Hong Kong	01-June	\$ 4,915,459
FANG-YI VESSEL WITH THE INSCRIPTION "YING MENG" 應(金甌)方彝	Hanhai Hong Kong	05-October	\$ 4,768,227



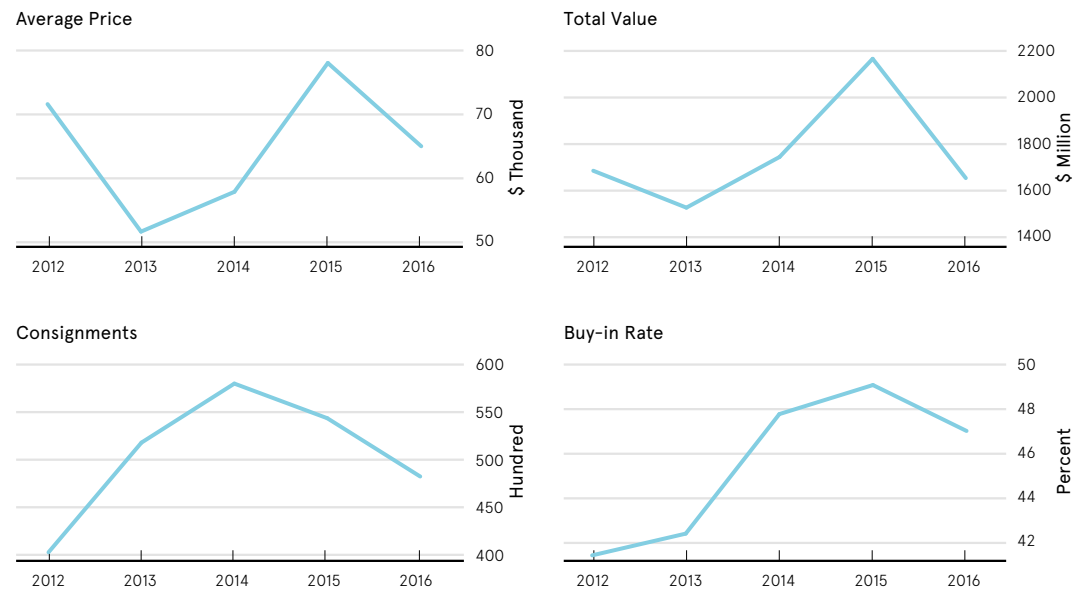
## ANTIQUES (CHINA)

### HIGHLIGHTS

- Prices for antiques dropped 16.8% on average in 2016
- Consignments at auction dropped 11.2%
- Economic slowdown is to blame for the market's poor performance

The total sales volume of antiques in China saw a steep decrease in 2016 compared with its strong performance in 2015. The market in China decreased by 23.2%, falling to \$1.66 billion dollars of auction sales. The decrease in volume is mostly due to a combined decrease in price (-16.8 % on average) and consignments (-11.2%) at auction. Poor performance in antiques is either due to shifting tastes, lack of quality supplied at auction, to the economic slowdown, or combination of all three factors. As the market supply has decreased, the buy-in rates decreased over the year to 47%. Nonetheless, despite the decline of sales value, the sector remains the largest collecting category for the second consecutive year. With the decrease of the people's purchasing power as well as the removal of speculators from the picture, serious collectors are more cautious about the market and have negotiated for more reasonable prices in each auction sale. Trend-wise, Ming Dynasty items are still the most sought-after. However, in 2016, the classical vases and jars shared top spots with copper statues, such as an impressive gilded copper statue of a Taoist figure of the Ming Dynasty that was acquired for \$13.7 million in May.

FIGURE 124: CHINA ANTIQUES



Maastricht University Graphic | Source: artnet

### TOP 10 ANTIQUES LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
明洪武 釉里红缠枝花卉纹象耳盘口瓶EMPEROR HONGWU PERIOD OF MING DYNASTY RED UNDER-GLAZED VASE WITH ELEPHANT SHAPED HOLDER AND DESIGN OF FLOWER SCROLLS	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 41,482,016
A MAGNIFICENT VERY RARE LARGE BLUE AND WHITE 'DRAGON' JAR, GUAN	Christie's Hong Kong	30-May	\$ 20,341,863
明永乐 青花双系扁壶 EMPEROR YONGLE PERIOD OF MING DYNASTY FLAT BLUE AND WHITE POT	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 17,778,007
明嘉靖 黄上红婴戏盖罐 MING DYNASTY, JIAJING PERIOD YELLOW AND RED JAR WITH COVER AND DESIGN OF PLAYING CHILDREN	Macau Chung Shun International Auctions Co.,Ltd	12-June	\$ 14,518,706
A FINE, OUTSTANDING AND RARE BLUE AND WHITE MOONFLASK, BIANHU, MING DYNASTY, YONGLE PERIOD	Sotheby's Hong Kong	06-April	\$ 14,250,348
明 铜镀金道教水将像 A GILDED COPPER STATUE OF A TAOIST FIGURE, MING DYNASTY	Dongzheng Auction	14-May	\$ 13,730,923
A FINE, MAGNIFICENT AND EXTREMELY RARE BLUE AND WHITE HOLY WATER VESSEL, MING DYNASTY, YONGLE PERIOD	Sotheby's Hong Kong	06-April	\$ 12,806,230
A SUPREMELY IMPORTANT IMPERIAL TANXIANGMU 'JINGTIAN QINMIN' SEAL, QING DYNASTY, KANGXI PERIOD	Sotheby's Hong Kong	06-April	\$ 11,939,760
PRINCE KUNG'S 'DRAGON AND PHOENIX' TIANHUANG SEALS THE SEALS KANGXI PERIOD (1662-1722), THE SEAL FACES XIANFENG PERIOD (1850-1861)	Christie's Hong Kong	01-June	\$ 10,968,423
蒙古十七世纪 铜鎏金哲布尊丹巴像·扎那巴扎尔 A GILT COPPER STATUE OF JETSUN DAMPA (ZANABAZAR), MONGOLIA, 17TH CENTURY	China Guardian Auctions Co., Ltd.	12-November	\$ 10,712,662

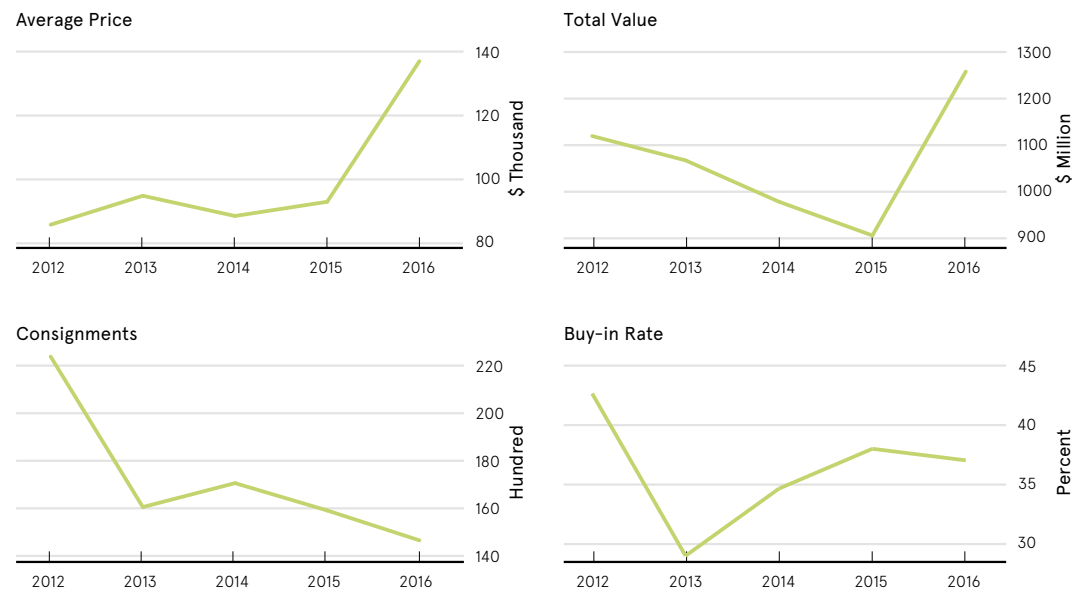
## OLD MASTERS AND 19TH CENTURY WORKS (CHINA)

### HIGHLIGHTS

- Bullish market sees +45% increase in price
- Sales of Old Master works reached a peak at auction in 2016
- Old Master market gains more popularity

The market for Old Masters in China has experienced tremendous growth in 2016. The total sales volume of Old Masters in China increased 36% in 2016, reaching a peak at \$1.25 billion. Meanwhile, in 2016 the average price of Old Master works sold in China saw a steep increase (+45%) compared with those in 2015. On the other hand, the number of lots offered and the number of lots sold have slightly dropped. While there was a slight market correction in the Post-War and Contemporary sector, the total sales value of the Old Master market exceeded the Modern Art market for the first time in the last five years, and is almost equal to the total sales value in Post-War and Contemporary. Scarcity in the market for Old Masters pushes prices across many genres and styles, making it difficult to identify a clear trend. At auction, the market was attracted by very different pieces at high prices, such as a 1338's Wu Zhen ink on paper that left for \$25 million, or a 1574's Zhao Nanxing calligraphic work sold for \$6.3 million, both at Beijing Council International Auction. Old Master works in China clearly triggered a lot of competition and market enthusiasm not seen in other sectors.

FIGURE 125: CHINA PAINTINGS



Maastricht University Graphic | Source: artnet

## TOP 10 OLD MASTERS AND 19TH CENTURY LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
WU ZHEN (1280-1354), 山窗听雨图 LISTENING TO RAIN IN THE MOUNTAIN, INK ON PAPER, 1338	Beijing Council International Auction Co., Ltd.	06-December	\$ 25,079,965
LANG SHINING (GIUSEPPE CASTIGLIONE) (1688-1766), 八骏图 镜片 设色绢本 EIGHT HORSES, MOUNTED, INK AND COLOR ON SILK, 1755	Paragon International	31-May	\$ 15,112,627
BADA SHANREN (1626-1705), 个山杂画册 A ALBUM OF GESHAN'S DRAWINGS, 1684; INK ON PAPER	China Guardian Hong Kong	29-May	\$ 9,902,405
JIN NONG (1687-1763), 花果册 A ALBUM OF FLOWERS AND FRUIT DRAWINGS, INK ON PAPER, 1755	China Guardian Auctions Co., Ltd.	15-May	\$ 7,393,574
WANG HUI (1632-1717), 江山卧游图 手卷 设色纸本 LANDSCAPE, HANDSCROLL, INK AND COLOR ON PAPER	Poly Huayi (Shanghai) Auction Company	22-December	\$ 6,951,140
CLAUDE MONET (1840 -1926), 圣·安德利斯 布面油画 SAINTE-ADRESSE , OIL ON CANVAS, 1873	Poly Huayi (Shanghai) Auction Company	22-December	\$ 6,620,134
ZHAO NANXING (1550 - 1627), 草书诗翰卷 CALLIGRAPHY , INK ON PAPER, 1574	Beijing Council International Auction Co., Ltd.	06-December	\$ 6,387,031
TANG YIN (1470-1523), 落花诗意图 A POETIC SCENE OF FALLEN FLOWERS , INK AND COLOR ON PAPER	Beijing Council International Auction Co., Ltd.	06-December	\$ 5,768,392
WANG JIAN (1598-1677), 仿巨然清溪待渡图 WAITING TO CROSS THE SPRING IN THE STYLE OF JU RAN'S, HANGING SCROLL, INK AND COLOR ON PAPER, 1669	China Guardian Auctions Co., Ltd.	15-May	\$ 5,457,162
WANG HUI (1632-1717), 仿宋元山水巨册 A LARGE ALBUM OF LANDSCAPE IN THE STYLES OF SONG AND YUAN DYNASTIES, INK AND COLOR ON SILK, 1706	Poly International Auction Co., Ltd.	05-June	\$ 5,078,577

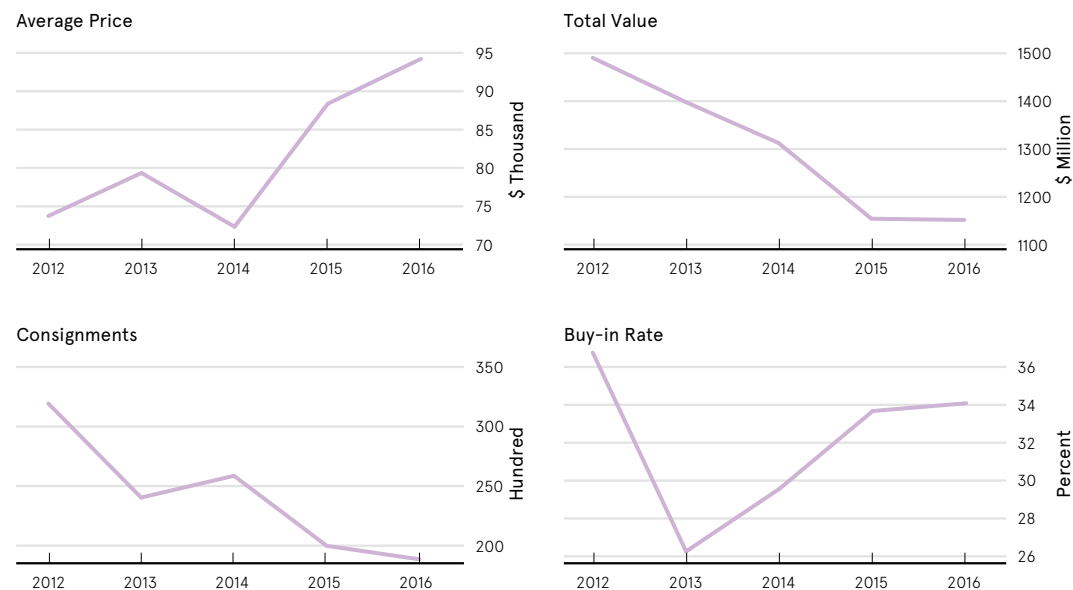
## MODERN ART (CHINA)

### HIGHLIGHTS

- Market volumes stabilised in 2016 at \$1.16 billion
- Supply at auction continued dropping (-6%)
- Average price saw a gain in 2016 (+6%)
- Modern Art gaining popularity over other categories

The total sales volume of Modern Art in China was unchanged between 2015 and 2016, at \$1.16 billion, still 22% less than the total sales volume five years ago. Nevertheless, the dynamics in the market are very different in 2016 compared to 2012: similarly to the Post-War and Contemporary market, the Modern Art market in China is suffering from a drop in supply (-6%) that triggers a symmetric price increase (+6%). One possible explanation of the fact that the market stays remarkably stable despite the slowdown of economic growth is that Modern Art is gaining popularity in China, as people are shifting their preference from Post-War and Contemporary pieces to Modern as well as Old Masters. One can possibly read the influence of a more conservative establishment than that of five years ago, which favours frugality over eccentricity and praises the glorious early days of the People's Republic of China. Very illustrative of this trend is Li Keran's work "Shaoshan, a Sacred Place of the Revolution," which fetched \$12.7 million at a June auction in Beijing.

FIGURE 126: CHINA MODERN



Maastricht University Graphic | Source: artnet

### TOP 10 MODERN ART LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
FU BAOSHI (1904-1965), 云中君和大司命 THE GODDESS OF CLOUD AND THE GOD OF LONGEVITY , MOUNTED, INK AND COLOR ON PAPER, 1954	Poly International Auction Co., Ltd.	04-June	\$ 35,024,670
ZHANG DAQIAN (1899-1983), PEACH BLOSSOM SPRING, HANGING SCROLL, INK AND COLOR ON PAPER, 1982	Sotheby's Hong Kong	05-April	\$ 34,906,634
ZHANG DAQIAN (1899-1983), 瑞士雪山 SWITZERLAND SNOW MOUNTAINS, MOUNTED, INK AND COLOR ON SILK , 1965	Poly International Auction Co., Ltd.	04-December	\$ 23,897,059
ZHANG DAQIAN (1899-1983), 巨然晴峰图 LANDSCAPE, HANGING SCROLL, INK AND COLOR ON PAPER, 1946	China Guardian Auctions Co., Ltd.	12-November	\$ 15,183,300
SANYU (1901-1966), CHRYSANTHEMES DANS UN VASE EN VERRE (CHRYSANTHEMUMS IN A GLASS VASE), OIL ON MASONITE, 1950	Christie's Hong Kong	26-November	\$ 13,354,822
LI KERAN (1907-1989), 革命圣地韶山 SHAOSHAN, A SACRED PLACE OF REVOLUTION, WORK ON PAPER	Beijing Council International Auction Co., Ltd.	06-June	\$ 12,784,394
ZHANG DAQIAN (1899-1983), 空行母像 A STATUE OF KHANDROMA, HANGING SCROLL, INK AND COLOR ON PAPER	Poly International Auction Co., Ltd.	04-June	\$ 9,719,346
FU BAOSHI (1904-1965), 风光好 GOOD SCENERY, HANGING SCROLL, INK AND COLOR ON PAPER, 1945	China Guardian Auctions Co., Ltd.	12-November	\$ 9,700,442
ZHANG DAQIAN (1899-1983), 松峰晓霭图 镜心 设色纸本 LANDSCAPE, MOUNTED, INK AND COLOR ON PAPER, 1969	Beijing Inzone International Auction Co., Ltd.	09-July	\$ 8,776,261
PABLO PICASSO (1881-1973), 灯下的女人(杰奎琳) 布面油画 WOMAN UNDER THE LIGHT (JACQUELINE), OIL ON CANVAS, COLLAGE, 1962	Poly Huayi (Shanghai) Auction Company	22-December	\$ 8,440,671

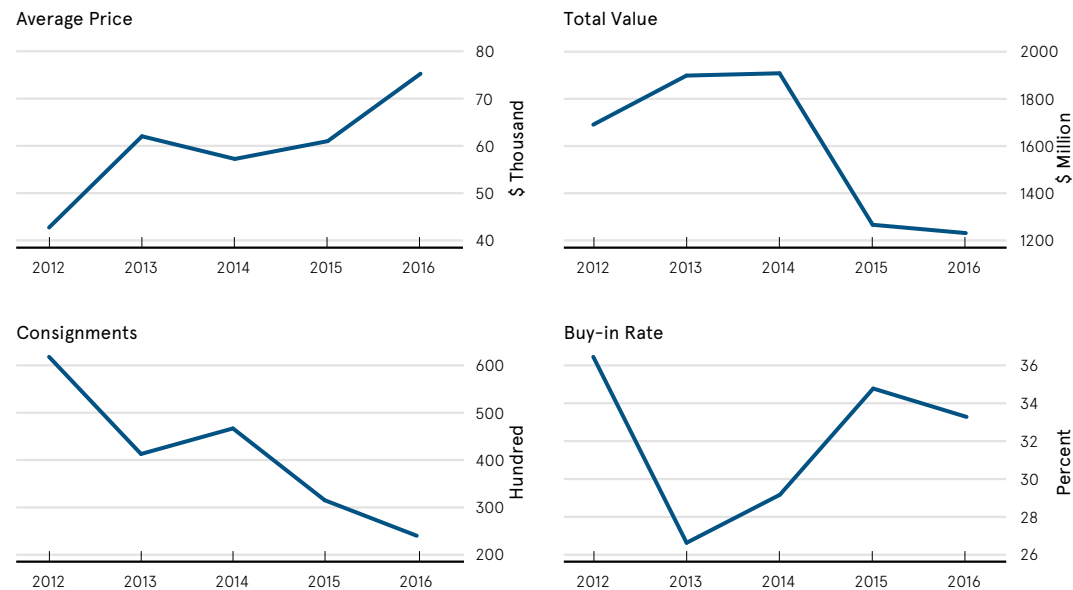
## POST-WAR AND CONTEMPORARY (CHINA)

### HIGHLIGHTS

- Supply at auction is squeezed
- The average price increased 72% since 2012
- Strong market concentration on a few artists

In 2016, despite the downturn in the economy and the continued correction of the financial market, the total sales volume of the Post-War and Contemporary Art market in China endured only a small contraction of 2.6% year-on-year to reach a strong \$1.25 billion in sales. This slight drop in sales is explained by a drop in the number of consignments (-22%), triggering a squeeze in supply, and a boost in prices (+22.4% on average). The buy-in rate also decreased after having increased two years prior. The market has concentrated on a few star artists. The trend has been especially strong for Wu Guanzhong whose works occupy 4 places in the top 10 sales of Post-War and Contemporary Art in China in 2016. Works by Chinese-French artists Chu Teh-Chun and Zao Wou-Ki were also in strong demand in the high-end market. Compared to previous years, the market has shown more appetite for established, older Post-War artists over younger contemporary artists.

FIGURE 127: CHINA POST WAR & CONTEMPORARY



Maastricht University Graphic | Source: artnet

### TOP 10 POST-WAR AND CONTEMPORARY LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
CUI RUZHUO (1944), 飞雪伴春 THE GRAND SNOWING MOUNTAINS, MOUNTED, INK AND COLOR ON PAPER, 2013	Poly Auction Hong Kong	04-April	\$ 39,564,634
WU GUANZHONG (1919-2010), 周庄 THE ZHOU VILLAGE, OIL ON CANVAS, 1997	Poly Auction Hong Kong	04-April	\$ 30,434,334
WU GUANZHONG (1919-2010), 荷塘 LOTUS POND, INK AND COLOUR ON PAPER, 1990	Poly Auction Hong Kong	03-October	\$ 13,692,449
CHU TEH-CHUN (1920-2014), VERTIGE NEIGEUX (SNOWY VERTIGO) (DIPTYCH), OIL ON CANVAS, 1990	Christie's Hong Kong	26-November	\$ 11,838,577
ZAO WOU-KI (1921-2013), UNTITLED (VERT ÉMERAUDE), OIL ON CANVAS, 1950	Christie's Hong Kong	28-May	\$ 9,100,273
WU GUANZHONG (1919-2010), 网师园 镜框 设色本 THE WANGSHI GARDEN, FRAMED, INK AND COLOR ON PAPERS	Holly International Auctions Co., Ltd.	26-May	\$ 7,805,231
WANG HUIQING (1944), FEET 2 (DIPTYCH), OIL ON CANVAS, 1999	Sotheby's Hong Kong	03-April	\$ 7,030,122
WU GUANZHONG (1919-2010), 竹海 BAMBOO FOREST, OIL ON CANVAS, 1985	Poly International Auction Co., Ltd.	03-December	\$ 6,350,267
ZAO WOU-KI (1921-2013), WATER MUSIC, OIL ON CANVAS, 1956	Christie's Hong Kong	26-November	\$ 6,279,010
ZAO WOU-KI (1921-2013), PAYSAGE DANS LA LUNE, OIL ON CANVAS, 1954	Sotheby's Hong Kong	02-October	\$ 6,018,101

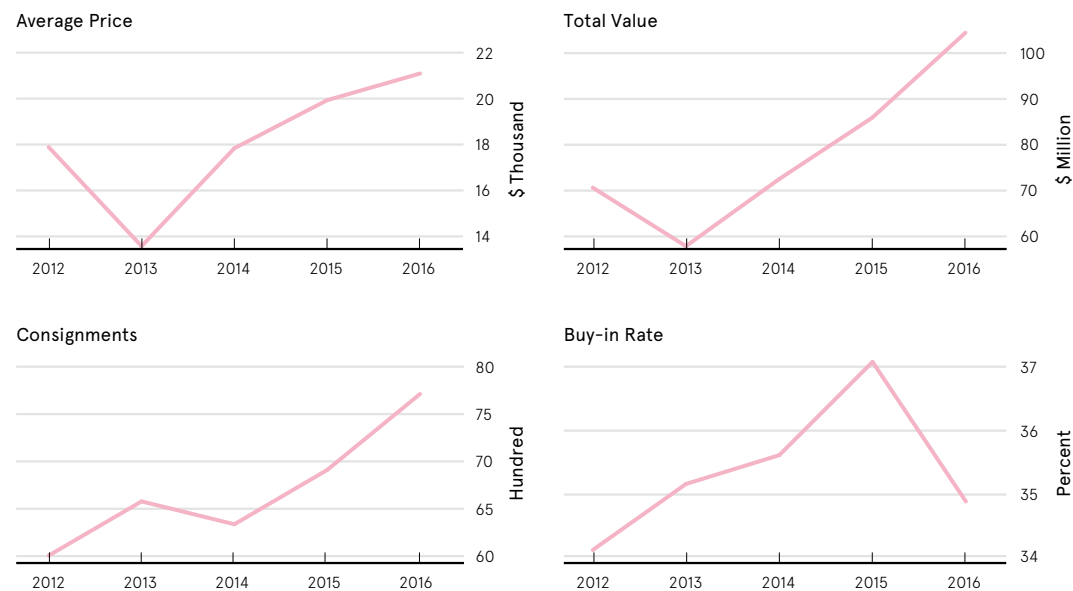
## PRINTS, PRECIOUS BOOKS AND MAPS (CHINA)

### HIGHLIGHTS

- Prints, Precious Books and Maps has traditionally been a niche market
- The market has been growing since 2013
- There is growing confidence in the market

The market for Prints, Precious Books and Maps has traditionally represented only a small portion of sales occurring in China due to the fact that this market is highly specialized and, traditionally, the panacea of a cultural elite. In 2016, the sector only accounted for 1.65% of total sales value of all auction lots in China. This niche market has totally brushed off the economic slowdown over the last three years. The total sales volume increased 21.5% between 2015 and 2016, reaching a record \$104.2 million dollars of auction sales. The number of lots consigned at auctions increased by 11% in 2016 compared to 8.6% in 2015, revealing a growing activity in the market. Despite the increased supply, on average, prices have also shown signs of sustained strength (+5.7%). Among all sectors of the art market in China, this is the only category that has been experiencing a continued growth since 2013. The most popular items sold in 2016 were, as usual, important volumes by famous authors, but also more particularly, unique pieces that marry literature and prestigious crafts. Important historical reviews were also favoured by collectors, such as Zhang Hai's collection of historical records.

FIGURE 128: CHINA PRINTS, PRECIOUS BOOKS AND MAPS



Maastricht University Graphic | Source: artnet

### TOP 10 PRINTS, PRECIOUS BOOKS AND MAPS LOTS IN CHINA IN 2016

Item description	Auction house	Date of sale	Price
清乾隆 缙丝御笔墨云室记手卷 A SILK TAPESTRY HANDROLL, QING DYNASTY, QIANLONG PERIOD	China Guardian Auctions Co., Ltd.	12-November	\$ 3,627,122
汉杨雄撰晋李轨唐柳宗元宋宋咸吴秘司马光注纂图互注扬子法言十卷NOTES FOR YANGTZE FA YAN (TEN VOLUMES)	Sungari International Auction	16-May	\$ 3,522,745
汉莱子侯刻石初拓本立轴水墨纸本 A HAN DYNASTY LAI ZI HOU STONE RUBBING	Guangdong Chongzheng Auction Co., Ltd.	12-June	\$ 3,154,238
A PAIR OF IMPERIAL ALBUMS BY THE QIANLONG EMPEROR AFTER NI ZAN, INSET WITH JADE DISCS, QING DYNASTY, QIANLONG PERIOD	Sotheby's Hong Kong	06-April	\$ 2,331,219
周毛公鼎六名家题跋本 A REVIEW FOR ZHOU MAO GONG TRIPOD BY SIX DISTINGUISHED PEOPLE	China Guardian Auctions Co., Ltd.	13-November	\$ 1,669,159
宋摹《王羲之〈来宿帖〉》A SONG COPY OF WANG XIZHI'S 'LAI SU TIE'	Beijing Council International Auction Co., Ltd.	07-June	\$ 1,434,679
八千颂般若经 THE PRAJNAPARAMITA SUTRA	Sungari International Auction	15-November	\$ 1,362,954
张海先生旧藏 历史资料一组 ZHANG HAI'S COLLECTIONS OF HISTORICAL RECORDS	China Guardian Auctions Co., Ltd.	14-November	\$ 1,175,749
(宋)真德秀撰大学衍义四十三卷 THE 43TH VOLUME OF DA XUE YAN YI BY ZHEN DE XIU	Sungari International Auction	15-November	\$ 1,151,587
大方广佛华严经卷第二十六 THE 26TH VOLUME OF THE AVATAMSAKA SUTRA	China Guardian Auctions Co., Ltd.	13-November	\$ 1,095,913

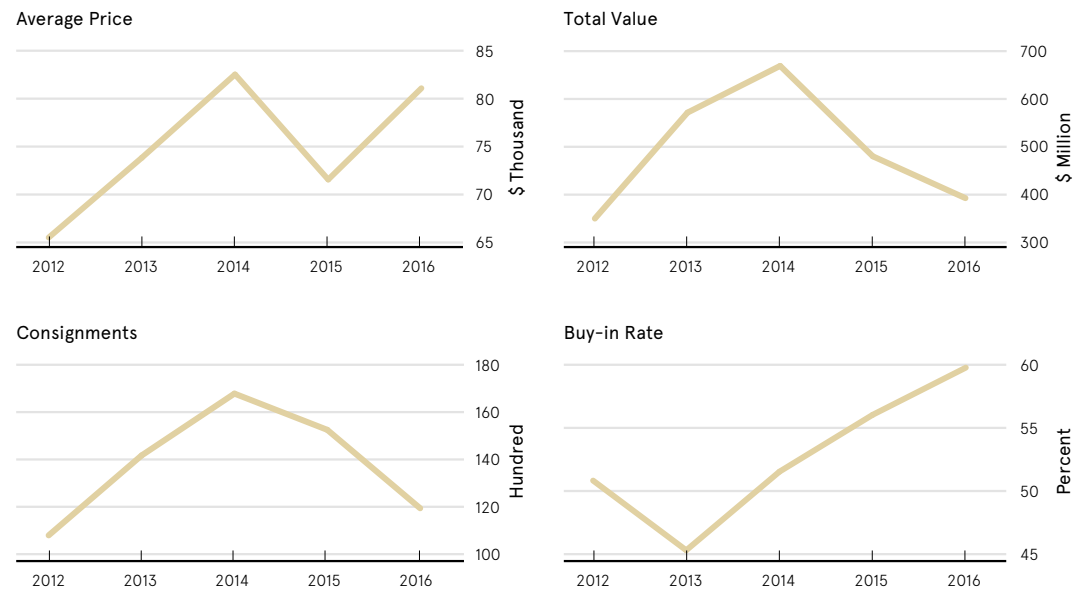
## LA HAUTE JOAILLERIE (CHINA)

### HIGHLIGHTS

- In 2016, auction sales volumes continued to slide following 2015's negative trend
- Prices bounced back but consignments continued their fall

The total sales volume and market supply of La Haute Joaillerie in China has experienced a continued decrease since 2014. The total sales value decreased 17.75% in 2016, from \$481 million to \$396 million and the number of lots offered in auction houses declined 21% in 2016. The average price in this sector, however, came back to 2014 levels, with La Haute Joaillerie lots at auction selling at an average price of \$81,000 in China in 2016. This suggests that as the market has contracted, it has gravitated towards higher priced works in this sector. Hong Kong dominated the Chinese market for La Haute Joaillerie, selling 8 out of the 10 top lots sold in China in 2016. The trend stayed similar to previous years, with coloured diamonds taking the bulk of the market's interest, illustrated by a coloured diamond ring that left for \$16.7 million in May at Christie's Hong Kong.

FIGURE 129: CHINA LA HAUTE JOAILLERIE



Maastricht University Graphic | Source: artnet

### TOP 10 LA HAUTE JOAILLERIE LOTS IN CHINA IN 2016

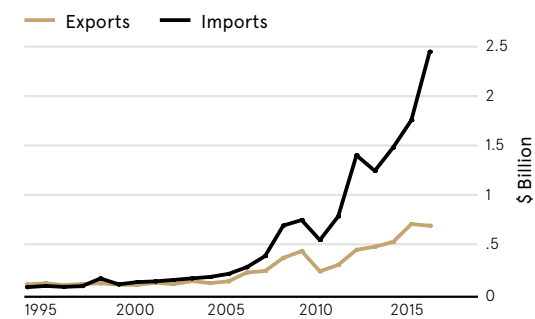
Item description	Auction house	Date of sale	Price
A SUPERB AND RARE FANCY VIVID BLUE DIAMOND AND DIAMOND RING	Sotheby's Hong Kong	05-April	\$ 35,008,045
A SUPERB COLOURED DIAMOND RING	Christie's Hong Kong	31-May	\$ 16,738,319
A SUPERB PAIR OF RUBY AND DIAMOND EAR PENDANTS	Christie's Hong Kong	30-May	\$ 11,548,165
AN EXCEPTIONAL ART DECO SAPPHIRE AND DIAMOND BRACELET, BY CARTIER	Christie's Hong Kong	30-May	\$ 7,223,395
瑞士古柏林实验室命名“帝王玉”缅甸天然翡翠配钻石挂坠 AN EXTREMELY RARE AND HIGHLY IMPORTANT JADEITE AND DIAMOND PENDANT	Poly Auction Hong Kong	05-April	\$ 5,995,564
极为罕有的 31.40 克拉天然缅甸红宝石配钻石戒指 未经加热 宝格丽 AN EXTREMELY RARE 31.40-CARAT NATURAL BURMESE RUBY AND DIAMOND BULGARI RING	Poly International Auction Co., Ltd.	06-December	\$ 5,350,393
30.19 克拉圆形足色全美钻石 30.19-CARAT D COLOR FLAWLESS ROUND DIAMOND WITH EXCELLENT CUT	Poly Auction Hong Kong	03-October	\$ 5,324,841
30.53 克拉圆形足色全美钻石 30.53-CARAT D COLOR FLAWLESS ROUND DIAMOND WITH EXCELLENT CUT	Poly Auction Hong Kong	03-October	\$ 5,324,841
3.22 克拉艳彩橘色钻石戒指 3.22-CARAT BRIGHT ORANGE DIAMOND RING	Beijing Council International Auction Co., Ltd.	05-December	\$ 5,014,025
IMPORTANT DIAMOND RING	Sotheby's Hong Kong	05-April	\$ 3,707,715



## ASIAN REGIONS ART TRADE & TRENDS

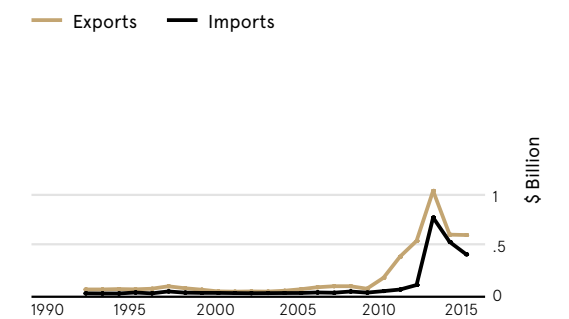
Hong Kong has traditionally been a port for border trade into Asia. Imports into Hong Kong, entering Mainland China still flow across the border at Hong Kong. In 2015 imports were \$2.5 billion into Hong Kong, and slightly less than half a billion U.S. dollars into China, with 10.6% of world import trade and only 2.4% of export trade in 2015. Trade directly into China, as recorded by the United Nations is much lower in 2015 after a peak in value during 2013, reaching just over \$1 billion dollars.

FIGURE 130: ART AND ANTIQUES TRADE HONG KONG



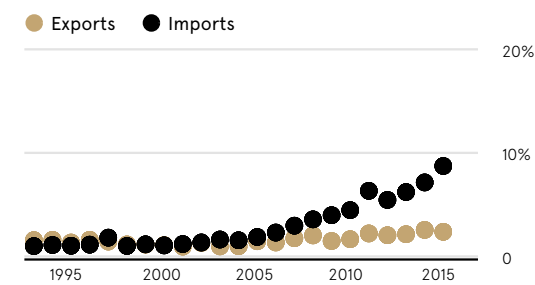
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 131: ART AND ANTIQUES TRADE CHINA



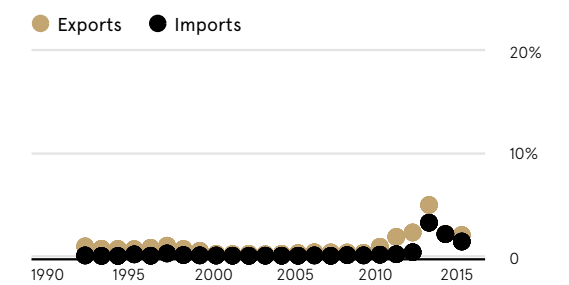
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 132: WORLD ART TRADE SHARE HONG KONG



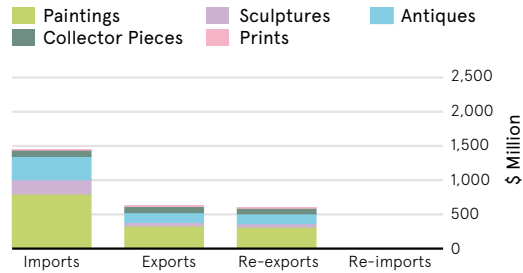
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 133: WORLD ART TRADE SHARE CHINA



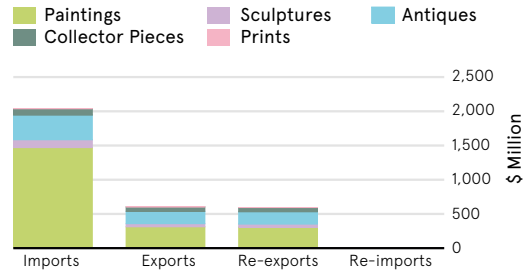
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 134: HONG KONG ART AND ANTIQUES  
TRADE DATA AVAILABLE UNTIL OCTOBER 2016



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 135: HONG KONG ART AND ANTIQUES  
TRADE COMPARABLE DATA UNTIL OCTOBER 2015

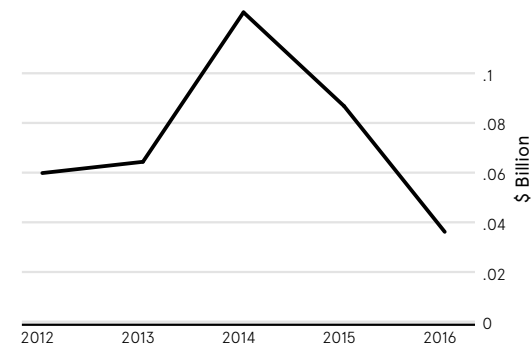


Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

Using trade data for the countries that have reported monthly trade until October 2016, we are able to gain a picture into global trade in art, collectors' pieces and antiques during 2016. Exports from Hong Kong remain strong during 2016, up 1.3% on the year until October 2016, comparable to 2015. However, imports during 2016 are down relative to the same comparable periods during 2015 by 29.5%. The slowdown into Hong Kong is an indication that the strong U.S. dollar is also hurting imports denominated in dollars.

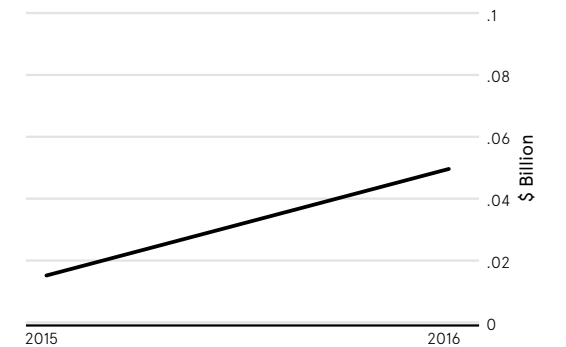
Focusing specifically on the breakdown across the various categories, we see that the large drop in imports is predominately due to the fall in the value of Paintings being imported into Hong Kong, falling by 46%. Imports of Paintings during 2016 are currently \$0.791 billion (with data until October 2016) comparable to only \$1.469 in the same period in 2015. This is not the case in all sectors. Antiques into Hong Kong remain strong during 2016, and Sculptures have become increasingly popular, having doubled year-on-year. Hong Kong's consistently steady gain in auction sales over 2016 has been Taiwan's loss in auction sales.

FIGURE 136: TAIWAN AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

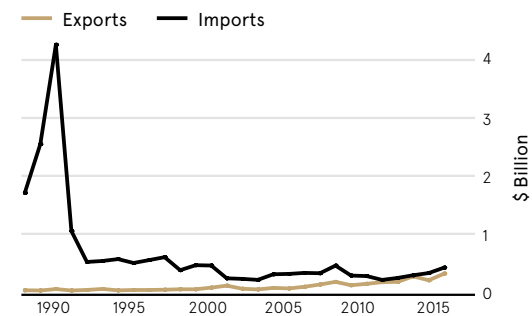
FIGURE 137: HONG KONG AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

In Asia, Japan's large share of the world's art trade has not re-emerged to the extent that it was at the end of the 1980s, over the past quarter of a decade. During a period of long stagflation in a depressed economy the interest in importing art is starting to reignite since the fall in the market in 1991. Demand for Japanese art from art dealers and galleries has not resulted in large exports from Japan. Sales of Japanese art has occurred rather through the network of Japanese galleries in the major art hubs abroad. However, the growth in antiques during 2016 has been apparent, particularly in the Paintings, and even more strongly in the antiques sector, with much larger auction house sales.

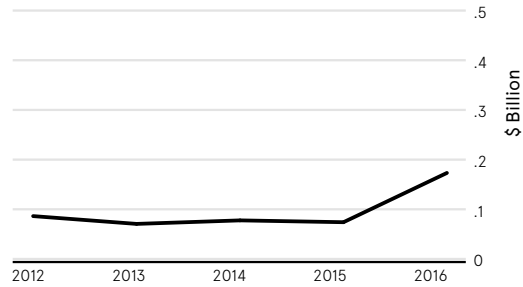
FIGURE 138: ART AND ANTIQUES TRADE JAPAN



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database



FIGURE 139: JAPAN AUCTION HOUSE SALES BY CATEGORY



Maastricht University Graphic | Source: artnet

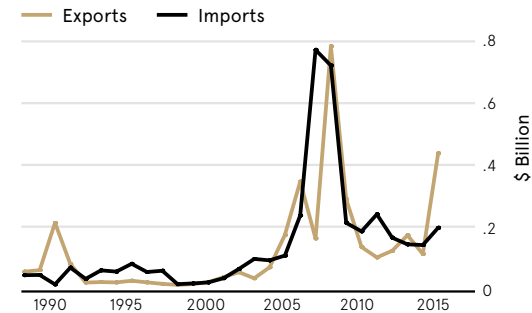
The Japanese market experienced growth during 2016 and the dealers surveyed expect strong growth moving into 2017. The auction market has seen a large increase in average prices and sales at auction increasing twofold over the year. Artnet gathers only a small fraction of Japanese auction sales, however the year-on-year comparison is still encouraging.

With large galleries posting sales in the range of between \$5-\$10 million each during 2016, and with expected growth during 2017, to be high into double digits, the art market in Japan is looking to experience an upturn in both the auction and dealer segments.

Detailed statistics are not given at the level of art and antique dealers in Japan, or for many Asian countries, and we rely upon our network analysis for a rough estimate of the number of dealers which is estimated as slightly larger than Hong Kong, with at least 500 art and antiques galleries.

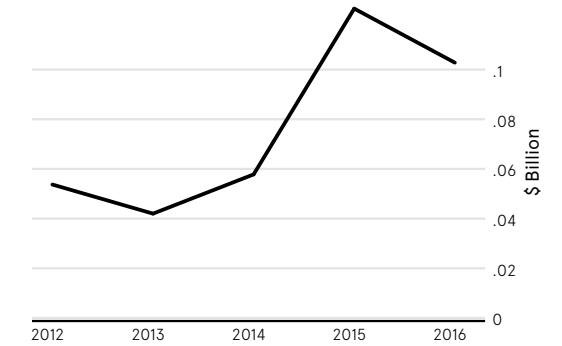
Trade in Singapore represents just over 1% of world exports and imports, but constituting to a larger share of Asian trade, with 12.3% and 7.5% of Asian exports and imports. There has been a slowdown in auction sales at many Asian markets, despite the steady rise in Hong Kong, auction sales in China, Taiwan, South Korea and Singapore in dollar terms are all down.

FIGURE 140: ART AND ANTIQUES KOREA



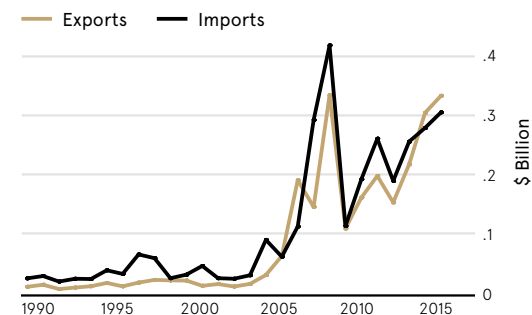
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 141: SOUTH KOREA AUCTION SALES REVENUE



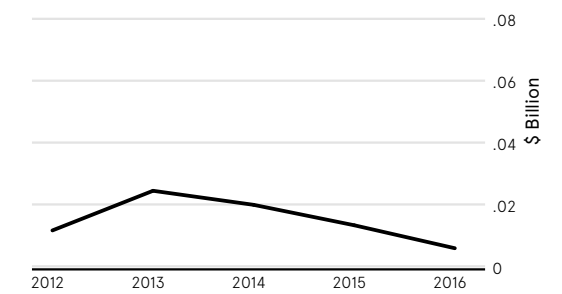
Maastricht University Graphic | Source: artnet

FIGURE 142: ART AND ANTIQUES SINGAPORE



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 143: SINGAPORE AUCTION SALES REVENUE



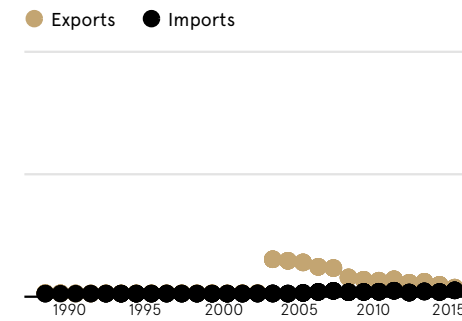
Maastricht University Graphic | Source: artnet



## INDIA

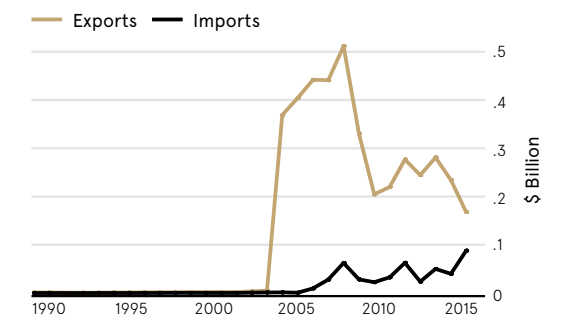
India is involved in the highest number of artworks to trade across borders in the world, and amongst the countries with the highest sell through rates. During the last decade exports have decreased in size, although auction sales have seen an increase over the past few years. During 2016 there was extremely strong growth experienced by both auction houses in India, and by art and antique dealers. Auction house growth was up 110% and dealers reported in some cases a doubling in turnover. Positing good forecasts going forward into 2017.

FIGURE 144: WORLD ART TRADE SHARE INDIA



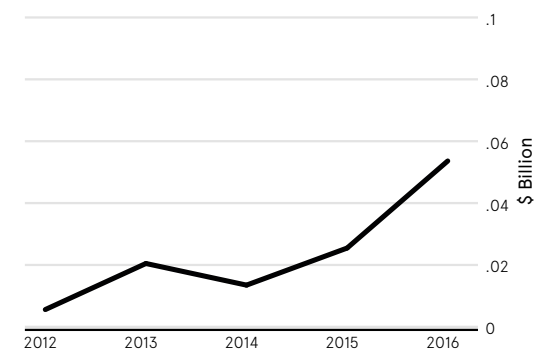
Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 145: ART AND ANTIQUES TRADE INDIA



Maastricht University Graphic  
Source: DESA/UNSD United Nations Comtrade database

FIGURE 146: INDIA AUCTION SALES REVENUE



Maastricht University Graphic | Source: artnet

**APPENDIX:  
DATA & METHODOLOGY**



## APPENDIX: DATA & METHODOLOGY

The TEFAF art market report has become a standard in the industry. Gauging and estimating the size of the art dealer market has been an integral part of this report over the years. TEFAF have positioned themselves at the heart of this market, in providing a comprehensive and broad study of dealers and traders related to the arts. For example, the 2016 Annual Art Market report reveals that there are over 69 thousand dealers in the U.S. alone, reported to employ more than 2.5 million people worldwide. This is a broad criterion. As outlined in this year's report, taking such broad criteria results in other types of dealers and auction houses being included in the statistics. For the purpose of aggregation to the industry level, we choose to adopt a more narrow criterion in this year's report on the art market. Figures for the numbers of art dealers are specifically lower than in previous years, our aim being to capture a more representative sample of the industry, making for a more comparative study for dealers represented at TEFAF and other international art fairs. The auction market appears smaller, but year-on-year it is larger than during 2015.

The two main reasons for taking this approach for the art and antique dealer market are reiterated here for clarity. Firstly, we have chosen for a more focused and specific definition of art dealers and art galleries, such that they are more representative of the industry that we would like to analyse. Secondly, with the improvement of the classification systems used in many countries' offices of national statistics it is no longer the case that broad definitions of sectors are required for industry analysis. The provision of more detailed and comprehensive data on the art dealer sector provides an opportunity to use these more detailed classifications, to capture the most appropriate types of dealers and galleries in the analysis.

The focus has the drawback that the industry estimates are smaller, yet we consider this to be more representative of the art and antiques market globally.

A major advantage that we can dig a little deeper into the art dealer industry. By providing employment figures and sales volumes that are reported in more detail, we can see for example from the global economics censuses, which are typically conducted every five or ten years, just how large the art and antique dealer sectors are in many of the larger art trading countries, as a basis for determining the underlying market structure.

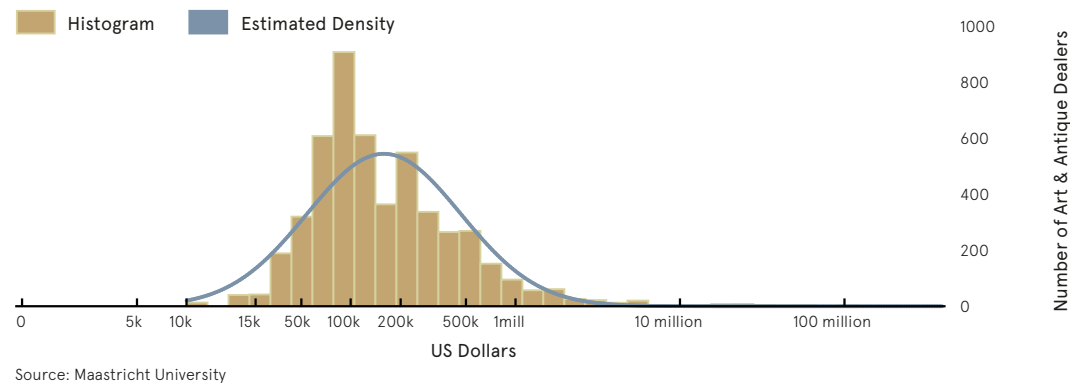
## FOR THE PURPOSE OF AGGREGATION TO THE INDUSTRY LEVEL, WE CHOOSE TO ADOPT A MORE NARROW CRITERION IN THIS YEAR'S REPORT ON THE ART MARKET.

Using a large sample of 5000 global art and antique dealers taken from a representative sample of dealers within the various national statistics offices which represent art dealers and art galleries, and antique dealers enables us to determine with a high level of confidence an estimate for the size of the art and antique dealer market.

First by plotting a histogram of the sales in thousands of U.S. dollars enables us see how turnover is distributed across the industry. There are a very large number of small dealers with a small annual turnover, and a very few number of dealers with a very high turnover, into the high six digits, and even seven digit figures. As in many other industries, the art world is dominated by a very few number of so called 'mega' art dealers and galleries, and an incredibly high number of small micro dealers, with low levels of turnover.

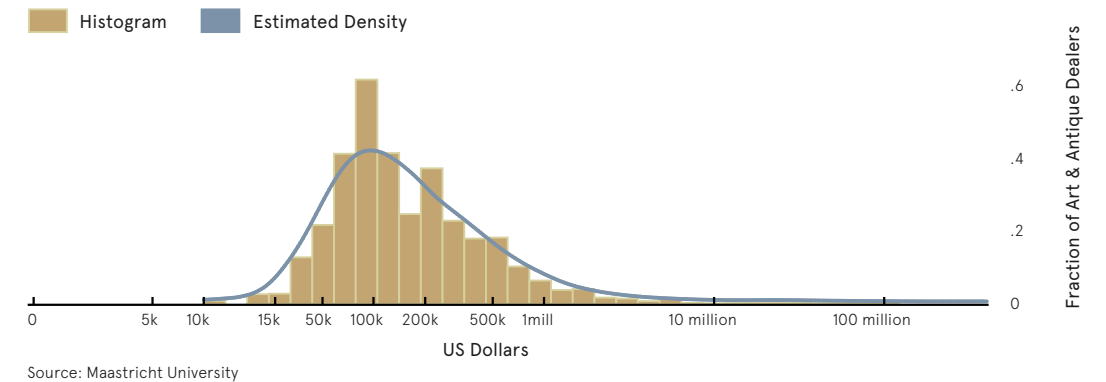
A common approach to take this type of market structure into account is to adopt a log scale for the histogram of turnover. The median turnover, that occurs the most frequently, is the natural logarithm of 4.25, or \$70k. To get an impression of the average turnover and variation in the cross section of dealer's turnover in the period 2015 and up to 2016 across the world a normal distribution is imposed. The mean is around 5.

FIGURE A1. DISTRIBUTION OF ART AND ANTIQUE DEALER ANNUAL TURNOVER: GLOBAL SAMPLE & NORMAL DISTRIBUTION



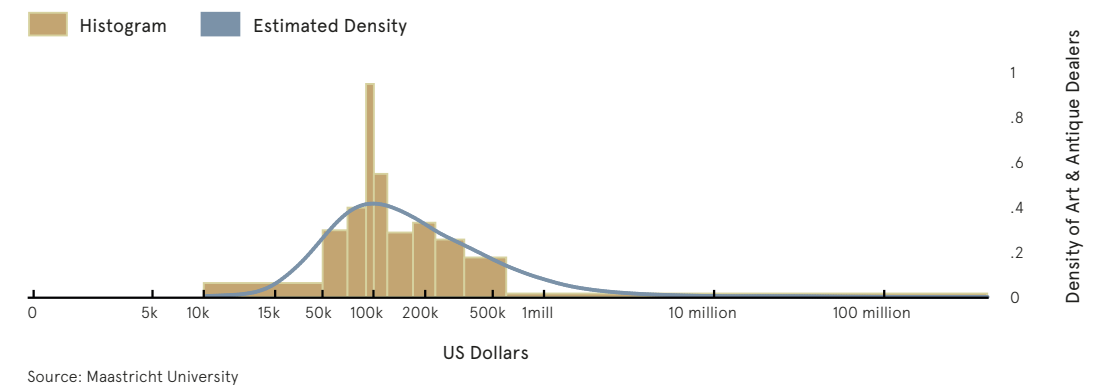
Rather than using a normal distribution it is more descriptive to use a kernel density function, as depicted below.

FIGURE A2. DISTRIBUTION OF ART AND ANTIQUE DEALER ANNUAL TURNOVER: GLOBAL SAMPLE & KERNEL DENSITY FUNCTION



In the above plot it is not easy to determine the proportion of sales occurring at each interval. Below we include a ten bar histogram, which has the appealing feature that each bar represents a tenth of the sample population. Each bar therefore contains the same area which is one-tenth of the whole distribution.

FIGURE A3. DISTRIBUTION OF ART AND ANTIQUE DEALER ANNUAL TURNOVER: GLOBAL SAMPLE & EQUAL PROBABILITY HISTOGRAM



By splitting the distribution into ten equal parts, immediately we see that the long narrow bar ranging from one million U.S. dollars upwards to those dealers that turnover more than 100,000 million U.S. dollars a year. This decile represents 10% of the sales made in the art and antique dealer industry. At the lower end of the distribution, a second slightly shorter and wider bar represents the 10% of the art and antique dealer industry for dealers with a low turnover below 50,000 U.S. dollars. A very large number of dealers have an annual turnover of between 10,000 and 50,000 U.S. dollars. Together they turnover as much as the few dealers with an annual revenue of over a million. 40% of all dealers represented in our sample take less than \$100 thousand dollars on an annual basis. The sample is already restricted by those who employ at least one person on the payroll highlighting just how many dealers turn over a relatively small amount annually, and are considered micro businesses. More than 65% of all art and antique dealers turn over less than 200,000 U.S. dollars. Only 25% of art and antique dealers' turnover more than 300,000 U.S. dollars annually.

Estimating a density function from thousands of art dealer financial statistics on annual turnover enables us to gauge the range of the sample population very accurately. The average turnover from over 5500 dealers is approximately 100,000 USD, defining the average from the estimated kernel density function. Aggregating data across the total number of art and antique dealers globally, provides us with a good estimate of the total size and value of trade in the art and antique dealer market. We use the global statistics on the size of the overall dealer market, bearing in mind that the largest markets are the U.S., the U.K. and Europe.

To further our understanding of art dealer markets where there are fewer dealers represented in our global sample, whilst also seeing how robust our approach is to dealer market where more accurate information is given through offices of national statistics, we use a network analysis. We can determine if the approach that we have taken is also reflective of the size of the industry, that is considered representative by those working as art dealers and galleries. Undertaking a network analysis to see how the figures as classified by official national statistics offices compares to a more general analysis provided by the industry itself. To provide an idea of how large the industry considers itself to be, we first asked all art dealers and galleries in this year's survey to report the number of other art galleries and art dealers they themselves know in the city from which they operate. We also asked this question on both a national as well as a global dimension. To gauge the size of the art market in every city, country and also worldwide we asked a second question to estimate the fraction of the overall number of art galleries and art dealers they know. It is quite natural for some art dealers to know a much larger number and fraction of other art dealers and galleries in their own

city, in the country that they are located, and also globally, depending on their own activity in the local, national and global art scene. The network size of larger dealers will be higher. However, by taking averages across art dealers responding for every city, every country and then more generically for all respondents we have a means to estimate the size of the art and antique dealer industry globally; as considered representative to the dealers themselves. The results from this analysis are revealing.

We also asked a follow up question as to how much time is spent on extending your network in the art world compared to the art dealers that they know. This gives a measure for the relative importance of social networking by the individual dealers. Our survey was fielded to all galleries and art dealers who exhibited at, at least one of the world's top 50 art Fairs. We also asked national and international art dealer associations to field the survey directly to their members. With the survey reaching 7000 art galleries and dealers all over the world, our response rate was 5%. Statistically the margin of error remains below 5%, so we can be comforted that the confidence level that estimates from our survey produce are made with a 95% confidence level, and from an academic point of view, therefore statistical significance can be drawn. We can further be assured that the sample is highly representative of the art dealer industry.

Our aim is to gain some greater insight into the art trade. We have gathered as much data as possible from global offices for national statistics, and databases with company accounts. By providing as much data as possible, retrieved on a number of dealers and galleries globally, the sample of dealers used to aggregate sales volume for 2016 is a representative sample of the population of art dealers and galleries in the industry.

Those responding to the survey provide additional information on the expectations for year-end sales for 2016, and also for projections going forward to 2017. The sample of dealers is representative for some countries, where the response rate was particularly high, for the U.S. and the U.K. in particular.

## UNITED NATIONS COMTRADE DATABASE

The category 97 under the United Nations trade com under the definition art, collectors' pieces, and antiques comprises of the following sub-categories. These are consistently used across countries and regions. They form the basis of the art trade flow analysis.

97. Works of art, collectors' pieces and antiques.

970110. Works of art, collectors' pieces and antiques // paintings, drawings and pastels, executed entirely by hand, other than drawings of heading 49.06 and other than hand-painted or hand-decorated manufactured articles; collages and similar decorative plaques // -paintings, drawings and pastels.

970190. Works of art, collectors' pieces and antiques // paintings, drawings and pastels, executed entirely by hand, other than drawings of heading 49.06 and other than hand-painted or hand-decorated manufactured articles; collages and similar decorative plaques // -other.

970200. Works of art, collectors' pieces and antiques // original engravings, prints and lithographs // original engravings, prints and lithographs.

970300. Works of art, collectors' pieces and antiques // original sculptures and Statuary, in any material // original w and statuary, in any material.

970400. Works of art, collectors' pieces and antiques // postage or revenue stamps, stamp-postmarks, first-day covers, postal stationery (stamped paper), and the like, used or unused, other than those of heading 49.07 // postage or revenue stamps, stamp-postmarks, first-day covers, postal stationery (stamped paper), and the like, used or unused, other than those of heading 49.07.

970500. Works of art, collectors' pieces and antiques // collections and collectors' pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest // collections and collectors' pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest.

970600. Works of art, collectors' pieces and antiques // antiques of an age exceeding one hundred years // antiques of an age exceeding one hundred years.

In preparing this report, I have a responsibility to be careful with the use of data and statistics from a variety of sources<sup>7</sup>. I refrain from making large claims on the exact size of the dealer market. Our analysis also reemphasizes that the art dealer industry is an extremely opaque market. At best we can give an estimate.

I believe it is a prudent position to consider how the industry is growing relatively in size, and shifting across borders or transforming in style, rather than making grand efforts in ascertaining the size of the industry as a whole. It is with this conviction that I have undertaken my analysis.



<sup>7</sup> I appreciate data collection work from (former) researchers at Maastricht University: Anouk Duivenvoorden, Marina Gertsberg, Phillip Vögelsang and Dr. Leonard Wolk.

## DISCLAIMER

The reports reflects the opinions of the author, and is provided in good faith on an “as is” basis. We take reasonable care to check the accuracy and completeness of the Report prior to its publication. However, the Report has not been independently verified. In addition, statements in the Report may provide current expectations of future events based on certain assumptions. The variety of sources from which we obtain the information in the Report means that we make no representations and give no warranties, express or implied as to its accuracy, availability, completeness, timeliness, merchantability or fitness for any particular purpose.

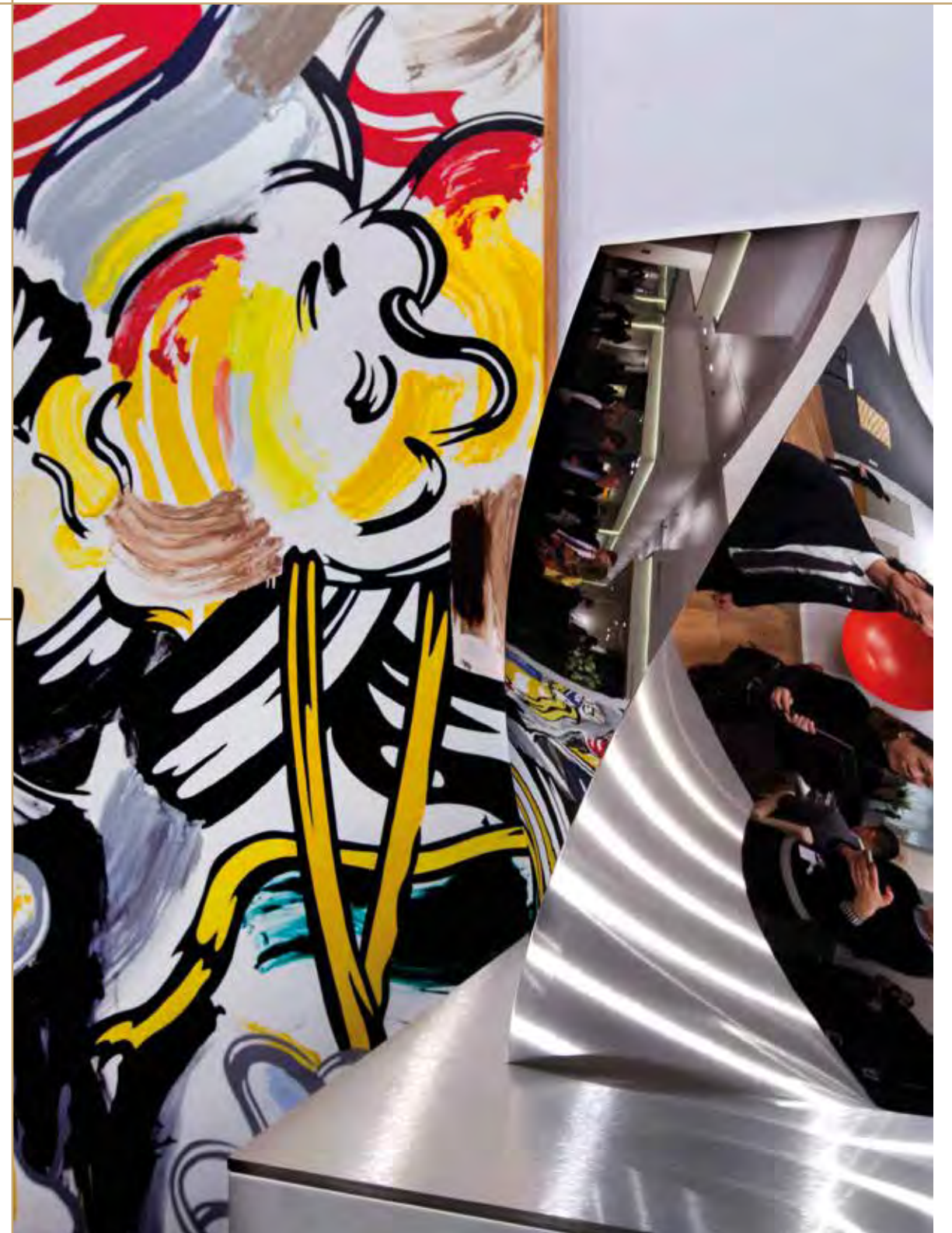
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## DEALER ASSOCIATIONS

Our special thanks goes to the following dealer associations. In conjunction to the direct contact with all art and antique dealers attending the top 50 world's art fairs the following associations helped us by also fielding the survey to their members. In particular to Erika Bochereau at CINOA, Michele Senecal, from the International Fine Print Dealers Association, Hugo Van Baelen, at the Flemish Antiques Guild, Helena Heukeshoven from the Tribal Art Society asbl, Susan Hadida and the Antiquities Dealers Association, Elizabeth Edwards of the Art Dealers Association of Canada, and Henry Blundell of Masterart.



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### Loraine Bodewes

Pages 14, 41, 60, 77, 88, 186, 202



