

The Existence of an Unregulated Secondary Market and Its effects on prices:
A Study into Price Asymmetry in the Vacation Ownership Markets

by

Christopher Alan Miller

Bachelor of Science
University of Florida
1997

Master of Business Administration
University of Florida
2002

Doctor of Philosophy
University of Nevada, Las Vegas
2009

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ABSTRACT

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The purpose of this research is to analyze the relationship between prices of a product sold in a fixed-role market, as defined by Patrick Aspers (2007), while there exist a switch-role market for the same or similar products. Additionally the research will explore the magnitude of price differentiation of identical or similar products across varied markets. This article explores three sub-markets where most consumers face adverse selection problems due to asymmetric information. Using empirical price data over a 6 month time period, this study will measure any price differences between timeshares offered in the primary and the secondary markets. Asymmetry tests will be used to determine if the prices in one market affect the price levels in the other. First descriptive data will be analyzed followed by tests for equivalence. Tests for correlation will be run in order to ascertain any relationship between the market types. A pair of tests is usually conducted: sum of coefficient tests and speed adjustment tests. For this research, these two tests will be performed on weekly price data of timeshares found on eBay, online brokers, and from timeshare developers. As of this writing, little to no research has acknowledged the existence of a secondary market for timeshares. Additionally, there is a lack of research on the effects on prices of developers due to the existence of auction and brokered secondary markets.

Introduction

In the decades of investigation into the effects linking prices to market information (Fama & French, 2007; Shleifer & Vishny, 1997; Sutton, 1991; Fama, 1970) and prices with market structure (Duffie, 1996; Grossman & Miller, 1988) one of the strongest examples of market efficiency was consistent pricing. As one might expect, prices for the same asset should vary within a small range. If the price range becomes too large arbitrage opportunities occur and provide pressure to collapse it. Given the development of the secondary timeshare markets, however, these market behaviors are not being followed. This study is an attempt to revisit and analyze the market and the forces at play which may or may not be following traditional paths.

From the beginning, the timeshare industry has been a dynamic and unique one. The industry, as reported by the American Resort Development Association (ARDA), enjoyed revenues of \$9.9 billion, a slight decrease from \$10.6 billion in 2007. In over 30 years the industry has grown from revenues of \$50 million in 1975. Many view the timeshare industry as a blend of the hotel and real estate industries. Consumers purchase a right to use hotel-like accommodations for a limited number of days per year.

This study intends to measure, analyze, and test the pricing behavior and relationships within the timeshare industry. To date, the few studies concerning timeshare prices do not empirically include the pricing data from the secondary markets. The purpose of this study is to fill the gap in the literature concerning inter-industry pricing when an unregulated secondary market exists.

Statement of the Problem

As noted above, despite the well established link between similar assets and similar prices, this connection between the prices of timeshares sold by developers and those sold on the secondary market remains unexplored. Similarly, no empirical research appears to have been completed that incorporates the different secondary market structures. The purpose of this of this research is to address this gap by analyzing the price relationships within the timeshare industry.

Objectives of the Study

The first objective of this study is to empirically test for a relationship between price movements of timeshares sold in the primary and secondary markets. The second is to find a correlation between the different market structures within the secondary market. The final objective is to create a model that would, if one is present, would eliminate any significant price differences between the primary and secondary markets.

Hypotheses

The hypotheses to be tested in this study are as follows:

H1: The prices between timeshares offered in the primary market are equal to those offered in the secondary markets.

H2: The prices between timeshares sold in the brokered secondary market and auction markets are similar.

H3: The aggregate impact of the primary market has an effect on prices of the secondary market.

H4: The speed of increases and decreases in prices of the primary market onto the secondary market is consistent (assuming there is a relationship)

BACKGROUND

Markets

One of the dominating assumptions pertaining to market theory concerns the existence of full information. In order for a consumer to make an efficient decision, they must have and utilize access to price information on similar products and services from competing vendors.

The Timeshare Industry

Vacation timeshare ownership involves the purchase of the right to use an accommodation for a defined period of time during the year over a specified amount of years or until perpetuity (Powanga & Powanga, 2008). The business model for the timeshare producers is quite unique. The largest components of costs are sales and marketing expenses. Because of this, many contributors to the literature believe timeshares are not suitable as investment properties (Powanga & Powanga, 2008; Hovey, 2002; Madsen, 1999; Ziobrowski & Ziobrowski, 1997). A phenomenon that is missing in the literature is the acknowledgement of the existence of the secondary market for timeshares. The secondary market consists mainly of the broker and auction markets. Evidence of the brokered market consists of companies such as Sellyourtimesharenow.com and Timeshares Only, Inc. eBay is an example of an internet auction market where timeshares are offered.

The Secondary Market

Since before 1989, when the State of Florida enacted the first timeshare resale law (Resort Development, 1989), there has been a formation and growth of a secondary timeshare market. Using the definition of secondary market described in financial texts as a marketplace where transactions in currently issued assets take place (Keown et al., 2002), the secondary timeshare market is comprised of those who want to sell timeshares they already have, those willing to buy, and those offering to assist in creating and executing the transaction. As the maturation of the timeshare industry continues, the formation of regulation of the secondary timeshare market is still in its infancy.

As with any secondary market, its use and its value are based upon those buying and selling in it. Many sellers use the secondary market to depart with the asset due to a number of reasons such as non – use, lifestyle change, or unexpected financial distress (Baumann, 2000). Purchasers also look to attain an asset at a price he or she thinks is reasonable. The resale purchases of timeshares typically do not carry the cost of marketing which can be as high as 43% of the price of a new timeshare from a developer (Powanga, 2008). This enables the purchaser of a timeshare on the secondary market to enjoy a higher financial value in the asset (Miller & Werner, 2009).

The very existence of the secondary market is creating competition for timeshare developers. Timeshare developers now have to compete with the current inventory held by resellers in a given location. Using basic theories of microeconomics, one would conclude, with a fixed level of demand and an increased supply, there would be downward pressure on prices on new timeshares offered by developers. If this causes the developers to lower their prices, in order

to maintain profit margins, developers may have to cut commissions to salespeople which make a large part of the 43% marketing cost (Ziowbrowski, 1997). This could run contrary to any programs the developers may have to curtail the high employee turnover they may be experiencing (Baumann, 2003).

Many developers try to interfere with the secondary market dynamic of price finding by their methods of handling resales. This provides developers more power to keep prices high and charge fees for making reselling an option. Many resorts provide secondary market services in order to control the price point resales are offered (Powanga, 2008). Theoretically, a price point should be determined by the relationship of the combined actions of the buyers that bid and the combined actions of the sellers that ask. In other words, prices should be controlled by the powers of supply and demand.

Timeshare resale companies, on the other hand, can also seem to be secondary market restrictive by charging commissions which can reach up to one – third of the sales price. These high commissions will negatively alter the net present value of a purchase or sale. In microeconomic terms high commissions are analogous to high taxes when considering the microeconomic effects on price, supply, and demand. For the resellers that are ethical and operate in what they believe are the consumer's best interest, the consumer can enjoy a savings of near 70% compared to buying from a developer.

Carole Levene, currently President of Timeshares USA in Orlando, Florida, claims buyers on the secondary market can enjoy a 60 percent savings by going through a broker. She does most of her transactions online. Levene states by keeping costs low, she can transfer the savings to the purchaser.

Wengel retorts by stating the customer cannot see the product they are buying in a secondary market transaction. He claims the customer is “buying it sight unseen (Baumann, 1999).”

Buying products “unseen” is a problem for some (Bellman, 1999), but if the purchaser is a current timeshare owner they already understand the timeshare process and they seem to be the largest percentage of resale buyers (Baumann, 2000). Hagberg supports this by stating the majority of resale purchasers already are owners of at least one time share or are prior owners. “They know they can get a deal.”

METHODOLOGY

Due to the high efficiency of the financial markets and a lack of consistent long lasting instances of price asymmetry between markets this research will test for price asymmetry model developed by Tweeten and Quance (1971) for agribusiness products.. This model was later improved by Punyawadee, Boyd, and Faminow (1991). The final model is:

$$\Delta P = a_0 + b_m \Delta PPT_{t-m} + c \Delta NPT_{t-m} + e_t$$

Where ΔP_t are the changes in price for timeshares on the auction market at time time t , and a_0 is the intercept. ΔPPT_{t-m} is a vector of lagged price changes in the primary market for the periods $t-m$, where m is the lag. ΔNPT is the vector of negative prices in the primary market for the periods $t-m$. e_t is the random term.

Data

Data in this study will include weekly timeshare prices for North American weekly units. Price data collection will start at the online auction site of eBay. Once a price or an offer is collected, information on a similar unit at the same resort for the same week will be gathered from the brokered websites. Once this data is collected, additional data will be collected on the style unit from the developer. If information cannot be collected from a minimum of one of the secondary market sources and the primary market, the data will not be used. Data collection is planned for 6 months.

PROPOSAL CONCLUSION

The researcher believes this study accomplishes many tasks in closing the gap that is apparently in the research. It is the first look into asymmetric prices within the timeshare industry. We add research literature into the areas of efficient market behavior, inter-industry asymmetric price transmission across sub-markets, and this study will shed light onto possible arbitrage opportunities.