Last Updated 8/19/2015 (2nd Edition….words in one sentence on Page 8 were re-ordered, else no other changes were made)

NOTE: This is the Second in a series of White Papers aimed at moving us from the current appraisal industry to a much different valuation industry of the future.

BRIEF HISTORY OF VALUATION

'Price vs. Value'

By George R. Mann, CRE

NOTE: I want to recognize the research on the history of real property valuation that Ed Pinto of the American Enterprise Institute has performed over the past few years. His findings are throughout this white paper.

I have found that since the beginning of valuation theory the issue of price and value was prominent and most people concluded that these are not the same. Richard M. Hurd's book *The Principles of City Land Values* (1903) is the second earliest book we (Ed Pinto and myself) have found on the subject of real property valuation. Over 110 years ago, Mr. Hurd stated the following:

"If a new utility does not arise, exchange prices may advance and recede, while intrinsic values do not change.' – Richard M. Hurd

Another significant contributor to real estate valuation was University of Wisconsin Professor Richard T. Ely. Mr. Ely is known as the 'Father of Land Economics.' He had no significant publications until he assisted some of his students in the 1920s.

"Their concern for promoting stable and affordable homeownership led Ely and others associated with the (American) Institute (of Real Estate Appraisers) to argue that market prices and real estate value were somewhat distinct....' – Page 122, 'Richard T. Ely and the Contribution of Economic Research to National Housing Policy, 1920-1940' , Marc A. Weiss

In 1923, Ernest Fisher, student of Professor Ely and member of Ely's Institute, writes *Principles of Real Estate Practice*. The following year (1924) Frederick Babcock writes *The Appraisal of Real Estate*. This book is the first generalized appraisal book and part of Professor Ely's Land Economic Series.

In his follow-up book, *The Valuation of Real Estate* (1932), Mr. Babcock establishes the concept of warranted value and explains the difference between price and value as follows:

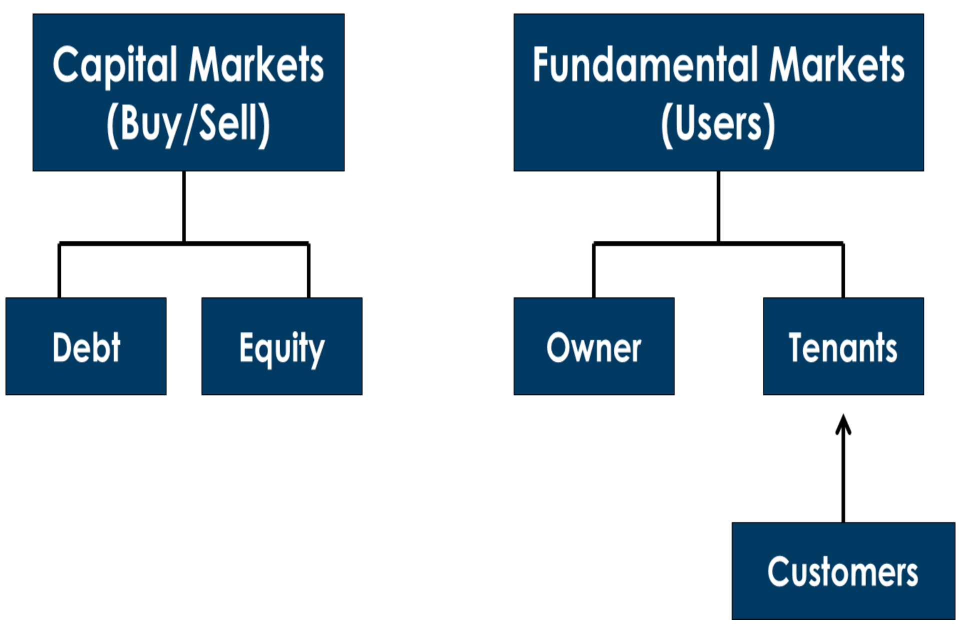
- The fact that several hundred purchasers have been found who were willing to buy certain undesirable subdivision lots at exorbitant prices would in no way be presentable as evidence of market value.
- Value will be used to designate the concept in which the thoroughly informed buyer is present and market price will be used to designate the prices which properties actually do bring in the real estate market.

The use of the term 'buyer' above was not meant to be real buyers or sellers. It is a hypothetical representation not to be taken literally.

In 1934, Mr. Babcock becomes the Chief Underwriter for the FHA and implemented his warranted value, which was also known as intrinsic value. The 1938 FHA Underwriting Manual states:

"This valuation is sometimes hypothetical in character, especially under market conditions where abnormalities in price levels indicate the presence of serious quantitative differentials the two value concepts [warranted value and available market price]. Marked differences between "available market prices" and "values" will be evident under both boom and depression conditions of market."

In the 2000s, Stephen Fanning, CRE, MAI designed the following diagram to show the two different real property markets. Capital Markets represent transactions and leads to Market Price. Fundamental Markets represents the Income Approach and leads to Value. In the 1930s, the FHA considered the Income Approach more indicative of value than the Sales Comparison Approach.



However, the separation of price and value ended by the early 1940s. George L. Schmutz's book *The Appraisal Process* (1941) defined Market Value as 'The highest price for which a property can actually be sold in a reasonable length of time.' (Page 11) He references wording from the California Supreme Court that also defines Market Value using the term 'highest price.'

*For 75+ years, other than Stephen Fanning (*author of the Appraisal Institute's book *Market Analysis of Real Estate) and John Blazejack, no appraiser has ever provided an opinion of Market Value! They have only provided most probable Market Price.'* – George Mann

Other than adding some basic assumptions (e.g. knowledgeable buyer and seller), the definition of Market Value stayed the same until the 1980s. During that decade 'highest price' was changed to 'most probable price.'

And that is where we sit today – with the worst definition in real property valuation. Using the word 'price' in any definition of 'value,' makes as much sense as the following definition:

Orange – An orange is a banana that meets the following conditions:

- A fruit that is round; and
- A fruit that is green or orange.

There is as much logic in defining an orange as a type of banana as there is in defining value using the term price! Cost, price, and value are different concepts that stand on their own.

Mann's Axiom – *If the market says it's so, it isn't.*

EXISTING APPRAISAL THEORY FAILURES

<u>NPV</u> – In the world of Finance, price and value are significantly different concepts. Whether purchasing an item (i.e. price) or producing an item (i.e cost), the company or individual has assumed that value is higher. The difference is typically termed some form of profit.

A basic premise of existing appraisal theory is that Net Present Value (NPV) of every market value assignment is $0. As noted above, Finance majors will recall from their studies that companies seek a positive NPV, but may settle for a $0 NPV in some situations.

However, if a company set their maximum return equal to their minimum IRR threshold, they will surely fail. The same holds true for real property purchasers. In order to satisfy investors, they must pay a price that is below <u>their</u> perceived value. This is also known as a positive NPV.

One might ask why would the seller accept a price that is below value. First, the seller does not know, nor cares, about the buyer's IRR (Internal Rate of Return) threshold. The seller makes their decision based on their acquisition price, income received since purchase, and an acceptable reversion. A variety of circumstances dictate why the seller chooses to sell at a particular time.

The ability of both buyers and sellers to be satisfied with the transaction price can be explained by the accuracy of prices and values. Studies have shown real property prices have at least a ±10% confidence interval and values have at least a ± 10%-15% confidence interval[1].

Thus, a $900,000 transaction price may have had the buyer placing a $1,000,000 value on the property. The buyer may have been working with a value range of $850,000 to $1,150,000. The seller may think a price between $800,000 and $1,000,000 is reasonable. Depending on market conditions, there is a lot of room for both parties to arrive at a mutually satisfying transaction price. In this case, the buyer has a NPV of $100,000 ($1,000,000 Value less $900,000 Price).

<u>Finance Law of Supply and Demand</u> – The general public, along with economists, try to apply the Economic Law of Supply and Demand to the real property market. This would be correct if real property was an utilitarian good or service. Until the 1940s, with some minor exceptions, real property was viewed as an utilitarian good – i.e. a source of shelter, enjoyment, etc. However, since the 1940s,

[1] A tip of the hat to George Dell, MAI, SRA who suggests we should stop considering confidence intervals and start using prediction intervals.

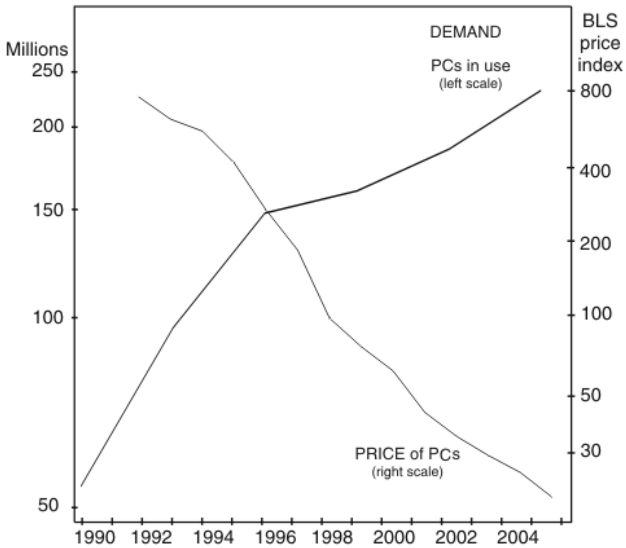
increasing leverage was encouraged to the point that real property is now a financial asset.

In economic markets, demand should rise as prices decline and vice versa. However, in financial markets, demand increases as prices rise and vice versa. The Law of Supply and Demand explains behavior in economic markets. However, this Law does not explain the behavior of financial markets. Socionomics explains financial market behavior in the newly developed Law of Patterned Herding.

The graphs below show an economic market (Figure 5) and three financial markets (Figures 6-8)[2]. The Law of Supply and Demand does not apply to the financial marketplace. As such, financial prices rise or fall with the trend of the herd. The term ‘real property’ can be substituted for ‘financial’ in this discussion.

[2] Prechter Jr., Robert R. and Wayne D. Parker (2007), “The Financial/Economic Dichotomy in Social Behavior Dynamics: The Socionomic Perspective,” *The Journal of Behavioral Finance*, Volume 8, No. 2, p. 7

FIGURE 5
Economic Market: Prices Trend Inversely to Customers' Holdings (Price of Personal Computers vs. Personal Computers in Use)



Note. Data from the Survey of Consumer Finances and the Bureau of Labor Statistics. Adapted with permission.

FIGURE 6
Financial Market: Prices Trend in the Same Direction as Volume (S&P 500 vs.NYSE Volume)

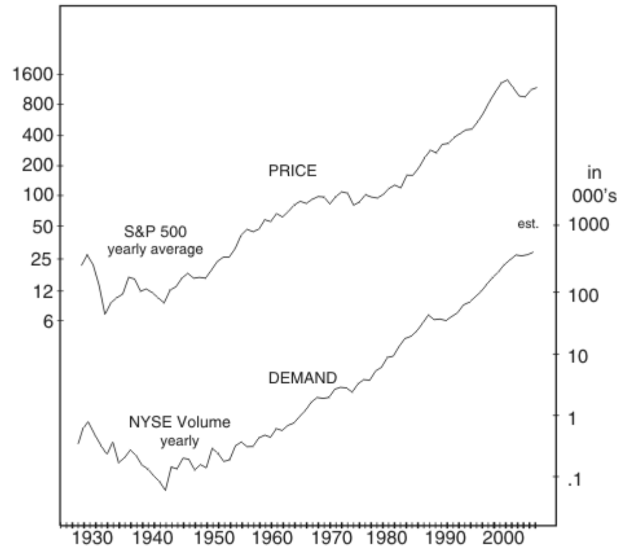
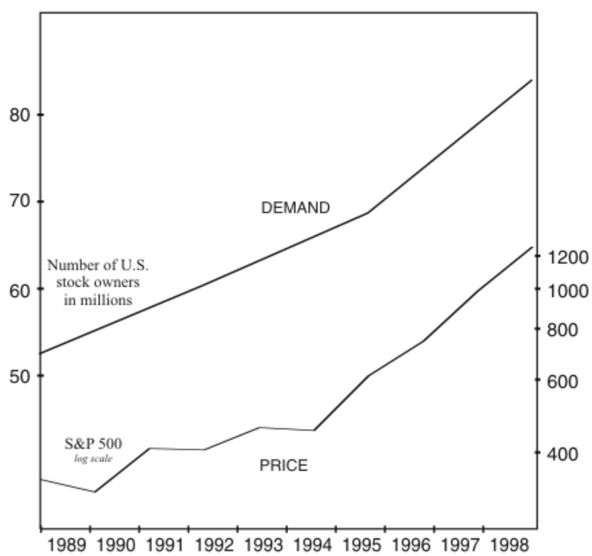
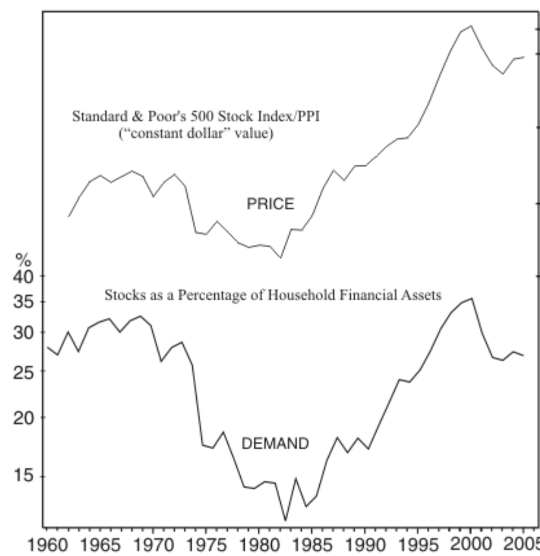


FIGURE 7
Financial Market: Prices Trend in the Same Direction as the Number of Owners (S&P 500 vs. Number of Annual Survey Respondents Who Own Stock)

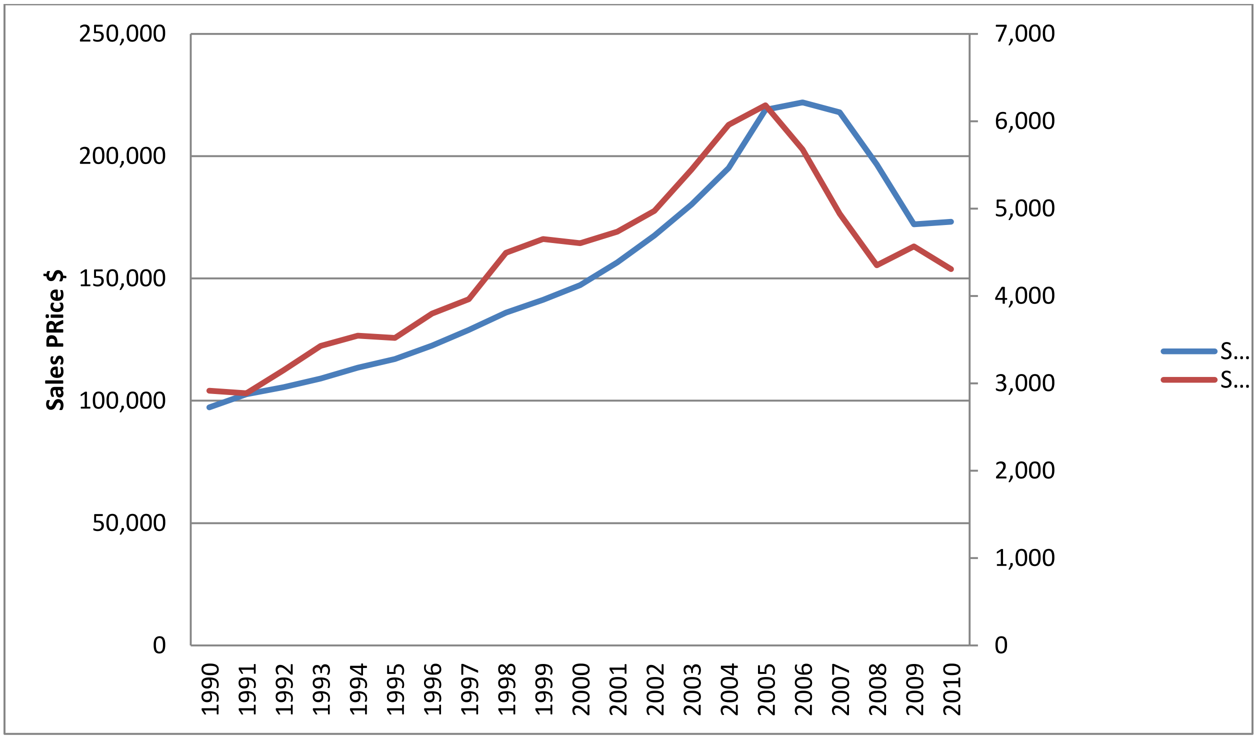


Note. Respondents were limited to individuals who are heads of household or married to heads of household. Data from the Survey of Consumer Finances. Adapted with permission.

FIGURE 8
Financial Market: Prices Trend in the Same Direction as Investors' Holdings (S&P 500/PPI vs. Stocks as a Percentage of Household Financial Assets)



The graph below shows the finance law in effect with housing demand (i.e. annual sales – Red Line) increasing as housing prices (Blue Line) increase. Prices fall when demand declines. In essence, prices and demand trend together in both directions.



The public must realize that transaction price is simply a reflection of the relative optimism or pessimism of the market's thinking on a future sale's price being higher than today's price.

The stock market is a classic example of this. When a person buys 100 shares of IBM they have not acquired a small percentage ownership of the company itself. They have simply paid a price that currently reflects the market's optimism, or lack thereof, that IBM will trade at a higher price in the future.

When IBM trades at a yearly low of $100 per share this reflects a lack of optimism. When it trades at a yearly high of $200 per share it reflects market optimism for even higher prices. Regardless of the price range noted, the value of IBM remains the same or might change slightly.

‘Using only the Sales Comparison Approach is a price estimate, not a value opinion.’ – Bill King

We don’t always need to go back to the future to find solutions to our current problems. Sometimes it is better to go forward to the past. The founding fathers of real property valuation had it right. It is time we follow their lead. I leave you with Mann’s Theory of Valutivity©.

1. **Price and Value are only equal during market equilibrium.**
2. **Real Property markets are very rarely in equilibrium.**
3. **Therefore, Price and Value are very rarely equal.**

In conclusion, it is time we 1) Stop using the Sales Comparison Approach, and 2) Fix our broken definition of Market Value.

The next White Paper will be a list of definitions to consider for the future Valuist© profession.

THE END

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ADDENDUM

There are likely hundreds of quotes noting the difference between price and value. However, there are a few that didn't fit in the body of this White Paper that I wanted to point out. They follow with my thoughts interspersed.

"A simple principle underlying value theory deals with the difference between price and value. Data sets consist of observed prices that are analyzed to gain an understanding of value, which cannot be observed. Therefore, the only alternative is to infer value from price data." - Marvin L. Wolverton, PhD, MAI (Ret.), The Appraisal Journal, Page 176, Spring 2014

I had never contemplated that value is not something we can see or touch. It makes sense that, like all opinions, value is simply each person's belief as to what something is worth. Cost and Price are facts that are observed. Value is not. Dr. Wolverton makes a very good point.

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The 1938 FHA Underwriting Manual states:

"In an unusually active sales market, such as exists in 'boom' times, rising prices, stimulated by strongly competing buyers, reach a point where fairness disappears, insofar as prices are concerned. <u>Such prices are almost worthless as information in estimating value.</u>" (Emphasis added)

"Only in times of comparative stability of the general economic structure, and during periods where there is a fairly well-balanced relation between the factors of supply and demand, will sales prices approximate or actually equal value."

The above essentially say the same things as Mann's Theory of Valutivity©. Of course, Babcock and Fisher said it nearly 80 years before I did☺

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"One real-time measure of 'home as shelter' is the rental market. People rent because they need a place to live, not because they expect a dwelling's value to go up. And for now, rents are maintaining their pre-real-estate-top trajectory.' -

Peter Atwater, President and CEO of Financial Insyghts LLC, 'Post-Crash Reality: Gimme Shelter,' The Socionomist, Page 16, 2014 Summit Special Issue

The value of a house is limited by the rent it can obtain. Prices have no such ceiling, or floor. In the 1930s, the FHA recognized the importance of rent and focused on the Income Approach for valuing houses. This is why I, and many others, recognize that the Sales Comparison Approach is not the correct way to value houses…..or commercial properties.

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In 2011, FitchRatings introduced its U.S. RMBS Sustainable Home Price Model. They state 'the objective of the model is on measuring the extent to which real prices deviate from sustainable values.'

As this model develops and goes from being national to local, this may be one of the ways residential appraisers can adjust all sales prices back to value.