COMMENT LETTER 8

Dear Chairman Chris Thorne,

Post-Science Institute (**Error! Reference source not found.**) appreciates the opportunity to submit comments to the Proposed New International Valuation Standard. Enclosed and attached please find its comments to several of the fundamental questions which you posed.

Please feel free to contact us for further information on the comments and on the possibility of collaboration. Thank you for your time and consideration.

Sincerely,

Hugh Ching
Founder and President, Post-Science Institute
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Exposure Draft of Proposed New International Valuation Standards

QUESTIONS FOR RESPONDENTS
The International Valuation Standards Board invites responses to the following questions. Not all questions need to be answered but to assist analysis of responses received please use the question numbers in this paper to indicate to which question your comments relate. Additional comments are also welcome. Please clearly identify the IVS number, title and relevant paragraph number to which your comment relates.

IVS 101- GENERAL CONCEPTS AND PRINCIPLES
4. This Standard is intended to explain fundamental concepts and principles that are referred to throughout the remainder of the standards to assist in their application. Some of the material has been carried forward from previous editions of IVS and some new concepts have been introduced, for example the discussions on market activity and market participants.
Do you consider that this objective has been met? Do you consider that there are any additional valuation concepts and principles that should be considered and discussed in this standard?

Post-Science Institute Comment:

An additional concept needs to be addressed is the topic of

Natural Valuation Standard vs. Artificial Valuation Standard
or
Non-Violable Laws of Nature In Social Science Vs. Man-Made Laws

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It should be perfectly clear to everyone by now that the financial crisis occurs because THE PRICE IS WRONG! The incorrect solution of value is the basic cause of most and the current financial crises, and the correct solution of value is the cure. Being mathematically rigorous, the solution of value is a non-violable law of nature in social science, which satisfies the following five fundamental requirements of mathematical systems for social science.

The five fundamental requirements are:

1. Realistic (r: R)
2. All-inclusive (r: A)
3. Deterministic (r: D)
4. Quantitative (r: Q)
5. Predictive (r: P)

The requirement of being realistic, symbolically represented by r: R, means that the mathematical description of a system corresponds sufficiently to reality. The requirement of all-inclusiveness describes the condition that all the relevant factors are included in the system. For example, a rational decision system should take into consideration of all the future expectations to infinity in time.

Deterministic means simply that the number of equations equal the number of unknowns. Predictive means that the mathematical description of the social system can be used to make predictions.
These five requirements are satisfied in a mathematically rigorous solution of value, which is described in the patent "Quantitative Supply and Demand Model Based on Infinite Spreadsheet" (Pat. No. 6,078,901).

The following is a brief description of the Infinite Spreadsheet Valuation System from the point of view of the Discounted Cash Flow Model, the current standard of real estate investment software.

Understanding the Infinite Spreadsheet from the point of view of Discounted Cash Flow Model

To determine the price, the Discounted Cash Flow Method calculates the cash flows during the holding period and the cash received when the investment is resold. All the cash flows are discounted back to the present with one or more discount rates.

To determine the price, the Infinite Spreadsheet accounts the cash flows realistically forward, with the cash flows grow with a reinvestment rate. And when the investment is resold, the cash received from the resale is realistically calculated, based on a yet-unknown resale price. All the cash flows and the cash from resale are accounted forward as would be in an accounting system.

DCF Method assumes a resale cap rate, which gives the resale price needed to determine the cash from resale. Also, terminal value calculation can eliminate the need to assume a resale price.

The Infinite Spreadsheet determines the resale price by going through exactly the same process outlined above for determining the price. And the same process for determining the price is used in all the resale prices to infinity in time.

The equation used in the Infinite Spreadsheet is:

Cash Return = Sum of Cash Flows + Cash from Resale

and

Cash Return = Initial Investment x (1 + %Rate of Return) to the power of holding period

A similar equation for determining the resale price for a future buyer when it is resold is of the exactly the

same form, which introduces an additional resale price for the future buyer. Thus, each time an additional equation is introduced, a new resale price is added. Either this process continues to infinity or the investment is completely used up somewhere along the process, in which case considering to infinity in no longer necessary.

Mathematically, the problem of the Infinite Spreadsheet can be expressed as:

Po = Po(P1(P2(P3(P4(P5(P6…(Pn(Pn+1…(Pinfinity)))…))))))

which simply says that the price Po depends on P1, and P1 depends on P2, so on and so forth to Pinfinity. Another way to say it is that if Pn is known Pn-1 can be determined. For example, if P2 is known, P1 can be determined, and if P1 is known, Po can be determined.

What the above analysis says is that the calculation should start from a resale price in the distant future and work backward in a time-reversed fashion. The distant future can be as far as one wants, within the computing power. Thus, in principle, the entire infinite spreadsheet can be made mathematically rigorous. In practice, most investors are no longer interested or know sufficiently accurately what happens after a certain time in the future, and an equivalent stable financial condition can be assumed for determining the first resale price in the distant future to be calculated. An approximate valid condition Pi/Pj = Ni/Nj where Pi is the resale price in the year i, and Nj is the net income in the year j. The validity of the condition Pi/Pj = Ni/Nj is still under intensive study by the PIs of this proposal.

The equation Pi/Pj = Ni/Nj provides the additional equation needed to make the number of equations and the number of unknown prices equal. However, the first calculated resale price generally has to be calculated by iteration. In the iteration, a trial resale price is picked, and using the trial price, the rate of return is calculated. If the calculated rate of return does not equal to the given rate of return within a pre-assigned accuracy, another trial resale price is picked, and the return is again calculated. This process continues until the calculated rate of return falls within the accuracy required, and the trial resale price is the resale price.

THE ABOVE VALUATION BY THE INFINITE SPREADSHEET IS BASED SOLELY ON EXPECTED FUTURE CASH FLOWS AND IS COMPLETELY INDEPENDENT OF THE MARKET PRICE, WHICH IS NEVER USED OR COMPARED IN THE VALUATION. ALL THE INPUTS OF THE INFINITE SPREADSHEET ARE OBTAINED FROM MARKET COMPARISON.

IVS 102- VALUATION APPROACHES

6. Previous editions of IVS have identified the principal valuation approaches listed in this proposed standard.

Do you agree that these three approaches encompass all methods used in the assets or liabilities that you value? If not, please describe what approaches you feel have been omitted.

Post-Science Institute Comment:

What has been omitted is the Unified Method of Appraisal.

Unified Method of Real Estate Appraisal

The deterministic solution to real estate appraisal based on the Infinite Spreadsheet has combined the three traditional approaches of real estate appraisal into one unified method of appraisal. The

traditional market comparison approach compares only the price, but the deterministic method has been designed to compare, in addition to the price, all the economic factors affecting the price. The results of the comparisons can then be used as inputs in the income approach, which corresponds to the Infinite Spreadsheet calculation for the monetary return, to determine the price or any other economic variables when the price is known from sales data. The cost approach is used in the determination of the price of land, corresponding to the residue value, which can be determined when the expected sales price of the developed property has been determined by the infinite spreadsheet. The unified method is represented jointly by the income approach, the market comparison approach, and the cost approach. Instead of appraising three different prices individually using the three traditional approaches, the unified method has managed to put each approach in its proper place within a single method and has, finally, reconciled, in a natural way, the three generally different prices for the same property into one single price. Thus, no longer will there be the need for the appraiser to face the embarrassing situation of having to choose one out of the three, often conflicting, prices, whose determination could be required by traditional appraisal standards.

7. Paragraph 6 of the draft sets out a proposed hierarchy of approaches which indicates that the direct market comparison approach is generally to be preferred where there are observable prices for similar assets available at the valuation date.
Do you agree with this hierarchy and do you consider it helpful? If not explain if you would prefer to see no reference to a hierarchy or would prefer an alternative hierarchy.

Post-Science Institute Comment:

The direct market approach would be wrong if the future expectation has changed. When it can be used when the future expectation has not changed or changed negligibly, it is still a case of "the blind following the blind" because if the initial appraiser has not determined the price correctly, all the future market comparisons will also be wrong. Financial crises occur because all the blind investors following each other falling off a cliff, created by the changed economic condition.

In science, only time-invariant quantities can be compared. In valuation, only the inputs expressed as approximate time-invariant quantities, such as a percentage of the price, can be compared to past data. When all the inputs are obtained from market comparison, a deterministic valuation system can calculate the price. The market comparison approach is the main cause of the Savings and Loan Crisis and the Subprime Woe.

IVS103 - BASES OF VALUE
9. Basis of value is defined in the draft as a statement of the "fundamental measurement assumptions of a valuation". In the current edition of IVS it defined as a statement of the "fundamental measurement principles of a valuation". Supporters of the proposed change believe that the word "assumptions" is more precise. It is self evident that a basis of value is a principle but IVS needs to explain the nature of that principle. The bases of value defined in IVS all consist of a set of assumptions that define the underlying hypotheses on which the value is based. The fundamental assumptions within a defined basis can then be used in conjunction with additional assumptions or special assumptions as explained in IVS 103 and 104. . Others prefer to retain the use of the word "principles", while some consider that a basis of value is more precisely described as a statement of the measurement objectives of a valuation.
Do you agree with the proposed change to the definition? If not indicate what alternative you prefer and why.

Post-Science Institute Comment:

Assumptions should not be permitted. All the inputs should be obtained from market comparison. Use the quantitative concept of input. If any input is not available, such as in the valuation of a new invention, the valuation system is non-deterministic, and the appraiser should say so. But, from our experience, most real estate and stock valuations, the systems are deterministic, where the inputs are easily obtainable for market comparison. The solution of value easily predicted the Savings and Loan Crisis and the Subprime Woe.

10. A change is proposed to the definition of Investment Value. The Board had received representations that some are confused by the distinction between Investment Value and Special Value in the current edition of IVS. The Board has proposed to amend the definition so that it only reflects the value to the owner, not the value to prospective purchasers. The rationale is that a prospective purchaser for whom an asset had value in excess of that to market participants generally could also be described as a special purchaser, which is separately defined. A reciprocal change is proposed to the definition of "special purchaser" to make it clear that it can include a single buyer with a special interest or a restricted class of buyers that can realise additional value not available to the market participants at large.
Do you agree with this proposed change? If not, please explain why and what you believe the distinction is between investment value to a prospective purchaser and special value to a prospective buyer who can realise that special value to be?

11. The Board has considered alternative names to "Investment Value" for the basis of value that describes value to a particular entity. Alternatives suggested include "Entity Specific Value", "Owner Value", "Value to Owner", or "Invested Value". Critics of Investment Value consider that the term is insufficiently precise; although it is a measure of the value of the investment in an asset to a particular party, it can also be interpreted as being the sum required to buy an investment in the market. Others consider that the term is sufficiently broadly understood that any change would cause confusion.
Do you support the continued use of the term "Investment Value" or would you prefer an alternative? If so, what would that alternative be?

Post-Science Institute Comment for both 10 and 11 above:

Here IVSC should consider the fundamental problem of the Supply and the Demand Model in economics. The problem relates to the quantity (q) of demand at a given price (P). It is the function q(P), which when summed up produces the supply and the demand curves indicated by Q(P)s. In q(P), P is a personal value or an individual value. Maybe investment value should be reserved for describing value based on investment analysis, not market comparison. The later part is just a suggestion and not serious. What is serious is the Supply and the Demand Model, which is the mainstream knowledge, which the appraisers should join, and where no particular terminology is needed. Currently, the entire field of economics is built on a foundation where the determination of q(P) is missing. There is one missing equation in economics, and, thus, economics is not built on an solid foundation. This foundation is where the valuation community is concentrating. However, only the problem of the foundation of value is studied, not a deterministic solution. IVSC, which does not use the same equations and terminology of economics, can make a historical contribution to knowledge if it can finally find this solid foundation for economics. Thank you.