
Melbourne's Transformation: Rust Belt to Renaissance

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Structured Abstract

In the global recession of the early 1990s the Melbourne economy was battered more extensively than the rest of the Australia. The industrial heartland of the city contracted sharply which had a range of flow on economic effects. There was heavy migration out of the so-called rust-belt of Melbourne. Twenty years on Melbourne has emerged from the worst global recession since the Second World War in terrific shape. So what has changed?

The economic reform agenda of the past twenty years has helped transform Melbourne into a post-industrial knowledge intensive economy. Macroeconomic policy settings and a microeconomic reform agenda can be seen to have greatly enhanced the Melbourne economy. But the spatial reforms have played a much greater role in the transformation to a knowledge intensive economy.

Projects such as the Southbank redevelopment and Postcode 3000 helped to revitalise the city. Southbank and Docklands provided the Central Business District with "Greenfields" to accommodate the growth in knowledge intensive service industries. Road projects such as the CityLink, EastLink and the Western Ring Road helped to improve connectivity within the city. These factors have produced agglomeration economies which have attracted high levels of skilled labour to the city and enabled high productivity firms to flourish. This has helped to produce a diverse and nimble knowledge intensive economy.

To continue to advance Melbourne, a new generation of reforms and enhancements has to be embarked on. The next generation of reforms will have to ensure a well connected,

higher density metropolis with a focus on growing the highly productive environment centered on the Central Business District to other parts of Melbourne. This will require improved transport links (to overcome the congestion which will accompany increased population and employment growth) and more intensive development in existing employment clusters. The consequences of inaction could be dire indeed.

Keywords – Melbourne, Spatial Economic Reforms, Agglomeration, Human Capital

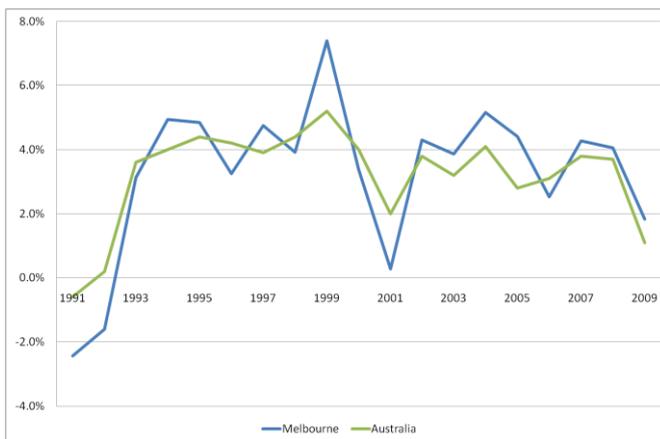
Paper type – Practical Paper

1 Introduction

A well functioning city provides a wide range of benefits to its residents, economy and government. These benefits take the form of productive economic activity, higher taxation receipts, high levels of liveability and social cohesion for the residents.

During the last twenty years the Melbourne economy has been transformed from a manufacturing hub, reliant on long standing protectionist policies, to a diversified post industrial economy very much living off its knowledge base in a highly competitive and global trading environment. This is evident in the pattern of GDP growth for Melbourne versus the nation as a whole. Since the depths of recession in the early 90's, Melbourne has, more often than not, outperformed the national economy.

Figure 1 GDP Growth Rates – Metro Melbourne vs Australia



Source: Australian Bureau of Statistics & SGS Economics & Planning

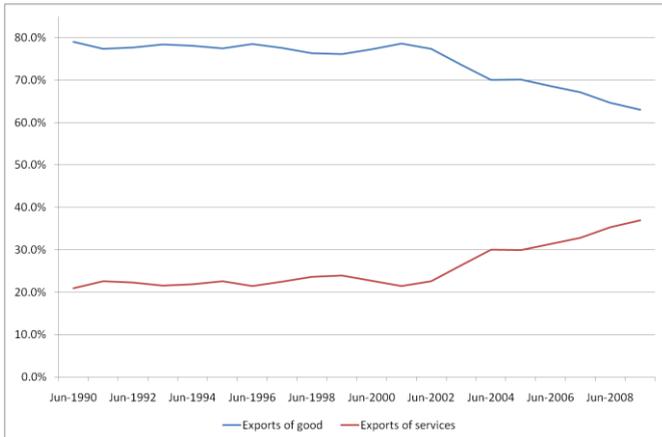
A few points of note in Figure 2 are:

- The 1991-92 recession was MUCH deeper in Melbourne than the rest of Australia.
- The Asian Financial Crisis which occurred around 1997 had a small impact on economic growth in Melbourne.
- Melbourne experienced a larger boom in 1999 and a larger bust in 2001 than the rest of the country. This period was influence by the introduction of the new taxation system which caused changes in consumption patterns to avoid the GST. 2001 was also the timing of the last recession in the United States.
- The Melbourne growth rate has been slightly higher than the Australian rate over the past three years.

The restructuring of Melbourne's and Victoria's economies over this period is also evident in the State's international export profile. Exports of goods, mainly manufactured products, still account for around two thirds of Victoria's sales to overseas customers, but

this figure has steadily declined from close to 80% back in 1990 (Figure 2). Meanwhile, the State’s sales of services to the rest of the world, including travel, education, financial brokerage, legal advice and other business services has grown steadily with a clear acceleration occurring at the turn of the century.

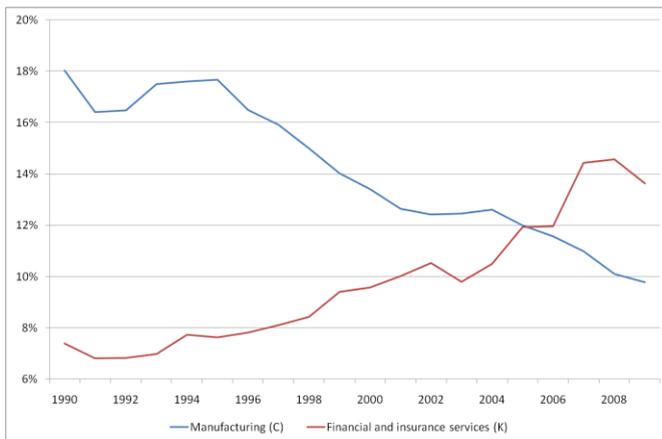
Figure 2 Composition of Victoria’s International Exports



Source: Australian Bureau of Statistics

A particularly striking indicator of Melbourne’s re-invention as a vibrant post industrial economy rests in the changing shares of total metropolitan value added attributable to Manufacturing versus Financial and Insurance Services, the latter being in the vanguard of knowledge based commercial activities.

Figure 3 Industry Share (Gross Value Added) – Metro Melbourne



Source: SGS Economics & Planning

As shown in Figure 3, financial services overtook manufacturing as a key contributor to the metropolitan economy back in 2005. The sector took a beating during the Global

Financial Crisis, but has bounced back strongly; in fact, it was one of the key industries which lead Victoria out of the lull in economic growth caused by global economic instability.

This transformation did not happen by accident. It was the outcome of focussed policy effort by both the Commonwealth and State Governments. Canberra's 'micro economic reform agenda', initiated under the auspices of the Hawke / Keating Government of the 80's and carried on with the fiscal/taxation initiatives of the early Howard years, had a significant positive impact on Victoria, albeit that it may have aggravated the 1991/92 recession for the State. These reforms provoked an 'internationalisation' of the Victorian economy, with the floating of the exchange rate and the decision to allow foreign banks to operate in Australia. In harness with National Competition Policy, the Kennett Government's moves to commercialise, corporatize and even privatise certain infrastructures and State owned businesses injected a fluidity and dynamism into the Victorian economy. Labour market reforms under the Hawke / Keating Government, which focussed on enterprise bargaining, rendered the Victorian (and other Australian economies) fundamentally more flexible in the face of exogenous shocks.

Infrastructure investment by the Victorian State Government further complemented these national reforms and accelerated Melbourne's transition to a knowledge based economy. Arguably, the Kennett Government followed an inspired strategy in 'trading in' 'old economy' assets, like the power industry, to invest in the key attributes sought by a knowledge economy, being connectivity and a vibrant down town.

Several 'settlement pattern shaping' infrastructure projects played a major part in repositioning Melbourne and Victoria. CityLink, commissioned under what were then innovative public-private partnership principles, was vital in connecting Melbourne's inner western industrial areas to the rich skills pool in the 'Monash corridor'. This gave a great productivity boost to these manufacturing and logistics areas which, in turn, helped to promote residential growth in a part of Melbourne that had lagged behind for decades. The Western Ring Road further improved the accessibility of Western Melbourne and reinforced the shift in Melbourne's hitherto 'unbalanced growth' towards the east.

More recently, the commissioning of EastLink in June 2008 has given a similar, though more modest, accessibility advantage to the key centres of Ringwood, Dandenong and Frankston. Dandenong, in particular, is now in a much better position with respect to skills access. The transformation of its manufacturing base towards higher value added activities is already underway.

As far as central Melbourne is concerned, the acknowledged heartland of Victoria's knowledge economy, revitalisation was not just the outworking of clever marketing or inspired residential intensification programs such Melbourne City Council's 'Postcode 3000'. Several infrastructure investments paved the way, including the Docklands project (which gave Melbourne a 'waterfront address' and the potential to lure finance and other business service houses requiring large floorplate offices), Federation Square (which underlined Melbourne's commitment to fresh and exciting design) and the Melbourne

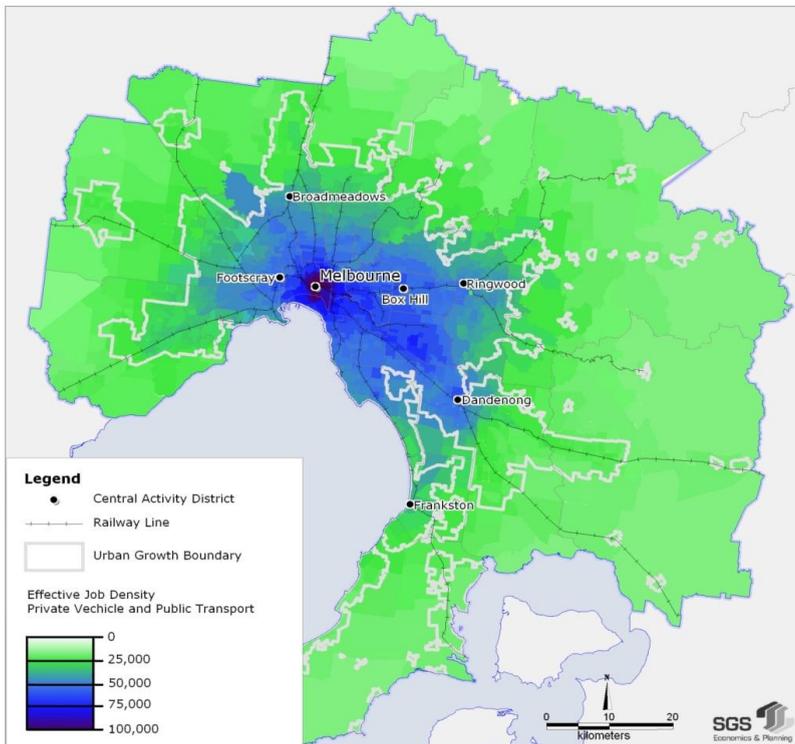
Exhibition and Convention Centre (which enabled the city to successfully challenge for the mantle as Australia’s premier destination for business tourism).

Together with an aggressive festivals and events program, these investments enabled a virtual overnight ‘rebranding’ of Melbourne, from a gracious but rather tired bastion of ‘industrial Australia’ underpinned by ‘Fordist’ manufacturers, to an eclectic ‘urban’ economy trading on its thinking power and creativity. Meanwhile, at the Victoria wide level, the State Government’s investments in the regional fast rail project took an important step towards greater integration between the labour market of Melbourne and those of Ballarat, Geelong and Bendigo. This permitted Victoria to project a ‘European style’ settlement pattern and aesthetic which also contributed to its reputation as a design based, knowledge economy.

2 Building Melbourne’s Knowledge Based Competitive Advantage

The upshot of this review of Melbourne’s re-invention is that infrastructure investment and connectivity were vital. Going forward, they will be even more important, because accessibility and urban density are likely to be the next major source of productivity enhancement in Australia.

Figure 4 Travel Zone Effective Job Density, 2006



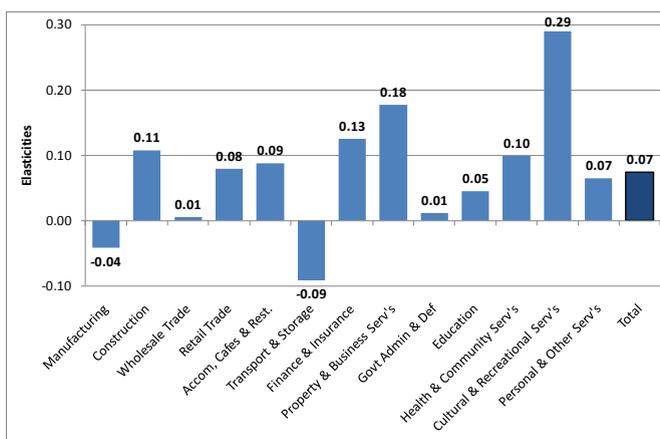
Source: SGS Economics & Planning

A simple measure such as looking employment density of an area does not effectively demonstrate agglomeration. A firm in a relatively low-employment area but located on the edge of a Central Business District (CBD) could potentially capture agglomeration benefits by being close to the CBD. Thus a measure of agglomeration must “incorporate both proximity and the scale of the economic activity and ...be calculated for very small areas” (Graham, 2006).

This measure of Effective Job Density (EJD) enables a more ‘real life’ representation of the proximity (in terms of travel time) component of agglomeration that other more basic measures overlook. That is, 68% of people working in the CBD of Melbourne travel to work on public transport and thus the proximity to those jobs is closely related to public transport travel times. The other extreme can be seen in locations such as Cranbourne (an outer location of Melbourne), where 98% of workers travel to work using private vehicles.

The impact of doubling EJD is referred to as the labour productivity elasticity of the industry with respect to agglomeration and allows the coefficients to be easily interpreted. Figure 5 presents this elasticity for each industry. The weighted total for all industries included in the analysis is 0.07. That is, a doubling of the effective job density will result in a 7% increase in labour productivity in an area. So a doubling in EJD will increase labour productivity which will allow firms to increase production by 7% with the same level of labour inputs. This labour productivity boost is brought about in a number of ways such as economies of scope and scale, access to skilled labour and knowledge transfer.

Figure 5 Elasticities of Labour Productivity by Industry



Source: Rawnsley & Szafrancic

The elasticity varies considerably between industries. Service industries which make up the bulk of the knowledge economy gain the most from increased agglomeration. This relationship partially explains the vigorous competition for centrally located sites amongst service-based firms. The premium paid for such sites is more than compensated by the

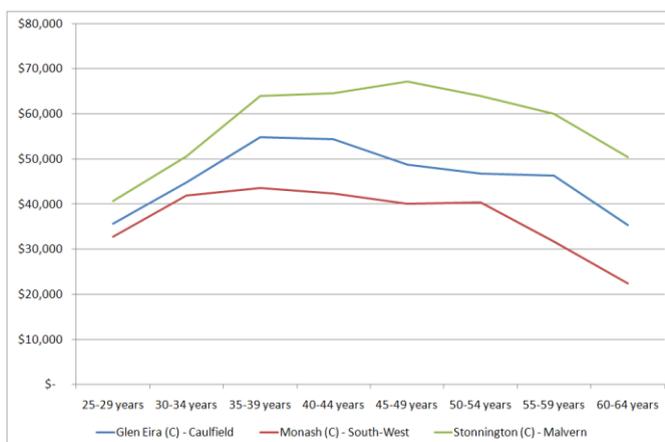
increased labour productivity from their operations in these strategic locations. This also explains why it is difficult to attract these types of businesses to suburban locations, notwithstanding the sound urban planning arguments for setting such a goal.

Over the past fifty years¹ the concept of Human Capital has been at the forefront of economic theory and practice. Human Capital comprises the knowledge and skills which enable a worker to contribute to a firm’s production and to earn a wage. Human Capital can be expanded by investment (formal education and experience gained by workers) which will increase the worker’s skill, and hence productivity. Human Capital can be used to understand a number of key issues like labour market outcomes and the distribution of income across society. However, it is also key in understanding the growth in the GDP.

The economic literature provides an explanation of this in Matching Theory (which is also described as Search Theory). Basically if there is a large range of jobs on offer a worker can search through the available jobs and best match their skills to the available job and maximise their wage. Also they have opportunity to work in a number of different jobs and hence gain a range of experiences (which can be seen as on-the-job investment in their education) which will also translate into higher productivity which can be observed in the form of higher productivity.

Figure 6 provides an indication of the variation in unqualified male human life time Labour Income across three SLAs in Melbourne. The per capita age-earnings profile is higher for residents with no qualifications in Stonnington (C) – Malvern than in Glen Eira (C) – Caulfield and Monash (C) – South-West.

Figure 6 Gross Annual Income for Unqualified Male Human Capital 2006



Source: Australian Bureau of Statistics

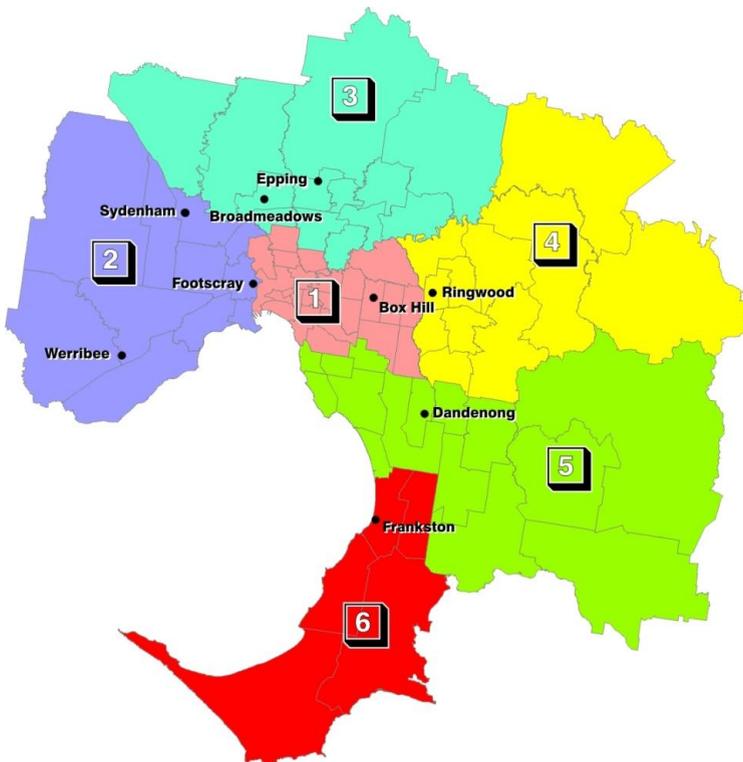
¹ Since Becker & Schultz published their seminal work in the 1960’s.

So connectivity is crucial, not just from a social inclusion point of view, but from the perspective of economic competitiveness. Thus, to further build Melbourne as a knowledge capital, we need to better understand the spatiality of its economy. To further understand the employment dynamics within Melbourne, a methodology developed and used by the Office of National Statistics in the United Kingdom has been employed. This has used Census origin destination journey to work data to define distinct self contained employment areas in Melbourne.

There are six distinct regions within Melbourne as shown in Figure 7. Of course there are still flows between the different regions. For example, 17,800 people travel from Region 2 to Region 3 for work, 87,400 people travel from Region 4 to Region 1, Region 1 attracts 75,600 from Region 2 and 57,900 from Region 4.

Most flows are towards Region 1 (the Inner Eastern) which contains Melbourne's CBD and other major employment zones. Understanding the features of the Inner Eastern Region is important to understanding the functioning of Melbourne. The Inner Eastern Region is the major employment hub, has a highly skilled resident labour force and is serviced by a radial public transport network. In 2006, the Inner Eastern had around 44% of the employment in Melbourne and the City of Melbourne had 18.2%.

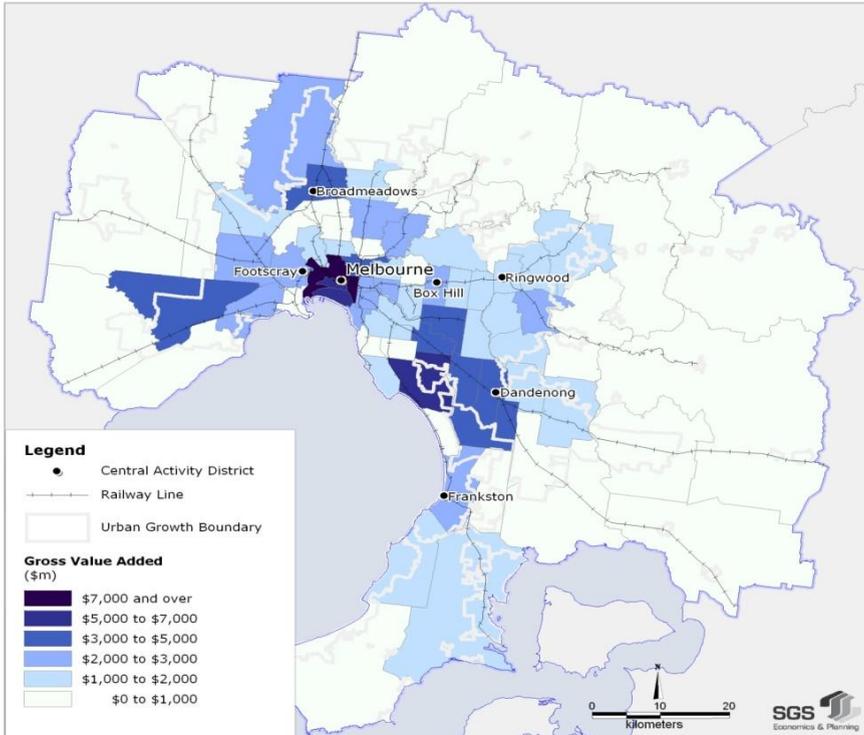
Figure 7 Self Contained Employment Areas in Melbourne.



Source: SGS Economics & Planning

To optimise productivity, each of these sub-cities needs a heart and needs to be well connected to each other and the centre. So the six Central Activities Districts (CADs) need to host a range of knowledge intensive industries which provide a range of services and employment opportunities for the residents. As shown in Figure 9 the Dandenong CAD provides employment to Pakenham residents. With significant population growth projected to continue in the south east growth area, the importance of the Dandenong CAD will also increase.

Figure 8 Total Statistical Local Area Industry Gross Value Added

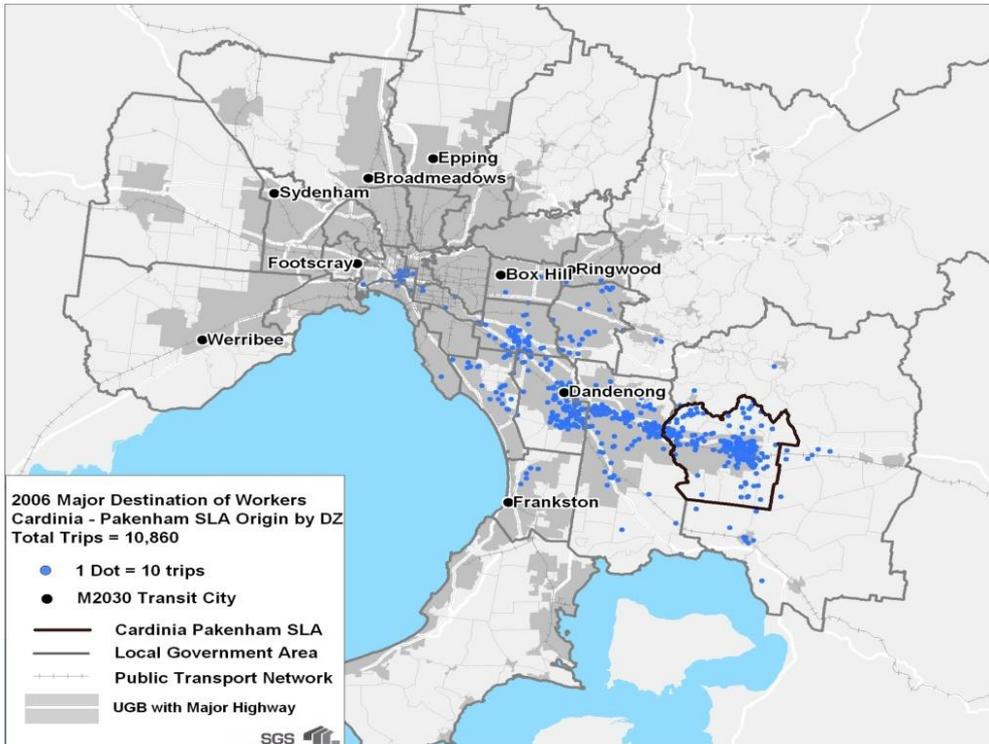


Source: SGS Economics & Planning

More importantly the CADs have to be well linked with the highly productive central core of Melbourne. There is great scope to build wealth by building more connected regions. The southern metro region hosts the second biggest wealth generators (as measured by industry gross value added) in the metro area (as shown in Figure 8). This will allow the firms located in the CADs to service a much larger economic base, both within Melbourne but also within Australia and even internationally.

We have a long way to go in this regard, with many communities (and businesses) locked out of opportunity. The Figure 10 shows that the areas with low EJD are the areas with the highest level of relative socioeconomic disadvantages (as measured by SEIFA).

Figure 9 Location of Employment of Pakenham Residents

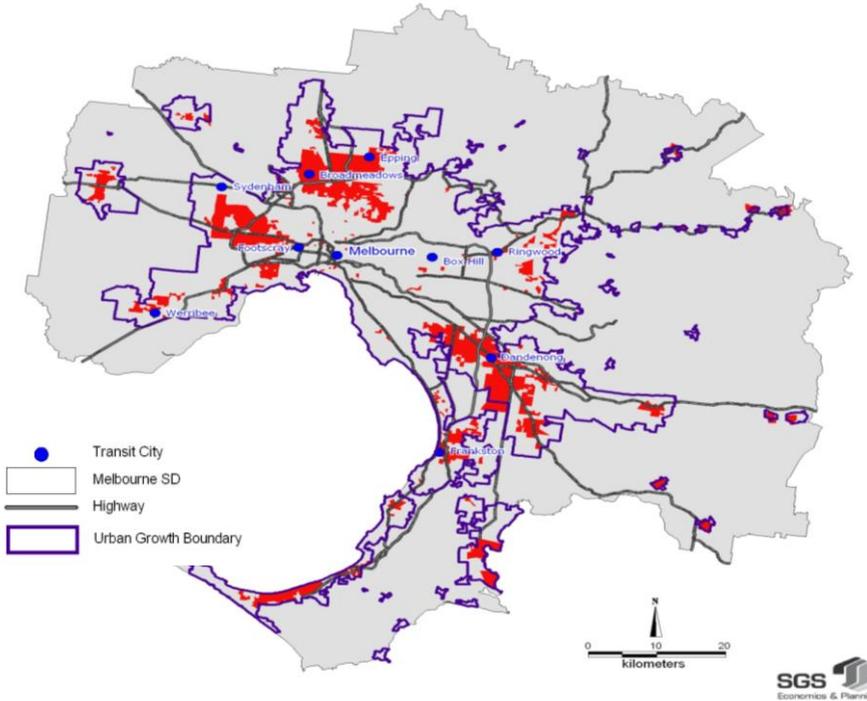


Source: SGS Economics & Planning

The disadvantage in these areas has the potential to become intergenerational which is even harder to address. Disadvantage is associated with a range of costs in terms of welfare services, health services and crime and justice services. It has the potential to create a divided city of the ‘have and have not’s’ which has feedback for the inner areas of Melbourne. This in turn could ultimately weaken the profile of the whole city.

If Melbourne is not maintained in its current level of liveability and economic prosperity the city will become less attractive and the population will migrate to other areas of Australia or the world. It will be younger people (who may have weaker links to the city) who would be the first to migrate, which over time will reduce the number of births in the future. This can result in a smaller working age population to support the overall population. This would have a range of negative implications for Melbourne.

Figure 10 SEIFA Lowest Two Quartiles (Most Disadvantaged Areas)



Source: Australian Bureau of Statistics & SGS Economics & Planning

3 Conclusion

Twenty years of economic reform and spatial organisational improvements has helped transform Melbourne into a post-industrial knowledge intensive economy. The recession of the early 1990's provided the catalyst for many of these reforms. At that time it was clear that the historical trajectory of the economy was no longer robust enough to continue into the future.

The Postcode 3000 project helped to revitalise the city and the Southbank and Docklands redevelopments provided the Central Business District with “Greenfields“ to accommodate the growth in knowledge intensive service industries. Improved connectivity within the city brought about by road projects such as the CityLink, EastLink and the Western Ring Road. These factors have produced agglomeration economies which have attracted high levels of skilled labour to the city and enabled high productivity firms to flourish. This has helped to produce a diverse and nimble knowledge intensive economy.

To continue to advance Melbourne, a new generation of reforms and enhancements has to be embarked on. The next generation of reforms will have to ensure a well connected, higher density metropolis with a focus on growing the highly productive environment centered on the CBD to other parts of Melbourne. This will require improved transport links (to overcome the congestion which will accompany increased

population and employment growth) and more intensive development in existing employment clusters.

Inaction on these fronts will cause heavy costs for the Victorian community. Aside from the lower economic growth, it has the potential to create a divided city of the 'have and have not's' which has feedback for the inner areas of Melbourne. This in turn could ultimately weaken the profile of the whole city. People with weaker links to the city, would be the first to migrate, which over time will reduce the number of births in the future. This can result in a smaller working age population to support the overall population. This would also have a range of negative implications for Melbourne.

References

- Bond, S. & Coombes, M. (2007) 2001-based Travel-To-Work Areas, Office for National Statistics.
- Becker, T. (1964). Human Capital. Columbia University Press, New York; 2nd Edition. 1975.
- Graham, D.J. (2006), Wider Economic Benefits of Transport Improvement: Link Between Agglomeration and Productivity, Stage 2 Report, prepared for the Department for Transport, London.
- Schultz, T. (1961). Investment in Human Capital, The American Economic Review, Vol. LI, March 1961 Number One.
- Rawnsley, T & Szafrancic, J. (2010) Agglomeration and Labour Productivity in Australian Cities, presented at Knowledge Cities World Summit, Melbourne 17-19 November 2010.
- Wei, H. (2004). Measuring the Stock of Human Capital for Australia, Methodology Research Papers, cat. no. 1351.0.55.001, Australian Bureau of Statistics, Canberra.