Freeports as ecosystems for the preservation of fine art value and the acceleration of related businesses

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Master Thesis June 2017 Word count total: 23507 Word count main text: 20805

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ABSTRACT

This thesis investigated the ecosystems of freeports. Freeports are specialized warehouses for the storage of fine art and collectibles, for both individuals and cultural institutions. Being discrete and confidential in their nature, the role of freeports in the growing contemporary art market is rather unexplored. However, their role becomes increasingly crucial in the growing international art market. Art is more and more perceived as an alternative for financial investment, which further stimulates the international art trade activity. Due to high transaction costs and differences in jurisdictions and rules concerning taxes per country, the physical location of the art transaction is crucial. This thesis aimed to investigate which factors in the art market and related markets drive the emergence and existence of freeports. To obtain an in-depth understanding on freeports and their operations, this thesis applied a contextual approach. First, an extensive literature review was done. Hereafter, interviews, a case study and a site visit were conducted and organized around four themes: the context, the business model, the operations and the impact of freeports. The outcomes revealed that there is no evidence that freeports are unregulated and used for money laundering practices. Further, it can be concluded from this research that freeports are predominantly used for secured preservation of valuable objects. In addition to safe storage warehouses, freeports also facilitate international art trade as they offer tax-free zones and a broad range of art related services. Finally, it can be concluded that freeports are integral nodes in an international network of art collectors, museums and other cultural institutions. As such, freeports serve as ecosystems for the preservation of fine art value and the acceleration of related businesses

KEYWORDS: freeports, fine art storage, transaction costs, art as investment, international art trade

Acknowledgements

I would like to thank my supervisor Prof. dr. F. Vermeylen for his guidance and support throughout the process of this thesis. As I first mentioned the subject of freeports, you replied that it would be an interesting but challenging subject. Although I lost the overall picture sometimes, you encouraged me to continue and directed me back on the right track.

My special thanks go to Carole Schmitz and Claude Herrmann for their time and willingness to help me with my research. The tour at Le Freeport Luxembourg as well as the interviews on site were highly valuable for the creation of this thesis. Thank you for your extensive input and the provided documents.

Furthermore, I would like to thank all who were interrogated for the purpose of this thesis. I highly appreciate their willingness and time to share their experience and knowledge with me. Your insights have been crucial for this research.

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1. Introduction

1.1 The field of research

The art market hides master pieces. As the volume of art works exceeds the available museum wall spaces, a great amount of art is stocked in storages. Not only museums but also individual collectors use specialized storage spaces to safely preserve their collections. Due to the development of art markets in the BRICS-countries (Brazil, Russia, India, China, and South-Africa) and the emergence of new art markets in Asian, Latin America and Arab countries in last decade, the global base of art collectors has increased (Pownall, 2017).

72% of the art collectors surveyed by Deloitte and ArtTactic says to buy art for the benefits of collecting combined with the potential value increase of the assets (Art&Finance report, 2016). This fairly new view of art as an investment became an increasingly important motivation among art collectors. Especially the demand for contemporary art rises due to this increase in the number of new art collectors. The rise in demand leads to higher prices and greater transactions on the art market. As both the collectors base and amount of transactions increases, the demand for art related services subsequently increases. Clients are demanding more services related to the preservation, securing and storage of their collectible assets. Storage of art can be done in freeports.

A freeport is a site where goods may be handled with less intervention from taxing and customs authorities, originally used to store goods in temporary transit before they reached their final destination (Wierbicki & Rottermund, 2016). These warehouses offer storage space to individuals as well as cultural institutions to securely store their art and other valuable collectibles. Freeports are often located near harbors and airports to facilitate international trade.

The word "free" refers to the suspension of taxes and duties. While stored, the tax obligations, which includes import tax, customs duties and VAT or sales taxes are suspended. If the good never leaves the port, duties will never be due (Wierbicki & Rottermund, 2016). It should be noted that freeports do not eliminate taxes; the temporary suspension is lifted when the good leaves the building. Freeports can be compared to bonded warehouses that are commonly uses in international trade. Bonded warehouses are facilities in which goods may be stored without paying local duties. This flexibility offered by these facilities is beneficial

for importers who do not want to pay duties on the goods in advance. When the importer decides to re-export the goods, they will not have to pay the duties in the temporary storing location. When goods are released for sale, duties become due. Using the bonded warehouse allows the importer to use the income gained from the sales, rather than having to pay duties in advance. Bonded warehouses are often located at harbors and are suitable for the storage of large parcels of goods.

The first freeport was opened in 1854. The government of Switzerland opened a warehouse in Geneva where goods can be stored under the suspension of tax and duty obligations. This was the forerunner of today's Geneva Freeport & Warehouses Ltd., which is now specialized in the storage of valuable collectibles and art. Worldwide, there are multiple (bonded) warehouses where goods in transit can temporarily be stored, exempt from duties and taxes. However, this thesis concerns the freeports that are specialized in storing valuable collectibles and works of fine arts. One of them is "Le Freeport" in Luxembourg, on which a large part of this research is focused.

Freeport locations		Building year	Size (square meters)	
City (State)	Country			
Geneva	Switzerland	1854	22.000	
Singapore	Singapore	2010	25.000	
Beijing	China	2014	83.000	
Luxembourg	Luxembourg	2015	22.000	
Newark (DE)	USA	2015	3345	
Shanghai	China	2017	t.b.a.	
New York (NY)	USA	2017	10.220	

Table 1. Freeports specialized in storing fine art and collectibles.

Abbreviation: t.b.a., to be announced Source: own elaboration

1.2 Research question

More than 150 years have passed between the opening of the first and the second facility that is specialized in the storing of fine art and collectibles (see Table 1). After the establishment of the complex in Singapore however, the emergence of other complexes grew rapidly. The newest freeport, and first in New York City, will be opened in the summer of 2017. Despite the increased use of freeports, little is known about their business and operations. The increasing art sales resulting in an increase in demand for specialized storing practices call for a new research.

Criticism on freeports results from the various notions of fraud and scandals. Due to the lack of transparency of the businesses, the reduced level of supervision and possibilities for private and confidential trading within the storage spaces, freeports are generally perceived as secretive warehouses suitable for fraudulent practices. Another issue is posted by the apparent lack of regulation within the novel freeport business and the effects in the art market (Deloitte & ArtTactic, 2016). Nevertheless, the number of freeports is expanding worldwide. Why is there a rise in the number of freeports worldwide? What developments in the art market have led to the increased use of specialized art storage? Is it true that these storage facilities are lacking regulation and transparency? Comprehensive research to understand the role and operations of freeports in the art market is lacking.

Therefore, <u>the aim of this thesis is to investigate which factors in the art market and</u> <u>related markets drive the emergence and existence of freeports</u>. In order to research this subject, a contextual approach will be conducted. The approach incorporates four themes, which include the context, the business model, the operations and the impact of freeports. By using these themes in the approach, the research aims to gain insight in the emergence and existence of freeports. The methods used for the investigation include interviews, a case study and a site visit to Le Freeport Luxembourg.

1.3 Relevance of the research

On April 5th, this year, The Art Newspaper published an article on New York's first art freeport, which will be opened for business in July 2017. The article states that the freeport is

developed "to create storage to serve the needs of international collectors in Manhattan", and that collectors are already reserving their space before the facility even opens (The Art Newspaper, April 5th, 2017). The concept of freeports as the storage facilities with tax suspension regimes especially designed for fine art and valuable collectibles, is a relatively new. Despite their secretive reputation, the use of freeports rapidly becomes common practice among collectors and art investors. International newspapers reported various incidents of scandals and fraud concerning the business of freeports; more than incidentally have freeports been involved in money-laundry rumors. Freeports are often negatively perceived in the art world. They hold a reputation as vaulted private banks, used to hide art (Ditzig et al., 2016). Nevertheless, not much research has been done on their operations and role in the (international) art world. Furthermore, there is a lack of scholarly literature on freeports. The relevance of the research is apparent as the art market experiences an increase in the use of these warehouses among the art buyers. As free trade zones, freeports may play a significant role in a market that is characterized by high transaction costs. Since all market players are affected by these high transaction costs, this role needs further clarification

1.4 Structure of the thesis

To accurately approach the subject of freeports, we need to understand the context in which they operate. The thesis starts with a <u>Literature review</u> which presents the relevant theory. First, it describes the structure of the art market, including its market players and characteristics. Second, the phenomenon of art as investment is discussed, with attention to transaction costs. Third, the international art market and the related consequences are described. The <u>Methodology</u> demonstrates the methods that are used throughout this thesis. The <u>Results</u> present the findings from the interviews, the case study and the site visit. Finally, the <u>Conclusions</u> summarizes and completes this thesis.

2. Literature review

This chapter will serve as a theoretical framework for this research. The literature review aims to shed light on previously researched theories and concepts in the field of cultural economics. This will serve as a basis for the research on the fairly new concept of freeports. De review of the existing literature is divided in three sections. The first section is dedicated to the contemporary art market. It assesses its distinctive market structure and the various actors. As goods traded in this market are highly heterogeneous, and often even unique, uncertainty and the issue of information asymmetry in the art market deserve attention. The second section focusses on art as an investment class. It elaborates on transaction costs, and studies the concept of the law of one price. The third section describes the globalization of the art world. As a consequence of the international art trade, new intermediaries developed to play key roles in the global art market. A freeport is an example of such an intermediary.

2.1 The contemporary art market

In order to grasp the business of freeports, we need to understand the market it which they operate. This section illustrates the structure of the art market, consisting of a primary and a secondary market. Afterwards the various key actors that play a role in this market are discussed.

2.1.1 Structure of the market

The terms art world and art market are often used interchangeable. Horowitz (2011) makes a distinction between these two concepts; the art market refers to the makers, buyers and sellers of art. The art world contains both the marketplace and the extensive network of stakeholders discussing the arts, such as museum curators, critics and art historians (Horowitz, 2011). The art market offers opportunities for ancillary service providers in the form of art lawyers, consultants, advisors, wealth managers, shippers, financial services, and storage. The latter constructs the main function of the freeports discussed in this thesis. It is impossible to measure the total size of the art market as it is an opaque market and a substantial part consists of unreported, often secretive, sales between private sellers and buyers. Every year during TEFAF art fair in Maastricht, the annual art market report is presented. The report

elaborates on the trends and figures of the previous year. This year's report was written by Rachel Powell, Professor in Art Finance and Museum Management at TIAS and Professor of Art Finance at Maastricht University. In the report she states that "it is near impossible to put an exact number on the size and volume of sales made privately". She says that an increasing part of the art market sales goes unrecorded through off-shore arrangements (The Art Newspaper, March 6, 2017).

Within the art market, a distinction between the primary and the secondary market must be made. The primary market is the market where contemporary art is sold for the first time, the secondary market consists of resale (Velthuis, 2011b). Since the art pieces appear on the market for the first time and a uniform standard of value does not exist, the economic value of the art is uncertain (Velthuis, 2011b). Therefore, the price for a work of art is often established on the primary market through intermediaries such as commercial art galleries. The gallery space serves both as an exhibition space as well as an environment to establish valuable networks with possibly interested buyers. An artist is often represented by one gallery that operates as their promotors in the art scene. The mutual dependable relationships between artist and dealer is characterizing for the primary market. Strong social ties, trust and loyalty are key in maintaining good relationships between dealer and artist (Velthuis, 2011a).

All transactions of art that has changed ownership before takes place on the secondary market. Here consumers are usually better informed on the particular work of art and the artist as the work re-enters the market. Information is easier assessable in this market as the majority of the transactions in the secondary market is done through auctions of which sales prices are publicly available. However, nowadays there is a vast increase in private dealer sales noticeable. In 2016, the sales through art dealers rose 20% in comparison to 2015, accounting for 62,5% of the global art sales. (Pownall, 2017). On the secondary market, art price data from auctions provide insight on how society valuates the arts over time. These prices rise and fall, as in other markets, due to changes in preferences, tastes and trends. Furthermore, also the societal environment, politics and economic developments highly influence the art market.

For a relatively small group of living artists, both the primary and secondary market operate alongside each other. Or, in other words, the borders between de markets become blurred. Dealers highly infiltrated the secondary market, while artist occasionally decide to bypass the gallery and sell their work directly to the auction house. An example of the latter is the remarkable contemporary artist Damien Hirst, who neglected his dealers in 2008. During a two-day sale, 223 works by the British artist where directly auctioned through Sotheby's. The auction fetched a total of \$200,7, a record for a single-artist auction (Vogel, 2008).

2.1.2 The market players

In its unique and opaque character, the art market deals with high levels of uncertainty. Therefore, the actors in the market rely to a great extent on reputation, trust and interdependent relationships. An intermediary in the art market, such as galleries, auction houses and dealers, functions as a connector for the buyer and seller (Velthuis, 2005). The following paragraphs will elaborate on some of these intermediaries. Afterwards, it also discusses the buyers of art and their motives. The various market players are, to a greater or lesser extent, involved in the emergence and usage of freeports.

Art galleries are the physical markets to buy art and often represent a few artists. The transaction volume of the physical gallery space as sales channel is most likely to decrease in the future, according to surveyed art dealers (see Figure 1). Gallerists, also referred to as art dealers, experience difficulties in competing with upcoming online and digital sales channels. A strong and extensive network of professional contacts is key to the success of a gallery (Velthuis, 2011b). Next to artist, other galleries and collectors, this network preferably also includes other mediums such as artistic journals and cultural reviewers that could help to strengthen the reputation of the gallery. Gallery owners deal with an interesting dilemma; they strive to maximize sales while respecting the artistic creating process of the artist. When one work tends to sell good, it is tempting to ask the artist to make a duplicate. However, artists seldom work on demand. Since its emergence in the late 19th century in France, the traditional gallery model has been able to establish and stabilize an economic value of art, through close social relationships between artist, dealer and collector (Velthuis, 2011a). To actively built and maintain these networks, it becomes increasingly important for art dealers to participate in art fairs. As art dealers travel from fair to fair, they often benefit from freeports for temporary storage of their collection.

Art fairs are important events in the art world that significantly influences the international art trade. Starting in the 1970s, the art fairs represent a highly commercial aspect of the art market, but they also pose opportunities for the participators to strengthen their relationships and customer base. The main reason for exhibitors to participate in an art fair is to acquire new clientele that visit the fair but would otherwise not visit the gallery. The market is influenced by globalization which stresses the importance of international art fairs to attract global collectors and investors. Art dealers reported that they experience difficulties in attracting collectors to their galleries, because it is too time-consuming. The art fairs present an efficient way for the clients to see more art in less time (Velthuis, 2014). Also for other interested visitors, the fair offers a broad suggestion of the latest art trend and different galleries. Fairs became a mirror for artist success, the quality of the markets, their development and the money that is circulating (Zorloni, 2013). The fairs are especially important as centers for the global collector. In its purest form, an art fair serves as a platform to connect an artist and a collector. However, the contemporary fairs play a key role in the social and network activities of the sector. Art fairs pose significant opportunities for companies that provide ancillary services to the art business, e.g. shipping, art insurance and art investment companies. The tendency in the art world is that "Everybody goes to fairs" (H. van Litsenburg, personal communication, May 15, 2017). The evolution of art fairs as exciting and fun events, rather than strict marketplaces, attracts additional amounts of visitors. As mentioned earlier in the thesis, reputation and credibility are key for longevity survival in the market. Attending fairs could help strengthen an artists', dealer's or collector's reputation. After a fair, dealers and clients can decide to continue their sales within the private showrooms of a freeport (Le Freeport (2015) Luxembourg [Brochure]).

<u>Auction houses</u> Christie's and Sotheby's by their duopoly worldwide dominate the auction world. Together with the ten largest international auction houses, they account for 65% of sales worldwide (McAndrew, 2017). However, an important second tier of over 500 auction houses in various national or local markets also hold significant sales in the international trade. Within these top segment of auctions, 70% of the value of sales results from the sales of fine art. Up until 2007, the auction sales strongly increased in both value and volume of sales. However, also in this sector the financial crisis took its toll resulting in a 44% sales decline in 2009. Sales started to bloom again with the contribution of the Chinese market, reaching a peak in 2014. Since then, the sales reported two years of decline. Together Christie's and Sotheby's are accounting for 38% share in the auction market, the majority of

their sales value are resulting from the Post War and Contemporary and Modern Art sales. Asia accounts for 40,5% of global auction sales while Europe accounts for 31% in terms of U.S. dollar values, and the Americas 27.5%. Only 1% of sales is represented by Africa and Oceania. The 40,5% of Asia does not point at a shift of the art world towards Asia, but rather at the development towards private sales in the U.S. and Europe (Pownall, 2017).

<u>Online platforms</u> change the way in which art business is done. The availability of information on the internet, through databases as ArtFacts.net, offers greater insight in the rather opaque and secret art market (Velthuis, 2014). The existence of online channels and databases allows art professionals as well as amateur art lovers to turn to the internet to gather information on a specific artist, prices, characteristics of an art piece, provenance and authorship (Arora & Vermeylen, 2013). Also art dealers are increasingly looking for online support for new client acquisition, as this is their main concern (Pownall, 2017). The internet increased convenience and efficiency for both buyers and sellers, with greater speed of transactions and easier global reach (McAndrew, 2016). The amount of companies that sell art online expanded rapidly during the period 2010-2014 because Internet has lowered the barriers to enter for the sellers as a brick-and-mortar gallery is no longer essential to business (McAndrew et al., 2016). According to the Hiscox Online Art Trade Report 2016, the online art market sales reached \$3.27 billion in 2015, which is a growth of 24% from 2014. The use of online platforms stimulates the integration of art markets worldwide which vitalizes international trade and an overall increase in the volume of art sales.

<u>Private dealer sales</u> have become common practice within the art world. Over the last years, auction houses are reporting less sales while the private sector compensates for the lost revenues at auction houses. Rachel Pownall even focused the TEFAF Art Market Report on the structure of the art dealer market and the numerous art dealers and galleries worldwide. Dealer sales now account for 62,5% of the global art sales, as opposed to the 37,5% auction sales (Pownall, 2017). The dealer side of the market is lacks transparency, as figures are not openly available. This is mainly caused by the fact that some trade goes unreported as art dealers are often small enterprises that work independently. Auction houses have been active in developing private sales departments to better fit the needs of the current collectors, but also to attract new clientele who do not wish to participate in regular auctions. The traditional centers for art trade have been strong, however, Asia and the Middle East have shown evident growth. The increase in the dealer market can partly be explained as a reaction on the cultural

and societal changes and economic uncertainty (Pownall, 2017). Buyers seek confidence through greater access to information and transparency on prices that private dealers offer as opposed to auctions. In the times of political tensions, privacy and anonymity is even more cherished by art buyers (Pownall, 2017). This is reflected in the increased use of freeports, which are known for high levels of privacy and anonymity.

Art consultants represent a fairly new group of intermediaries within the art world. Companies as The Fine Art Group advises and guides individual collectors and (financial) institutions who seek alternative investment options to diversify their portfolio (H. Litsenburg, personal communication, May 15th 2017). Art consultants, as help monitoring transactions between various dealers. As art experts, they have they potentially facilitate art trade by lowering search and transaction costs, their expertise and knowledge adds value and both parties possibly benefit from network effects (Arora & Vermeylen, 2012). Art investors often engage in large deals, concerning considerable amounts of money. Scrutiny and careful deliberation is therefore important. Investors who do not have the knowledge and experience in the art world to close a profitable deal, can consult the services of art consultants in order to make well-informed decisions. Despite the democratization of the art world and the information online, art experts still play a significant role in the art market as art buyers need guidance in a chaotic environment (Arora & Vermeylen, 2012). Art consultants aim to provide a complete service to their clients including advice and assistance on the preservation and storage of their clients' assets. Therefore, these companies such as The Fine Art Group, rent storage spaces at a freeports. In turn the consultant rents out these storage space to its own client. The amount of investors who see art as an alternative investment vehicle is growing, which spurs the demand for storage facilities and specialized advice (H. Litsenburg, personal communication, May 15, 2017). Art consultants anticipate on the opportunities posed by this growing demand.

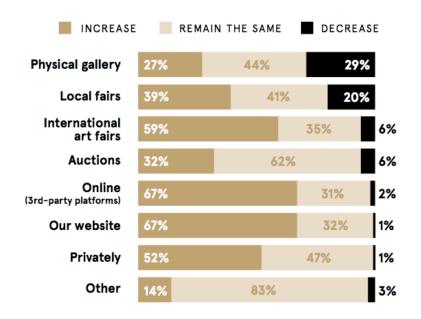


Figure 1. The development of transaction volume of sales channels

Percentages represent the expected development of the transaction volume via different sales channels in the future. Percentages based on MACCH Global Dealer Survey 2017. Source: Pownall, R. (2017) TEFAF Art Market Report. Retrieved from http://made2measure.org/tefaf/amr2017/home

<u>Art collectors</u> are no longer centered in or around the major cities as London, New York and Hong Kong. Globalization, on which the next chapter elaborates, made physical distance less vital, as information and objects can easily be transferred around the world. Although markets highly differ in their level op development, the contemporary collector is almost located worldwide. An example is the increase in the number of top 200 art collectors in Asia between 1990 and 2016 (see Tabel 2). According to Clare McAndrew, a cultural economist, since the decline of 2009, the arrival from Chinese, Russian and Middle-Eastern boosted the prices in the art market (Segal, 2012). As seen in the figure above, the share of collectors in these regions continued to increase over the last years (see Table 2). Also by opening an office in Dubai in 2006, Christie's acknowledged and reacted to the emergence of art buyers in this area. These relatively new collectors are generally more interested in the economic commodity that art can serve (Pownall, 2017). The terms art collector and art investor are increasingly used interchangeable in the literature. The borders between pure collectors and pure investors become blurred. The majority buys art for the combination and the value increase potential. As of 1935, Menzies already indicated that the majority of art collectors regards the money expended on their collections as invested capital. They do appreciate the sheer beauty and artistic qualities but they are also motivated by the knowing that the objects could be sold for a good price. Menzies argues that the collector of the present day, hence 1930s, could invest in collectibles with much greater security than he could at the beginning of the century (1935). This increased confidence included the possession of knowledge by a body of art dealers that could be consulted when a collector needed the opinion of an expert before engaging in a business (Menzies, 1935).

The private collectors who drive the demand for art can be divided into two types. The first is type is the collector who are driven purely by the desire to collect art for his own sake, with no direct intention of selling the work. They receive so-called "aesthetic dividend" from possessing the works rather than financial offsets (Zorloni, 2013). The second type is the collector who buys works of art as a status symbol with financial expectations. This type of collector often has less knowledge and experience in the art market than the first type and considers art as a commodity that can enhance their social status (Zorloni, 2013). The second type of collectors makes the art market active, as they are generally wealthy and have high disposable incomes. According to a recent survey, 72% of the collectors buy art for passion with an investment view, 6% of the collectors indicated that they buy art for a mere investment purpose (Deloitte & ArtTactic, 2016).

Motives for buying art can be distinguished in three categories (Velthuis, 2011b). For some buyers the primarily reason to invest in art results from the aesthetic dimensions of an art piece. People might seek to decorate their interior or want to build a collection of art works. Secondly, people buy from a financial viewpoint as art may be bought as an investment. The bait for art as an alternative investment have inspired more and more people to invest their money in the art market. The third reason represents a social reason. Buying art may provide access to social circles or enhance ones' status. In practice, people are often motived by a mix of these reasons (Velthuis, 2011b).

Table 2. Location of top 200 art collector	rs.
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	1990	1995	2006	2016
US	114	94	106	97
Canada	1	7	5	3
North America	58%	51%	56%	50%
Brazil	1	1	2	5
Argentina	2	4	1	2
Mexico	3	4	3	3
Other Latin America	2	3	3	2
Latin America	4%	6%	5%	6%
China	0	0	0	7
Hong Kong	6	4	0	3
Japan	12	8	2	4
Other Asia	0	1	2	7
Asia	9%	7%	2%	11%
UK	12	11	14	12
France	10	17	11	9
Germany	10	17	12	11
Italy	5	9	4	3
Other EU	5	14	18	12
Switzerland	9	4	14	11
Europe	26%	36%	37%	29%
Russia	0	0	0	3
Middle East	0	1	2	4
Other	8	1	1	2
Other	4%	1%	2%	5%

Values represent the number of top 200 art collectors and their percentages by continent. Source: Art Basel and UBS, The Art Market 2017. Copyright Arts Economics with data from ARTNews. Retrieved from https://www.artbasel.com/about/initiatives/the-art-market

2.1.3 Uncertainty and information asymmetries

The structure of the art market is perceived as opaque and secretive. The quality of an art work cannot be objectively addressed, which leads to higher levels of uncertainty than in other markets. Arguably, only an expert or dealer can accurately address the value of an object by using his knowledge and experience. The informative power of the art dealer is enormous and only his reputation allows the clients to trust him (Zorloni, 2013). Inexperienced buyers are forced to rely on the judgements of dealers in order to make decisions concerning which art to buy or to sell. In an uncertain art market, the reputation of this dealer is key. Bonus and Ronte (1977) stated that the economic value of an artwork depends on its credibility, which is created through the interaction between various experts with recognized knowledge and reputation. To judge the quality of the arts, it takes experts

who must be credible to the public. It appears that the social conventions within the art world play a main role in determining the economic value of an art work. Valuation based on social conventions is an ambiguous operation. When someone in the art world with an established reputation as a knowledgeable expert, attributes a work to, for example, to Van Gogh, the value of that work would swell. The same expert could in a way make or break the career of an emerging artist by the quality he or she ascribes to it. Given the lack of objective data on what is art, the quality of a work is closely related to the reputation of the artist, the experts and the credibility of the work. Building on this, Beckert and Rössel (2013) also argue that de differentiating properties of a work of art are constructed by the symbolic forms of recognition and reputation in the particular field. For that reason, buyers are looking for indicators that signify the presumed quality of an artist or work. As it is stated by Rachel Pownall in this year's TEFAF Art Market Report: "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" (p.13). Trust is especially vital in the art world in comparison to other markets, as the art market faces a high degree of uncertainty. The uncertainty of the quality of an art work is prevalent, but also the threat of fake paintings that circulate in the market. Affairs concerning forgeries and falsification are continuous and can cause loss and damage to the parties involved.

An artistic product has no or little discernible value and therefore distinctive from regular products and markets. This makes art a credence good, meaning that the value of a product is predominantly determined by the credibility of the experts in the evaluation process (Velthuis, 2011b). The acceptance of one's artistic judgement of a particular art work is highly dependable of their credibility and position within the art world. In a way, the art market is built on social constructions, that allow experts to generate credibility among other participants and evaluators. The acquisition of this credence or symbolic capital by curators, experts, critics etc. is done through elements as long-term commitment to the art world, extensive knowledge in the field and personal charisma (Velthuis, 2011a). Only through a well-established reputation as credible, one can convert the social capital into economic capital.

Given these uncertainties, prior knowledge and objective information on the value of art is difficult. The structure of the art market is characterized by high levels of information asymmetry between buyers and sellers. Akerlof (1970) analyzed this phenomenon in his paper on asymmetrical information when the sellers had more information on the current state of a used car than the buyers had. He argued that this leads to a market of "lemons", where only poor quality cars would be offered. This economic concept can also be found in other markets. When an art dealer sells an object which looks right at first sight, but he does not inform the buyer on the poor quality underneath the paint, there is a situation of information asymmetry. The concept described by Akerlof assumes that the seller has more information about the asset that the buyer. Another form however which is often found in the art market, it the asymmetry that the buyer knows more that the seller of the asset. Art dealers, collectors and investors develop an expertise by doing business in the art field. They encounter a lot of different works of art and create a certain eye for quality. It could thus occur that an individual, for example, inherits a work of art and without any specific art knowledge, he is not aware of the real value of the work. He consults an intermediary to determine the market value of the work. An art dealer that comes across could easily take advantage of the situation by not informing the individual of the real market value of the piece, and misleading him to sell it to the dealer for a smaller price. This phenomenon is especially applicable in the art world because the quality of an object cannot be objectively and directly observed. Without the services of experienced art experts, some works of art will never be valued at what they are worth in the market, simply because unsophisticated owners are not aware of the value of the painting in their attic. Some years later the owner sells the painting at a flea market to another inexperienced buyer. Professional art dealers are alert on these bargains and try to find undiscovered treasures outside the established art market.

The existence of information asymmetries also poses opportunities for fraud and deceit in the art market (Velthuis, 2011b). Forgeries have been created and sold for the price of original Old Masters paintings, while the information on the quality only known to the seller. To cope with these asymmetries, art experts are hired to certify the authenticity of an art work and the negotiate the deal. These interactions between the parties involved in a transaction are often long-term trust relationships and far from anonymous (Velthuis, 2011b). Online sales channels entered the market as new intermediaries providing a broad range of information that would otherwise be accessed through experts. However, the role experts, and consultants, is still crucial. In a market that is characterized by information asymmetries, trust, reputation and status are key (Arora & Vermeylen, 2012).

2.1.4 Conclusion

This section explained the structure of the art market. Due to the heterogeneous goods, the level of uncertainty and existence of information asymmetries, the art market is different from other markets where goods are traded. Therefore, the various intermediaries play an important role in connecting the buyer and the seller. Although the major auction houses have reported less sales recently, the private dealer sales are increasing in volume and value. An increase in the amount of collectors and a spread in their locations is observed (see Table 2). New (online) channels are gaining success, however the traditional galleries and fairs are still essential for sales (see Figure 1). Considering this, Rachel Pownall states in this year's TEFAF Art Market report: *"As we review the year at the end of 2016 we find that the world's art markets are larger and optimistic"* (2017). The next chapter will elaborate on this expansion of the current art market.

2.2 Art as investment

This section elaborates on art as an asset class for investment. Only fairly recently, the arts have been approached from an economic angle. During times of economic uncertainty, investors seek assets that will maintain their value over time. Financialization in the art market and the interest for art as alternative investment class significantly increased over the last decade. However, the behavior of the art market notably differs from traditional financial markets. First, negotiations within the market are characterized by high transaction costs. Second, as opposed to other markets, the law of one price does not hold here. This section will subsequently discuss these concepts.

2.2.1 Financialization and the rise of investment vehicles in the arts

The financialization of the art market can be approached from two starting points. First, taken the physical works of art into account, the influences of money and finance are increasingly observable in contemporary art. Money-art, as Haiven (2015) calls it, uses coins, credit cards etc. as artistic materials. Since mid-1980s there has been an expansion in the amount of artists working with money-art, as a reaction of the financialized neoliberal capitalism and the

increasing role of money in everyday life (Haiven, 2015). The presence of a new base of high net worth individuals who is eager to collect and speculate on contemporary art, influences the artistic production of artists. Artworks feature or reflect on money to cater the desire of the bourgeoisie, the financial elite who is willing to pay a large sum for a work that once seemed unconventional and ugly. Besides buying contemporary works, the financial elite increasingly supports the arts by financing and funding museums and art foundations.

The second approach is more crucial for the research of this thesis as it influences how the art market changed over the last decade. Although the new practices mentioned above increase integration with the financial sphere, the contemporary art market is in essence an inappropriate environment for financialization. Financialization of a market requires the availability of data for quantitative analysis and of price movements and the identification of opportunities for value extraction (Ivanova, 2016). Given the opaque and illiquid nature and the unregulated fashion, the art market does not lend itself directly for the process of financialization. However, new quantification methods, such as art indices, information providers and dedicated art investment funds, enable art to be handled as stocks and bonds. The fact that art is not correlated to the markets of stocks and bonds, makes it an attractive financial tool.

The rise of a new industry sector that incorporates the art market and financial services, explains the growth of art investment and its supporting industries (Coslor, 2016). The increasing investments lead the emerging of institutional investors industries as insurance companies, investment companies, pension funds. This financialization distinguishes a new sort of art collector. One who is no longer interested in the aesthetic dividends that art investments returns. Here art is recognized as a pure investment class with focus on price trends, returns and other features. However, when investing in art, one should have extensive knowledge of the value and properties of the work in order to make a successful investment. This sets the art investor apart from the former art collector seeking consumption benefits in the first place and return on investment regards as an extra. And not only the individual, also larger firms buy art to for diversification purposes. Art investment funds that only offer art are fairly new, but further illustrate the treatment of art as any other financial investment (Coslor, 2016). However, it takes more planning and knowledge to run an art investment fund successfully. As opposed to stocks and bonds, the costs resulting from taxes, storage and insurances should be taken into account.

Financialization influences the way art is seen and treated in the market by the various actors. In financial markets, the term speculation refers to the practice of buying stocks of which a significant price movement is likely. A speculator looks for investment opportunities that could provide a quick profit by selling the shares of stock soon after buying. This phenomenon has also made its way into the art market in the practice of so-called art flipping. To boost the price, one buys an artwork by an upcoming artist with the intention to resell it immediately. Art flippers are more interested in selling a painting at a profit than in building a collection. These individuals buy frequently and in large volumes to increase the resell potential. They retrieve their information on this resell potential from websites as ArtRank.com, which claims to be able to list emerging artists and their potential return on investment based on complex algorithms. Instead of being frowned upon by the art world, ArtRank.com indeed caters the demand of the flipper, a term borrowed from the financial world which indicates a short-term investor who only buys shares of stock to sell them almost instantly for a profit (Velthuis, 2014). Velthuis (2014) defined a "flipped" art work as being resold at an auction within three years of creation. The more frequently a work changes hands, the more people discuss and appreciate it. This hints at the development that the value of art is not created by its cultural and aesthetic value, but by public circulation.

A work of art can be seen as a durable good because its function doesn't become obsolete over time. In fact, in many cases the value of an art work rises with the age of the work. Therefor it can be seen as a safe store of value, like gold, in comparison to risky financial investments. It also serves as luxury item, which signals social prestige and the belonging to a cultural elite. Art can thus response to different types of needs. These may be limited to the material and physical attributes to serve aesthetic needs, or it may serve psychological motivations, referring to the intangible characteristics of the work. The population of high-net-worth individuals (HNWI's) has increased worldwide (see Figure 2). As people become richer, their budget for art and collectibles increases. The combination of economic aspects of capital allocation and aesthetic sensation causes the attractiveness of art as investment class (Sokolowska, 2015). Also Korteweg et al. (2016) found that the interest for and knowledge of the markets for arts and collectibles among investors has increased over the last three decades.

However, investing in art vastly differs from investing in financial commodities. Baumol (1986) elaborates on five differences between the art market and traditional financial markets. First, a particular stock is made up of an amount of homogeneous securities that are all perfect substitutes. A paining however is unique and even two works of the same painter on the same subject are not perfect substitutes. The second difference is that a stock may be held by many individuals, while works of art cannot be divided or bought by multiple investors. The owner of a specific work holds a monopoly on that work in the sense that he or she is the owner of a unique piece. Third, where trade in continuously on the stock market, is it fairly possible that an art object is only resold once a century. Fourth, the prices for which stocks are exchanged are publicly available. The exact prices of an art trade are often only known to the parties involved. Finally, Baumol (1986) suggests that in the market for art there is no such thing as the true equilibrium price. There is one similarity that can be discovered between the stock and the art market. Economist have questioned the function of stock brokers who might possess information on which investments to take and are able to make valuable predictions. However, evidence indicates that there is not much that prior information can do to improve the forecasts for the purchaser. If the market for arts are not any more regulated or stable, the help of professionals who conduct an analysis might also not able to estimate and forecast the price and value of a work of art. Frey and Pommerehne also referred to this concept: "[...] information and specific knowledge about the market for art in general, and about any paintings in particular does not allow an individual, on average, to reap higher rates of return than he might have if the paintings had been bought without special knowledge" (1988:85).

In the early nineties, Goetzmann (1993) found a relationship between the demand for art and the accumulated wealth from art collectors. He also pointed at the relationship between periods in which extraordinary prices fetched at auctions and an exceptional investment in global stocks. As art is both a consumption and a luxury good, owners derive pleasure from the aesthetic characteristics and the sign of wealth it may signal (Mandel, 2009). As of 1899, Thorstein Veblen created the term "conspicuous consumption" for consumption that is not related to the intrinsic value of the specific good but to the utility derived from the consumption. He argued that people in the leisure class consume certain goods to advertise their wealth and enhance their social status. The leisure class derived utility from the conspicuous consumption of high-prices luxury goods (Veblen, 1899). Mandel continues on this idea by stating that the "utility dividend" of consumption increases when the price of the good is high, and this dividend endogenously controls the level or art returns (2009). The demand for luxury goods, and thus art, is a function of income. The investment in art represents both the demand for luxury goods and the demand for conspicuous consumption.

Frey and Pommerehne (1989) aim to expand the research on this subject with their empirical inquiry on art investment over the period 1635-1987. They acknowledge three aspects of art investment that are problematic in comparison to traditional stock and bond investments. First, the attribution problem can cause the value of a painting to fluctuate dramatically. Second, the risk of fakes and forgeries. Frey and Pommerehne (1989) state that even an art expert cannot guarantee whether a painting is original. Third, there is a material risk to the physical object. It could be damaged or destroyed by environmental factors or wars. Taken these problems into account, their results on the profitability of investing in art show that the real rate of return on paintings is half the real return that could be received by buying public securities (Frey&Pommerehne, 1989). Thus they conclude that investments in paintings are not financially lucrative. However, they recognize that the reasons why individuals choose this form of investment are beyond financial reasons and intrinsic benefits are derived from possession.

In their research, Renneboog and Spaenjers (2015), estimate the returns in international art markets. They look at various countries and the national factors affecting the pricing of art works and found a substantial variation in investment performance across countries. However, in all countries the average return on art is below the return to equities over the same period (Renneboog&Spaenjers, 2015). The uncertainty of making in poor investment which cannot be disposed of rapidly, considering the relatively illiquid nature of art, makes that art not dominates the return on financial assets. Another difficulty posed by the investment in art is the fact that different styles and periods of art fallow different patterns when it comes to securities. Old Masters are considered relatively safe investment, and therefore sometimes also referred to the "blue chip" of the art world (Coslor, 2016). By using these terms, the art world becomes more understandable for financial investors. Nevertheless, investors who want to add art to their portfolios would be wise to consult professionals in the art investment field, given the unregulated art market. Clare McAndrew, a cultural economist, observed that people have realized that art is a safe investment when other markets underperform, because their value is generally stable, or even increases in value over time (Segal, 2012). However, when seeking for monetary returns rather that the aesthetic dividends of consumption, one should recognize the high transaction costs. Besides the costs

for the actual transaction, also the costs resulting from logistics and the involved taxes are adding up.

The publication of Baumol (1986) can be considered as starting point for the growing interest of the investment in art among scholars. He and many of the following scholars, do not include transaction costs into their studies. However, these costs should not be overlooked when considering to invest in art.

2.2.2 Transaction costs

Although apparent in every market, transaction costs in the art market are usually higher and play a more significant role. Transaction costs are defined as all the resources one must expend beyond the good's sticker price to complete a deal (Day, 2013). In the art market these costs often entail the seller's commission and the buyer's premium, collected by the auction house. The amount of these costs depend on different factors such as the auction house, the country and the market. The rates are also adjusted to the hammer price that was fetched. This hammer price is the price a work of art obtains during the auction, but does nog include further commission. The higher the hammer price of a particular lot, the lower the extra commissions. Taking an auction at Christie's London into account, these rates are 25.0% on works below £100,000; 20.0% for hammer prices between £100,001 to £2,000,000 and 12.0% for £2,000,001 and above. These percentages for buyer's premium are the same in New York, e.g. 25.0% for hammer prices up to \$150,000, 20.0% for prices from \$150,001 to \$3,000,000 and 12.0% for lots fetching \$3,000,001 and above. For Christie's Amsterdam, this premium also includes VAT and range from 30.25% for works up to €50,000; 24.20% between \notin 50,001 and \notin 1,600,000; and 14.52% on \notin 1,600,001 and above¹. These rates are the same for Sotheby's in these locations.

Often times it is costly to obtain reliable information on a potential purchase. One must consider several attributes before a purchase can be made accurately. To address the value of an object, one should have information on the content of the object itself, but also

¹Retrieved from <u>http://www.christies.com/buying-services/buying-guide/financial-</u>information/#Buyer's-Premium

information on the current market, the trends and the reputation of the artist. The amount of research required to verify the authenticity, attribution and legal claims frequently add substantial costs to the asking price (Day, 2013). This is predominantly due to the unique nature of art as an object. The involved intermediaries who provide additional art services are of influence of the amount of transaction cost. Depending on the intermediary, an auction house, gallery or dealer, the transaction cost can highly vary. Furthermore, important transactions often require the specialized help of lawyers and art advisors. These expert help to navigate in the opaque environment and are experienced on problems concerning authenticity and forgery. These services come with a price.

Next to the commission and premium calculated on a sale, transaction costs in the form of logistics and taxes need to be considered. The costs for logistics, transportation, preservation, shipping, storing and insuring art are substantial. Insuring art is a business in itself and also lead to substantial costs during transactions or possession of a work (L. Kamp, personal communication, May 10, 2017). The motivations for collecting may vary, ranging from passion to inheritance, it needs to be safeguarded in financial terms. The insurance of art is different from household insurance as art often sits in clusters, e.g. museums, freeports, corporate collections or at a fair. This leads to large accumulations of value in one place, that need to be insured against different risks. These risks include for example hurricanes and other climate effects such as fire, water and light losses. But also theft poses an insurable risk, albeit in lower percentages. Resulting from the globalization of the art market, the quantity of art works traveling around the world is higher than ever. There are many transportation companies specialized in the transport of art of all sorts and seizes. Nevertheless, insuring your transport is advisable as many incidents of losses do occur when art is in transit (Deloitte & ArtTactic, 2016).

Rules for taxes on art works vary among different countries. Although payment is eventually mandatory, the applicable taxes can be suspended while the work is stored in a freeport. This temporarily lowers the total costs on a transaction. Tax is the financial obligation levied on wealth, income, sales etc. by the government of a country. In European Union member states, Value Added Tax (VAT) was initially intended to be applied to all goods and services as a single tax rate. However, in reality the rates do differ between goods and countries. Taxes in the United Stated work differently from the European Union and even vary within the country between states. Furthermore, duty is a fee charged on the import and export of goods. The custom authority of agency of a country often levies a tax on imported and exported goods or merchandise. The amount of this tariff is generally dependable on the value, weight of dimensions of the particular good. The purpose of this duty is predominantly to control the flow of goods that enter the country and to protect the domestic industries from foreign competitors. All goods that enter the country must be checked, documented and cleared by customs. Again, different rules and rates are applied in different countries around the world. However, all EU member states apply the same common custom tariff (CCT). Customs authorities do not levy import duties on products traded between EU member states.

As we are dealing with the transaction costs in the art market, 'Droit the suite', or artist resale royalty, should be included. This term is used for the legal right granted to artists to receive a fee on the resales of their works. This royalty is effective for the artist or the heirs during the lifetime of the artist and for a period up to seventy years after the artist deceased. This rule was implemented in the European Union in 2006 by the Resale Rights Directive to protect the interests of the artist. The artist receives a 4% of the sale price under \in 50.000. If the work sells above this amount, the percentage decreases. The limit of the droit de suite rule is \in 12.500, which is levied over sale prices over \in 2.000.000. This rule is not effective in the United States.

Transaction costs in the art market are relevant as they are generally higher than in financial markets. Apart from the government taxes, transaction costs are paid to the intermediaries involved in a transaction. As there are often multiple intermediaries involved in the sale of an art work, transaction costs are ample. Even after the investment, these possibly lead to negative cash flows. One could therefore argue that from a cost point of view, art is not an interesting investment. However, there are also some advantages in investing in art in comparison to financial or real estate markets. There is no tax on capital gains arising from trading works of art and the share of resources invested in art is taxed differently from other investments (Zorloni, 2013). For example, when a firm buys a work of art to hang in the boardroom, they can deduct the amount spent on the painting as production costs. Also, ownership and possession of art does not need to be included in income tax returns (Zorloni, 2013). Positive tax regulations continuously stimulate art purchases.

For most collectors these financial drawbacks are outweighed by the aesthetic dividend and pleasure, and even psychological gains, derived from possessing a work of art. These art buyers are therefore less influenced by high transaction costs as their returns of

investing in art reach beyond monetary ones. Next to the transaction costs, the absence of the law of one price is another phenomenon that distinguishes the art market from other markets.

2.1.3.2 The law of one price

The theory of the law of one price assumes that perfect commodity arbitrage guarantees that goods are uniformly priced around the world – disregarding the transport costs and trade restrictions (Isard, 1977). This implies that identical goods must have identical prices in all markets. However, this is seldom the case in art markets. Renneboog and Spaenjers (2014) in their study did not find evidence that the art markets have become more integrated due to globalization. Prices for works of art tend to differ highly among various locations. Furthermore, the art market generally consists of unique products rather than identical goods. The theory of the law of one price has also been applied to the arts and culture sector. This was done by Pesando (1993) by comparing auction prices for modern prints in London and New York. He found that prices in New York were 7% higher than in London. A possible explanation for this could be the presence of the large base of Japanese collectors that was located in New York during the eighties (Pesando, 1993). Another research by Pesando and Shum (2007) investigated the law of one price on Picasso prints. Again, there was a difference in price found between the different auction houses, and New York also performed better in this study than Europe in terms of realized prices. Nevertheless, the scholars could not find a definite explanation for their findings, but it can be concluded that the law of one price does not hold for the art markets.

2.2.4 Conclusion

This chapter aimed to shed light on the existing literature concerning the financialization of the art market and the rise of art as an asset class. Key in considerations on art investment are the involved transaction costs. Due to the multiple intermediaries involved in art transactions, additional costs on top of the sales prices are substantial. Also after the purchase, the costs of possession and logistics keep incurring, possibly leading to negative cash flows on the investment. The absence of the law of one price distinguishes the art market from others. The price of an art work is subjected to the particular market or place the transaction is made. Nevertheless, art is considered a suitable alternative for asset diversification and the use of art

as such still increases. Next to financial returns, aesthetic dividend seems to play a crucial role in the decision to invest in art.

2.3 International art trade

After describing the structure of the art market and use of art as financial investment, this section continues to investigate the international art trade. The art market has made and is still making steps towards a globalized market. As a result of the expansion of the global buyers' base and a raise in the amount of high-net-worth individuals, the art market increased in both value and volume of sales. As a consequence of increased international art trade, new market players emerge. Freeports play a role in facilitating the international art trade.

2.3.1 Globalization

Since the beginning of this century, the international art market has been characterized by a dynamic growth rate, between 30-60% annually (Sokolowska, 2015). Figure 2 shows the increase in HNWI's in various regions. Also the global volume of import and export of art knows an overall growth since 1988, apart from the drop in 2009 (see Figure 3A and 3B). An increase in prosperity in countries of emerging markets is an important factor in the growth of the demand for artifacts (Sokolowska, 2015).

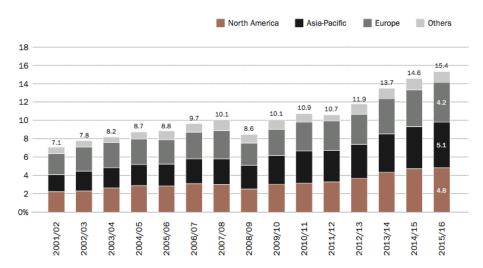


Figure 2. The global population of HNWI's

Stacked bars represent the number HNWI's and their distribution per continent. Source: Art Basel and UBS, The Art Market 2017. Copyright Arts Economics with data from Capgemini/RBC Wealth Management. Retrieved from <u>https://www.artbasel.com/about/initiatives/the-art-market</u>

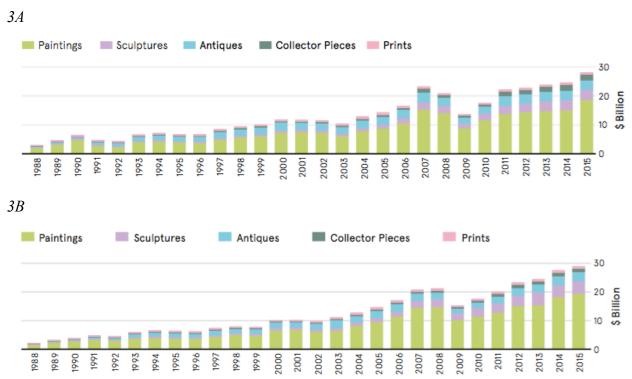


Figure 3A and 3B. Volumes of art import and export worldwide

Stacked bars represent the worldwide sales volume in billions of dollars (\$) of various types of fine art pieces per year (1998 – 2015). Panel A represents the import; panel B represents the export. Source: Pownall, R. (2017) TEFAF Art Market Report. Maastricht University Graphic, DESA/UNSD United Nations Comtrade database. Retrieved from http://made2measure.org/tefaf/amr2017/home

The art market has globalized rapidly since the end of the 1960s and has become more apparent over the last two decades (Yogev&Ertug, 2015). But even earlier, in the sixteenth and seventeenth century, artists as Rubens were selling their pieces across borders and in the early twentieth century Italian and French painters were selling to American collectors (Velthuis, 2011b). These cross-border transactions kept expanding, with the extreme rise of the Chinese art market between 2003 and 2006 an intense peak in the art world. Other signs of increased globalization include the cross-border traffic of art works, art students, artists, exhibitions, fairs and so on (Yogev&Ertug, 2015). Although globalization allows for diversification of the art business, it also poses new risks for the traditional gallery model (Velthuis, 2014). Furthermore, technological developments drive the arts to a more transparent and globalized marketplace, as internet databases make information widely available for investors worldwide. Physical distance becomes less important for art dealers as global supply and demand is brought together in online commercial portals and auctions. These developments simultaneously facilitate international trade and cultural exchange, while posing pressuring on the traditional local gallery spaces.

Despite these developments, trade is still not always easy across boarders as no globally identical standards exist and import tariffs may vary. Renneboog and Spaenjers (2014) argue that the global art market is shaped by differences in international demand, however, there are still barriers that are unrelated to variation in taste preferences that complicate international trade. Physical distance may pose difficulties for potential buyers as inspection is less accurate, however also practical and legal barriers hinder international art trade. Despite the globalization of the world economy, Renneboog and Spaenjers (2014) in their study did not find evidence that the art markets have become more integrated. The differences in taste and preferences stay persistent across countries. An examination of graphical segmentation shows that there is a close connection between the nationality of the artwork and the country of sale, as barriers to cross-border art purchases due to high transportation and transaction costs still exist. However, this does usually not apply to the high-end segments of the art market who are in general less restricted by these barriers. A certain degree of integration can be discovered in the auction market as the two – highly globalized - auction houses Christie's and Sotheby's dominate the auction market worldwide.

Graphical location can also be of influence when investing in art. Research has found that there have been differences over the period 1971-2001 in the returns on art investments across different countries (Renneboog & Spaenjers, 2014). Quemin (2013) conducted a study on international art fairs and also found that even in the highly globalized contemporary art market the territorial dimensions did not disappear. The national dimensions remain major factors in the hierarchy of countries organizing international art fairs and the countries that participate (Quemin, 2013).

To conclude, various scholars have studied the globalization of the art market. Some of them found that globalization did not lead to the devaluation of local ties and the importance of physical distance in the Western contemporary art market (Velthuis, 2014; Quemin, 2013). Others however argue that there is strong global integration between Asia and other non-Asian countries (Yogev&Ertug, 2015). It can be concluded that globalization matches international supply and demand in the contemporary art market and that it enabled the connection between various emerging art markets worldwide. However, the geography of the art market is still important. This is especially observable in New York and London, that are both seen as the key centers for both the Western art market and the financial markets (Coslor, 2016). Most headquarters of influencing firms in the art and financial world are located in one or both cities.

2.3.2 Consequences of international art trade

Both Velthuis (2014) and Quemin (2013) in their studies found that the globalization of the art world did not lead to the deterioration of local ties and physical location of art institutions. Yogev and Ertug (2015) however, argue that the previous two scholars only take the perspective of the Western oriented art market, and do not report on the globalized developments in the East and Asia. According to their study, Europe's dominance in the art world is decreasing over time while the fair and gallery related activity in Asia is increasing considerably (Yogev&Ertug, 2015). This is also reflected in the developments in emerging markets. The BRIC-countries (Brazil, Russia, India, China) and countries in the Middle-East are more and more entering the market for art and collectibles. In 2006 Christie's held its first auction in Dubai, and also Sotheby's has been located in Doha Qatar since 2008. In March of

this year, Sotheby's opened another outpost in Dubai. This is a reaction on the growing interest and market for fine art (see Table 3).

Year	Value (\$m)	Volume (m)
2006	\$54,425	32.1
2007	\$65,875	49.8
2008	\$62,020	43.7
2009	\$39,511	31.0
2010	\$57,025	35.1
2011	\$64,550	36.8
2012	\$56,698	35.5
2013	\$63,287	36.5
2014	\$68,237	38.8
2015	\$63,276	38.1
2016	\$56,621	36.1
Growth 2006-2016	4.0%	12.5%
Growth 2009-2016	43.3%	16.5%

Table 3. Value and volume of the global art market transactions 2006-2016

Numbers represent the value (\$) and volume (m) of global art market transactions per year. Source: Art Basel and UBS, The Art Market 2017. Copyright Arts Economics (2017) Retrieved from <u>https://www.artbasel.com/about/initiatives/the-art-market</u>

Art trade is no longer limited to specific countries and its borders. To make the international art trade efficient, new intermediaries emerged. Art dealers, international fairs and digital channels are anticipating on international customers and art logistic companies are specializing in long distance transport by plane and truck. Art consultants are increasingly mediating in cross border sales. However, as mentioned before in this thesis, cross border transactions are not always easy due to the different rules and taxes that may apply in different countries. Considering multiple jurisdictions in international art transactions, the location of the sale is crucial for purposes of tax compliance (Wierbicki & Rottermund, 2016). Therefore, freeports emerged as intermediaries that facilitates the mobility international art market.

2.3.3 A new market player: freeports

Freeports around the world have established themselves as prominent nodes in the international art trade and the involved networks (Ditzig et al., 2016). The concept of freeports in not new. Bonded warehouses, or freeports have originally been used to store goods, and later manufactured goods, in transit to facilitate international trade (Wierbicki & Rottermund, 2016). However, in the last 50 years, the more of them have moved up-scale, anticipating on the trend of investing in art and valuables. The current freeports are specialized in the storage of a broad scale of valuables, ranging from fine art, wines, and precious metals to classic cars. Next to storing services, these facilities often offer a broad scale of related services, including insurances, shipping services and art advising. As such, they aim to be logistic hubs that actively build networks between different jurisdictions and geographies. Governments support these freeports are they often attract global capital flows and establish themselves as nodes for international wealth (Ditzig et al., 2016). In Luxembourg, the government accepts the freeport as an addition to the burgeoning financial center, which can help Luxembourg to compete with London and New York in art finance, using paintings as collateral when structuring loans (The Economist, 2013).

Free zone storages were initially built to store goods in temporary transit until they reach their final destination. However, currently storage of art and other luxury goods in freeports is often long-term or even permanent. The high-end services and conveniences offered by the facility does not give the art investor much reason to move their valuable assets. Through their strategic locations worldwide near harbors or airports, easy accessible for transportation companies, freeports serve as a "one-stop shop" for collectors and cultural institutions (Ditzig et al., 2016). Wierbicki and Rottermund (2016) identified 5 criteria on which a collector selects a warehouse for storage or transactions; (1) flexibility in movement; (2) privacy with respect to disclosure requirements; (3) the amenities and services offered; (4) security and access; and (5) the current location of the art and the selection of a convenient travel location to mitigate risk of loss or damage. These criteria are of paramount importance to the business of Le Freeport Luxembourg as their clients consist of the top segment of the art market (C. Herrmann, personal communication, May 23, 2017).

Le Freeport offers private viewing rooms were transactions can take place within the tax suspension zone. As such, the works of art can change ownership without physically leaving the facility. Never before have so many artworks been enclosed in wooden boxes,

hidden out of sight in freeports (Heidenreich, 2016). To stabilize the value of an art work, it is safer to keep in inside the freeport. The contradiction between art as a valuable asset and its perception of an aesthetic work of art is what Heidenreich (2016) calls "freeportism". The "art-bank" hides art to stabilize the value. This value is not accessible as it is only the effect of a transaction. However, the value of a painting within the fully equipped, international network of freeports may be higher than outside the system (Heidenreich, 2016).

Because of the confidentiality and discretion, the total amount, or value of the inventory of freeports is unknown. The increase in the global private dealer sales indicates that dealers are using the opportunity trade within a private surrounding. It has been said that freeports are hiding the world's paramount art collections. Jean-Luc Martinez, the director of the Louvre in Paris, France, describes freeports as the greatest museums no one can see (Bowley & Carvajal, 2016).

The art market questions the transparency and level of regulation within the freeports. Investigators say the art market has been increasingly used as a vehicle for money laundering since the 1980s, due to its opaque and unregulated character (The Economist, 2013). Freeports are perceived to facilitate these practices because of the secrecy they offer. In Gevena and Singapors, for example, a high level of confidentiality is offered as items can be stored by persons who are "entitled", not necessarily the real owner, and can be declared by customs as "antique", "wine" or "painting" (The Economist, 2013). The level of regulation however differs worldwide. Freeports have their own agreements and jurisdiction. The Luxembourg freeport is subject to the EU-money laundering laws and there are numerous guidelines and agreements to prevent illegal processes concerning the facility. In an interview with The Wall Street Journal, Mr. Arendt, the CEO of Le Freeport, explained that there are "safeguards to prevent illegal behavior and that he is confident Le Freeport isn't used for money laundering" (Letzing & Colchester, 2015).

2.3.4 Conclusion

The times have passed in which the arts were treated differently from other markets. It is no longer a small, exclusive and independent market. Although growth is observable in the global art market since the burst of 2009, the figures for 2015 and 2016 show a slight

decrease in the total value and volume of transactions. Markets became internationally oriented and the arts are nowadays intertwined in the other globalized economies. The performance of the international art market is tied to a wider economic context and influenced by global political uncertainty (McAndrew, 2017). Another explanation for the slight decrease is the decline in reported auction sales, simultaneously with the increase in private dealer sales. Rachel Pownall states in this year's TEFAF Art Market Report: "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.

3. Methodology

This chapter elaborates on the methodology and the approaches used in this thesis. It functions as the bridge between the theoretical framework discussed above and the study's results. The previous sections addressed the existing literature and explained the characteristics of the art market in general. The international art trade has been studied and freeports were briefly discussed from a theoretical perspective. To specifically focus on the aim of the current thesis, *which is to investigate which factors in the art market and related markets drive the emergence and existence of freeports*, the methods that have been applied are described below.

In the field of cultural economics, both quantitative and qualitative approaches to research are used. This thesis consists of qualitative research as it aims to gain a contextual understanding of freeports, rather than generalization. The contextual approach is based on empirical research as it observes and collects new data in words rather than in measurable quantities (Bryman, 2012). Earlier in this thesis, the relevant literature has been assessed. The literature is obtained from various sources including scientific and non-scientific articles, such as newspapers, reports and other publications. After addressing the theory, the contextual approach is constructed by illuminating four themes; 1. Context, 2. Business model, 3. Operations, 4. Impact. In order to research these themes, literature searches, interviews, a case study and a site visit were incorporated. The following paragraphs will elaborate on these four methods.

3.1 Interviews

Qualitative interviews can be both structured and unstructured. The unstructured interview tends to be similar to an open conversation in which the interviewee is allowed to respond freely to the range of topics pointed out by the interviewer (Bryman, 2012). Prior to the interview, the interviewer prepared a list of questions often referred to as an interview guide (Bryman, 2012). Although in-depth interviews are flexible in comparison to quantitative interviewing, an interview guide is needed to provide structure and grip during the interview. As in-depth interviews also allow for questions that are not prepared in an interview guide beforehand, interviews subject to differ among various interviewees. The interviews are expected to last approximately 40 minutes each and consists of open-ended questions in a semi structured order (see Appendix 1). The question prepared in the interview guide are

organized around four themes; context, business model, operations and impact. Afterwards the interviewee will be asked about his or her own opinions. By organizing the questions in these specific themes, the interview can effectively be guided towards the research aim.

Different professionals in the art world will be interviewed. Accordingly, the interviews will also slightly differ to adjust to their field of expertise. Kvale (1996) introduced nine different sorts of questions that could be used during an unstructured interview. Generally, most interviews contain all nine questions in no particular order. For this current research, the most appropriate questions are the so-called *probing* and *specifying questions* (Bryman, 2012). The first is a follow up question and probes the interviewee to elaborate more on what has been said earlier. The *specifying questions* encourages the interviewee to be more specific and detailed. Besides asking appropriate questions, during an interview it is key to listen carefully and allow for pauses. Silence could give the interviewee the opportunity to amplify and clarify the answer and is important for the pace of the interview. Both the interviewer and interviewee should be calm and relaxed to contribute to a successful interview.

Being well prepared is crucial for a successful interview. The interviewer should be aware of the fact that the interviewee is making time in his or her schedule and that poor preparation could come across as unprofessional. Also Turner (2010) stresses the importance of interview preparation and suggests eight principles to follow when developing an interview. Starting by choosing a suitable setting to conduct the interview. This should be a comfortable setting with little distraction. There should be no loud noises that could disrupt the audio recording. The interviewee should feel comfortable to freely answer the questions, so there should be no other people that could overhear the interview. Ideally the interview takes place in the office of the interviewee. Before officially starting, the purpose and course of the interview should be clearly explained. It should be mentioned that this interview is conducted to contribute to the research on freeports in order to complete my master thesis. To address terms of confidentiality, it should be explained that the interview will not be published or shared with third parties. Useful information will be extracted from the interview in order to support the research. The format of the interview will not follow a strict plan with previously defined questions that should be answered. The unstructured format allows for improvised directions and follow-up questions. The sequence of the interview is highly subjected on the participation and willingness of the interviewee. Interviewees will

receive my contact information so they can contact me if necessary. Subsequently, the contact details of the interviewees in this thesis are known to the interviewer. If possible, the interview will be recorded.

3.2 Case study

To answer a research question, an *exemplifying case* can be conducted to provide a suitable context and to exemplify a broader category of cases (Bryman, 2012). It is important to note that a case study has implications concerning generalizability (Bryman, 2012). One single case cannot be used to represent a certain class of object and cannot be used for generalization. Information from various sources is brought together in order to be as accurate as possible. The decision for the incorporation of the Mark Rothko painting results from the assumption that buyers of this price segment of this painting, is most likely the segment of clients that uses freeports. For the case study is it also assumed that the buyer purchases the painting for investment reasons. It could therefore be anticipated that this particular painting would be stored in a freeport.

The case should provide understanding of the applicable transaction costs and taxes that apply to the purchase of a specific piece of art work in different countries. In order to understand the operations of Le Freeport in Luxembourg and the decision of their clientele, a case study is conducted to examine whether is it beneficial to store the work of art in this freeport. Although the market has become increasingly globalized during recent years, the majority of the total art trade takes place in a small number of key international hubs such as New York, London and Hong Kong (Zorloni, 2013). Nowadays, also Le Freeport in plays a significant role in positioning Luxembourg as an international hub for art and finance. Companies that operate both national and international as well as art dealers in an international environment need to deal with various tax rules and regulations. Around the world, different rules and regulations hold concerning the import and export of works of art. Regardless one's intention to possess an artwork, for example as an investment, aesthetic pleasure or as heritage, tax concerns are always relevant. The following table will compare the tax duties of Luxembourg with some of their neighboring countries and the three key international art trading hubs in the world, New York, London and Hong Kong. It is difficult to determine the exact final price of an art work, as many different tax and import tariffs may apply. These rates are subject to differ between EU-goods and Non-EU-goods. Value Added Tax (VAT) on art varies within the EU, while there is no export VAT within the EU. Sales

taxes are only applicable in the US, but may differ between states. Custom duties levied on art works are generally 0%, and therefore not included in the table below. Lower rates apply when an art work is bought directly from an artist, instead of through an intermediary. Hong Kong is generally perceived as the "free for all" zone in the art world, as no rates are applied in this region (see Table 4).

Country or city	VAT on purchase or Sales Tax	Import VAT
Luxembourg	17%	8%
The Netherlands	21% in the gallery 6% directly from artist	6% from non-EU countries
Belgium	21% in the gallery 6% directly from the artist	6% from non-EU countries
France	20%	5.5% from non-EU countries
Germany	7% for unique works 19% for multiples	7% for unique works from non-EU countries 19% for multiples from non-EU countries
Switzerland	8% in the gallery No VAT for purchases from artist	8%
New York (USA)	8.875%	None on original works
London (UK)	20%	5% from non-EU countries
Hong Kong	-	0%
Singapore	7% Goods and Services Tax (GST)	0%

Table 4. Payable rate on works of art

Values represent the different tax and duties rates on works of art in various countries. Source: Boesch, B., & Sterpi, M. (2013). The Art Collecting Legal Handbook. M. O'Sullivan (Ed.) and own elaboration.

To further illustrate the above elaborations, the fate of a particular painting (see Figure 4) is shaped. The data used in the case study result from the available information on taxes and from the information provided by the interviewed professionals. To illustrate the case, a painting by Mark Rothko issued as a subject. This painting is auctioned at Christie's London this year and fetched a price of 13,066,846 US dollars. Buyer of this lot is primarily driven by the investment opportunity of the work. This case study is relevant to illustrate what the

buyers' benefits are of storing the work in a freeport.

Figure 4. The paining in question



Mark Rothko (1903-1970) No. 1 (1949) Signed and dated 'MARK ROTHKO 1949' (on the reverse) oil on canvas 78¹/₄ x 38³/₄in. (198.8 x 98.4cm.) Painted in 1949

The motives for the collector, Mr. James, primarily result from investment perspectives and he has been advised on the investment opportunities at this auction.

3.3 Site visit to Le Freeport Luxembourg

To gain in-depth understanding of the full particulars of a freeport, a site visit was initiated. Considering its location, Le Freeport Luxembourg was chosen as most appropriate facility for a visit. A field study is often conducted to observe the behavior of the sample (Bryman, 2012). However, in this thesis the field study is an extension of the contextual approach of freeports. In advance, the management of the facility was contacted. An agreement was made and the visit to the facility was scheduled on May 23rd, 2017. Next to a tour through the, two interviews were planned. Prior to the visit, explanation on the research and the interview guide were provided to the interviewees. For security reasons, an identification and proof of enrollment at the university were requested. During the visit extensive explanation on the building, logistics and operations is provided. Through careful observation, recording and note taking, the qualitative data for the research are obtained. The research at the physical site will allow for greater understanding of the subject and its context. Furthermore, it provides the opportunity to interact with professionals in the field.

3.4 A contextual approach

In order to serve the research aim of the thesis, a contextual approach is constructed. The approach is organized around four themes that will guide the research towards its aim. The themes are chosen to serve different aspects of the research aim. The <u>Context intents to</u> sketch the framework and environment in which freeports operate. The <u>Business model</u> aims to explore what makes freeports unique and distinctive from other warehouses where art can be stored. <u>Operations</u> questions how business is done at the facility and what the levels of regulation and transparency are. The <u>Impact</u> examines the role of freeports in the broader international art market and their possible consequences.

In order to realize the contextual approach, four themes have been incorporated in the interviews and other interrogations. The following table demonstrates which questions are used in the interviews in order to gain understanding the different themes (see Table 5).

Context	Business model
 How do freeports work? Why do freeports exist? What drove/drives their emergence? Do freeports in different countries work differently? What constitutes the success? What are the main reasons one stores its art works in a freeport? What are the main threats of storing? What objects are stored most frequently? Why this Luxembourg? 	 What is the business model of Le Freeport? Which different parties are involved in the business of the freeport How do you keep track of what is inside? Do you need to keep track of what is inside? Who are the clients? Which different services are offered? Why do people choose Le Freeport? Can anyone store here? How is fraud prevented?
Operations	Impact
 What is the supply chain of the freeport? How is the relationship with the operating companies? Do collectors avoid transaction costs? How are operations regulated? What is the level of transparency? What are the advantages to store at Le Freeport Luxembourg? On average, how long does an art work stay inside the storage? What are the import/export/VAT costs when a works enters and leaves the freeport? What happens when an art work comes in? How much does is cost to store? 	 What does their existence say about the art market? What is their influence on the international art market? What function does Le Freeport Luxembourg fill in the international art trade? How do freeports influence the art trade? Is it beneficial to store art? What is the effect of transaction costs on the emergence of freeports? What explains the success of Le Freeport Luxembourg?

Table 5. Specific questions per theme, used during the interviews and other interrogations

Source: own elaboration

3.5 Limitations of the methods

Interviews in this research consist of both face to face as well as telephone interviews. Also, several art professionals have been questioned per email to obtain valuable information. The

conversations via telephone and email could not be recorded. However, the names of the art professionals that have been approached for this research are included in Appendix II. Interviews could be (unconsciously) biased by steering questions or interpretations. The quality of the interviews is highly dependent on the cooperation and willingness of the interviewee. Due to the variety expertise among the interviewees, a comparison between the interviews is difficult. Each interview will provide unique answers and insights. A large share of the data for the research was obtained through conversations with professionals via email or telephone. These interrogations were not planned interviews and therefore not recorded and are subjected to personal opinions and interpretations. There are significant differences between the operations of various freeports worldwide. The outcomes from the site visit to Le Freeport Luxembourg are independent and not generalizable for other freeport facilities.

4. Results

This chapter presents the results obtained from the contextual methodology. In order to structure the contextual approach, four themes were formulated. These separate themes will be discussed below. Next, the results from the case study will be presented. Finally, the outcome of the site visit to Le Freeport Luxembourg will be described.

4.1 Context

The existing literature and the various reports on the art market revealed that the interest and market for art generally increased since the market breakdown in 2009. The base of HNWI's increased, resulting in more individuals with investing budget. In times of social, political and economic uncertainty, hence since the financial crisis, people seek more secure assets for their investments. Art became a generally accepted and valued vehicle for investment. The top percent of the rich become even richer, and seek to diversify their investment portfolio. Often times they choose art instead of traditional investments, simply because they enjoy it (H. van Litsenburg, personal communication, May 15, 2017). These HNWI's is also the segment that demand the best possible professional service for their assets. As they expand their collections, their need for ancillary services increases. Alongside the restoration and conservation, the storing of the art works is key in the preservation of their value. As a consequence of the growth in art as an asset class, the demand for professional storage increases.

Apart from the individual art investors, the storage spaces are also used by museum collections and companies. Another driver for the increased use of professional storage is posed by insurances. Art insurance companies recognize the risks involved with the possession of art. Art loss and damage not only occurs through theft or fire, but more often through unpredictable, hazardous accidents. Having multiple masterpieces in one home might be too risky, resulting in extremely high insurance costs. One might therefore decide to store, some of, their works in a freeport were the risks are eliminated. Using the freeport storing facilities especially makes sense when the work is acquired as an investment. Firstly, because the high insurance costs resulting from keeping the work at home, will generate a negative cash flow resulting in a less profitable investment. Secondly, because the work will need to

be resold in the best possible condition. Keeping the work hanging on one's wall puts the investment at risk.

The collectors who are purely driven by aesthetic motivations, who buy for decorative purposes, still and will always exist. However, the amount of investors who see art as an alternative investment vehicle is growing, which spurs the demand for storage facilities, as the art is in this case not used to decorate one's home. People tend to enjoy to invest their wealth in art, as opposed to classic financial assets (H. van Litsenburg, personal communication, May 15, 2017) With the opening of Christie's and Sotheby's in Dubai, a new market emerged, resulting in an overall growth of the art market in the past 10 years. The very top, wealthy investors in these areas are gradually becoming acquainted with the possibilities that art can offer as an investment class. Storing it in the no-man's land of a freeport, allows its value to secured, or even to appreciate. The combination of the relatively low costs for storage, the safety benefits of the facility and the duty-free environment, makes the freeport a suitable solution for the art buyer with an investment view.

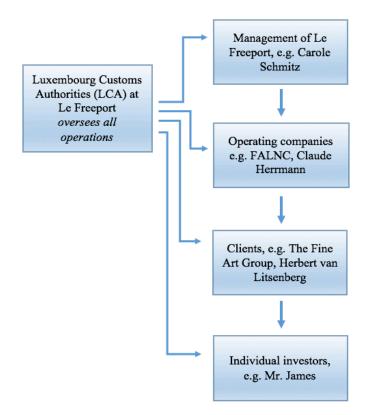
4.2 Business model

The business model of an organization comprises the way in which it generates revenues and makes profit from its operations. Based on the visit to the facility and the interviews with the attentive representatives, the business model of Le Freeport was explored. The clients who store at Le Freeport are generally high net worth individuals who possess high end art works. Whether they are collecting art as an investment or for aesthetic reasons, they demand the best possible service for their art works in terms of handling, shipping and storing. The business model of Le Freeport entails an "one-stop shop", offering multiple services at one location. The facility provides an ecosystem in which all forms of art services are provided. Furthermore, all necessary knowledge and materials are in-house for the preservation of fine art. When considering the different services separately, there is nothing unique or new to the freeport. Secured storages exist, art logistic companies exist, there are many tax suspension zones in the world and art restaurateurs can be found elsewhere. However, the combination of all these separate building blocks it what distinguishes the freeport as a service provider. As an complete ecosystem, the business makes sense. The business is targeted at the niche market of affluent collectors who demand the very best for their art works, just as they do in other aspects of their lives. Next to excellent service, these target group usually demands

privacy and discretion when it comes to their asset handling. As an example, at Le Freeport privacy and discretion are assured through the available private viewing rooms. The meetings and visits from various clients are carefully planned, so that an unexpected confrontation within the building would not happen.

The management of Le Freeport exists of four fulltime employees and is concerned with the management of the building and the relationships with the operating companies and external parties. Within the freeport, the storage spaces within are rented out to different operating companies, such as Fine Art Logistics Natural Le Coultre. Within Le Freeport Luxembourg, three operating companies for fine arts are based, and one company specialized in the storing of wine. In turn, this operating company, rents the storage spaces to a third party, its own clients, which include art investment companies, cultural institutions and private individuals (see Figure 5). This operating company handles the entire storing and handling process for its clients. The fourth party involved in the freeport is the Customs department of the Luxembourg government, based at the facility. Every single item that is stored within the facility, needs to be cleared by customs. This Customs department is the only operating party within the Le Freeport who know *exactly* what is inside the building. Hence, the management of the building does not know what is inside each vault that are rented out by the operating companies. There are three art logistics companies operating at Le Freeport, each of them only knows what is behind the doors of the spaces they rented out to their own clients. Privacy and discretion are key drivers behind the processes within the building. The Customs department is the only "all-knowing" party at the site.

Figure 5. An illustration of the order of operations at Le Freeport Luxembourg



Source: own elaboration

4.3 Operations

The literature of this thesis elaborated on the opaque and nontransparent character of the art market. Section 2.1.3 emphasized the importance of uncertainty, trust and reputation in the fairly unregulated environment. The commonly perceived reputation of freeports as mystical, intriguing and fraudulence places suitable for offshore transactions and money laundering practices is a widespread misinterpretation. At least for Le Freeport Luxembourg it is. In Luxembourg, every single item that enters the building needs to be cleared by customs. When a work of art enters the freeport, it will have to undergo several procedures. The truck in which the piece is transported will be throughout checked, to prevent that other items or people enter the building unnoticed. The truck will be unloaded and afterwards the crate will enter the X-ray scan. Before opening the crate, customs will use a specific instrument to test the load on explosives and drugs. Prior to arrival, all documents concerning the piece need to

be delivered to customs by the operator. The documents need to include information on provenance, owner, artist, value, conditions etc. of the work. Customs the checks if the particular work of art is registered as missing by The Art Loss Register, Interpol or the police. Both customs and the operators employ Know Your Customer (KYC) processes prior to accepting a crate for storage. These processes ensure that the customs department knows who the owner is of every piece entering the facility. Only when all security processes are completed, the crate can enter the storage room. Also after the crate has entered the storage, customs monitors and documents every further movement and operation concerning the particular piece.

Since regulators in Luxembourg published a law on July 24, 2015, all operators at Le Freeports are required to comply with the national anti-money laundering laws and regulations. This law incorporates the Regulation on Money Laundering which imposes obligations on art professionals when participating in transactions. As stated above, these obligations include requiring identity documents of the clients involved, keeping documents of any operations carried out, monitoring all operations and establishing internal control measures (Deloitte & ArtTactic, 2016).

In terms of transparency, the levels vary for the different parties involved. The level for Customs is high; operations are completely transparent and documented. Customs holds the highest level of transparency within the operations of the freeport. The operators have high transparency concerning their own clients and their assets. The management of Le Freeport however, has a lower level of transparency concerning the actual content of each vault. For external parties, e.g. dealers in the art market, the level of transparency is low. Information on the operations, items and transactions within the freeport is not at all disclosed to the external environments.

The previous paragraphs reference to Le Freeport in Luxembourg. It should be notices that these operations differ from other freeports in the world. For example, the overall transparency in Geneva is significantly lower as customs does not need to employ KYC procedures and crates do not need to be opened and cleared before entering. In both Singapore and Geneva, individual collectors can rent a storage space directly from the management of the building, bypassing the interference of an operating company. This results in considerably less regulated processes within these facilities. "The unknown of what's inside the Geneva Freeport makes it an ideal metaphor for the art market, much of

which is shrouded in mystery. Sales at auctions attract attention, but both the value and the volume of private transactions are apparently larger. Perhaps far larger." (Segal, 2012)

4.4 Impact

The answer to the question of the influence of freeports is debatable. One the one hand, freeports have a negative effect on the art market as they lead to a restrained market (R. Pownall, personal communication, May 12, 2017). Art in freeports is unlikely to appear in public auctions or at fairs. Certain art pieces therefore only circulate within the networks of the affluent collectors who engage in private sales, behind the doors of the freeport. Furthermore, given the level of transparency, art that has been out of sight for many years will either be forgotten or leads to intense speculation about the work. The latter possibly drives prices even higher. Freeports keep works off the market, restricting dealers from acquiring pieces through traditional public sales channels resulting in a less regulated and a more discreet market. A development that is not for all participants in the market desirable.

On the other hand, freeports have no negative influence on the market as they provide a different type of solution for art preservation (C. Herrmann, personal communication, May 23, 2017). Freeports provide a safe and secure environment for collectors or investors who do not want to store art in their attics or garages, as these are not ideal places to keep valuable assets, so collectors turn to the facilities of freeports. Furthermore, art investors have generally no interest in storing their assets indefinitely out of sight. Investors seek profitable sales. For an artwork to increase in value, it needs to be exposed. For example, when a piece is exhibited in an acknowledged museum, it often increases in value. An investor cannot sell art that has been hidden and forgotten, and thus not appreciated, at a good price. As VAT is suspended on transactions, the freeports actually stimulate trade rather than restraining it.

Freeports help to make international art trade more efficient. Due to tax suspension regimes, art can more easily be transported to other jurisdictions without paying high costs. Also the provided shipping services make the transportation convenient and safe. The aspect of the tax suspension, however, invites criticism. Sceptics argue that because of the tax benefits, people are stimulated to engage in storage in these vaults instead of hanging it on their walls. Tax suspension zones would spur the possibilities of money laundering which negatively influence the art market and harms its reputation. However, generally taken, the clients that choose to store in freeports are affluent, or even HNWI's, who do not seek the

financial benefits of storage. Rather, they seek professional service, security and privacy for their art, instead of tax avoidance. Furthermore, "There are going to be ethical people and unethical people in every business" says Wendy Cromwell, an art advisor and founder of Cromwell Art LLC (Sussman, 2017). The art market will be subject to dishonest transactions, but so is every other international trade market.

It is often considered a shame that many precious and valuable masterpieces are withdrawn from public's sight. David Arendt, the CEO, explains that the purpose of Le Freeport Luxembourg is to "conserve the cultural integrity of works of art and the capital value of the goods that are trusted to our care" (Tasman-Jones, 2015). Art is fragile and its condition, and therefore value, easily depreciates. The freeports ensures the preservation and protection of art. However, Le Freeport recognizes the cultural disadvantages of storing precious art out of sight. Therefore, it encourages the clients to loan their works to local museums, exhibitions and institutions. For this purpose, art pieces can leave the storage without losing their tax advantages under specific conditions and for a limited period. "The Freeport is not a place where art should stay out of the world but where it should live, as shown by the existence of showrooms and conference rooms inside Le Freeport" (Picinati di Torcello & Limier, 2015).

4.5 Results case study

The case study presented in section 3.3 illustrated the application of transaction costs, taxes and duties rules to a specific work of according to different scenario's. The following section elaborates on the outcomes of the study.

The buyer with investment perspective, Mr. James, acquires a work of art from the Post War & Contemporary Art Evening auction at Christie's London. This lot is perceived to be a promising investment. The realized price for the lot at this auction is GBP 10,693,000 or 13,066,846 in US dollars². This price includes the hammer price and the buyer's premium. Mr. James primarily buys from an investment perspective and will be selling the work when a good opportunity arises, assumedly 4 years after purchase. In the meantime, this Rothko will be stored, keeping the costs of possession as low as possible. He possesses three storage rooms in different freeports around the world to efficiently store his vast collection of

² Retrieved from http://www.christies.com/lotfinder/paintings/mark-rothko-no-1-6059888-details.aspx?from=salesummery&intobjectid=6059888&sid=252c9aac-180c-408a-89af-c9acc8f4c697

physical assets. Mr. James wants to decide wat would be the best scenario for him to store the work, considering his investment purpose. His storage rooms are located in the following freeports: Le Freeport Singapore, Le Freeport Luxembourg and Le Freeport Geneva and Arcis Fine Art and Collection Care in New York. He recognizes that the various options will pose different costs. A calculation for the different options is made so that the best option can be selected. This calculation will take the obligated rates for taxes and custom duties in to account. The transaction costs concerning the auction house will be the same in all options. The rates in the case study are indicative and provided by one shipping³.

The provenance of this lot is Marlborough Gallery Inc. New York. Christie's imported this lot for sale using a Temporary Import Regime from New York, meaning that the good is a Non-EU item and no import VAT is levied⁶. The import VAT is transferred to the buyer in London. These rates in London are 5% on the hammer price for import and 20% on the buyer's premium for the purchase. These costs are included in the realized price. However, the buyer can decide to export the lot directly or complete the import in another EU country immediately after the sale in London. Thus, the final destination stipulates which percentages are applied (see Table 4). At the time of sale, this painting is a Non-EU-Good, which is also commonly called a transit good. The period of storage is perceived to be 4 years.

³ All rates are indications and provided by Claude Herrmann, executive manager Fine Art Logistics Natural Le Coultre, personal communication, May 23, 2017

Transaction costs at Christie's London⁴

Hammer price: \$11,666,826

Import VAT 5% on the hammer price: \$583,341

Buyer's premium at Christie's London 12% on the hammer price: \$1,340,189

Total realized price excluding VAT and fees: \$13,066,846

Droit de suite: not applicable to this artist⁵

Option 1 – Shipping to his home in London

Import VAT in the UK: 5% = \$583,341

Tax on the purchase: 20% on the 12% buyer's premium: \$280,003

Shipping costs: \$3 per kilometer (excluding transport insurance)

Insurance costs: considerably higher than in a storage facility

Option 2 – Shipping to Le Freeport Singapore

UK import not applicable

No import costs for as long as the artwork stays at Le Freeport Singapore

Goods and Services Tax (GST): 7%

Custom duties: 0%

Shipping costs: \$790

Handling costs: \$840

Storing costs Le Freeport: cost storage room (depends on size) + insurance (depends on value)

Option 3 – Storing in Le Freeport Luxembourg

UK import costs not applicable

No import costs for as long as the artwork stays at Le Freeport Luxembourg

Import VAT: 8% but suspended while in storage

Shipping costs: \$2240

Transport insurance: \$9044

Inbound handling at LE FREEPORT: \$425

⁴ Rates provided by Melina Melrose, Post-War and Contemporary Art Business manager, Christie's London, personal communication, May 26, 2017

⁵ Retrieved from http://www.adagp.fr/en/mysearch/rr-right?keyword=Mark+Rothko

Storing costs Le Freeport: \$17.500,00 per year for a 18m² storage room

Insurance for storage: 0,013% per month

Option 4 – Storing in the Geneva freeport

Import costs Switzerland: Suspended while in storage

Import VAT: 8%

Shipping costs: \$4522

Transport insurance: \$9044

Inbound handling at Geneva freeport: \$515

Storing costs Le Freeport: cost storage room (depends on size) + insurance (depends on value)

Import costs US: non because it is an US good

Custom duties: non

Shipping costs: \$712

Handling costs: \$840

Storing costs Arcis: cost storage room (depends on size) + insurance (depends on value)

4.6 Conclusions to the case study

Mr. James acquires the lot primarily from an investment view, intending to resell it after a couple of years. From an investment view it would be rational to store the Rothko painting in a freeport until resale, because of the security and tax suspension benefits. The investor aims to keep all costs, resulting from possession, shipping and storing the art work, as low as possible to obtain the highest possible margin when reselling the painting.

<u>Option 1</u> – From an investment view, it would not be beneficial to keep the painting in his home, considering the value of this painting. When the work is shipped to his home, the 20% tax on the sale applies. Furthermore, the risks of fire, damage of theft are too high when kept at home, leading to tremendous insurance costs. Also, the climate in the house would not be optimal for the preservation of the work, e.g. temperature, humidity, sunlight. In order to sell the work after four years, the preservation and security should be optimal.

<u>Option 2</u> – The GST on import in 7% in Singapore. The GTS is calculated on the value of the good, which includes cost, insurance and freight plus the possible duty payables. Although duty is not applicable when the work directly enters the freeport, the 7% on the costs and insurances on freight are substantial. Besides shipping costs, also the risks of shipping apply. With the length the shipment, the risks increases. In general, art should be shipped as little as possible to secure its value.

<u>Option 3</u> – Shipping to Le Freeport Luxembourg would be safest in terms of proximity. The collector benefits from a suspension of VAT on the services provided for the artwork while inside the facility (storage, handling, presentation etc.). This suspended VAT will be due when the artwork is permanently imported into the European Union. As long as the artwork remains "in transit", the collector can permanently suspend any due VAT by shipping the artwork to another country, inside or outside the EU.

<u>Option 4</u> – The transport costs to Geneva are slightly higher. Concerning the import, VAT of 8% is due on the custom clearance, levied on the purchase price plus shipment and insurance.

<u>Option 5</u> – There is no VAT charged in the US. In most cases works of art can be imported duty free. This shipment from London to New York imposes high shipping and insurance costs.

The painting will be resold after four years in storage. By using a freeport, the VAT payments are postponed which improves the clients cash flow. Looking at rates that apply to the different scenario, it would be lucrative to export the work directly to one of the freeports, so that the 5% import rate for the UK does not apply. The combination of the rate on import in Singapore at 7%, and the distance makes it a less lucrative solution. Despite the low rates in the US, the shipping and insurance will be high.

Under the "temporary admission", that is offered by Le Freeport Luxembourg, the work of art can leave the freeport under supervision of Customs without losing the tax advantage. For a maximum length of one year, the work can be shipped to a specific destination e.g. a museum, gallery or exhibition. This is beneficial as the value of the work often increases when it is exhibited. Furthermore, if the value of the painting increased after four years and the collector decides to sell the work, he can do so within the Le Freeport facility. If the sale takes place within the freeport, the painting does nog leave the storage and the VAT will not be due.

The eventual location of resale is of influence on the decision of storage location. The location of best possible market for resale, or the buyers in the network connected to a specific freeport need to be considered when choosing a storage location.

4.7 Limitations to the case study

Every situation and every client is different. Considering the content of the freight, a unique painting, often no standardized procedures exists concerning the shipment. The case study can provide certain insight in the various options and rates, however these situations are not comparable and no vast conclusion can be drawn from these figures. The case study is not complete as some rates, for example for the freeport in Singapore, could not be obtained. The decision for storage location often depends on other factors than costs. The options for future sales, the services offered by a facility and predominantly the personal preferences of the buyer are decisive rather than price rates, as these are assumed to be less important to the buyers in this segment. Furthermore, deals and rates can sometimes be negotiated between the buyer and shipping company.

4.8 Outcomes site visit Le Freeport Luxembourg

For the purpose of the research, a site visit to Le Freeport in Luxembourg was initiated. During the visit an explanation of the operations and business of a freeport facility was given. The state-of-the-art architecture protects and houses high tech systems for climate control, fire prevention and security. The amount of cameras is countless.

When a visitor enters the facility, by appointment, the procedure is comparable to an airport. The personal identification is checked, bags are scanned through an x-ray and persons enter a body scan. After entrance, a tour through the facility started by the following explanation on how transportation trucks unload their freight at the freeport. Twenty-four hours prior to arrival, the chauffeur confirms the expected arrival and needs to provide his identification and documents. Upon arrival, multiple cameras are closely documenting the process, the truck is parked in a restricted area inside the facility. The chauffeur leaves the

truck, after which the outside of the vehicle is checked and cleared. Specialized equipment is used to detect whether a heartbeat is observable inside the truck. These sensors are so accurate that once a heartbeat of a mouse inside an old crate was detected. After this first step, the truck is stationed in the next zone, where the temperature is controlled. Once the freight is adjusted to the desired climate, the crate is unloaded and transported to the nearby customs area. Each entry and exit of goods must be notified to the Luxembourg customs authorities (LCA). The LCA, or customs, are physically present at Le Freeport, and supervises the crate at entrance to carry out all required procedures. First the outside of the crate is carefully checked, starting with a tool that is able to detects explosives and drugs. Second, the crate is subjected to X-ray scans, which is able to identify the whether there are other objects, such as cash money, inside the crate. When nothing peculiar is found, the crate is opened by customs.

Prior to delivery, detailed documents need to be provided to customs, stating the descriptions of the work, the value, the provenance, the owner (so no another person with the right of disposal) etc. These data are checked by The Art Loss Register, Interpol and the police to exclude the possibility of a stolen or missing art work. Once the content of the crate corresponds with the information on the documents, the authorized operating company takes over to safely store the crate in the designated vault. All possible movements concerning the crates, for example temporary admission, are monitored and supervised by the customs authority inside the Le Freeport. The operators are obligated to keep records from all operations and corresponding costs and to declare correctly to customs. Once a sale is made, inside a private viewing room of Le Freeport, the procedure is repeated, excluding the possibility of illicit transactions.

There is 24 / 7 / 365 on-site security, combined with video surveillance and security alarms, inside and outside the facility. Storage rooms have heights up to 6 meters, specifically designed for oversized artworks or installations, featuring doors of 5x5 meters. A temperature of 21°C and 55% humidity is constantly maintained. The climate control, as other systems, is backed up in case of power failure. In case of fire, the brigade from the airport intervenes in less than 5 minutes, nevertheless walls and doors are fire resistant for up to 3 hours. The four wine cellars can store 750.000 bottles of wine under the optimal conservation level of 13-16°C and 60% humidity.

Le Freeport operates within a legal framework compliant with international standards to guarantee a total traceability of all goods stored and all activities carried out within the facility. Each operator is authorized and subject to anti money-laundering legislation, Anti-Money Laundering Act, posed by the Luxembourg government⁶. It has to keep an inventory of goods entrusted to him for storage, through the Know Your Customer (KYC) procedures: data on inbound, stored and outbound goods are exchanged electronically with the LCA. Each entry and exit of goods has to be declared to customs, who are physically present.

Despite these regulated procedures, confidentiality and discretion remain the key at Le Freeport, in order to ensure its competitiveness. The KYC documentation is preciously protected and will not be automatically transmitted to other member states or the eventual end user. While inside the facility, discretion and privacy is also personally experienced as no one was seen during the entire visit. All doors are closed and locked, nothing, except from the impressive architecture of the building, is observable.

Photographing inside the facility is prohibited for security reasons. However, to illustrate the outcomes of the site visit, professional photos were provided.



Vaulted door © LE FREEPORT Luxembourg.

⁶ "In Luxembourg, regulators published a law on 24 July 2015 requiring the operators of the newly launched Luxembourg Freeport to comply with national anti-money laundering laws and regulations" (Deloitte & ArtTactic, 2016:151).



The outside of the facility © LE FREEPORT Luxembourg.



Located at the Luxembourg airport © LE FREEPORT Luxembourg.



Private viewing rooms © LE FREEPORT Luxembourg.

5. Discussion and own interpretation

This chapter reflects on the results of this thesis and presents a discussion including my own interpretations. The aim of this thesis was to investigate which factors in the art market and related markets drive the emergence and existence of freeports.

In order to scrutinize the aim of this thesis, a contextual approach was chosen as a feasible method. The outcomes show that there are several factors that drive the emergence and existence of freeports. First, the overall expansion of the art market, driven by the increase of HNWI and the emergence of new markets leads to an expansion of the global art buyer's base. Second, the distrust in financial commodities and the financialization of the art market spurs the interest for art as an alternative investment class. The aesthetic and monetary returns increasingly attract art investors. Third, globalization stimulates the international art trade beyond the traditional epicenters. This increase stipulates the emergence of new intermediaries to facilitate the cross border trade. Freeports established themselves as important nodes in the international network of the art world. Results from the case study show that one should consider several tax rates and additional costs when a storage decision is made. However, situations are unique, not only in the content of the freight, but also the personal preference of the client is consequential. The site visit illustrated the operations at Le Freeport Luxembourg. It was discovered that the level of regulation and control is high at this facility, as the Luxembourg Customs Authorities (LCA) are physically present and monitor every operation.

The international art trade, as discussed in chapter 2.3, has been approached from different angles by multiple researchers (e.g. Schulze 1999; Mandel, 2010; Sokolowska, 2015). Schulze (1999) suggests that new trade theory is less applicable to the exchange of unique art between consumers. He also emphasized the trade between very dissimilar countries will be limited as the reciprocity for the appreciation in terms of art (Schulze, 1999). Almost two decades later, it is safe to say that the appreciation of certain art works is globally adopted. Mandel (2010) examined the balance between art investors and art consumers within the international art trade and found that the *average* art buyer is a consumer, meaning that the buyer is not driven by investment motives. However, more recent research on the art market found that 72% buys art for passion with an investment view (Deloitte & ArtTactic, 2016). Up to this point, the research did not investigate the

consequences of the expansion of the international art market and the increase in art investors. The current thesis finds that freeports play a crucial role in these developments.

The phenomenon of art as a commodity for alternative investment has been widely discussed in the existing literature (e.g. Frey & Pommerehne, 1988; Renneboog & Spaenjers, 2013). However, these scholars do not incorporate the effects of transaction costs and taxes into their finding. Within the art market, these costs are significant and should not be overlooked when making investment decisions. Due to high transaction costs and taxes, art is an expensive investment that possibly yields negative cash flows. Preserving and safeguarding the asset is therefore crucial for future resell. Freeports offer a broad range of services, including logistics, infrastructure, insurance, preservation, restoration, but predominantly they offer a safe and secure place to protect a valuable asset against depreciation.

Characteristics of freeports have been discussed in multiple newspapers and other publications. Due to the multiple jurisdictions, rules and tax compliances involved, the physical location of an art transaction is key. Wierbicki and Rottermund (2016) correctly state that freeports are, as their original purpose, still being used to facilitate international trade. The concept of freeports is thus not new, however what is stored inside and their related businesses evolved extensively. Various scholars have addressed the respective theories, concepts and development concerning the art market in their literature. However, a complete review of their emergence and current state of freeports is nonexistent. Therefore, this thesis presents, to the best of my knowledge, the first comprehensive approach on freeports including a literature review, interviews, a case study and site visit.

There are multiple limitations recognizable to the current work. First, due to the discrete, private and confidential nature of the environment in which the freeports operate, a close and throughout examination is challenging. Second, the interviews conducted in this thesis know restrictions as they do not include interviews with the clients of freeports, e.g. the art investor, museums or galleries. Also, as many of the interrogations for the research of this thesis were conducted via telephone or email, the audio recordings are missing which makes transcription impossible. It is suggested here that further research should incorporate the various stakeholders, and increase the number of interviews, in order to make outcomes more generalizable. Third, the case study is limited in that it does not provide a complete overview

of possible scenario's and the related figures. No vast conclusion could be drawn as figures are not generalizable and comparable between respective freeports. Every situation concerning shipping and storing decisions of a client is unique and requires customized advice. Fourth, during the site visit, the use of a camera and recording device was prohibited. However, the notes that were taken during the visit are incorporated in the outcomes.

Multiple publications on freeports negatively depict their business as unregulated, fraudulent and questionable (e.g. The Economist, 2013; Heidenreich, 2015; Bowley, 2016). Although a lot of attention is drawn to incidents concerning fraud and money-laundering in the art market, it should be noted that these aspects are not integral to this market. I agree with the suggestion of Rachel Pownall that there are illicit transactions in every other market and people with immoral intentions operate everywhere (Personal communication, May 12, 2017). However, the insights provided by the interviews and the site visit demonstrate that the level of regulation at Le Freeport in Luxembourg is actually high and that processes are carefully monitored and subjected to the Money Laundering Act and Know Your Customer procedures. It is my interpretation that freeports are in fact regulated to a higher level than one might think. Nevertheless, a note of caution should be taken as these interpretations are based on one single freeport facility and its operations and outcomes are not generalizable to other facilities. Freeports highly differ among each other in terms of regulation and transparency. Since investigations of and site visits to other freeports were beyond the scope of this thesis, suggestions for further research include a scientific comparison of various freeport facilities around the world.

The findings of this thesis corroborate the results of Ditzig et al. (2016), who claimed that freeports are value-creating operations that have established themselves as prominent junctions in the international art market. Their purposes reach further than providing private storage in secretive vaults. The availability of the services offered combined with the inhouse professional knowledge and experience concerning valuation, art advisory and brokerage, makes these facilities serve as 'one-stop shops' for art collectors of all kinds. Furthermore, freeports are able to connect different infrastructures and therefore serve as an integral engine to international trade (Ditzig et al., 2016). Their clientele and operations attract even more businesses, for instance investment companies, banks and insurance companies, to the surrounding regions. As such, freeports operate as accelerators for related businesses, beyond the scope of the traditional art market.

Sceptics of freeports argue that "freeports represent a financial system in which investors have no connection to the art they buy" and "Works of art are created to be viewed" (Segal, 2012). However, as long as art has been created, is has also been made and held in private. With or without the existence of freeports, some collectors will always want to keep their possessions out of sight for various reasons (C. Herrmann, personal communication, May 23, 2017). Under the temporary admission regulation, art can in fact be viewed and exhibited while in storage. The Luxembourg Customs Authority keeps documents and data of the entry and exit of every single object within the facility, preventing art from disappearing. Another criticism on freeports states that "duty-free art" travels within the tax free zones of a "ubiquitous prison [where] rules still apply, though it might be difficult to specify exactly which ones, to whom or what they apply, and how they are implemented" (Steyerl, 2015). In my interpretation, the perception that freeports are principally used to evade taxes is somewhat naïve. Although the benefits of tax suspension can certainly add up considering the value and volume of transactions, the segment of clients that uses freeports is generally not motivated by the benefits of tax suspension. It is surely not their main reason why they turn to freeports.

Considering the available technology, knowledge and experience, art is in an optimal location within a freeport facility. Art is too fragile and precious to endure imperfect climate conditions. Likewise, freeports are vital for museums and galleries with substantial collections that exceed their available wall space. These institutions seek professional storage to protect their possessions for future exhibiting. Simultaneously, the art insurance companies insist on professionally secured storage, before covering the valuables. To ensure that next generations will be able to enjoy the paintings of Van Gogh and Picasso, these works need to be professionally preserved in specialized environments.

6. Conclusions

This thesis presents a contextual approach to the investigation of factors in the art market and related markets that drive the emergence and existence of freeports. Although the concept of freeports, as temporary warehouses for goods in transit, is not new, their importance in the temporary art market is growing. Due the opaque character of this market and the discrete and anonymous practices within the freeports, the literature lacks a comprehensive study on this subject. The increase in the number of HNWI's, who seek to diversify their portfolios by investing in the finest art of the highest segment, the growth of the international art market and the increased interest for art as investment stimulate the rapid developments within the freeport business. To begin with, it can be concluded that there is no evidence for the negative reputation of freeports as unregulated vaults for offshore transactions and money laundering practices.

The second conclusion is that freeports preserve the value of fine art. The ecosystem serves as an 'one-stop shop' that not only offers high-tech systems to preserve and protect valuable collections of art collectors and cultural institutions from depreciation, but also a broad range of art services. They operate in consolidated networks of related businesses and potential buyers, that facilitate further sales. Freeports' clients are attracted by the level of convenience and all-inclusive service offered to handle their valuable assets under one roof.

Further is can be concluded that freeports facilitate international trade. The physical location of the transaction is vital when trading internationally, considering the various tax structures and jurisdictions per country. The benefits of the tax suspension zone facilitate trade and add extra incentives to store art inside the facilities. In order to make a prudent investment, to secure the asset and to resell it at a profit, investors gratefully exploit the assistance and services offered by freeports.

Finally, freeports are accelerators for related businesses. Value is created by the freeports position in and relationship to the network of global art markets, rather than the actual value of the art that is stored inside. Within these nodes international wealth is accumulated, which invites art related businesses such as fine art logistic companies, art consultants and insurance companies. Additional investors are attracted to these hubs, resulting in financial centers near the freeport locations.

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Appendix I

Interview guide

The interviews that will be conducted are in-depth and unstructured. This means that no formal list of questions is followed during the interviews. However, the following serves as a guide that can be used during the interview to give direction to the interview. These questions serve as an indication for suitable questions. Not all interviews will cover the exact same questions, the content of the interview will depend on the expertise of the interviewee. The research aims to investigate which factors in the art market and related markets drive the emergence and existence of freeports. The questions are organized in four themes that will serve the contextual approach of the research. The last section questions the interviewees personal opinion.

1. Context

- How do freeports work?
- Why do freeports exist? What drove/drives their emergence?
- Do freeports in different countries work differently?
- What constitutes the success?
- What are the main reasons one stores its art works in a freeport?
- What are the main threats of storing?
- What objects are stored most frequently?
- Why this Luxembourg?

2. Business model

- What is the business model of Le Freeport?
- Which different parties are involved in the business of the freeport
- How do you keep track of what is inside? Do you need to keep track of what is inside?
- Who are the clients?
- Which different services are offered?

- Why do people choose Le Freeport?
- Can anyone store here?
- How is fraud prevented?

3. Operations

- What is the supply chain of the freeport?
- How is the relationship with the operating companies?
- Do collectors avoid transaction costs? What is the margin for a collector to store?
- What are the advantages to store at Le Freeport Luxembourg?
- On average, how long does an art work stay inside the storage?
- What are the import/export/VAT costs when a works enters and leaves the freeport?
- What happens when an art work comes in?
- How much does is cost to store? To what extend do the prices for storage depend on the characteristics of the art work? (size, materials, provenance, market value etc)
- How are operations regulated?
- What is the level of transparency?

4. Impact

- What does their existence say about the art market?
- What is their influence on the international art market?
- What function does Le Freeport Luxembourg fill in the international art trade?
- How do freeports influence the art trade?
- Is it beneficial to store art?
- What is the effect of transaction costs on the emergence of freeports?
- What explains the success of Le Freeport Luxembourg?

What do you personally think?

- Does the emergence of freeports change the way in which you personally do business in the art world?
- Do collectors have a connection with the art they store?
- Do freeports change the way in which collectors treat art?

- What factors do you think have led to the emergence of freeports?
- Do you think that freeports will harm the aesthetic value of art?
- What do you think of the fact that art is stored away instead of enjoyed? Is it moral?

Appendix II

Overview of the respondents

The art professionals that are interviewed in the scope of this research include the following:

- Carole Schmitz Customer Relationship Manager, Le Freeport Luxembourg Face-to-face interview, Luxembourg, May 23rd, 2017 Contact: cschmitz@lefreeport.lu
- Claude Herrmann Executive Manager, Fine Art Logistics Natural Le Coultre S.A. Face-to-face interview, Luxembourg, May 23rd, 2017 Contact: cherrmann@falnlc.lu
- Rachel Powall TEFAF Chair in Art Markets, Art Economist, Professor Maastricht University Telephone interview, Amsterdam, May 12th, 2017 Contact: r.pownall@maastrichtuniversity.nl
- Herbert van Litsenburg Head Benelux markets, The Fine Art Group Telephone interview, Amsterdam, May 15th, 2017 Contact: hvanlitsenburg@fineartgroup.com

Other sources

The contacts below have been very valuable for this thesis. Their knowledge and experiences helped towards a better understanding of the presented topic

- Adriano Picinati di Torcello Director, Management Consulting, Art & Finance Coordinator, Deloitte General Services
- Alessia Zorloni Cultural economist and consultant specializing in the art markets
- Alexander Strengers Head Corporate Collection, De Nederlandsche Bank
- Andrew Hare Tax Department, Sotheby's London

- Carole Schmitz Customer Relationship Manager, LE FREEPORT Luxembourg
- Claude Herrmann Executive Manager, Fine Art Logistics Natural Le Coultre S.A.
- Elisabeth Wolf Hasenkamp Holding GmbH
- Filip Vermeylen Professor Erasmus Universiteit Rotterdam
- Herbert van Litsenburg Head Benelux markets, The Fine Art Group
- Jessy Verhoeven Founder of The Art Connector, former business manager at Van Gogh Museum Consultancy
- Leo Kamp AXA ART Netherlands, Country Manager
- Louise Hamlin Director & Founder of Art Market Minds
- Melinda Melrose Post-War Contemporary Art Business manager, Christie's London
- Micaela K. Saviano Private Wealth, Deloitte Tax, LLP
- Niek Groot Manager Gallery / Commercial department, Crown Fine Art
- Paulina Cramer Post sale services, Christie's Amsterdam
- Rachel A. J. Pownall TEFAF Chair in Art Markets, Professor School of Business and Economics, Maastricht University
- Wim Ledegen Katoen Natie Art