

**BUILDING BETTER
HOMES, TOWNS
AND CITIES**

Ko Ngā wā Kainga hei
whakamāhorahora

National
SCIENCE
Challenges

Financiers and Developers: Interviews concerning their interests, relationships, and the residential development process

**Laurence Murphy
School of Environment
University of Auckland**

Building Better Homes Towns and Cities
SRA 1 – The Architecture of Decision-making
Working Paper

March 2019

Acknowledgements

This research is funded through the Building Better Homes, Towns and Cities National Science Challenge: SRA 1 -The Architecture of Decision-Making. The author would like to thank the research participants for sharing their time, knowledge and expertise. Thank you also to Dr Kay Saville-Smith (CRESA) for her review and comments.

Every effort has been made to ensure the soundness and accuracy of the opinions and information expressed in this report. While we consider statements in the report are correct, no liability is accepted for any incorrect statement or information.

© 2019 Building Better Homes, Towns and Cities National Science Challenge and the authors. Short extracts, not exceeding two paragraphs, may be quoted provided clear attribution is given. Working Papers are research materials circulated by their authors for purposes of information and discussion. They have not necessarily undergone formal peer review.

Contents

	Executive Summary	i
1	Introduction	1
2	Study Methodology	2
3	Results	4
3.1	Development feasibility	4
3.2	Developer finance	5
3.3	Profit, development feasibility and the role of banks	6
3.4	Finance, residential development and risk management	8
4	Conclusions	11
	References	14

Tables

Table 1	Characteristics of Interviewees	3

Figures

Figure 1	Residual Land Valuation Formula	11
Figure 2	Property interests reflected in a residual valuation	12

Executive Summary

This report presents the findings of a series of interviews with senior developer, valuation and finance professionals working in the residential development sector. The interviews focused on the complex interactions, interests and relationships that exist between financiers and developers, and how these interactions are embedded in residential development feasibility analysis.

Two themes emerged from the interviews. First, counter to the policy accounts that construct developers and financiers as simply responding to market wide forces of supply and demand, it is clear that developers and financiers actively create and operationalise practices that govern acceptable profit margins, operational structures and house prices. Second, access to finance and the conditions under which finance is offered have profound impacts on residential development practices and processes.

Compared to the significant attention given to the role of public planning and its possible impacts on housing supply and costs, the finance-developer relationship has been given little attention. These interviews are part of a broader research component in the *Architecture of Decision-Making* stream of Building Better Homes, Towns and Cities designed to fill that gap.

The eleven interviews suggest that:

- In order to initiate a development, developers need to create a ‘capital stack’ (or ‘funding stack’) that consists of both debt and equity.
- The availability and cost of capital has a profound impact on the capacity of developers to undertake any development.
- Bank debt funding is a key requirement for residential development.
- Bank sector risk management strategies typify and treat residential development as inherently risky.
- Banks’ risk management strategies can affect the organisational structure of developers and promote particular organisational forms (e.g. special purpose vehicles (SPVs)). An SPV is a company established specifically to undertake a particular development. SPVs restrict a bank’s risk exposure to a single development and avoids the complexity of having to deal with a development company that has financial interests across a number of developments.
- The banks’ preference for a pre-sales development model is designed to manage finance risk. But the model itself can alter the profile of a development’s risk and the viability of a development.
- Development feasibility analysis is a key industry calculation that is embedded in everyday developer practices and conditions the financier/developer relationship.
- The developer’s acceptable profit margin (a key component/output of a development feasibility analysis) is strongly conditioned by the needs of financiers.
- Developers need to be seen to achieve a certain level of profitability in their feasibility analyses if they want to secure funding. This conditions what are viewed as acceptable price forecasts and residual land valuations.

1 Introduction

Media, policy and economic analyses of housing issues place considerable focus on market wide processes and the role of supply and demand in producing price outcomes. The emphasis on sector wide housing processes has two important implications. First, it creates a powerful narrative that housing market processes are external to the operation of the actors involved in the provision of housing (Smith et al 2006 and Smith 2011). In effect, developers, builders and financiers are constructed as passive actors that respond to an external and objective market reality that they have little or no influence upon. Second, it downplays the way the everyday practices of industry agents shape and construct the manner in which housing is provided and priced.

This paper examines the ways in which taken-for-granted development feasibility and financial risk management practices (routine calculative practices) profoundly shape the residential development sector and determine the way in which profitable housing is delivered to the market. Focusing on the manner in which markets are made, or performed (Smith et al 2006), this paper examines the inherent tensions and struggles that exist between developer and financier interests involved in the creation of residential developments. In contrast to 'market wide' accounts that assume that housing demand will automatically result in new housing supply, this paper is concerned with examining the manner in which developer interests are shaped via everyday calculative practices and risk management strategies enacted by financier/developer interactions (see Murphy, forthcoming).

Drawing upon a series of semi-structured interviews with senior industry professionals, this paper considers the everyday practices of development interests/actors in shaping housing outcomes. It is argued that a deeper understanding of the dynamics at play within the residential development sector will assist in the development of effective housing policies that have the potential to change accepted practices and address ongoing housing affordability issues.

2 Study Methodology

As part of a broader investigation into the nature of decision making in the residential development sector, this research focuses on the nature and impact of developer/financier interactions. The study consisted of a series of semi-structured interviews with senior property professionals that had relevant experience with undertaking, financing or consulting on residential developments in New Zealand. The survey was designed to examine industry wide practices and taken for granted heuristics that shape developer and financier activities within the sector. The objective of the interviews was to examine the manner in which routine calculative practices (e.g. development feasibility analysis) shape residential development behaviours and outcomes (Murphy, 2017; Murphy, forthcoming).

Prior to the survey, ethics approval for the project was obtained from the University of Auckland Human Participants Ethics Committee (UAHPEC). Given that the research focused on professional practice, a direct recruitment process was deemed suitable and participants were recruited using a purposive sampling method that relied on publicly accessible information sources (e.g. industry and sector reports and directories; conference proceedings; media coverage etc.). The sample was stratified to ensure that experts and professionals with expertise in development feasibility (e.g. developers) and development financing were included.

The research approach is qualitative and ‘theoretical sampling’ (sampling concerned with theory construction rather than statistical representativeness) (Levy, 2006) was employed. Within this qualitative methodological framework the final sample size is determined “when the outcome of the interviews becomes repetitive and no new themes emerge” (Levy, 2006: 381). Given that the research is focused on standard practices and benchmarks, it was expected that a small sample would be sufficient to ensure information saturation.

Table 1 sets out the key professional characteristics of the eleven participants interviewed in this phase of the project. Interviews were conducted with senior professionals including company directors, development managers, chief financial officers, senior consultants in international real estate advisory firms operating in New Zealand, and senior valuers.

The interviewees included large scale private developers, community housing developers, valuers, and finance interests. In total the interviewees had accumulated in excess of 260 years of professional real estate experience, predominantly in New Zealand but also overseas. Each of the interviewees had varied career trajectories and had amassed considerable professional expertise across different facets of the property development sector. As part of the interview process interviewees were encouraged to draw upon their career experiences to reflect on the various practices that shape contemporary residential development processes.

No	Occupation	Area of Expertise	Activities	Industry Experience (yrs)
1	Senior Consultant	Commercial and Residential Development management	Development Feasibility	43
2	Group Property Manager	Community Housing	Development Feasibility	4
3	Developer (large Scale) & Development Director, Advisory Consultant	Large Scale Residential Development	Development Feasibility	35
4	Managing Director-Finance Group	Development Finance	Development Feasibility	30+
5	NZ Director-International Consultancy (NZ)	Valuation and Research Services	Development Feasibility, Market analysis	40
6	Partner- Advisory Services/ Consultant (International Firm)	Valuation, Advisory (large scale multi-year developments)	Development Feasibility	25+
7	Director –Property Development and Investment Firm	Large Scale (High end) residential developments	Finance, Development Feasibility	25+
8	General Manager-Community Housing Provider	Affordable Housing	Policy, Funding	5
9	Development Management-Community Housing Provider	Affordable Housing	Range of Development activities	30
10	Strategic Planner-Urban Regeneration	Large Scale Urban Regeneration programmes	Range of Development activities	15
11	Director Research Consultant International Consultancy (NZ)	Finance, Banking, Development	Consultancy	9

Table 1: Characteristics of Interviewees

3 Results

This section presents key findings from the interviews organised around the following four themes:

- Development feasibility.
- Development finance.
- Profit, development feasibility and the role of banks, and
- Finance, residential development and risk management.

3.1 Development Feasibility

Across the interviews there was a general agreement that a development feasibility analysis was a pre-requisite in undertaking any residential development process. Development feasibility analysis was argued to have two functions for developers. It was used to consider the viability of land purchase and to identify the potential profit margin of a development. The potential to make a profit was seen as an important trigger in the development process.

At a minimum, it was argued that developers should undertake a ‘back of the envelope’ feasibility analysis as early as possible. As one developer put it:

“A quick back of the envelope exercise tells me is that [development] not going to create a profit margin for me.” (Housing Developer 3)

This type of analysis was deemed critical in deciding whether there was a potential profit available in the development opportunity. Moreover, as another developer argued, a quick feasibility analysis was deemed a useful decision tool to ‘kill a deal’:

“They would normally run a feasibility very quickly.... because what you’re looking for is a reason to kill a deal.” (Large Private Housing Developer 2)

Once a development opportunity is deemed potentially viable, interviewees argued that undertaking a robust development feasibility analysis was essential to secure bank finance. However, even getting to the stage of approaching a funder required considerable upfront effort. As one developer put it:

You couldn’t possibly go to a financier at that point. You would not have anything like the right amount of data or interest... before you get to them; ... you normally then would have to do a degree of DDs (Due Diligence). (Large Private Developer 1)

In terms of a full development feasibility analysis it was argued that in most residential development projects a static analysis was undertaken. A senior finance consultant described the processes as follows:

“... Assuming it’s just a discreet project like a block of 30 apartments, or 50 apartments, they’ll just use a static residual”. (Finance Consultant 1)

The static feasibility is calculated as follows:

“... a static residual, which is revenue... - [in] residential context less GST- less land cost, less building cost, less holding costs - and holding costs,... And the residual would be the [profit] margin.” (Finance Consultant 1)

While it was argued that undertaking a development feasibility analysis was essential in the development process, the interviewees acknowledged that there were several players in the sector that failed to undertake appropriate financial analysis. This was particularly an issue concerning the purchase of land. Two scenarios were presented throughout the interviews. First, it was argued that small scale developers often engaged in a development based on previous experience and bought land as the opportunity arose without any formal feasibility analysis. Second, several interviewees referred to larger land purchases undertaken by overseas funded interests that seemed to ‘over-price’ the land given the current market conditions.

In summary, the interviews clearly indicated the significance of feasibility analysis in the sector and its vital importance in securing finance. In effect development feasibility or residual land valuation has a significant ‘locked-in’ institutional status and is a key calculative practice that affects the residential development sector.

3.2 Developer Finance

The existence of a demand for housing and the potential financial viability of undertaking a development are important contexts in the developer decision making process. However, all the interviewees highlighted the fundamental importance of securing finance in order for a development to proceed. This section focuses on the nature and character of funding required by developers.

Depending upon their scale of operations and other attributes, interviewees argued that developers are required to assemble a ‘capital stack’ or ‘funding stack’ in order to undertake a development. In the course of the interviews both debt and equity funding were discussed.

The major retail banks were identified as the main source of debt funding. This was described as Tier One lending, which is a secured form of lending and is usually the cheapest source of funding available to a developer. In terms of this senior debt, a developer indicated that the banks usually “want to sit at eighty percent of cost” (Large Developer 1).

In addition, to standard development loans a financial consultant indicated that at least one bank was offering “stretch finance”. This form of finance involves combined senior and subordinate debt and is more expensive than normal development loans, but usually less expensive than equity finance.

Since normal bank development loans are pitched at seventy to eighty percent of development costs, developers are faced with a funding shortfall. From the bank’s perspective applying a ‘loan to cost’ ratio is a risk management strategy that ensures

that developers are required to generate twenty to thirty percent of equity. One developer described the process as follows:

“Most developers have two tiers of funding. Somebody has to provide the equity and then somebody else provides the bank funding. Banks are very simple. They take no risk. They go, ‘we want equity from somewhere else’.”
(Large Private Developer 1)

For developers, accessing equity can be problematic and is generally viewed as expensive, especially compared to normal bank development loans. Developers can use their own equity or access equity finance. One developer stated:

“... the more equity I do the more affordable my equity becomes because equity guys are expensive. They charge a lot...Typically fifteen to twenty percent IRRs (Internal Rate of Return).” (Large Private Developer 1).

The high cost of equity finance can have a serious impact on the profitability of a scheme, especially if a development is subject to delay or time overruns. This was illustrated by one developer who stated:

If you were borrowing twenty percent [say \$20 million] and you’re paying twenty percent on it; you’re paying four million dollars a year. ... That’s why a twelve to eighteen month delay; people start to haemorrhage.” (Large Private Developer 1)

In summary, notwithstanding the key role of developers, the residential development process is strongly dependent upon the availability of finance capital. The capacity to access capital and the nature, and cost, of funding has a profound impact on the capacity of the sector to produce housing.

3.3 Profit, development feasibility and the role of the banks

Development feasibility analysis provides the basis for assessing the value proposition of a proposed development. In particular, it is a calculative device for assessing the *potential* profitability of any development. At a general level, the potential profitability of a residential development project represents a key decision-making benchmark for individual developers. However, as we have seen, the ability to advance a development is dependent upon access to debt and equity funding. The need for funding, particularly the reliance on banks as key debt funders, has potential behavioural implications for developers. Developers need to perform in a manner that is likely to result in them securing development finance. This section examines factors that affect the calculation of an acceptable profit margin within the sector. Attention is specifically given to the way banks influence the setting of profit margins within the development feasibility analysis.

In reflecting on the development feasibility process a large-scale private developer stated:

“So typically, any bank... will want to see the feasibility...they will want to see a profit margin...in excess of twenty percent. They’ll want to see a margin. Twenty percent is the magic kind of number. (Large Private Developer 1)

Clearly, under the scenario described by this developer, the banks are concerned to see a profit margin in the developer’s feasibility analysis but are also signalling what they deem to be an acceptable margin. This signalling is internalised by developers and is operationalised as a taken for granted bench mark. The twenty percent ‘magic number’ has become widely accepted as indicated by other interviewee responses. A community housing developer stated that “... we see that the banks definitely do drive expectation around your development margins.” (Housing Developer 3) and a financial consultant stated:

[Concerning banks]... They’ll look at a lot of metrics, but one of them is that there is a margin in the deal for the developers, because that’s effectively an additional buffer for their lending. They would seek for resi twenty, twenty-five percent. (Finance Consultant 1)

It was generally held that the banks’ desire to see a twenty percent development margin within the developer’s feasibility model reflected a standard risk management strategy. Given the inherent risks associated with residential development it was argued that a significant margin was required in order to act as a buffer in case things go wrong.

The interviewees clearly viewed the twenty percent margin as a generic industry wide figure but also indicated that banks were flexible depending on the nature of the developer. One large scale private developer with access to equity funding argued:

“I guess you could say the banks are pushing them towards it. But I would say that the critical element here is a lack of capital by the developer.” (Large Private Housing Developer 2)

It was argued that developers with large balance sheets or supported by large institutional funds were likely to be able to get funding for projects with lower profit margins.

Three themes emerged from the respondents’ comments. First, it is clear that interviewees placed the developer’s margin within a broad ‘risk/return’ framework. Within this context residential development is viewed as inherently risky and consequently it is accepted that profit margins need to reflect the level of risk that is present. Second, the interviewees indicated that the ‘risk management’ needs of the banks are internalised by developers and operationalised in their development feasibility analyses. In this context there was a prevailing understanding that a twenty percent margin (on cost) was the ‘magic number’ for a residential development feasibility analysis. It is important to remember that the presence of a twenty percent margin in the development feasibility analysis is not a guarantee that the developer

will achieve this figure but rather it is a signal that the project meets a risk management hurdle. Third, it was argued that, developers with large balance sheets or access to institutional funds would likely be subject to a lower threshold profit margin when dealing with the banks.

3.4 Finance, Residential Development and Risk Management

Within the context of sustained house price increases, population growth and a political will to increase housing supply, it would seem obvious that there is considerable opportunity to engage in profitable housing development. Consequently, much of the debate concerning new housing supply in New Zealand has centred on the external factors that have restricted supply. However, in contrast to this narrative, interviewees identified the inherent risks involved in residential development and the ways in which banks operationalise risk management strategies that shape everyday development practices. This section sets out the nature and impact of these various strategies.

Throughout the interviews considerable emphasis was placed on the conditional nature of bank lending processes. In particular, the interviewees stressed the types of risk management strategies employed by the banks and how these shaped developers' daily activities. From the developers' perspective, the banks were viewed as operating 'no risk' strategies. Development finance was offered on a strictly conditional basis, as described by one developer:

"They won't take any risk. The bank will take zero risk. The offer they make you early will be subject to you getting resource consent; subject to you having building consent; subject to you having a fixed price lump sum contract; subject to you having pre-sold. (Large Private Developer 1)

For one interviewee the conditional nature of the banks' practices were effectively a test of the real feasibility of any development. He stated:

"They will certainly run the rule over the initial feasibilities, but they get their protection through their conditions ... because they'll require eighty or ninety, or in some case a one hundred percent pre-sales before the money actually flows out. And so that's the ultimate test of the feasibility". (Finance/Developer 1)

Another developer emphasised the level of auditing that takes place:

"But our experience is that the banks are incredibly forensic about checking everything on a ... development project, not just from planning but engineering peer reviews, costing peer reviews, building consent, the tendered terms". (Large Private Housing Developer 2)

Notably these auditing processes incur professional fees, for engineering, legal and quantity surveyor reports, that are paid by the developer.

In combination, the conditional nature of bank funding and the strong auditing processes that are employed highlight the perceived inherent riskiness of the residential development process. This view on risk is operationalised in the developer's feasibility analysis and the bank's lending practices.

Interviewees identified two significant organisational outcomes arising from the banks' lending practices. These were i) the need to create special purpose vehicles (SPVs) and ii) the need for pre-sales.

In a discussion centred on the ways in which banks deal with developer risk across multiple developments a developer outlined his experience with SPVs.

"Every bank isolates every project;... every single project I do, the bank insists that I set up a new SPV; special purpose company.

They take a first mortgage charge of shares in the company over its GSA [General Security Agreement]; over all its undertakings and all its assets. They will not allow anybody to get near their securities." (Large Private Developer 1)

Interestingly, as the process is described by this developer, the banks' desire to isolate development risk produces a distinct organisational outcome. Clearly the creation of an SPV contains the banks' risk but this organisational form has potential downstream implications. While a developer may have a long and distinguished history, each of its SPVs is a single project entity with a fixed lifespan. This raises questions concerning risks associated with developments post the development phase.

The importance of pre-sales was discussed by most interviewees. Pre-sales were required to cover the costs of the land and development. As one interviewee put it:

[You need] one hundred percent of costs as pre-sales, which is typically around seventy-five percent [of total] sales, and that those pre-sales have to be; it's strongly defined in terms of what is an eligible pre-sale. (Financial Consultant 1).

A development management consultant noted that the level of pre-sales required by the banks can vary during phases of a property cycle. He described the process as follows:

"You could say in the normal market somewhere between swings and roundabouts they'd be looking for seventy percent pre-sales...

The current thing is that basically they want, before construction, one hundred percent pre-sales to the value of the money that they are lending."(Development Management Consultant 1)

Developers interpreted the banks' conditions regarding pre-sales as a risk management strategy, but they also indicated that this placed considerable burdens on the developer. One developer stated:

"No bank will fund anything without pre-sales..." (Large Developer 1)

The pre-sales development model represents an attempt to de-risk the development process by locking in buyers. While pre-sales offer some security for the banks, a reliance on a pre-sales model has wider implications for the sector. Sharam et al (2015) argue that identifying and securing pre-sales is costly and time consuming for developers. Moreover, if the period for pre-selling is extended and delays the start of the development, then the conditions under which the financial feasibility of the project was calculated (interest rates, construction costs etc.,) can change and “strip a project of its profitability” (p474). For Sharam et al (2015) the pre-sales model is costly and has negative implications for the provision of affordable housing.

In discussing pre-sales the interviewees paid particular attention to the problems of apartment development in Auckland. In effect, the model requires that the developer sells all of the units in advance of beginning the development. One interviewee noted the difficulties faced by apartment developers in securing pre-sales and contrasted that with the experience of ‘horizontal’ suburban development. He argued:

*“So, if you’ve got a super lot that you can build 30 homes on... Yeah, it would be pretty easy to fund that, because you don’t have to have the pre-sales really, and if you do, you do it in chunks. You chunk it down; I’m only going to do five; so, I’ve got three pre-sales of the five, can I get funding to go ahead.”
(Finance Consultant 1).*

Interestingly, while this description highlights the lower risk nature of suburban development compared to apartment development, it also suggests that developers can derive benefits from piecemeal or small-scale development practices. In addition, this argument highlights the benefits of restricting the ‘build out’ rate (cf. Letwin, 2018) of development or slowing the speed at which housing is released to the market.

In summary, the interviewees highlighted the strong relationship between the bank risk management practices and everyday developer practices. They indicated that developers’ organisational structures and sales models are strongly influenced by the need to secure development funding.

4 Conclusions

The manner in which new housing supply is produced in New Zealand is strongly conditioned by the actions of various actors operating with the residential development sector. While the existence of unmet housing demand and clear house price pressures signal an underlying demand for new housing, this demand will only be met under certain conditions. Within the context of private market housing provision successful development outcomes need to meet the demands of a variety of interests including: land, developer, construction and finance interests.

This working paper has focused on the way financier and developer interests are operationalised in the development process. Paying particular attention to key decision-making practices relating to development feasibility analysis and financier risk management strategies, the paper examines the manner in which specific practices are 'locked-in' and shape the evolution of the sector.

Development feasibility analysis is a key practice in determining the potential financial viability of any residential development. At its simplest, development feasibility is a residual calculation that provides either a measure of the land value or developer's profit (Murphy, 2017).

Figure 1, presents the formula for a non-forecasted residual valuation. This simplified formula, that does not include a discounted cash-flow analysis, is on the surface a neutral calculative device that aids the decision-making process.

$$LV_0 = (1 + i)^{-t} \left[\frac{DV_0}{(1 + p)} - DC_0 - I \right]$$

LV_0 = present net land value
 DV_0 = development value
 DC_0 = development costs
 p = profit (expressed as a percentage of the development value)
 i = cost of finance (annual interest rate)
 t = development period
 I = finance costs (usually calculated for construction period only)

Figure 1- Residual Land Valuation Formula (Source: Wyatt, 2014, p188-189).

However, as demonstrated in Figure 2, feasibility analysis reflects a social process in which different interests are in competition. In this context, a feasibility analysis attempts to proportion components of the value proposition of a residential development to different interests. The developer is seeking an appropriate profit margin (p) that reflects the level of risk involved in a development and finance interests (banks, equity investors) are seeking a return, as expressed in the costs of finance (i). The arrows in Figure 2 indicate that the developer profit calculation and the needs of finance actors are interrelated and co-constituted.

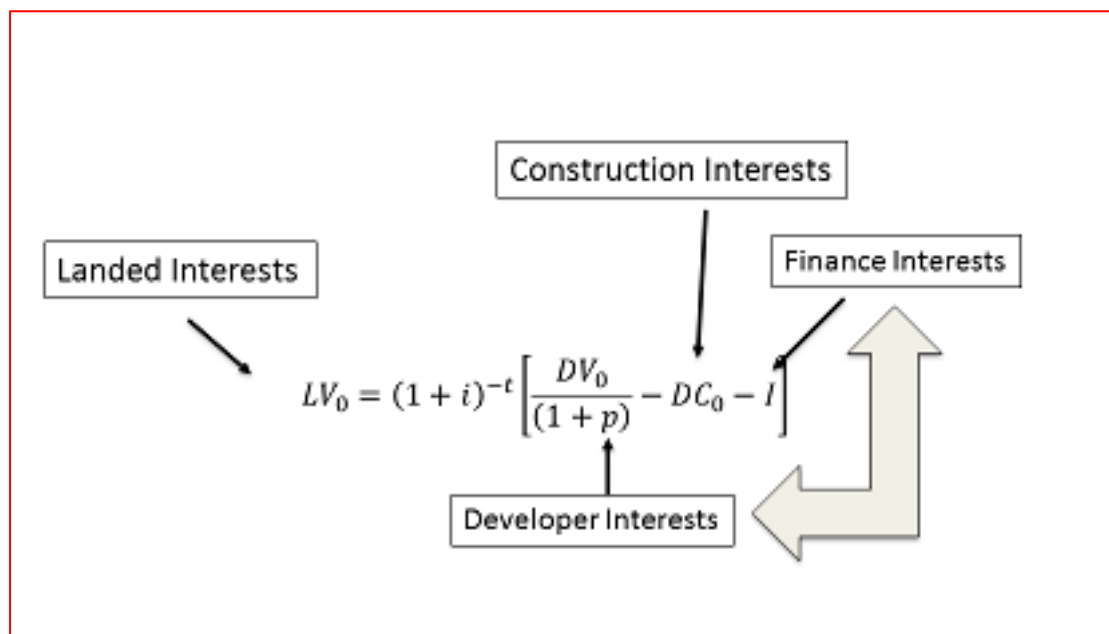


Figure 2: Property interests reflected in a residual valuation

Drawing upon a series of 11 interviews with senior professionals in the sector, this paper has identified a number of ways in which financial interests are embedded in the standard residential development process. The key findings are:

- In order to initiate a development, developers need to create a ‘capital stack’ (or ‘funding stack’) that consists of both debt and equity.
- The availability and cost of capital has a profound impact on the capacity of developers to undertake any development.
- Bank debt funding is a key requirement for residential development.
- Bank sector risk management strategies typify and treat residential development as inherently risky.
- Banks’ risk management strategies can affect the organisational structure of developers and promote particular organisational forms (e.g. special purpose vehicles (SPVs)). A SPV is a company that is established specifically to undertake a particular development. SPVs restrict a bank’s risk exposure to a single development and avoids the complexity of having to deal with a development company that has financial interests across a number of developments.

- The banks' preference for a pre-sales development model is designed to manage finance risk. But the model itself can alter the profile of a development's risk and the viability of a development.
- Development feasibility analysis is a key industry calculation that is embedded in everyday developer practices and conditions the financier/developer relationship.
- The developer's acceptable profit margin (a key component/output of a development feasibility analysis) is strongly conditioned by the needs of financiers.
- Developers need to be seen to achieve a certain level of profitability in their feasibility analyses if they want to secure funding. This conditions what are viewed as acceptable price forecasts and residual land valuations.

The findings of this research are important at several levels. First, in contrast to the policy accounts that construct developers and financiers as simply responding to market wide forces of supply and demand (see Smith, 2011; Smith et al 2006), it is clear that developers and financiers actively create and operationalise practices that govern acceptable profit margins, operational structures and house prices. Second, the study highlights the fundamental importance of finance to the residential development process. The needs of financiers and their risk management strategies profoundly affect developer behaviours and influence the nature, quantum, and price of houses developed. Third, the research highlights the complex implications of risk management strategies adopted by financiers. For, example, encouraging developers to form special purpose vehicles (SPVS) is an effective strategy for banks wanting to minimise their risks but it has the effect of transferring risk to the long-term owners of the dwellings once a development is completed. Moreover, this organisational form is problematic when dealing with the consequences of serious building defects and legal liability. Finally, given the importance of development finance to the sector, policy attention should be directed to examining how alternative and innovative financing structures could be employed to encourage the production of affordable housing.

References

- Letwin, O. (2018) *Independent Review of Build Out: Final Report*, Ministry of Housing, Communities and Local Government, London, UK
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752124/Letwin_review_web_version.pdf
- Levy, D. (2006). Qualitative methodology and grounded theory in property research. *Pacific Rim Property Research Journal*, 12(4), 369-388.
- Murphy, L (Forthcoming) Performing Calculative Practices: Residual Valuation, the Residential Development Process and Affordable Housing. *Housing Studies* (accepted for publication).
- Murphy, L. (2017). Land costs and affordability. *Build* 163, December 2017, pp 59-60. Wellington: BRANZ.
- Sharam, A., Bryant, L., & Alves, T (2015) De-risking development of medium density housing to improve housing affordability and boost supply, *Australian Planner*, 52:3, 210-218,
- Smith, S. J. (2011). Home price dynamics: a behavioural economy? *Housing, Theory and Society*, 28(3), 236-261.
- Smith, S. J., Munro, M., & Christie, H. (2006). Performing (housing) markets. *Urban Studies*, 43(1), 81-98.
- Wyatt, P. (2013) *Property Valuation* (2nd Edn), John Wiley and Sons, Chichester UK.