Workplace Futures Index – Wave 1
Playford & Salisbury

Rasika Ranasinghe, Ann-Louise Hordacre & John Spoehr
2014

A report for The Stretton Centre funded by the Australian Government Suburban Jobs Program

WISeR
Informing Decisions
Workplace Futures
Index – Wave 1
The Australian Workplace and Social Research Centre (WISeR) focuses on work and socio-economic change. WISeR is particularly interested in how organisational structure and practices, technology and economic systems, policy and institutions, environment and culture interact to influence the performance of workplaces and the wellbeing of individuals, households and communities.

WISeR also specialises in socio-economic impact assessment including the distributional impacts and human dimensions of change on different population groups and localities. Our research plays a key role in informing policy and strategy development at a national, local and international level.
CONTENTS

KEY FINDINGS AT A GLANCE ........................................................................................................... 1
1 INTRODUCTION .......................................................................................................................... 1
2 WORKPLACE FUTURES INDEX (WFI) ............................................................................................ 2
  2.1 CONSTRUCTION OF THE INDEX .......................................................................................... 2
  2.2 FUTURE EMPLOYER SENTIMENT AS MEASURED BY THE WFI ........................................... 2
      2.2.1 WFI by industry ................................................................................................................. 4
      2.2.2 WFI by size of establishment ............................................................................................ 7
3 SUMMARY AND FUTURE DIRECTIONS ...................................................................................... 8
REFERENCES ..................................................................................................................................... 9
APPENDIX A. CONSTRUCTION OF THE WFI: METHODOLOGY ...................................................... 10
APPENDIX B. TABLES .................................................................................................................. 11
APPENDIX C. SURVEY QUESTIONS ............................................................................................... 12

LIST OF FIGURES

FIGURE 1: UNEMPLOYMENT RATE, GREATER ADELAIDE, SEPTEMBER 2013 ............................................. 1
FIGURE 2: WFI, OVERALL AND BY LOCATION, NOVEMBER 2013 ........................................................... 3
FIGURE 3: SUB-INDICES OF THE WFI: OVERALL .................................................................................. 4
FIGURE 4: WFI BY INDUSTRY, NOVEMBER 2013 ................................................................................. 5
FIGURE 5: SUB-INDICES OF THE WFI, BY INDUSTRY, NOVEMBER 2013 ........................................... 6
FIGURE 6: WFI BY SIZE OF ESTABLISHMENT, NOVEMBER 2013 ....................................................... 7
FIGURE 7: SUB-INDICES OF THE WFI, BY SIZE OF ESTABLISHMENT, NOVEMBER 2013 ......................... 8

LIST OF TABLES

TABLE 1: WFI: OVERALL AND BY LOCATION, NOVEMBER 2013 .......................................................... 11
TABLE 2: WFI BY INDUSTRY GROUP, NOVEMBER 2013 ..................................................................... 11
TABLE 3: WFI BY SIZE OF FIRM, NOVEMBER 2013 ......................................................................... 11
KEY FINDINGS AT A GLANCE

Business and economic sentiment surveys are explicitly designed to obtain quick insight into short-term economic developments with the aim of gauging market actors’ assessment of current economic conditions and their expectations of developments in the future.

The Workplace Futures Index (WFI), constructed based on data from the first wave of the Workplace Futures Survey (WFS) – Playford and Salisbury, provides the starting point to a series of employer sentiment indicators that will enable policy makers and analysts to track changes and trends in the northern Adelaide regional economy. Combined with quantitative labour market statistics, they provide important information on current business sentiment and directions in the business cycle in a timely manner.

The WFI is constructed as a forward looking composite indicator of five distinct but related aspects in a workplace: employer expectation, investment, recruitment, profits, sales and business growth for the next 12 months. The index will be updated in the next wave of the WFS in May 2014, which will make it possible to analyse market trends over time.

The index score can range from 0 to 100. The middle point, 50 is considered as the benchmark and the following classification is adopted: WFI<50: Low business confidence; WFI=50: Business confidence is unchanged; and WFI>50: High business confidence (Martin & Papile, 2004).

Four hundred and fifty-one employers in the northern Adelaide local government areas Playford and Salisbury participated in the Workplace Futures Survey in November 2013. Many of the results from this survey have been reported elsewhere (Ranasinge et al., 2014), with the current report focusing on the Workplace Futures Index which assesses business sentiment over the 12 months to November 2014 as one index (WFI) and independently across the five sub-indices: investment, recruitment, profits, sales and business growth.

Overall, employers in Playford and Salisbury were generally optimistic as indicated by the WFI. Employers in Playford displayed a slightly higher level of confidence (WFI=65.1) than those in Salisbury (WFI=63.7). Of the sub-indices, recruitment was the lowest with an index score of 58.8, indicating that employers were relatively cautious in their hiring expectations.

The manufacturing industry had the lowest employer confidence with a WFI of 61.7, followed by construction (62.8). At the other end of the spectrum, retail trade had the highest employer confidence (WFI=66.8). Of the sub-indices recruitment was lowest in manufacturing (55.5) and highest in health care and social assistance (62.8). Retail trade had the highest sub-indices score in investment, profits, sales and growth, indicating a general sense of optimism in this industry. Small businesses had the lowest level of confidence (WFI =62.3).

The recruitment sub-index had the lowest score among the sub-indices, suggesting modest hiring sentiments by employers regardless of size of establishment or industry. In spite of the cautiousness displayed in hiring expectations, small to medium sized businesses (2 to 4 and 5 to 19 employees) had a relatively optimistic outlook in their sales and growth expectations.
1 INTRODUCTION

Business and economic sentiment surveys are explicitly designed to obtain quick insight into short-term economic developments with the aim of gauging market actors’ assessment of current economic conditions and their expectations of developments in the future. The emphasis lies in understanding the directional changes in the economy (for example, production, vacancies and employment) rather than measures of levels. When combined with quantitative statistical surveys, results from business sentiment surveys have proved to be valuable in revealing current sentiments and forecasting turning points in the business cycle (Inklaar, 2003). Business sentiment indices based on such surveys provide frequent and timely indicators of developments in the market. Sentiment indicators consist of employers’ opinions and assessments on relevant topics, and offer additional opportunities for analysis while serving as an independent reference for labour market statistics.

The implementation of a business confidence survey in the cities of Playford and Salisbury in the northern Adelaide region is especially important for several reasons. Adelaide’s northern suburbs have historically high and persistent unemployment, especially among the youth (see Figure 1). In addition, regional economic outlook in northern Adelaide is going through a particularly volatile period due to the gradual departure of the auto industry. Currently, there is no existing source of business confidence data at the regional level.1

In this context, the Workplace Futures Survey (WFS) – Playford and Salisbury fills an information gap in understanding business cycle fluctuations. The WFS is a series of longitudinal workplace surveys implemented in Playford and Salisbury, and is managed by the Australian Workplace Innovation and Social Research Centre (WISEr) for the Stretton Centre with funding from the federal government Suburban Jobs Program. The first wave of the survey was completed in November 2013, incorporating 451 employers across the Cities of Playford and Salisbury.2

The WFS incorporates the Workplace Futures Index (WFI) and also captures different dimensions of economic activity, organisational planning and performance, vacancies and recruitment, skill gaps and demand, and training and development.

The WFI is an employer sentiment index, constructed as a composite indicator of five distinct but related aspects in a workplace: future

Figure 1: Unemployment rate, Greater Adelaide, September 2013

---

1 The DEEWR Survey of employers’ recruitment experiences: Playford Local Government Area, South Australia - August 2012, conducted by the then Department of Education, Employment and Workplace Relations (DEEWR) contains information on employer recruitment practices and experiences, including recruitment expectations. However there is no employer sentiment index associated with this survey.

2 See Ranasinghe et al (2014) for a comprehensive analysis of the first wave of the survey.
expectations regarding investment, recruitment, profits, sales and business growth. The index will be updated every six months with the WFI administered in May 2014, which will make it possible to analyse market trends over time in the cities of Playford and Salisbury.

2 WORKPLACE FUTURES INDEX (WFI)

The Workplace Futures Index (WFI) is a composite measure of employer confidence, based on five indicators of future outlook in the next 12 months:

- Intentions to invest
- Intentions to recruit
- Expectations for business profits
- Expectations for sales
- Expectations for business growth

Robust information about the future and the ability to accurately forecast the direction of economic changes such as employment and productivity are crucial in strategic planning. The literature on employer confidence indices often present them as short term indicators of economic trends that can provide early signals of turning points in economic activity. They enable policy makers and businesses to monitor this activity over a given period of time. The composite WFI provides a single early warning signal of the regional economy, while the five indicators deliver additional information on each of the economic aspects used to construct the composite index.

2.1 CONSTRUCTION OF THE INDEX

The WFI is constructed by quantifying responses to survey questions capturing employer sentiment along the specific indicators listed above (independently these become the sub-indices). The responses range from ‘strong increase’, ‘moderate increase’, ‘no change’, ‘moderate decrease’ to ‘strong decrease’. The methodology is discussed in detail in Appendix A.

The index (or sub-index) score can range from 0 to 100. Following the literature (Martin & Papile, 2004), the middle point, 50 is considered as the benchmark and the following classification is adopted.

- WFI<50: Low business confidence
- WFI=50: Business confidence is unchanged
- WFI>50: High business confidence

2.2 FUTURE EMPLOYER SENTIMENT AS MEASURED BY THE WFI

- Overall, employers in Playford and Salisbury were generally optimistic as indicated by the WFI.
- Employers in Playford indicated a slightly higher level of confidence (WFI=65.1) than those in Salisbury (WFI=63.7).
- Of the sub-indices, recruitment was the lowest with a rating of 58.8, indicating that employers were relatively cautious in their hiring expectations.

---

3 This information is gathered by means of five short questions that are included in the WFS (please refer to Appendix C for the relevant survey questions).
The WFI is a forward-looking indicator of employer sentiment based on the five sub-indices described in Section 2. The composite index for the overall sample and for the cities of Playford and Salisbury are presented in Figure 2. Given that an index higher than 50 indicates a relatively high level of employer confidence, the overall, Salisbury and Playford indices display a high employer confidence for November 2013. The overall index stood at 64.4, with Salisbury displaying slightly lower employer confidence than Playford (63.7 compared to 65.1). These results will be updated in the next wave of the WFS in May 2014, which will make it possible to track the trends and patterns in the WFI.

**Figure 2: WFI, overall and by location, November 2013**


Figure 3 illustrates the five sub-indices contributing to the WFI. While the overall index values for all five components indicate an optimistic outlook by employers, a closer analysis provides a more nuanced story. The recruitment sub-index was the lowest with 58.8, indicating that employers were relatively cautious in their hiring expectations. This is broadly consistent with the Manpower Employer Outlook Survey for the fourth quarter of 2013 which was relatively flat for South Australia, reporting a net employment outlook of 0%.

The sub-index of employer expectations of sales for the next 12 months was the highest at 66.9, followed by growth (66.4). Employers were cautiously optimistic in their profit expectations with the sub-index at 63.8.

---

6 Details of the index and components are in Table 1 in Appendix B.
7 The Manpower Employment Outlook Survey is a global employer survey, conducted quarterly in 42 countries for more than 50 years. The survey consists of a single question relating to employment expectations for the quarter. The 2013 fourth quarter survey for Australia included a representative sample of 1,509 employers. See ManpowerGroup (2013) for details.
The manufacturing industry had the lowest employer confidence in November 2013 with a WFI of 61.7, followed by construction (62.8).
- Retail trade had the highest employer confidence (WFI=66.8), followed by health care and social assistance with a WFI of 65.3.
- Of all sub-indices, recruitment was the lowest across all industries and lowest in the manufacturing sector.
- Retail trade had the highest sub-index score in investment, profits, sales and growth.
- The health care and social assistance sector had the highest sub-index score for recruitment expectations (62.7)

The WFI by industry indicates that the manufacturing industry had the lowest employer confidence (WFI=61.7) in November 2013 (see Figure 4). This is likely to be a reflection of uncertainty around the auto manufacturing sector at that time. Noting the survey was conducted just prior to the December 2013 announcement of the closure of GM Holden production plant in 2017. The construction industry displayed the next lowest confidence with a index of 62.8. Retail trade was the most optimistic with a index score of 66.8. Health care and social assistance stood at 65.3. All ‘other’ industries were combined and assessed together (due to low numbers of employers in the remaining industries) with a WFI of 65.1.
Figure 5 presents the five sub-indices of the WFI by industry. The recruitment sub-index was low across all industry groups, and lowest in manufacturing with a rating of 55.5, indicating a cautious reaction to recruitment opportunities over the year to November 2014. Health care and social assistance had the highest employer confidence in hiring expectations (index=62.8), followed by retail trade (index=60.0).

The investment sub-index stood above 60 for all industry groups, displaying cautious optimism by employers for the 12 month period starting November 2013. Retail trade had the highest investment score at 68.4 while construction had the lowest with 61.9.

Employer expectations for business profits were again cautious, with the manufacturing and construction industries displaying the lowest confidence (sub-index score of 60.3 and 61.5 respectively). Health care and social assistance, retail trade and other industries all had a similar confidence levels with the profits sub-index standing at approximately 65.

A similar pattern is evident in employer sales expectations, with retail trade and other industries having a higher sales sub-index score (70.2 and 67.8, respectively), while the sales score for manufacturing, construction and health care and social assistance sectors stood at 64. The growth sub-index was mixed across industry groups. Manufacturing had the lowest growth outlook with a score of 63.7, while retail trade had the highest with a score of 69.4.


5 The associated tables are available in Appendix B.
2.2.2 WFI By Size Of Establishment

- Small businesses had the lowest level of confidence (WFI = 62.3)
- The recruitment sub-index had the lowest score among the component indicators, suggesting modest hiring sentiments by employers regardless of size of establishment.
- In spite of the cautiousness displayed in hiring expectations, small to medium sized businesses (2 to 4 and 5 to 19 employees) had a relatively optimistic outlook in their sales and growth expectations.

The Cities of Playford and Salisbury are mostly dominated by small employers, and this is reflected in the survey sample. Smaller establishments (with 2-4 employees) report the lowest employer confidence with a WFI of 62.3 (Figure 6). A similar sentiment is evident in medium sized establishments (20-199 employees). Not surprisingly the largest establishments (200+ employees) were the most confident with an index of nearly 80.7 Small to medium scale establishments with 5 to 19 employees are relatively optimistic with an index of 66.8.

**Figure 6: WFI by size of establishment, November 2013**

![Bar chart showing WFI by size of establishment]

Note, results for 200+ employees should be interpreted with caution due to low sample size (n=6).

Disaggregating the sub-indices by size of establishment clearly illustrates that organisational size matters. As seen from Figure 7, employer confidence is generally positively related to the size of the establishment. The largest businesses (200+ employees) have consistently scored the highest across all sub-indices, while the smallest businesses (2-4 employees) scored the lowest.

The recruitment sub-index had the lowest score, indicative of the tepid hiring sentiments by employers across businesses regardless of size. Small businesses with 2 to 4 employees had the lowest recruitment confidence with the sub-index standing at 55.0, while those with 200 or more employees were relatively resilient with a recruitment sub-index of 68.7.

---

7 Note that there were only 6 establishments with 200+ employees in the sample. This reflects the distribution of firm sizes in the region.
8 The associated tables are available in Appendix B.
In spite of the cautiousness in hiring expectations, small to medium sized businesses (2-4 and 5-19 employees) had a relatively optimistic outlook in their sales and growth expectations. Interestingly, businesses with 20 to 199 employees had lower sub-index scores for all component indicators, compared to businesses with 5 to 19 employees. This may suggest an underlying vulnerability within these businesses, which we will be able to examine more closely as additional data becomes available from future surveys.

3 SUMMARY AND FUTURE DIRECTIONS

The WFI for November 2013 stood at 64.4 indicating that employers in Playford and Salisbury were cautiously optimistic about the next 12 months. An analysis of the sub-indices reveals that employers were least optimistic about hiring new employees. In terms of industries, the manufacturing sector had the lowest score with the index at 61.7, compared to the retail sector which was a resilient 66.8. Small businesses are more susceptible to market volatility, and this is evident from the low WFI of 62.3 for small businesses (2 to 4 employees) compared to 79.6 for the six largest establishments (with 200 or more employees).

The WFI, constructed based on data from the first wave of the WFS, provides the starting point to a series of employer sentiment indicators that will enable policy makers and analysts to track changes and trends in the northern Adelaide regional economy. Combined with quantitative labour market statistics, they provide important information on current business sentiment and directions in the business cycle in a timely manner. The WFI will be updated as new data from the WFS becomes available.
REFERENCES


Appendix A. CONSTRUCTION OF THE WFI: METHODOLOGY

The WFI is constructed by quantifying the qualitative responses to survey questions that capture business sentiment along the specific indicators listed above. The responses range from ‘strong increase’, ‘moderate increase’, ‘no change’, ‘moderate decrease’ to ‘strong decrease’. The values are assigned range from 0 to 1 as follows:

- Strong increase → 1
- Moderate increase → 0.75
- No change → 0.5
- Moderate decrease → 0.25
- Strong decrease → 0

Then the diffusion index (average sum across firms) for each indicator is calculated by;

\[ WFI_i = \frac{\sum_{n=1}^{N} P_{i,n}}{N} \times 100 \]

Where,

- \( WFI_i \) = Workplace Futures Index for Indicator \( i \)
- \( P_{i,n} \) = Points given to firm \( n \) for Indicator \( i \)
- \( N = \) Total number of respondents (firms)
- \( i = \) Indicator

The aggregate WFI is calculated using the following formula.

\[ WFI = \left( \frac{\sum_{i=1}^{I} \sum_{n=1}^{N} P_{i,n}}{I \times N} \right) \times 100 \]

Where,

- \( WFI = \) Workplace Futures Index
- \( I = \) Total number of indicators in the Index

The index can therefore range from 0 to 100. Following the literature (Martin & Papile, 2004), the middle point, 50 is considered as the benchmark and the following classification is adopted.

- \( WFI<50: \) Low business confidence
- \( WFI=50: \) Business confidence is unchanged
- \( WFI>50: \) High business confidence

The index is adjusted using industry level weights as described in Ranasinghe et al (2014) to reflect the reference population.

---

\(^{*}\) The literature on business sentiment indicators provides examples of using a three-point scale for the questions (positive, neutral and negative response). See for example, Manpower Group (2014) and Dunkelberg & Wade (2014). The use of a five-point scale as in the WFI, allows aggregation to the three-point scale if needed, while preserving the continuity of the response variable.
## Appendix B. Tables

### Table 1: WFI: Overall and by Location, November 2013

<table>
<thead>
<tr>
<th>Workplace Futures Index (WFI) – November 2013</th>
<th>Overall (n=451)</th>
<th>Playford (n=227)</th>
<th>Salisbury (n=224)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI</td>
<td>64.38</td>
<td>65.14</td>
<td>63.70</td>
</tr>
<tr>
<td>Sub-indices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>65.99</td>
<td>67.53</td>
<td>64.57</td>
</tr>
<tr>
<td>Recruitment</td>
<td>58.85</td>
<td>59.46</td>
<td>58.29</td>
</tr>
<tr>
<td>Profits</td>
<td>63.81</td>
<td>64.34</td>
<td>63.32</td>
</tr>
<tr>
<td>Sales</td>
<td>66.86</td>
<td>67.64</td>
<td>66.17</td>
</tr>
<tr>
<td>Growth</td>
<td>66.41</td>
<td>66.71</td>
<td>66.13</td>
</tr>
</tbody>
</table>

### Table 2: WFI by Industry Group, November 2013

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing (n=75)</th>
<th>Construction (n=74)</th>
<th>Healthcare and Social Assistance (n=59)</th>
<th>Retail Trade (n=78)</th>
<th>Other (n=165)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI</td>
<td>61.72</td>
<td>62.81</td>
<td>65.25</td>
<td>66.83</td>
<td>65.05</td>
</tr>
<tr>
<td>Sub-indices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>64.49</td>
<td>61.99</td>
<td>66.28</td>
<td>68.40</td>
<td>67.66</td>
</tr>
<tr>
<td>Recruitment</td>
<td>55.48</td>
<td>59.72</td>
<td>62.79</td>
<td>60.20</td>
<td>58.13</td>
</tr>
<tr>
<td>Profits</td>
<td>60.27</td>
<td>61.46</td>
<td>65.00</td>
<td>65.88</td>
<td>65.65</td>
</tr>
<tr>
<td>Sales</td>
<td>64.64</td>
<td>64.93</td>
<td>63.89</td>
<td>70.21</td>
<td>67.95</td>
</tr>
<tr>
<td>Growth</td>
<td>63.70</td>
<td>65.97</td>
<td>68.29</td>
<td>69.44</td>
<td>65.87</td>
</tr>
</tbody>
</table>

### Table 3: WFI by Size of Firm, November 2013

<table>
<thead>
<tr>
<th></th>
<th>2 to 4 employees (n=183)</th>
<th>5 to 19 employees (n=178)</th>
<th>20-199 employees (n=84)</th>
<th>200+ employees (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI</td>
<td>62.35</td>
<td>66.84</td>
<td>62.73</td>
<td>79.58</td>
</tr>
<tr>
<td>Sub-indices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>63.24</td>
<td>67.99</td>
<td>67.59</td>
<td>81.25</td>
</tr>
<tr>
<td>Recruitment</td>
<td>55.06</td>
<td>62.42</td>
<td>59.43</td>
<td>68.75</td>
</tr>
<tr>
<td>Profits</td>
<td>62.87</td>
<td>65.89</td>
<td>60.34</td>
<td>75.00</td>
</tr>
<tr>
<td>Sales</td>
<td>65.41</td>
<td>69.19</td>
<td>63.39</td>
<td>91.67</td>
</tr>
<tr>
<td>Growth</td>
<td>65.15</td>
<td>68.71</td>
<td>62.92</td>
<td>81.25</td>
</tr>
</tbody>
</table>
Appendix C. Survey Questions

The relevant questions for the construction of the WFI are listed below;

For the following questions please compare where you are now with where you think you will be in 12 months time and indicate if you expect a:

- Strong increase
- Moderate increase
- No change
- Moderate decrease or
- Strong decrease
- [Unsure]
- [Not applicable]

1. In your intentions to invest in your business in the next 12 months
2. In your intentions to recruit in the next 12 months
3. In your expectations for business profits in the next 12 months
4. In your expectations for sales in the next 12 months
5. In your expectations for business growth in the next 12 months