

# **Art as an Investment from a Historical Perspective**

# Art as an investment

- Idea to invest in artworks attested for a long time with “funds” to invest in art. “La peau de l’ours” art fund created in 1904 (paintings resold in 1914)
- Interest of art as an investment need to take into account the following points
  - Asset paying no dividend: profits reaped from resale only
  - Artworks are heterogeneous by nature!
  - Illiquidity of sales: not a daily market with daily transactions.
  - Very high transaction costs and price opacity
  - No economic model to assess the “fundamental” value of the artwork (≠ shares and DDM for example)

# Art as an investment

- Need to understand factors driving prices (conspicuous consumption, death of the artist, income inequality, stock markets movements...), characteristics of the artwork
- Need to assess whether art as an investment may be more interesting in some period than in others?
- Before deriving risk-return characteristics and correlations, need to construct an index for heterogeneous goods (// other markets: real estate, cars, etc.)

# Simple comparison?

- Possible to compare the price of any two paintings (converted in \$ of the same year)?



**Portrait of Dr Gachet – Van Gogh  
– 127,3 million \$ (82,5 at sale)-  
1890, Christie’s (NY), 15 May 1990**



**Portrait of Adèle Bauer I – Klimt - 135  
millions \$ - 1907.  
Private sale 18 June 2006**

# Unconvincing

- Not very convincing because:
  - Different artists
  - Different form of sales (auction house versus private sales)
  - High end of the market (may not be representative of the market as a whole)
  - Different size
  - Only two observations!
- Need to find a method to address these issues

# Methodology I: Repeated Sales

- Same exercise as before but with the following example
- Picasso Print “Repas frugal”
- Sold for 374 000\$ at Christies’ in NY, 19 November 1990 and for 189 980\$ at Christies’ in London two weeks later (Pesando, 1993).
- Much more credible than before!



# Methodology I: Repeated Sales

- Tracking the price evolution of a similar work resolves the problem of artworks' heterogeneity since we are looking at the same painting (same painter, same topic, same size etc...) unless it has been altered by time
- Possible to create a sample of so-called repeated sales (to increase the number of observations)
- On basis of this sample compute the average price evolution over time and then construct an index

# Perfect solution?

- Not necessarily it has some shortcomings
  - Paintings take time to come back on the market (proportion of paintings of repeat-sales with respect to all sales is 7% after 10 years, 13% after 20 years and 15% after 30 years, Ginsburgh, Mei and Moses, 2006) => limited sample
  - Paintings coming back on the market may represent a biased sub-sample (failed artists do not reappear)
  - The methodology does not allow assessing the impact of a given characteristic on prices

# Methodology II: Hedonic Regressions

- Imagine we have two exact same paintings but one is larger than the other, On basis of their price we could determine how size affects the price.
- Hedonic regressions generalize this approach and treat artworks as a “bundle” of characteristics
- Characteristics typically include: name of the artist, size of the artwork, dated or signed work, topic, technique, support, attribution, exhibition history but also death of the artist, fame as viewed in art history dictionary (length of entry) etc...

# Methodology II: Hedonic Regressions

- Index constructed on basis of “time variables” (what is not explained by the model and is linked to a period)
- Positive points: allows using the whole set of artworks, allows identifying the contribution of given characteristics to the price
- But at the cost of intuition
- Risk to omit variables and thus to have a biased estimation, need to define a functional form

# Comparison

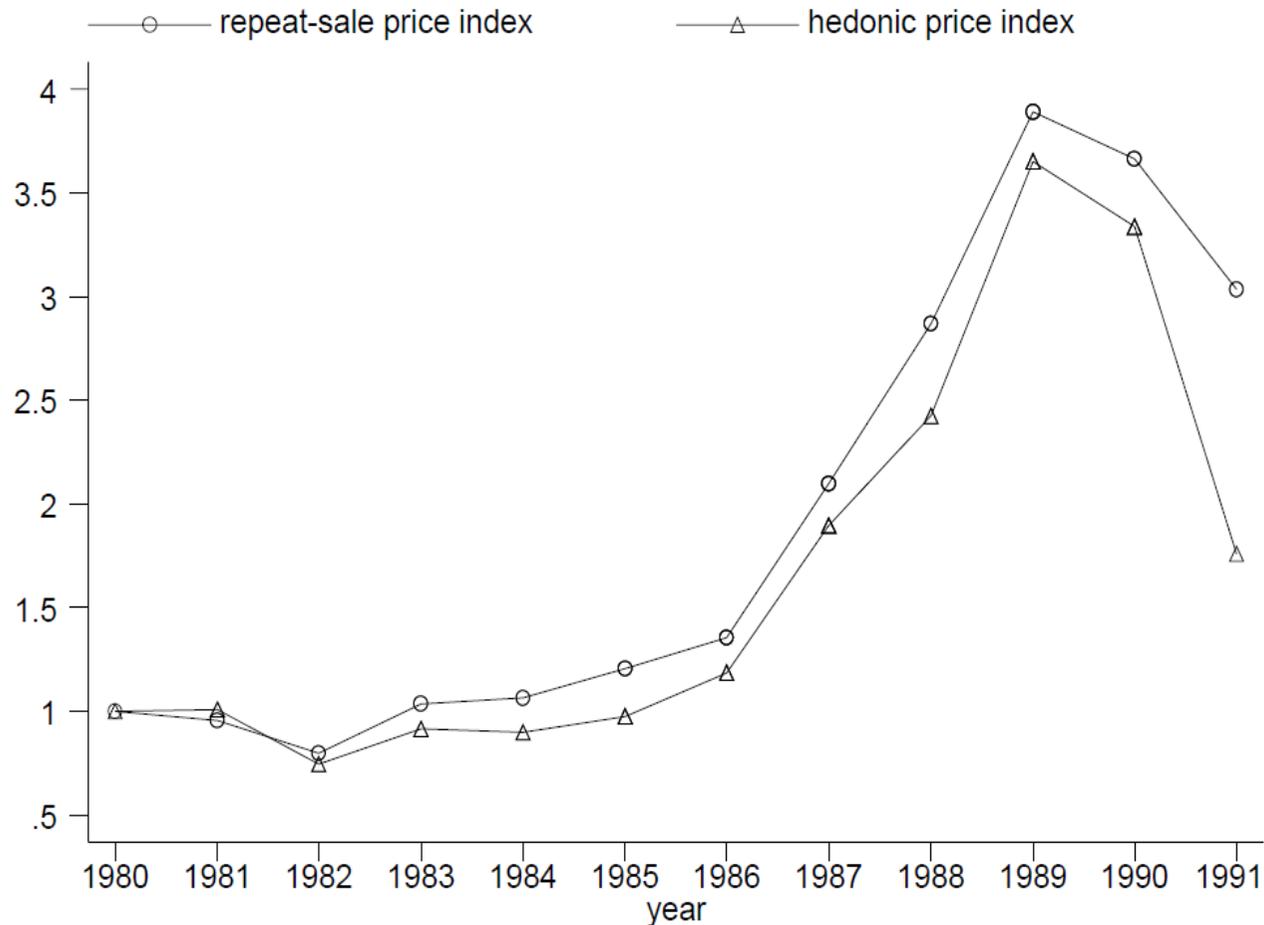


Figure 1: Repeat-Sales and Hedonic Indices for Impressionist Art

Source: Ashenfelter et Grady (2002)

# Characteristics

- Prices are highly influenced by the painter (no surprise)
- Are a positive function of size but negative function of size squared (intuitively the bigger the better but up to a point)
- Are positively influenced by signature, date, past exhibitions, fame in dictionary, provenance
- Are negatively influenced by attribution qualifiers
- Are positively linked to income inequality

# Death effect?

- “The moment he [the artist] dies, his pictures, if they are good reach double their former value”, Ruskin, 1889, p. 122.
- Death: end of production => limit of supply
- Ekelund, Ressler et Watson (2000): death effect
- Renneboog and Spaenjers (2009): slightly positive effect in one specification, negative in the other
- Reputation effect. Effect function of fame at death (Ursprung and Wiermann, 2008)



# Art Yearly Return and Volatility

Authors	Method	Sample size	Period	Annual Return	Volatility (standard deviation)	Medium
Baumol (1986)	RSR	640 obs.	1652 – 1961	0.55%		Paintings
Pesando (1993)	RSR	27,961 obs.	1977 – 1992	1.51%	19.94%	Prints
Chanel et al. (1996)	HR	1,972 obs.	1855 – 1969	4.9%		Paintings
Goetzmann (1993)	RSR	3,329 obs.	1715 – 1986	5.2%	37.2%	Paintings
Mei and Moses (2002)	RSR	6,114 obs.	1900 – 1999	5.2%	35.5%	Paintings
Renneboog and Spaenjers (2013)	HR	1,100,000 obs.	1957 – 2007	3.97%	15.21 %	Paintings

# Art as an investment

- Long term risk-return trade-off of art: Art poor investment
- Correlation with equities? Mixed results: Goetzmann (1993) high correlation; Mei and Moses (2002) less correlation, Renneboog and Spaenjers (2013) no correlation!
- Poor investment but :
  - Consumption good (*aesthetic dividend*)
  - Conspicuous consumption (Mandel, 2009)

# What about during times of distress?

## Presentation:

- Evolution of the French art market between 1911 and 1947 (largest market at the time)
- Quick overview of WWI and Great Depression,
- Focus on art markets in occupied countries during WWII (France, Netherlands and Belgium)

**ANOTHER GREAT  
ART SALE COMING**

The Collection of Marczell de Nemes of Budapest Soon to be Sold in Paris.

**MANY FINE OLD MASTERS**

Works by Rembrandt, Rubens, Van Dyck, Botticelli, Hals, and El Greco in the Collection.

Special Cable to THE NEW YORK TIMES.

*The New York Times, June 1<sup>st</sup> 1913*

# WWI

- WWI => market comes to a halt (David, 2016)
- Increase in liquidity risk



# Great Depression

- Market crashes between June 1929 and June 1934 (David, 2016)
  - 1929 crisis affects the luxury sector (Monnier, 1995)
  - 1/3rd of art galleries forced to go bankrupt (Feliciano, 1995)
  - Daniel-Henry Kahnweiler: “Sales are almost impossible”
  - Deflationary policies leading to high export prices worsened the situation for art dealers.

# What about WWII ?

- Art market in occupied Europe (France, Netherlands and Belgium)
- How does the market behave during the war in an occupied country?
- How do prices of artworks compare with other goods?
- How do the German “degenerate art” policy affect the market?

# Occupied France: a boom!

« Les seules issues possibles au torrent des disponibilités sont offertes par l'Hôtel des Ventes et par la Bourse. A l'Hôtel les prix demeurent libres et vous savez à quelles surenchères donnent lieu les moindres objets mis en vente »

Assemblée Générale Compagnie des Agents de Change, 21 Décembre 1942

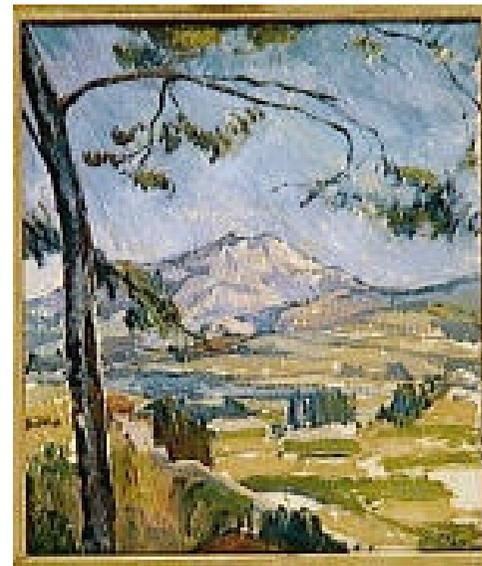
# Art market

- Literature mostly dedicated to the fate of looted artworks but also:
  - Increase in the number of galleries
  - Arrival of new actors on the market: German officials, German museums, French “nouveaux riches”
- German rule
  - Competition between rulers (Kunstschutz, Embassy, Goebbels, Rosenberg and Göring)
  - Arianization of some major galleries and looting

# A booming market

- Drouot's most active years ever and record breaking sales such as the “succession Viau”
- Important number of modern fakes (Assouline, 2005)

« Cezanne », *La Vallée de l'Arc et la montagne Sainte-Victoire*

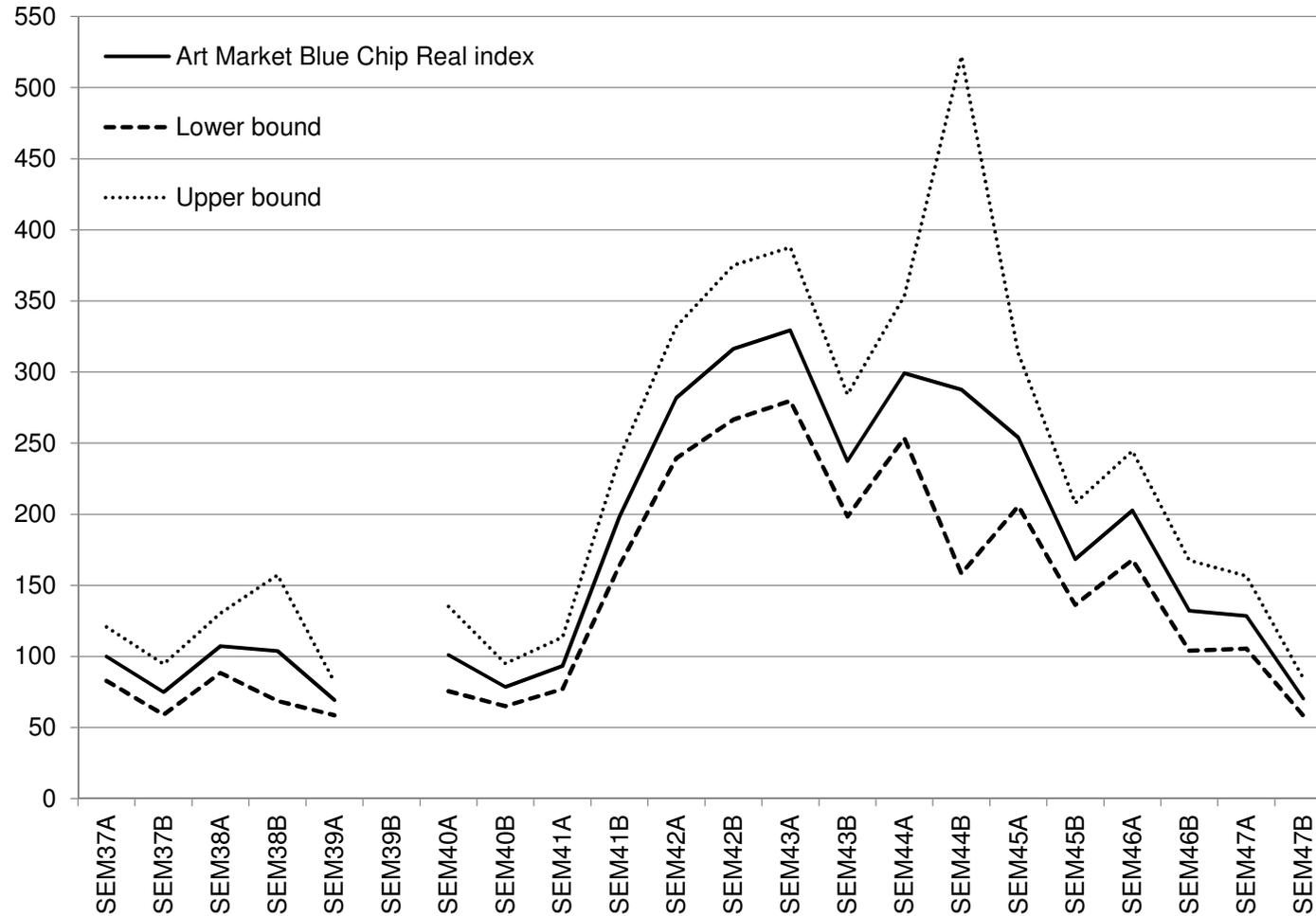


# Price evolution?

- Data source: *Les ventes de tableaux. Aquarelles, gouaches, dessins, miniatures à l'Hôtel Drouot. Répertoire et prix d'adjudication.* For four years (1940-41; 41-42, 42-43, 43-44). End in June 1944.
- Total of more than 25 000 paintings sold over the four years (See Oosterlinck, 2017)
- Distinction between liquid (blue-chip) artists (more than 3 sales during the war) and others



# Price evolution



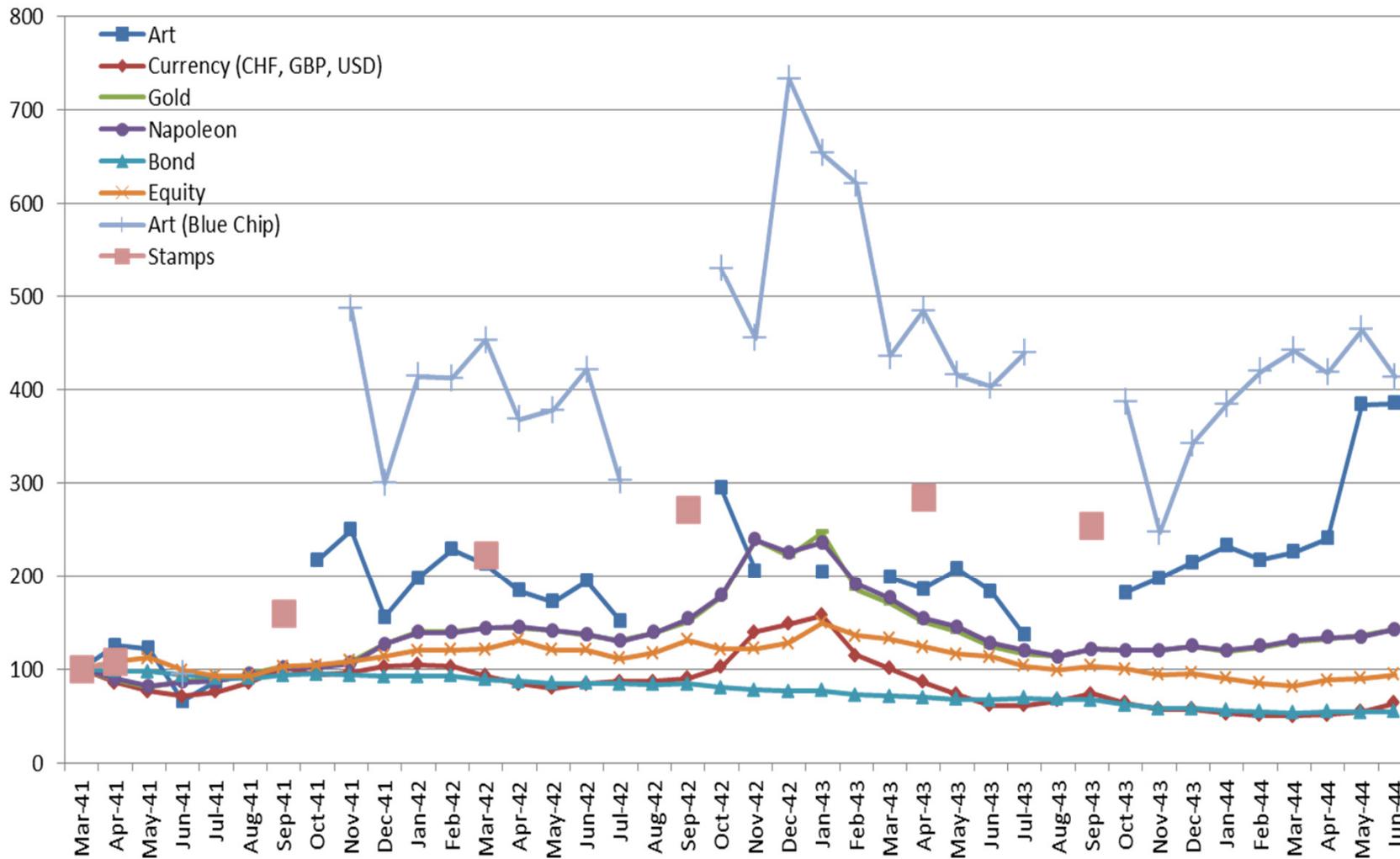
Source: Oosterlinck (2017)

© Kim Oosterlinck

# Art in occupied France

- Need of some comparison
  - Bonds => State Bond 3% Rente
  - Stock Market => index created by Le Bris and Hautcoeur (2010)
  - Gold (Napoleon, Sovereign, US Dollar) => data from the black market in Paris published shortly after the war (Vigreux, 1948)
  - Foreign Currencies (CHF, \$, £) => data from the black market published shortly after the war (Vigreux, 1948)

# Comparison



Source: Oosterlinck (2017)

© Kim Oosterlinck

# Art as wartime investment?

	Monthly Return (March 1941-May 1944)	Standard Deviation	Sharpe Ratio	Beta
<b>3% Rente</b>	0.22%	1.23%	NA	0.09
<b>Equity</b>	1.81%	6.42%	0.25	1
<b>Foreign exchange (£, USD, CHF)</b>	3.04%	11.94%	0.24	0.43
<b>Gold Napoleon</b>	3.14%	10.06%	0.29	0.44
<b>Gold</b>	3.26%	11.27%	0.27	0.86
<b>Art</b>	6.32%	22.73%	0.27	0.37

Source: Oosterlinck (2017)

# What explains such a boom?

- Defeated countries plundered (clearing, occupation costs, exchange rate)
- Occupying forces almost unlimited means
- State can rely on three tools to finance itself: money creation, taxes or bond issues
- Money creation and the bond emission to soak it up but wartime inflation!
- Limited investment opportunities...

# What explains such a boom?

- Artworks in wartime??? Contemporaneous sources (Léon-Martin, 1943) and authors (Le Boterf, 1974; Moulin, 1967; Feliciano, 1996; Riding, 2010)
- German demand (looting but also buying)
- Important black market and arrival of new people (nouveaux riches) with money to invest
- French demand
  - ⇒ Fear of inflation and limited real goods
  - ⇒ Need to hide illegal profits (black marketeers),
  - ⇒ Need to flee the country

# Art as wartime investment?

- Risk-return? Usually, risk compensated by a higher return. Which risk? Normal Times well documented but during War Time?
  - Inflation
  - Monetary reform
  - Legal Risk (Illegal assets)
  - Liquidity (Abroad)
  - Market intervention
  - Discreet assets (small and easily transportable assets that can store a large amount of value)

# Art as wartime investment?

	Inflation Proof	Legal	Liquidity (abroad)	Market Intervention	Discretion
<b>3% Rente</b>	No	Yes	No	Yes	No
<b>Equity</b>	+/-	Yes	No	Yes	No
<b>Foreign exchange (£, USD, CHF)</b>	+/-	No	Yes	NA	Yes
<b>Gold Napoleon</b>	Yes	No	Yes	NA	Yes
<b>Gold</b>	Yes	No	Yes	NA	Yes
<b>Art</b>	Yes	Yes	+/-	+/-	Yes
<b>Real Estate</b>	Yes	Yes	No	NA	No

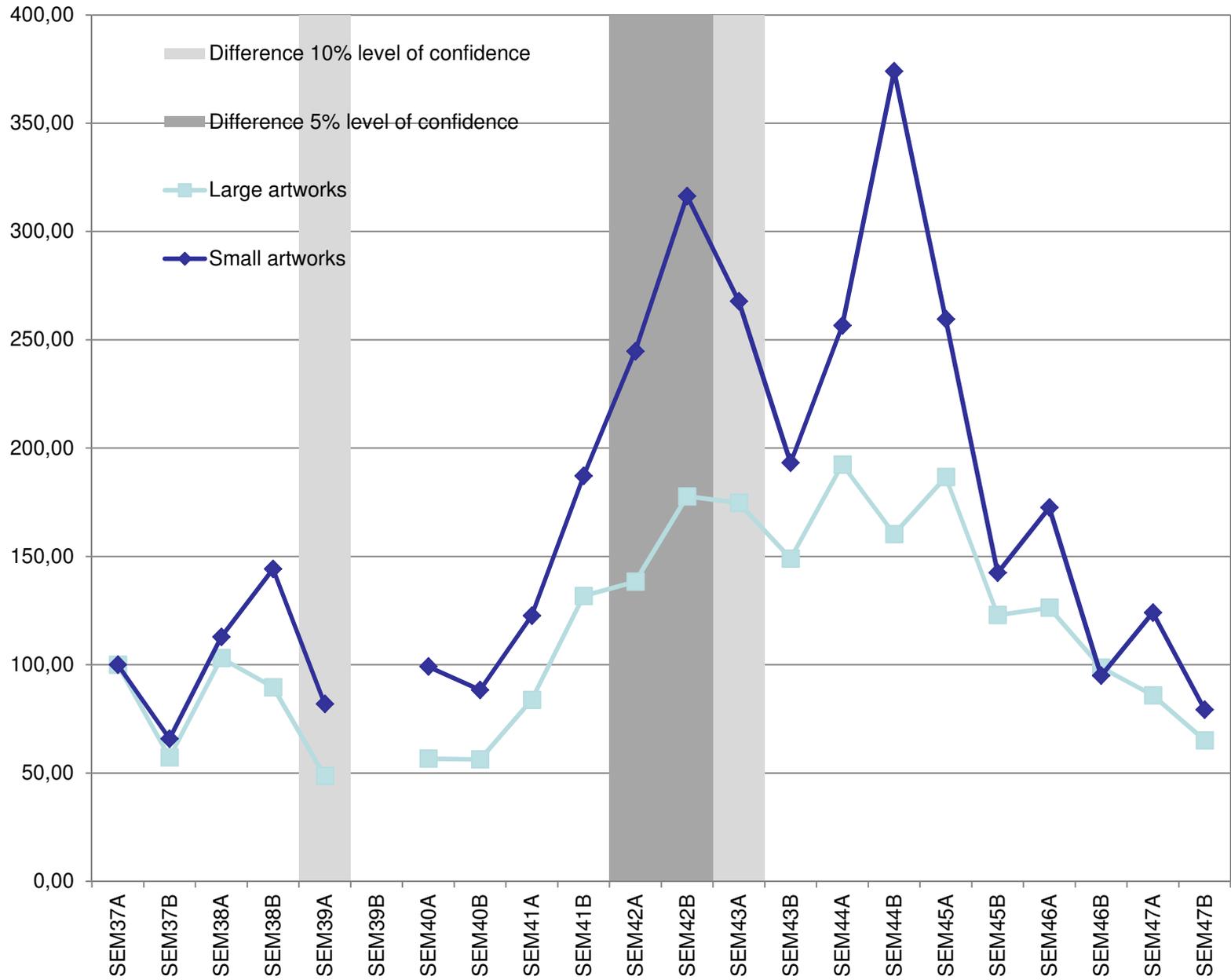
Source: Oosterlinck (2017)

# Discretion?

- Black Market Protagonists' interest for paintings mentioned in a large and recent literature dedicated to the black market, see also Monglat in Marcel Aymé's *Uranus*
- Interest for art mostly to hide illegal profits and this well before the Liberation
- People willing to flee France may also be interested in artworks
- All these elements may increase demand more for small than large artworks

# Can we test this?

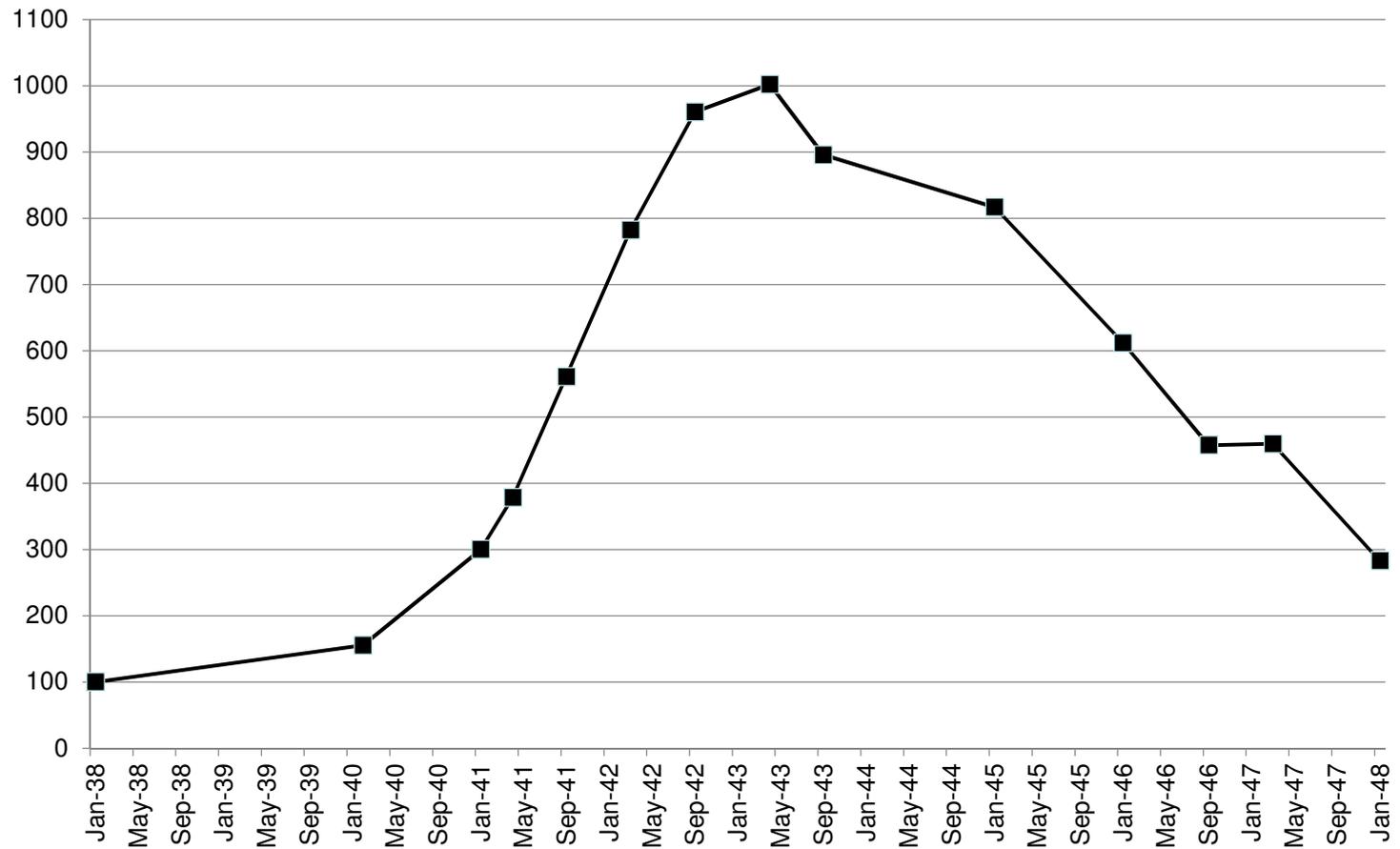
- If people search for discrete assets then:
- Paintings easier to hide should have a different dynamic than large ones (here test with 1<sup>st</sup> and last quartiles)
- Prices of other discreet assets should jump
- Difference should be highest when;
  - Black market was most active
  - Fleeing was still more or less possible



# Other assets?

- Not limited to artworks, also true for jewels or collectible stamps (maybe less so for gold coins), see Rivet (1947):
- “Enfin, une spéculation extraordinaire s’est exercée à diverses reprises sur les timbres-postes et les pierres précieuses, valeurs se présentant sous un faible volume et pouvant se dissimuler et s’échanger facilement.”
- To be sure, how did stamp prices evolve?

### Stamp Real Index



Source: Oosterlinck (2017), data catalogues Thiaude (1937-1947)

# The price of degenerate art

- 1936-1937: turning point for the visual arts in Germany (Critics “ban”, decision to have an exhibition on “Degenerate” art)
- Degenerate art: no precise definition
- But are de facto considered as degenerate the Jewish or pro-Soviet painters as well as the painters belonging to Abstract movements, Cubism, Expressionism, Fauvism, (Impressionism), Post-Impressionism

# The price of degenerate art

- Entarte Kunst exhibition: huge “success”
- First step in Nazi policy aimed at purging the museums
- After 1938, distinction between:
  - Degenerate artworks which can be sold or exchanged
  - “Useless degenerate artworks”
- 1939: auction sale of the first group in Lucerne (125 artworks, 5 million CHF 38 lots unsold), burning of part of the second group (fire exercise, 5000 artworks destroyed)

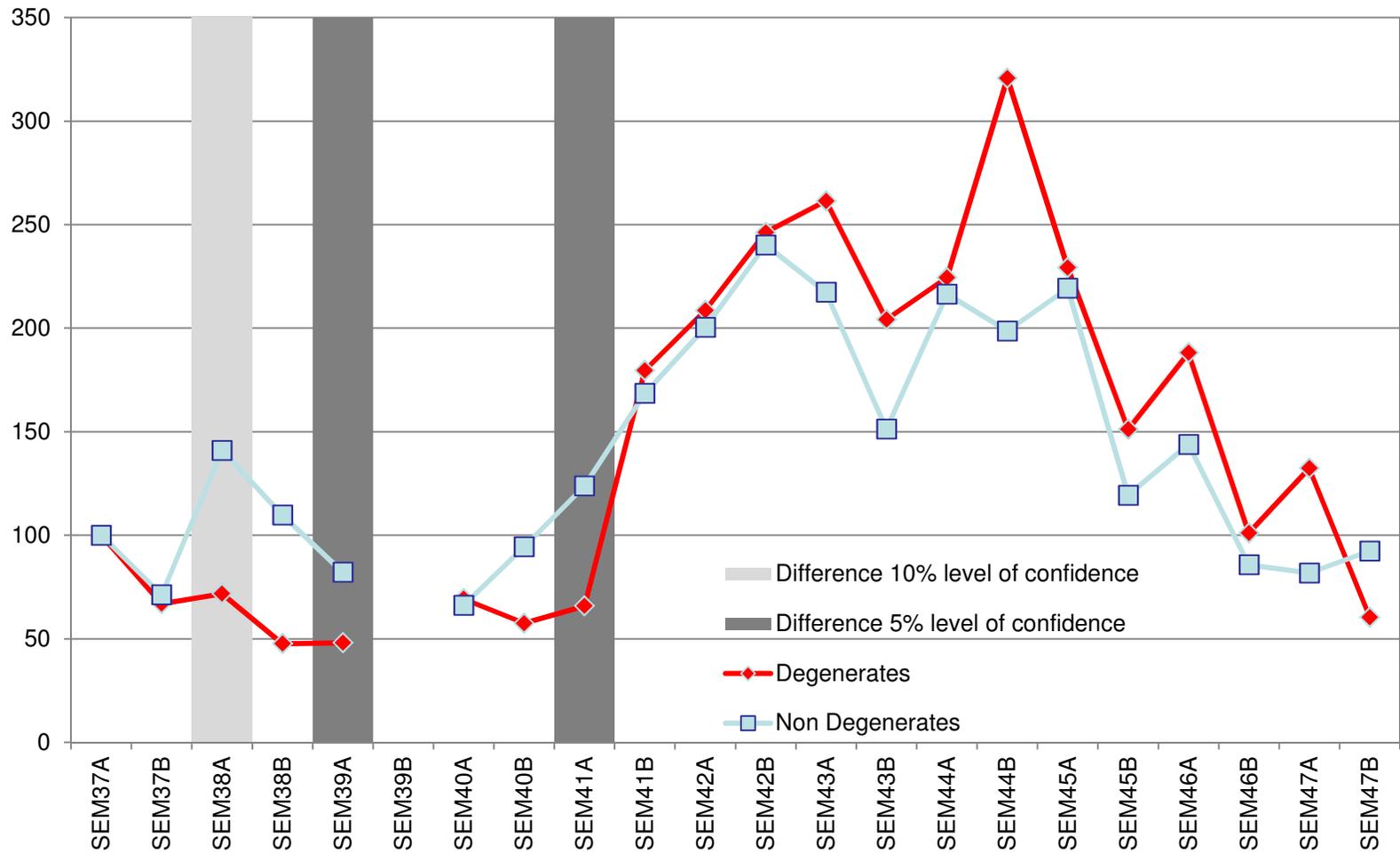
# The price of degenerate art

- Degenerate art in France? Authorized but (re)export to Germany forbidden!
- Hitler => Mental well-being of Frenchmen should not be take into account
- German interest to let Frenchmen “degenerate themselves” (Bertrand Dorléac 1993)
- However, destruction in July 1943 of 500/600 artworks (Klee, Picasso, Léger, Ernst, Miro...)

# The price of degenerate art

- Conspicuous consumption one element of value in art markets
- During WWII in occupied France conspicuous consumption of “degenerate” artworks would have been counter-productive as long as the occupation was expected to last.
- Is this visible in artwork prices?

# Degenerate art...



Source: Oosterlinck (2017)

# Boom a French phenomenon?

- No! David, Euwe, Goldman, Oosterlinck (2017)  
=> boom on all markets in occupied Western Europe
- Netherlands: Euwe (2007), Euwe and Oosterlinck (2017a and b)
- Belgium: Milo (1943), Devillez (2002), David, Goldman and Oosterlinck (2014)
- But was the boom similar?

# Occupied Netherlands

‘Im Augenblick ist die Lage wie folgt: Eine oder mehr Gruppen kaufen alles was sie erhaschen können. Preise spielen gar keine Rolle!’

Hans Posse, August 1940

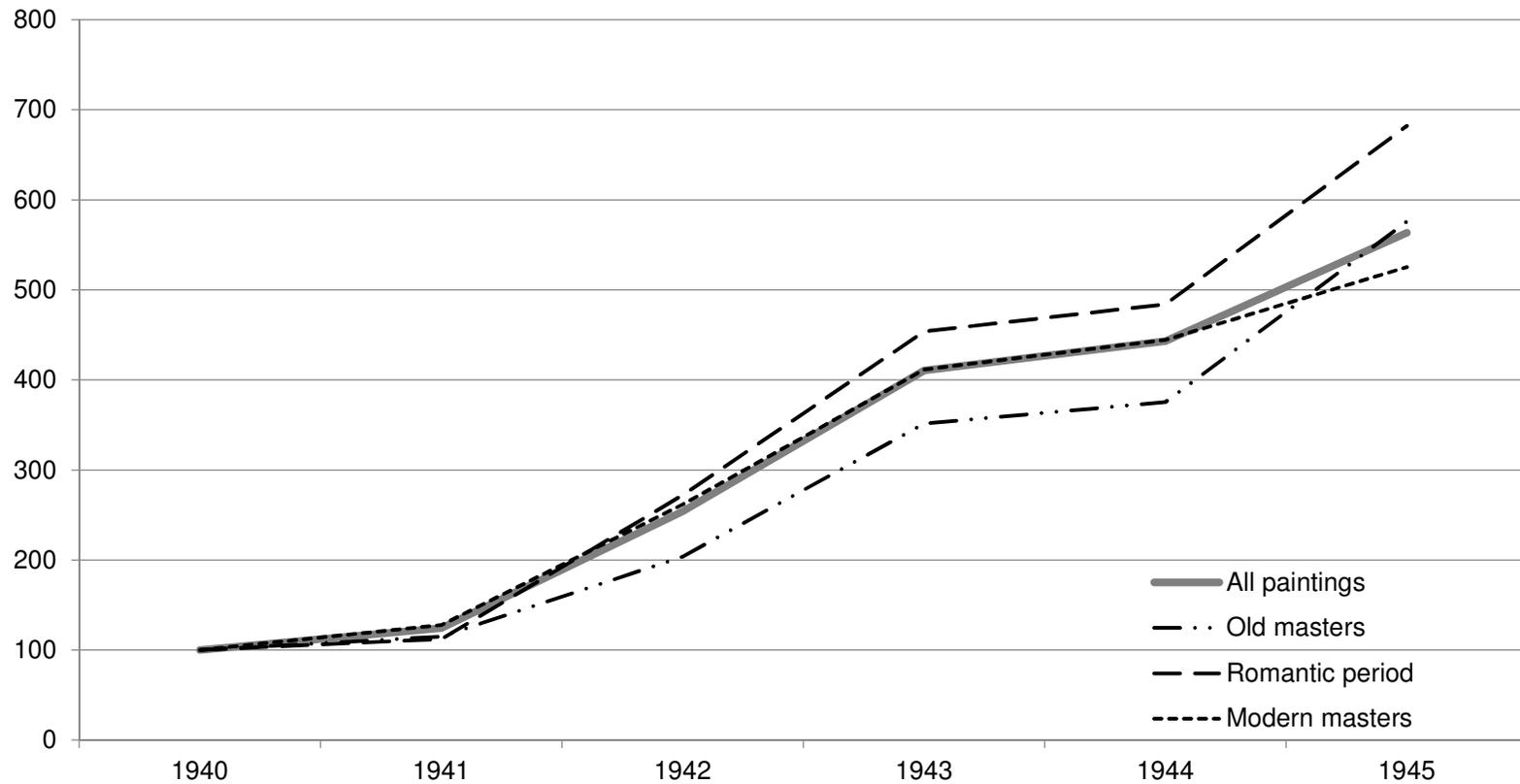
(Sonderbeauftragter Hitlers für den Aufbau der Sammlung des Sonderauftrages Linz („Führermuseum“))

‘Im vergleich der Vorkriegszeit sind die Preise für Gemälde enorm gestiegen.’

Sicherheitsdienst, *Meldungen aus den Niederlanden*, 1942

# Price Evolution

Figure 1: *Price development of paintings sold at Mak van Waay, period 1940-1945. In constant prices, indexed.*



Source: Euwe and Oosterlinck (2017)

# Demand

- Black market
  - Netherlands: Euwe (2007), Euwe and Oosterlinck (2017 and b)
  - Belgium: Milo (1943) enriched farmers with no taste driving the prices up. Good targets for fakes (Elslander, 1954)
- Low quality and Fakes
  - In Belgium => Magritte fake Braque, Picasso and di Chirico (Devillez, 2002), Milo (1943) explicitly mentions many fakes attributed to Louis Artan. Elslander (1954), “ugly daubs”

## Euwe and Oosterlinck (2017), Fakes signaling!

Artist	Description	Signed?	Date
Leickert (?), Ch.	View on the Kromme Rijn with the Utrecht Dom on the horizon. On the right bank a watermill.	Fully signed	Oct-40
Dutch School (19 <sup>th</sup> century)	Large hilly landscape with a drover and cattle.	Signed: B.C. Koekkoek	Oct-40
Unknown master	Flock returning to the sheep pen with shepherdess.	Signed: A. Mauve	Nov-42
Teniers, D. (copy after)	A group of peasant sitting in front of an inn.	Fully signed	May-41
Bergen, Dirk van (1640-1690)	Italian landscape. In a mountainous landscape a loaded oxcart is stopped by a horseman. Some sheep flee, while the oxen get disordered.	Signed: A. v.d. Velden	Jun-42
Koekkoek, B.C. (in the manner of)	Landscape with tall trees and a drinking hole for cattle where two riders are watering their horses.	Signed: B.C.K.	Nov-42
Dutch School (17 <sup>th</sup> century) (in the manner of Jan van Goyen)	Flooded land. Amidst the water stands a lonely tower ruin. In the foreground fishermen casting their nets. On the rowboat marked with the monogram of Van Goyen. According to an expertise by Prof. Dr. W. Vogelsang a work by J. van Goyen.	Monogrammed	Apr-44

# Demand

- Art as hedge against expected inflation
- Belgian artist, Alfred Bastien in November 1940: many people were buying art to “get rid of their money”(Montens, 1990)
- Netherlands: Inge Wijde (1943), Euwe, 2007
- Monetary reforms => impact on art market in Belgium and Netherlands (Montens, 1990, Euwe, 2007) and also after the war (David and Oosterlinck, 2015)

# Conclusion

- Art market: inefficient market!!!
- Returns: consensus that these are modest at best
- Consumption: one of the main return for art investors
- But also value as discreet assets (now tax evasion)
- Volatility extremely high
  - Vermeer and El Greco: rediscovered
  - On the other hand fallen from fashion artists...