Pacific Rim Real Estate Society
15th Annual Conference

18 – 21 January 2009, Sydney, Australia

Can Risk Management boost the supply of Affordable Housing Development and Management?

Connie Susilawati[1]
and acknowledge contribution of Bonivasius (Monash University)

Abstract

A shortage of affordable housing is a major problem in Australia today. This is mainly due to the limited supply of affordable housing that is provided by the non-government housing sector. Some private housing developers see the provision of affordable housing for lower income people as a high risk investment which offers a lower return than broader market-based housing**.** The scarcity of suitable land, a limited government 'subsidy', and increasing housing costs have not provided sufficient development incentives to encourage their investment despite the existing high demand for affordable housing.

This study analyses the risk management process conducted by some private and not-for-profit housing providers in South East Queensland, and draws conclusions about the relationship between risk assessments/responses and past experiences. In-depth interviews of selected non-government housing providers have been conducted to facilitate an understanding of their approach to risk assessment/response in developing and in managing affordable housing projects. These developers use an informal risk management process as part of their normal business process in accordance with industry standards. A simple qualitative matrix has been used to analyse probability and impacts using a qualitative scale - low, medium and high.

For housing providers who have considered investing in affordable housing but have not yet implemented any such projects, affordable housing development is seen as an opportunity that needs to be approached with caution. The risks associated with such projects and the levels of acceptance of these are not consistently identified by current housing providers. Many interviewees agree that the recognition of financial risk and the fear of community rejection of such housing projects have restrained them from committing to such investment projects. This study suggests that implementing improvements to the risk mitigation and management framework may assist in promoting the supply of affordable housing by non-government providers.

[1] School of Urban Development, Queensland University of Technology, Brisbane, Australia, c.susilawati@qut.edu.au

Keywords:

Affordable housing development, affordable housing management, risk management, risk assessment

1. Introduction

Housing affordability is a growing problem for lower income groups in Australia. An increasing demand for housing has led to rising house and rental prices and to a consequent decline in housing affordability. In this context, affordable housing is the term given to that part of the rental and home ownership market represented by lower-income groups (the bottom 40 per cent of households by income distribution) (Department of Housing, 2005). Affordable housing providers need to consider "appropriateness of the dwelling, housing and social mix, tenure choice, location of housing, quality of environmental planning and design and cost" as well as, the income status of home owners/renters (Department of Housing, 2005). Despite the rising demand for affordable housing, this area has not been seen as being "commercially viable" for housing developers, and there has been limited investment in this area by the non-government housing sector.

Investors will generally expect a higher return for a higher risk project. Affordable housing is expected to provide lower returns than market-based housing, whilst incurring a similar or higher risk (Miles, Berens, Eppli, & Weiss, 2007). The increasing scarcity of land and rising building costs are further disincentives (Residential Development Council, 2007). Risk management has, therefore, become important in such low-return investments.

The Australian Standard defines risk as "the chance of something happening that will have an impact on objectives". (Standards Australia/Standards New Zealand, 2004, p.4). Risk can also be defined as the uncertainty of such future events that might influence the achievement of one or more objectives such as the organisation's strategic, operational and financial objectives (Hillson & Murray-Webster, 2007). While the negative aspects of risk are usually emphasised, risk management may also produce positive opportunities for developers (Webb, 2003). This study defines risk as the uncertainty of outcome which may have a positive opportunity or a negative effect on project objectives.

This study follows up on a preliminary report on the results of stakeholder interviews which were conducted by this author (Susilawati & Armitage, 2004). This report recommended the establishment of effective partnerships between various affordable housing providers as a method of achieving the most successful delivery of such housing. The aim of this study is, thus, to analyse and to describe the risk management processes conducted by affordable housing providers in South East Queensland. In-depth interviews of non-government (private and not-for-profit) housing providers have been undertaken to assist in understanding the risk assessment and response processes employed by these providers when developing and managing affordable housing projects in partnership with other stakeholders. How they identify major risk factors, how they assess and respond to these, and the nature of the relationship between these processes and past experiences will also be explored in this paper.

2. Risk management in affordable housing development and management

Risk management is 'an iterative process consisting of well-defined steps, which, when taken in sequence, support better decision-making processes by contributing greater insight into risks and their impacts' (Standards Australia/Standards New Zealand, 1999, p.iii). Most definitions of risk management relate to the process of identifying, and of analysing the likelihood and impact of risk, of evaluating it, of dealing with it, and of monitoring and communicating information about it (Kim & Bejaj, 2000, p.38). See Figure 1.

Risk management should be integrated into 'the philosophies, practices and business plans' that make up an organisation's culture (Hillson, 2002, p.241; Standards Australia/Standards New Zealand, 2004, p.v). Risk management requires human judgement at the individual, group and organizational levels (Hillson & Murray-Webster, 2007). Hillson suggests that project managers manage risks 'continuously, both consciously and unconsciously, though rarely systematically' (Hillson, 2002, p. 240). Figure 1 below, shows how risk management begins with the establishment of context, proceeds to risk identification, and then to risk assessment or analysis, and finally, to risk response and mitigation

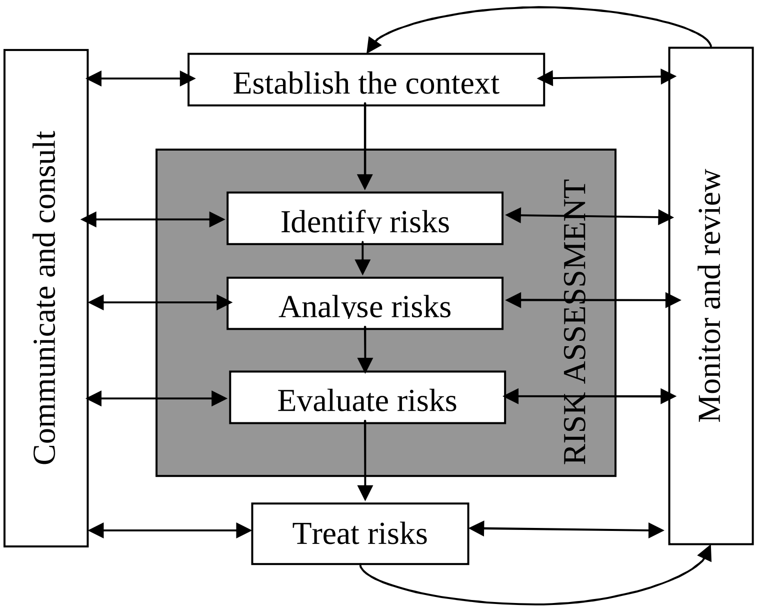

Figure 1. Risk management
Source: AS/NZS4360:2004, p..9

After identifying risk types and categories, the following risk assessment processes are commonly utilised:

1. Risk assessment related to likelihood (Low, Medium or High) and to consequences (Low, Medium or High),
2. Risk ranking based on financial impact and description.
3. Risk exposure is the multiplication of impact value and the probability of occurrence

(Robinson, 2006; Webb, 2003)

Past experiences of risk may affect a developer's risk response strategies. Many respond to risk by having contingencies for risk mitigation. This might include sub-contracting the work to transfer risk, or the purchase of insurance. Others might just accept the risk (Hillson & Murray-Webster, 2007; Melton, 2007).

A risk management policy is usually created to formally identify and to manage the risks of events that may have major implications for the organisation. The areas of impact of these events may be varied, and can include risks associated with finance, human performance, tenancy management and reputation. Such risks may impact on the organisation, staff, tenants and/or on various stakeholders (Robinson, 2006).

The tools most commonly employed to measure such risks include qualitative techniques (Elenor, 2006). Webb (2003) called these 'likelihood and consequences' tools and Melton (2007) described them as 'probability and impact analysis' tools. The quantitative measurement of probabilities or likelihoods is difficult, particularly where such probabilities are low. For this reason, probability (or likelihood) will be defined in this study by the ‘low, medium and high’ qualitative criteria. The consequences of risk can be measured by both quantitative and qualitative techniques. Financial consequences are easily measured in terms of financial impacts on the organisation. Non-financial consequences may include the failure to achieve a desired outcome for a tenant, employee or stakeholder. Table 1 shows the qualitative risk analysis matrix. Categories of risk evaluation shown in this table below are in the low/medium/high risk range.

Table 1. Qualitative Risk Analysis Matrix

	Low Consequence	Medium Consequence	High Consequence
High Likelihood	M	H	H
Medium Likelihood	L	M	H
Low Likelihood	L	M	M

Source: Elenor, 2006, p.26

Key:
A. Likelihood

Low — Over the long-term, an event is considered likely to occur very infrequently in the normal course of activity;
Medium — When an event is not expected to take place in the short to medium-term, and its occurrence over the long-term is reasonably probable; and
High — An event is reasonably likely to occur in the short- to medium-term.

B. Consequence

Low — Minor impact, inconvenience, frustration or low financial consequence;
Medium — Impacting in a reasonably significant way, or upon a number or parties. Includes financial loss that may impact upon the resources available but not to a major extent; and
High - Impacting in a significant way, or upon a number of parties. This includes financial loss that may impact to a major extent upon resources, such that activities may have to be curtailed.

C. Risk

H: High risk — Immediate action and/or senior management attention is required
M: Medium risk — Management responsibility must be specified; and
L: Low risk — Management by routine procedures is required.

Source: Elenor, 2006, p.25-26

Risk Management for Community Housing concerns the core functions of affordable housing providers. These functions are: land procurement; housing development; asset management; property management; tenancy management; and, community building (Bisset & Milligan, 2004). A similar focus for risk management can be also found in the broader rental market, where low-income people are forced to find alternative accommodation due to the lack of affordable housing.

The main goal of any private organisation is to maximise profits by maximising income whilst minimising costs. The main income from rental fees in the broader rental housing business is derived from property which is maintained in good condition. The main operational costs of such rental housing are, thus, maintenance works and repairs. The major goals of the managing agent are to maximise rental income whilst minimising maintenance costs. These agents will be able to minimise their business risk if they can select good tenants who usually pay their nominated rent on time, and are willing and able to take good care of the property (Short, Seelig, Warren, Susilawati, & Thompson, 2008). The process of tenant selection has a strong focus on selecting a tenant with the ability to pay the rent (a good financial capability) and the ability to care for the property (a good rental history). In a low vacancy housing climate, many agents are reluctant to include many low-income tenants in their preference listing process in order to minimise the risk to them of rental arrears (Short et al., 2008).

3. Methodology

This study is based on data collected from a series of interviews conducted in South East Queensland from October 2007 to February 2008. These interviews focussed on the risk management process during the implementation of affordable housing projects and subsequent associated management phases. The interviews sought to identify challenges and associated strategies for risk minimisation which particularly require stakeholder partnership arrangements. The interviewees comprised major stakeholders who are participants in an affordable housing providers' organisation which develops and/or delivers services for low-income tenants.

The interview contacts were obtained via a snow-ball sampling technique (based on referrals from initial interviews), which was used to identify related affordable housing providers in both the private and in the not-for-profit organisations. Affordable housing developments are considered a 'new' initiative for both groups and are also a relatively 'new' initiative for State and Local Government authorities in Queensland. This researcher found that the major stakeholders tended to keep in close contact with one another, whether working collaboratively or independently. This, then, facilitated the inclusion of all the major players via this 'snow-ball' sampling process.

Nineteen interviewees who work for ten not-for-profit and six private organisations, and who have direct involvement in developing and managing affordable housing in Brisbane and surrounding region (beyond the Brisbane City Council) in South East Queensland (see Table 2 - Profile of Interviewees) were selected for interview in this study. Themes mentioned by several interviewed persons having different roles within the same organisation were combined to give one result for each organisation contacted.

Table 2 also details the distribution of ‘not-for-profit’ versus the ‘private’ organisations which were surveyed.

The qualitative data for this study has been analysed using NVIVO. NVIVO software is used for the thematic analysis (identifying themes, classifying similar themes into the same category, calculating and tabulating the number of organisations that have mentioned them) to find the main issues suggested by the interviewees. Identified themes have been divided into two sections for reporting - affordable housing developments and affordable housing management. Identified themes have also been categorised as one of the main themes in risk management. These include: risk identification; risk assessment; and, risk responses (risk management strategies). In addition to the interview questions, interviewees were asked how risk management was conducted within their organisation (see Table 3). Not all interviewees have actually implemented affording housing developments. Two were included in the interview process on the basis that they were actively analysing new projects with a view to their participation in this area of development.

Table 2. Profile of Interviewees

Organisation	Interviewee	No. of Organisations	Gender
Not-for-profit	13	10	5 Male 8 Female
Private	6	6	3 Male 3 Female

4. Analysis and discussion of interview results

Risk management is conducted mainly as an informal process by each organisation (see Table 3). While this is specified as part of their standard operating procedures, not all organisations have a formal risk management and risk registration process, or an appointed officer to plan, to conduct, and to monitor the risk management process in their organisation. Some organisations (6) undertake formal risk assessment for every project, but most (10) conduct risk assessment informally using a qualitative probability-impact matrix as part of their corporate policy. If the organisation's main goals are delivering affordable housing which is to be delivered under a government-subsidised program, then this organisation will have to have an formal risk management process as part of their accreditation procedure.

One company stated that they would identify project risks via a three-stage process which consisted of a consideration of the risk management matrix, which was then followed by a due diligence and risk assessment study. This company conducts informal risk identification in the due diligent process, employing constraint analysis (Strength-Weakness-Opportunity-Threat (SWOT) format), and also property, market and financial analysis. This internal process has a very important role in this company’s decision-making, for they hold that it is better to cancel risky projects at an early stage.

Only two organisations have a formal risk assessment process that is applied after the initial ‘due diligence’ process. One of the not-for-profit organisations has a full-time risk management officer. His role is to ensure that the organisation's policy complies with current government legislations and accreditations. This formal process aims to ensure that the organisation's reputation will not be affected by any proposed development. This particular risk assessment process is part of this company's standard operational procedure (SOP) and it is supported by a computerised risk register database and by a monitoring system.

Table 3. Risk management experiences by number of organisations

No	Description	Number of not-for-profit organisation (10)	Number of private organisation (6)
1	Conduct risk management - Formal risk management - Informal risk management	 6 4	 0 6
2	Have experience of developing or managing 'affordable housing'	10	4
3	Have partnership(s) to deliver or manage 'affordable housing'	10	3
4	Risk experience related to tenants: - unable to pay rent (bad debt) - property damage - high turn-over of tenants (vacancy) - reluctance to take low income and high needs tenants	 6 6 1 3	 4 1 1 3
5	Rental fee charged: - discounted market rent - income-based rent (for public and community housing)	 8 7	 3 0

Affordable housing management is thought to be associated with a higher risk than private real estate management because of bad debts (10), higher turn-over of tenants (higher vacancy levels) (2) and because of a higher risk of property damage (7). Some interviewees (6) mentioned their reluctance to take on risks associated with renting to low-income households, and especially, to those with special or more complex needs. Since most (11) of the affordable housing providers set rental payments based on a discounted market-based rent rather than on income-based rent as paid in public housing, the rent default rate may be higher in the former situation**.** As one interviewee observed "You can expect there will be a problem with paying the rents, with property damage, and with anti-social behavioural problems". Much of the problems are not, however, caused by the tenants themselves but by associates of the tenant. An over-crowded house can develop problems of hygiene and excessive noise, and this has the potential to lead to property damage. On-site care-takers or pseudo on-site management has helped to reduce such risks for some properties.

Most organisations studied (13) have partner(s) to deliver and to manage the affordable rental/ownership housing. In general, an organisation needs to assess the viability of the investment and to evaluate the partnership selection process for any property development/investment decision. An organisation will have to meet not just this investment and partnership criteria, but also the location and cost criteria for affordable housing criteria as defined by the Queensland Department of Housing. This requires that affordable housing should be "well located in relation to places of employment and to the range of services, facilities, communication and transport networks required to meet other household needs." It is also critically important, as one interviewee declared, that "we have a good design, a good location, a good affordability, a good social mix and, are not creating a ghetto".

Decisions regarding affordable housing investment/development can, thus, be represented as a three part process by this researcher's diagram in Figure 2 below. These decision-making criteria are interconnected and may impact total cost of providing affordable housing for lower-income people. The first criteria, location and cost of affordable housing criteria, (which are applied in each affordable housing project) has already been discussed above. The main issue in the second criteria, that of partnership criteria, is an inequity level among partners because of the associated financial risk, for as one interviewee noted "it is important to share a common value and have the right affordability mix in each project". Another interviewee stated that a partnership is not an easy situation to manage and that it is like having "too many cooks in the kitchen".

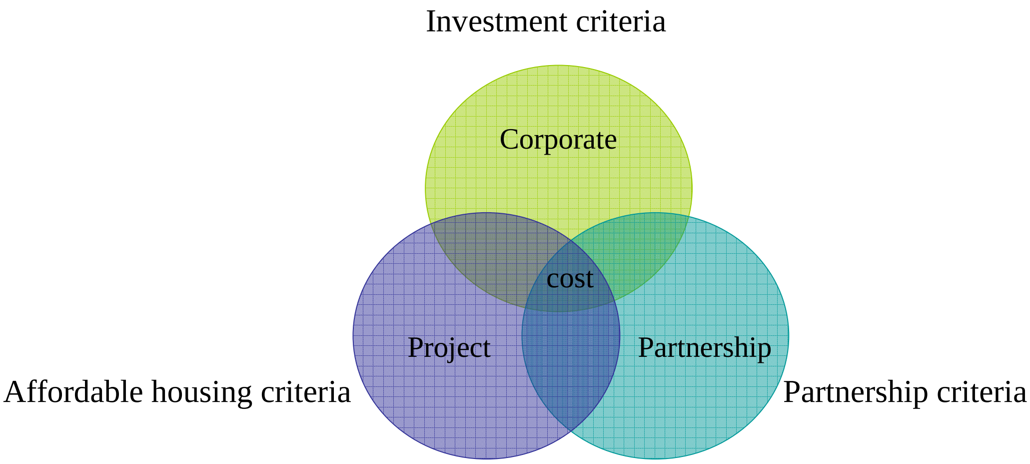

Figure 2. Interconnection between decision-making criteria related to risk assessment

Even though the affordable housing project is considered a risky investment, some projects have been engaged in due to the new partner's trust in the existing capability of the main partners. Strategic partnerships can, moreover, be formed in which each partner has his/her own unique role. This might involve a developer wishing to invest in a viable project in partnership with a not-for-profit organization who will manage the development in the interest of producing a good social outcome. Several interviewees (8) referred to the benefits of forming such strategic partnerships. Two specifically referred to the desirability of analysing partnership projects on the basis of "partnership reputation and performance of other development work".

The third criteria - investment criteria, in Figure 2 concerns the Corporate Policy of the involved organisation. This involves the organisation's economic, social, political and legal investment criteria where:

- Economic criteria is related to maximised returns, to minimised costs and to resource availability;
- Social criteria is to provide a roof over heads;

- Political criteria is the level of community and market acceptance through the development approval process; and
- Legal criteria is compliance with required legislation and appropriate accreditation.

The interview results for identified risk management themes have been collated by number of organisations and these are displayed in Table 4 and Figure 3 below. Risk types and levels described by the housing providers have already been reported in Table 4. The comments on different themes in these tables reflect differing roles of the interviewees in development or in management.

Nine organisations stated that affordable housing is not a preferred property development and, therefore, that they had had to leveraged its market risk. The physical features of affordable housing are not those preferred by the community seeking accommodation. These include medium to high density development, smaller room sizes and limited carpark facilities in multi-unit residential developments. The limited legal rights to the use of the land such as caveats or land covenants which enforce the land have to be used for affordable housing for at least 10 year, will also influence the property value.

Some housing providers (2) have considered investing in affordable housing but have not yet implemented any new development and affordable housing development is seen by these as an opportunity to be approached with caution. Many participants agree (9) that fear of financial risk, community rejection and development approval risk have dominated their current hesitation in entering into risky investment projects. The increment of development and maintenance costs are also major risks stated by 15 organisations in project level (see Table 4).

Figure 3 below categorises the three levels of risk in affordable housing development and management - the project level, the corporate level and the partnership level. All participants have nominated financial risk as a major consideration at all these levels. . Although risk of litigation also is considered to be equally important, the interviewees' were concerned about this mainly at the corporate level. In selection of partner(s), the reputation of the partner becomes very important in the selection of a new partner and this is seen to have the greatest impact at the corporate and project level.

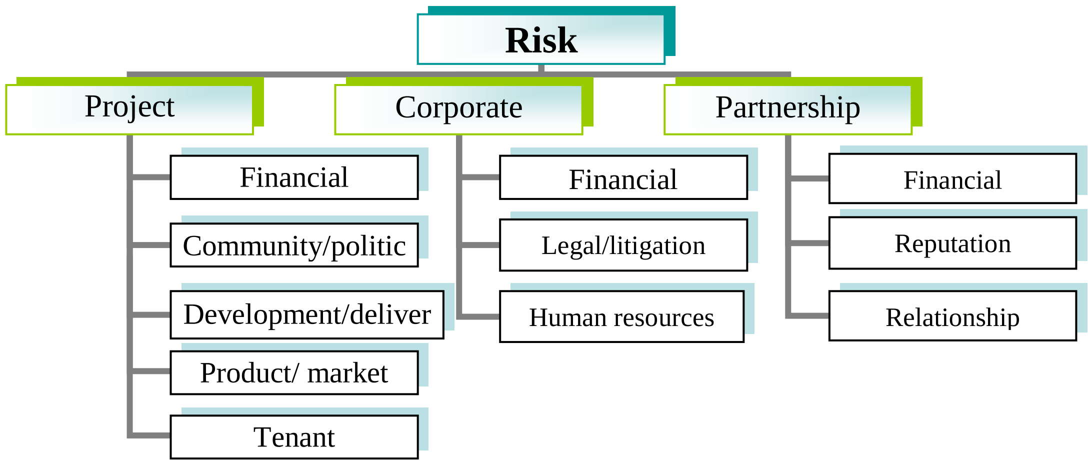

Figure 3. The main risk categories at the project, corporate and partnership levels

Table 4. Identified risk management themes by organisation

	Themes	Risk	Affordable housing development	Affordable housing management	Not-for-profit	Private
Corporate	Financial risk	High	Delay and cost increment Diminishing surplus from other project	Profit loss and require cross subsidy from other portfolio	4	2
	Litigation/ legal risk	Med	Not comply with legislation, planning, building, other regulation	Not comply with legislation (e.g. RTA) and accreditation	5	1
	Human re-sources risk	High	Limited staff experiences and expertise (board and executive)	Limited staff experiences and expertise	4	0
Partnership	Reputation risk	Med	Working with partners who have limited experience but have good 'personal' reputation	Working with partners who have experiences in managing housing	1	1
		High	Working with partners who have unsuccessful project(s)	Working with partners who have bad reputation	3	1
	Relation-ship risk	High	'Too many cooks' inequity level of partnership	Inequity level of partnership	1	1
Project	Product design/ market risk	Med	Not preferred product: Medium to high density Less carpark Smaller rooms Land covenant/ second mortgage	Poor maintain property (existing stock) Non favourable product (see affordable housing development column) Market 'low' acceptance	6	4
	Community risk	High	Community rejection: not in my backyard (NIMBY)	High criminal Bad suburbs/ experience Low community supports	5	4
	Political risk	Med	NIMBY Limited incentives	NIMBY	4	0
	Develop-ment approval risk	High	Planning constraints Planning bonus with land covenant for 10 years Community consultation	'refurbishment'	5	4
	Funding and financial risk	High	Lose government funding Debt service ability Low Loan to Value (LTV) Interest rates increase	Lose government funding	3	2
	Delivery/ procure - ment risk	High	Development risk Increment of delivery cost	Tenant selection Tenant mix/ allocation Maintenance and repairs	9	6
	Cost risk	High	Cost increment	management cost higher than market housing	8	6
	Tenant risk	High	Tenants stigma	Tenants stigma, low reliability of income 'Unhappy' tenants	3	4
		Low		A given risk for not for profit management organization Low risk for 'working poor' or key workers	4	3

Table 4 above shows the divergence of views by interviewees towards risks associated with reputation and tenants. The reputation risk is associated with the reputation of partners. Since many partners lack experience in affordable housing developments, this judgement will be made on the basis of reputation related to the handling of other projects. This difference of opinion (High - 4 versus Medium - 2) is one of degree only. The interviewees were divided also, over the risks of attracting stigma associated with affordable housing tenants. This difference of opinion was marked (High - 7 versus Low - 7). This reflects the status of the project developers. Not-profit-organisations accepted the risks associated with low income tenants more readily than did private developers, since these organisations have had more extensive experience in managing community housing which targets low-income tenants and those with special needs.

Housing providers (4) mentioned that the current government incentives for providing affordable housing are not very attractive. Tenants needing affordable housing are not, themselves, empowered to attract an additional supply. The risk adverse attitude of most stakeholders works to hinder the implementation of collaborative affordable housing projects. A list of organisational risk responses including risk transfer, acceptance and minimisation are given in Table 5 below. This table lists risk minimising strategies adopted by housing providers.

Some risks have been transferred at the project level to other stakeholders via: the purchasing of insurance (6); and the sub-contracting out as fixed term developments to other builders (3); by retaining a tenancy bond (4); or, by selling the completed development to other institutional or financial investors (6). The normal insurance that the project will need is liability insurance, construction insurance, building insurance, and landlord insurance to comply with financial and regulatory requirements. For a financier, the value of land in a good location will cover the bulk of the loan amount as it has a lower loan to value (LTV) ratio than does a broader market-based housing development. Some housing providers (4) accept a potential loss of income by budgeting for contingency costs and vacancy allowances.

A risk reduction strategy suggested by interviewees (5) is the targeted selection of affordable housing tenants from ‘low to moderate income’ workers in key areas - such as teachers, police, or nurses. Such key workers may not be eligible for public housing but will still be finding it difficult to find housing which costs less than 30 per cent of their income. Some organisations (3) additionally arrange a direct debit on renters' incomes via CentreLink’s Pay Management System to ensure that the rents get paid on time, and also arrange a complaint mechanism, as well as, a regular property inspection system in order to minimise property damage risk.

Although some housing providers (8) have transferred some of the risk (see Table 5), they did not mentioned this as part of a risk management strategy since it is part of their business process. As mentioned earlier, the initial evaluation process is very important for minimising risk at an early stage. Some organisations (7) state that experienced executive and board members have an important role in the selection of a good location for affordable housing development. The planned pre-lodgement meeting and other initiatives by Urban Development Land Authority (UDLA) approach in Queensland has been recognised by local government and the surveyed organisations as valuable initiative for reducing delays in the development approval process. Two organisations indicated a favourable response for such an initiative.

Table 5. Risk responses utilised by organisations

Risk	Transfer	Accept	Minimise
Location risk – site acquisition			Valuation and board review, selection of good location (7)
Product design/ market risk			Market segmentation for key workers (5)
Community risk			Not ghetto, mixed housing (6)
Government supports and political risk			Managing councils' expectations (3)
Development approval (planning) risk			Pre-lodgement meeting UDLA's (Urban Development Land Authority) approach (3)
Funding and financial risk	Sell to investor(s) (6)		The financier minimises the risk by low loan to value ratio (LTV) to improve service ability for loan payment (2)
Delivery/ procurement risk	fixed contract (2)	Contingency (1)	Fixed construction contract and contingency (3) Strategic partnerships (5)
Cost risk	Insurance (2)	Contingency (1)	Planned and fixed cost contracts (3)
Tenant risk	Rental bond (4)	Stigma,bad debt, damage and social behaviour problems Contingency (4)	Centrelink direct debit facility (3) Rental bond, community club, tenant selection process, tenant educational programs (5)
Business risk	Rental bond, insurance (4)		Management system (2)
Reputation risk			Select reputable partners (2)
Relationship risk			Strategic partnerships with tenants' support providers (for special needs) (8)
Human resources risk			Staff retention program, building capacity, diversifying company employment structure (4)

Note: Number of organisations (combined not-for-profit and private organisations) is noted in Table 5 above in brackets.

While this study has found that low income households will be included in the selection process, it also has found that the housing providers may prefer to select tenants with higher incomes in order to reduce their risk. These organisations' tenant selection process uses a similar but 'more thorough' process than does as the broader market-based housing and includes such things as checking the applicants' tenancy history, applying an income affordability check, and interviewing the potential tenants after reviewing their application form. This helps to mitigate the higher risks associated with these lower income groups. More effort is made, importantly, to achieve a good mix of tenants for a property, and to match the property to the tenants' needs. Careful tenant selection and allocation will ensure financial sustainability for the project and will reduce the likelihood of disturbances.

Many organisations (5) also emphasised the important role of housing providers in educating tenants to empower their own economic capability thus reducing the risk of incurring bad debts. Some identified areas for education as money management, a property-care program, employment pathways, and so on. These programs help tenants to improve their current financial situations, thus enabling some to be able to move into the open housing market. Some of these programs will be delivered by the community club in affordable housing complexes. At Kelvin Grove Urban Village (KGUV), the community hub in the village has been used for different activities associated with family fun, 'education' and arts. Not-for-profit organisations and private managers (such as real estate agencies/developers) have thus reduced the perceived risks associated with the provision of affordable housing by establishing strategic partnerships. Ten of the surveyed organisations responded favourably to this form of risk minimisation. Some survey organisations (8) also referred to needing to provide additional support to tenants with special needs.

All organisations indicated support for government initiatives in this area of providing affordable housing. Support for the provision of subsidies and indirect funding through improvements to the supply of land and to planning mechanisms, as well as, for improved risk mitigation efforts was mentioned. It was suggested that: the government could provide assurance as safety net for housing providers and financial institutions; the government could offer a 'safe investment' guarantee similar to government bonds in order to generate an increased supply of affordable housing; and that a formalised risk management process could include the development of a risk register. Such initiatives would help to attract more investors to the provision of affordable housing which would then be seen as a more 'manageable though still risky' investment.

5. Conclusions

The majority of housing developers/providers that were interviewed were not found to be using a formal risk management process in every project selection and implementation. Many considered that their normal business practice included an adequate informal risk management process. As an industry standard, a simple qualitative matrix is utilised at the organisational level to analyse risk probability and impacts on a qualitative scale (low, medium and high). Due diligent is used in the development stage to filter the viable projects for implementation, and finally, an informal risk assessment process is normally used in the selection of strategic partnerships and in the selection of appropriate prospective tenants.

The provision of affordable housing developments and their management have, so far, been seen as ‘risky’ investments. Not only have such projects had to meet the affordable housing project criteria but also, have had to meet organisational partnership and investment criteria as well. The identified risks have been categorised under three level of risk in affordable housing development and management. These are: the project level; the corporate level; and, the partnership level (see Table 4). Private organisations are more concerned with the financial risks associated with the provision of affordable housing. This concern is focussed on the impact of the stigma associated with lower-income tenants and their association with affordable housing. These are thought to have an impact on the long-term sustainability of the investment at both the operational, as well as, at the disposal stage. This has led many to seek active strategic partnerships with community-based organisations to mitigate this risk. By contrast, not-for-profit organisations who have had more experience with low-income groups and in managing community housing, have a slightly different attitude toward tenant risk. They generally accept it as a given risk, form strategic partnerships with tenant-support providers, and then minimise it by budgeting for it as a contingency cost.

A well-managed community housing organisation with a formal risk management strategy is, clearly, in a strong position to attract private investors as partners in supplying affordable housing. Recent Government interventions, such as through planning schemes and policies within the Urban Land Development Authority (ULDA), and new initiatives, such as tax incentives developed through the National Rental Affordability Scheme (NRAS), will assist in providing more certainty for housing providers and this will significantly reduce such investment risks. The surveyed affordable housing organisations hope that such interventions can be delivered in the form of grants, and by direct and indirect subsidies and government guarantees.

For housing providers who have considered investing in affordable housing but have not yet implemented any projects, affordable housing development is seen as an opportunity that must still be approached with caution. The identification of risks and the levels of acceptance of such risks are not uniform across the current affordable housing provider community. Many interviewees agreed that the awareness of financial risk and the fear of community rejection of affordable housing have led to a reluctance of housing providers to become involved in such risky investment projects. This study suggests that an improvement to the risk mitigation/management framework may assist in enhancing the supply of affordable housing.

Further study is needed to evaluate the effectiveness of having a mixed investment portfolio mix with different types of housing rather than of just catering for stand-alone affordable housing projects. This portfolio mix could consist of mixed housing products, mixed-use housing and commercial developments, better strategic partnership arrangements, the provision of more public infrastructure, and a wider selection of tenant groups. The issue of an improved portfolio mix and partnership/tenant challenges need to be resolved to encourage more investment in affordable housing.

References

Bisset, H., & Milligan, V. (2004). *Risk Management in Community Housing: Managing the challenges posed by growth in the provision of affordable housing*. Ultimo: National Community Housing Forum.

Department of Housing. (2005, 7 July 2005). What is 'affordable housing'? Retrieved 29 August 2008, from http://www.housing.qld.gov.au/partnerships/affordable/whatis.htm

Elenor, C. (2006). *Managing Risk in Community Housing Operations: Concepts and Tools*. Ultimo: National Community Housing Forum.

Hillson, D. (2002). Extending the risk process to manage opportunities. *International Journal of Project Management, 20*(3), 235-241.

Hillson, D., & Murray-Webster, R. (2007). *Understanding and managing risk attitude* (2nd ed. ed.). Aldershot: Gower.

Kim, S., & Bejaj, D. (2000). Risk management in construction: An approach for contractors in South Korea. *Cost Engineering, 42*(1), 38-45.

Melton, T. (2007). *Project management toolkit : the basics for project success* (2nd ed.). Amsterdam: IChemE/Butterworth-Heinemann.

Miles, M. E., Berens, G., Eppli, M. J., & Weiss, M. A. (2007). *Real estate development : principles and process* (4th ed.). Washington, D.C.: Urban Land Institute.

Residential Development Council. (2007). *Boulevard of Broken Dreams: The future of housing affordability in Australia*: Property Council of Australia.

Robinson, G. (2006). *Gerry Robinson's Risk Thinkers Guide: The breakthrough book on Risk Management*. Melbourne: Brolga Publishing Pty Ltd.

Short, P., Seelig, T., Warren, C., Susilawati, C., & Thompson, A. (2008). *Risk-assessment practices in the private rental sector: implications for low-income renters*. Queensland: Australian Housing and Urban Research Institute.

Standards Australia/Standards New Zealand. (1999). *AS/NZS 4360:1999 : Risk management* (2nd ed.). Sydney: Standards Australia International Ltd and Standards New Zealand.

Standards Australia/Standards New Zealand. (2004). *AS/NZS 4360:2004 : Risk management* (3rd ed.). Sydney: Standards Australia International Ltd and Standards New Zealand.

Susilawati, C., & Armitage, L. (2004, 25 to 28 January). *Affordable Housing Investment in Queensland.* Paper presented at the Tenth Annual Conference, Pacific Rim Real Estate Society, Bangkok.

Webb, A. (2003). *The project manager's guide to handling risk* Aldershot, Hants: Burlington, VT : Gower.