Intangible Elements of Uncertainty in Property Valuation:
Theoretical Underpinning

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Abstract
There has been a considerable and significant number of researches that looked into the uncertainty and risk of
valuation process in various parts of the world, especially in the US and the UK. Early research tended to focus
on the tangible methods used by valuers. In recent times, research has concentrated on anticipated risk that could
be encountered in carrying out valuations and the way that valuation information is processed. The summary of
the previous researches skip over a further latent and potential influence: that of the influence of intangible
elements of uncertainty and risk on property valuation and the transaction which might follow. The aim of this
paper is to examine the effect of intangible elements of uncertainty in property valuation and also to have a
thorough understanding of the risk inherent in property valuations. The main research questions that this study
seeks to address include: What precisely are intangible elements of uncertainty with regard to valuations? How
could intangible elements of uncertainty in property valuation be minimized and dealt with? To what extent do
intangible elements of uncertainty affect and influence property valuation? And should there be a general
approach of anticipating and forecasting intangible elements of uncertainty in property valuation? A mixture of
self-administered questionnaires and in-depth personal interviews were considered most appropriate as data
collection instrument for this research due to the advantages derivable from both approaches. Descriptive and
inferential statistics will be employed to interpret and explain the associations found among the variables. This is
a paper in progress and as such the expected outcomes of the study might suggest that the series of comparable
evidence available is the most common factor that will affect a valuation certainty. Risk and uncertainty could be
inherent parts of the valuation process as regularly the valuer is unable to identify and price correctly all existing
and future influences on the value of the asset. It is recommended that the Royal Institution of Chartered
Surveyors (RICS) should build up a standard methodology and approach to uncertainty expression, not only for
the valuer’s peace of mind, but in order to offer the most excellent and promising service to the general
community.

Keywords: Intangible Elements, Property, Risk, Uncertainty and Valuation

1. Background of the Research
It is a well known fact that both the scholastic literature and more so the real estate profession, according to
French and Gabrielle (2005a), use the terms “risk” and “uncertainty” interchangeably. The academic literature
has explained and discussed at length the difference between risk and uncertainty (see for example, Byrne and
Cadman, 1996; Byrne, 1995; Kelliher and Mahoney, 2000; French and Gabrielli, 2004). It is by and large agreed
that uncertainty is due to the lack of information and poor or inadequate information about the inputs needed in
the model. Moreover, the more the analysis is taken into the future, the more tentative are the output of that
analysis. The results and findings of analysis are only assured when the future can be foreseen. On that basis, the
risk is the appraisal of the distinction between the actual and the anticipated outcomes of our analysis.

French and Gabrielle (2004), further argued that, in spite of the method used, the valuation will be
influenced by uncertainties. Uncertainty could be felt in the comparable data obtainable; uncertainty in the
present and prospect market circumstances and uncertainty in the explicit inputs for the subject property. These
input uncertainties will transform into an uncertainty with the output figure, the approximation of price.
Uncertainty impacts on the valuation procedure in two ways, first of all the cash flows from investment are, to
changeable degrees, uncertain and secondly the consequential valuation figure is open to uncertainty.

Uncertainty is a worldwide fact of property valuation. Each and every type of valuations, by their nature, are
unsure and uncertain. Hitherto, they are generally reported to the client as a single point estimate without
reference to the background, circumstance and situation of the uncertainty underpinning them.

Lorenz, Truck and Lutzkendorf (2006) observed that the issue of identifying and expressing risk and
uncertainty within the framework of property valuations is presently one of the key concerns in modern-day UK
valuation literature. It is argued that risk and uncertainty are intrinsic parts of the valuation process because the
property valuations is left to the decision and knowledge of the individual estate valuer alone. More specifically, the most recent version of the RICS Red Book (RICS, 2003) does not make available guidance on how to report risk and uncertainty in an understandable and suitable manner. As a result, “individual real estate valuers must take the issue into their own hands and tender the client what they feel is their most excellent price estimate (Joslin, 2005). The research questions that this study may review include: What precisely are intangible elements of uncertainty with regard to valuations? How could intangible elements of uncertainty in property valuation be minimized and dealt with? To what extent do intangible elements of uncertainty affects and influences property valuation? Should there be a general approach of anticipating and forecasting intangible elements of uncertainty in property valuation? Why should real estate valuers presently deal with the issue of intangible elements of uncertainty and risk in their valuation reports?

Some bewilderment exists within valuation literature concerning the terms risk and uncertainty because they are often used interchangeably as stated earlier and because one can repeatedly be found within the explanation of the other. For that reason, a research on how intangible elements of uncertainty and risk affect property valuation is imperative. Uncertainty emanates due to a lack of knowledge or unsatisfactory information regarding all the inputs that can be used in an analysis and it is probable that doing away with uncertainty will not be achievable since no one will have perfect knowledge about all the conditions that can impact on the outcome of a property investment.

Joslin (2005) stated that the Royal Institution of Chartered Surveyors (RICS), in 1994, published and made available the Mallinson Report (RICS, 1994). The most important substance of the report was to evaluate the, then, existing valuation practices and to suggest a number of modifications and amendments that would permit the real estate valuer to offer an improved service to the customer. The Mallinson Report was a reaction to the general criticism which placed the property crash of the late 1980s to valuations. These criticisms in many cases have been unconfirmed and flimsy (French and Gabrielli, 2004). A valuation is a “snapshot” in time and is an estimation of market price. As such, it is uncertain. Unless a property is actually sold to establish market price, any estimate is uncertain. The role of the valuer is to appraise up to date market situation and from a “sea of uncertainty” produce a single judgement (RICS, 1994). Depending on both the property and the market, valuers will be more or less certain about the valuation. A valuation is based on likelihood of outcome and the consequence of this is uncertainty of output, and the valuation figure. The principal aim of the research is to examine the influence of intangible elements of uncertainty in property valuation and also to have a thorough understanding of the risk inherent in property valuations.

2. Literature Review

There has been a substantial amount of research into the uncertainty and risk of valuation process in various parts of the world, especially in the US and the UK (Baum, et al, 2000). Early research tended to focus on the tangible methods used by valuers. In recent times, research has concentrated on anticipated risk that could be encountered in carrying out valuations and the way that valuation information is processed. The works of Adair and Hutchison (2005a); Adair, Hutchison, Burgess and Roulac (2005b); French (2000 and 2001); French and Gabrielli (2004); French and Gabrielli (2005); Goodie and Young (2007); Lee and Stevenson (2005); Levy and Schuck (2005); Loizou and French (2012); Males (2002); deserve academic credit and is worth to be mentioned in this regard.

Recent research on tangible elements of uncertainty in property valuation has examined the following issues

- the bases of appraisal and assessment for various uses of valuations
- the fundamentals and essentials of the valuation procedure from instruction through to reporting
- the techniques, methods and procedure used to arrive at the estimation or valuation
- the outside or external influences on the valuer carrying out the valuations
- the precision and correctness of valuations and the likely margin of error or mistake
- the use of information and data contained by the valuation process

Some of these researches reveal that uncertainty and risk inherent in valuation accuracy is a challenging and tasking issue (see for example, Comeau, 2009; French, 2000, 2001, 2007 and 2011; French and Gabrielle, 2006; Goodie, and Young, 2007; Jaffe and Stavins, 2007). There is substantiation, proof and confirmation from the previous researches that valuers both lag the market and produce valuations which smooth the peaks and troughs of ‘real’ prices (Savvides, 1994). Current research generates and hypothesised the following hypotheses:

- Valuations will be based upon the earlier and preceding valuation plus or minus a perception and opinion of change by taking into account the tangible elements of uncertainty and risk.
- The perceived changes due to uncertainty and risk in property valuation, unless the subject of very
reliable transaction evidence, will be conservative.

- Valuations will be affected negatively by procedures and precedents of a statutory and regulatory nature due to uncertainty and risk involve.
- The outcome of officially authorised judgements will be a powerful influence on valuations.

The summary of these previous researches omits a further potential influence: that of the influence of intangible element of uncertainty (race, skin colour, socio-economic background, ethnic background, religious inclination, unsafe zones property cultural identity, crime, safe zones, apartheid, social security, indigene-ship, native affiliation and risk on property valuation and the transaction which might follow (Aliyu, 2012; Hoesli, Jani and Bender, 2005). The general supposition, postulation and assumption essential and fundamental to the research summarised above is to the effect that valuations stand apart from the market due to intangible elements of uncertainty and risk in property valuation (Savvides, 1994). Markets generate prices, and valuers conduct valuations. The processes are self-governing, and the valuer behaves as an objective observer, reviewer or assessor by incorporating uncertainty and risk as factors that influence the probable outcome of property valuation.

Nevertheless, within both the professional and academic environment there is no substantial literature on the influence of intangible element of uncertainty on land and landed property value (Aliyu, 2012). At the local level, there is an agreement that individual valuations are susceptible to a degree of ambiguity. At the global level, it is obvious that a small number of scholars (e.g. Adair, Hutchison, Burgess and Rouillac, 2005b; and Lorenz, Truck and Lutzkendorf, 2006) acknowledge that assessment-oriented indices reflect the accurate fundamental recital of the property market. It is generally believed, for instance, that such indices fail short in capturing the degree of market instability and tend to insulate causal performance. As a result, issues such as the intensity and scenery of valuation uncertainty and the basis and level of guide smoothing have created a considerable research literature.

On the other hand, a lot of issues remain contentious and unanswered, partially because the enormous bulk of these studies and observations have overlooked the actual world situation in which valuations are fashioned and conducted. Above all, a presupposition fundamental to a large amount of the scholastic work carried out to date is the self-determination of valuations from the market value background.

The research explained and discussed in this write up seeks to identify whether this is an accurate and acceptable understanding and elucidation: or, on the other hand, whether valuers and valuations themselves, due to uncertainty and risk, influence the process of the market, thus, invalidating research and concert data which rely upon the assumption of self-determination or independence. It is in the light of the above that this research seeks to examine the influence of intangible elements of uncertainty and risk in property valuation.

3. Theoretical Motivation

Explanation and debate about intangible elements of risk and uncertainty are the foundation stone of a number of research articles and volume of published materials (see for example: Pellat, 1972; Robinson, 1989; Whipple, 1988; Hargitay and Yu, 1993; Sykes, 1993; Byrne and Cadman, 1996). The definitions that are approved and accepted follow the effort of Bryne and Cadman (1984) in which they looked at uncertainty as anything that is not identified about the upshot of an endeavor at the time when the judgment is made. However, risk could be seen as the extent of a failure or loss recognized as a likely effect of the judgment. It is by and large established that uncertainty arises because of the lack of information and unfortunate or flawed knowledge about all the contribution that can be used in the investigation.

In it’s widely usage, valuation could be seen as the assessment of the worth and value of land and landed property in a given time and circumstance. It is an appraisal and evaluation of the market price of a property at a single point in time. It is therefore an approximation and any estimate is hypothetic and unsure (Troy and Werle, 2008). In the non-appearance of incessantly business, profound and unbiased markets, intangible elements of uncertainty greatly affect the value arrived at in the property market because they act as a hindrance when carrying out land and landed property valuation exercise and transaction activities.

Adair and Hutchison (2005a) observed that intangible elements of risk and uncertainty are intrinsic and inbuilt parts of the valuation procedure as often the valuer is incapable in identifying and pricing correctly all existing and potential influences on the value of the asset. Whereas the ultimate distinct point estimation of value may turn out to be a statement of verity in the intellect of the users of the appraisal, it on the other hand remains the judgment of a professional and specialist. Undeniably, the huge number of scholastic, intellectual, educational, academic and practice oriented research into valuation inconsistency validate the biased and prejudiced nature of land and landed property asset pricing (Adair et al., 2005b).

However, despite such quantum of research on the subject matter, the previous studies have been disputed for discrepancy and inconsistency for failing to incorporate intangible elements of risk and uncertainty in numerous appraisal assignments such as the pricing of urban renewal (Jaffe and Stavins, 2007). Furthermore, the Royal Institution of Chartered Surveyors (RICS) (2003) emphasized the need for more meticulous and
thorough risk appraisal measures limited by the land and landed property specialty. More exclusively, they established that a latest and new method and approach is required that sandwich predictable and conventional analysis of returns uncertainty with a more comprehensive survey of trade risks.

As mentioned earlier, intangible elements of risk and uncertainty are intrinsic parts of the valuation process. Land and landed property pricing as a type of investment decision-making look for ascertaining the current value of prospect earnings and expenditure stream. Going by this, risk can be regarded as the likelihood that a goal and target rate of return will not be arrived at. To put it this way, it presumes that all results together with their probabilities of happening are acknowledged.

As a matter of fact, the huge part of the confusion between risk and uncertainty occurs due to the exchangeable, transposable and compatible terminology. This vagueness is confirmed in the fourth edition of the RICS Red Book (RICS, 1994) Practice Statement 7.5.32 documented that the appraisal procedure have an inbuilt amount of bias which differs in diverse bazaar circumstances and by category of assets. Practice Statement 7.5.32 moreover differentiates between unusual uncertainty, which the valuer must account as such, and usual uncertainty. Unusual uncertainty takes place when a number of facets of the property are unrealistic. Eventually, the valuer is not capable to value with the standard or predictable degree of self-confidence. When writing a valuation report to the client, full explanation and facts ought to be offered in such a way that the client can be wholly conversant of the level of certainty and the valuer’s self-assurance in the statement given.

Subsequent to influential effort of Males (2002), uncertainty has to be differentiated from risk. Whereas risk has to do with outcomes of economic accomplishment to which possibilities can be allocated, uncertainty relates to circumstances in which information on which likelihood computations might be based is missing (Troy and Werle, 2008). The idea, notion, perception and concept of uncertainty has been further specified and distinguished in the existing wealth or body of knowledge. According to Troy and Werle (2008), two types of uncertainties are clearly differentiated. One type is basic or substantive uncertainty. At this point, the individuals are short of all information essential to make decisions with conventional outcomes, and this information is out of stock, even in principle, at the time when the decision is to be made (RICS, 2003). The other type is planned uncertainty (Joslin, 2005). It relates to conditions of asymmetric information. At this juncture some actors grasp information which is unavailable to others (Goodie and Young, 2007). This can bring out ethical danger and other types of imperfect action.

4. Expected Outcomes
The results of the data collection would suggest that the series of comparable evidence available is the most common factor that will affect a valuation certainty. Risk and uncertainty could be inherent parts of the valuation process as regularly the valuer is unable to identify and price correctly all existing and future influences on the value of the asset.

Uncertainty could be recognised as an in-built component within the valuation process and in the lack of perfect data across the property market it could be possible that this condition will be appropriate to varying degrees. If uncertainty cannot be eliminated the valuer is obliged to manage the analysis of risk and uncertainty within the valuation process so that its impact and influence are minimised and the end user of the valuation can have self-assurance in the value arrived at.

It will be anticipated based on the available literatures that risk and uncertainty must be expressed contained by the valuation to proffer each party a careful consideration of the state of affairs that enfold that meticulous assessment and valuation. It is recommended that the Royal Institution of Chartered Surveyors (RICS) ought to build up a standard methodology and approach to uncertainty expression, not only for the valuer’s peace of mind, but in order to offer the most excellent promising overhaul to the common community. The notion, idea and concept of uncertainty within a valuation is inadequately unstated and understood and is not often expressed and explained to the customer and client in any logical, rational, sound, consistent and articulated form.

5. Conclusions
The idea behind any valuation is to establish the present value of a future cash flow (French and Gabrielli, 1994). If it is believed that uncertainty should be communicated to the users of valuations, then it is imperative that there is an fixed standard for the expression of the uncertainty of the inputs and agreement on the output information that must be conveyed with each valuation (French and Gabrielli, 1994). It is obvious that real state profession recognises both normal and abnormal uncertainty, yet we are still in a professional environment where we do not provide the user of the valuation with any information on the uncertainty of the valuation in normal market conditions” (French and Mallinson, 2000).

The valuer can only make a specialist judgment using all the knowledge and experience available. The lack of standardized approach to the expression of uncertainty is an ongoing difficulty within the industry and thus lay the seeds of misunderstanding (French and Mallinson, 2000). One can argue that uncertainty is a normal market feature deriving from the nature of property, which should be openly acknowledged. It is variable from
property to property and from market condition to market condition. It is something to be managed as it cannot be removed (RICS, 2002).

If the RICS strive to establish an acceptable method by which uncertainty could be expressed in a uniform and useful manner presented in a prescribed professional standard (French and Mallinson, 2000) it would benefit the profession throughout. More work will be required to agree on these issues, but the use of a Monte Carlo model, we believe is sufficiently easy, robust and accessible for the profession to consider as a possible means of expressing uncertainty in valuation. (French and Gabrielli, 2004)

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