

Financial returns and price determinants in the Australian art market, 1973-2003

2005 Helen Higgs & Andrew Worthington, Queensland University of Technology

Some consider art an investment. Indeed, several self-managed superannuation funds hold paintings in their portfolios, although regulations for this have tightened in recent time

Higgs & Worthington recently created an index to track the overall price movement of Australian paintings, based on 37,605 auction sales from 60 well known Australian painters from 1973-2003

Building an index simply from averaging the annual sale prices of paintings each year wouldn't correct for differences in artist, physical characteristic, etc. The authors instead used a "hedonistic" approach whereby they valued paintings as a collection of attributes

- **This allows us here to summarise both thirty years of "appreciation" (price increase) of Australian art and also the factors that determine price**

Unless you capture financial reward for the aesthetic value of art (eg. through renting), this and other published work, suggests that other assets provide a higher, long term total return

- **As in any market, there will always be speculators who believe they can beat the market through timing and spotting undervalued artists (both those featured here, and the up and coming who are not represented in this study)**
- **Others simply enjoy art and would be pleased to note that prices have beaten inflation**

Investment characteristics of art

Not liquid (delays typically exist in selling)

Not divisible (as with direct property, you can't sell a portion of the piece)

High transaction costs (selling costs can range from 10-30%)*

Limited opportunity for earnings (no dividends, no interest, limited rental opportunities)

Asymmetry of information (sellers may know more than buyers)

Risk factors

- **Physical risk of damage (insurance can lower returns about 1% pa)***
- **Reattribution and fraud (work could be attributed to a different artist)**
- **Fashion (eg. artist or school become less in demand)**



Higher risks and the typically unrewarded aesthetic value drives overall returns lower

- **Art may also be considered a consumption good, which explains its correlation with other major investment indices**

* transaction and insurance costs not factored in the following returns, this would further reduce estimated returns

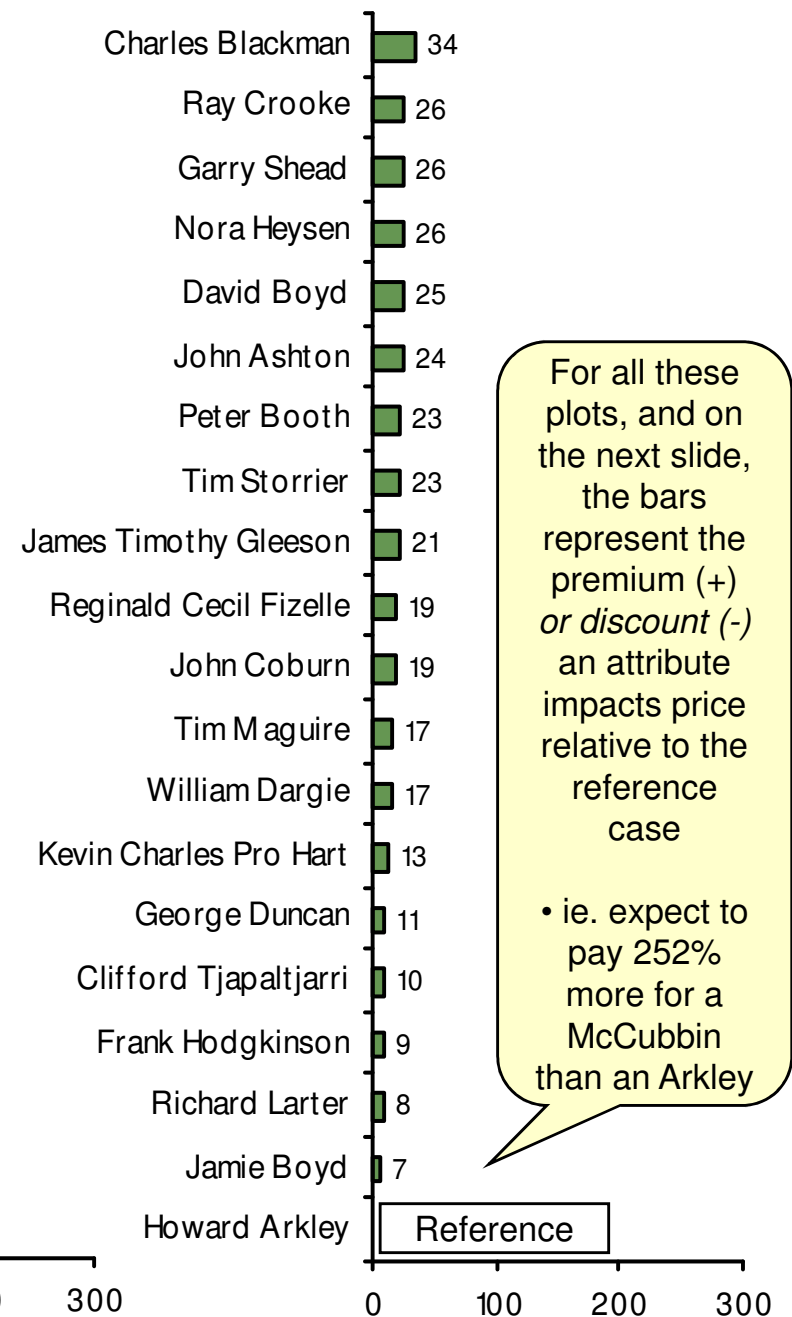
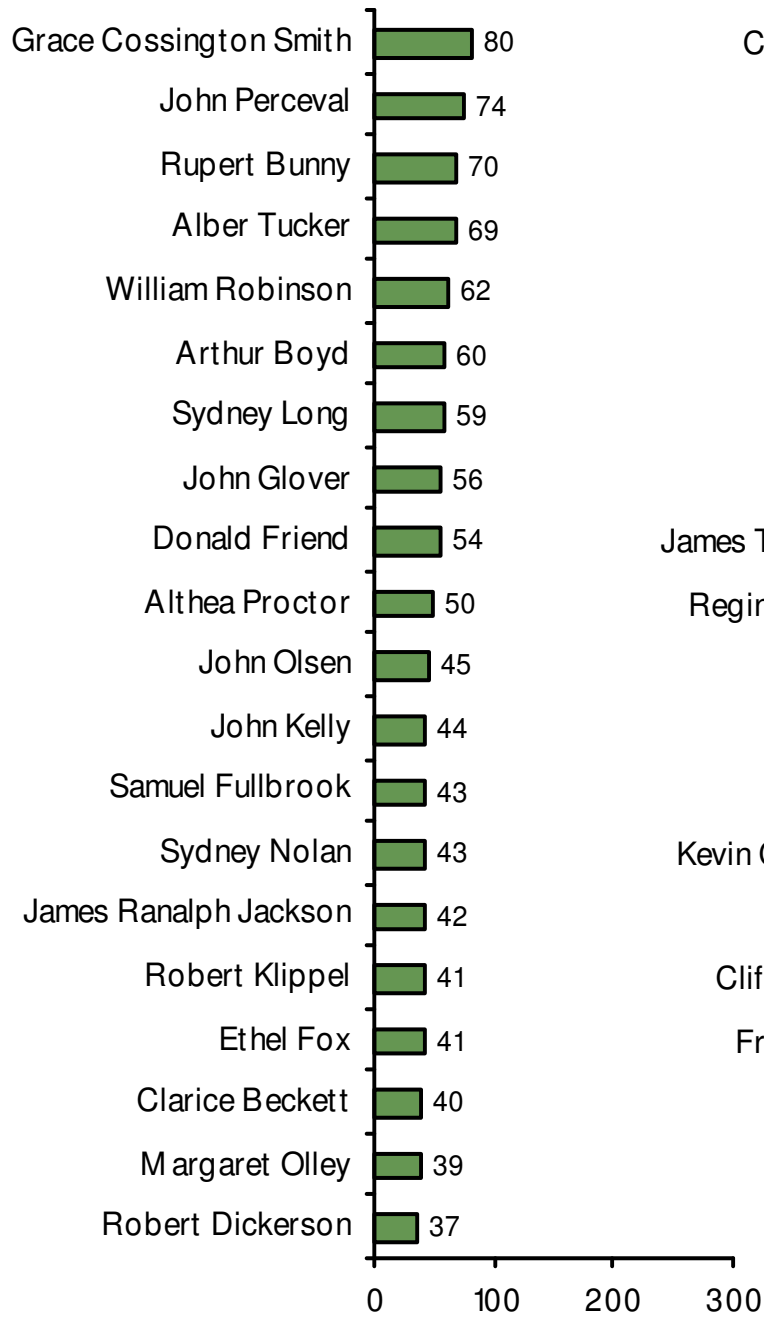
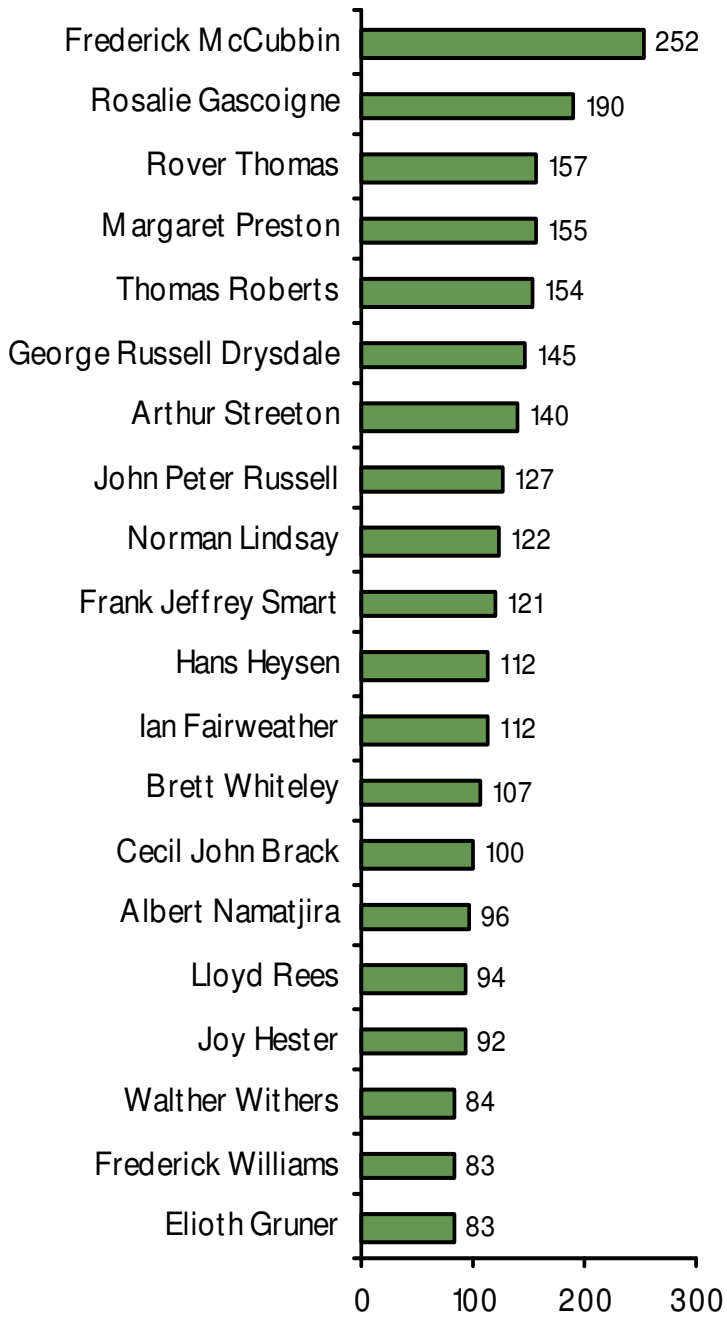
What determines price?

To construct their index the authors were able to explain the price of a painting at auction according to a number of factors

- **Who the artist was (*see next*)**
 - **The most influential factor**
 - **A McCubbin commands a 252% price premium compared to the standard, reference work of Howard Arkley**
 - **A deceased artist commands only a 1% price premium**
- **The medium painted on (*see next*)**
 - **Longer lasting oil and acrylic command a 6% price premium**
- **The auction house who sold the painting (*see next*)**
 - **Which may account for a modest 3% swing in price**
- **Size**
 - **Bigger is better, up to 6.7 m². Afterwards the price falls, as only galleries become able to hang large pieces**

Unfortunately for speculators, there is no information on which artists, mediums, etc... will appreciate faster in the future (ie. represent buying opportunity). It also isn't clear what are the prices or price trends for lesser known artists

% price premium by artist

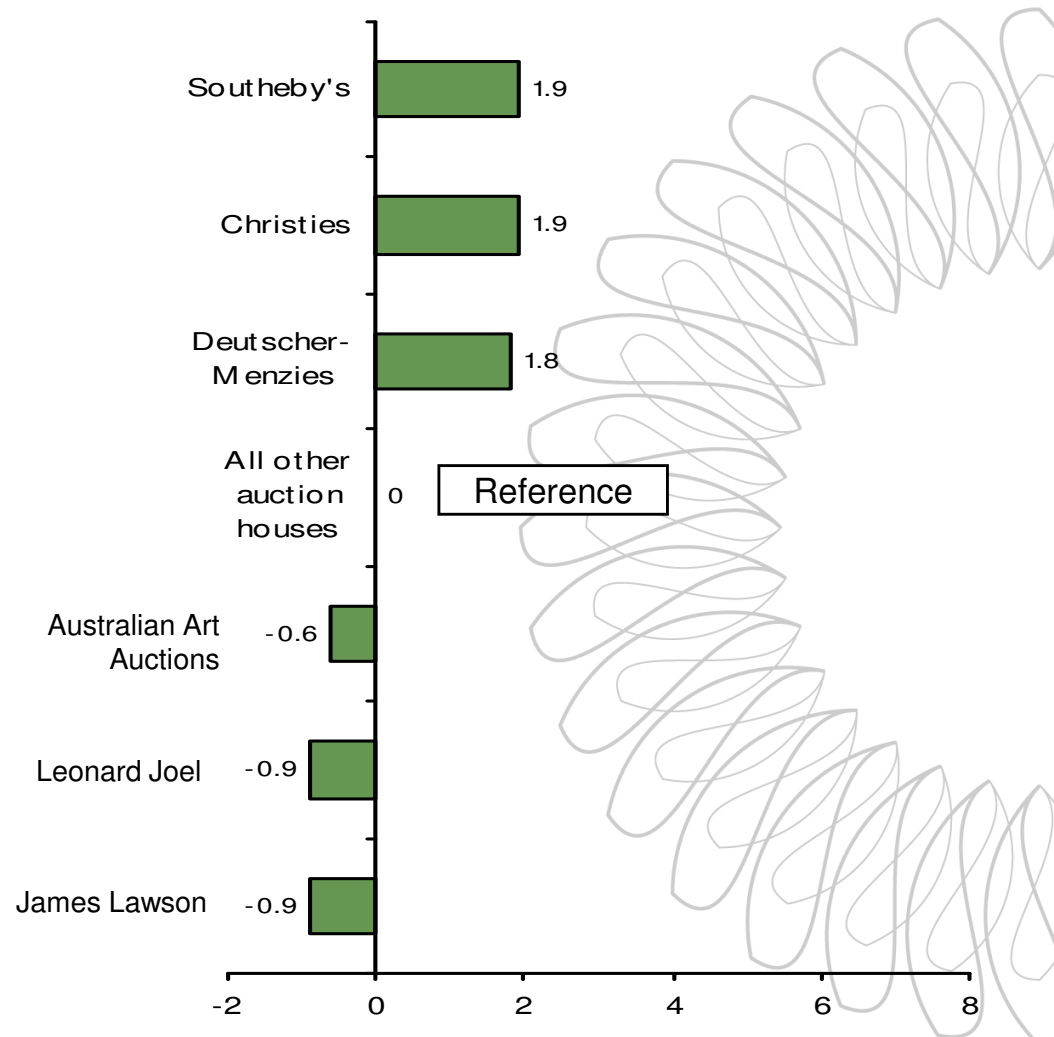
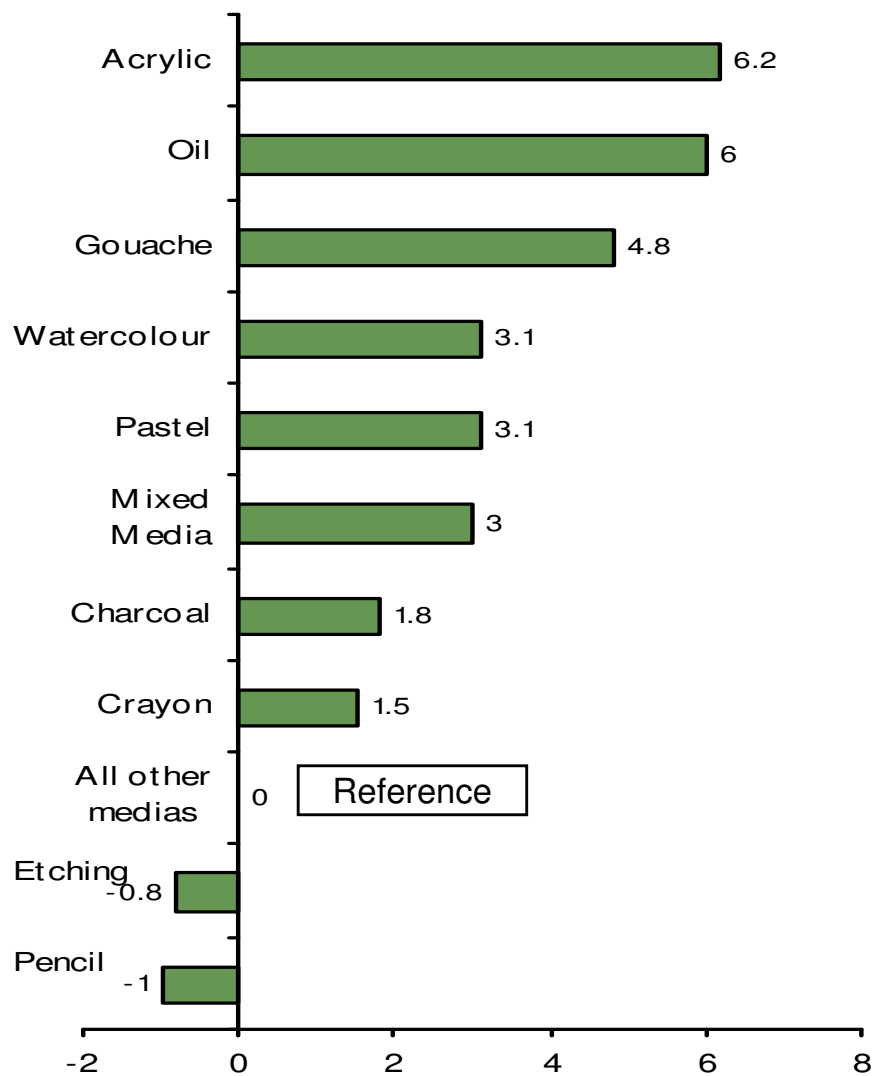


For all these plots, and on the next slide, the bars represent the premium (+) or discount (-) an attribute impacts price relative to the reference case

- ie. expect to pay 252% more for a McCubbin than an Arkley

Reference

... and by media and auction house



Note expanded scale vs previous
 (ie. % range is much less than for artist)

About art “appreciation”

The following two slides compare ...

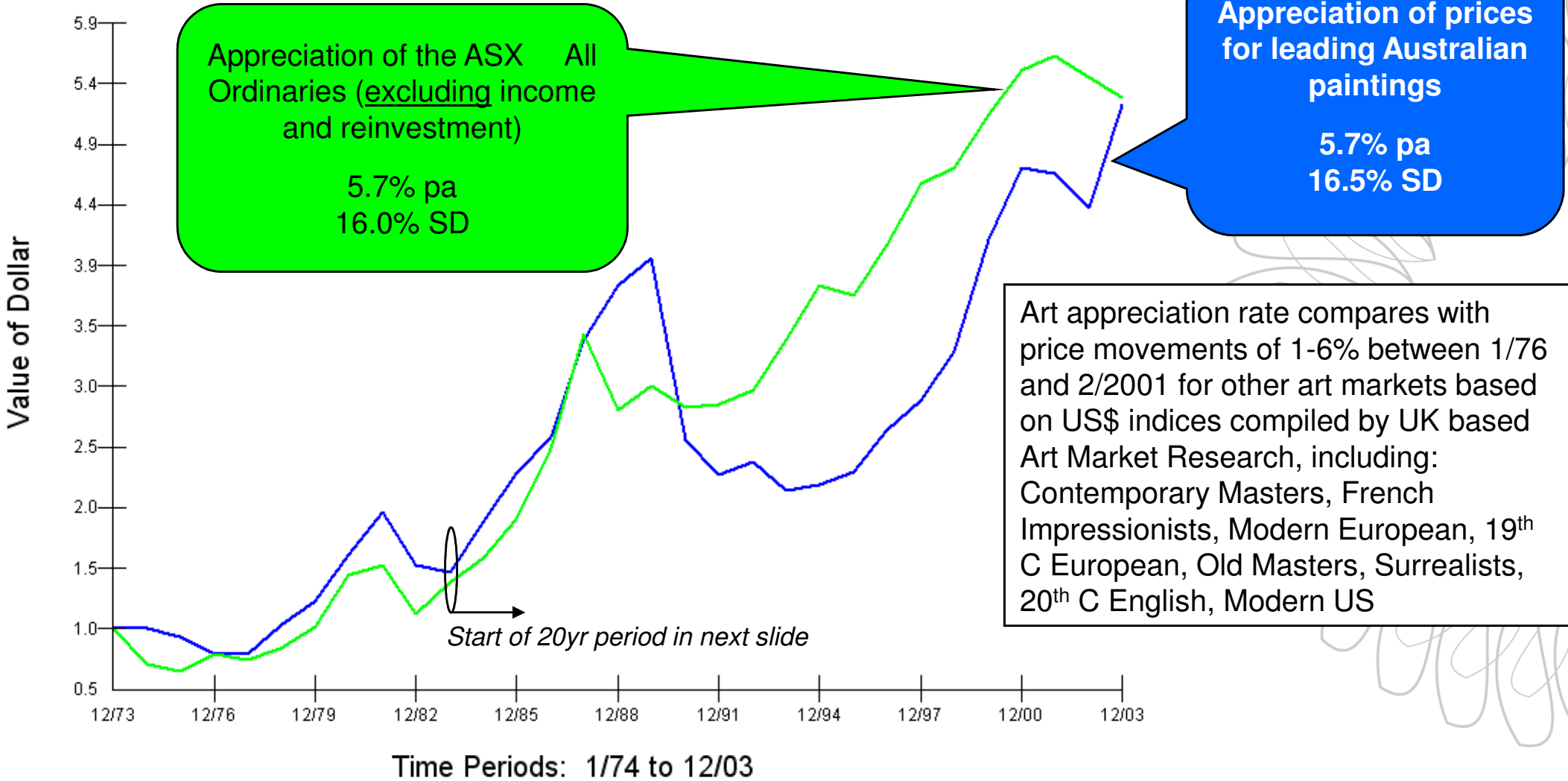
- **Price returns from art vs. price return of the ASX (excluding income)**
 - **Based on data published in the author’s article**
- **Price returns from art vs. a broader set of investment indices including accumulation indices which account for income from various sources (dividends, interest paid, rent)**
 - **To capture the total returns from the latter asset classes**
 - **If an art collection is “appreciated” and not rented out for income, as often is the case, comparing the price only returns of art with these accumulation returns is appropriate**

As you can see the Australian art market, over the 30 year period from 1973-2003, appreciated at roughly the same rate as the price of stocks in the All Ordinaries index

- **However when income is considered, art returned less than other asset classes**
- **Art increased in value above inflation. If art is only considered a consumption good, then it beats out modern luxury cars as a store of value**

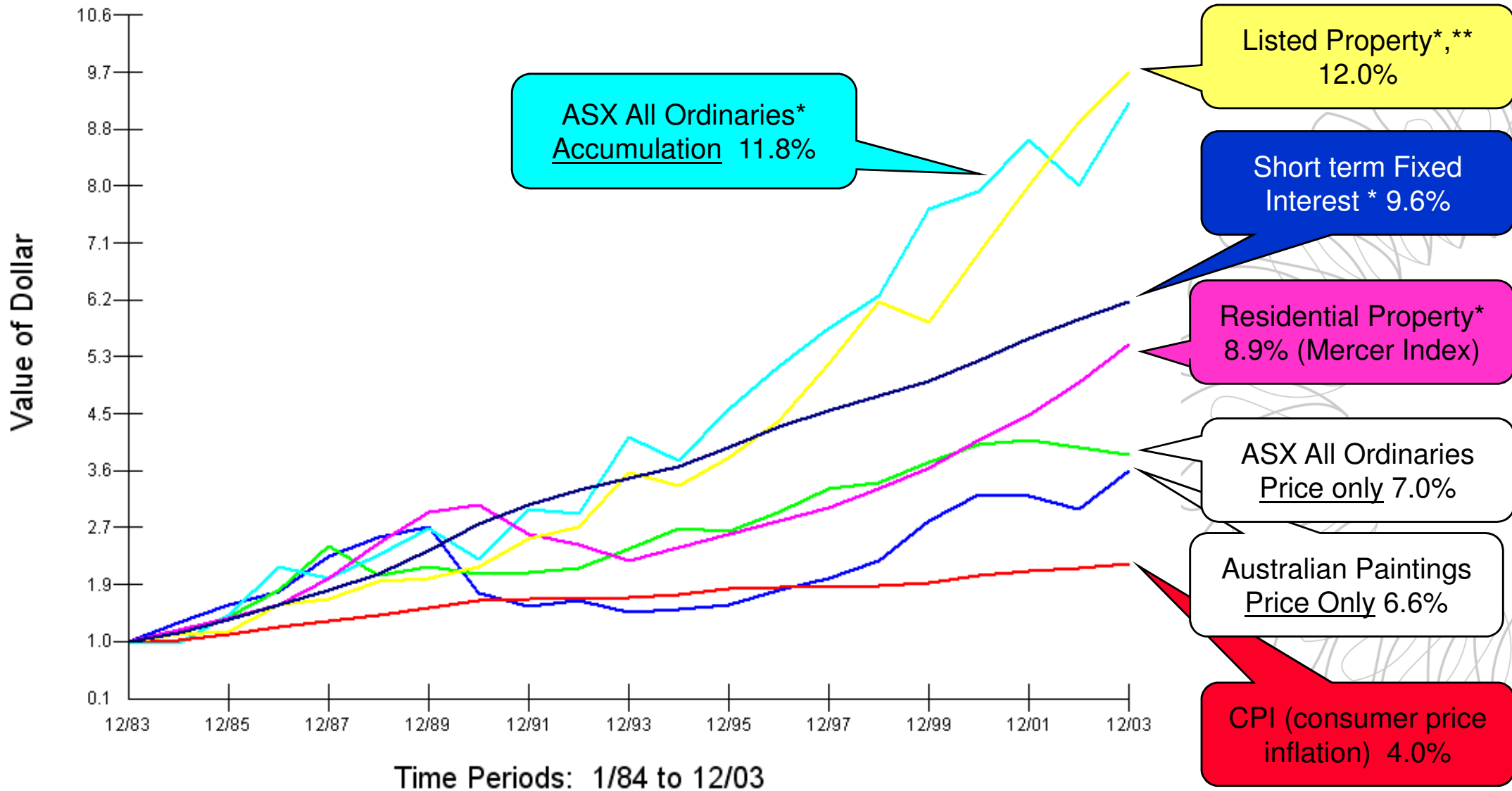
Art and ASX price comparison (per H&W)

GROWTH OF DOLLAR



Broader investment indices comparison

Executive Summaries



*includes reinvestment of income/interest/property-rent
 **Listed property includes commercial, office and retail property classes
 All returns are annualized %. Shorter 20 yr period used because of data availability

To learn more, read the articles (I)

<http://www.bus.qut.edu.au/schools/economics/research/documents/DPNo184-WorthingtonHiggs.pdf>

Financial returns and price determinants in the Australian art market, 1973-2003

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In this study, 37,605 paintings by sixty well-known Australian artists sold at auction over the period 1973-2003 are used to construct a hedonic price index. The attributes included in the hedonic regression model include the name and living status of the artist, the size and medium of the painting, and the auction house and year in which the painting was sold. The resulting index indicates that returns on Australian fine-art averaged seven percent in nominal terms over the period with a standard deviation of sixteen percent. As a result, the risk-adjusted return of 0.42 in the Australian art market is only slightly less than the risk-adjusted return of 0.44 in the Australian stock market over the same period. The hedonic regression model also captures the willingness to pay for perceived attributes in the artwork, and this shows that works by McCubbin, Gascoigne, Thomas and Preston and other artists deceased at the time of auction, works executed in oils or acrylic, and those auctioned by Sotheby's or Christie's are associated with higher prices.

To learn more, read the articles (II)

<http://www.bus.qut.edu.au/schools/economics/documents/DP%20No%2093.pdf>

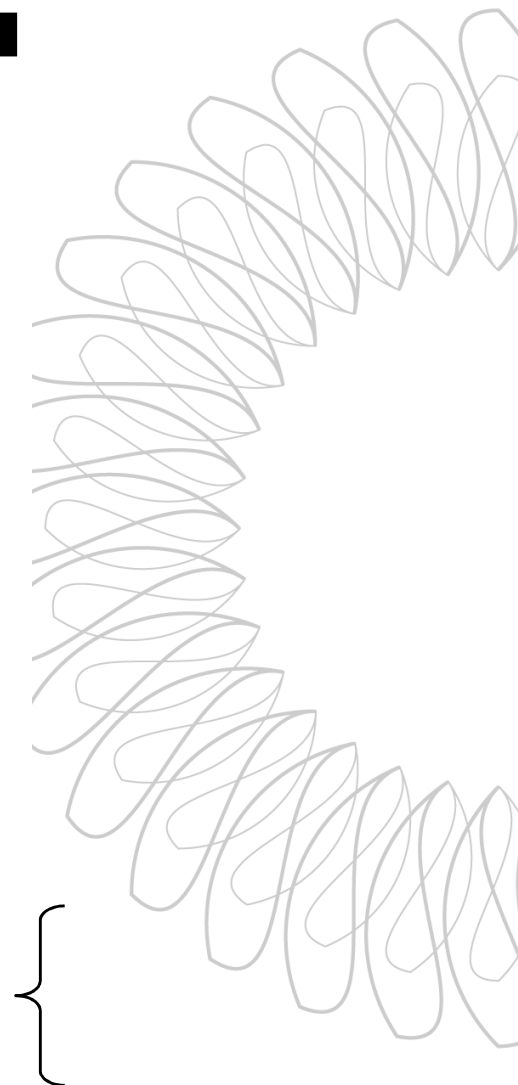


Art as an Investment: Risk, Return and Comovements in Major Painting Markets

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Abstract. This paper examines the short and long-term price linkages among major art and equity markets over the period 1976-2001. The art markets examined are Contemporary Masters, French Impressionists, Modern European, 19th Century European, Old Masters, Surrealists, 20th Century English and Modern US paintings. A global equity index (with dividends and capitalisation changes) is also included. Multivariate cointegration procedures, Granger non-causality tests, level VAR and generalised variance decomposition analyses based on error-correction and vector autoregressive models are conducted to analyse short and long-run relationships among these markets. The results indicate that there is a stationary long-run relationship and significant short and long-run causal linkages between the various painting markets and between the equity market and painting markets. However, in terms of the percentage of variance explained most painting markets are relatively isolated, and other painting markets are generally more important than the equity market in explaining the variance that is not caused by innovations in the market itself. This suggests that opportunities for portfolio diversification in art works alone and in conjunction with equity markets exist, though in common with the literature in this area the study finds that the returns on paintings are much lower and the risks much higher than in conventional financial markets.



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