Eco. 343/AH 261, Fall 2012

This is a course in applied micro-economics. The application is to art, but my interest is in the intriguing questions art as marketable commodity poses to standard economic thinking, rather than in art's aesthetic qualities.

In terms of temporal scope, we will be looking at the contemporary art market (CAM)– better market*s*, for there are many, just one of which is dubbed the market for Contemporary Art, or art by living artists.

My approach is through key players: (1) dealers (including gallerists), (2) auction houses, (3) artists, (4) buyers (collectors of art) and (5) investors in art, art advisors and the funds available to those who wish to invest in art. We shall observe the ways various players behave and try to account for them in terms of the opportunities and constraints they face in trying to do the best for themselves that they can. In other words, we will treat them as economic agents.

I shall ask of you three things. First, that you complete (in groups of three) a number of small **TASKS**, which I shall define in advance and you will address, submitting your group responses in the form of a single page, typed statement. These TASKS will number 8 and contribute 40 per cent of your grade (each one 5 per cent). The purpose of these TASKS is to get you to think for yourselves and gain hands-on experience analyzing aspects of CAM. The TASKS will range from the interpretative, to the analytical, to the quantitative.

Secondly, I ask of you a **RESEARCH PAPER**, of no more than 15 pages (text only: graphical appendixes and charts do not count within this page limit). These PAPERS may be completed by the same group as you work with on the small TASKS. Note that you may, if that seems more appropriate to you, have me grade particular sections (as well as the whole) by the responsible individual author. Or you may write the whole PAPER yourself. *PAPERS are due the last day of classes and may be submitted in hard copy or emailed as an attachment*. I am open to a wide range of topics but you must clear your topic with me and I expect you to consult me regularly on your progress, problems, modifications, and so on. The first step towards identifying a topic is to consider what your own interests are and what motivated you to take this class in the first place, and the second is to turn your interests into something new. The best PAPERS tend to be those that start with an *issue that you make problematical* in some way, then *analyze*, *arguing* for one interpretation among (maybe) several.

Example: not *that* the market for Chinese art, both traditional and contemporary, has grown by leaps and bounds, but *whether* this is a bubble phenomenon (how would you define"bubble"?), *whether* it is due more to "middle class" income growth or the growth of wealth at the very top of the wealth distribution (can you separate the two? are reliable relevant data available?), *whether* Hong Kong is likely to edge out Shanghai or Beijing as international art centers, and if so *why* that might be (because of lower import duty and sales tax rates?), greater transparency (how would you measure this?), less government interference including censorship (how would you know? measure?). Are art prices in The People's Republic driven to an extent not true elsewhere by the availability of (unregulated) art "funds," some of which sell tradable shares in their portfolios, thereby increasing investment options? And so on.

In terms of subject and method, historical topics are fine, so too are quantitative and theoretical investigations, but *any* PAPER must be analytical – pose a subject, propose an analysis of it that is new, and argue a position. Above all, think of doing something that you take pride in. The PAPER will contribute 50 per cent of your grade. I would love to meet you regularly to discuss possibilities, help you shape your topic, etc.

The final contributor towards your grade is a 10% component reflecting my subjective judgement of the **COMMITMENT** and **FLAIR** you bring to the class, not only in the TASKS and PAPER but also in terms of your in-class INTERVENTIONS and/or your face to face discussions with me (so as not to favor those less shy in public).

NB: no mid-terms; no final exam.

Two matters of class etiquette. Please, (i) no texting or emailing during class and (ii) no eating in class. This last is a rule of the Economics Department, which has responsibility for the room we are in. As to (i) I have no problem if you take notes on a laptop or iPAD, but it is both disrespectful and, I believe, falsely presumptuous to engage is texting or dealing with email during class. The fact is you cannot demonstrate commitment or intervene helpfully unless you are fully engaged as well as being just physically present. Moreover, although multi-tasking is possible in some situations, there is positive evidence that it is bad to try it whilst driving, which is analogous to being in class, and I have yet to be convinced that it is compatible with absorbing new details and arguments, except for a few extraordinary individuals.

Lastly, **my grade scale**: 60-74, C-range; 75-89, B-range and 90 +, A-range.

Course schedule (deliberately partial and summary except for the first few classes).

Class of August 28.

Art is an odd commodity. For example, ask yourself whether cost of production is a factor in the price of artworks (I shall talk mainly about paintings)? If 'no' then the marginal cost curve, which is the short-run supply curve for a producer, is (largely) irrelevant to price. With cost of production mainly out of the picture, there is no MSRP – manufacturer's suggested retail price – to provide a baseline such as we have with cars. How, then, is price determined?

By demand? Yes, but why is there any demand for things that are non-necessaries? Of course we desire many things that have no immediately utilitarian purpose in our lives, so perhaps art is one of those. But then we must expand the traditional economic notion of what is "useful," which tends to favor those things that serve a tangible, physically constructive purpose. Art falls outside that category. For the most part, it is not an input into other products, nor is it a survival need for consumers. Yet many people would allow that we have a basic need for *stimulus*, and on that level – things in our lives that are challenging, provocative, novel and constantly varied – art surely gives pleasure while, on the other side, and at least as important, saving us from the bane of boredom.

The economist, by contrast, has traditionally considered goods as useful for eliminating pain or giving positive satisfaction, but with pleasure always being subject to the so-called 'law' of diminishing marginal utility. This 'law', put forward by W.S. Jevons in the 1860s and '70s as a universal, actually applies only to basic needs. Jevons himself admitted that the arts and scientific inquiry were exceptions to his universal law. His defence for taking this oddly mixed position was that too little was known of the "laws of mind" for us to be able to say anything useful about the exceptions.

Modern psychologists have challenged that position, and there is an experimental tradition, started in Germany, where it goes back beyond the 1870s, showing that subjects enjoy increasing pleasure when complex and ever-changing mixes of stimuli are applied – especially those combining variety with novelty, open-endedness, "interestingness" or, generically, "challenge" to our curiosity. This has also been shown for art among many other things. What seems to be called for, then, is an expansion of the economic understanding of demand, to include not only more of the same thing, but more of always changing complexes of the pleasure-yielding characteristics of goods – "always changing" being necessary because we tire even of pleasing characteristics and find them positively *dis*pleasing if they are simply repeated or if, on the other hand, they are made too challenging.

Central here is the concept – articulated in the 1950s by economist Kelvin Lancaster – that we do not buy goods as such; rather, we purchase from among various bundles of pleasing characteristics that goods embody.

This way of thinking has been applied to the explanation of art prices using hedonic regression. It is also the basis of various new, online efforts to interest potential buyers in paintings. One such, still in Beta form, but which uses the same technique as made the Music Genome Project successful, is *Art.sy*, but there are others, their numbers growing even as I write. The whole area of the online display and selling of paintings is an intriguing one to research. One major auction house, *Saffron* in Mumbai, sells exclusively online, and also holds no-reserve (everything must go) sales, but it is just one of many online enterprises. Among the international auction houses, *Christie's.LIVE* offers online bidding during their regular auctions, though so do virtually all auction houses these days, even the one in Hillsborough NC whose sales I attend. The trend toward online selling seems to be strongly upward. You can find interviews with various persons responsible for online selling, plus a list and description of the special features offered by five "top" recent online startups: PurePhoto, Paddle8, Artsicle, Art.sy and the VIP online fair, in recent and archived pieces at "Art Market Blog with Nicholas Forrest," which I recommend as a source on all matters to do with CAM: *www.artmarketblog.com*.

The desire for ever-changing, stimulating complexes of pleasing characteristics in a product probably captures much of what is behind the demand for art/paintings. Adam Smith in the eighteenth-century, addressed the subjective pleasure we take in goods in general using the word *fancy*. It is safe to say that art prices tend to be heavily driven by fancy. Smith (and a string of writers before him) distinguished needs of the body (Jevons's chosen focus) from wants of the mind, noting that the latter are infinite. Smith himself spoke of "demand or need…(whether this [need] be real or capricious)," and proceeded to analyze how art is priced, employing the analogy of an auction. He also focused on the case where supply is less than demand, which is fairly typical with art, since each painting or other art object – statue, drawing, performance, installation, video – is somewhat unique. In contexts of this sort fancy reigns – or, rather, fancy plus wealth. Thus Smith:

> If there is less than is sufficient to supply the demand, the parties contend who shall have it. The case here is the very same as at an auction. If there be two persons equally in fancy with anything and equally earnest to have it, they will bid equally according to their abilities, whether their desire for it be reasonable or unreasonable. The richest however will always get it as he is best able to bid highest.
>
> *Lectures on Jurisprudence* [1762-63 session]
> R.L. Meek, D.D. Raphael and P.G. Stein (eds), Glasgow edition of *The Works and Correspondence of Adam Smith*, volume V, p. 358.

Note that the auction model applies somewhat to purchases from a dealer or gallerist as well as to formal auction sales. I understand Smith to have been saying that the laws of demand and supply hold for art, but they work there in special ways. What is special? In the first place, as noted, typically each piece of art tends to be somewhat unique, so that demand exceeds supply almost by definition; and, secondly, the demand for art is largely unrelated to personal physical need or production requirements, which is just to repeat what I mentioned at the outset, that the cost of art frequently bears little or no relation to its price. Instead prices tend to be heavily driven by whim or fancy, though whim is necessarily constrained by wealth or disposable income. There are of course some for whom that constraint hardly matters, which again alters the way economists must reason, since ordinarily scarcity, either of resources or of means, or both, is part of price formation.

Smith's analysis is not only generally apt but very relevant, as we will discover, to the CAM. In the sub-market for Contemporary Art in particular, prices seem to be driven by the fancies of those at the very top of the wealth distribution. More on this when we come to art advisors, buyers or collectors of, and art investors, but the role of top wealth owners in setting the prices of art in the Contemporary market is another intriguing area of research.

A more general implication of thinking about the economics of art in the Smithian manner is that it fits with the general perception that art markets are endemically opaque. Where fancy defines preference there is a lot of room for persuasion, and not all the information made available is objective or true. As an aspect of this, art markets are characterized by slightly questionable practices. We shall address this lack of transparency and prevalence of questionable practices in the context of thinking about the behavior shown by dealers, auction houses, art advisors and others, but we begin with dealers.

We will move through a series of topics for about a month and a half, after which I will suspend classes for two weeks to let you catch your breath and to me to meet with each group. Following that short hiatus we shall reassemble as a class for presentations of early versions of your PAPERS. Attendance at these presentations is expected and is a good opportunity to show your critical acumen.

TASK #1 (**for submission in class, August 30**): read my summary (posted) of a letter of advice from veteran dealer Anton Goedkindt to his cousin, Chrisostomo van Immerseel, a beginner, in the 1620s. Goedkindt was in Paris, Van Immerseel shuttling between Antwerp and Seville, and Goedkindt was trying to open up a market for Flemish paintings – they both hailed from Antwerp – in Spain. The issue is how a dealer should present his paintings to prospective buyers.

Questions for you to consider when reading the summary: should a dealer reveal his asking price on receiving a first expression of interest from a prospective buyer? If not, why not? What strategy should he adopt?

Your specific challenge: Articulate in your own words the rationale behind the "withholding" strategy recommended by Goedkindt, and put it all into a supply and demand diagram. Towards clarifying your eventual written statement on this, address the following questions in your within-group discussions.

- Can Goedkindt's advice be pictured using *regular* demand and supply curves?
- Note that, if we assume each of the paintings in a dealer's stock to be somewhat unique, there would be as many supply curves as there were paintings, but each would take the same very particular shape: what shape?
- How would you show on one of the supply curves, for any specific painting, the constraint that the dealer must cover costs plus a profit? (Of course in reality that constraint did not have to be met for each and every painting, just the whole set.)
- How should the potential demands of different fanciers be represented for any specific and somewhat unique painting? (Hint: think about showing both cost and fancy on – yes *on* – the supply curve for an individual painting?)
- And, importantly, how would you represent *success* in the "withholding" strategy advocated by Goedkindt?

[You can address all these questions on a single diagram, with the axes labeled in the usual way, and accompanied by relatively few words.]

Class of August 30

We will discuss **TASK #1** in class. But also, by way of preparation for class, read the paper on "The Noise Trader Approach to Finance," by Shleifer and Summers (he of the cameo appearance in *The Social Network*). This comes from the *Journal of Economic Perspectives*, volume 4, 1990, pp. 19-33 and is available via JSTOR. The argument of this piece is as follows: (1) some investors are not fully rational; they trade on feelings or some 'system' or other; (2) changes in prices driven by investor "sentiment" (cf. fancy) are not fully countered by arbitrageurs; hence (3) stock returns (both the level and volatility thereof) are influenced to some extent by "noise" (irrationality, sentiment).

Question: why is noise trading not offset/countered fully by arbitrageurs?

Answer: because arbitrage is not riskless, hence it can be costly.

Our interest in the Shleifer and Summers paper stems from the applicability of its argument to art markets. They note that costless arbitrage requires there to be a *perfect substitute* for the asset being considered for purchase or sale. Thus, if you hold a portfolio of stocks, and there is another portfolio that matches its composition perfectly, should the price of the second fall below that of the first, you could, without risk of loss, sell the first and buy the second. However, this condition, they suggest, is not satisfied for stocks, and from what we know already it is surely not satisfied for art. This is in large part because each piece of art is somewhat unique: there can be no matching portfolios of paintings. There is insurance in the form of irrevocable bids on single lots in an auction, but nothing like, say, options on futures for whole portfolios of paintings.

Nonetheless, efforts are continually being made to collateralize art. One very limited possibility is insurance. In the situation of an owner trying to decide whether or not to consign a piece of art to an auction, it ought to be possible under certain conditions for an insurer profitably to offer a price guarantee acceptable to a consignor, even if the offer is not an irrevocable guarantee (meaning that the art will definitely sell, if only to the guarantor).

Here is a line of argument – owed in large measure to three former students – which makes this case. Imagine an owner who is willing to consign a painting (to a particular auction house for a specific sale) only if there is a guarantee of an acceptable amount. Assume also a single insurer who is willing to offer contracts containing such guarantees.

Suppose a potential consignor is faced with the following alternatives: (1) a guaranteed price of $0.5 million offered by an insurer, versus (2) what seems to the consignor like a 50% chance of getting $0.75 million at sale and a 50% chance of getting only $.25 million. The mathematical expectation of these two outcomes is the same: 1 x $0.5 million versus [{.5($.75m.) + .5($.25 m.)}] = [$0.375m. + $0.125m.], which is also \$0.5m. Suppose, however, that the consignor is *risk averse*. Then he/she will choose the riskless guarantee of \$0.5 million.

What is in this for an insurer? Here we can introduce an additional factor, *asymmetric information*, in particular, the likelihood that the insurer knows the market better than the consignor and can actually manipulate market sentiment surrounding the painting in question sufficiently to make it highly probable that the painting will sell for much more than the guaranteed price.

What form might manipulation take in such a case? The insurer might emphasize in press releases (i) that the painting is by an artist who is in some demand, (ii) that the painting is one of the best produced by that artist, even perhaps (iii) that it is the only one of its sort by that artist not already in a museum (and therefore the only one not permanently lost to the market). None of this is false but the case is close to that in which noise traders pump up the price of certain stocks by buying on a hunch or "special" information.

Two features of art markets make this possible. One is the fact that art prices tend in part to be fancy prices (i.e. prices influenced by sentiment). There are no solid benchmarks as indicators of what price "should" be. The other is that lack of transparency in art markets allows rumor and "inside" information to play a role – although, strictly speaking, "inside information" is not even defined in this almost completely unregulated market.

My immediate interest in the possibility just illustrated is not so much that it and comparable manipulation is pervasive in art markets (though it is), or even that promotion is necessarily a bad thing, but that dealers in particular have a reason to try to exploit the potential for manipulation.

For dealers must purchase and maintain a stock of art. This represents a serious investment on their part, returns on which are slow and uncertain while carrying costs, including interest on loans taken out (if they can get loans!), plus insurance and storage costs, constitute a steady, fixed drain on their funds. If, by analogy with the stock market, sentiment plays a role in determining art prices; and if some players – here dealers – are constrained by having to place their bets on what market sentiment will do to prices without any guarantee or insurance, and no riskless arbitrage possibilities on their stock of paintings as a total portfolio, then they can be expected to do whatever it takes to survive satisfactorily.

Think of dealers as trying to maximize their return on sales subject to certain outlays and constraints. This means trying to maximize the difference between purchase price or actual price and hoped for (expected future) selling price for each item added to stock. Strictly speaking the difference for each item separately should be expressed as a compound rate of return, to allow for the time interval and compounding between purchase and resale. On the other hand, the purchase price must be increased by carrying costs (storage, insurance, etc.), which recur annually for as long as an item is held between initial purchase and eventual resale. (For these items of cost it is as if the dealer gets a regular *negative* dividend for each year an item is held.) On the other side, though in this case potentially *adding to* future resale prices, each item added will presumably, if well chosen, enhance the value of the whole stock by an amount reflecting the ever-increasing depth and the range (of related items) a dealer can show potential buyers.

A dealer's maximization problem is thus enormously complex.

Insurance, to repeat, might be a possibility for individual pieces in a particular auction sale (the example above), but since dealers invest in stock, and stocks comprise subtle amalgams of individual pieces, often held for long periods of time, during which sentiment and prices can move quite unpredictably, dealers have an incentive to behave in self-serving ways, many of which suggest that they have what I call *insensitive propriety antennae*.

TASK #2 (**for submission in class September 6**). Examine the ramping charts by Meghan Wilson-Anastasios (posted) for the Australian contemporary paintings market (a *small* market, where such behavior can move prices significantly; cf. the market for single-family house price futures, on which more below).

These charts capture the following process. First, a dealer chooses an artist to be the "next big thing." The dealer then builds a small stock of works by this artist, buying privately to avoid exciting attention. Then, at a certain point, the dealer, well known in this small market, "announces" the artist as a coming player whose work

any serious collector will want to have, by placing in auctions then buying back at inflated prices one or more pieces by the artist. This causes a ripple, the media will remark the sudden jump in prices of the artist, and at subsequent auctions these prices are sustained (or so the dealer hopes) and he/she will begin offering collectors other paintings by the artist from those he/she has in stock, though also at the enhanced prices. This is manipulation of sentiment. From the charts you will notice that it works indifferently: sometimes yes, sometimes no.
Your issue*: who, if anyone, is harmed by such ramping, whether the enhanced prices stick or not?*

Class of September 4. Read the posted summary of questionable behaviors by dealers.

Still dwelling for a moment on the matter of the absence of riskless arbitrage in art markets, note that there are strong similarities between markets for paintings and markets for houses. Close substitutes may be available but certain distinguishing features also tend to make each piece of art and each house somewhat unique. Indeed, when it comes to sale and re-sale, art dealers and realtors, respectively, are at pains to stress the individuality of what they are offering, and owners too like to think of their house or their paintings as different from those of others. This introduces a further problem for the creation of hedges against losing the bet that the value of one's holdings of art (stock for a dealer, collection for a consumer) will increase over time.

Futures contracts have in fact been designed for a large class of houses, namely, single-family dwellings, employing prices indexed across ten significant cities, and there are options available on those futures, but there is no real (functioning) market, for the reason that total trading volume is so small that trades of any significance will move price by a large amount, which traders find unattractive because it increases their risk. Another way of saying this is that there is a liquidity problem in this market, a comment frequently made also concerning art markets.

For more on home price futures see Robert Shiller (co-inventor of the Case-Shiller house price index), in *Finance and the Good Society*, p. 62 and notes 15 and 16 to chapter 6 (p. 246).

Auction prices for paintings have also been indexed – see *www.artasanasset.com* , the site of *Beautiful Assets Advisors* principals Jianping Mei and Michael Moses, who have developed an "all art" index and indexes for 7 sub-categories of art objects, using the repeat sale method (same painting at initial sale and resale, to avoid mixing apples and oranges). But in the absence of futures contracts and options on these, investing in paintings on the basis of such indexes is still just an expression of hope, an unhedged bet. For that reason, as we will see, the properly cautious attitude to art as investment is to treat it as a small alternative category added to a very much larger portfolio of financial assets.

Class of September 6.

Ramping is just one of the somewhat questionable activities engaged in by dealers to compensate for their not having hedges for their stocks. A short list would include, in addition, (1) **withholding prices**. Gallerists in New York are legally required to show prices, but many ignore the law and it is not applied; (2) **forming *Rings***. Dealers often collude so as to keep winning bids at auction down. This is everywhere illegal but rarely prosecuted; (3) **being complicit in forgery and/or supplying fictitious provenances and authorships** (example: the forger of paintings Ken Perenyi, who even as a teenager walked into reputable dealerships in NYC with his paintings, which were so good and so attentive to the requirements of what he said they were that experts, including some at major auction houses, happily took them; his book, *Caveat Emptor*, will appear in September; (4) **engaging in "incestuous" buying** (gallerists and dealers, as in ramping, buying back the works of artists they represent or carry to avoid a selling price occurring that would dent a smooth upward trend); (5) keeping perfect records, yet somehow **failing to inform (or pay) artists they represent when work is sold** (the Joe Rowand case in Durham, NC); (6) ***telling different stories* about availability and price to different prospective buyers** (this can be inferred in connection with the

Goedkindt advice); and (7) **failing to ask the sort of questions a person with normal propriety antennae would ask** (the case of the major dealership, Wildenstein, in connection with their un-inventoried Paris vault holdings).

As preparation for class, read the posted pieces on these various actions and inactions.

TASK #3 (**for submission, class of September 11**). There have been calls for dealers to be much more closely regulated. Opponents of such a move argue that regulation would be the very death of art markets. They claim that dealers are the brains of the art market and we cannot do without their knowledge and expertise. Complementing this is my own argument that dealers in a sense are driven to questionable behavior. Regulating them without altering the constraints under which they operate would be pointless.

Your challenge: since online buying and selling is growing so rapidly, why not just accept that this is the natural end of dealers/gallerists of the traditional sort, and focus efforts on excluding fraud (and other forms of misbehavior) from the online alternatives? This suggested "solution" presumes that there is less fraud etc., or at least more readily discoverable fraud and other misbehavior in online markets for art. Is that true? Or does fraud just take different forms? (You will need to do some research and hard thinking about online art sellers, as well as exploring eBay's experience with fraud.)

Class of September 11. **[**From here on I will refrain from spelling out my thinking and simply indicate what we will discuss in class and what your **tasks** are.]

As preparation for this class, read the (posted) summary by John Asker of his own article on the postage stamp ring that operated so successfully in New York. Make sure you understand how the ring's knock-out auction preceding the actual sale worked and how its outcomes relate to the real auctions. Study closely Asker's illustrative charts.

Note that there are only rare instances of rings having been prosecuted. Why is that?

For in-class discussion today, dealer-like peccadillos can also be observed in the *auction* business: read Meaghan Wilson's article from *Public Space* (2010) (posted) of the accusations against one dealer/auctioneer in the Australian market. In short, opacity is exploited by lots of the players in CAM, not just one sort in particular, though dealers have good reason to fudge whereas others may simply be behaving opportunistically.

TASK # 4 (**for submission in class September 13**)

Invert the usual aim of rings, which is to lower the winning bid at an actual auction, and spell out what would be necessary for dealers to get together in order successfully to *raise* winning bids. Hints: ask yourselves why they might do this on a regular basis. To benefit whom? What kind of joint financing arrangement is presupposed in their being able to pull it off? And, in particular, does a successful ring to raise prices not have to be a form of Ponzi scheme, involving new "clients" outside the ring of dealers but served by them? Who might they be? Note: I do not know the answer to these questions, though I will share with you details of one historical situation where dealers collectively did bid prices up.

Class of September 13

We turn now to the second major group of players, *auction houses*.

Opacity reigns here too. We will focus on the nature of competition between the two global giants, Sotheby's and Christie's.

These two global players have similar products and ways of operating, comparable fixed costs and similar constraints in terms of what they can and cannot control. By the way, what do they control?

Under the circumstances, they should not compete on price but should simply agree to divide the market equally. However, it is difficult to prevent any such tacit agreement taking on the appearance of (or being in fact) collusion. In the mid-1990s, they tried formal collusion on consignor's/seller's premiums – one aspect of price formation – and were caught, tried and (some of Sotheby's principals) convicted.

Since then these two have sensibly competed on non-price items such as the average size of sales and the degree to which the focus is on top quality lots. Sotheby's actually adopted a global strategy in 2006 to hold smaller sales with relatively more top quality lots per sale. As far as I know the strategy is still in place.

However, what neither house seems to be able to control closely is hammer prices.

TASK #5 (**for submission in class, September 25th**). Each group should: (a) choose a single auction, within the category Modern and Contemporary Art, whether London, or New York or Hong Kong or anywhere else, daytime sale or evening, from within the period 1992-2012 (but excluding the years 1999-2000 and 2008-2009). Obtain from Sotheby's or Christie's sites the complete auction results for your chosen sale. (b) Create a database of the logs of (hammer prices – mid-estimate). (c) Produce a histogram of the deviations and (d) find the mathematical form that most closely fits the distribution of differences. (There are programs that will enable you to do this. Jmp is one, freely downloadable from the Duke statistics advisory service). (e) Calculate the percentage of revenue for your chosen sale that was generated by extreme outcomes, both low- and high-end, using quintiles and, at the farthest extremes, percentiles. You might benefit from reading the former student paper on the Australian Aboriginal Desert Paintings Market (posted).
Your challenge. In addition to getting some results, in your typed assessment of the significance of what you find, please address the question: does it seem that these auction houses closely control hammer prices? Are they accurately predicted by the mid-estimates? If not, does that mean their experts do not know what they are doing? Or do your results also admit of the interpretation: they know *exactly* what they are doing?

Class of September 18. We shall discuss your TASK results, and go to our next group of players, *artists themselves*. Artists on the whole earn very little and a majority must work two jobs to get by. This is confirmed by Throsby and Hollister's findings for the Australian market (see summary and charts, posted).

But art has a positive social benefit. As noted earlier, it stimulates in positive ways and it fends off boredom. Inverting that order, it not only eases a discomfort but yields positive pleasure, pleasure that grows with exposure, knowledge and experience. Moreover, those positive qualities are rarely confined to an individual, but become *positive spillovers or externalities*. So there is case for social funding for art and the arts. Why should a society forego these positive spillovers and leave all arts funding to the private sector? Notice that this is a more direct and unapologetic case than the begging to which arts providers usually feel themselves reduced.

TASK #6 (**for submission in class, September 27th**)

Your challenge: Come up with a scheme for raising the economic circumstances of artists that does not have the common downside effects of: (a) encouraging the production of "bad" art by supporting too many artists to the left of the median in the (assumed Normal) skills distribution (as did the Dutch scheme of some years ago to pay certified "artists" a living wage, in return for a substantial portion of their output becoming State property); (b) benefitting mostly established artists, who need it least (e.g., *droit de suite* [see posted piece by Bogle and Ginsburgh] and the erstwhile Irish scheme to grant artists freedom from taxes, a scheme that greatly enriched artists such as Bono and the band U2, and, naturally, encouraged foreign artists to base themselves in Ireland).

Class of September 20

Discussion of the proposition that art, since it generates positive spillovers, should receive public funding.

Class of September 25

We move on to the fourth group of players, *buyers*. Buyers may be divided into collectors of two sorts. There are those who enjoy the art they buy and for whom there is a private but also a possible external (social) consumption flow from possessing and living with items they love and have chosen to include in their home environment.

The possible social externalities, under the name of Veblen Effects, have been incorporated in an interesting recent analysis by Ben Mandel (see posting). Although Mandel stresses the kudos from owning good art his model can easily be modified to encompass private consumer benefits and aesthetic appreciation.

Even more recently Sergey Skaterschikov, founder of Skate'sIndex, an art price tracking and art advisory service and partner in Art Basel and various other art promotional institutions, has reported that no painting which sold at auction for $30 million or above has ever been re-sold for more than it cost. This tells us that the most costly art cannot have been bought for investment purposes. But if really high priced art continues to be bought and not even with an eye to investment, the buyers must be people for whom the relevant range of their consumer expenditure function, or demand curve, for art, is vertical – shades of Adam Smith. Goetzmann, Renneboog and Spaenjers (posted) have recently shown that art prices respond most sensitively to shifts at the very top of the income distribution (their proxy for wealth). This seems to apply to art collectors worldwide. Check out the latest annual online *World Wealth Report* from Capgemini.RBC*.* These Reports include major country and regional data on changing total wealth and its distribution. They also classify spending by categories, including art. Those at the top of the wealth distribution are the ones whose demand registers as the highest dots on the vertical supply curves of your first **TASK**; they are Adam Smith's bidders who always win any piece equally appealing to/fancied by wealthy individuals.

TASK # 7: (for submission in class October 2)

Track the spending of the "*ultra high net worth* individuals: what do they spend on, and where does art fit in? Are there major differences in the patterns of spending in Asia and the Middle East compared with the West?

Your challenge: Address the question whether UHNW individuals' spending explains the extraordinary resilience of the Contemporary Art sub-market when GDP and consumer spending in all major economies is slowing and most of the developed world's economies are in recession or growing slowly or even at negative rates. Properly to address this question you will have to apply the results of

Goetzmann et.al. to the Contemporary Art sub-market, perhaps using Mei and Moses's, or *Artprice*'s C50 Index, or *Art Market Monitor*'s auction results for this sub-market and compare the two to income growth for the OECD countries, India, China and the other BRICS (Russia and Brazil). Unfortunately Mei and Moses charge for their indexes, but Duke purchases access to *Artnet*'s databases (check with Lee Sorrensen, the Lilly Library Art Librarian), while *Artprice* provides some indexes, including a Contemporary Art (C50) index and *Art Market Monitor* supplies some free analysis. Tracking these two together should show a widening wedge between GDP growth (roughly flat in the developed economies, plunging recently in the Brics) and Contemporary Art prices (pretty stable, or slightly increasing). Note that you may not be able to obtain Indian data or separate price records for Chinese contemporary versus all other Chinese paintings.

Class of September 27

I move on to the final category of player in CAM, *art advisors and art funds*. My interest in art advisors as a group is that most of them fall short of Sergey Skaterschikov's ideal of transparent and objective information. Instead, most use the simplest of visual devices, the straight-line trend between two points, which points themselves are carefully chosen so as to show steady upward trend for any artist they wish to promote.

TASK #8: (for submission in class October 9)

Choose a living artist from within any geographical area within the Contemporary Art sub-market and show – verbally and visually – in an <u>honest</u>, <u>objective</u> way whether "your" artist seems, on the basis of the most recent ten years of auction results, to constitute a "good" investment. Consider the following issues:

- Is it more appropriate to do this for an individual painting than for an artist's work as a whole, or some segment thereof? (i.e., better to use only resale data?)
- What is an appropriate benchmark against which to judge "good"? Mei and Moses, seemingly in line with the demand for honest and objective

advisory aids, have just announced that they will in future provide (for subscribers only!) "true returns" for single pieces of art. This involves calculating the r (the compound annual return) from the equation

$$SP - PP(1+r)^n$$

where SP is the ultimate sale price, PP the original purchase price, and n is the number of periods in the term (number of years) chosen for study. This true return will then be compared with a total return index for the S&P 500, where dividends are reinvested tax free for the same holding period as the pieces of art. Why have Mei and Moses opted to report on single pieces of art?

- The most successful art funds, such as the Fine Art Fund, ignore the basic institutions of the art market (dealers/gallerists and auctions). Why might that be?

Class of October 9

I would like to devote this period to a discussion of one of the Bric art markets, perhaps China. This will bring to a close our quick romp through the CAM. After the Break, starting on **October 18**, I would like you to participate in a try-out of something called the **Fantasy Collecting Game**, developed by a graduate student and former member of this class. During the same two weeks I want to meet with each group to discuss tentative **Research Paper** proposals. Starting on **November 1** we will have **presentations of these proposals**, in two stages (preliminary and more fully developed), **through December 6.**