Race and Art

Prices for African American Painters and Their Contemporaries

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This article investigates the extent to which economic markets have incorpo-
rated mainstream artistic acceptance of African American art. Prices of oil
paintings sold at auction from 1972 to 2004 for African American artists are
compared to their contemporaries. Gross means between the two groups
reveal averages significantly lower for African American artists throughout
the time period. Hedonic regressions, used to refine the statistical analysis by
controlling for factors characterizing the painting and auction environment,
also reveal that African American artists fetch lower prices. The hedonic
regressions, however, reveal a narrowing gap between the two groups since
price appreciation has been higher for works by African American artists.
The high investment returns have made investment in paintings by African
American artists a relatively profitable niche in recent years comparing well
with traditional investments such as stocks and bonds. This profitability may
continue since painting prices for African Americans have not completely
caught up to those of contemporaries.

Keywords: *African American painters; economics of art*

A frican American art was little appreciated by the art community until
the 20th century. This lack of acceptance was the result of numerous
factors including quality perceptions, style conformity, and racial prejudice.
Regardless of the causes, the likely consequence has been for works by
African American artists to be undervalued in the marketplace. This article
focuses on values for paintings by African American artists in comparison
to those by contemporary non–African American artists from 1972 to 2004.
Prices and rates of return are compared for the two groups in order to

determine if systematic differences in value exist and if the gap is narrowing or widening. To my knowledge, there has been no formal large-sample empirical work that systematically measures economic values for paintings by African American artists.

African American artists and art historians have documented the enormous difficulties facing African Americans in the art world. For good historical summaries of these difficulties, see Lewis (1990) and Bearden and Henderson (1993). The history of African American artists is intertwined with that of slavery and its manifestations of inferiority and racial prejudice. African Americans often were denied the privilege of personal expression under slavery. In addition, the creative arts require knowledge of artistic traditions, prolonged study, and disciplined practice in technical skills, all of which were generally unavailable to slaves. Poverty and the isolation of rural living prevented access to implements such as tools, media, and models of the creative arts such as painting and sculpture (Bearden & Henderson, 1993). Both during and immediately after slavery, African American art was often a reflection of the values and motifs of the dominant White society, and like many White artists of the time, African American artists generally developed styles derived from European traditions. African American art forms were judged inferior and their cultural roots discredited by the White community (Lewis, 1990). After slavery was abolished, the situation did not change immediately since African Americans in general were preoccupied with economic survival and cultural acceptance was slow to form.

It was not until the early 20th century that self-expression and racial heritage began to take hold in the African American art community with both internal and external changes in attitudes. The Harlem Renaissance of the 1920s reflected a movement by African Americans in many fields, including artistic expression, with African American artists becoming "energetic participants in a cultural revolution . . . in search of cultural identity, self-discovery, and understanding" (Lewis, 1990, p. 3). This has carried forward through the end of the 20th century with increased patronage of African American artists by the art community. Historians and art critics have come to appreciate the African American aesthetic as one that encompasses not only the spontaneous arts, music, and dance but also more deliberate expressive forms such as paintings, sculpture, weaving, and pottery. African American artists are now evident on the national and international art scenes, with special galleries around the United States and international exhibitions. The number of African American students in fine

arts programs increased dramatically in the last half of the 20th century. And African Americans are rapidly increasing the number of distinguished positions held in the fields of art criticism and art history (Lewis, 1990).

With the social, political, and economic climate improving for African Americans in the United States in the second half of the 20th century, it is reasonable to inquire to what extent financial art markets have reflected this surge in African American participation in art. Anecdotal evidence exists for differences in market appreciation between African American and other American artists, with some observers claiming that African American art continues to be underrepresented, underappreciated, and undervalued in the art community. This article attempts to document empirically with a large sample whether African American artists have been systematically less valued in the market and whether this is changing. If in fact African American art is coming into its own economically and appreciating faster than the more general art market, it may be a good niche to be in for a collector also interested in financial success.

Performance of Paintings as an Investment Asset

Economists have focused on numerous areas over the years that at first may seem to be outside their realm. One of the latest areas to be invaded by economists is art. Baumol's (1986) art economics article, although not the first, received much attention with its characterization of art investment as a "floating crap game." Economic studies have tried to document the profitability of investment in collectibles of all kinds, including high-end paintings and sculpture whose beauty endures for centuries to such things as wine whose bottles and labels may endure even though the taste may be fleeting. These examples illustrate the approach of the economist, which usually is to focus on monetary values. Intrinsic value, artistic interpretation, acceptance, reputation, taste, and so forth are still the realm of indigenous experts such as the art historian or wine connoisseur. Interestingly, economists' findings on monetary values associated with art and artists corroborate the views on intrinsic value, esteem, and historical importance determined by artists and art historians (Galenson, 2001).

Anecdotal evidence from some spectacular individual examples suggests that collectibles in general and art in particular represent lucrative forms of investment (Frey & Pommerehne, 1988). The more mundane scientific evidence is less enthusiastic, with returns from art investment generally

found to be modest and accompanied by high risk (for extensive reviews of the economic literature, see Ashenfelter & Graddy, 2003; Burton & Jacobsen, 1999). The rate of return on art investment usually matches and sometimes exceeds inflation but often lags that of stocks and bonds. In addition, the variance of art returns tends to be much greater than stocks and bonds. Exceptions or niches exist, however, with some styles, subject matter, time periods, and individual artists doing better than others (see Agnello, 2002; Edwards, 2004; Hodgson & Vorkink, 2004; Mei & Moses, 2002). These somewhat dismal financial results should not be surprising given the consumption benefit of art to the owner (Frey, 1997) as well as special risks inherent in fine art such as fire, theft, maintenance, mutilation, forgeries, and mistaken attribution (Frey & Pommerehne, 1988, 1989). Although not an overly attractive investment, art nevertheless may have appeal since few consumption goods retain real value over long periods. If art returns do not positively covary strongly with the returns of other assets, even those whose returns are both higher and less volatile, art can play a role in reducing the overall risk of a portfolio, especially for wealthy investors seeking an outlet for excess liquidity (Ashenfelter & Graddy, 2003).

Data and Comparisons of Gross Means

Data collection for this article first focused on selecting the group of African American artists. Artcyclopedia (2005) provides sortings for recognized artists using various criteria such as art movement, subject matter, medium, and characteristics of the artist such as nationality, gender, and race. In order to achieve some homogeneity for comparison purposes, focus is placed on African American artists born between the year 1800 and World War II who painted in the oil medium. The group of African American artists was reduced further to the final group of 16 listed in Table 1 who meet the homogeneity requirements and also have sufficient volume of recorded sales for meaningful statistical analysis. Paucity of sales data prevents further potentially useful artist homogeneity with respect to elements such as style, subject matter, birthplace, and locale where the artist worked.

For comparison, each African American artist was assigned at least one contemporary non–African American artist. Amalia Amaki, artist and curator of the Paul R. Jones Collection of African American Art at the University of Delaware, provided the expertise in choosing contemporaries by considering similar style, life span, and reputation. Although fame was not a factor in choosing the contemporaries, Table 1 reveals some famous artists making

Table 1
Artist Summary

African American Artist	Life Span	Sample Size	Contemporary White Artist	Life Span	Sample Size
Robert Scott Duncanson	1821-1872	39	George Inness	1825-1894	345
			Thomas Cole	1801-1848	45
Edward M. Bannister	1828-1901	33	Frederic E. Church	1826-1900	70
Charles Porter	1847-1923	15	John F. Francis	1808-1886	122
Henry Ossawa Tanner	1859-1937	33	Thomas Eakins	1844-1916	38
William Edouard Scott	1884-1964	15	Everett Shinn	1876-1953	98
			Robert Henri	1865-1929	255
			Winslow Homer	1836-1910	44
Horace Pippen	1888-1946	14	Earl Cunningham	1893-1977	8
Alma W. Thomas	1891-1978	15	Barnett Newman	1905-1970	18
			James Rosenquist	1933-	106
Beauford Delaney	1901-1979	12	Philip Guston	1913-1980	88
			John Marin	1870-1953	29
Allan Rohan Crite	1910-	7	Charles Woodbury	1864-1940	175
Romare Bearden	1914-1988	15	George Grosz	1893-1959	156
			Stuart Davis	1894-1964	52
Hughie Lee-Smith	1915-2000	34	Joseph Hirsch	1910-1981	56
			Edward Hopper	1882-1967	21
Jacob Lawrence	1917-2000	24	Stuart Davis	1894-1964	52
			Arthur Dove	1880-1946	41
Charles White	1918-1979	5	Moses Soyer	1899-1974	239
			Joe Jones	1909-1963	37
Benny Andrews	1930-	6	Ben Shahn	1899-1969	64
Sam Gilliam	1933-	12	Robert Rauschenberg	1925-	54
Bob Thompson	1937-1966	36	Lyonel Feininger	1871-1956	124
			Jan Muller	1922-1958	6

the contemporary list along with a few lesser known artists. The African American artists, although well known by art historians, are typically less known in the general art community. Our African American artists represent the available statistical universe for this group, whereas the contemporary list results from selection using objective and subjective criteria. The fact that contemporaries include some quite famous artists indicates that their universe is populated by artists of widespread fame to a greater degree than that of African American artists. Although fame is likely accompanied by higher economic valuations, it does not follow that price performance over time correlates closely to fame. Fame may play a role in profitability if economic returns vary systematically between high-quality and low-quality items or famous and nonfamous artists. Findings vary, with some researchers

observing that high-quality art does not generate higher returns (e.g., Mei & Moses, 2002) while others have found that high-quality art is the superior investment with higher returns and no more risk (Agnello, 2002; Flores, Ginsburgh, & Jeanfils, 1999). For some African American artists, more than one contemporary could be identified by the curator. Secondary contemporaries are not used in most statistical analyses since the volume of transactions for contemporaries far exceeds that of African American artists. The focus on primary contemporaries serves to reduce the differences between the two groups since we observe later in the article that primary contemporaries have a lower average price than secondary contemporaries.

In order to analyze economic issues in art, such as investment returns and risk, general measurement of the time series movement in prices is a starting point. Since art is not a homogeneous commodity traded in highly organized markets like stocks and bonds, price indices are not readily available. The researcher in art generally has to build his or her own price series, especially for particular submarkets in which the market activity is low. Realized prices from public auctions typically are used since auction data are readily available and usually representative. The Art Sales Index (Hislop, 1971-2004), compiled annually, was used to obtain sales information for the 16 African American artists and their contemporaries. The auction records provide sales price as well as useful information characterizing the painting and auction environment. Since the auction records cover the time period of 1972 to 2004, during which considerable inflation occurred, nominal prices were converted to real prices using the Consumer Price Index as the deflator with the base period of 1982 to 1984.

Table 2 shows overall as well as individual pairwise price comparisons between African American artists and their primary contemporaries. Overall mean prices are found to be significantly lower for African American artists than for their contemporary group with at least 99% confidence when using the t test under unknown population variance. In order to employ the standard t test, normality of the price data is necessary. Since painting price distributions are commonly characterized by some very high-priced outliers, the price data are transformed using logarithms that serve to compress the price data and achieve the symmetry necessary for normality. The means in Table 2 are calculated from the logarithms. Mathematical details can be found in Yamane (1973). At the individual artist level, 12 of 16 cases show significantly lower prices for African American artists (at least 95% confidence). In only two cases, Horace Pippen and Charles White, do works by African American artists command higher prices, and only in the

Table 2
Comparisons of Mean Real Price by Artist and Overall

African American Artists and Mean Price		Contemporary White Artists and Mean Price		
Artist	US$	Artist	US$	t Value[a]
Robert S. Duncanson	21,377	George Inness	27,247	−2.16[b]
Edward M. Bannister	6,531	Frederic E. Church	285,462	−10.02[c]
Charles Porter	3,804	John F. Francis	17,441	−4.47[c]
Henry Ossawa Tanner	20,380	Thomas Eakins	180,969	−5.50[c]
William Edouard Scott	6,055	Everett Shinn	37,412	−2.91[c]
Horace Pippen	62,404	Earl Cunningham	11,364	2.15[b]
Alma W. Thomas	17,895	Barnett Newman	639,384	−7.58[c]
Beauford Delaney	6,382	Philip Guston	114,573	−8.62[c]
Allan Rohan Crite	1,925	Charles Woodbury	2,659	−0.37
Romare Bearden	17,591	George Grosz	22,328	−3.13[c]
Hughie Lee-Smith	4,549	Joseph Hirsch	5,055	−1.17
Jacob Lawrence	22,966	Stuart Davis	119,172	−4.28[c]
Charles White	2,701	Moses Soyer	2,242	0.09
Benny Andrews	1,974	Ben Shahn	20,503	−4.57[c]
Sam Gilliam	2,309	Robert Rauschenberg	93,094	−10.85[c]
Bob Thompson	6,690	Lyonel Feininger	233,382	−17.91[c]
Overall	13,858	Primary	64,428	−7.46[c]
Overall	13,858	Primary and secondary	71,630	−10.05[c]

a. t tests were performed using log price in order to normalize the data.
b. Minimum confidence level = 95%.
c. Minimum confidence level = 99%.

case of Horace Pippen is the higher price significant. These two exceptions reflect African American artists who are well known relative to their contemporaries. We note that even for Horace Pippen, the most highly valued African American artist in the group, the mean real price (US$62,404) falls below the mean of contemporary artists. The mean real price for oil paintings created by our group of African American artists is US$13,858, whereas for primary and all contemporaries (primary and secondary combined), mean real prices are observed to be US$64,428 and US$71,630, respectively.

Regression Methodology

Although the comparisons of means reported above are useful, factors other than the race of the artist may influence price and thus account for the

differences. Multiple regression is a powerful refinement over simply com-
paring mean prices because it allows us to control for the characteristics of
each painting and auction transaction as well as the race of the artist. In
addition, regression allows for the investigation of whether prices are con-
verging or diverging between artist groups over time. Two regression mod-
els generally used to analyze price movements over time are the repeat-sales
and hedonic models. The repeat-sales methodology developed by Bailey,
Muth, and Nourse (1963) has the advantage of controlling for the item when
observing price movements. Disadvantages are that only items subject to
multiple sales can be used, necessitating a large number of total transactions
and also ignoring nonmultiple transactions. The theoretical details of apply-
ing the repeat-sale regression model to art can be found in Chanel, Gerard-
Varet, and Ginsburgh (1996). Empirical applications can be found in
Baumol (1986) for old masters, Pesando (1993) for modern prints, and Mei
and Moses (2002) for Americans, old masters, and impressionists.

    Given the limited number of observations on African American artists,
we employ the hedonic framework where transactions of different works are
pooled together in a multiple regression equation. In this way, a much larger
set of objects can be included in the analysis. Developed initially to con-
struct price indices for automobiles and housing with different characteris-
tics, hedonic price models have been used extensively in many areas,
including art. When applied to large samples, hedonic models provide reli-
able estimates for the implicit effects on value of characteristics surround-
ing each sales transaction. Hedonic models generally yield coefficient
estimates with smaller standard deviations than those from repeat sales
(Chanel et al., 1996). Applications of the hedonic price model to various
art portfolios go back to Anderson (1974) and are summarized in Ashenfelter
and Graddy (2003).

    In this article, a log linear model for price is employed:

$$\ln P_{it} = \alpha + \gamma t + \mathbf{B}\mathbf{X}_i + u_i \quad i = 1 \ . \ . \ . \ n, \tag{1}$$

where $\ln P_{it}$ is log real price of painting i in time period t; α is the equation
intercept; $\mathbf{B}\mathbf{X}_i$ represents the systematic portion of price accounted for by
the vector of independent variables, with $\mathbf{X}_i$ characterizing the particular
painting or auction environment; γt represents a global growth relationship
of price over time; and u_i is a random error. The log framework again pro-
vides normalization for the data since the frequency distributions for paint-
ings are generally found to have long tails due to a few extremely expensive
works. Given the limited number of observations available for each year,
we use a simple form, γt, for the time component of P_{it}, which estimates the

long-run or global rate of return (γ) instead of short-run annual rates of return (see Agnello & Pierce, 1996). **B** represents a vector of marginal values associated with the painting and auction characteristics, $\mathbf{X_i}$.

The empirical rendering of Equation 1 is given below:

$$\ln P = \alpha + \gamma^*\text{Time} + b1^*\text{Size} + b2^*\text{Size Square}$$
$$+ b3^*\text{Illustrated} + b4^*\text{Auctioneer} + u. \qquad (2)$$

The variables for time, size, size square, illustrated, and auctioneer are the variables available to characterize the painting and the auction environment. Time is the auction year, initialized at 0 for 1972 and increasing by 1 each year. As indicated earlier, the coefficient γ represents the average rate of return over the time period of estimation. Size is the product of painting height and width in inches. Size square is the square of size. Since a larger size requires more time and effort to accomplish, larger works will likely command higher prices for the same quality; thus, $b1$ is expected to be positive. The square term is a way to investigate whether the size effect on price is linear, and it provides a simple test for nonlinearity since the linear size model is a special case within the quadratic. Illustrated and auctioneer are (0,1) dummy variables. Illustrated = 1 when the painting is illustrated in the auction catalog. Auctioneer = 1 when the auction takes place at either Sotheby's or Christie's, the largest and most well-known auction houses in the world. Illustrated and auctioneer coefficients reflect potential demand-enhancing elements in marketing the painting at auction. Since only the highest quality paintings generally get chosen by the major auction houses and illustrated in catalogs, these variables also proxy the quality of the painting and fame of the artist (see Agnello, 2002). Including these variables as controls in the regression allows for more accuracy in estimating other coefficients, and thus more confidence in making comparisons between the African American and contemporary artist groups. For some analyses, the data are divided into two periods, early (1972-1989) and late (1990-2004), in order to test for structural changes in the prices. The year 1990 divides the data roughly equally between the subperiods and was a turning point both in the U.S. economy and the U.S. art market (see Agnello, 2002).

Hedonic Regression Results

Table 3 presents the results for the hedonic model estimated separately for distinct time periods and artist groupings. See Gujarati (2003) for background on statistical interpretations that follow. "All" refers to auction

Table 3
Hedonic Regression Coefficients for Data Stratified by Race and Time Period

Time Period	Intercept	Time	Size	Size Square[a]	Illustrated	Auctioneer	R^2	F[b]
Whole period (1972-2004)								
All ($n = 2,022$)	7.436	-0.0028	0.0008	-4.2	0.6085	1.1779	.28	158.3
	(0)[c]	(.51)	(0)	(0)	(0)	(0)		
African ($n = 315$)	6.7157	0.0398	0.0003	-1.8	0.4755	1.0314	.27	22.6
	(0)	(0)	(0)	(.0002)	(.01)	(0)		
Contemporary ($n = 1,707$)	7.3746	-0.007	0.0011	-9.1	0.6621	1.1623	.30	145.7
	(0)	(.14)	(0)	(0)	(0)	(0)		
Early years (1972-1989)								
All ($n = 1,006$)	7.931	-0.041	0.0011	-9.8	0.7043	0.748	.24	63.4
	(0)	(0)	(0)	(0)	(0)	(0)		
African ($n = 100$)	6.8462	0.0009	0.0014	-35	0.7424	0.7895	.28	7.3
	(0)	(.98)	(0)	(.0004)	(.02)	(0)		
Contemporary ($n = 906$)	7.9639	-0.0427	0.0012	-11	0.711	0.7519	.25	61.4
	(0)	(0)	(0)	(0)	(0)	(0)		
Late years (1990-2004)								
All ($n = 1,016$)	6.034	0.0428	0.0007	-3.6	0.802	1.4605	.35	106.6
	(0)	(0)	(0)	(0)	(0)	(0)		
African ($n = 215$)	5.2302	0.0995	0.0003	-1.5	0.4072	1.1022	.35	22.8
	(0)	(0)	(.01)	(.0024)	(.04)	(0)		
Contemporary ($n = 801$)	5.9983	0.0306	0.001	-8	1.0166	1.463	.36	90.5
	(0)	(.02)	(0)	(0)	(0)	(0)		

a. All coefficients of *Size Square* are divided by 10 to the 8th power.
b. F is a test statistic for the equation.
c. p values for coefficients are in parenthesis.

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records combined for African American artists and their first contemporary artists. "African" refers to auction records of African American artists only, whereas "Contemporary" refers to auction records of primary contemporary artists only. The regression results show that the auction characteristic variables are highly significant. The model fits better for late years than for early years, with explanatory power (R^2) increasing from an average of 26% for early years to 35% for late years. In all cases R^2 for the hedonic regressions, although low, is statistically significant at better than the .01 level given the high equation F statistics. The low R^2 is typical of cross-section price estimation for paintings pooled across individual artists (see Agnello, 2002; Agnello & Pierce, 1996). Size and size square have significant statistical effects but small actual effects on price. Since the size and size square coefficients are positive and negative, respectively, size has positive effects on price initially but negative effects eventually. Using the size and size square coefficients (0.0008 and -4.2×10^{-8}, respectively) for all painters and the whole data period, the eventual negative impact on $\ln P$ does not occur until a painting reaches a size of 9,526 square inches. Although some works in the data set exceed this large size, the average size is 714 square inches. Thus, we conclude that diminishing returns to size occur within the sample range, but only for a few extremely large works that likely can be displayed only in museums.

Whether a painting was sold at the major auction houses and illustrated in a catalog have a strong positive association with auction price. These variables are important regression controls since in our sample African American paintings are much less likely to be sold at the major houses (47% vs. 68%) and slightly less likely to be illustrated in catalogs (82% vs. 84%) than contemporaries. This study as well as previous studies find that major auctions houses, especially Sotheby's, are associated with higher painting prices (Agnello, 2002; Ashenfelter & Graddy, 2003). For the whole period and all artists, paintings illustrated in an auction catalog have a higher intercept for $\ln P$ by 0.6085 and thus a higher price by US$1,421. For paintings sold at Sotheby's or Christie's auction houses, the intercept of the $\ln P$ regression rises by 1.1779; thus, price rises by US$3,812. Both of these effects are somewhat weaker for African American artists than for their contemporaries. In the late years, illustrated and auctioneer effects change somewhat for the two groups. For African American artists, catalog illustration coefficients weaken from early to late years from 0.7424 to 0.4072, whereas auctioneer effects increase from 0.7895 to 1.1022. For contemporary artists, both effects have strengthened. As noted earlier, since illustration and auctioneer likely proxy quality and fame, we interpret at least part of the price increases associated with these variables as market ratification of expected higher

values for paintings at major auction houses and for paintings found in cata-
logs. This conclusion holds for both artist groups.

The most important findings for this article involve the intercept and
time slope comparisons for African American painters versus their contem-
poraries. For all time periods, the intercepts for African American artists are
lower than those of their contemporaries. Thus, when controlling for sev-
eral factors that may affect painting price other than the race of the artist,
the average price for works of African American artists remains consider-
ably below that of their contemporaries. Focusing on the whole period
(1972-2004), the intercept for African American artists is 6.7157 or
US$825, that is, exp(6.7157), as opposed to 7.3746 or US$1,595 for con-
temporaries. The regressions support the uncontrolled findings shown ear-
lier but reduce the differences between the two groups. In Table 2, mean
prices for African American artists are observed to be less than one quarter
of their primary contemporaries' mean prices. When controlling for other
factors, especially quality and fame of the artists, reflected in part by the
variables of illustrated and auctioneer, African American artists' prices are
about one half of their contemporaries' prices. Although the uncontrolled
means likely overstate the price differences between the two groups, the
controlled regression may understate the differences purely due to the race
of the artist if selections by major auction house and catalog illustration are
racially biased. When comparing intercepts of African American artists and
their contemporaries for the early and late time periods, a narrowing
between the two groups is observed. In the early time period, the intercepts
(ln$) are 6.8462 and 7.9639, or in dollars, that is, exp(α), US$940 and
US$2,875 for African American and contemporary artists, respectively.
Thus, with regression controls in place, prices of works by African
American artists begin in 1972 at about one third of those of their contem-
poraries. In the late period, the intercepts become 5.2302 and 5.9983, or
US$187 and US$403, respectively, for the two groups. The difference in
intercepts in the late period narrows both absolutely and relatively. Thus,
we observe that with regression controls, the prices of works by African
American artists in 1990 (the beginning of the late period) are about 46%
of those of their contemporaries.

The narrowing of the price gap is the result of higher rates of growth for
African American artists than for their contemporaries. The time coeffi-
cients in the regressions reveal this result clearly. Throughout the entire
1972-2004 period, African American artists experienced a real rate of
return significantly greater than zero of 3.98%, while their contemporaries
experienced roughly a zero return (−0.7%). Higher returns for African
American artists persist for the subperiods as well. In the early years, the

real rate of return for oil paintings by contemporaries was significantly negative (−4.27%), while the return for African American artists was roughly zero (0.09%), thus narrowing the price gap between the two groups. In the late years, both groups show positive returns, but the gap narrows further with African American returns (9.95%) more than 3 times that for contemporaries (3.06%). The cumulative effect of higher African American returns is the reason for the narrowing differences in intercepts (α) between the two artist groups for the two time periods. The findings strongly suggest that although African American artists experienced significantly lower average painting prices during the period, the price gap is narrowing significantly.

The findings on returns for the contemporary group are in line with a previous large-sample study focusing exclusively on American artists that found an average real rate of return of −1.4% during the 1971-1996 period (Agnello, 2002). In addition to outperforming their contemporaries, African American painters compare well with traditional financial markets, especially after 1989. For the period 1990-2004, the annual real rate of return was 8.14% and 4.90% for the S&P 500 stock index and Lehman Aggregate Bond Index (a blend of long- and short-term bonds), respectively (Center for International Securities and Derivatives Markets, 2006). Thus, in the late period the 9.95% annual real return for the sample of African American painters makes them a better investment than either stocks or bonds. Paintings by contemporaries do not fair as well, with a real return of 3.06%, which trails the alternative financial market investments substantially.

Conclusions

When comparing price performance for oil paintings by African American artists born before World War II to that of their contemporaries using various statistical frameworks, the same general conclusion is found. For oil paintings sold at auction between 1972 and 2004, average prices for African American artists were significantly lower than for their contemporaries. Rates of return in the early years (1972-1989) were low for both groups and increased significantly in the late years (1990-2004). However, rates of price appreciation were higher for African American artists than for their contemporaries in both periods. The evidence indicates that although prices remain lower for African American artists, the gap appears to be narrowing. Hopefully, the findings will stimulate further investigation, perhaps using alternative contemporary artists as well as artists born later in the 20th century, when the artistic styles

tended to be more abstract. In addition, investigations of whether the narrowing of price differences is the result of declining prejudice, evolving artistic appreciation, changing demographics and income, or other factors are interesting questions for further research.

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