

ARTICLE

Real Estate Development Industry Structure: Consequences for Urban Planning and Development

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Introduction

In some economic sectors, such as media, agriculture (agribusiness), transport (especially airlines) and retail food outlets, industry structure and its consequences are the subject of policy, media and scholarly attention. By contrast, there has been little policy or scholarly interest in the structure of the (real estate) development industry even though it is a highly regulated, high value industry that shapes the built environment. Little is known about the makeup of the industry and its implications for matters such as efficiency, the structure of the built environment, and the relationship of the industry with planners. This neglect is lamentable and the article aims to show that development industry structure is an important topic demanding attention. It does this by drawing on existing literature to outline some possible or likely implications of industry structure, for urban development and planning, emphasizing particularly the consequences of a concentrating industry. These potential consequences are serious and wide ranging, concerning, amongst other things; the price and nature of the built environment; the nature of planning; power relations between planners and developers; sustainability and even the viability of planning as a public sector activity. This article makes no claim to be an exhaustive or definitive statement on these issues. Instead, the hope is to draw attention to this issue, to stimulate research and debate, and to encourage both practitioners and scholars to reflection upon the implications of inaction.

Industrial Economics and Development Industry Structure

The structure-conduct-performance framework in the field of industrial economics posits that the structure of an industry influences the conduct or behaviour of that industry, which influences the performance of that industry, and that these dimensions also influence each other. (See Tables 1 and 2.)

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Structure	Conduct (Behaviour of firms in an industry)	Performance (How market performs under different structures)
Number of firms Size distribution of firms Industry concentration Product differentiation Conditions of entry	Advertising Reacting to what rivals do Collusion to restrict supply Discouraging the entry of new firms Raising costs of new or existing firms	General factors Price Profits (economic or above normal in oligopolistic industries) Efficiency (use of resources without waste) Innovation (producing new products to meet market requirements; improvements to production processes)
	(Conduct becomes more of an issue as industries tend towards oligopoly)	Additional non-quantifiable factors Fairness—e.g. shifts in wealth from many customers to few monopolists Values—e.g. whether competition in itself is a good or bad value Freedom of choice Social effects—e.g. influence of economic monopoly on political competition including the power to corrupt political processes Economic security—e.g. market power giving managers of businesses more
		discretion which may generate greater jol losses Cultural diversity—e.g. monopolies and tight oligopolies may narrow the range of products they deliver; fewer firms may not serve communities as well by the reduced civic roles of company branches
		Impacts of concentration in specific industries Media and entertainment—quality and political implications of news reporting; cultural (e.g. Americanization/ homogenization via domination of television); quality of information; potential use of that information to influence politics Food industry—health; product quality and diversity Chemicals and pharmaceuticals—may require regulation due to their nature; power relative to regulators.

Source: Derived from and expanded upon Martin (1994) and Shepherd (1997).

TABLE 2. Examples of scholarly and press remarks concerning industrial organization

Source	Quotation
US refereed journal article	Neighbourhoods that experienced more bank mergers are subjected to higher interest rates, diminished local construction, lower prices, an influx of poorer households, and higher property crime in subsequent years. The elasticity of property crime with respect to merger-induced banking concentration is 0.18. We show that these results are not likely due to reverse causation(Garmaise & Moskowitz, 2006, p. 495)
Australian National Newspaper 2005	Treasurer Peter Costello unveiled proposed changes to the Trade Practices Act yesterday, flagging the introduction of criminal penalties for company chiefs guilty of serious cartel conduct as well as better protection for whistleblowers 'The purpose of these changes is to send an absolutely clear signal that this behaviour will not be tolerated' Mr Costello said 'And if any executive would be tempted by the economic gain from entering into a cartel, they should know they run the risk of imprisonment' Mr Costello said cartels would be harmful for the economy because the fixing and rigging of prices fed its way into cost structure and damaged other companies and competition. (Butterly, 2005)
Australian national newspaper 2004	Australia's \$6.5 billion vegetable and horticulture industry is becoming increasingly agitated about what it sees as federal government inaction on back-up for farmers and orchardists against the effective duopoly buying power of Coles and Woolworths.
	'Australian consumers will no longer be able to take for granted the healthy, clean vegetables and fruit they enjoy today, if the Australian government reneges on the promise to make a crucial decision that affects 20,000 hardworking farmers,' the chairman of vegetable grower association Ausveg, Michael Badcock, said. (Jay, 2004)
The West Australian newspaper	More than half the State's 305 dairy farmers have signed confidential agreements to use collective bargaining in a bid to force processors to pay more for their milk The supermarkets agreed to pay more for the milk but the processors pocketed the increase. (Trott, 2004)
Queensland state newspaper	The Aussie farmer and small businessman have been dealt another blow. If it's not the weather creating carnage then it's government and big business. They that rule the world are systematically pulling down the foundations of Aussie life. Now major supermarket chains are phasing out well-known Australian brands, all in the name of competition.(Spencer, 2004)
Queensland regional newspaper	Australia's biggest supermarket retailer has been accused of bullying its suppliers into paying up-front payments to keep their products on the shelves, as it pushes to lift its house brand categories. (Jimenez, 2005)

Popular perceptions of development industry structure are of either a competitive industry or of one dominated by large powerful players. In a sense both perspectives are partly correct. Development offers opportunities and advantages for both large and small firms while a combination of diverse factors (Table 3) produces structures that are complex and highly variable between planning jurisdictions, sectors, submarkets, the nature of the markets and cultures (Coiacetto, 2005). The regulatory system, planning, plays a significant role in shaping industry and setting barriers by the process of allocating land and property rights including development rights, standards and procedures and collaborative approaches to planning (Ball, 2003; Coiacetto, 2005). Developers can influence the planning system in ways that may suppress competition.

However, the overall trend is probably towards increasing concentration because of a combination of factors (see Table 4; Coiacetto, 2005) but there is very little literature concerning the consequences of this. The following argues that rising concentration has significant consequences for urban development and planning by suggesting what these might be. It does not purport to be a comprehensive account.

TABLE 3. Factors shaping development industry structure

- Development is characterized by semipermeable, exogenous and endogenous entry barriers that
 are highly variable, but are affected by a range of factors and are tending to rise. These barriers
 are associated with planning, different planning regimes, different submarkets and sectors, and
 so on.
- Incumbent firms (by geography or submarket) are able to influence entry conditions to their advantage by various means such as control of land resources, influencing regulation policy and standards, advertising, and filling available product space in specific locations, submarkets or sectors.
- There are strategic benefits for large firms in development or for firms to expand or to integrate vertically or horizontally. Large firms can reduce risks associated with land acquisition, markets and submarkets, borrowing and planning.
- Degrees of monopoly can be created by market segmentation (into submarkets) and product differentiation.
- The local nature of development confers a degree of monopoly power on firms. This is countered by a limited potential for industry globalization (Logan, 1993) and tempered by other factors like technological change and planning procedures.
- 6. Volatility in the development industry can promote both concentration and deconcentration. There are risks for small firms to overly expand production during a boom but also advantages for large firms who can spread their activities across several development cycles—allows firms to take a more strategic approach to land (Ball, 1983).
- Local or regional industry structures can occasionally become reshaped or dominated by the entry of new large firms, especially from other economic sectors.
- 8. Non-urban policies, e.g. labour laws that aim to make employment secure and prohibit subcontracting (Ball, 2003), regulation for more financial transparency from lenders for (Ball, 2006); regulation to enable land to be sold off the plan before its completion changes the relationship between lender and developer and could create a shift in the type of firms that could get funding.

Source: Summarizing Coiacetto (2005). Other sources cited in table.

TABLE 4. Factors that combine to increase development industry concentration

- More sophisticated and demanding customers in some real estate sectors such as industrial and
 residential and a general trend upmarket in the residential development industry towards the
 more lucrative markets raising entry costs and making developers require greater control over
 the total production process and the quality of the finished product.
- 2. Greater segmentation of markets.
- 3. More complex, demanding and extensive regulation and development assessment processes.
- Partnerships and collaborative approaches in planning, which may promote concentration and favour a select few firms.
- 5. Greater 'professionalization' of the industry.
- Opportunities for larger firms to influence planning regimes and politics in ways that are detrimental to the continued existence or entry of small scale players.
- The advantages of incumbent large firms in terms of long planning horizons, excess capacity, finance, advertising, land acquisition strategies and so on.
- The generally higher level of skill required in development due to a range of factors outlined above.
- Takeovers amongst public companies, which concentrates power and influence and gives few developers greater control over the key strategic land resources.

Source: Derived from Coiacetto (2005).

Consequences

Prices and Profits

A competitive industry should have normal profits and therefore better prices for customers (Ball, 2003). However, as the industry appears to be concentrating normal profits should not be the norm and this should be a factor in high real estate prices in some locations, sectors or submarkets (although some degree of ease of entry of many small firms is a moderating influence on an otherwise oligopolistic industry). However, such impacts would be empirically difficult to test because of the nature of development and of property markets: high expected return rates in this high risk industry, the high volatility and variability of industry and individual firm profits (and losses), and the rate of entry and exit (and failure) of firms through development cycles would make it difficult to unmask economic profits. A further complication is that developer's products (the primary property market) to some extent must compete with existing property (the secondary market) which usually dominates supply. However, property markets can be seen to comprise of submarkets (Galster, 1996), which are to some extent overlapping and some extent discrete, and in which developers and other sellers can exert some degree of monopoly power. The other (resultant) problem is a dearth of empirical research (Ong et al., 2003). One Canadian study (Lorimer, 1978) claimed 25 – 35% of the price of new homes comprised economic profits and that the failure for prices to drop in downturns was due to the oligopoly power of large developers. Some indirect evidence comes from work on the effects of regulation on residential development in New Jersey (Luger & Temkin, 2000). It argued that developers there pass on the additional land costs generated by highly restrictive regulation to the consumer, but with a multiplier of about four.² The explanation proffered

centres on the price inelasticity of demand associated with the area's high growth rates. However, the multiplier could also be explained by the monopoly power of the developers and by the higher entry barriers imposed by the additional costs of highly restrictive regulation. In fact, the authors argued that the imposition of higher regulation had caused a 'shakeout' of small developers in the 1980s. Others (Ong *et al.*, 2003), lacking empirical data, have used simulations-based economic experiments with participants acting as developers to provide insights into oligopolistic land bidding and product pricing behaviour of developers who bid for their sites, but these are limited by their non-empirical basis and so are of uncertain reliability.

A concentrated industry should produce cost savings via scale economies, but whether these are passed on to consumers depends on the effects of decreased competition and increased power to restrict entry (Rudin, 1978). In any case, scale economies are probably not intrinsically very great in real estate except in specific highly capital-intensive subsectors such as CBD commercial, otherwise they would constitute a high barrier to entry of new firms. Moreover, some of the barriers that do exist are endogenously generated to raise competitor costs and suppress competition and by planning (e.g. advertising and promotion, marketing, raising industry and planning standards, filling the available product space, professional development of the industry). It is unlikely that oligopolistic firms, having created these barriers to suppress competition, would use their monopolistic gains to pass on cost reductions to consumers.

Collusion amongst oligopolistic developers to fix price and/or supply would be much harder if not impossible to uncover in development than for other industries because:

- Unlike commodities like oil or petrol, the real estate commodity is highly
 differentiated, by location and its attendant pattern of externalities, and by
 features of the product itself, and so prices will be very diverse and each
 product is not comparable with others;
- The development process is extremely complex and diverse (Gore & Nicholson, 1991; Healey, 1991, 1992; Ganderton, 1994) and so it would be extremely difficult to demonstrate any deliberate supply withholding;
- Production levels within firms and across the industry are highly variable temporally and this too makes it difficult to demonstrate withholding of supply;
- Risk and profit levels are high (three to four times alternative low-risk investments such as term deposits) and temporally variable; and
- This is a secretive industry where information is critical but firms are unlikely to cooperate.

Nevertheless, collusion, of sorts, can occur at local scales where local oligopoly exists. Developers of adjoining sites have described to the author how they cooperated in the release of their developments, for example, choosing to carefully phase their projects to avoid oversupplying the market at any time.³ Of course, cartels can only operate if barriers to entry are high and it is suggested (Coiacetto, 2005) that their height is variable, and, sometimes, high.

Efficiency

The entry and exit of firms in relatively competitive industries where barriers are relatively low could be seen as an efficient use of resources and efficient response to shifting market conditions (Ball, 2003). However, the loss of many firms during downswings, many of them linked to other firms such as builders, also represents a waste of resources and a loss of capacity built up through experience in a difficult industry (Healey, 1998). Large firms employing numerous staff lead to inefficiencies compared to competitive markets (Ball, 2003, p. 905) and have to maintain a high level of output to keep their staff (involved in land acquisition, marketing etc.) busy (Coiacetto, forthcoming) and so their production is responsive to its internal organization rather than to demand.

Development cycles create another efficiency problem: periodic oversupply. In competitive markets the actions of many small firms and their impacts on supply are difficult to predict. Rudin (1978) therefore suggests that in a more concentrated industry overinvestment may become less frequent since better planning allows large developers to be freer of the dictates of the market. Yet Logan (1993) argues that a globalized industry with larger players accentuates booms and busts since securitization concentrates investment in areas perceived to be of low risk. Some empirical evidence (Leitner, 1994) supports the view this promotes overinvestment in some areas and accentuates regional cycles of growth and decline as the cost of land and property more closely reflects variations in interest rates.

A competitive industry probably generates a relatively efficient use of land resources. Many firms implies that there is a greater probability of some firm taking up a development opportunity on a site, and less chance of sites being passed over, whereas an oligopolistic industry would be more inclined to avoid marginal sites and more predisposed to 'cherry pick' the best sites thereby generating pressure for improperly sequenced, difficult-to-service development.

Innovation

Innovation can produce major leaps in productivity that minor incremental changes in efficiency might barely achieve (Shepherd, 1997, p. 115). Innovation is important for urban development and planning because achieving sustainability requires innovation (Hargroves & Smith, 2005). However, development is an inherently conservative industry because of the high risks involved and few developers seek to be innovators or pioneers (Neilson, 1976). In addition, it is hard to make innovations that can be applied generally because the nature of a development process tends to be project specific and bound by the limitations and constraints of each unique site (which may explain why most sites are reshaped significantly making them more similar and rendering the development process more predictable and uniform).

Despite conflicting perspectives, the prevalent view in industrial economics is that competitive industries are the more innovative (Shepherd, 1997, pp. 120–126). Competitive firms are more likely to benefit from innovation and are more likely to be forced to innovate. Invention also tends to arise from small individuals and units rather than from large establishments channelling large resources into

research and development. It also stands to reason that the more numerous firms are, the more likely there will be some which will innovate. These views accord with empirical work in the housebuilding industry, which indicates rising concentration has led to standardization of housing (Nicol & Hooper, 1999) and of housebuilding processes and practices (Gibb, 1999).

However, in development innovation is not only or necessarily related to firm size but also to the nature of a firm, its strategies and its niche (Coiacetto, 2001). 'Cashed up' showpiece developers, for instance, are less concerned with risk and return than with 'making a mark'. Some developers become expert in working for a specific client type (banks, government departments etc.) whose brief may require innovative design or development. Probably similar things happen when private developers work in public – private partnerships and urban redevelopment corporations where the public entity takes some of the risk out of the process for the developer. These and other 'pioneers' like public sector developers (Gleeson & Coiacetto, 2005) pave the way for other more risk-averse developers to adopt their innovations. A key, then, to an innovative industry structure is 'diversity', a feature which increasing concentration diminishes.

There are, however, two instances where monopolists may be inspired to innovate (Shepherd, 1997, p. 120):

- 1. Where large economies of scale are to be obtained; and
- 2. Where the free rider problem is solved; that is, imitators cannot quickly take up the innovations and devalue them.

It is possible that large developers may obtain economies of scale but more value is probably to be obtained by innovations in the process of internalizing the positive externalities of large developments as happens in Master Planned Communities (MPCs). MPCs involve an innovation of both process and product. MPC developers innovate by creating a new kind of product totally differentiated from others—a community (Coiacetto, forthcoming) and so create a market that is difficult for others to break into. They also create an innovative development process—community building: establishing a virtuous cycle wherein investment in a location and its infrastructure generates increasing site value (captures its own positive externalities) to better attract buyers to further generate investment in the site's infrastructure.

Some very large-scale residential and MPC developers also innovate with new products *within* their developments. They must maintain a high level of sales rates and do this by:

- Targeting as many submarkets as possible and (unlike regular developers) trialling new products to do so;
- Investing in design and community building; and
- Putting considerable effort into design to help mix together different consumers (social groups) (Coiacetto, forthcoming).

Now such innovation is important only so long as a producer is competing for market share. However, as an industry moves towards tight oligopoly or a

dominant firm structure, innovation, design and community building become less important. It is also possible that community building sets up expectations in the regulators that favour these developers over other 'bad' (Weiss, 1987) developers. Indeed, some analysts urge planners to align themselves with 'good' developers (Wadley, 2004).

The innovations described probably spread to other firms little and slowly because:

- Much of the innovation of process and its financial consequences (whether it
 is working and how well) are hidden from view. It concerns the sequence,
 timing and allocation of investment in infrastructure, facilities, landscaping
 community building, and managing the spatial arrangement of uses and timing
 of their development so that it adds maximum value to the development
 (financially and in turnover); and
- The innovations are not useful to anyone except large firms as they largely concern capturing the externalities of their own development and so free riders are not a significant problem.

These comments relative to MPCs probably apply to other developments also, especially industrial estates and, in particular, ones that attempt to best associate land uses so as to best add value as in industrial ecology.

Power and Influence

Large oligopolistic development firms have greater power and influence to use to their advantage and to the detriment of smaller competitors. They:

- Participate more in participatory planning processes and are better represented in industry organizations (Darlow & Carter, 1996);
- Can have a stronger influence on policy, especially land release policy (type of parcels, location etc.); and
- Can influence industry standards to keep out potential rivals. (In the camera
 film market Kodak had effective control over industry standards making entry
 difficult for new firms and/or making the entrant's products incompatible;
 Shepherd, 1997, p. 295). The raising of entry barriers in development could be
 facilitated by growing collaboration between planning and development
 interests such as in professional organizations like the UDIA (Urban
 Development Institute of Australia).

The development industry has already been shown to influence planning in other ways: many of the practices that are now considered good planning were earlier worked out on the ground by 'good' developers (Weiss, 1987). The literature also provides examples of how very large-scale developers and corporations have had enormous power over local communities and governments. The Disney Corporation in Florida virtually set up its own government and labour laws (Foglesong, 2001). Wadley (2004, p. 181) reveals the role of central governments—sometimes enlisted by the developers—in circumventing or

overriding local authorities to favour and promote large-scale development projects via various means: enterprise zones, special statutes, special development authorities and so on; Searle and Cardew (2000) provide specific Australian examples. Ironically, if oligopolistic industries generate higher property prices the industry may blame these on planning and so use them as weapons in the struggle for changing regulation in a way that facilitates further concentration.

How concentration affects corruption is also a serious challenging question. Certainly corruption has much to do with the culture of public authorities but it will also be influenced by the nature of the developers. Perhaps larger, better-resourced firms would be more likely to use their greater resources to corruptively influence political decisions as they are more likely to benefit from the decisions because they have greater market share. In a competitive industry, firms might still have an incentive to bribe to gain some locally circumscribed advantage but the sums involved would be limited and the overall impact on urban form and structure small.

An industry arguably does not have to be very concentrated before it can begin to significantly influence policy. Development is a high value industry where large profits and betterment gains are to be made. Even in a moderately concentrated industry a small number of developers getting together could muster significant influence and resources, while a modest increase in concentration can produce a number of considerably powerful players. Presently in parts of Australia developers seem to be emerging unexpectedly quickly as a very significant and growing force in the funding of political parties with some not particularly prominent developers being capable of making donations in the order of hundreds of thousands of dollars around election times (Corkhill, 2005; McDonald & Larsen, 2003). What might appear to be very incremental changes in industry concentration could have disproportionately significant impacts on the ability to muster resources, to lobby and otherwise attempt to influence policy. In addition, lobby groups have substantial resources for research and lobbying. These include the resources of the firms involved, who are sometimes organized into teams to lobby specific issues as well as the membership fees and many events fees.⁵

Purpose and Focus of Regulation

A highly concentrated industry could engender a shift in the purpose and focus of planning/regulation.

The regulation of development by public authorities is an activity that is necessary to the efficient operation of development industries and so is generally supported by the industry. It can help decrease uncertainty and to regulate the problem of externalities thereby creating value for developers (Coiacetto, 2000; Dawkins, 1996, 1997). Moreover, planning is useful to large-scale players because it can be influenced in ways that help raise barriers or costs to competitors and potential competitors. However, the need for public planning should diminish as industry concentrates (and as neoliberalism dominates policy; Wadley, 2004) and so could lose support amongst developers. In other words, when development in a planning jurisdiction (i.e. the area in which the key legislation is framed) is dominated by one or just a few large players, doing away with the separate public

authority that sets the rules may become an option: developers can set up their own rules. This means the replacement of public sector planning by privatized forms of planning, which experience shows (Dawkins, 1997) are likely to be more rigorous than any public sector planning. Large private sector developments can sideline, privatize and internalize public planning functions (Dawkins, 1997). Even by 1994 in the USA Knox had recognized that many new developments require membership of community management associations that constitute 'a web of servitude regimes that regulate land use and mediate community affairs in what often amounts to a form of contracted fascism' (1994, p. 170).

It is conceivable that such changes and impacts could stimulate interest or pressure to reorient the purpose of public regulation away from the control of development proposals and project through strategic planning, development control and assessment, towards a watchdog role over activities like collusion and pricing. What kinds of organizational structure and power would be required to do this, and whether it would even be feasible to achieve these goals are important questions that exceed the scope of this article. The danger too is that that once these impacts are widely acknowledged, it may be too late to take effective action.

Urban Structure

In a competitive development industry, individual developers have little power to influence the form and structure of urban development except through geographically small-scale monopoly power. Planners have a relative degree of influence over where and how development occurs but the problem for planners is the resource intensive task of coordinating many small developments.

While Rudin (1978) suggested that larger-scale developers and a more concentrated industry might produce a more orderly path of development since large firms can acquire large amounts of contiguous land well ahead of the need to develop it and thus avoid wasteful leapfrogging, I have already argued this may not be the case. Moreover, an industry dominated by large-scale developers may create an urban structure dominated by MPCs and by the exigencies of their producers' needs. Their developers seek out large, cheap sites in simple ownership wherein they can capture their own externalities. They might have no incentive to locate close to other urban areas or MPCs and are in a powerful position relative to regulators to ensure the development occurs where they prefer.

MPCs appeal to some planners because they integrate a variety of land uses but this is not unproblematic. MPC developers seek to attract services and facilities that add value to their development (say, schools or police), which may leave external locations underserviced. They may prefer to exclude land uses and services, notably industrial property, that might be needed, but are not desirable because they do not add value to their development. The problem then becomes where, how and by whom such land uses and services get provided.

Concentration may also affect the housing choice and affordability range. Rudin (1978) found that the mix of houses in Toronto did not appear to be greatly affected by increased concentration in what he called the residential development industry⁶ because large developers are diversified and have the managerial

capacity to respond to market swings. Large residential estates must target more than one residential submarket to achieve adequate sales (Ball, 1983; Coiacetto, forthcoming) and their developers experiment to find new products for new markets or small niche markets (Coiacetto, forthcoming). Nevertheless, it is hard to see that they cater any better for the poorer markets than do competitive industries, or moreover, that in the long run a concentrated industry would need to focus on anything less than only the most lucrative submarkets.

A concentrated industry can alter the path of urbanization in an area (Rudin, 1978) but the outcome might not be desirable: edgeless cities with large separated, dispersed developments. It is also possible to envisage a national industry dominated by a few firms, each with regional branches each offering a similar array of products in a similar way to which shopping centre owners (e.g. Westfield in Australia) dominate regions with each shopping centre offering a very similar array of stores regardless of its location. Local development would be dominated by regional branches of national firms with a likely outcome being greater standardization of development products. Some empirical evidence supports the view that concentration in the housebuilding industry has created more standardization of housing types and restricted consumer choice (Nicol & Hooper, 1999).

Other adverse impacts on urban outcomes of growing firms' size may include:

- Greater travel and transport costs due to the spatial separation and arrangement
 of such communities in space linking nucleated centres leading to the need for
 linking roads and freeways;
- Greater costs of infrastructure to link and or service these; and
- Privatization of public space—parks, amenity, quality of environment by (a) enclosure, as in gated communities or (b) separation and distancing from other elements of the community as in MPCs.

Sustainability

Keeping and Shiers (2004) identify four areas of relevance to sustainable development. With the addition of the socioeconomic dimension of affordability, this provides a simple, convenient (but not definitive) framework:

- The location of property—including greenfield and brownfield development as well mixed-use developments;
- 2. Contamination: dealing with polluted land;
- 3. Green property: the design of buildings that have lower environmental impact;
- 4. Procurement: sustainability and the (UK) construction industry; and
- Affordability.

Both concentrated and competitive industry structures pose opportunities and constraints for sustainable development (Table 5). Much of the preceding discussion on industry performance is relevant to sustainability and so is not repeated here. However, a key point is that diversity and competitiveness is necessary to be able to respond to a variety of development opportunities since

TABLE 5. Implications of development industry structures for sustainable urban development

	Competitive/monopolis	Competitive/monopolistic competitive industry	Oligopolistic/monopolistic industry	opolistic industry
	Factors promoting sustainability	Factors demoting sustainability	Factors promoting sustainability	Factors demoting sustainability
Location	Planners have more influence over location of development. A diverse and competitive industry means more efficient use of land resources with more likelihood of small and marginal sites being developed.	Needs more resources and attention by planners to coordinate the actions of numerous firms. Harder to predict timing and nature of development of individual sites and to coordinate infrastructure.	Developers offer communities benefits to get approval for out of sequence developments. Planners may prefer to deal with established, large developers.	Firms seek large sites in simple ownership and have more power relative to planners to choose location—leads to unsequenced development and undesirable land use pattern.
Location: mixed-use and/or co-location of uses	More innovative industry with more risk takers at industry margins.	Onus is on planners to attempt to influence/ coordinate activities of numerous small developers to achieve mixture of uses.	Large developments can mix uses. Residential developers must target multiple submarkets.	The greater the firms' market dominance the less they need to target markets they perceive as risky and the weaker is consumer power.
Contamination	A diverse industry is more responsive to such issues. Firms get geared up to work in particular submarkets and switching costs may prevent switch to new fields. Competitive firms have more incentive to work in	Small players may be averse to involvement in contaminated sites due to small margins for error in impact of risk on their operations.	Larger and more established organizations may have the resources to commit to long-term projects.	Some firms are not organizationally structured to deal with issues such as brownfield and contaminated site development. Dominant or tightly oligopolistic firms have less incentive to develop marginal sites.

(continued)

TABLE 5. (Continued)

	Competitive/monopolis	Competitive/monopolistic competitive industry	Oligopolistic/monopolistic industry	polistic industry
	Factors promoting sustainability	Factors demoting sustainability	Factors promoting sustainability	Factors demoting sustainability
	marginal sites and projects.			
Design	Small firms more likely to innovate.	Some firms may be adverse to risk in competitive markets.	More opportunities and resources to invest in design.	Firm may lose incentive if dominant.
Procurement: processes, methods and materials used in development	Competition may lead smaller firms to experiment and search for niches where their innovations may work. Planners have to take control to influence industry-wide changes. Coordination is difficult but power is with regulators.	Individual firms have little or no power to influence processes and materials for greater sustainability.	Large firms can reduce procurement costs, have a stronger bargaining position with suppliers and can influence how they do their work.	Power is on the firm's side. May have no interest in more sustainable methods, processes and materials in development.
Cost and/or affordability	More efficient markets. Less power to affect supply.	Waste as firms squeezed out in downturns. Supply is difficult to predict.	Scale economies reduce costs.	Greater market power and influence over industry output levels.

each site and opportunity poses a unique set of conditions and problems. Without this, less desirable parcels are likely to be overleapt. Some firms are simply not organized or equipped to develop particular types of sites such as brownfield and contaminated. While larger and more established organizations may have the resources to commit to long-term projects, oligopolists need not bother competing in more marginal and risky sites, locations, projects and submarkets. Firms become intellectually and structurally geared up to work in particular types of development such as MPCs and may not need to move into new development types. In a more competitive industry there is the greater incentive to some to work in higher risk areas. Working in brownfield sites, for example, means that private costs increase and are more uncertain for the developer, so if the choice exists, oligopolists may just choose to stay in markets suited to sites where costs are relatively easy to predict.

In sum, although there are benefits and costs of both competitive and monopolistic industries, the latter seem to pose the greater problems. The problems associated with small firms centre more on the problems of coordinating the actions of many small players, which is a natural *and achievable* role of planning. The issues surrounding monopolistic industries concern matters of power, which is a tougher problem to deal with: 'Power is to planners as profit is to developers—the means of survival' (Wadley, 2004, p. 181).

Conclusions

Although the nature of development makes it difficult to empirically test, a concentrated industry may be characterized, *inter alia*, by:

- 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.

The form and structure of urban development will change in complex ways as cities are shaped by the imperative of large development corporations. Such changes 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, increased difficulties and costs of providing infrastructure and developments that do not attract necessary services and land uses because they do not add value to the development.

In combination, these and other changes suggest a concentrated industry has impacts for sustainability. It is true 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. Concentrated industries pose a more insurmountable obstacle, power, which once surrendered could be irretrievable.

Maintaining industry competitiveness should be a legitimate and important function of public sector planning while striving to achieve other planning goals. This imperative applies beyond local authorities to include the multiple agencies which influence planning policy and standards. Given that planning helps to concentrate industry there may be avenues for planning interventions to promote competition by addressing:

- Development standards and the complexity of planning process;
- The land allocation process including a more active role for public land agencies;
- Information supply to help firms make more informed decisions about entry and exit to the industry; and
- Capacity building for all players, especially for small-scale infrequent players (not just alignment with 'good' developers; Wadley, 2004, p. 189).

In conclusion, industry structure is important and planners must take action now to ensure development remains competitive. The quotes presented in Table 2 showed that concentration in some industries has important, sometimes unexpected, impacts and so research is important to gain a better understanding of what these might be in development. Moreover, if planners do not take action now, we may witness future press articles like the following one, possibly not be as outlandish as it first seems, from the imaginary 'The Last Independent E-paper', 8 November 2023, 'World Town Planning Day Commemoration Supplement':

'Excessive, and un-Australian' is how one prospective buyer described the rules and regulations set up by the planners for the Advance Australia Development Corporation on all their master planned estates across the country. 'They tell you what age you have to be, how much noise your kids can make, how many kids you can have and where they can go, when you can cook and how you can wear your hair and what's more is you don't have any choice since they are the sole developer of housing and land anywhere around the city. They have priced us right out of the market. You can't get a home now unless you have the right colour, the right income, the right car, the right career'. Mr. Green joined a growing chorus of voices including builders, retail traders, the education department, building owners and managers calling for reform to break the monopoly Advance Australia has on new development and land release. 'They've set up the rules so that no one else can develop. That's bad for the environment, for homebuyers and for everything except their profits' Mr Green said.

Unemployed former planning academic Clifton Holmes said 'we had to shut down our planning school because the only jobs left for planners are in inventing more rigid rules and regulations that make residential estates more high value and profitable for the developer. You don't need a planning degree to do that!' When pressed to say what it does take, Professor Holmes said 'one lawyer and a laptop; for the whole country, that is! Planners used to look after the public interest, but there are only corporate interests now. And you can see the balkanised⁷ mess they've made of what we once called 'cities'. I wish we planners had done something when we still could'.

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Notes

- 1. Within industrial economics the alternative and competing paradigm, which emerged later, is the Chicago school. It adopts an ideological stance that industrial organization and monopoly are not issues and so is mostly theoretical, there is little empirical work and policy is not of central concern. The present article is within, and adopts the concepts and terminology of, the structure conduct performance framework.
- 2. The authors estimated the cost of regulation on a on the cost of a typical building of \$236,000 to be 16% or \$38,000 and of this about \$9,500 is considered excessive or due to regulation that is unwarranted.
- 3. This is not necessarily undesirable from an urban development and planning perspective.
- 4. This can also happen where public land agencies release land to private developers. For example, according to their website (http://www.lda.act.gov.au/business_opportunities/index.html), the Australian Capital Territory Land Development Agency current (2006) criteria 'include the tenderers' familiarity with the latest thinking and practice in urban design and construction'.
- The UDIA (Queensland), in 2005 set membership at \$6,358 for major developers and \$1,056 to \$1,914 for other firms depending on output.
- 6. More accurately, the housebuilding industry.
- 7. Gleeson (2004, p. 320).

References

- Ball, M. (1983) Housing Policy and Economic Power: The Political Economy of Owner Occupation (London, Methuen).
- Ball, M. (2003) Markets and the structure of the housebuilding industry: An international perspective, *Urban Studies*, 40(5–6), pp. 897–916.
- Ball, M. (2006) Markets and Institutions in Real Estate and Construction (London, Routledge).
- Butterly, N. (2005, 3 February) New cartel penalties include jail, *The Courier Mail*, p. 7.
- Coiacetto, E. (2000) Planning-in-practice and planning-in-principle: Is planning facilitative of the real estate development process?, *Australian Planner*, 37(3), pp. 120–129.
- Coiacetto, E. (2001) Diversity in real estate developer behaviour: A case for research, Urban Policy and Research, 19(1), pp. 43-59.
- Coiacetto, E. (2005) Real estate development industry structure: Shape and shapers, in: C. Star (Ed.) Conference Proceedings (Refereed) Ecopolitics XVI: Transforming Governance for the 21st Century, pp. 139–174 (Griffith University, Brisbane, Australia/Ecopolitics Association of Australasia/Centre for Governance and Public Policy).

- Coiacetto, E. (forthcoming) Residential sub-market targeting by developers in Brisbane, *Urban Policy and Research*
- Corkhill, M. (2005, 12-13 March) Developing a big influence, The Courier Mail, p. 30.
- Darlow, A. & Carter, N. (1996) The involvement of developers in Local Agenda 21, in: Y. Rydin (Ed.) The Environmental Impact of Land and Property Management, pp. 35-49 (Chichester, Wiley).
- Dawkins, J. (1996) In praise of regulation. Australian Planner, 33(1), pp. 10-15.
- Dawkins, J. (1997) Public and private regulation of large projects in the US, *Sydney Vision, UTS Papers in Planning* (Sydney, Faculty of Design, Architecture and Building, University of Technology).
- Foglesong, R. E. (2001) Married to the Mouse: Walt Disney World and Orlando (New Haven/London, Yale University Press).
- Galster, G. (1996) William Grigsby and the analysis of housing sub-markets and filtering, *Urban Studies*, 33(10), pp. 1797–1805.
- Ganderton, P. (1994). Modelling the land conversion process—a realist perspective. *Environment and Planning A*, 26(5), pp. 803–819.
- Garmaise, M. J. & Moskowitz, T. J. (2006) Bank mergers and crime: The real and social effects of credit market competition, *Journal of Finance*, 61(2), pp. 495–538.
- Gibb, K. (1999) Regional differentiation and the Scottish private housebuilding sector, *Housing Studies*, 14(1), pp. 43–56.
- Gleeson, B. (2004). Deprogramming planning: Collaboration and inclusion in new urban development, *Urban Policy and Research*, 22(3), pp. 315–322.
- Gleeson, B. & Coiacetto, E. (2005) Public land agencies in Australia: The key to positive planning?, *Urban Research Program Research Paper 5* (Brisbane, Urban Research Program, Griffith University).
- Gore, T. & Nicholson, D. (1991) Models of the land-development process: A critical review, *Environment and Planning A*, 23(5), pp. 705 730.
- Hargroves, K. C. & Smith, M. H. (Eds) (2005) The Natural Advantage of Nations: Business Opportunities, Innovation and Governance in the 21st Century (London: Earthscan).
- Healey, P. (1991) Models of the development process: A review, *Journal of Property Research*, 8(3), pp. 219–238.
- Healey, P. (1992) An institutional model of the development process, *Journal of Property Research*, 9(1), pp. 33-44.
- Healey, P. (1998) Regulating property development and the capacity of the development industry, *Journal of Property Research*, 15(3), pp. 211–227.
- Jay, C. (2004, 3 September) Growers plant seeds of discontent, Australian Financial Review, p. 62.
- Jimenez, K. (2005, 23-24 April) Supermarkets turn screw with own brands, The Courier Mail, p. 3.
- Keeping, M. & Shiers, D. E. (2004) Sustainable Property Development: A Guide to Real Estate and the Environment (Oxford, Blackwell Science).
- Knox, P. (1994) The stealthy tyranny of community spaces, Environment and Planning A, 26(2), pp. 170–173.
 Leitner, H. (1994) Capital markets, the development industry, and urban office market dynamics: Rethinking building cycles, Environment and Planning A, 26(5), pp. 79–802.
- Logan, J. (1993) Cycles and trends in the globalization of real estate, in: P. L. Knox (Ed.) *The Restless Urban Landscape*, pp. 35–54 (Englewood Cliffs, NJ, Prentice Hall).
- Lorimer, J. (1978) The sweetest game in the country, Canadian Business, 51(11), p. 71.
- Luger, M. & Temkin, K. (2000) Red Tape and Housing Costs: How Regulation Affects New Residential Development, (New Brunswick, NJ, Center for Urban Policy Research).
- Martin, S. (1994) Industrial Economics: Economic Analysis and Public Policy, 2nd ed. (New York: Macmillan).
- McDonald, S. & Larsen, L. (2003) Ocean Views [Television], Four Corners, ABC Television.
- Neilson, L. (1976) Developers as conservative decision-makers, in: J. C. McMaster & G. R. Webb (Eds) *Australian Urban Economics: A reader*, pp. 151 173 (Sydney, Australia and New Zealand Book Company).
- Nicol, C. & Hooper, A. (1999) Contemporary change and the housebuilding industry: Concentration and standardisation in production, *Housing Studies*, 14(1), pp. 57–76.
- Ong, S. E., Cheng, F. J., Boon, B. & Sing, T. F. (2003) Oligopolistic bidding and pricing in real estate development: Experimental evidence, *Journal of Property Investment and Finance*, 21(2), pp. 154–189.
- Rudin, J. R. (1978) The changing structure of the land development industry in the Toronto area, *Major Report 13* (Toronto, Centre for Urban and Community Studies, University of Toronto).
- Searle, G. & Cardew, R. (2000) Planning, economic development and the spatial outcomes of market liberalisation, *Urban Policy and Research*, 18(3), pp. 355–376.

Shepherd, W. S. (1997) *The Economics of Industrial Organisation*, 4th ed. (Prospect Heights, IL, Wavell). Spencer, V. (2004, 13 August) Shopper's stand, *Townsville Bulletin*, pp. 1, 8.

Trott, P. (2004, 23 September) Dairy farmers unite to raise prices, The West Australian, p. 45.

Wadley, D. (2004) Good development, better planning: The nexus revisited, *Planning Practice and Research*, 19(2), pp. 173 – 193.

Weiss, M. A. (1987) The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning (New York, New York University Press).

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