# EXPECTATIONS VS REALITY:

# PROPERTY INVESTOR DECISION MAKING FOR SEISMIC RISK MITIGATION

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### Rationale

**Property investors** are important stakeholders in the built environment. Their investment behaviour in an increasingly complex environment is, however, constantly challenged by social, economic, technological and environmental disruptions. Amongst these disruptions, natural hazards are a major threat that influence property investors' portfolio preference in regions prone to earthquakes. Although traditional economic theory views the property investment decision making as rational, there is a greater recognition that investors operate in a world characterised by uncertainty and asymmetric information, questioning the rationality assumption. In New Zealand, local and central governments are implementing regulatory mechanisms to increase resilience of our built environment. However, the response of property investors often deviates from the expectation of the policymakers.

This study therefore, attempts to analyse the complexity in property investment decision making to understand how actual investors make investment decisions instead of modelling how they should do it. Using an institutional approach, this study sets out to understand the formal and informal interactions that exist amongst various stakeholders in earthquake-prone environments as a way of establishing a legitimate form of reasoning. Thus, providing insights for informing our resilience policies and implementation

**TOP DOWN REGULATORY DRIVERS DECISION MAKING IS COMPLEX AND DEVIATES** FROM RATIONAL EXPECTATIONS (NORMS) **Building (EQPB)** There will be no one 'right' **Amendment Act** course of action How can we improve the **PROPERTY** Life safety quality of decision outcome **DECISIONS** to increase compliance and Compliance resilience? WITHIN **COST OF** timeframe % NBS **EARTHQUAKE-COMPLIANCE** PRONE **BUILDING Considerations:** Business FRAMEWORK continuity Investment return Building life cycle · Market demand **Outcomes:**  Economic/physical Occupiers | Insurance Strengthening **KAIKOURA** Banks • Strengthening and • Incentives Demolition/ **M**ARKET DRIVERS redevelopment **BOTTOM UP** 

framework in an increasingly complex and uncertain world.

**Understanding of Property Decision Making Behavior** 

Property investors operate in environments that are governed by formal (government regulations) and informal (tenants, banks, insurance) rules (Agboola, 2015)

Whereas government legislations are driven by safety, property investors are also driven by business continuity and investment returns (Roulac, 1999)

The response of property investors to market uncertainties often deviate from the assumed norm (Parker, 2016).

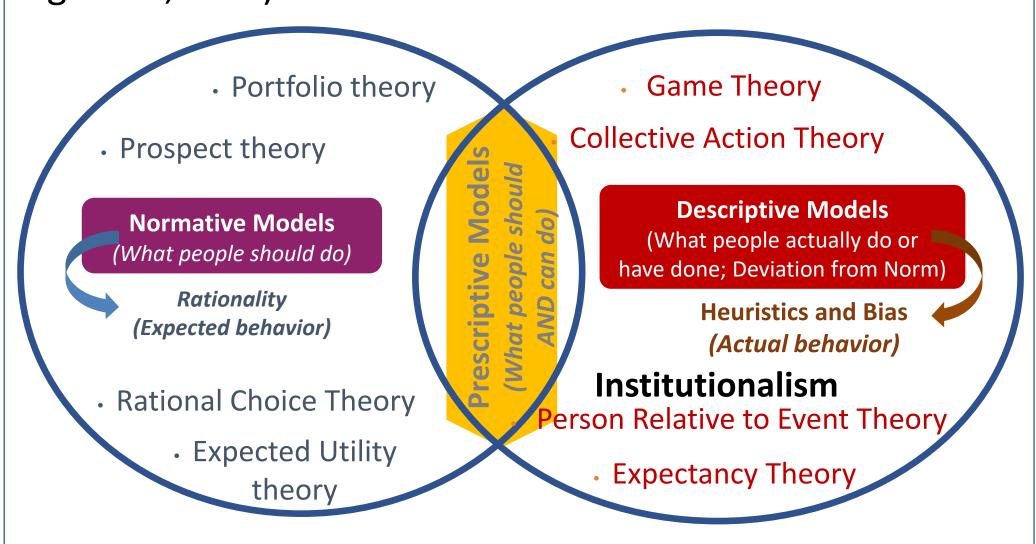
# **Theoretical Perspectives**

Traditional property investment decision making is premised on normative processes (Roberts and Henneberry, 2007)

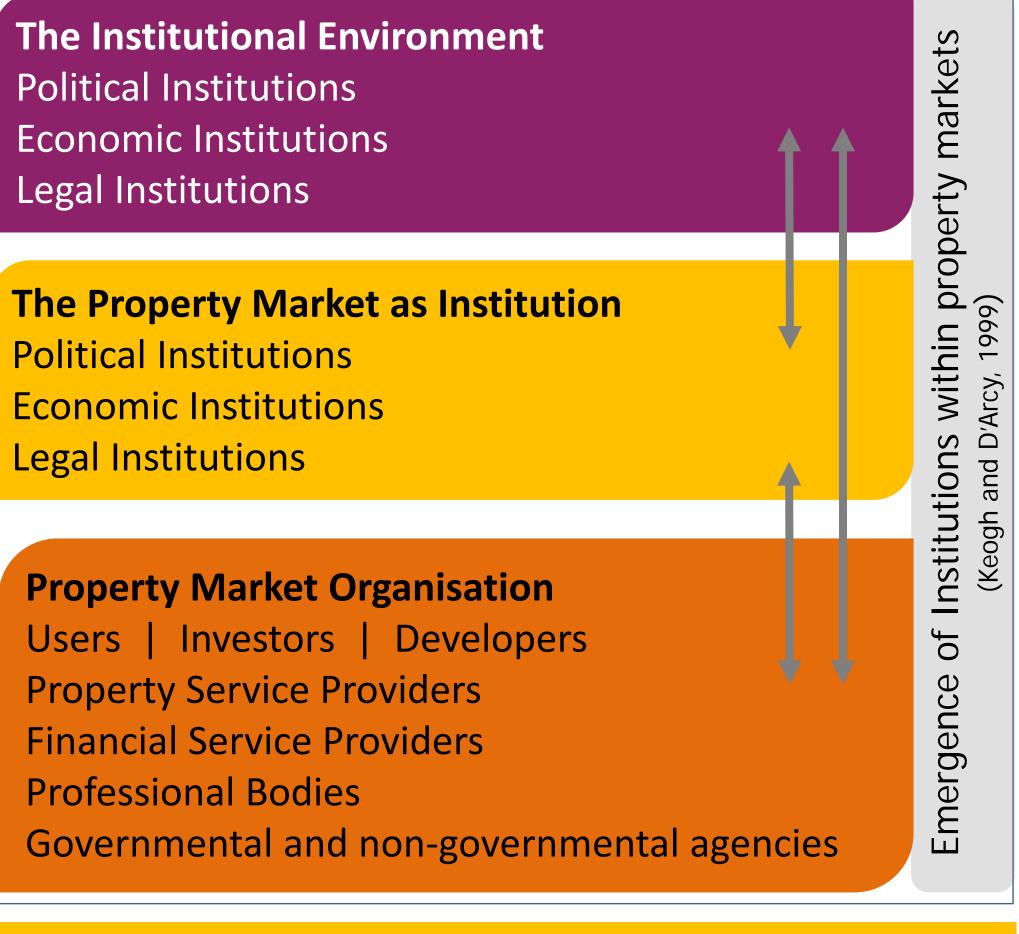
Researchers have explored deviation from rational process (Gau, 1987; Keogh and D'Arcy, 1999; Shah, 2011) Researchers have explored how investors skip processes (Diaz, 1999)

Researchers have observed **behavioral issues** in investors actual decision making (Imazeki and Gallimore, 2009; Gallimore et al., 2000; Chukwudumogu et al., 2018) Researchers have attempted to propose a unified decision making model - **prescriptive** (Parker, 2016)

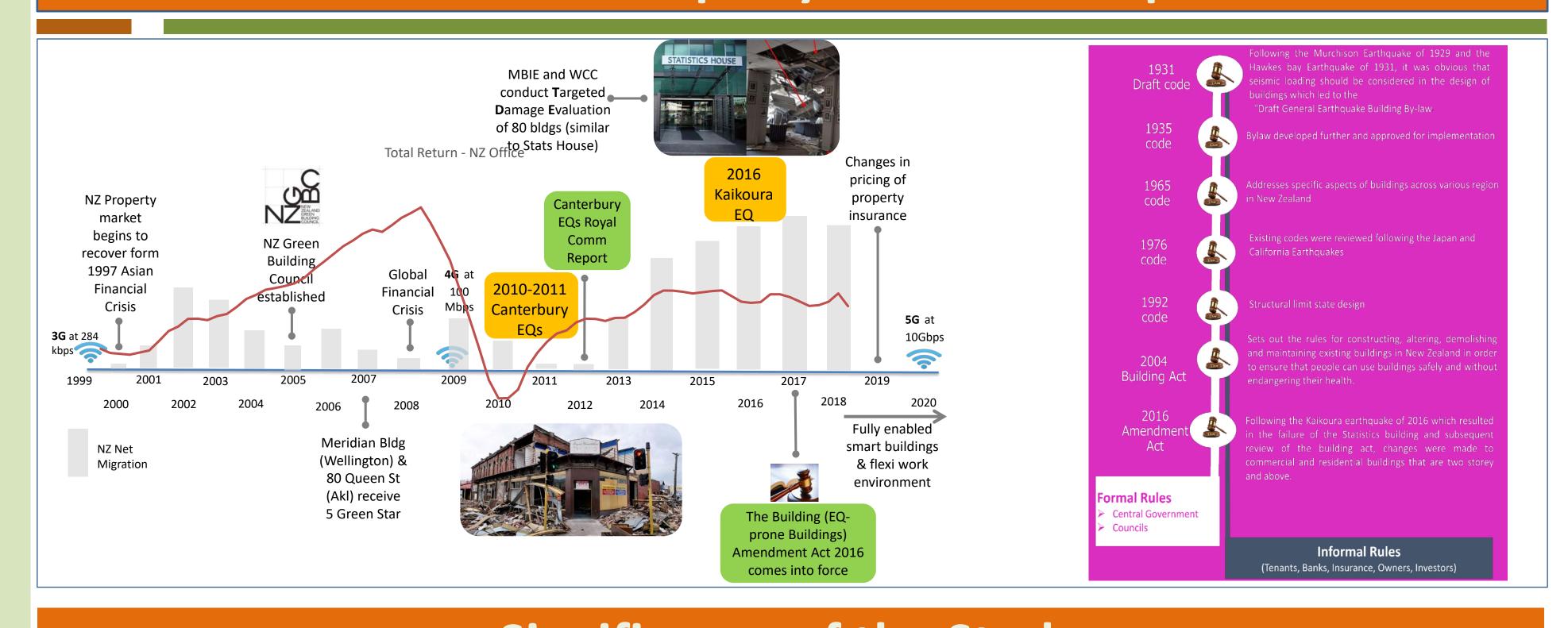
There is still a need to understand the emergence and role of institutions in property investment (Lang 2011; Agboola,2015)



Institutions are rules of conduct, meant to coordinate the actions of individuals or organizations:



# **New Zealand Property Market Disruptions**



#### Significance of the Study

For properties in earthquake-prone locations, to remain relevant in today's market, they need to be able to easily adapt to changes throughout their lifecycle (Wilkinson et al., 2014). These changes could be in form of property use (e.g. adaptive reuse) or regulatory requirements (e.g. safety standards and strengthening of buildings). The reality of today's world has therefore challenged property investors to embrace change and be proactive in their investment decision-making, especially in the presence of market disruptions (Kreimer et al., 2003, Kapucu and Garayev, 2011).

A fundamental aspect to be considered in this study is based on environmental and regulatory disruptions and the relevance of institutional framework in understanding property investor's adaptive behavior and its implication on their investment decisions. The study, therefore, attempts to bridge the gap that currently exist within property literature, thus, providing a deeper understanding of how property investors react to market disruptions and their motivation for doing so. This study will also attempt to offer practical solutions that could simplify the complex property investment decisionmaking process in high-stakes, low-probability settings, through a framework that will help inform investment practice and policies aimed at resilience of the built environment.

### **Study Methods**

#### **Data sources**

- Wellington CBD building inventory
- Building Consents
- CityScope property market data
- Annual reports of NZ's property trusts (e.g. Precinct, Argosy, Kiwi Property)

#### Methods:

- Document analysis
- In-depth interviews with property investors

adapted their

#### References

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regulatory changes? Based on various

How well have

property investors

complied with the

market disruptions, how have investors property portfolio decision?