

Workshop on
MARKET OPPORTUNITIES IN SPACE:
THE NEAR-TERM ROADMAP

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Measuring the Market for
Space Tourism

Dr. Geoffrey I. Crouch

&

Dr. Jordan J. Louviere

The Travel & Tourism Industry

- “Travel and tourism is the largest industry in the world” *THE ECONOMIST, JAN. 10, 1998*
- Approaching \$4 trillion (about 10%) of gross global product
- Sustains 1 in 10 (300 million) jobs worldwide
- The possible emergence this century of space tourism *could* create a hugely important new market
- It could also contribute to a revolution in space transportation systems advantaging other fields of space commerce

Existing and Possible Future Forms of Space Tourism

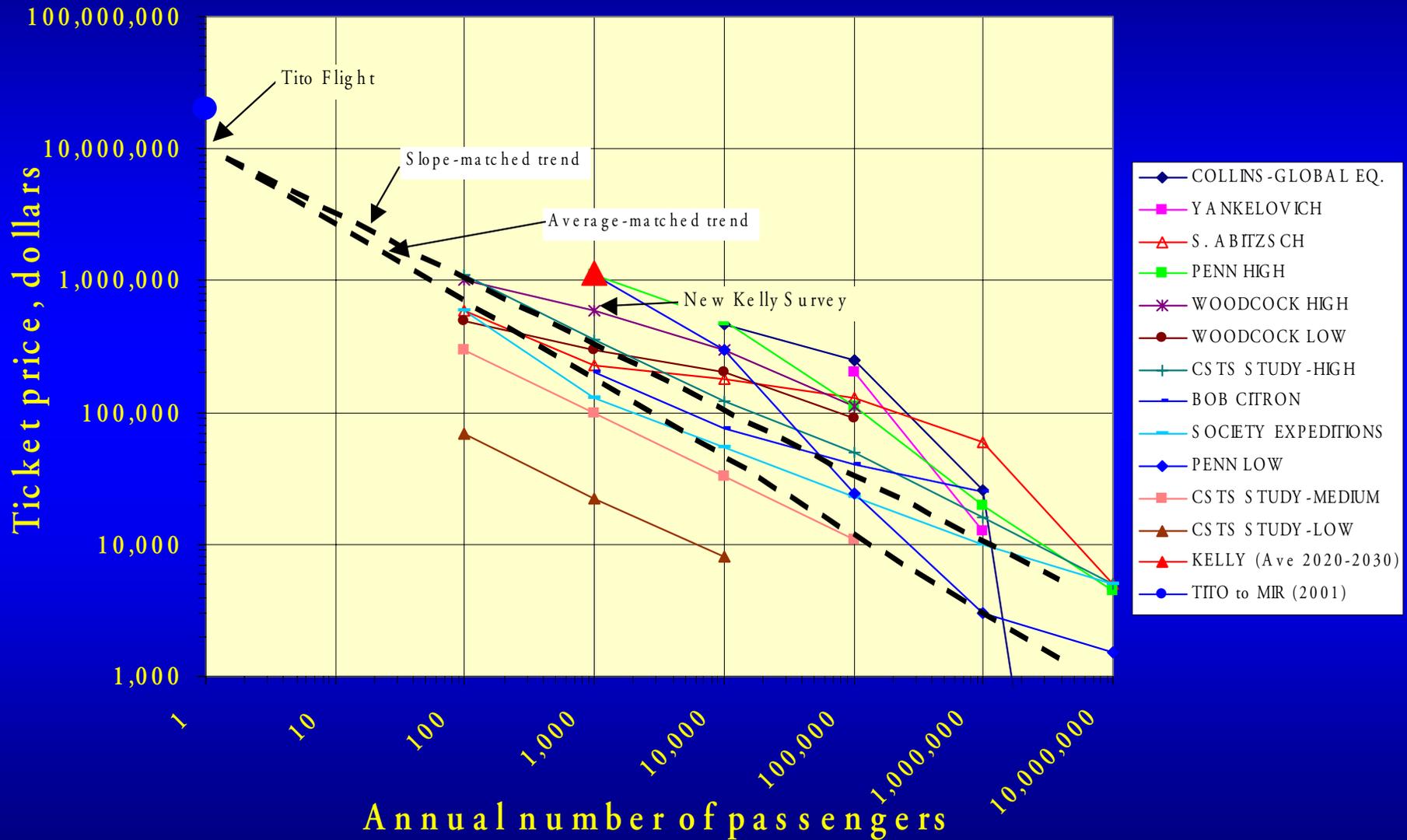
- Terrestrial space tourism
- High-altitude and suborbital experiences
- Orbital space tourism
- Interplanetary travel and space colonies in the more distant future
- Can see the ‘tip of the iceberg’
- But no credible evidence yet of latent demand

Market Research to Date

- Only modest, simple studies so far
- Typically sampled general public for responses
- Graph compiling and summarizing their results

SPACE TOURISM MARKET ELASTICITY

Including implied trends



Source: I. Bekey

Shortcomings of Current Research

- Consistent? – maybe, Valid? – more doubtful
- Reflect *interest* or *desire* rather than *behavior*
- Not based on any theory of consumer behavior
- Ignore important attributes of the experience
- Survey respondents not forced to ‘trade off’
- Ignore the need to save first
- Ignore perceptions of risk
- Ignore reputation and credibility
- Ignore market dynamics and competition

Choice Modeling

- Theoretically sound & empirically sophisticated
- Must use *stated* rather than *revealed* choice data
- Good theory connects stated choice data to real market behavior
- Stated choice methods have some important advantages
- A credible basis for proceeding further

‘Accelerating’ Consumer Learning

- Until recently, the concept of public space travel was fantasy and fiction
- Publicity over Mr. Tito’s trip made it a reality
- An improved research environment
- More real, less hypothetical survey questions
- How to ‘educate’ consumers in surveys?
- *Information acceleration* provides a tested method for doing so

Conclusion

- Improvements can and should be carried out
- More credible basis for entrepreneurs and investors
- Valuable information to aid in design
- Greater attention on marketing is now required
- Discussion paper on marketing research is available