



## ***Economic Stress in Perth***

Matthew Tonts

### **Introduction**

From its onset during late 2007, the global economic crisis has captured considerable media and political attention. Sharp decreases on national stock exchanges, the collapse of financial institutions and rising unemployment have all been widely reported around much of the world. However, what such reports often fail to capture is the local level hardship that wider economic forces can create. In the United States, the Associated Press recently developed an index of economic stress to measure how the global financial crisis was affecting local counties. The monthly index measures unemployment, foreclosures and bankruptcies. No similar measure exists in Australia. While the Australian Bureau of Statistics has developed the *Socio-Economic Index for Areas* to measure local level performance, this is based on a five yearly snapshot of data collected in the Census of Population and Housing. What this index fails to capture is socio-economic performance for a much finer series of time periods. This paper reports on the development of a new index of economic stress for Perth, Western Australia. Using data that are available annually, it reports on the geographical and temporal nature of economic stress between 2005 and 2009, thereby capturing the impact of the resources boom and the subsequent global economic downturn. In effect, it charts the experience of local areas in the face of much wider economic forces.

### **Concepts, Data and Methods**

Economic stress is not easy to define or measure. Moreover, it is often relative and experienced quite differentially by individuals and families in what, on the surface at least, appear to be quite similar social, economic and geographic circumstances. This study takes a quite pragmatic view of stress, linking it to unemployment, welfare receipts and income. Not only do these measures link with readily available annual datasets, but they also capture the everyday experience of economic hardship. There is little doubt that not having a job, being dependent on social welfare, and being on a relatively low income provide insights into those places *likely* to be experiencing economic stress. Of course, the index should be taken as indicative rather than absolute. In addition, it should be noted that Australia lacks good, publically available annualised data at the local level on a number of important indicators of stress, such as housing affordability, bankruptcies and cost of living.



The specific data used in the analysis are:

- Unemployment rate (from the Department of Education, Employment and Workplace Relations)
- Ratio of Newstart recipients to Total Population (calculated from Centrelink data)
- Rental assistance (calculated from Centrelink data)
- Mean Taxable income (for which the most recent year available is 2006/2007)(from the Australian Taxation Office)

The data are organised at the postcode level, and a nominal suburb/area name was applied to each of these for ease of interpretation. It should be noted that some postcodes stretch across more than one suburb. In all, data were analysed for 110 postcodes across the Perth metropolitan area. Z-scores were calculated for each of the variables, with the following weights applied: unemployment (1.0); newstart recipients (0.25); rental assistance (0.2); taxable income (1.2). Z scores across all variables were summed and converted to the Stress Index (*SI*). The *SI* indicates economic stress on a scale of 0-100, the higher the score the higher the likelihood of individuals and families in that postcode experiencing economic stress.

### **Economic Stress Across Metropolitan Perth, 2005-2009**

Table 1 provides a list of Perth's most economically stressed areas between 2005 and 2009. The most recent index shows highest levels of stress concentrated in Mirrabooka and Girrawheen. Both of these locations also appear amongst the five most stressed locations in 2007 and 2005, indicating that, at least in relative terms, economic hardship is an enduring feature of these places. Other locations that are repeatedly in the list include Osborne Park, Kwinana and the area around Highgate-Northbridge. These places are characterised by low incomes and relatively high rates of unemployment. They are also those characterised by high proportions of the population in economically vulnerable circumstances, including new migrants and people with English as a second language. Traditionally, these areas have been dominated by public housing and private rental accommodation.

An enduring characteristic of the geography of Perth's economic stress is the way in which certain places appear to be 'locked in' to the bottom 10. While the economic stress index is relative, and the real living conditions in these areas is likely to have improved considerably over longer time horizons, the persistence of stress in these areas is of concern. This is despite numerous attempts by planners and policymakers to tackle locational disadvantage.

Yet, there is some evidence that stress is geographically fluid. The 2009 index sees the entry of some of Perth's newer outer metropolitan areas

on the list of the 10 most economically distressed. Yanchep entered the list at 8 in 2007 and moved to 3 in 2009. New entrants to the list in 2009 include Two Rocks (4), Butler (8), Alkimos (9) and Clarkson (10). The rising level of stress in these areas is perhaps indicative of the local impacts of the wider economic downturn. These areas have high proportions of new homeowners, many of whom are under mortgage stress. Compounding this, they have large numbers of people engaged in vulnerable industries, such as retailing, hospitality, construction and mining. The economic slowdown has seen increasing numbers of people engaged in these industries out of work. It is, however, likely that the recovery in the resources sector, and the State economy more generally, will see economic stress decrease in suburbs such as Butler, Alkimos and Yanchep.

**Table 1 Perth's 10 Most Economically Stressed Areas, 2005-2009**

2005		2007		2009	
Suburb	SI	Suburb	SI	Suburb	SI
Mirrabooka	59.0	Kwinana	58.0	Mirrabooka	58.4
Osborne Park	58.9	Girrawheen	57.8	Girrawheen	58.3
Kwinana	58.4	Mirrabooka	57.2	Yanchep	58.1
Girrawheen	58.0	Wellard	57.0	Two Rocks	57.9
Naval Base	57.5	Naval Base	56.9	Osborne Park	57.9
Wellard	57.2	Osborne Park	56.5	Kwinana	57.0
Rivervale	57.1	Highgate-Northbridge	55.1	Highgate-Northbridge	56.9
Kewdale	56.8	Tuart Hill	54.9	Butler	56.8
Tuart Hill	56.6	Yanchep	54.7	Alkimos	56.8
Highgate-Northbridge	56.0	Beechboro	54.6	Clarkson	56.8

Table 2 provides a list of those places at the other end of the stress index: the bottom 10 of all 110 postcode areas included in the study. It is important to note that the table does not imply the absence of economic stress, merely that economic stress is likely to be much lower amongst the residents of these areas. The four areas demonstrating the lowest



levels of stress remain consistent across the period 2005-2009: Cottesloe-Peppermint Grove, City Beach, Nedlands-Crawley and Claremont. Not only do these areas have very high levels of income, but extremely low levels of unemployment. Other areas in the western suburbs also dominate the list, with Subiaco, Wembley, and Mosman Park all recording low levels of economic stress. Outside of the western suburbs, Applecross and South Perth, together with North Fremantle, demonstrate relatively low levels of stress.

**Table 1 Perth's 10 Least Economically Stressed Areas, 2005-2009**

2005		2007		2009	
Suburb	SI	Suburb	SI	Suburb	SI
Cottesloe/Pep Grove	34.8	Cottesloe/Pep Grove	31.0	Cottesloe/Pep Grove	34.8
City Beach	35.6	City Beach	35.1	City Beach	35.6
Nedlands/Crawley	35.7	Nedlands/Crawley	36.0	Nedlands/Crawley	35.7
Claremont	38.7	Claremont	38.4	Claremont	38.7
Subiaco	41.8	Mosman Park	41.2	Subiaco	41.8
Applecross	42.0	Applecross	41.6	Applecross	42.0
Mosman Park	42.2	Subiaco	41.7	Mosman Park	42.2
Wembley	44.3	South Perth	43.5	Wembley	44.3
South Perth	44.7	East Fremantle	43.9	South Perth	44.7
North Fremantle	45.0	Wembley	44.2	North Fremantle	45.0

### Major Increases and Decreases in Stress

While there is a considerable degree of stability in the 10 most and least stressed areas, across the entire metropolitan area there is evidence of substantial variation over time. Table 3 shows those areas that had the largest increase in economic stress between 2005 and 2009. The area that had the largest change in its rank over this time was the northern suburb of Nowergup, where new housing development and a changing demographic structure has contributed to an increasing level of stress. Other northern suburbs have also experienced rapid increases up the stress 'league table'. Here, mortgage stress, employment in vulnerable industries, rising unemployment and relatively low incomes are becoming an increasingly real part of everyday life. Indeed, it is here that we can pinpoint the most serious impacts of the end of Perth's economic boom.

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**Table 3 The Big Movers: Increasing Stress, 2005-2009** (note that the higher the rank, the lower the stress)

Area	2005 Rank	2009 Rank	Change
Nowergup	59	16	-43
Central Perth	53	22	-31
Carabooda	62	36	-26
Butler	32	8	-24
Alkimos	33	9	-24
Two Rocks	23	4	-19
Clarkson	29	10	-19
Yanchep	21	3	-18
Wanneroo	38	21	-17

The rising levels of stress in the places listed in Table 3 are in contrast to the conditions in those places listed in Table 4. The most striking feature of this table is that the areas tend to be inner or middle ring suburbs, many of which were traditionally low income. Places like Belmont, Carlilse, Victoria Park and Maylands have undergone major transformations over recent years, and are no longer those where stress is most prevalent.

In these areas, gentrification has led to a quite different socio-economic profile than that of the past. These suburbs now contain a diverse mix of residents, with fewer people in vulnerable occupations/sectors, higher incomes, and lower levels of welfare dependency. It is also clear that revitalization efforts and development programs have made a considerable difference not only to the character of the built environment, but also to the local economic profile.

At the wider metropolitan scale, the overall trend then is a shifting geography of economic stress. Rather than being confined to inner and middle ring suburbs as was traditionally the case, economic stress is now increasingly concentrated in outer suburbs, particularly north of the river.

**Table 4 The Big Movers: Decreasing Stress, 2005-2009** (note that the higher the rank, the lower the stress)

Area	2005 Rank	2009 Rank	Change
Victoria Park	12	54	+42
Carlisle	14	47	+33
Maylands	20	44	+25
Bayswater	40	62	+22
Inglewood	43	64	+21
Mount Lawley	71	92	+21
Morley	39	58	+19
Belmont	11	28	+17
Riverton	64	81	+17

### Underlying Socio-economic Drivers

As part of the analysis for this project, the index of economic stress was correlated against a number of other socio-economic indicators. The majority of these were drawn from the *2006 Census of Population and Housing*. In conducting this analysis, a number of socio-economic variables are strongly correlated with economic stress. These are:

- Proportion of the population born overseas
- Proportion of the population who speak English either moderately well or poorly
- Proportion of the population employed in vulnerable sectors (taken as manufacturing, hospitality and retailing)
- Proportion of the population without post-school qualifications
- Proportion of the population with a mortgage

In other words, those places that tend to have the above characteristics are also those most likely to experience economic stress. Clearly this reinforces what many policymakers already recognise, at least anecdotally, as the risk factors underlying economic stress. Yet these drivers only offer a partial insight into the underlying drivers of stress. Here more qualitative insights into the experiences of households and individuals is needed if more effective policy and planning responses are to be developed. Thus, the next stages in this research involve not only the ongoing monitoring of economic stress, but developing a more detailed understanding of how it is affecting quality of life and broader liveability within metropolitan Perth.



### About FACTBase

The FACTBase project is a joint venture between the University of Western Australia and the Committee for Perth, an influential member-based organisation driven by a diverse assembly of Perth's leaders. Members collaborate with business, government and community groups to actively improve the liveability of our city, resulting in a real and enduring contribution to Perth and the metropolitan area.

One of the only broad-reaching projects of its kind to be undertaken in the southern hemisphere FACTBase condenses the plethora of databases and studies on the subject of liveability and analyse what's happening in Perth through words, maps and graphs.

### About the Author

Matthew Tonts is Professor of Human Geography at The University of Western Australia.

### Contacts

For further information on the FACTBase project contact:

Marion Fulker, CEO, Committee for Perth  
08 9481 5699 or [marion.fulker@committeeforperth.com.au](mailto:marion.fulker@committeeforperth.com.au)

Matthew Tonts, Professorial Fellow, School of Earth and Environment  
08 6488 7392 or [mtonts@cyllene.uwa.edu.au](mailto:mtonts@cyllene.uwa.edu.au)

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