

Research in Cultural Economics:

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- Association for Cultural Economics, International, formally chartered in 1992 with a Constitution and formal officer structure after about 20 years of operation as the Association for Cultural Economics. North-Holland Handbook of the Economics of Art and Culture, 2006
- First biennial international conference in 1978 in Edinburgh; 15th just completed in Boston. Conference held in Barcelona in 2000.
- Notable Spanish membership and participation:

Spanish Representation

- University of Oviedo
- University del Pais Vasco
- University of Barcelona
- University of Valencia
- Polytechnic University of Valencia
- University of Valladolid

Recent Research by Spaniards or about Spain

- Determination of Concentration of Creative Industries: A Comparison between Italy and Spain
- Who Benefits from Governmental Grants to Cultural Industries? The Catalan Case
- Contingent Valuation and Cost-Benefit Analysis .
Draft Recovery of Cultural Heritage City in Developing Countries
- Economic Valuation of a Museum of Contemporary Art

A Model of the Book Publishing Industry in Spain

Promotion and the Dynamics of Success in the Prerecorded Music Industry in Spain

- Analysis and Implications of Cinema Consumption Habits in the Digital Era in Spain
- Determinants of Prices of the Primary Market versus the Determinants of the Auction Prices for the Spanish Print and Drawing Market
- Analyzing Authors' Rights Distribution in the Recording Music Industry
- Are Popular and Classical Music Listeners the Same People?
- Overlaps between Arts and Sports Attendance and Participation

“Sub-Fields” within Cultural Economics

- Art and Culture in the History of Economic Thought
- History of Art Markets/Evolution of Music Markets
- Economic Analysis of Art Law
- Copyright and Intellectual Property Rights
- Culture and Economic Development

More Research Areas

- Empirical Demand Estimation
- Nonprofit Firms in the Performing Arts
- Industrial Organization Applications to the Cultural Sector
 - a. Contract Theory
 - b. Competition vs. Cooperation issues
- Rockonomics: Economics of Popular Music

Labor Economics Applications

- Human Capital and Artists' Labor Markets
- Stardom and Talent: Superstar Theories and Winner-take-all Markets
- Contingent Work, Excess Supply and Occupational Risk
- Possible Overlapping Research between Arts and Sports Labor Markets

Arts Auctions: Markets for Paintings, Violins, etc.

- Special Economic Issues related to:

Museums

Orchestras

Ballet and Modern Dance

Theater

- Economic Analysis and Public Policy
Toward Cultural Heritage

Final Selected Research Sub-Areas

- Culture in Urban and Regional Development; Cultural Districts
- Culture and International Trade
- Tax Incentives in Cultural Policy
- Philanthropy and Culture
- Culture and Public Policy: Regional Issues and Comparisons

Definitional Issues in the Field: What is an Arts-Related Business?

- Museums and Collections (Museums, Zoos and Botanical Gardens, Historical Society, Planetariums)
- Performing Arts
- Visual Arts/Photography and Crafts
- Film, Radio and TV (the media arts)
- Design and Publishing (Architecture, Advertising)
- Arts School and Services (Arts Councils, Agents)

Occupations and Earnings Variability US 2000

Occupation	Coeff Var/ Rank	Mean/Median
Actor	1.774 / 1	2.031 / 1
Announcer	1.580 / 4	1.580 / 8
Athlete	1.727 / 2	1.869 / 2
Author	1.381 / 6	1.463 / 12
Dancer	1.141 / 14	1.314 / below 15
Musician	1.596 / 3	1.783 / 4
Photographer	1.351 / 7	1.498 / 10
Producer/Direct.	1.145 / 13	1.390 / below 15

Key Results: Markusen/Schrock

- Artists contributions to regional economies are not limited to being connected to arts organizations and events.
- These contributions are spread very unevenly among cities.
- The “Big Three” US cities excel in all subgroups (performing artists, visual artists, authors, musicians)
- Mid-artist concentrated cities specialize

More Markusen/Schrock

- No clear empirical relationship between artistic strength and either overall regional employment or recent growth rates (contradiction to Richard Florida?)
- Architects are especially concentrated in large cities; designers much less concentrated
- Model does NOT assume that firms and arts organizations come first and artists follow. Artist location decisions MAY attract other arts USING firms.

Markusen/Schrock Policy Recommendations

- Cities should diversify away from strictly bricks and mortar subsidies to arts facilities, but instead support artist occupations via artists' centers, and live and work spaces.
- Cities can pioneer ways of tightening the connections between existing corporate community and resident artists: NOT just one-way philanthropic gifts TO artists, but via better utilization of artists as valued workers and sources of unique talent.

Importance of Improved Criteria for Allocating Public Funds

- Currently, large new performing arts facilities receive disproportionate share of public funding (Univ. of Chicago Cultural Policy Center study on overbuilding)
- Smaller more diverse targets of funding are critical to avoid the potential for weakened overall regional arts sector, even though mega-organizations may be thriving, or at least surviving.

Role of Research on Competition vs. Cooperation in the Arts (Seaman JCE paper)

- Distinction between “vertical” IO contracting (Caves) research and “horizontal” industry analysis.
- Monopoly vs. other models applicable to the performing arts/ spatial modeling/antitrust analytical models/non-local vs. local geographic markets
- Possible social gains from collusion

Vertical Contracting Issues/Caves

- Key structural properties of economic organization in the creative industries:
 - 1. Nobody Knows (role of sunk costs)
 - 2. Art for Arts Sake
 - 3. Horizontal and Vertical Differentiation
 - 4. Temporal Coordination
 - 5. Durability and the Hazards of Coordination

Demand Issues in the Arts: Key Findings

- Income elasticities of demand cannot be adequately estimated without separation of “pure” real income effect from the opportunity cost of leisure and the resulting substitution effect
- Quality matters, but in very complex ways.
- Dynamics in consumption are important, but passive inertia, learning-by-consuming, and rational addiction versions of why have importantly different implications

More Demand Issues

- Formal education is more important than income in explaining variations in arts attendance, but econometric estimation has not significantly strengthened the results from less sophisticated statistical techniques.
- Specialized “lifestyle” and socialization factors have at times dominated traditional socioeconomic demand determinants.
- Price elasticity estimates have been biased by failure to fully adjust for strategic pricing in non-profit settings.

Final Demand Findings

- Econometric evidence regarding cross-price elasticities is limited, and has tended to focus on “inter-art form” effects, rather than “intra-art form effects.
- Increased sample sizes and more sophisticated econometric techniques may be less important to more sub-sample estimation and expanded use of other disaggregated data.

Outline of Cultural Heritage Research

- Heritage as a capital asset
- Cultural capital, natural capital, and sustainability
- Cost-benefit analysis applied to heritage decisions/estimation of non-market benefits of heritage/cost-benefit analysis and cultural value
- Public intervention in heritage markets (Direct expenditures, indirect tax expenditures, hard and soft regulation)

Further Outline of Heritage Research

- Public choice considerations in heritage markets
- Devolution/decentralization in the formation and implementation of heritage policy
- Private sector roles (effects of regulation, sustainability in heritage financing, philanthropy and heritage)

MORE on Valuation of Culture in Next Presentation

- Contingent valuation vs. Economic Impact Models
- Possibility that incorrectly done economic impact studies: Naïve Economic Impact Models (NEIM) can be right “by accident” even though Sophisticated Economic Impact Models (SEIM) are superior methodologically in estimating spending impacts

The Problem

- How do we answer the question: What is the Economic Importance of, e.g., the Georgia Aquarium to the Atlanta Economy?
- Most common approach: Economic Impact Studies
- Possible alternatives: Contingent Valuation; Travel Cost Analysis; Property Valuation and other Hedonic Approaches

Types of Economic Impact

- Consumption Impact (C)
- Long Run Growth Impact (LRG)
- Short Run Spending Impact (SRS)

Classic Economic Impact Models (EIM)
linked to Regional Input-Output
Analysis and Keynesian Type Income
Expenditure Flows is Focused on SRS

Classic EIM Overstatement “Errors”

- Direct Base Spending Diversion Error
- Induced Ancillary Spending Base Error
- Multiplier Indirect Impact Error
- Supply Constraint Crowding-Out Error
- Ex-Post Verification Error
- General vs. Partial Equilibrium Policy Interpretation Error

Aggregation Paradoxes

- The Whole May Be Less than the Sum of the Parts: The Economic Impact on Georgia May be \$0 but $> \$0$ in Atlanta
- The Whole May Be $> \$0$ but the Parts Appear to be = \$0: Spending “Diversions” and “Displacements” may Suggest No Institution or Event is “Incrementally Relevant,” but the GDP clearly $> \$0$

Aggregating Impacts: Are CVM and EIM Complements or Substitutes?

- $RV = \text{“Real” Value}$; $CVM = \text{Contingent Value}$; $EIM = \text{Econ Impact}$
- $RV = \alpha (CVM) + \beta (EIM)$
- $(1,0)$ or $(0,1)$
- $(1,1)$
- $(1,0)$
- $(0,1)$

Mixed Case

- OR:

(α, β) are both functions of specific variables that can be specified.

While it is most plausible to expect both parameters to be between 0 and 1, it is possible for both to be > 1 , if both CVM and EIM systematically understate RV

Common CVM Biases

- Sample Selection/Question Design
- Anchoring
- Lack of Perceived Budget Constraints
- Various “Embedding Effects”
(violations of more > less, or excess weighting of irrelevant alternatives)
- Aggregation Perversities

Some Distinctions

(1) $EIM = \$0$ vs. the $\alpha = 1, \beta = 0$ Case

Example: Bille-Hansen CVM study of Royal Theatre of Copenhagen which assumes that “primary purpose of cultural activities is not to attract tourists.

(2) $\beta = 0$ case only if EIM always fully unreliable, OR CVM and EIM were perfect substitutes and $CVM = RV$

Suggestive “Overlap” of CVM and EIM

- Willingness to Pay studies linked to existence, option” and bequest motives can easily reflect expected tangible benefits like jobs, income, expanded services via tax revenues, etc. Atlanta Olympics Example
- Portney (JEP, 1994) links full CVM of saving endangered species to possible job and income losses via expanded regulation

More Overlaps

- Bille-Hansen (JCE 1997) study considered the overlap explicitly:
 - “Do you think the Royal Theatre has value for people other than those who go there, due to significance for country’s cultural level, **because it attracts tourists**, or for other reasons?”
- * Full Information CVM report expected EIM

Key Polar Cases

- CVM and EIM as perfect substitutes:
(0,1) or (1,0)

In “strong” form, either is fully capable of measuring RV accurately; including both is clear double-counting.

“Weak form” could capture, say, EIM overstatement of 20% of RV to yield (0, 0.833) case as alternative to (1,0) case.

Pure Complements Case

- Here, we get (1,1), such that accurate RV requires both CVM and EIM be summed. Implies that CVM measures something totally different from EIM.
- Possible case of CVM capturing ALL consumption value (use + non-use) and EIM captures short run net incremental economic spending effects

Complements Assumption in Action

- Thompson (1998), uniquely reported and summed both CVM and EIM results re: economic value of the arts in Kentucky.
- In an intriguing twist, his CVM was \$21.8 million and his EIM was nearly the same at \$22 million, yielding his full result of \$43.8 million, but possibly implying each was correctly measuring the SAME thing.

Thompson Interdependencies

- Complements case undercut by:
 - (1) Praises CVM for capturing “arts amenity value to households” but asks “natural” question: “How does this abstract amenity benefit influence the real economy?”
 - (2) While he focuses on longer run growth effects linked to property values, attracting jobs, etc., this suggests not just LRG but SRS interdependence is possible

Stylized Example: Diagram I

- Assumptions:
 - (1) No tourist demand
 - (2) Pop = 50,000 with local theater with ticket demand = $10,000 - 100 P$
 - (3) Avg. $P = \$30$; $Q = 7,000$
 - (4) Total expenditure = \$210,000; consumer surplus = \$245,000
 - (5) Users/Non-users = 0.14, Elast. = -0.4286

“Perfect” CVM Result

- Total user value = area under demand curve
= TE + CS = \$455,000.
- But usual strength of CVM is capturing non-observed value (in this case CS, not TE) which is also full surplus assuming no producer surplus. Assume that non-users have \$0 use value, per user value of \$35 would = \$245,000 consumer surplus

Link to Option Price

- Cicchetti and Freeman (1971) define option price (OP) as the sum of option value (OV) and expected consumer surplus (ECS). Assuming here that users have no separate option value and ECS is known with certainty, we get the accurate real use and non-use value of \$35 via user option price \$35

Non-User Value in Our Example

- Many CVM studies find non-user to user WTP values of about 0.35 on average, implying here an average non-user WTP of \$12.25.
- The maximum non-user value = 43,000 non-users x \$12.25 = \$526,750, but adjusting for non-adults (say 20%), this becomes \$421,400.
- Total use + non-use value = \$245,000 + \$421,400 = \$666,400 in that case.

Sensitivity Analysis

- Instead of this \$16.10 per adult person (41,400 people) = \$666,400, we might lower the non-user/user ratio to 0.20 to be consistent with other studies, which would yield a no-user value of $0.2 \times \$35 = \7 , or a total non-use value of \$301,000 (using the whole non-user pop = 43,000), yielding total value of $\$245,000 + \$301,000 = \$546,000$ (assuming again users have \$0 non-use value).

EIM, CVM and Full Value

- Without tourists (and assuming no import substitution) a sophisticated EIM (SEIM) yields value of \$0
- Total ticket expenditures of \$210,000 would drop out of both CVM and EIM studies, and our range of RV is \$546,000 to \$666,400.
- EIM claims to measure how much economy would shrink w/o theater and that = \$0. CVM claims to capture all not directly measured benefits.

Three Possible Conclusions So Far

1. Possible pure complements case, where CVM and EIM measure different things; both α and $\beta = 1$, but $EIM = \$0$
2. If EIM is truly a general case (adjusting for all the cited “errors” of EIM), we might just consider $\beta = 0$ always, to avoid accidentally overstating economic value
3. But in reality, EIM will not always be $\$0$, and CVM will not always measure RV accurately.

In Praise of Naïve EIM (NEIM)

- Given the propensity to do EIM studies, and the very high cost of an “accurate” CVM study, can we use a NEIM that does not adjust for all the errors to approximate RV?
- The “worst” NEIM studies take the organization’s budget (here \$210,000) and assume all sources of funds are “external” and all “uses” of funds are “internal” (local).

Using NEIM to Approximate RV

- Using a “direct base impact” of \$210,000 and a “regional multiplier” of 2.6 yields the \$546,000 lower RV from a “perfect” CVM.
- A multiplier of 3.17 yields the higher value of \$665,700.
- 3.0 is the average used by a sample of past NEA arts studies, and 2.6 was the most common value across 22 studies in a 1987 survey (2.6 is a plausible state multiplier but high for a city or even metro area)

Thompson Again

- The Thompson study seems carefully done, but it is likely that few if any Kentucky tourists visited primarily due to the arts, making the SEIM close to \$0.
- If so, his \$22 million valuation can be:

$$RV = 1(\text{CVM}) + 0 (\text{SEIM}), \text{ or}$$

$$RV = 0(\text{CVM}) + 1 (\text{NEIM}).$$

Either approach is “right” but the second is accidentally right.

CVM vs. NEIM Measure of External Benefits

- The NEIM result in our example was \$210,000 direct impact + \$336,000 indirect (via multiplier effects), so only \$336,000 represents an “externality” and it is a “pecuniary” externality.
- The CVM result for that lower bound case of \$546,000 was entirely “external” to the theater (not captured in revenue), and are “real” externalities.

How Likely is this Result to be Observed?

- Table 1, pp. 28-29 of the paper identify key variables from the “no tourists” simplified case.
- See pages 29-34 for analysis of those results.
- Pages 35-39 gives a variety of results for a tourists illustration generating three possible rankings of NEIM, EIM and CVM

Some Empirical Evidence from Past Studies

- Table II derives EIM unadjusted and adjusted results for 9 past arts studies, reported as per capita economic impacts, and compares those results to mean WTP results from arts CVM studies.
- Four of the studies generate results fairly consistent with an NEIM/CVM of about 1.0

Overall Conclusions

- CVM and EIM approaches are not conceptually independent, so the parameter weights are most likely fractional.
- The pure complements case cannot be the general case and can only apply in an unlikely case of true independence or if such a significant understatement error applies to both cases that summing = RV

More Conclusions

- The pure substitutes case can also only occur with significant measurement error, as in the case of NEIM significantly overstating the “true” EIM but accidentally yielding the correct CVM value, when that value is a good measure of RV.
- Given measurement errors in both approaches, it is possible that a NEIM can better approximate RV than a SEIM, with various rankings having been derived to show all possible cases. NEIM is much cheaper than either SEIM or CVM.