The Corporate Geography of Australian Cities:
Tracking change in ASX-Listed Firm Headquarters in Australian Cities, 2013-2016

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Abstract: The geography of firm location is a longstanding focus in urban studies. While industrial urbanism created a clear urban-suburban dichotomy, post-industrial urban landscapes appear more nuanced and complex. This paper examines the distribution of Australian Securities Exchange (ASX) listed headquarters in Australian cities. It focuses on change in the distribution of firm locations between 2013 and 2016 by sector, with a lens on the differences within and between Australia’s five largest cities. Findings indicate that the number of listed firm headquarters diminished overall, and that declining activity in the resources sector was primarily responsible. Cities in which mining and energy play a key role, particularly Perth, experienced the greatest headquarters losses, while Melbourne was the only city to gain firm headquarters over the three-year interval. On a more local scale, central business districts (CBDs) lost firm activity across all cities, while suburbs gained firm headquarters, particularly inner-ring suburbs adjacent to CBDs. This change was led in particular by the health care and information technology sectors, which exhibited the greatest gains. These broad changes indicate a shift to the knowledge economy across cities in which central and CBD-fringe locations are desirable from a firm perspective due to proximity to related firms and institutions, and also to high-skill labour forces, as a more detailed look at the intra-metropolitan geographies reveals.

Key words: Urban Geography; Economic Geography; Firm Location; Central Business District; Comparative Urbanism
Introduction

The distribution of firm location is widely studied within urban studies and geography to better inform understandings of economic change and urban structure (Lang et al., 2009; Hartshorn and Muller, 1989; Taylor et al., 2002). On an inter-urban level, the distribution of firm headquarters reveals both the magnitude and influence of the corporate landscape, particularly through change over time (Csomós, 2017). Cities with a robust corporate landscape are distinguished from those in which there are one or two dominate firms or institutions, as may be the case in state-led economies, or where an economy is based on a single resource. Furthermore, specialisation in one sector, or several complementary ones, has been analysed from an agglomeration perspective (Fujita and Thisse, 2013; Quigley, 1998), with firm ‘proximity’ understood to play a pivotal role in a corporate ecosystem (Boschma, 2005).

The distribution of firms in Australian cities has been explored from numerous perspectives, including through network analysis of inter-urban relations (Martinus and Sigler, 2017); ‘Global City’ formation (Searle, 1996); and, the metropolitan distributions of sectoral activities (Sigler et al., 2016; Tonts and Taylor, 2013), particularly the knowledge economy (Yigitcanlar, 2010), manufacturing (Logan, 1966), and resources (Martinus et al., 2015). This paper takes a fresh look at recent changes in the economies of Australian cities by analysing the changing firm geographies of Adelaide, Brisbane, Melbourne, Perth, and Sydney. By observing trends in the shifting sectoral mix within and between these cities, we can better understand how macroeconomic changes impact urban landscapes concretely, and how these unfold in urban space.

The paper is structured as follows. First it gives a brief background in how firm geographies have been approached to date. It then provides information on the datasets that were collected and used, and the methods of analysis. It follows with an overview of sectoral change in cities over the three year period of 2013-2016 before focussing on the local distributional changes in Australia’s five largest metropolitan areas. It concludes by summarising the main findings tied to modest decentralisation and changes tied largely to industry-based factors.

The Firm Geography of Cities

The study of firm location within and between cities has been approached from a number of angles. The growth and development of the modern central business district (CBD) in the late 19th and early 20th centuries catalysed interest in the distribution of firms within ‘downtowns’ (Murphy, 1971). This was largely carried out in descriptive terms, with the mix of firms and industries serving as a proxy for commercial activities clustering as the modern city emerged. From the 1970s onward, work on the distribution of firms, at least in the Anglo-American context (which largely conforms to patterns observed in Australia), focussed on suburbanisation and dispersal, most significantly work on ‘edge cities’ (Garreau, 1991). The decanting of offices to office parks and peri-urban locations was driven in large part by residential suburbanisation, automobility, and the related construction of arterial highways and other infrastructures.

As urban geographies were transformed by mass suburbanisation, the global distribution of firms was affected by globalisation and its concomitant processes of outsourcing and offshoring. The global balance of power was thus re jigged from the 1990s onward to conform to the new economic logics of deregulation and neo-liberalisation. Power in certain industries, particularly advanced producer services, was consolidated in a handful of urban centres, known in some literatures as ‘Global Cities’ or ‘World Cities’ (Sassen, 1991). Manufacturing in particular was shunted from the global North to the global South as transportation costs sank, protective tariffs were lifted, and digital telecommunications facilitated transnational production. Thus, firms branched out widely, and the multinational firm became a key object of inquiry in urban and economic research (Beaverstock et al., 2000). This novel distribution of firms between cities became increasingly interesting to those exploring change from a comparative perspective (Shearmur and Coffey, 2002), particularly national economic systems that morphed into globalised production networks.

The study of firms to understand trends in the transformation of urban space is thus well established. In the Australian context, the primary focus has been on changes within cities as manufacturing activities have been either suburbanised or offshored from inner-city suburbs. Using the case study of Melbourne as an example, Watkins (2014) concludes that there are fundamentally two distinct patterns of spatial reorganisation of the urban economy. The first is characterised by co-location with residential populations, primarily consumer-oriented goods and services. The second consists of
industries that are historically centralised, and have continued to locate in and around central business districts (CBDs). This includes advanced services such as finance & insurance, and property & business services, but also utilities such as electricity, gas, & water, and industries that require access to regulators and clients, such as accountancy, administration, and research. Given the importance of resources to the Australian economy, mining and energy firms fall within this latter category.

Data and Methods

Two complete sets of firms listed on the Australian Securities Exchange (ASX) were used in this analysis—one from mid-2013 and another in mid-2016. Lists were drawn from the ASX database and initially included all listed firms. For the purposes of this analysis, firms headquartered outside Australia were eliminated, and for the metropolitan-level analysis only corporate locations inside Australia’s Greater Capital City Statistical Areas (GCCSAs) were included. Firms that were not actively traded were also eliminated. While the ASX provides a complete list of domestically listed Australian firms, it also harbours a number of deficiencies that are worth noting. Most importantly, it does not include the myriad privately listed firms. It also does not include multinational firms operating in Australia and listed elsewhere, nor does it include joint venture or subsidiary information. Nonetheless, given that more than 2000 firms are registered on the ASX, many of which are Australia’s leading firms across industries and sectors, the ASX provides the advantage of standardised corporate data, conforming to the exchange’s stringent conditions for listing. This includes ongoing reporting on financial data and operations information.

For comparative analysis, it provides a data set that can be analysed over time by firm, sector, industry, or in aggregate form. Firm headquarter locations were recorded as addresses and geocoded to discrete points, and then matched to statistical area level two (SA2) units. Point data contained information on firm location, market capitalisation, listing code, sector, and industry. Sector and industry data were recorded in the ASX database according to the Global Industry Classification Standard (GICS), arguably the most prominent of the various industrial taxonomies used to classify firm data. Broad patterns were observed by tracking changes in GICS sectors over the three year interval. This was performed on both a large scale to analyse sectoral changes, as well as on a metropolitan scale to draw attention to the nuances of the spatial distribution of headquarters within cities. Figure 1 provides an overview of ASX firm headquarters in Australia, conforming to the patterns previously established in (Author, 2013).

**Figure 1. Distribution of ASX Headquarters in Australia by Sector (2016)**

![Figure 1. Distribution of ASX Headquarters in Australia by Sector (2016)](image-url)
The overall pattern of ASX headquarters is quite strongly centralised within the five major capital cities in this analysis. Other cities with significant numbers of firm locations were Canberra and the Gold Coast, as well as regional cities in Victoria (Bendigo, Ballarat), New South Wales (Newcastle, Wollongong), and elsewhere.

**Sectoral Change in Australian Cities**

The period between 2013 and 2016 brought significant changes upon the Australian economy. Though gross domestic product (GDP) growth remained positive over this period, there were changes in industry wealth across the country being shaped by the health of two industry sectors (ABS, 2010; Priestley, 2010). First was slow global recovery of the financial industry after the global financial crisis (GFC) of 2008/09 which had particularly impacted the financial centres of Sydney and Melbourne. Second was resource demand, largely from China, which drove the resource economies of Perth and Brisbane, and had secondary implications on Australia’s financial centres given their strong domestic role in the financialisation of resources (cf. Martinus and Sigler, 2017). Indeed, compared to many other nations, the Australian economy fared relatively well overall during and after the GFC with financial industry impacts balanced by a buoyant resources sector (RBA, 2017). Nonetheless, the mostly Asia-based demand for Australian resource exports slowed by 2013, and the 2013-2016 period saw business investment as share of nominal GDP decline substantially with large drops in mining related engineering, machinery and equipment, and employment and participation rates fall to pre-boom 2004/05 rates (RBA, 2017).

Thus, while overall the Australian economy was healthy, the interval under analysis was largely characterised by less prosperity than the preceding years. Resources accounted for over 40% of Australian exports in 2015/16. Iron ore continued to be Australia’s number one export accounting for more than 15% of total exports, and oil & gas for another 7% (Thirlwell, 2017). However, drops in global commodity prices weighed heavily on domestic firms in the energy and materials sectors. Business investment in mining dropped from more than 50% of the national total in 2013/14 to approximately 34% in 2015/16 (Reserve Bank of Australia, 2017). This was in part due to a fall in iron ore prices from its high of over $180USD per metric tonne in 2011 to a nadir of $40 in 2016 (Trading Economics, 2017), while Brent Crude (a major trading classification for oil) fell from close to $120USD per barrel to less than $50USD for these same years (Macrotrends, 2017). Further compounding these falls in commodity prices was a drop-off in capital expenditures (capex) in large-scale projects, including Wheatstone and Gorgon Projects in Western Australia and Santos GLNG in Queensland, as construction phases drew to a close and shifted to production in 2016 (JTSI, 2016; Santos GLNG, 2016). Thus, while the large companies such as Chevron, BHP Billiton, Rio Tinto and Santos began to recoup earlier capital outlays of the construction phase, many smaller (junior) firms supporting capex and pre-capex activities (e.g. surveying, exploration) were heavily squeezed or eliminated altogether (Rose, 2015). And while much of this activity was fundamentally remote/regional in orientation, the command and control economies of the major Australian cities were likewise affected, as the analysis that follows shows.

Table 1 details the changes in the composition of sectors by GCCSA over the 2013-2016 interval. The total number of firm headquarters in Australia’s five largest GCCSAs declined by 8% from 1783 to 1640. Leading this decline was a decrease of headquarters in the materials sector, which lost 117 firms. While some of these firms simply renamed or reincorporated, others were subject to private equity buyouts, mergers, acquisitions, or put into administration. Further declines were observed in energy, reflecting much of the industry’s orientation toward oil & gas and coal, and in financials and industrials. Firm losses were observed in every GCCSA except for Melbourne, which gained modestly due in large part to its large information technology sector. Perth lost 98 headquarter locations, attributable primarily to the large number of firms in the materials and energy sectors. These two industries in Perth alone accounted for more than half the ASX headquarters losses.

| Table 1. Distribution of ASX Headquarters Sector and GCCSA, 2013-2016 |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                             | Adelaide                   | Brisbane                   | Melbourne                  | Perth                       | Sydney                      | Metro Total                 | Change                     |
| Consumer Discretionary      | 4    | 1    | 17   | 18   | 34   | 40   | 20   | 21   | 50   | 53   | 125  | 133  | 8    |          |
| Consumer Staples            | 3    | 3    | 2    | 3    | 6    | 13   | 13   | 13   | 9    | 9    | 33   | 41   | 8    |          |
Although the resources sector was contracting, gains were observed in a number of industries. Information technology gained 49% more firm headquarters over this interval, as did health care—attributable undoubtedly to an ageing national population.

**Change in Firm Headquarters by City**

There was substantial variation in the number and distribution of firms on a metropolitan scale. This section details the patterns within Australia’s five largest GCCSAs of Adelaide, Brisbane, Melbourne, Perth and Sydney. Overwhelmingly, firm headquarters remained tightly bound within inner metropolitan regions, with 1324, or 81%, located within the inner five kilometres in these five. Firm clustering in and around CBDs has been repeatedly attributable to the historical development of each city around its port or colonial commercial node, and subsequent transportation investment and planning that both physically and discursively created the CBD-centric metropolis (authors, forthcoming).
Adelaide

The GCCSA containing the South Australian capital city has a total of 58 firm headquarters. The most significant sector is materials (24), followed by energy (10), health care (6), and information technology (6). Adelaide is perhaps the most centralised of the major cities, with more than half of headquarters (30) located in the central SA2 (Adelaide). Outside the CBD, Toorak Gardens (7) and Goodwood - Millswood (4) were home to the majority, reflecting the south-easterly orientation of the city’s more affluent suburbs and their resident labour force.

Change in Adelaide was less profound than elsewhere, reflecting the relatively small number of overall ASX firms, and the well-established nature of the local corporate landscape tied to the South Australian economy, particularly around materials and energy. Santos and Beach Energy are the largest such firm, having its origins in the state’s petroleum reserves. A number of smaller resources firms involved in a mixture of mining activities dropped off the list, the largest being Western Desert Resources whose demise was attributable to a drop in the price of iron ore.

The overall pattern of change in Adelaide was a modest reduction in the number of firm headquarters in the CBD and immediate surrounds, and a slight increase in the nearby SA2s of Unley – Parkside and Payneham – Felixstow. Figure 2 details these changes.

Figure 2. Distribution of ASX Headquarters in Adelaide and Relative Change by SA2 (2013-2016)
**Brisbane**

The Brisbane GCCSA contains 139 firms, primarily in materials (39), industrials (21), and energy (18). These are largely contained within the inner SA2s of Brisbane City (56), Spring Hill (10), Fortitude Valley (9), Paddington (9), and Milton (9). This reflects Brisbane’s historical commercial orientation toward the Brisbane River, which served as the main commercial artery for more than a century, and a skew toward specific inner suburbs north of the river, which was traditionally the more white-collar of the two sides. Within the CBD, the ‘Golden Triangle’ along Eagle Street houses the majority of firms. More recent developments, particularly the rezoning of adjacent precincts has led to the decanting of firm activities to the CBD-fringe (Sigler et al., 2015), which offer greater proximity to ‘lifestyle’ amenity and new floorplan layouts as part of mixed-use projects (JLL, 2014). Further groupings of firm headquarters can be observed outside the city centre in industrial zones such as Murarrie, Rocklea – Acacia Ridge, and Seventeen Mile Rocks – Sinnamon Park.

As Brisbane’s economy is strongly tied to the resources sector, change was marked by declines in firm headquarters in materials (5) and energy (5), and to a lesser degree financials and industrials. The largest losses were of firms in the copper, gas, and coal sectors, commodities that all sank in value over the three-year interval. This decline in resource-based headquarters was somewhat compensated for by gains in information technology (7) and real estate (2). The gain in information technology represents a doubling of Brisbane’s firms, several of which are telecommunications providers of bandwidth services.

As elsewhere, firms appear to have left the CBD in favour of surrounding precincts such as Spring Hill and Fortitude Valley. New commercial property ventures in these areas as well as recent infrastructural investments such as the Airport Link tunnel and residential developments in Newstead and Hamilton may be responsible for drawing firms to slightly more suburban locations to the east of the CBD.

**Figure 3. Distribution of ASX Headquarters in Brisbane and Relative Change by SA2 (2013-2016)**
Melbourne

The Melbourne GCCSA has a broad range of firm headquarters (308) across sectors, primarily in health care (55), materials (53), information technology (44), and consumer discretionary (40). The sectoral distribution in Melbourne reflects its historically strong commercial role, borne out of its colonial linkages and later its position as the first national capital (Authors, forthcoming). Many of its largest firms emerged from formerly state-owned or state-related industries, such as National Australia Bank (NAB), Telstra, CSL Limited, and Medibank. Others are large ‘legacy’ firms, whose position in Melbourne is tied to the city’s history; these include BHP Billiton (the world’s largest mining company), Rio Tinto, and ANZ Bank.

Melbourne’s gridded CBD is central to many firm operations, with 115 headquarters in the Melbourne SA2, followed by the adjacent precincts of Albert Park (17), South Melbourne (16), Southbank (14), Richmond (11), and St Kilda (11). The southerly and easterly orientation of Melbourne’s firm headquarters reflects the city’s historical development, with the eastern suburbs offering higher social status and amenity, and seaside suburbs to the southeast. Apart from these SA2s, there are no suburbs with significant numbers of firm headquarters (>4), reflecting a dispersal of a range of more suburbanised industries, yet a sustained south-easterly orientation toward Dandenong, Brighton, and Hawthorn.

Melbourne was the only major Australian city to increase its number of firm headquarters. This is in large part the case due to a diminished role for resources, at least when compared to other major cities, as well as a greater orientation toward advanced services such as information technology and health care. Furthermore, the corporate landscape of Melbourne is dominated by large firms, with only a limited number of the small resources firms found elsewhere. The CBD lost 10 headquarters over the three-year interval, with commensurate gains in prestige suburbs to the south and east. Further gains were experienced in the consumer staples industry, with a number of food & beverage producers emerging in outer suburban areas such as Dandenong and Whittlesea.

Figure 4. Distribution of ASX Headquarters in Melbourne and Relative Change by SA2 (2013-2016)
Perth

The Perth GCCSA has more ASX firms than any other (652), reflecting the presence of many smaller firms, particularly junior miners in the resources sectors. With Western Australia having some of the largest known reserves of iron ore, gold and nickel, Perth is and has historically been more tied to the nation’s resources industries than other large Australian cities (Martinus and Sigler, 2017).

The mining economy of Western Australia is particularly visible in Perth’s corporate landscape, with 391 headquarters locations, primarily in Perth City (232) and the adjacent western suburbs of Subiaco – Shenton Park (63) and Nedlands – Dalkeith – Crawley (18). Though Western Australia is home to several leading mining companies such as Fortescue, South 32, and Southeast Asia Resources, it also headquarters large energy companies, notably Woodside. Other sectors are less significant in relative terms, with a few notable exceptions including Wesfarmers (parent company of Coles, Bunnings and Officeworks).

Change in Perth was quite pronounced with 78 net firm headquarters losses in materials and 19 in energy. This was to some degree offset by an increase of 14 in information technology and modest gains in other sectors. The majority of these losses were in the CBD (Perth SA2), which lost 79, and Subiaco – Shenton Park (13), as well as in adjacent districts such as Wembley – West Leederville – Glendalough (5), Como (3) and Mount Hawthorn – Leederville (3). In contrast to what was observed in other cities, outer metropolitan regions were the only SA2s to exhibit net headquarters gain, including the metropolitan’s major port and coastal tourism city of Fremantle (3) and Fremantle South (1). Thus, in Perth the overwhelming dominance of resources meant that losses were more extreme in terms of both aggregate numbers and spatial redistribution.

Figure 5. Distribution of ASX Headquarters in Perth and Relative Change by SA2 (2013-2016)
Sydney

Australia’s most populous metropolitan region has the greatest number of large firms, including 73 firms with a market capitalisation of more than $1 billion (AUD). Firms are well distributed across all sectors, with materials (98), financials (66), and industrials (59) leading in headquarters locations. The total number of headquarters (483) was second only to Perth, with significant concentrations in the CBD (270), and the adjacent SA2s of North Sydney – Lavender Bay (48), Pyrmont – Ultimo (12), St Leonard’s – Naremburn (12). The decentralisation of business activity in Sydney has been tied not only to high commercial real estate in the centre, but also to state-level planning initiatives to encourage firm location on the north side of the harbour in a string of suburbs extending to Macquarie Park—known more recently as Sydney’s ‘global arc’ (Searle, 2008). Unlike other cities, Sydney also exhibits significant firm activity outside the traditional core with the inner-west industrial belt of Homebush and Olympic Park, and suburban nodes at Chatswood, Frenchs Forest, Parramatta – Rose Hill, and Sutherland, for example.

Headquarter declines in Sydney were modest, as losses in materials (19), financials (14), real estate (8), and industrials (6) were offset by gains in information technology (15) and health care (6). Thus while this was somewhat tied to a shifting resources industry, Sydney’s role as Australia’s primary financial centre (Martinus and Sigler, 2017) also drove much of the change. Firms in financials were characterised by medium-sized firms in the diversified financials industry, many of which were in fund management.

In spatial terms, the CBD lost 26 firm offices, with modest losses in inner suburban areas such as Bondi Junction – Waverly and Pyrmont – Ultimo. The relatively modest losses in Sydney reflect the diversity of its economy outside of resources, but also its role as a budding technology hub, with many of its newish IT firms in ‘fin-tech’, and providing enterprise solutions or data services. Many of these were in the CBD, with others in prestige northern suburbs such as North Sydney, Mosman, and Chatswood. The implications of spatial planning privileging development in Sydney’s west was not visible, with Parramatta losing two firm locations and prestige eastern suburbs increasing and/or holding steady.

Figure 6. Distribution of ASX Headquarters in Sydney and Relative Change by SA2 (2013-2016)
Conclusion

An analysis of ASX headquarters locations by cities provides an overview of how sectoral differentiation influences the corporate landscape of cities. This in turn has both economic impacts and spatial planning outcomes, as the fortunes of firms create the need for new types of office spaces as well as new living spaces for their labour forces. As this analysis shows, while the major Australian capital cities share the commonality of a strong CBD, their economic profiles are quite distinct and affect the distribution of firms both temporally and spatially.

Over the three year period of analysis, two specific trends emerged. First, economic change was highly tied to the distribution of firms by sector. Change was most profound in the cities whose economic profiles were skewed toward resources. With strong links to both the energy and mining industries, Perth’s corporate landscape changed the most, with dozens of firms disappearing from the ASX listings. On the other hand, Melbourne was the least affected, as its strong information technology and health care industries buoyed losses in resources. This pattern reflects some degree of volatility tied to resources, but also a strengthening role for technology, and services more broadly.

Second, there was a general pattern toward firm dispersal. Each city lost CBD headquarters, with gains primarily in CBD-adjacent suburb. Thus, in contrast to the peri-urban development associated with sprawl and ‘edge cities’, most development was in fact in inner suburbs in which re-zoning and commercial investment, coupled to some degree with amenity-driven residential construction, was responsible for decanting CBD activity. In each case, this development was associated with suburbs in more affluent corridors, suggesting that access to high-skill labour was ostensibly more important than the cost savings associated with suburbanisation.

Though a three-year interval may reveal only an aberration in a long-term trend, the ASX firm dynamics indicate that even in a relatively strong economy, the pace of change is rapid. The implications of this change affect the urban landscape in many ways, and serve to supplement economic data derived from occupation-based information to enhance an understanding of how Australian cities are structured.
References


