Property Investment Decision-Making Behaviour in Urban Post-Disaster Rebuild: A Theoretical Perspective

By

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ABSTRACT

This paper which is part of an ongoing Doctoral research expands our theoretical knowledge on the interactions, processes and factors that influence the decision-making behaviour of private stakeholders (investors, developers and agents) in a post-disaster rebuild environment. By exploring their attributes and relationship, we can achieve an in-depth understanding of the unique and complex challenges faced by private property stakeholders after a major disaster that requires massive rebuilding over a long term.

Post-disaster rebuild poses unique challenges and questions for property stakeholders and institutions. This study takes a theoretical approach to look at these issues around participation and decision-making behaviour, which is considered fundamental to long-term post-disaster recovery (Manyena, 2006; Chang et al. 2010). The work presented in this paper is a literature-based theoretical exploration and framework of an on-going doctoral research. This paper takes a broadly theoretical approach to champion the need for a deeper understanding of decision-making behaviour in urban disaster recovery through the lens of property stakeholders and institutions such as investors, developers and agents. It is necessary to engage this viewpoint because the implications of large scale disasters on the long-term recovery in the commercial property market have not yet been substantially explored.
INTRODUCTION AND OBJECTIVES

This study looks into the distinctive perceptions and decision-making behaviour of private property stakeholders in an urban post-disaster rebuild environment. Decision-making behaviour within the property market is shaped by the interactions of psychological, social, cultural, institutional, political and economic processes at work within the local community (Jackson et al. 2006 & McGregor et al. 2008). Thus, the links between post-disaster rebuilding and the decision-making behaviour of property investors and developers merit further attention.

The ongoing post-disaster rebuild of the Christchurch city centre rebuild presents a unique platform for this paper. After the 2010 & 2011 earthquakes in Christchurch, property owners and investors in the city centre were faced with unexpected and challenging decision on what next to do. Whether to receive insurance compensation and invest elsewhere or stay back and be a part of the rebuild. Although the rationale behind such decision-making behaviour is typically complex, a theoretical concept is adopted based on preliminary discussions with some property stakeholders.

Traditionally, when trying to understand property investment markets researchers tend to take a positivist approach and assume rational decision-making behaviour. Alternatively, non-positivist approaches can also be used to explain the behaviour of stakeholders and this allows us to discover the importance of social structures and processes lying beneath the surface (Levy & Lee, 2009). In an attempt to understand the behaviour and actions of property investors and developers Werlen, (1993), Guy & Heneberry, (2000) demonstrated the usefulness of institutional approach and analysis by explaining it as a “methodological impulse to unpack” the “competing ways” in which different players in the market (e.g developers, investors, architects, financiers and agents) see and act. These individual experiences thus act as the “frames of reference” of the individual players. In this regards, Studies such as Levy & Schuck (1999, 2005); Levy, Murphy & Lee (2008); Ohman, Soderberg & Westerdahl (2013) have adopted non-positivist approaches to increase understanding the property investment markets. This paper utilizes a similar context to explore the social processes that exist among
private investors and developers participating in post-disaster rebuild through the lens of property agents.

The paper will contribute to the academic literature by expanding our understanding of the role played by private property stakeholders and institutions who represent an integral part of urban post-disaster rebuilding. Shaw, (2003) and Wu & Lindell, (2004) suggest that the rebuilding phase may be one of the most demanding forms of activity after a major disaster, because it operates in unprecedented and complex conditions.
REVIEW OF LITERATURE

PROPERTY INVESTMENT MARKET BEHAVIOUR - A MAINSTREAM ECONOMICS INTERPRETATION

A majority of the literature on decision-making behaviour in the property investment market often reflects rational, normative models that treat behaviour as highly structured and formalised (Galimore et al. 2000). But by contrast, behavioural psychology suggest that individuals can act sub-optimally and this is often a neglected aspect of property investment decision-making research. The post-disaster rebuild environment is perceived as dynamic and quite chaotic. Therefore, a lot of property decision-making behaviour are not entirely rational and will be subject to factors such as heuristics, sentiments, biases, passion, emotions and fear.

The bulk of literature in this regard are positioned within the standard assumption of mainstream or neo-classical economics (Ohman, Soderberg & Westerdahl, 2013). This idea is based on the rationale that decision makers with stable preferences are acting in a perfect market with many competitors, accessible information and homogenous products. The practices of property professionals and stakeholders are most times based on these conventional assumptions, which consists of paradigms inherited from both economics and finance disciplines (Diaz III, 1999). A majority of this type of literature on the property investment market according to Diaz III, (1999, p. 327) are “…theoretically underpinned by the rational man construct and the efficient market hypothesis and uses regression-based econometric techniques…” to analyse price and quantity.
Figure 1: A Basic Neo-Classical Economics Expression of the Property Market

Source: Adapted from Malpezzi, (1990) & Hamzah, (2012)

The figure 1 above presents a simplistic depiction of the property market operation guiding a lot of mainstream literature. The fundamental assumption behind this paradigm is that demand and supply will adjust automatically to external changes and reach a new equilibrium in the long-run (Keivani & Werna (2001 pp.94-95). Keogh & D’Arcy, (1999) describes this “automatic self-functioning system” within the property market as involving assumptions on market efficiency, characterised by agents’ rational behaviour, perfect competition, perfect knowledge and no transaction cost. In this model, prices and quantity are the focus of analyses because producers’ decision on the price and quantity of space to be built are dependent on the price and quantity of the factors of production (Keivani & Werna, 2001). In the long-run, the market is expected to adjust and reach a new equilibrium when there is a shift in demand or supply.

The Limitations of the Mainstream Economics Literature on the Property Market

Investment Behaviour:

The mainstream or neo-classical economics approach of explaining property market dynamics has been criticised for its tendency for what is called ‘institutional neglect’ (Ball, 1998, p. 1515) and its incorporation of too many assumptions.

This perceived weakness is a major concern, due to the potential for skipping behavioural and institutional realities of property stakeholders. As a result, the complexities of the social processes that make up the property market may not be adequately reflected in mainstream economics literature. Therefore, solely adopting this approach for property literature may
inadvertently provide an obscured view of the process and not accurately reflect actual property market behaviour.

Figure 2  

An Obscured View of the Property Market depicted by Mainstream Economics

![Diagram showing macroeconomic factors, stakeholders' institutions, and outcomes such as property spaces, rents, and prices.]

Source: Adapted from Hamzah, (2012)

Figure 2 provides a schematic of the “obscured view” that can arise from a mainstream economics interpretation of the property market. According to Ball, 1998, p. 1506) “many economic models have only limited, stylised, institutional behaviour” and usually do not give an in-depth explanation of the operations of institutions and stakeholders. The assumptions about market equilibrium and rational behaviour only allow the data to fit the model rather than confirming the theory (McMaster & Watkins, 2006).

In practice, some of these assumptions can be difficult to sustain (Ball et al. 1998). For example, the assumption of perfect competition among firms in the property market may be unsustainable because firms will adopt “strategic behaviour” in their decision-making behaviour. This action may involve adopting strategies that can “affect property market outcomes” and be “positive” for the firms, especially regarding earning “long-term above normal profit” (Ball et al. 1998, p. 106). Firms can do this by rearranging their organisational structure, creating a niche market and innovating. As a result of these highlighted
shortcomings, there have been growing interests on how best to robustly explain the decision-making behaviour of investors and developers.

A BEHAVIOURAL AND INSTITUTIONAL DIMENSION TO THE PROPERTY INVESTMENT MARKET

As already pointed out, a significant proportion of mainstream literature on property investment market adopt a positivist methodology that emphasises the application of rational decision-making techniques and maximising utility within an economics paradigm (Guy & Henneberry, 2000). While this approach has considerably increased our knowledge and understanding of how property investment market works, it only offers a limited view of what happens. Guy & Henneberry, (2000) have advocated for a more methodological and theoretical approach that focuses on understanding the wider institutional and behavioural components of the property market.

The property market comprises a network of actors with unique roles and distinct economic behaviours in different circumstances depending on their organisational objectives (Ball, 1986, 2003, 2006, 2010). Some of these actors may include planners, investors, developers, agents, government departments, financial institutions, landowners, (Ball, 1986). At a local level, the disaggregation of the property markets and other pre-existing conditions tends to moderate the activities of these actors (e.g. the political, social, economic and legal institutions) as well as policies designed to influence them. In essence, the behavioural and institutional examination can provide a harmonising effect on other theoretical approaches adopted in property research.

Contemporary literature examining property decision-making suggests that the main-steam economics explanation may accurately reflect the decisions of property market participants (Soderberg and Westedahl, 2013). This study views decision-making behaviour is been shaped by sentimental factors that are inherent to a post-disaster environment where there is a long period of uncertainty and risk due to the “shock effect” of the disaster.
A Behavioural Context to the Property Investment Market:

While mainstream studies make several assumptions about the property markets, especially on how to model them as a critical question, the alternative will be to observe how markets are formed (Smith et al. 2006). In other words, the focus should be on the practices of property stakeholders by acknowledging the specifics of the property market as simply market fundamentals rather than property market imperfections (Soderberg and Westerdahl, 2013). A review of behavioural property research by Diaz III (1999), Diaz III & Hansz (2007) and Wofford et al. (2010) all suggest that property investment research paradigms be aligned with the management of risks associated with human cognitive abilities. Furthermore, French & French (1997), De Bruin & Flint-Hartle (2003) also highlight that there are potential limitations in the standard finance and economics-based models for analysing property investment behaviour.

When it comes to research on property investment market behaviour, there have been studies on various aspects of investment strategies for property investors. Adair et al. (1994) examine attitudes to investment diversification and risk about property type, location, market knowledge and transparency. They observe a mismatch between perceptions of investment attraction and actual investment behaviour. As a result, investment analysis is highly quantitative and empirical, so most investments are directed to sub-markets with adequate information on market conditions. An analysis of market selection criteria and the decision-making behaviour of international investors by Worzala & Newell (1997) and Falkenbach (2009) showed that although diversification was an important rationale, certain investment criteria are found to be threshold conditions, which indicates a bounded rational behaviour (De Bruin & Flint-Hartle, 2003). Gallimore & Gray (2002) have also emphasised that decision makers consider investor sentiments as an important form of information to be used alongside other market fundamentals.

Soderberg & Westerdahl, (2013) identified that most property literature have shown very little qualitative based studies that examine investment behaviour in the commercial property market. For example, Gallimore et al. (2000) undertook a semi-structured interview of investment property directors of fairly small property companies in the UK market. They found that the decision-making behaviour of companies did not necessarily align with standard quantitative descriptions. At the same time, investors mainly conduct satisficing,
rather than optimising behaviour in search for investment opportunities and market information (Gallimore et al. 2000). Henneberry and Roberts, (2008) have also attributed “calculative practices” and the “IPD benchmarking system” as reasons for irrational behaviours. This system does not take a passive role in measuring and understanding the market but instead helps shape the market. Consequently, they assert that the economy cannot be considered “rational” in the sense assumed in mainstream economics.

**An Institutional Context to the Property Investment Market:**

Ohman, Soderberg & Westerdahl, (2013) suggest that mainstream studies re-apply the institutional paradigm established by some of the pioneers of modern property research such as Ratcliff (1972). Nevertheless, in a dominant environment of finance and economics-based models, such application become isolated and provides little guidance for empirical research. Hodgson (2006, p.2), defines institutions from an economics perspective as "... systems of established and prevalent social rules that structure social interactions...". He identifies a distinction between ‘organisations’ and ‘institutions’ where organisations constitute entities whilst institutions entail social rules, organisations may however also constitute institutions in some cases (Hodgson, 2006, pp. 17-18). Ball et al (1998) concurred with this definition of organisations as ‘players’ and institutions incorporating the ‘rules of the game’ and went further by compressing the two concepts into just ‘institutions’ in their work.

This paper recognises a similar “casual approach to defining institutions” as “it is the easiest approach and corresponds to common sense views on what is an institution” (Ball, 1998, p. 1502). Institutions in real estate encompasses tangible and intangible items such as “…a characteristic group (e.g. developers, landowners, agents, financiers), a practice (e.g. surveying, accountancy), a process (e.g. town planning, the process of law), a building that has a special, well-established place in society (e.g. a hospital, school, prison), a characteristic grouping of organisations (e.g. financial institutions, the Church), a sociological phenomenon (e.g. the institution of marriage), an enduring body of settled doctrine employed to regulate different legal relations, as in the ‘institution of property’. “ Seabrooke & Hebe (2004, pp.9-10). This institutional approach is particularly valid as reflected in Hodgson (1998, p.180), which states that the study of institutions involves the examination of "human activity partly through the continuing production and reproduction of habits of thought and action".
Hodgson (2000, p.327), also acknowledges the importance of focusing on the individual whereby "the individual is moulded by social and institutional circumstances". The examination of 'human habits' is underpinned by the belief that the market in itself does not represent the overall economy (Samuels, 1995).

THE PROPERTY INVESTMENT AND DEVELOPMENT MARKET IN URBAN POST-DISASTER/REGENERATION.
Conceptually, urban regeneration is a process of reversing economic, social and physical decay in towns and cities where market forces alone will not suffice (Adair et al. 1999, p. 2031). It entails the perception of a declining inner-city that incorporates a process of physical regeneration to establish a basis for economic growth and social well-being (Healey et al. 1992). On the other hand, urban post-disaster recovery as a concept still lacks any authoritative definition with a definite aim, content and characteristics (Lizarralde, 2004; Yi & Yang, 2014). The lack of definition is attributable to the fact that most of the literature on post-disaster recovery has been relatively smaller when compared to traditional research topics in the built environment and property regarding the intent, process and results (Yi and Yang 2014). Nevertheless, some terms have been adopted to suit the framework of specific research on related issues (Chang, 2013; Yi and Yang, 2014). A number studies have somewhat discussed this concept in the context of post-disaster reconstruction (Chang et al. 2010); Post-disaster recovery (Alexander et al. 2006); post-disaster rebuilding (Olshansky, et al. 2006); post-disaster redevelopment (Simunovich, 2008); and even urban regeneration (Adair et al. 1999 & 2000). Yi and Yang (2014) suggests that there may be some subtle differences between these concepts, but so far there are no reported comparisons or contrasts.

This paper adopts a premise that there are unique similarities between the concept of urban regeneration and urban post-disaster rebuilding, which has already being explained earlier. As such, engaging with this literature has assisted in informing the study objectives. An integral part of the urban regeneration literature involves understanding the role of the private stakeholders concerning stimulating property investment and development (Adair et al. 1999 and Nappi-Choulet, 2006).
The Behaviour of Private Investors and Developers in Urban Regeneration

Studies by McGreal et al. (2000), Adair et al. (1998 & 2003) and Nappi-Chouplet, (2006) indicate that perceived total investment returns remain a primary influence on property investment and development decisions. In a similar vein, Nappi-Chouplet (2006) also found that the involvement of institutional property developers in the urban regeneration of the Paris region of France was dependent on their ability to attain high returns on investment and that the internal rate of return (IRR) was the main criteria for investment decision-making. This influence is due to the requirement of above average returns on investments necessary for addressing viability concerns. There are also other identifiable factors that are important considerations for any investment decision and these include investment security, risk spread and the potential for rental and capital growth McGreal et al. (2000).

Adair et al. (1998 & 2002), emphasised that private sector investment is opportunity driven and needs to show returns commensurate with the risk and return profile of participants. Therefore, efficient and a receptive property market is essential to lever investment into urban regeneration locations. Adair et al. (1998), also highlights that typical institutional investors set very high criteria for compensating risks when considering any investment in urban regeneration location due to higher uncertainty. This perception translates into the demand for a higher risk premium reflecting the seemingly poorer physical and locational characteristics of many urban regeneration areas. Consequently, there is a psychological preference for safer investment choices perpetuates certain misconceptions about urban regeneration areas such as low returns, weak demand and high costs Adair et al. (1998 & 2002).

Adair et al. (1998 & 2003 p.2032) highlight some of the anecdotal perceptions of investors in urban regeneration locations to include;

- Investors perceive urban regeneration sites as offering weak investment opportunities due to the potential for a high risk and low return profile. Therefore, new and innovative measures such as financial and non-financial incentives are necessary to attract private investment
- The primary driver for investment in urban regeneration projects is the risk-adjusted return and limited availability of alternative property investment
Investors only adopt specific decision-making parameters to urban regeneration investments such as seeking higher returns over of what is achievable in prime locations.

There may be some downsides to these perceptions because by placing too much emphasis on the prospects of financial viability, investors may miss any potential investment opportunity that may come from urban regeneration locations. In a final analysis, Nappi-Chouplet (2006) and Tranch & Green (2001) are of the opinion that smaller local investors and developers have the advantage of intimate knowledge of the local market and close relationship with local authorities and clients. On the other hand, this contrasts with the decisions of institutional investors who respond to complex extrinsic factors before making an investment decision in a particular location.
A BACKGROUND ON CHRISTCHURCH: THE 2010 & 2011 EARTHQUAKES AND THE CBD REBUILD

The city of Christchurch is New Zealand’s second largest city and the largest city on the South Island (Population of 370,000 in 2011). The Christchurch CBD encompasses approximately 600 hectares and as shown in the figure below is defined by the grid road network bounded by four (4) avenues; Deans, Bealey, Fitzgerald and Moorhouse.

Figure 3: Map of Christchurch Central Business District

Source: Marquis, (2015), Adapted from image 2015, Digital globe, Google earth, imagery date: 3/03/2009

A report by Ernst & Young, (2012) shows that historically, the commercial property investment and ownership in Christchurch central city has been dominated by local investors and developers that comprised a mix of high net worth individuals, families and informal groups of individuals. The same report also showed that only 13.4% of owners (by net lettable floor area) were based overseas. Christchurch had a low commercial office market rent due to the surplus of space in the CBD area. As a result, major corporate and institutional investors were not quite active in the Christchurch CBD for many years due to the inability to attract
high rent tenants. In this regards, the economics context prior to the earthquakes may have influenced decision-making behaviour in a post-disaster environment.

**Figure 4:** Commercial (Office) ownership profiles in Christchurch before February, 2011

![Commercial (Office) ownership profiles in Christchurch before February, 2011](source)

*Source: Ernst & Young (2012)*

The earthquake events of 2010 and 2011 in Christchurch was a catastrophe of enormous proportions and the New Zealand Treasury put the cost of damage at about 10% of national G.D.P (Bollard & Ranchhod, 2011). The New Zealand budget policy statement of 2012 stated that the Christchurch rebuilding will, without a doubt, be the biggest economic undertaking in New Zealand’s history (Brook 2012). In fact, the New Zealand government did indeed fear for the worst and worried that the second biggest city in the country might simply implode from the shock (McCrone, 2014). The city was well insured, the local economy did not entirely collapse as initially feared (Brown, et al 2013). This advantage was attributed to the fact that New Zealand has one of the highest insurance penetration rates in the world (Brown, Seville & Vargo 2013; CBRE, 2012).

The government declared a state of national emergency and Civil Defence became lead agency, with a cordon established around the CBD area. Chang *et al.* (2014) provides a detailed description of the impacts of the CBD cordon which had been reduced to about half its original size by July 2011 and removed entirely in June 2013. The Figure below shows the
extent of the CBD cordon at various timeframes, which was also prolonged by the continued aftershocks.

**Figure 5:** Extent of central business district cordon, February 2011 to May, 2013:
Source: Canterbury earthquake recovery authority (2012)
Generally, compelling and sometimes controversial decisions were taken such as cordonning the central business district; residential zoning; creation of the Canterbury Earthquake Recovery Authority (CERA) & Christchurch Central Development Unit (CCDU); developing of the Christchurch central recovery plan also known as “The Blueprint” shown in figure 6 have been made by the government after the earthquakes (Chang et al 2012; Rodrigues, 2012). These decisions were made to bring some level of confidence and certainty among potential private property stakeholders who would engage in the post-disaster rebuild (Taylor, 2013). The Christchurch Central City Blueprint took off in 2012 as shown in figure 6 below was considered a bold choice that would spearhead the post-disaster rebuild in Christchurch City Centre by providing a clear direction for collaboration between the private and public sector (JLL, 2012). However, it has most times fallen short of inspiring confidence among property stakeholders and this has been attributed to a lack of coordination, governance and inefficient procurement in the overall implementation of the Christchurch city centre blueprint (NZCID, 2013). Studies by (McCrone, 2014; NZCID, 2013) show that the implementation of the central city Blueprint may not live up to the high expectations and in fact, the post-disaster recovery in Christchurch city centre has sometimes stalled on different occasions since the rebuild started. Their studies also acknowledged the failure of the Christchurch central city Blueprint to inspire initial confidence among property stakeholders. Some of the identified reasons for this included but not limited to;

- Historical political tensions between local city council and the business community;
- The amalgamation of national government agencies and departments with elected city council to form the Christchurch central development Unit (CCDU);
- Failure to impose moratorium on the approval for commercial developments outside the city centre and suburban locations;
- The decision by the Christchurch central development Unit (CCDU) to force the agglomeration of commercial redevelopment in a particular precinct and
- The aggressive internal disputes over cost-sharing on anchor projects in the Christchurch city centre blueprint.
Figure 6: The Blueprint Plan for Christchurch City Centre

Source: Christchurch Central Development Unit (CCDU), 2012
It is important to note that after a major disaster, there are profound changes that occur with long-term repercussions on affected locations and this was clearly manifested in the over 90% of the office space stock lost in the central city of Christchurch due to the earthquakes (Moricz et al. 2012; Anthony, 2014 and Sellars, 2013). This massive shortfall had a reverberating effect on the commercial property market because it contributed over two-thirds of the available stock of office space in the entire Canterbury region (Anthony, 2014). Property investors and developers may have become extremely cautious to participate in new projects due to the unique risks and uncertainty they have to take on. In fact, the usual property investment cycle may become very lopsided and difficult to predict for a very long time.

A Theoretical Framework on the Decision-Making Behaviour of Property Stakeholders in a Post-Disaster Rebuild Environment

This paper leans on the argument that the behavioural and institutional approaches can offer a credible balance to mainstream economic models especially in understanding the decision-making behaviour of private property stakeholders in a post-disaster environment. The premise here is that an institutional and behavioural perspective offers a robust contribution to the literature on decision-making in urban post-disaster rebuild. With this in mind, a theoretical understanding of the processes in the market through the habits and social interactions of property stakeholders (investors, developers and agent) in post-disaster rebuild environment can be developed. Samuels, (1995 p.571) argues that this approach also yields a “deeper answer” to the phenomenon under study. The knowledge revealed is reliable “although changes in institutions and working rules occur frequently, they normally change slowly, through both non-deliberative (for example, habitual and customary) and deliberative (typically legal) modes” (Samuels, 1995, p. 573).
The figure 7 above illustrates how the hidden intricacies of the property market can open up by engaging the behavioural and institutional dynamics through pre-existing social, economic, political and legal institutions revealed in the diagram. According to Rosenberg, (1994, p.1), “by examining the particular sequence of events and institutions within specific industries, one can extract insights into the process... knowledge of a kind that cannot be deduced from some mere theoretical framework”.

In other words, property stakeholders will assimilate and interpret these endogenous and exogenous factors in their operations. These interactions ultimately shape property prices and space supply and demand, which are critical in a post-disaster environment. The goal of analysing institutions is usually to offer an in-depth explanation and meaningful insights that enriches the understanding of property market processes (Ball et al. 1998). By embracing this approach, insights into the perceptions and decision-making behaviour of private property stakeholders particularly in a post-disaster environment can be robustly “fleshed out” by
posing questions that examine their perceptions and motivations for investment and development.

**Figure 8: A Decision-Making Framework for Stakeholders in a Post-Disaster Environment:**

![Diagram of Decision-Making Framework](image)

**GAP AREA**

The framework in the figure 8 above provides a structure on how the literature has progressed in line with the study objective. By providing an underpinning for this paper, the literature review has identified a gap area in the decision-making behaviour of private property stakeholders in a post-disaster rebuild environment. The review of the literature, suggests that a common theme points to the importance of the social process and environment that exist among property stakeholders and institutions.

*Source: Adapted from Egbelakin, (2013)*
The goal of this literature was to inform the study from a theoretical perspective by putting into context the general understanding of decision-making behaviour of private property stakeholders. Therefore, the objective here is to make a unique contribution to the property literature by providing a robust understanding of this complex social process that influence decision-making behaviour in an urban post-disaster rebuild environment.
CONCLUSION

The objective of this study was to allow for a holistic and deeper understanding of the decision-making behaviour in a post-disaster rebuild environment through the lens of private property stakeholders. Although normative models provide an “ideal world” view of investment, the chaotic nature of the property investment market as visible in a post-disaster recovery environment appears to preclude any rigid and rational decision-making behaviour. In this case, individual investors may make decisions based on sentimental factors such as passion, love, emotion, prestige, limited domain and cognitive powers. In this regards, this paper provides a valuable insight into the behavioural dynamics of private property stakeholders (investors, developers and agents) involved in the post-disaster rebuild. Till date not much has been done in this area of property literature. The purpose of this study therefore, was to address this shortcoming by developing an a priori view the factors influencing the decision-making behaviour of property investors and developers involved in the post-disaster rebuild of Christchurch city centre through the lens of agents who represent a vital link among property stakeholders.
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