

# Real estate development industry structure: Is it competitive and why?

Eddo Coiacetto



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## Research summary

Industrial organisation has received a great deal of attention over a considerable amount of time in both political and scholarly arenas. This interest has been in industry generally as well as in specific economic sectors like media, telecommunications, retail food outlets and air transport. Industry structure refers to the make up of an industry - the market share of individual players and the concentration of producers in that industry. Although the real estate development industry is a very large industry and a major shaper of the built environment, planning, the discipline concerned with regulating development, has shown remarkably little interest in matters of development industry structure, little is known about the industry's structure and little exists of a quantitative nature to describe that structure. Based largely on a review of existing literature and a case study, this paper investigates the nature of development industry structure and suggests that it is not necessarily a competitive industry and, in some instances, can be highly oligopolistic. The paper will discuss factors that may shape industry structure including how regulation (planning) can be an important influence. In the conclusion the paper briefly points out that development industry structure should be an important issue for planning and that it has implications, worthy of investigation, for the form and structure of cities, for sustainability and for power relations with industry regulators.

## Introduction

Industrial economics deals with issues of market structure; how, why and to what effect industries range from competitive to monopolistic.

The structure-conduct-performance framework within industrial economics posits a relationship, no longer considered unidirectional, between its elements (Martin, 1994; Shepherd, 1997). Industry structure (the number and size distribution of firms) affects industry conduct (strategic behaviour including advertising, ability to influence supply and collusion) which affects industry performance (e.g. efficiency, price, quality of product, innovation).

Concern with market structure predates modern economies and is ongoing. Aristotle cited instances of monopoly power in 347 B.C. (Aristotle, 1921, Book 1 Chapter 11) while officials in ancient Rome, pre-classical Greece and the early middle eastern cities had to deal with monopolies (Shepherd, 1997, 22). Last year the Australian Federal Government proposed changes to the *Trade Practices Act* to apply criminal penalties to leaders of firms found guilty of serious cartel conduct and to afford protection to whistleblowers (Butterly, 2005).

Policy and industrial economics scholarship have focused on some sectors like media, agriculture (agribusiness), transport (particularly airlines) and retail food outlets (Shepherd, 1997) but very rarely on real estate development. This suggests that development is considered a competitive industry and that the supply of buildings and land is unproblematic. This oversight is of concern given that development is a high value industry that shapes where and how we live, work, travel and play and therefore has consequences for sustainability.

This paper aims to further research and policy understanding of industry structure in real estate development. It is largely conceptual and based on existing literature, case study material and the author's exposure to development including through project-based teaching. The objectives are:

1. To show that real estate development is not necessarily a competitive industry and that there can be instances of concentrated market power;
2. To discuss what factors structure the industry and suggest that these further show that the industry is not competitive and that it is likely to concentrate; and

3. To conclude with a brief outline of the likely consequences of a concentrated development industry.

The case study concerns development applications (DAs) lodged under the *Environmental Planning and Assessment Act 1979*, in the two small, similarly sized, rapidly developing but socially contrasting coastal Local Governments Areas of Ballina and Byron Shires in northern New South Wales between 1988 and 1993. The use of DAs and similar data poses special research opportunities and difficulties that need not be elaborated here (Aspinal & Whitehand, 1980; Brotherton, 1992; Foley & Hutchinson, 1994; Rodger, 1981).

After introducing the topic of industrial structure, the paper outlines the nature of the real estate development industry and markets before addressing the stated objectives.

## **Industrial structure**

Typologies of market structures ranging from competitive to monopoly are well known (Table 1). Within these main structures there are gradations wherein oligopoly is usually divided into three classes of increasing order of concentration: loose oligopoly, tight oligopoly, and dominant firm.

This paper now outlines the three dimensions of the structure-conduct-performance framework<sup>1</sup>.

### **Structure**

The structure of a market concerns its composition in terms of the buyers and sellers although scholarly focus is – as in the present paper – usually on the supply side.

Key elements of an industry's structure are its number and size distribution of firms (e.g. market share and industry concentration), product differentiation, and its entry conditions (Martin, 1994; Shepherd, 1997).

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<sup>1</sup> Industrial economics is divided between two broad schools of thought: the structure-conduct-performance analytical framework and the later Chicago School. The Chicago School framework is largely theoretical and maintains that monopoly is not problematic since it is short-lived and is the product of government intervention that creates artificial barriers without whose presence there would be no monopoly. As such, empirical work does not form the basis of its approach and policy is not of central concern. The structure-conduct-performance framework has an empirical tradition and is policy oriented. This model provides loosely the basis for this paper's analysis.

**Table 1: Characteristics of four types of market structures**

	<b>Perfect competition</b>	<b>Monopolistic competition</b>	<b>Oligopoly</b>	<b>Monopoly</b>
Number of firms	Many small	Many small	A few large	One
Product characteristic	Homogenous	Differentiated	Differentiated	Single
Barriers to entry	None	Slight	High	Very high
Control over price of their products	None	Slight – local competition limits how much they can charge	Varies: oligopolists may either engage in trade wars to reduce market share of rivals and newcomers or aim for more monopolistic situation by cartel, by takeovers and mergers or aggressive marketing.	Considerable
Ability to control the price of inputs	None	Slight	May be high e.g. supermarket chains can set the price for some agricultural produce.	May be very high depending on whether other producers have other outlets for their produce
Other features			Constantly trying to keep themselves and products in consumers eye in order to maintain or even increase market share by branding, heavy advertising, promotions, gimmicks etc.	
Examples	Wool growers, market gardeners	Restaurants, clothing shops.	Car manufacturers, supermarkets, soft drink- (e.g. Coke & Pepsi), cigarettes, fast foods, Kodak (dominant firm)	Water, local electricity, Velcro.

Source: drawn from Child, 1989; Martin, 1994; Shepherd, 1997.

There are various ways to define the number and size distribution of firms including simply counting them and/or the average output per firm. More useful are the Concentration Ratio, the HHI and the Inverse Ratio and while their application to the development industry is rare, their meaning is outlined to establish a baseline for future comparative analyses (Box 1). Figure 1 shows the relationship between market structure and concentration measures.

## Box 1: Market share and measures of industry concentration

### Market Share

Market share is a firm's share of the industry's total sales revenue and indicates the degree of monopoly: market influence is considered to begin to be felt at 15%, be significant at 25-30%, and strong at 40-50% (Shepherd, 1997, 72).

### Measures of Concentration

Concentration reflects the degree of oligopoly in an industry or the degree to which market share is concentrated in few or many hands. Measuring it as a single index has limitations since the distribution of firm sizes is rarely uniform. An industry may, for example, have many small firms, whose combined market share is significant, together with one dominant firm. Nevertheless, a unitary index is useful for comparison and analysis. Three standardized measures of concentration are the Concentration Ratio, the HHI or Hirshman-Herfindahl Index, and the Inverse Ratio:

1. The Concentration Ratio is the total market share of the leading firms, usually four. It says a lot about the top firms but nothing about the others.
2. The HHI is a single index that takes into account all the firms in an industry, not just the leading ones. It is the sum of the squared market shares of these firms. The logic of the approach is such that in any industry with a given C4 ratio (say 40%) the HHI will be higher if say, the top firm has a very large market share (say 30%) and will be lower where the market shares of the these top 4 firms is more even. This is useful because the former case indicates a higher level of monopoly power in the industry. There are variants in the way the HHI is expressed ranging from zero to 10,000 if calculated on a percentage market share basis, and from 0 to 1 if derived using decimal points. The upper figure in both cases represents monopoly. Using a decimal approach, the HHI can be interpreted in the following way. An index of 0.2 means the industry has a concentration equivalent to there being 5 equally sized firms and an index of 0.33 implies an equivalent of there being 3 equally sized firms.
3. The Inverse Ratio (Buzzelli, 2001) is useful where an industry has many firms which collectively have a significant market share. The IR represents the number of firms required to produce a given market share, usually 80%.

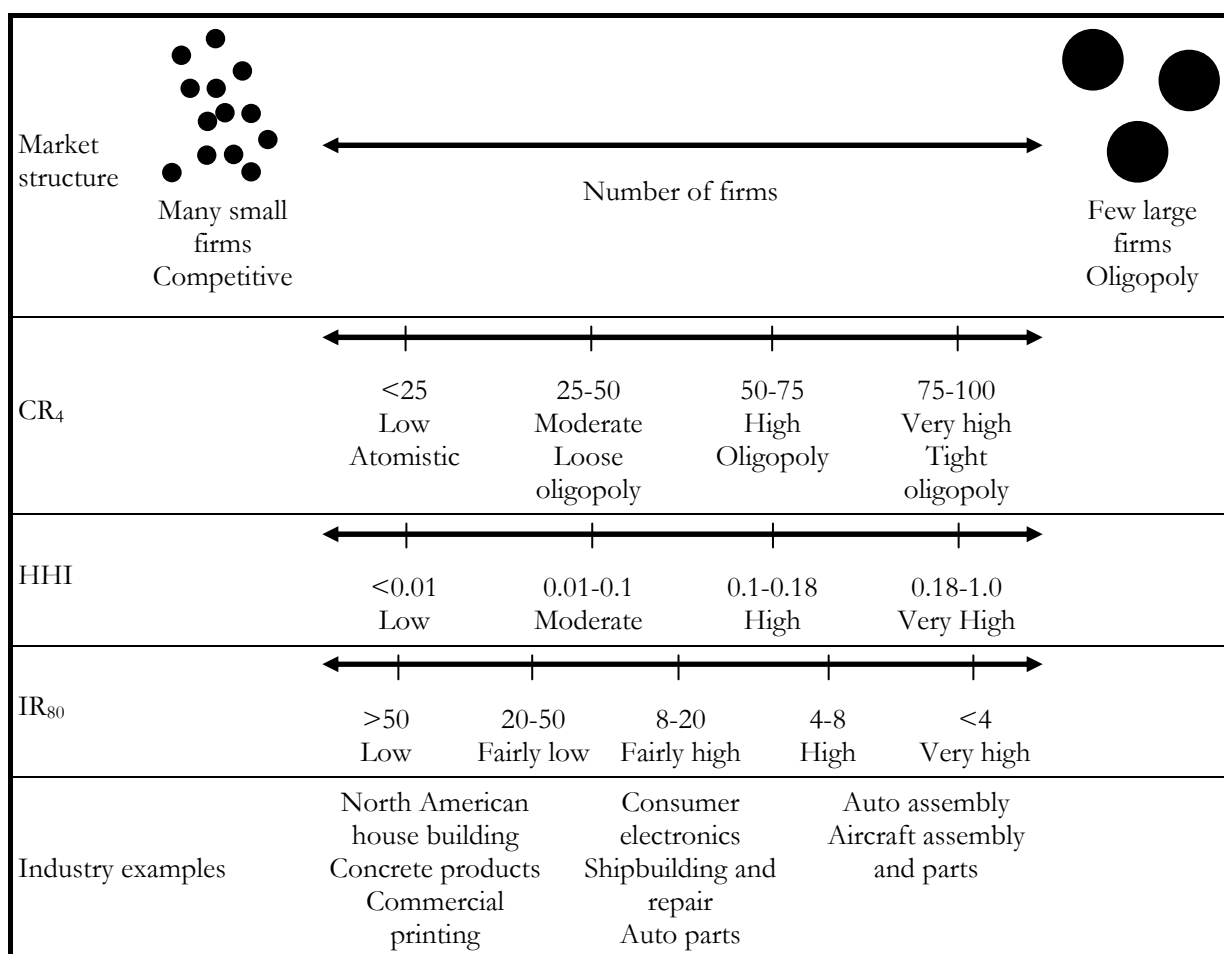
In perfectly competitive markets firms sell a homogenous product but real markets have real products that are always differentiated to some degree. With increasing differentiation products become less substitutable for each other and the degree of monopoly power rises<sup>2</sup>. The key condition for defining markets is substitutability; close substitutes are in the same market and other goods are outside (Shepherd, 1997, 63).

The technical definition of substitutability is simple and uses the concept of cross-elasticity of demand defined as:

$$\text{Cross-elasticity of demand between goods 1 \& 2} = \frac{\% \text{ change in quantity of good 2}}{\% \text{ change in price good 1}}$$

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<sup>2</sup> Although society trades off some degree of market power for the sake of product variety (Martin, 1994).



Source: adapted from (Buzzelli, 2001) with HHI derived from (Martin, 1994; Shepherd, 1997).

Note: Industry examples are primarily Canadian.

**Figure 1: Market structure and concentration ratio**

Products with high positive cross-elasticities of demand are close substitutes and can be considered in the same market: Coke and Pepsi are in the same market, and different brands of petrol are also substitutable for each other. Products which are not substitutes for each other have no or very low cross-elasticities of demand: an increase in the price of shoes does not affect the quantity of ice cream purchased (Shepherd, 1997, 63).

While it is an elegant tool for conceptualising markets, the cross-elasticities of demand methods is impractical as it is almost impossible to measure empirically. Instead, economists use other indicators like geographic dimensions, the general character and uses of the goods, judgements of knowledgeable participants, and distinct groups of buyers and sellers (Shepherd, 1997, 64-66).

Market entry conditions are a basic determinant of an industry's number and size distribution of firms (Martin, 1994, 5). Entry barriers may be *exogenous* (inherent to the industry) or *endogenous* (under the control of incumbent firms) (Box 2). Time taken to enter or exit an industry is also important.

## Box 2: Common causes of barriers to market entry

### I. EXOGENOUS CAUSES: EXTERNAL SOURCES OF BARRIERS

1. **Capital requirements:** related to MES<sup>a</sup> of plants and firms, capital intensity, and capital market imperfections.
2. **Economies of scale:** both technical and pecuniary, which require large-scale entry, with greater costs, risks, and intensity of retaliation.
3. **Absolute cost advantages:** many possible causes, including lower wage rates and lower cost technology.
4. **Product differentiation:** may be extensive.
5. **Sunk costs:** any cost incurred by an entrant that cannot be recovered upon exit.
6. **Research and development intensity:** requires entrants to spend heavily on new technology and products.
7. **High durability of firm-specific capital (Asset specificity):** imposes costs for creating narrow-use assets for entry and losses if entry fails.
8. **Vertical integration:** may require entry at two or more stages of production, for survival; raises costs and risks.
9. **Diversification by incumbents:** massed resources redeployed among diverse branches may defeat entrants.
10. **Switching-costs:** complex systems may entail costs of commitment and training, which impede switching to other systems.
11. **Special risks and uncertainties of entry:** entrant's higher risks may raise the costs of capital.
12. **Gaps and asymmetries of information:** incumbents' superior information helps them bar entrants and may raise entrant's cost of capital.
13. **Formal, official barriers set by Government agencies or industry wide groups:** examples are utility franchises, bank-entry limits, and foreign trade duties and barriers.

### II. ENDOGENOUS CAUSES: VOLUNTARY AND STRATEGIC SOURCES OF BARRIERS

1. **Pre-emptive and retaliatory action by incumbents:** including selective price discounts to deter or punish entry.
2. **Excess capacity:** the incumbent's excess capacity lets it retaliate sharply and threaten retaliation credibly.
3. **Selling expenses, including advertising:** increases the degree of product differentiation.
4. **Segmenting of the market:** segregates customer groups by demand elasticities and makes broad entry more difficult.
5. **Patents:** may provide exclusive control over critical or lower-cost technology and products.
6. **Exclusive controls over other strategic resources:** such as superior ores, favourable locations, and unique talents of personnel.
7. **Raising rival's costs:** actions that require entrants to incur extra costs.
8. **Packing the product space:** may occur in industries with high product differentiation.
9. **Secrecy about crucial competitive conditions:** specific actions may create secrecy about key conditions.

<sup>a</sup> Minimum efficient scale is output where average cost of production is lowest.

Source: Shepherd, 1997, 210.

## Conduct

Conduct refers to the behaviour of firms and includes advertising, reacting to what rivals do, collusion and other means of attempting to erect entry barriers (Box 2). Its relevance increases as industries become more oligopolistic and have greater market influence (Martin, 1994, 5). Collusion is the most spectacular form of negative conduct: independent firms form a cartel to restrict output to raise prices above the marginal cost of production.

## Performance

The standard market performance concerns are profit levels, efficiency and innovation (Martin, 1994; Shepherd, 1997). Under non-competitive conditions firms can influence supply and price to earn economic (above normal) profits. Efficiency refers to how well resources are used

without waste, the expectation being that greater market power means more waste. Innovation is about producing new products to meet market requirements or about improvements to the production process. A scholarly concern is the relationship between structure and innovation.

Concerns beyond performance that may be pertinent to specific industries, are cited by Shepherd (1997, 130-40): fairness issues like shifts in wealth from many customers to few monopolists; value issues like whether competition in itself is a good or bad value; freedom of choice; social effects like the influence of economic monopoly on political competition including the power to corrupt political processes; economic security issues like market power giving managers of businesses more discretion which may generate job losses; and, finally, cultural diversity issues like monopolies and tight oligopolies narrowing the range of products they deliver.

Having described the basic concepts and concerns of industrial economics generally, attention now turns to the real estate development industry.

## **Real estate markets and development**

Development is the process of carrying out works involving a change in the physical use or in the intensity of an existing use of land or buildings. (Balchin, Bull, & Kieve, 1995, 126)

Development is an unusual industry which poses unique problems for analysts of market structure. Understanding its character is important for understanding what shapes its structure.

### **The product and the market**

The product of real estate development is serviced land or land and buildings: residential, industrial, commercial or other.

Real estate markets are difficult to define because the product is highly heterogeneous. Since no two properties are alike no property is (fully) substitutable for another (Evans, 1995). Substitutability may range from very low (e.g. industrial users have very specific requirements for building size, location, access, layout and relationship to other uses) to moderate (e.g. residential units in similar adjacent apartment blocks). Real estate is multi-dimensional and is characterised by aspects of the site (e.g. use, development potential, tenure, access, slope, aspect, landscaping, flooding), the building if there is one (e.g. design, materials, finishing), and the location which sets the whole pattern of externalities (e.g. amenity and access to resources like labour, schools, transport and jobs). Real estate is not one commodity but a bundle of commodities that cannot be independently priced and traded. Markets or submarkets should be thought of not just in terms of groups of similar products, but groups of products with closely substitutable attributes. A large warehouse in a peripheral suburb may be therefore in the same submarket as a smaller, more accessible or better maintained property, depending on the buyers' willingness to trade-off attributes. For some housing analysts, submarkets are seen as forming hierarchical levels (Galster, 1996). For practical purposes, however, it is useful to consider submarkets in other terms such as distinct groups of buyers, for instance, second—home buyers in the residential market.

Markets are also usually defined by geography (Martin, 1994; Shepherd, 1997) but real estate markets can be multi-spatial. Employment, family, recreation and other considerations limit the spatial search range of users like homebuyers or industrial users, and so markets are usually local. An investor market may be extensive but can overlap with local user markets. For example, Queensland investment apartments are often marketed interstate and investment in national property trusts blurs the notion of geographical markets.

Heterogeneity underscores market inefficiency. Since each property is unique there are few traders in most sub-markets and there is no true market value of a property, the market only determines a price range (Adams, 1994; Evans, 1995, 5). This means that

buyers and sellers have to search for the best price, that buyer and seller psychology affects prices, that time on the market matters, and that real estate agents have a role to play in channelling information but, at the same time, have increased opportunities to act unethically and illegally. (Evans, 1995, 5)

High transaction costs and difficulties in users changing location limit the frequency of transactions and thus surpluses and shortages are difficult to eliminate. Full information is impossible as each property is unique and prices paid are not always publicly registered and disclosed. In development, transactions may be kept secret and made through intermediaries to prevent the seller knowing of the buyer's development intentions.

The product is highly durable. Newly developed real estate represents only a fraction of total property on the market in a given year but it is almost the sole source of extra supply to meet changing demand (Ball, 2003). This means that the real estate development market is a subset of the real estate market and so could behave differently to the broader property market. New product is the only product which can meet new demand and so the development market is highly volatile in response to small changes in demand- more volatile than the property market generally (Ball, 2003).

### **The process and the firms**

The development process is highly variable (Ganderton, 1994; Gore & Nicholson, 1991; Healey, 1992; Healy, 1991).

Development can be relatively simple such as getting approval to subdivide land and pegging out the lots for sale<sup>3</sup>. More complex projects like office blocks may involve multiple tasks including market research, site acquisition, architectural design, interior design, engineering design, multiple approvals, engineering, quantity surveying, and presales even before construction commences. Each task may be complex, phased and iterative.

Development requires project-specific skill sets and resources that the developer does not need to possess directly, only organise, and so development organisations are highly varied. They may be very small (say one person with a phone) or a large corporation, a once-only player, or a professional. A large output does not require a large organisation. The internal organisation of development firms - itself a subject worthy of further research - is not the focus of this paper but is relevant to its theme and will be referred to occasionally. Herein, a 'large' firm means one with a large output regardless of the size of the organisation.

Development firms can be difficult to identify. A development role may be context dependent, for instance, a builder is a developer when they acquire land, subdivide it and build houses on it for sale, but not when they are contracted to build houses on a client's land. To further complicate matters, development functions may be mixed up with other functions like real estate construction, finance, investment and management. Regional shopping centre managers Westfield Holdings, for example, also undertake investment and development activities.

The process and the market is one in which information plays a critical role in making informed estimates, projections and decisions but information can be scanty, poor or costly to obtain. This includes information about site conditions such as biophysical conditions (possible contamination and its associated costs) as well as legal and statutory constraints, existing and

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<sup>3</sup> This is a thing of the past in many economies.

future aspects of the location such as transport and access, land uses and their impacts, services and their infrastructure, community and local government attitudes. Future market conditions are extremely difficult to predict and characterised by strong cycles. The value of land inputs are difficult to establish as developers operate in inefficient markets (Evans, 1995). Thus local contacts and detailed local knowledge are very important making development largely a local industry (Logan, 1993).

Obtaining finance for land development is problematic. Traditionally, because development is risky, lending is usually at a few percent above base lending rates and the lender can often reset the rate during the period of the loan. Loans are typically negotiated project-by-project, on a limited term and subject to risk assessment, strong conditions, project supervision and site inspections. Short-term cost overruns and finance shortfalls from conventional sources (banks and development lenders) may need to be funded from highly expensive sources like solicitors funds charging multiples of the base lending rate.

Real estate is the main raw material input, itself is a 'product' obtained in a market with problems described earlier, for example, inefficiency and non-substitutability. Moreover, unlike resources for other products, a new source of supply is usually negotiated for each new project. Market conditions change over time and the landowners' price expectations are affected by many factors including their current use and plans for the land, the current market climate and stage of the market cycle, their experience, the quality of information, lifestyle factors, the uniqueness of the site, their monopoly strength, and whether they even want to sell.

Risk, instability and uncertainty, then, characterise development distinguishing it from related industries like construction (Campbell, 1993, 1). However, gestation periods are long and opportunities fleeting so developers must often rush into decisions that bind them to set courses in which they irreversibly commit large amounts of resources to projects (Whitehead, 1987, 15), some of which cannot even be staged. These factors amplify the volatility of development<sup>4</sup>.

### **Market failure and regulation**

The real estate market is characterised by failure (Adams, 1994). Already mentioned are imperfect information and market inefficiency. The market also fails to account for:

1. Externalities; development produces social costs and benefits including traffic generation, increases to the travel times of consumers and raising or lowering the value of adjoining properties;
2. Equity; development does not necessarily provide affordable 'products' but allocates these on the basis of ability to pay; and
3. The needs of future generations; concerned with short-term private costs and benefits of development, market driven development is not sustainable.

Market failure provides a rationale for planning (Adams, 1994). Planning is also concerned with the coordination of uncoordinated developments and infrastructure. It can create value for developers and other land users by generating a more positive pattern of externalities, by reducing the risk of bad contiguous development, and by reducing uncertainty over future land uses and so helping developers to plan (Coiacetto, 2000; Dawkins, 1997). Regulation can

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<sup>4</sup> . This volatility and instability has also been attributed to, amongst other things, structural factors such as capital switching (Harvey, 1985), to developer personality and individual behaviour (Whitehead, 1987). Even the techniques of investment appraisal employed by developers have been implicated (Lee, 1983) because the residual techniques used are highly sensitive to small changes in inflation and interest rates and their use encourages developers to invest and disinvest en-masse. Volatility varies markedly according to the political and planning context within which the development takes place (Van der Krabben & Lambooy, 1993).

protect landowners and developers from the consequences of their own activities - overstretched infrastructure systems, loss of amenities as sites are progressively developed, dramatic falls in property values following speculative splurges. (Healey, 1998, 212)

Healey (1998) also points to a role in urban policy for regulating development in such a way as to build its institutional capacity to achieve desired outcomes: environmental, social and economic sustainability of urban dynamics.

Planning, like concern about monopoly, is not new. Partly as a result of market failure, real estate development is an unusually highly regulated industry and it is almost impossible to conceptualise development without some kind of regulation.

The fact is that no city, however arbitrary its form may appear to us, can be said to be “unplanned”. Beneath the strangest twist of lane or alley, behind the most fitfully bounded public place, lies an order beholden to prior occupation, to the features of the land, to long-established conventions of the social contract, to a string of compromises between individual rights and the common will. (Kostof, 1991, 52)

Planning provides access to critical resources in development, namely, land and to development rights. These affect where and when development can occur, its form (e.g. its density), and its quantity. Regulation is implemented largely via plans that establish medium to long-term frameworks to guide development and which set out the provision of infrastructure. Unlike many other industries, development is also regulated on a product-by-product basis and in considerable detail. Since each site and project is unique, negotiation (sometimes protracted) is inherent in development control regardless of whether development occurs within a rigid legalistic framework or a flexible one (Booth, 1989).

### **Industry structure: Is real estate development a competitive industry?**

There seem to be several popular images of the structure of development industries. One is a highly competitive deconcentrated industry comprising numerous players. Planners even in small communities deal with hundred of DAs each year. Another is of an industry dominated by large, rich, powerful and ruthless developers.

Existing literature does not provide much illumination. There is little literature to begin with. Sometimes claims are unsupported by evidence, for instance, that the industry in the UK is ‘highly oligopolistic’ (Healey, 1998, 218).

Some work concerns development-related industries like housebuilding. In the UK housebuilding integrates both land development and building components and is thus similar to real estate development. Ball argued it is neither monopolistic nor competitive but highly complex although he did not quantifying this in standard measures (Ball, 2003). In other places, including the USA and Canada, housebuilding usually comprises only the building component. Buzzelli (2001) showed the Canadian industry is highly deconcentrated with cyclical patterns and a trend to deconcentration. Even at its highest level in 1978, concentration was quite low with CR<sub>4</sub> and IR<sub>80</sub> ratios of 9.8% and 647 respectively. Previous empirical work there on housebuilding (but defined therein as land development) also confirmed that until 1978 concentration was rising (Rudin, 1978).

Other empirical work demonstrates the piecemeal nature of urban development and the important cumulative contribution of many small actions to the fabrication of the built environment (Whitehand & Carr, 1999) and others have provided some empirical evidence for

low degrees of concentration amongst initiators of development, architects and builders in English towns (Whitehand, 1983a).

Some empirical survey-based analysis of the development industry structure (Campbell, 1993) leave out many of the numerous smaller firms that make up an industry and also rely on the misleading use of average firm outputs to quantify industry structure.

Use of averages suggests that the Ballina-Byron case study has a highly atomistic industry. For example, there were approximately 800 residential flat building developers each applying for only 4.25 units on average. An average residential subdivider applied for 22 lots while the average rural residential subdivider applied for 11 lots. However, analysis using standard concentration measures reveals a very different picture (Table 2) where large numbers of firms and low average outputs mask high concentrations. In Ballina Shire, for instance, there are 58 residential land development firms but the top four account for a massive 64% of output, making the industry highly oligopolistic. There is also considerable variation between sectors with industrial development virtually a monopoly in Ballina Shire and highly oligopolistic in Byron, while residential subdivision is oligopolistic and residential flat development is relatively atomistic. There is also consistent variation between the Shires with concentration always being higher in Ballina than in Byron.

The Ballina and Byron Shires provide evidence that concentration can be high but very variable. There is other evidence too. First, the emergence of firms that integrate both land development and building functions may signal rising concentration since they tend to be large organisations. Builder-developers dominate residential development in the UK and are increasingly common in Australia.

Second, temporal shifts in concentration seem to occur in industries related to or overlapping development. The case of the Canadian housebuilding industry was discussed earlier in this paper (Buzzelli, 2001; Rudin, 1978). In city centre office development in Wellington, New Zealand, site ownership concentration rose from 1.08 sites per owner in 1950 to 1.6 sites in 1986 while ownership shifted away from individuals and trading companies towards increasingly larger firms and which are increasingly involved in finance (Morrison & O'Malley, 1992).

Third, some residential builder-developers are going beyond project-specific advertising towards experimenting with brand names that stay in the consumers profile and are non-location specific (Coiacetto, under review-b). Product branding (plus promotional trials and fairs) is a strategy used by producers in oligopolistic industries (Table 1).

Fourth, the local nature of development confers some spatial monopoly. Quantification of localness is rare but the Ballina-Byron case shows a very strong predisposition for developers to operate very locally. Over 75% of DAs there originated in the same Shire as they were lodged and it was very common for developers to carry out their activities within the confines of one village or town. Very little cross-investment, only 2% of DAs, occurred despite the Shires' adjacency and high level of development activity.

Fifth is the prevalence of mergers since these tend to characterise situations of growing oligopoly. Ball (2003) suggests firms take over others in upswings to acquire land quickly but it also happens in oligopoly situations as firms try to increase market share. In Australia, at the top of the property pyramid, there are a few very large publicly listed diversified property groups whose fluid portfolios can include investment, construction and finance with some development. Since 2004 the Australian share market has seen considerable takeover activity. A snapshot of such activity amongst publicly listed Australian property groups (Box 3) reveals a small, concentrated world comprising few, very large firms in an intense, highly fluid situation, clashing and

**Table 2: Industry concentration for real estate development in Ballina and Byron Shires NSW: DAs 1988-93**

<b>Land subdivision:</b>												
	<i>Total No. lots</i>		<i>Total No. DAs</i>		<i>Total No. firms</i>		<i>CR<sub>4</sub> (Percent)</i>		<i>IR<sub>80</sub> (No. firms)</i>		<i>HI</i>	
	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>
<i>Industrial</i>	246	132	6	8	2	6	100	95	1	4	0.968	0.256
<i>Residential</i>	1764	2278	86	210	58	151	64	43	9	27	0.133	0.63
<i>Rural residential</i>	571	462	36	101	25	84	41	30	13	30	0.067	0.037
<b>Building development:</b>												
	<i>Total No. Units/ (value in brackets)</i>		<i>Total No. DAs</i>		<i>Total No. firms</i>		<i>CR<sub>4</sub> (Percent)</i>		<i>IR<sub>80</sub> (No. firms)</i>		<i>HI</i>	
	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>	<i>Ballina</i>	<i>Byron</i>
<i>Residential flat buildings</i>	2032 (\$131.111M)	1,389 (\$81.056M)	619	383	473	319	19 (19)	13 (11)	206 (184)	131 (118)	0.010 (0.015)	0.010 (0.011)
<i>Commercial</i>	(\$37.619M)	(\$20.812M)	137	169	119	141	(66)	(34)	(10)	(23)	(0.197)	(0.054)

Notes: Figures based on DAs only, not approvals

Indexes based on share of number of allotments. Figures in brackets based on share of value of development.

Values are in 1991 Australian dollars.

### Box 3: A snapshot of takeover activity amongst publicly listed Australian property groups

On the 4th March 2005, the property group Stockland Trust failed to take over rival property group General Property Trust (GPT) which has an office, residential, retail and hotel portfolio of \$AUD8B. In this takeover attempt Stockland is known to have been holding discussions with Westfield Holdings who, with a global portfolio estimated at \$AUD39B, are involved largely in regional shopping centres and some development. Stockland Trust previously had taken over residential property developer Lensworth paying \$AUD848M for its land banks in December 2004. A factor in the failure to take over General Property Trust is considered to be an overly high price paid for Lensworth.

GPT was also the subject of a failed takeover bid in 2004 by another property group Lend Lease whose portfolio includes development, construction and finance. GPT was originally floated by Lend Lease in 1971. Lend Lease previously took over Australia's original and leading publicly listed master planned community developer, Delfin, which then became Lend Lease's residential development arm. It was speculated that Lend Lease might sell off 50% of Delfin to GPT as part of a potential joint venture or merger with GPT.

There was speculation also after Lend Lease's failed bid that Lend Lease might become a target of takeover, possibly by Westfield Holdings. Lend Lease managed GPT's portfolio and received \$AUD 65M annually in fees or 10% of its total earnings. Westfield Holdings used its 6.5% share of GPT's to block the Lend Lease takeover and to try to get certain GPT shopping centres (valued variously in the press between \$774 and \$842.2M) as well as GPT's management rights. GPT is believed to have planned to cut Lend Lease out of its management and go into a joint venture for international property expansion with Babcock and Brown, an investment firm.

Westfield Holdings started to venture into British property in 2000. At the end of 2004, together with another Australian property group, the Multiplex Group (previously mostly in construction), they took over British property group Duelguide plc who own major British retail developer Chelsfield. The object of several previous takeover attempts, Chelsfield is said to have cost the equivalent of about \$AUD1.4B.

Multiplex Group, who had previously in 2004 failed to take over the British property group Minerva further enhanced its development and construction pipeline after the Duelguide takeover by taking over the Ronin Property Group.

This snapshot does not reveal any apparent connection between the previously mentioned firms and Mirvac, largely an apartment developer. Considered by the press to be left out of the takeover rush amongst publicly listed firms, in October 2004 it attempted a takeover of the James Fielding Group to try to add \$AUD1.5B to its investment development portfolio.

Sources: Based on perusal of newspapers and news sources between 19th August 2004 and 7th March 2005 including Australian Associated Press Financial News Wire, Business Review Weekly, AFX UK Focus, Australian Financial Review, Dow Jones International News, Sydney Morning Herald, The Courier Mail.

Note: Being a highly fluid situation, this snapshot attempts only to represent the situation as of the 7th March 2005.

sometimes collaborating in interesting ways. Early April 2005 also saw a spate of takeovers amongst public listed development firms in Queensland (Mac Dermott, 2005).

Sixth is that developers operate in and occupy submarkets. Real estate markets are subdivided into submarkets by sector, geography and motive for acquisition (i.e. use, investment and development). Within each there may be few buyers and sellers exerting some degree of monopoly power (Adams, 1994). There is a trend to further segmentation of submarkets, in the residential sector for example, along lifestyle and lifestage lines. Studies of the supply aspects of submarkets are rare but residential development firms do recognise the existence of submarkets and do target them while some specialise in specific submarkets or combinations thereof (Coiacetto, under review-b). Moreover, endogenous and exogenous barriers prevent firms moving operations effortlessly from one submarket to another (Coiacetto, under review-b). The fact that developers recognise and target submarkets implies that cross-submarket substitutability is low enough to make submarket targeting worthwhile.

## What factors structure real estate development industries?

### General considerations on entry conditions

Development is relatively open to many kinds of players who can, or can hire someone to, organise and coordinate the requisite skills. There is usually no accreditation process and no qualifications necessary. There are many players in real estate related roles who can acquire some understanding of the development process, or who have access to land or other resources, and can enter the industry (contest the market) either when opportunities arise or on a continuing professional basis: lawyers, financiers, builders, surveyors, landowners (Coiacetto, 2001) and even money launderers.

This suggests that the industry is competitive and highly contestable. However, it is becoming more professionalised with formal degrees offered and more short professional development courses in areas like development, marketing, planning and sustainability. This raises the costs and skills of participating in the industry. Moreover, if entry barriers are low for small firms they are also low for large firms - possessing land, finance or other resources - which by their sheer size can quickly dominate or alter the structure of local industries (Box 4).

### Box 4: Examples of large firms entering and reshaping real estate development industry structure

1. St Joe is a very large development firm in northern Florida. St Joe Paper moved into development from a position of being a timber company possessing very large tracts of land for forestry products as St Joe Paper. Now a significant shaper of sunbelt migration to Florida, St. Joe has 825,000 acres (343,750 ha) of land of which 36% is within 16kms of the Gulf of Mexico. It produces "homesites, ranches, farmsites, hunting and fishing preserves", undertakes town and leisure development, commercial development, and offers real estate services (The St. Joe Company, Website). In 2003, with 16 residential projects under way in Florida, it had 3,569 residential sales/contracts and a further 24,907 in the pipeline (The St. Joe Company, 2004).
2. The well known global Disney Corporation set up Disneyworld at Orlando, Florida and is now a very major developer there (Foglesong, 2001). The new urbanist community of Celebration is probably its best-known development apart from Disneyworld which is a massive development in itself.
3. Finance companies expanded into real estate in the 1980s lured by the profits of a development boom and partly in response to the problem of short-term, high interest rate funding (Healey, 1998; Logan, 1993).

### Features of the market

#### *Consumer requirements*

Market changes can induce structural change. In Australia and other advanced economies, current homebuyers have higher expectations than previous generations concerning the quality and 'delivery'<sup>5</sup> of their homes. There also seems to be a residential development industry trend towards the more lucrative but more discriminating markets (Coiacetto, under review-b; Galster, 1996; Outer Suburban / Interface Services and Development Committee, 2004, 380). Developers therefore require greater control over the total production process and the quality of the finished product. They can do this either by vertically integrating land development and housebuilding functions (sometimes also market research, marketing etc.) or by other means such as covenants, development control plans and special arrangements with preferred builders. The overall effect is to make development more complex, raise entry costs and to require a larger-scale, more complex organisation which in turn necessitates higher output levels to keep staff gainfully employed (Coiacetto, under review-b; Knox, 1995, 135).

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<sup>5</sup> Buyers increasingly want a fully completed and landscaped home and land package, and unlike previous generations, are less likely to acquire the land first and then engage a builder, owner-build, or build in stages.

In industrial property, user space requirements are becoming more specific but consumers are seeking more flexible tenure arrangements. This raises entry costs by making such development more skill intensive and risky.

It is also useful for firms to be large enough to possess varied land banks since market changes may affect the kinds of sites required. In the commercial sector, for instance, demand for larger office space with parking facilities has shifted some development activity towards suburban office parks with good access to major arterial roads and freeways.

### *Features of the submarket*

It is in firms' interests to segment markets as segmentation "segregates customer groups by demand elasticities and makes broad entry more difficult (Shepherd, 1997,12). In housing, segmentation occurs increasingly by lifestyle, lifestage, income and along lines of existing home ownership (e.g. second-home buyers).

Each submarket has different risks and entry conditions: clearly CBD commercial development is far more complex than creating a few residential allotments. The skills and knowledge required to operate in each submarket and sector pose entry barriers: special risks and uncertainties of entry as well as asymmetries of information between incumbents and potential entrants. Firms can attempt to increase market share or dominate particular submarkets by raising endogenous barriers. In higher end residential submarkets, for example, experienced developers aim to fill the available product space. They maintain excess capacity and very carefully monitor and adjust output levels to changes in demand in order to pre-empt opportunities for other firms to exploit market gaps. They also maintain dominance by carefully controlling the development process, no mean task given its breadth and complexity, to ensure a quality of product that others cannot match for this discerning submarket. Developers in the first-home buyer market focus on mechanisms to reduce borrower risk such as by setting up lending arrangements. Master Planned Community (MCP) developers offer a somewhat unique product and there are special skills and assemblages thereof required in their successful development: design, infrastructure planning, and community building. Some firms try to capture several submarkets as do MCP developers (Coiacetto, under review-b).

Over time then, firms may evolve an internal structure and staff expertise and acquire landholdings to match their targeted submarkets (Coiacetto, under review-b). While this creates a diversity of firms, it also bars their entry to other submarkets due to 'switching costs'. It also probably facilitates concentration by conveniently packaging skills and landholdings for easy acquisition or takeover by more powerful firms.

Segmentation is associated with the rise of another endogenous barrier, namely selling expenses, including advertising. Marketing and market research have become increasingly important and common in development (Coiacetto, under review-b)<sup>6</sup>. Advertising and marketing are increasingly sophisticated with tentative shifts from information advertising towards persuasive advertising which focuses on increasing market share. Lifestyle messages are increasingly part of marketing and some firms are experimenting with branding. While this could be taken as a sign of competition in the industry it can also be interpreted as a sign of a struggle for dominance amongst oligopolists.

### *Volatility*

Development cycles change industry structure. New firms enter in upswings and existing firms expand. Firms may takeover others as a quick means to their land. Downswings lead to exits,

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<sup>6</sup> The general industry rule of thumb, in Brisbane at least, is that budgeting is recommended at a not insignificant 2% of gross development value.

failures, and decreasing size while surviving firms may takeover land and other assets of firms (Ball, 2003). Healey (1998) contends that the types of firms entering development industries change throughout the cycle. For instance, developer-traders concerned only with land value growth enter during upswings but leave the real development task to others.

Volatility promotes both concentration and deconcentration. It promotes small firms because over-expansion during a boom incurs the risk of holding too much tied up capital in land or unsaleable or slow selling products after the bust. Developers attempt to tailor output very carefully to avoid oversupplying the uptake of the market (Ball, 1983) which in the case of residential development may be only six or so units per month and in industrial, just one unit per month.

However, firms do expand and contract production cyclically. Some maintain small organisations by relying on subcontracting to alter scale of production without having to continually fire and hire staff during development cycles<sup>7</sup>. As we have seen, however, this must be balanced against the need to build up organisational expertise to deal in specific submarkets and to control the quality of product delivered. It may also prove difficult to get contractors in upswings and so the industry will also have some large firms with large organisations. The 'choosier' market since the 90s may have further encouraged these.

Large firms can also spread their activities across several development cycles, particularly in regions that sustain long-term market growth such as by immigration<sup>8</sup>. MPC developers undertake projects typically planned for 20 years or so or 3 development cycles. This also allows firms to take a more strategic approach to land acquisition – acquiring it directly or via options at lower cost in low periods and developing it in upswings (Ball, 1983).

## Finance

Partly because of the negative experiences of previous development cycles, a conservative development financing approach tends to favour highly experienced firms over newcomers. However, the difficulty of obtaining finance can be circumvented sometimes, for example, in relatively simple developments like land subdivision. It is easier if the developer is the landowner or can go into a profit sharing deal with the landowner, if infrastructure is already available to part of the land, or if the development can be divided into small stages to fund subsequent stages. Boom times or land supply restrictions may speed sales and facilitate the process. So there are opportunities for small firms to enter.

For larger firms, in the longer term there is the possibility of going public which frees them from seeking funding on a project-by-project basis and permits longer-term planning. Public companies are not an insignificant proportion of development firms<sup>9</sup>.

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<sup>7</sup> This is evident in building firms (Ball, Le Ny, & Maginn, 2003; Buzzelli, 2001) where it is enable by the breaking down of processes into simple repeatable, quantifiable and manageable tasks whose pace can be monitored. Sometimes developers also do this (Coiacetto, under review-b) but in the land development process it is more difficult as each project and site presents a unique case and set of problems. However, consultants can be used extensively avoiding the need for organisations to grow in order to expand production and so some firms prefer to work with a small team in a loose arrangement with preferred related professionals. In the early 1990s land development firms, on average, had few staff (Campbell, 1993).

<sup>8</sup> According to Somerville building firms are larger in growing areas (Somerville, 1999).

<sup>9</sup> In 1991, Australia wide, approximately 20% of UDIA member development firms out of a total of 94 survey respondents were public companies while about 60% were private companies and 12% were sole proprietors/partnerships (Campbell, 1993). Given that some of the larger developers tend to be public companies or groups within them (Campbell, 1993) and given that large firms are more likely to be represented in the UDIA, the proportion of public firms amongst all development firms is almost certainly much lower than 20%.

## **De-localising development and industry structure**

The traditionally local nature of development has been breaking down with the entry of national and international conglomerates into the industry, replacing local players (Logan, 1993). This “globalisation” is characterised by the “securitisation of real estate”(Logan, 1993) which has enabled development, like manufacturing and other industries, to be financed in the national and international markets. Another feature is the emergence of new organisations to plan and execute development; ever larger international-scale firms who have certain advantages in operating at local level including the ability to raise finance through semi-public securities trading agencies. This has blurred the distinction between developer and financier. However, globalisation of development has limits (Logan, 1993; Wood, 2004). Large developers are still reliant on local partners for expertise, for local contacts and for “front-men” to smooth the way. Furthermore, “securitisation” – facilitated by the emergence of investment risk rating services - does not make local risks go away.

Technological change and standardised procedures can loosen developers’ reliance on local contacts and information. Some real estate can be inspected virtually. Planning schemes and public authorities now provide much more and often cheaper information (sometimes free via internet) concerning site conditions (e.g. flooding, contamination) and the surrounding environment (e.g. transport infrastructure, timetables and trip planners, future land use plans). Some data are in easily accessible form and more amenable to analysis than data obtained by traditional means. In Australia, some states have relatively consistent planning scheme contents and formats. Some nationally uniform building and development codes are in place and a national development assessment system is on the agenda. While these could be more complex, standardisation should facilitate cross-penetration of geographical markets, permitting some developers to expand spreading risk geographically<sup>10</sup>.

But does the entry of relatively large-scale non-local players make it difficult for local players to compete? (Logan, 1993, 48). There is an assumption that nationalisation and internationalisation of development increases concentration (Whitehand, 1983b, 323) but the very limited empirical research so far does not support this view (Whitehand, 1983b). In the Ballina-Byron case, the Ballina industry is both more concentrated (Table 2) and more local. So increasing penetration of local industries by non-local players may simply increase the number of players therein, at least in the short term. However, at work are many factors which require considerable research to unravel.

### **Capturing Positive externalities**

Developers face uncertainty over what happens in the area surrounding their projects. Incompatible nearby development, or even a lack of development, can reduce a project’s value. Infrastructure may not be provided or else not in the desired time, form and location. Furthermore, a firm’s projects may generate positive externalities that are captured by adjacent landowners rather than by the firm.

Large firms can turn ‘externalities’ to their advantage. On large projects they can capture what would otherwise be external land value increments. Also, by careful attention to the appearance, design and layout of the project and its infrastructure, they can maximise the positive externalities and minimize the negative externalities of the project’s individual sections thereby boosting its total value (Coiacetto, under review-b). This probably works better on cheaply acquired, semi-isolated greenfield sites because the increment on the starting value is greater and because there are no existing or potential adjacent developments to create uncertainty about potential negative externalities.

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<sup>10</sup> Though the spread of risk may be undermined by the greater coincidence of regional market and development cycles.

## Regulation

Planning affects developers and the feasibility of their developments by the way it allocates land and development rights to the development firm, to neighbouring landowners, and also by the provision of infrastructure for urban development including its location, timing, type, quality and the incidence of the costs (e.g. whether they are paid for by taxes, by grants or by developer contributions).

This affects industry structure in several ways. First, the existing arrangement, size, tenure and ownership of land parcels – themselves a product of previous land use planning decisions - together with the choice of which of these parcel are designated for development, affect which kinds of firms can acquire and develop the land. Where many small land parcels are designated, high switching costs may bar the entry of firms that may have spent years internally structuring their organisation - in terms of their staff and expertise, the relationships they have built, their marketing, land holdings and so on - to service specific sub-markets with certain types of project on certain types of land (Coiacetto, under review-b). It could also stimulate the entry of many small-scale passive ‘mum and dad’ type developers who might develop only once (Coiacetto, 2001). Where large properties are designated, high acquisition costs may preclude many medium and small-scale firms and facilitate control over strategic land resources by few large firms.

Second, the allocation process is risky and uncertain, a gamble in which there are advantages for large-scale operators who can hedge their bets on several possible outcomes by assembling land banks (Ball, 1983). Of course, as a gamble, a few of the wins will happen to other, sometimes small, landowners with landholdings in the right place at the right time.

The third concerns influencing the allocation process. Knowing intimately the arcane, abstruse world of planning and plans, the process, the rules, the planners, councillors and other actors involved is useful to developers. It is also important to have the means and power to influence by lobby, persuasion, litigation, use of the media, by engaging consultants to make effective planning submissions, and in the extreme, by corruption. Lobbying may occur for pro-development interests generally or for specific interests where developers compete with each other for the favourable allocation of resources (Molotch & Vicari, 1988). Developers do not have to participate formally to influence planning as they are in frequent negotiations with planners about their projects (McGuirk, 1995). Developers can use the planning system to suppress competition by challenging rivals’ proposals via the submissions system, in court, by funding protest groups or in other ways<sup>11</sup>. In each of these cases size and the resources it brings affords power and influence.

Fourth, planning-imposed land supply restrictions in the UK may have led to the emergence of builder-developers, who tend to be larger organisations (Ball, 2003, 911). By integrating land development and building in a context of a limited land supply, firms could gain more control over the supply of new housing, thereby decreasing competition in both land and housing markets and reducing the risk of oversupply<sup>12</sup>.

Fifth, the allocation of development rights includes the form of development and this too can affect structure. Policies, like the draft regional plan for southeast Queensland (Queensland Government, 2004), that aim to increase the density of urbanisation could squeeze out small

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<sup>11</sup> An interesting case came before the NSW Independent Commissioner Against Corruption. A major developer, in order to gain leverage over the Byron Shire Council, and to gain an edge on a rival developer, unsuccessfully accused the Council of fast-tracking the rival’s development application (Bradbury, Mordaunt, & Frontline Television Productions ABC-TV (Australia), 1996).

<sup>12</sup> This sufficient explanation is not a necessary one. Consumer preferences for a complete housing product is also a sufficient explanation as is Healey’s (1998) view that the British pattern is the result of the vacuum left by exit of government from public provision of housing.

firms lacking the necessary capital or capacity for high density projects. Possibly only few larger firms would be capable of such projects. Eventually, new firms may enter or switch to higher density development though it would take time to match the incumbent firms' organisation and superior knowledge and information. By that time, the incumbent firms could develop means to dominate the market and erect entry barriers: by getting the best architects and designers; acquiring banks of the best land leaving marginal sites for potential entrants; filling the available product space; and further developing the knowledge, skills and relationships required in the many aspects of the process (planning, market research, marketing etc.) that create information asymmetries between them and potential entrants.

### *Standards and processes*

In several ways planning frameworks, schemes and processes have become more complex and so heightened entry barriers. Integrated Development Assessment Systems attempt to integrate a large number and variety of required approvals into one system but have generated abstruse systems that complicate what might otherwise be simple applications. In Australia and other countries there has been a trend away from simple, easy-to-use prescriptive standards towards performance-based standards that concern the (multiple) impacts of development (Baker, Sipe, & Gleeson, 2006). These raise costs for various reasons, for example, DAs are more difficult to prepare, to assess and are more challengeable. The number and range of matters regulated has also increased adding to the studies, reports, lead times, costs and risks. Examples include public participation requirements, social impact assessment, water sensitive design and sustainability.

The retreat of the state from the provision of infrastructure has transferred costs increasingly to the private sector, both as developer-provided infrastructure and as contributions for infrastructure external to projects. This has "changed the process of land development from one where anyone could arrange for surveyor's pegs to be driven into the ground could subdivide his land into home sites, to a highly specialised process open only to those who could marshal significant financial and professional resources" (Troy, 1978, 7).

The trend to the use of consistent terminology and definitions, procedures and so on would slightly reduce the dependence on local knowledge and facilitate the interpenetration of local markets. Nevertheless, differences between local planning regimes remain and these may advantage either local or non-local developers depending on the nature of the local regime. Although Ballina and Byron Shires operate under the same prescriptive, top-down frameworks, significant differences between their regulatory regimes remain. Ballina Shire Council is more business-like, stable and pro-development with a relatively homogenous and pro-development community. Byron Shire Council is relatively unstable and strongly divided between pro-and anti development interests, while the community is more heterogenous and divided on support for development (Coiacetto, 2000). As a result, development is much more contested by the community in Byron. Not surprisingly, in terms of DA refusal rates, non-local developers in Byron Shire fare worse than non-local developers operating in Ballina Shire (Table 3). Somewhat surprisingly though, local developers in Ballina Shire fare worse than non-local developers. The situation in Byron is what one would expect if local knowledge and contacts are important; non-locals fare worse than locals. Assuming that non-local developers, are on average, more likely to be experienced players (which would explain their relatively high approval rates in Ballina), this suggests that the importance of local knowledge and local contacts is probably more relative than absolute. They are less important where the development assessment process is formalised, standardised and predictable and more important where it involves the resolution of conflicting interests or is characterised by conflict and unpredictability.

As discussed, it is unclear whether greater interpenetration of local markets by developers concentrates industry.

**Table 3: Proportion of development from non-local sources and DA refusal rates: Ballina and Byron Shires 1988-93**

	DA's from non-local <sup>1</sup> sources as percent of all DA's in Shire	Subdivision DA's from non-local <sup>1</sup> sources as percent of all lots applied for in Shire	Building development DA's from non-local <sup>1</sup> sources as percent of value of all building development applied for in Shire	Refusal rates for DA's from same Shire	Refusal rates for DA's from non-local <sup>1</sup> sources
<i>Ballina Shire</i>	9.6	1.6	22.2	9.9	7.7
<i>Byron Shire</i>	14.2	27.1	56.0	12.7	15.3

<sup>1</sup> Non-local here means not from the same or surrounding Local Government Areas.

#### *Partnerships and collaborative approaches*

Since the 1990s planning approaches have expanded beyond traditional regulatory, command and control approaches to include ones where planners adopt more active roles by creating the conditions for economic and property development (Healey, 1998). This sometimes involves partnerships and special arrangements with developers and/or setting up special semi-autonomous authorities to encourage, facilitate and coordinate private investment in the built environment of an area, usually one that requires regeneration<sup>13</sup>.

Such approaches could increase concentration. Intuitively, unless planning resources are boosted, there are fewer niches for developers than in a purely command and control system since planners cannot collaborate or partner with large numbers of developers at once. There are also advantages for the few firms that learn to operate under such arrangements because success begets success. Such arrangements create and involve a special close working relationship of mutual assistance between the developer and the planner who is often in a separate authority to the development assessment authority<sup>14</sup>. This creates an asymmetry of knowledge and of power between incumbent firms and potential ones.

#### *Public real estate development*

In the 1960s UK, the retreat of the state from developing public housing left a vacuum which became occupied by expanding housebuilders thus forming a unique and 'highly oligopolistic' builder-developer dominated industry (Healey, 1998).

Public land development agencies like the Australian state and territory land commissions of the 1970s (Troy, 1978) and their contemporary descendents (Gleeson & Coiacetto, 2005) sometimes assemble land then release it to private developers. How this land is allocated affects industry structure.

#### **Other policies**

Policies not directly concerned with regulating development can influence structure. Some countries, like France, have labour laws to make employment secure and prohibit subcontracting. This could account for some of the differences between various countries' house-building structures, though it seems that where such laws are introduced an informal sector exists that undermines this (Ball, 2003).

<sup>13</sup> The Urban Renewal Task Force is an example in Brisbane.

<sup>14</sup> Though the notion that the developer benefits has been challenged (Ball et al., 2003).

Regulation for more financial transparency from construction lenders makes it hard for large multifunctional construction firms to be transparent, so they have broken off into smaller housebuilding operations (Ball, 2006).

Regulation to enable lots to be sold off the plan before the completion of development in some instances is relatively new. In 1997 the *Land Sales Amendment Act* made it legal to sell land off the plan in Queensland. Such regulation can indirectly influence structure, perhaps in complex ways. Development loan conditions sometimes require a specified amount of land to be pre-sold. This changes the relationship between lender and developer and could create a shift in the type of firms which could get funding; an unexperienced firm with a certain pre-commitment of sales might stand more of a chance under this lending regime. It also changes the organisation of the development process and the establishment costs. It may also dampen development cycles slightly since it connects the commitment to develop more securely to future market conditions.

## **Trends**

A combination of factors suggest a trend to rising concentration: more sophisticated and demanding customers; greater segmentation of markets; more complex and extensive regulation and greater 'professionalisation' of the industry. Larger firms can influence planning regimes and politics in ways detrimental to the continued existence or entry of small firms. Incumbent large firms have advantages in terms of long planning horizons, excess capacity, finance, advertising, land acquisition strategies and so on. Development requires higher skill levels due to a range of factors outlined previously. Finally, takeovers amongst public companies concentrate power and influence and concentrates control over the key strategic land resources.

## **Conclusions**

The popular views of development are either of a competitive industry, or of one dominated by large powerful players. Both perspectives have an element of truth since development is an industry which offers opportunities for many small players but there are also advantages and opportunities for large and expanding firms. Development industry structure is a function of:

- The existence of competitive advantages for large firms in dealing with planning risks, land acquisition risk, market risk and financial risk and to capture the externalities of their own development;
- The existence of semi-permeable exogenous and endogenous entry barriers that are variable but tending to rise. These are associated with planning, submarkets and sectors, and so on. Incumbent firms have some power to influence entry conditions to their advantage; and
- The occasional possibility of local or regional industry structures being reshaped or dominated by the entry of new large firms.

Combined, these point to a general industry structure theme of a few large firms but often with many opportunities for small firms. Variations depend on local factors and sectors. Instances of high oligopoly exist and a degree of monopoly can also be achieved by spatial dominance and by the dominance of submarkets. Many factors influence structure and regulation is an important but generally unrecognised one.

It is arguable that concentration is rising due to rising entry barriers, the extra power to influence industry structure afforded to large firms, growing complexity in the development arena as well as mergers enacted by growing and powerful organisations. Of the current spate of takeovers in publicly listed development firms in Queensland, the Director of Hunter Green Institutional Broking, Charlie Green said:

It's pretty Darwinian; the guys who are strong now will just get stronger and the weak now will perish or get gobbled up. (Mac Dermott, 2005)

There is not the space here to discuss the implications of different structures and rising concentration. What these consequences may be is the subject of another paper (Coiacetto, under review-a). Briefly, however, there are three broad interrelated areas of concern. First are the standard concerns of industrial economics: the potential for economic profits and higher prices; efficiency including the efficient use of land and particularly marginal and contaminated sites; and the impacts on innovation in an inherently risk-averse industry. Second are the issues that surround planning and governance: the power of firms relative to the regulators; the impacts on corruption; the ability of firms to shape regulation to their own advantage and to suppress competition. Third are issues that relate to urban development: the impacts on development cycles and their scale and volatility; the nature of urban development that a concentrated industry would favour including its location, form and type as well as how and where infrastructure is provided (e.g its sequencing and the balance between private and public sector provision); the impacts of that urban development on matters such as travel times, costs and affordability; the power of firms to shape that urban development; the type and quality of products produced; and finally, how the above factors in combination affect sustainability.

It is suggested (Coiacetto, under review-a) that while considerable empirical research is needed to address these issues and the nature of development renders empirically analysis difficult, a concentrated industry would probably exhibit:

- above normal prices and profits;
- collusive practice amongst developers;
- less efficient use of resources, especially land;
- exacerbated development cycles;
- less innovation, therefore fewer leaps in productivity, reduced opportunities for sustainable innovations, and less innovative urban environments;
- greater power of developers relative to regulators;
- growing corruption;
- the reorientation of the focus and purpose of planning towards more private planning and private sector control over peoples lives; and
- greater power of developers over the form and structure of cities together with a sidelining of the environmental and public interest in urban development.

A concentrated industry would also have complex impacts on the form and structure of cities (Coiacetto, under review-a). These may include poorly sequenced development, reduced choice for consumers, greater travel costs, privatized provision of what were formerly public goods such as parks and facilities, and increased difficulties and costs of providing infrastructure. There may also be problems in providing necessary services and land uses (like industrial) in large-scale master planned developments because they are not perceived by developers to add value to their development. Finally, it is also suggested that both competitive and concentrated industries pose obstacles to achieving sustainable development. However, the obstacles the former pose are merely ones of coordination, which is a normal and accepted role of public sector planning. By contrast, concentrated industries pose a more insurmountable obstacle to planners, namely the permanent surrender of the power and capacity to control development (Coiacetto, under review-a).

Although it has been argued in this paper that planning and regulation have helped to create concentrated development industries, this paper is not an argument for deregulation; see Feagin (1990) for insights into the implications of *laissez-faire* development. However, planners could be making a rod for their own backs as they help generate a less competitive industry dominated by

larger more powerful players who, as their power grows, have diminishing need to cooperate with planners – and may in fact be able to dominate them. It is also beyond the scope of this paper to examine the policy implications. However, policy needs to be aware of the consequences of its actions on industry structure; to consider its impacts on industry structure in the policy-making process; and to deliberately draft land use and other policy to include, amongst other goals, shaping a competitive industry.

This is an area worthy of further study. Considerable theoretical development and empirical work is required and future works should utilize standard measures of concentration for comparative analytical purposes. Research will not be easy for the structure of real estate development industries is complex and variable and affected many factors. Moreover the situation is highly changeable with an industry characterized by high levels of volatility and a high firm turnover creating a passing parade of players and individual firms with highly variable outputs over time.

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