

Deloitte Access Economics

Reply evidence to
union opinions:
for use by Fair Work
Commission
Four Yearly Review
of Modern Awards
Penalty Rates
AM2014/305

Meridian Lawyers

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Dear Ms Wellard

Reply evidence to union opinions

Thank you for Meridian's emailed correspondence of Thursday 10 September (around 3pm) referring to two Deloitte Access Economics reports dated 25 June 2015:

1. *The modern face of weekend work: survey results and analysis* for Meridian (the "Weekend report") that was filed on behalf of employer parties in support of their penalty rates claim during the Fair Work Commission's four yearly review of modern awards; and
2. *The effect of the Pharmacy Industry Award (PIA) 2010 on community pharmacy in Australia* for the Pharmacy Guild of Australia (the "PIA report"), also previously provided to you as evidence in the review.

On 4 September 2015 the union parties filed their expert opinions (which I understand you received on 7 September 2015). The Commission required reply evidence from the employer parties in relation to these opinions, and this document represents my reply as requested by Meridian.

I have reviewed, and reply to the union reports, as identified by you, that comment on the Weekend and PIA reports or deal with specific industry issues as follows.

Section 1: Australian Council of Trade Unions

- Raymond Markey: The continuing importance of penalty rates for weekend work: a review of the evidence (comments on the Weekend report)
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-MarkeyReport-ACTU-040915.pdf>

Section 2: United Voice

- Olav Muurlink: Response to literature review and quantitative work in the Weekend report
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-UV-Muurlink2-040915.pdf>
- Damian Oliver: Impact of penalty rates on wages of hospitality workers
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-UV-Oliver-040915.pdf>

Section 3: Shop, Distributive and Allied Employees Association

- Sara Charlesworth and Fiona Macdonald provides additional AWALI and qualitative analysis about work life interference¹
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-expert2-SDA-040915.pdf>
- Sara Charlesworth report on questions and matters referred to in the Weekend Report
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-expert3-SDA-040915.pdf>
- Helen Bartley (Bartley Consulting) regarding both of our reports and another one
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-expert9-SDA-040915.pdf>
- Martin O'Brien: Regression Analysis in the PIA report
 - <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM2014305-expert8-SDA-040915.pdf>

Yours sincerely,



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¹ Charlesworth corrects an error in her other report.

Contents

1	ACTU.....	1
1.1	Raymond Markey re Weekend report - Summary.....	1
1.2	Issues and replies.....	1
1.2.1	Profile of workers on penalty rates.....	1
1.2.2	Employment effects.....	2
1.2.3	Role of the weekend.....	4
2	United Voice.....	7
2.1	Olav Muurlink re Weekend report.....	7
2.1.1	Literature search methodology.....	7
2.1.2	Survey methodology.....	8
2.1.3	Time use studies.....	10
2.2	Damian Oliver.....	11
3	Shop, Distributive and Allied Employees Association.....	12
3.1	Sara Charlesworth and Fiona Macdonald re Weekend report.....	12
3.1.1	Survey sample and online method.....	12
3.1.2	AWALI survey, weekend work and work-life interference.....	14
3.1.3	Qualitative analysis.....	15
3.2	Helen Bartley re Weekend report.....	16
3.2.1	Survey approach.....	16
3.2.2	Presentation of results.....	16
3.3	Helen Bartley re PIA report.....	17
3.3.1	Survey questionnaire and response rate.....	17
3.3.2	Data analysis.....	17
3.4	Martin O'Brien re PIA report.....	19
	Limitation of our work.....	42

Tables

Table 3.1 : General Retail Award younger age discounts.....	13
Table 3.2 : Change in average annual wage cost due the PIA.....	22

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1 ACTU

1.1 Raymond Markey re Weekend report - Summary

Markey's arguments focus on the following main issues.

1. Comments about the profile of workers receiving penalty rates – this section is short and provides little disagreement with our work, but concludes by citing a Centre-Left body that assumes away the employment response as 'evidence' that economic theory does not hold in practice.
2. Markey then asserts that there is inadequate evidence that penalty rates may be one factor causing reduced staffing levels or that they could have an adverse effect on employment levels and, rather, claims that changes in staff levels only ever reflect demand fluctuations. At the same time, he says it is possible that there is an employment effect, which is what we note in our study.
3. Markey agrees that people who work weekends may have particular characteristics that make them more likely to work weekends, but disagrees that work life balance outcomes are explained by many more factors other than just working hours, income and being a parent. He also makes a number of peripheral observations that do not really impact our report's evidence.

1.2 Issues and replies

1.2.1 Profile of workers on penalty rates

A. Paras 5-7: Markey notes that many workers on penalty rates are among the low paid, and working unsocial hours is not the experience of a majority of workers, and our report is in agreement. He also notes that our analysis shows the growth in the proportion of weekend workers who are dependant students living at home, around 22% of the total. Markey emphasises the larger share are not dependant.

- We naturally concur. Our point was simply to observe that the particular dependant student group is a growing share of the total.

B. Para 8: Markey provides a retail industry case study by the McKell Institute (2014)² which estimates the total losses to retail workers in rural NSW due to a partial penalty rate cut to be between \$89 million and \$226 million and losses due to abolition to be between \$164 million and \$315 million.

² http://mckellinstitute.org.au/wp-content/uploads/pdf/McKell_Penalty_Rates_WEB.pdf

- The paper self-acknowledges that it “has modelled hypothetical scenarios” (p17). The paper assumes there is no wage elasticity of demand; so, of course, if it is assumed that there is no employment response, then reducing wages reduces income. However, to purport to prove that there is no employment response, and hence losses, is incorrect as you can’t just assume away any actual impact.

1.2.2 Employment effects

A. Para 9: Markey attempts to attack the 28%/33% non-response rates for Saturdays and Sundays respectively on Q15, even while noting that people who don’t work those days would not respond for the day they don’t work and that those working in larger organisations may not have knowledge regarding overall staffing.

- There is nothing noteworthy about this; two-thirds to three quarters is an excellent response rate and recent evidence also suggests that the expense of increasing response rates is frequently not justified given the marginal differences in survey accuracy³.

B. Para 10-11: Markey claims that, for the group of people for whom both hours reduce and workload increases, the increased workload can only be coincidental or due to ‘operational factors’. He acknowledges, however, that it is ‘possible’ that penalty rates are a factor.

- We do not attribute this only to penalty rates, as Markey claims; rather, we indicate that this is in line with what economic theory would suggest and cannot be ignored as one driver. Markey concludes that more research would be needed to determine the exact extent of all factors. We agree, but logically cannot rule out that penalty rates may be having an employment impact here, as Markey does rule out when he summarises in para 4 that ‘changes to staffing levels on the weekend are simply due to fluctuations in demand’. It is difficult to see how the data supports the conclusion that demand factors are overwhelmingly responsible for reduced staff by saying it is because the proportion is similar for those who perceived fewer staff and lower workloads; in this case demand and supply are both working in the same direction.⁴ Moreover, Markey does not provide any evidence that employers may not increase staff due to the ‘capacity of the facility’; rather, this is purely speculative and it is

³ Visser, Penny S., Jon A. Krosnick, Jesse Marquette, and Michael Curtin. 1996. “Mail Surveys for Election Forecasting? An Evaluation of the Colombia Dispatch Poll.” *Public Opinion Quarterly* 60: 181–227.

Keeter, Scott, Courtney Kennedy, Michael Dimock, Jonathan Best and Peyton Craighill. 2006. “Gauging the Impact of Growing Nonresponse on Estimates from a National RDD Telephone Survey.” *Public Opinion Quarterly*. 70(5): 759–779

Curtin, Richard, Stanley Presser and Eleanor Singer. 2000. “The Effects of Response Rate Changes on the Index of Consumer Sentiment.” *Public Opinion Quarterly* 64(4): 413–428.

Holbrook, Allyson, Jon Krosnick, and Alison Pfent. 2007. “The Causes and Consequences of Response Rates in Surveys by the News Media and Government Contractor Survey Research Firms.” In *Advances in telephone survey methodology*, ed. James M. Lepkowski, N. Clyde Tucker, J. Michael Brick, Edith D. De Leeuw, Lilli Japiec, Paul J. Lavrakas, Michael W. Link, and Roberta L. Sangster. New York: Wiley

Rok Seon Choung, G. Richard Locke III, Cathy D. Schleck, Jeanette Y. Ziegenfuss, Timothy J. Beebe, Alan R. Zinsmeister, Nicholas J. Talley. 2013. “A low response rate does not necessarily indicate non-response bias in gastroenterology survey research: a population-based study.” *Journal of Public Health* February 2013, Volume 21, Issue 1, pp 87-95

⁴ Markey’s qualifications do not appear to be in economics, but in political science.

difficult to envisage many situations where an extra staff person could physically not be accommodated in a facility such as a hotel, retail store or pharmacy.

C. Paras 12-13: Markey claims that “any work commitments on a Friday evening or Saturday are...unsociable”.

- This is contradicted by Sara Charlesworth’s evidence that some people like working weekends because they enjoy their co-workers’ company (a “nice group of co-workers” p18). Some staff also enjoy the company of their patrons⁵, so sociability can also be achieved for some people at some times in this way.
 - Markey also claims that two questions were asked about use of services, one asking what day of the week people (not just “employees”, as he states) prefer to use services; this is Q22 of the survey and he has no issue with it.
 - He claims that a second question asked how much more likely people were to use a particular kind of service on a Saturday or Sunday than on the average weekday. Such a question was not asked.
 - Q20 asked how many times per week people accessed services and at what times, and Q21 asked about the reasons for accessing at those times. Analysis of the data then derived the likelihood conclusions.
 - Markey also claims that the lack of specificity about ‘weekday’ is somehow problematic for respondents to answer; however, there is no evidence that this was the case in the response rates, consistency of responses, comments, or the fact that the word “weekday” is in common use and people understand the concept. Moreover, pay rates are varied based on Saturday, Sunday and “weekday” and time of day, hence the appropriateness of using this formulation in the survey.

D. Paras 14-16: Markey argues that there is no possible relationship between opening hours, penalty rates and preferences.

- This is because Markey, while acknowledging it is possible, does not accept as per 1.2.2B above that (in line with economic theory and supply and demand drivers), fewer hours and higher workload could in part be driven by penalty rates. That said, there is no arguing from the survey and other evidence that opening hours are indeed more limited on weekends⁶, and preferences for using these services at these times is indeed higher and thus facilities are in many cases more crowded than on weekdays (e.g. supermarkets on Saturday mornings, pubs on Saturday nights), and that therefore those who prefer to use services on weekdays may be avoiding the crowds (e.g. pensioners shopping on weekdays instead).
- Moreover, as noted in the PIA report, pharmacy industry data shows a decline in trading hours over 2009 to 2014 with 94% of businesses reporting closing on public holidays and 89% on Sundays due to the burden of penalty rates.

⁵ There are many examples online, for example in after hours hospitality: “The worst part is when the night ends, you just want to be around the fun, loving atmosphere all the time, it just lifts everyone’s spirits seeing happy faces and people full of excitement and joy.”
<http://au.indeed.com/cmp/Spotless/reviews?fcountry=AU&fjobtitle=ALL&start=20>

⁶ This is demonstrated, for example, by the 240 responses noting that the timing of their service access is driven by services not being open on weekends.

E. Para 17: Markey argues that there is no evidence that owner-manager employers increase their own hours of work and reduce those of employees to avoid penalty rates.

- Our report does not claim this, so we are agreed.⁷

F. Paras 18-19 on wage elasticity of demand: Markey claims that the academic research cited in our report is flawed, including that by Price (2005) – which Markey claims does not discuss penalty rates except for two mentions, and that by Lewis (2014, 2015) – which he claims is hypothetical.

- As penalty rates are incurred by extended trading hours, which entail working on Sunday, it is not a misrepresentation that Price’s report looks at the effects of penalty rates as an extension. This is clearly outlined in the report and the findings similarly acknowledged. Lewis (2014, 2015) are not cited in our report.⁸

G. Paras 20-21: Markey argues there is limited evidence that minimum wages have a negative net employment impact.

- Our report acknowledges the ambiguous overall effect of a minimum wage on employment, particularly with regards to different industries, and makes no definitive claim on the relationship between the two variables. However, it does note studies that find the relationship and those that do not, acknowledging either could be the case.

H. Para 22: Markey cites OECD data comparing average unemployment levels with statutory minimum wages and concludes no sufficient correlation between the two variables.

- However, the data represented in the OECD table provides a minimum wage average of two measures over the twenty-year period 1993-2013, making it ill-suited for a static comparison with unemployment (it is uncertain from the table when or from where this particular rate has been taken). Multiple regression analysis would be required to draw robust conclusions.

I. Paras 23-24: Markey claims that minimum wages have no employment effects but just substitute employee wages for employer profits.

- Our report does not dispute the redistribution effect but notes as per para 1.2.2D above that there is existing evidence for reduced trading and hours worked.

1.2.3 Role of the weekend

A. Paras 25-27: Markey states that data from Lewis (2014) on time allocation of workers ignores the fact that averaging minutes over a diverse population and over a year misses the nuances of relativities between demographics and activities.

- However, Lewis (2014) is not cited in our report, and the main purpose is not for sub-group analysis in any case.

⁷ Economics and common sense would suggest that this would only happen if the opportunity cost of employer time was lower than the penalty rate plus on-costs, *and* if owner-managers were skilled in the required areas to perform the services as a substitute.

⁸ We cite Lewis (2013) and Lewis and MacDonald (2002).

B. Paras 28-32: Markey provides a lengthy discussion of time use and drivers of work-life balance and stress.

- Our report, in contrast, notes that weekend workers may be more likely to work on the weekend due to specific combinations of demographic characteristics, preferences and priorities that suit weekend work, but does not claim that this is due to low wages, higher rates of involuntary turnover or any single specific factor. It is not clear how Markey's analysis relates to refuting our evidence and our point remains that not all people regard working weekends as conflicting with balance.⁹

C. Para 33: Markey notes that parents are under-represented among those working unsocial hours and that caring responsibilities and working hours are independent contributions to work/life stress.

- We agree. Parents are under-represented among those working unsocial hours and across the working population due to staying-at-home to care for children.¹⁰ The list of factors for work life stress other than working hours in the work life balance study we referenced include: being female; having young or many children (defined as more than 2); being well-educated; having multiple responsibilities; long commuting times; living in the ACT, Queensland or Victoria; tight finances/debt; health problems; inadequate support at home in domestic work or parenting; study deadlines; being from a culturally and linguistically diverse (CALD) background; and geographic factors – such as traffic congestion. Our point was that it would be necessary to control for all these factors if robust conclusions are to be drawn from the simple relationships between working hours and stress in the AWALI study.

D. Para 34: Markey cites the AWALI survey that “5.8% of workers worked evenings only, while 13.1% worked both evenings and weekends, and 19.1% worked weekends only. Based on these figures, around 40-41% of weekend workers also work evenings” and are thus less likely to be able to partake in social engagements rather than due to personal preference.

- We agree that chances of interaction may be lower for workers who work both evenings and weekends. However, it is also likely that additional confounding factors influence limited social engagement as well as weekend work, such as personal preference or other commitments during the weekdays, such as study, which is evidenced in point C above.

E. Para 35: Markey agrees that average shift length on weekends is shorter than average weekdays, but that preparation, travel time and fatigue mean that the burden of weekend work is “indeed significant”.

- However, preparation, travel time and fatigue are similarly experienced on weekdays. There is no actual evidence provided of additional burden in this paragraph and 'significant' is not defined or quantified.

F. Paras 36-37 – importance of Sundays: Markey claims that the finding that more than half of employees in the sample viewed Saturday and Sunday as equally “valuable” is at odds

⁹ Vanderkam argues that “For many people, working on weekends is actually the key to making work and life work together.” <http://www.fastcompany.com/3021090/how-to-be-a-success-at-everything/is-working-on-weekends-the-secret-to-a-successful-happy-wo>

¹⁰ This is one reason it was important to include them and their views in our survey sample.

with evidence that fewer respondents reported having no problem or minor problem working on Sunday than on Saturday.

- However, the percentage difference of 1% between the days is not statistically significant.

G. Paras 38-42 – employee preferences for weekend work: Markey disputes the extent to which employees who worked weekends do so out of choice.

- The AWALI survey (Table 9, p. 14) notes that 39.7% of all workers who work weekends would continue if penalty rates were not offered, slightly higher than the comparable figure of 37.8% of all workers who rely on penalty rates, supporting our thesis that time preferences, while responsive to external factors, are highly personal and varied.
- The majority of weekend workers in our survey who did select a reason for not wishing to work on the weekend indicated that their reasons were of only “minor importance” to the respondent. The evidence over an extended period by Dawkins, Rungie and Sloan (1986), provides reinforcing qualitative insights into working preferences, as Markey acknowledges.
- Finally, we did not ‘neglect’ to ask about penalty rates, as claimed by Markey, we explain in the report we deliberately excluded this due to potential vested interest bias (i.e. workers receiving penalty rates are unlikely to report in ways that may jeopardise their future incomes).

2 United Voice

2.1 Olav Muurlink re Weekend report

Summary

1. On the literature search, Muurlink misrepresents the method as a systematic protocol, which was not its purpose. Rather it was conducted as a targeted review of discrete literature as per its intent and instruction. Muurlink's suggestions for alternative search terms are not fit for purpose and he erroneously describes Google Scholar as 'arbitrary' in its search result ordering.

2. On survey methodology, Muurlink questions the sample as biased, which it is not. The sample was of Australians with a response rate of 29%, conducted using standard professional research techniques. He also says it is not representative of workers or weekend workers, which it was not intended to be. It was intended to be representative of the Australian population working age and older, in order to reflect views in relation to weekend work, time use, and access to services in particular industries. Muurlink also claims that instead of surveying, a diary approach should have been used; however, that method is extremely expensive and time-consuming and the marginal value is dubious, even if it had been feasible within time and budget constraints.

2.1.1 Literature search methodology

A: The combination of search terms provided in Table 3.1 yield a combined total of approximately 400,000 articles. However, the report states on page 13 that "the literature search revealed a limited number of articles". In addition, Google Scholar arbitrarily limits search results to 1,000 items, and so it would not be possible to review all search results.

- The engagement letter (page 4) specified that we would undertake a targeted search. The search was not intended to be systematic. Page 12 of the report states that a targeted search was undertaken.
- Page 13 notes that the search was further restricted to include "articles with specific reference to penalty rates and their effect on workplace composition, employment characteristics and consumer activity on the weekend."
- Google Scholar limits search results to 1,000, but this is not arbitrary. Rather, "Google Scholar aims to rank documents the way researchers do, weighing the full text of each document, where it was published, who it was written by, as well as how often and how recently it has been cited in other scholarly literature."¹¹

¹¹ Google Scholar – About <https://scholar.google.com/intl/en/scholar/about.html> 16/09/15.

B: The fifth combination of search terms in Table 3.1 (consumer activity AND weekend) should have used “consumer behaviour OR behaviour,” in order to use a term that is more commonly associated with how consumers act.

- The engagement letter (page 2) specifies that the report will “collate and provide an analysis of data regarding consumer activity on the weekend.” As such, “consumer activity” was used as a search term.
- The report is concerned with establishing what activities service sector employees and others undertake on the weekend and on weekdays.
 - “Consumer behaviour” is defined as “the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society.”¹²
 - “Activity” is defined as “a thing that a person or group does or has done.”¹³
 - As such, “consumer activity” more closely matches the aims of the project.

C: A commonly used technical term for penalty rates (“premia”) was not used in the search methodology.

- Muurlink has not provided any evidence of his assertion that premia is a commonly used search term.
 - Using the term “premia” in Google Scholar yields almost 100,000 results, while using “penalty rate” yields 6,480 results. The first two pages of Google Scholar results for “premia” are concerned with financial market premiums, while the first two pages for “penalty rates” are roughly evenly split between the labour market and taxation policy. Thus, “penalty rates” is likely to provide a more focused search.

2.1.2 Survey methodology

A: No information is provided in the report as to: whether respondents were from Australia; whether respondents were paid to take part in the survey, and the response rate. It is standard practice to report this information in academic work.

- LiveTribe¹⁴ has confirmed that:
 - All respondents were from Australia.
 - Respondents who took part in the survey were “paid” in the usual way that LiveTribe respondents are paid. Each survey that is completed provides points, and when certain thresholds are reached these points can be converted into cash, gift cards etc.¹⁵

¹² Kuester, Sabine (2012): MKT 301: Strategic Marketing & Marketing in Specific Industry Contexts, University of Mannheim, p. 110

¹³ https://www.google.com.au/?gws_rd=ssl#q=define+activity.

¹⁴ Muriel Geagea, Operations Director, 16/09/15.

¹⁵ <http://www.livetribe.com/paid-surveys>

- The survey was emailed to 18,312 people. Of these, 5,375 participated (response rate of 29%).¹⁶ Of these, 59% (n=3,154) completed the survey, and 79 responses were cleaned¹⁷. Of the remaining completed surveys (n=3,075), 975 responses were randomly discarded to provide 2,100 completed surveys.

B: The characteristics of the sample are not representative of Australian weekend workers and Australian workers. Specifically:

- *The report is not able to support conclusions about 15-18 year old weekend workers (HILDA data shows that 21-22% of weekend workers are aged 15-18 years old, while only approximately 1%¹⁸ of the LiveTribe population was in this age bracket).*
- *The mean age of the LiveTribe weekend workers (approximately 45.2)¹⁹ is older than the mean age of Australian weekend workers (30.8 years – see page 26 of report).*
- *Subgroup analysis was “conducted to correct this problem” (page 5 of Muurlink’s notes). The “younger workers” were defined as under 35s.*

Reply

- The report does not draw any conclusions specific to the 15-18 year old age group. Rather, conclusions are made in relation to weekend workers, and to weekend workers aged under 35 years.
- The report did not conduct subgroup analysis of younger workers to “correct a problem”, but rather to provide additional insight into weekend workers aged 35 years and under, as the age distribution of the LiveTribe population is older than the HILDA population (the report notes this on page 23).
 - The cell size used for the subgroup analysis was n=260 for 16-35 years. Subgroup analysis is also possible for 18-21 years, as the cell size for this group is n=33.²⁰
 - As the mean age of the LiveTribe population is 45.2, it is appropriate to define respondents aged 35 and under as “younger”.
- The purpose of the survey (to “gather survey data from weekend workers and consumers on their attitudes to weekend work and access to services on the weekend” – page ii of report) is broader than the purpose implied by Muurlink’s comments. As such, the sampling was designed to reflect the view of the Australian working age and older population on weekend work, time use and access to services, not just those of a limited sub-group of the population (weekend workers). As such, the sample is representative of the larger population it was designed to review.

¹⁶ LiveTribe advises that a normal response rate for a survey that is fielded for 3-4 days is 10-15%. The Deloitte Access Economics survey was fielded for 13 days.

¹⁷ Cleaning refers to ‘removing speeders’, ‘flat liners’ and ‘bad verbatim answers’ – this is described on page 22 of the report.

¹⁸ This is calculated as the sum of 16-17 year weekend workers and ¼ of weekend workers aged 18-21, divided by the size of the population (1,000).

¹⁹ This is calculated by taking the average age of each age group in Table 4.1 (page 23) and calculating a weighted average across all groups.

²⁰ The Department of Social Services (who run HILDA) consider that cell sizes of n=20 are sufficiently large. Charlesworth also relies on this sample size. See for example https://www.dss.gov.au/sites/default/files/documents/05_2012/aspect_of_retirement__report_final.pdf

2.1.3 Time use studies

A. *Time use studies are the preferred method for assessing how people spend their time. Muurlink claims that the method used in the report (where respondents were asked to recall how they spent their time in previous weeks) is “fraught with difficulty” and will “not accurately reflect reality.”*

- It is acknowledged that time diary research is probably a gold standard; however, such studies are very expensive and time consuming. To run a time-use diary study robustly, time use needs to be measured over different months of the year and seasons, to ensure representativeness. This could require up to 12 months to accurately collate data such that potential monthly variation is accounted for. It would also need to representatively cover people of all age-gender groups, geographies, income and education levels, working/non-working situations across different industries, and other important substrata such as Indigenous Australians, culturally and linguistically diverse Australians. Our survey sample does this, but to collate a similar sized and similarly representative cohort of 2100 people completing diaries, was completely infeasible within the time and budget constraints of the report.
- The “brief review” contained in the Bittman 2005 study is in fact one sentence, which says: “It *seems* that time diaries produce more reliable estimates of time spent in an activity than stylised questions, such as: how many hours did you work last week?” (emphasis added). See page 79 of the paper.
 - This paper provided four references in support of this statement: Juster, 1985; Robinson, 1985; Niemi, 1993; Robinson and Godbey 1997.
 - Given the age of these papers, only a copy of the Niemi paper is on the internet²¹. This paper did not compare time diaries with self-reports (the comparison method was interviews, which are subject to significant bias – for example, respondents have a tendency to overstate the hours they spent on ‘socially acceptable’ activities)²².
- The time use survey data referred to in the Bittman paper is taken from the ABS Time Use Survey 1997. The most recent version of this survey is based on data from 2006 which is almost ten years old and may not accurately reflect the current situation in Australia in 2015.
- Given these concerns, it is dubious that a time-use diary approach would add significant additional value, even if it had been feasible.

²¹ This article is available at <http://link.springer.com/article/10.1007/BF01078729>

²² Niemi I 1993, ‘Systematic error in behavioural measurement: comparing results from interview and time budget studies’, *Social Indicators Research*, 30(2): 229-244.

2.2 Damian Oliver

This study does not comment on either of our reports and does not contradict our evidence.

Oliver analyses HILDA and AWRS data to investigate the characteristics of workers in industries relevant to United Voice and who earn penalty rates, as well as the impact of penalties on total earnings for these workers.

The analysis has the following findings:

- The characteristics of employees receiving penalty rate payments and usually working weekends are that they are more likely to be: casual, part-time, under 25 and not married/defacto. This is also in line with our observations.
- Weekly earnings were higher for Accommodation and Food Services employees who were permanent/fixed-term, full-time, male, 25-39, not studying. Penalty rate earnings comprised 33.4% of earnings and their impact has been benchmarked in various ways to minimum wages, median full-time earnings and average full-time ordinary earnings. Comparisons with the hospitality industry were made in that the latter are likely to be older, more likely to be working full-time and less likely to be studying full-time. These findings were not a line of enquiry in our study but have no impact on our findings.
- We note that in relation to the 'impact' of penalty rates the analysis is static i.e. it does not take into account employment effects. Similar to the McKell Institute paper in section 1.2.1, to assume away wage elasticity of demand is not appropriate. Moreover, comparison of a population which is more likely to be casual, part-time, young and without dependants relative to benchmarks that are for full-time workers who are older and with more dependants on average, makes any findings difficult to interpret.

3 Shop, Distributive and Allied Employees Association

3.1 Sara Charlesworth and Fiona Macdonald re Weekend report

3.1.1 Survey sample and online method

A. Charlesworth notes that it is an online survey based on a consumer panel reached via email, claiming internet users may not be representative of the target population.

- It is unclear what bias would be introduced by using an online survey versus other methods such as paper or telephone surveys. Bias is likely to be related to the purpose of the survey; for example, if the survey was related to internet use or use of digital technology then an online survey may introduce some bias. Alternatively, if the survey was aimed at surveying the elderly for example, one could also argue that an online survey may introduce bias. However, the literature has revealed that, except in such cases, internet surveys are an accepted method of obtaining responses as they are more reliable than responses from traditional paper surveys, which are associated with significantly higher rates of completion errors.^{23,24}
 - Furthermore, as more Australians have become connected to the internet over the last decade, the limitations of online surveys have been reduced. In 2013-14, according to the Australian Communications and Media Authority, 92% of Australians use the internet, and 81% of homes have an internet connection.²⁵ So old information as per Charlesworth's reference are out of date.
 - Paper based (self-completed) or telephone surveys could have a larger bias, for example they may be biased towards people who are at home more often, or people who are unemployed. Telephone surveys are more likely to introduce interviewer bias.

B. Charlesworth incorrectly speculated there may be a large non-response rate.

- The survey sample was obtained by sampling a large (approximately 282,000 persons) on-line survey population. In drawing the total survey sample (i.e. those who were emailed the survey), i-Link ensured that the sample was drawn to represent the

²³ Lewis et al (2009), 'Internet versus paper-and-pencil survey methods in psychological experiments: equivalence testing of participant responses to health-related messages', *Australian Journal of Psychology*, Vol. 61, Iss. 2, pp. 107-116

²⁴ Kongsved (2009), 'Reliability of short-form 36 in an Internet, and a pen-and-paper version', *Inform Health Soc Care*, Vol. 34, Iss. 1, pp. 53-58 Gordon (2008), 'Developing the online survey', *Nurs Clin North Am*, Vol. 43, Iss. 4, pp. 605-619

²⁵ ACMA (2014), *Communications report 2013-14 series, Report 1 – Australians' digital lives*, <http://www.acma.gov.au/~media/Research%20and%20Analysis/Research/pdf/Australians%20digital%20livesFinal%20pdf.pdf>

Australian population in terms of gender, age and geography based on Australian Bureau of Statistics data.

- The two surveys were open for 13 days, and had a response rate of 29%. I-Link indicates that usual response rate is between 10-15% for a survey that is open 3-4 days. Given the number of days the surveys were open for, the response rate is usual, and should not be regarded as low. This has been verified by an independent market researcher who advised that a response rate of 29% is considered to be good.
 - CoreData Research, a financial services research and strategy consultancy, has stated that ‘response rates for paper based and CATI surveys have been rapidly falling for some time. Conversely, response rates for web based surveys have been growing with increasing internet adoption among the public. Many consumers now have a preference for the convenience of web based surveys’.²⁶

C. Charlesworth claims the survey instrument should distinguish what proportion of respondents who identified as casual worked full-time or part-time.

- Under Fair Work legislation, casual employees are distinct from full-time and part-time workers, so the groups are fit for purpose.

D. Charlesworth complains that the survey aggregates a number of years into an age cohort (22-35 years). This makes it difficult to evaluate findings about ‘younger workers’.

- It is unclear how the proposed age cohorts of (15-19 years and 20-24 years etc.) as opposed to the report’s selection would have significantly impacted the findings of the report. There is nothing inappropriate about the age groups reported (broadly - school age, University age, beyond University in the under-35 group).
- Another reason to pay more attention to the groups below 22 as we have done is due to the fact that pay is associated with year of age in a number of awards for these people, although there are notable differences across awards and by state/territory. Some pay rates increase each year (e.g. the Fast Food Industry Award, 2010) while for the General Retail Award different rates apply to junior employees aged under 21 (see Table 3.1).

Table 3.1: General Retail Award younger age discounts

Age	% of weekly rate of pay
Under 16 years of age	45
16 years of age	50
17 years of age	60
18 years of age	70
19 years of age	80
20 years of age, employed by the employer for 6 months or less	90
20 years of age, employed by the employer for more than 6 months	100

E. Charlesworth objects to the inclusion of the self-employed in the workforce.

- Based on the profile of the i-Link consumer panel, only 1.4% identify as self-employed. It is unlikely that the number of self-employed employees would significantly affect the

²⁶ Core Data (2014), ‘Keys to Growth Report – Product Overview 2014’, accessed 17 September 2015, http://www.coredata.com.au/wp-content/uploads/2014/10/Keep_Steal_Grow_Product_Overview.pdf

results. Moreover, it was deemed quite appropriate that these employees' views and behaviours not be excluded from those of the target population of Australians working age and older.

F. Charlesworth expresses concerns about the proportion of those in the sample who are not in the workforce or who are unemployed.

- The survey sample is intended to be representative of the Australian population, whether they work or not. People who do not seek work (i.e. are not in the labour force) may be engaged in a range of other activities such as full-time education, carer roles or volunteer work, and act as consumers accessing the services of interest on weekends and weekdays, with their own time use and access preferences. By including these people in the survey sample, the survey is more representative of the target population.
 - The historical participation rate in Australia is 63% (1978 to 2015). The non-weekend workers sample has a broad distribution: those employed or who are unemployed but seeking a job make up 72% of the survey sample. The slight *over-representation* of workforce participants in our survey is potentially explained by the lower response rates from the oldest old in our survey and interest of respondents in the content of the survey.

3.1.2 AWALI survey, weekend work and work-life interference

A. Charlesworth notes that the Weekend report states the correlation between work-related stress and weekend work 'may be capturing the different characteristics of the weekend worker population as indicated in the literature review, not the effects of weekend work per se, since, as this report shows, weekend workers act differently to non-weekend workers in ways that can't directly be explained by the fact that they work weekends.' She goes on to claim that we thus assume that only one particular type of person works on weekends.

- The report does not assume that only one type person works on weekends. It is clear from the survey sample of 'weekend workers' that there are variety of employment and social demographic backgrounds. To clarify, there may be an underlying factor or personal characteristic which cannot be observed but may confound the measurement of the levels of work-life interference. These factors are listed in Section 1.2.3 above in our reply to the ACTU (Markey) response, para 1.2.3C.

B. Charlesworth accuses our analysis of having a 'non-representative survey methodology and inadequate sampling', particularly the non-weekend worker group, claiming that the AWALI survey, instead, is a large, nationally representative survey of Australian workers.

- The AWALI sample comprises only Australian workers who answered a CATI call on a weekend and then continued to participate in a telephone interview. We have noted the problems with this technique above (see Section 3.1.1A).
- The AWALI sample analysed by Charlesworth excludes the self-employed, which is not fit for purpose in our study (see Section 3.1.1E)
- The AWALI sample ignores others in the labour force, notably the unemployed – a group which unions arguably should have a strong regard for.
- Moreover, for the purpose of our study we required the experiences and views of current non-workers who also value their weekend time (including those in full-time

study, in volunteer roles, on parental leave or career breaks, or undertaking caring roles for the elderly or those with disabilities).

- The AWALI sample would thus lead to biased results to the extent that those it excludes may value their weekend time and access the services in the industries of interest differently from the average of the population.
- Moreover and importantly, we note that the AWALI survey relied upon by Charlesworth is a telephone survey conducted only on weekends, when potentially weekend workers would be working (and hence more stressed) than non-weekend workers (who would be having days off). We consider this to be much more serious and identifiable introduced bias.

C. Charlesworth notes that, for employees with young children, working on weekends is associated with worse work-life interference than not working on weekends and the association is statistically significant.

- The Weekend report uses, as an example of the many confounding factors which drive work-life interference, 'having young children' or 'many' children (more than two, not more than one, as per the definitions in the source research). There are naturally many other potential confounders which need to be considered such as those listed in Section 1.2.3C.
- The regression analysis that Charlesworth uses throughout her response has serious flaws.
 - First, she includes numbers of hours worked together with weekend work as independent variables, but they are correlated (weekend workers work fewer hours than non-weekend workers), potentially resulting in multicollinearity.
 - Second, the regressions rely on combining 'sometimes' as well as 'often' and 'almost always' relative to 'never' combined with 'rarely'. It is not clear why these groupings are adopted or why 'sometimes' would not belong in the other group. This is important since the 'sometimes' group may drive results. For example, in Charlesworth's Table 3.2b, the AWALI Sunday retail score is higher for those who work weekends sometimes, compared to those who work weekends often or almost always. This suggests those who work weekends a lot have better work life balance than those who only work weekends sometimes.
 - Finally, and most importantly, the explanatory power (R-squared) of all the regressions is very low, suggesting just what we say in our report – there are a lot of confounding factors that are in fact driving work life outcomes that are just not accounted for in AWALI.

3.1.3 Qualitative analysis

The qualitative analysis provided by McDonald comprises a sample of 25 respondents recruited from the 81 AWALI 2014 survey respondents who said they worked in retail and sometimes, often or always worked on Sundays, 23 of whom also worked on Saturdays.

- The qualitative analysis does not refute any of the evidence in the Weekend report.
- We note however, that there is no discussion of how or why the particular 25 in the sample were excluded from the remainder, nor why Sundays was chosen rather than

Saturdays, or 'Saturdays and Sundays'. It appears that the sample was neither random nor representative, and that the quotations provided are also highly selective, chosen by McDonald without explanation.

3.2 Helen Bartley re Weekend report

3.2.1 Survey approach

A. Bartley, like Charlesworth, claims that an online panel approach is not representative of the target population and has a large opt-out rate, yet also comprises people readily available to participate – a 'convenience' sample.

- It is contradictory to claim that the sample has a participation rate that is both too low and too high. The response rate was 29% and, as argued in Sections 2.1.2 and 3.1.1 above, this is considered a good response rate that would not suffer from significant non-response bias, nor would the on-line approach jeopardise the robustness of findings (for the reasons argued in those previous sections).
- Respondents are not so available that they all drop everything and participate, yet the internet is optimal for enabling people to respond and hence is valuable in ensuring higher participation, which is what is desirable. There is no issue with convenience in surveying – it is an asset, and surveyors typically don't aim to be inconvenient in their approaches.
- Overall, the survey approach was an effective, cost-effective approach with a representative sample, with a balanced participation rate.

B. Bartley complains that the report does not outline the number of individuals who were removed from the sample in the 'data cleaning' process i.e. 'Speeders', 'Flat Liners', and claims it is not necessary for all responses from 'Bad verbatim' respondents to be removed.

- As described in detail in Section 2.1.2, the survey had 3,154 completions, of which 79 responses were cleaned (1.5%).²⁷ This is a typical clean rate according to the survey fielders and uses standard professional checks to identify individuals displaying certain patterns of behaviour – described as 'Speeders', 'Flat liners', and 'Bad verbatims'. All responses from these latter individuals were removed for two reasons:
 - If these respondents do not answer open-ended questions legitimately, the rest of their answers are less likely to be reliable.
 - There was a surfeit of completed surveys (975 responses were randomly discarded to provide the desired 2,100 completed surveys), so it makes sense to remove the lower quality ones first and then randomly discard.

3.2.2 Presentation of results

A. Bartley says Table 4-2 of the report could have been clearer if two tables and percentages were shown, and that charts 4.4 and 4.5 on pages 27 and 28 are also "unclear".

- The percentages are effectively presented and the commentary notes this: 'since exactly 1,000 completed responses were received for each of these questions, the

²⁷ Cleaning refers to removing speeders, flat liners and bad verbatim answers – this is described on page 22 of the report.

percentage of respondents who selected each answer is simply the number of respondents divided by ten’.

B. The ‘N/A’ responses to some questions were not clearly explained.

- All N/A responses are as per the questionnaire provided in the Appendix of the report. In relation to Table 4.2 specifically, as an example, the questionnaire indicated that the boxes should be left blank “if the reason does not apply to you”. Respondents could choose a score from 1-3 if the reason mattered to them, or ‘Does not apply to you’ (referred to ‘N/A’ in the Table 4.2) if the reason doesn’t matter to them.
- There is no indication that respondents had any difficulties with the N/A categories, which are important to include so that people are not forced to provide a non-response or sub-optimal response if something is not applicable to them. This is standard good practice in survey design.

3.3 Helen Bartley re PIA report

3.3.1 Survey questionnaire and response rate

A. Bartley says it is customary for a report of this nature to include a copy of the questionnaire; this was not provided, and therefore the robustness of the methodology cannot be fully assessed.

- A copy of the questionnaire is provided at Appendix A.

B. Bartley says the 5.6% survey response rate is low, which could introduce bias into the findings and confidence intervals.

- Response rates for busy clinical professionals in the health sector are typically lower than those in the general population, in our extensive experience. One reason why such a large sample was asked to respond (all 5,350 pharmacy proprietors across Australia represented by the Guild) was to ensure that there were enough responses to allow reliable conclusions to be drawn from the survey.
- n=302 responses is more than adequate in providing confidence. The Department of Social Services (who run HILDA) consider that cell sizes of n=20 are sufficiently large for confidence in the analysis. Charlesworth also relies on this sample size and reference.²⁸

3.3.2 Data analysis

A. Bartley notes that the PIA report refers to weighted averages (see pages 32, 34, 35 and 45 of the report), but that the reasons for applying the weights to the data and the method of weighting are not clearly explained.

- The ‘weighted’ average in a Likert score simply refers to the implicit weight of the score itself. For example on page 34, respondents provided a score of concern between 1-10. The results can thus also be calculated as a simple average of the scores.

²⁸ https://www.dss.gov.au/sites/default/files/documents/05_2012/aspect_of_retirement__report_final.pdf

B. Bartley notes that a number of statistical assumptions are required to hold in order for regression analysis to yield reliable conclusions, and requires detailed reassurance on each in order to ascertain reliability, including:

- *linear relationships between the dependent variable and each of the independent variables;*
- *equality of variance between the pairs of variables used in the regression;*
- *each predicted value of the dependent variable from the regression is independent; and*
- *the independent and dependent variables are normally distributed.*

With reference to the points above, in order:

- Plots of residuals vs fitted values were used to test whether the linear relationships as specified in the model are plausible. The plots indicate no evidence of non-linear relationships in the specified equations.
 - We also ran models on the natural logarithms of the variables such as wagecosts and sales_total and the results were substantially the same i.e. no evidence of non-linearity. (The coefficient on the PIA dummy in the wagecost equation, for example, then estimates the proportional change in wagecost associated with the introduction of the PIA.)
- Equality of variance between the pairs of variables we have interpreted to mean testing for any heteroscedasticity (when error terms have a pattern rather than being random). Analysis of standard errors showed that used of the estimated models was robust in this regard (robust to heteroscedasticity).
- It is unclear from Bartley's wording what the predicted values should be independent of. If she means that they should be independent of each other (i.e. independence of observations across pharmacies), then that is satisfied in our sampling technique. If she is referring to the potential for simultaneity bias or omitted variable bias, then our response to O'Brien refers to these aspects and, since panel data techniques were used to remove time invariant fixed effects, there is no evidence that the PIA variable is not exogenous.
- This statement is not correct. In ordinary least squares estimation, there is no requirement that the independent variables be normally distributed (or have any specific distribution). It follows that the dependent variable need not be normally distributed. A normality assumption may be made about the error terms, in which case hypothesis testing is exact. Otherwise, hypothesis testing relies on the Central Limit Theorem, and the tests have the correct size asymptotically.
 - The natural logarithmic transformation mentioned in the first dot point often has the effect of transforming the data towards normality. Since this transformation also shows similar findings, this underscores the robustness of the econometric methods.

3.4 Martin O'Brien re PIA report

O'Brien claims that the five regression specifications used in the PIA report are flawed as a result of three claims.

First he questions the attribution of impacts due to the way that the PIA variable is specified as a dummy and claims this will capture the effect of all changes between 2009 and 2014. However it is difficult to imagine any impacts that would be more substantial than the PIA and GFC over the modelling period 2009 – 2014. Further, if the PIA coefficients are biased due to the exclusion of a GFC variable, it would be biased in a direction that would underestimate the effect of the PIA; thus deeming our estimates to be on the conservative side.

Second, he has concerns about the levels of significance of some of the coefficients in the regression equations. However, these coefficients are not for the PIA variable, which is significant at 10% (1% is too stringent a criterion; referring to another one of his concerns). Considerations of multicollinearity were checked through multiple means including correlation of explanatory variables and variance inflation factors (VIFs) and all model specification was determined accordingly. The high R-squared values occur after correction for any multicollinearity among the non-significant variables, indicating that the value reflects good explanatory power of the equations.

Finally, he suggests there may be simultaneous equation bias in the models. We have demonstrated through running reduced form equations with similar results that the analysis is also robust in this regard.

A. O'Brien claims that, because the dummy variable for the Award takes the value of 0 in 2009 and 1 in 2014, it will capture all effects since the introduction of the Award, and that this is problematic since he believes the GFC (and other time variant factors) would have influenced outcomes over this period.

The first part of the claim is true – the PIA dummy variable will capture the effects of all variables that changed between 2009 and 2014 and which are not included in the models.²⁹ It is therefore appropriate to consider the variables that could have had an impact on the sector. These variables are either macro, representing changes in economic conditions between 2009 and 2014, or micro, representing variables that are specific to the sector or individual pharmacies. The micro variables are included in the survey and in the modelling. The macro variable highlighted by O'Brien is the GFC. Could the GFC have had the effects on the sector found in the regressions?

Firstly, the GFC had only a mild effect in Australia, due to factors such as the growth of the Chinese economy, the lowering of interest rates by the Reserve Bank of Australia and economic stimulus. Economic growth was 3.7%, 1.7% and 2.0% in FY2008, FY2009 and

²⁹ It is not possible to include a GFC variable in the model, or any variable that takes on the same value for each of the pharmacies in the dataset, since such a variable would be perfectly correlated with the PIA dummy and the estimation of the models would fail.

FY2010, respectively, and Australia experienced only one quarter of negative economic growth in that period.

The coefficients on the PIA dummy variable in the various models suggest that between 2009 and 2014 there has been:

- an increase in wage costs;
- a decrease in weekly trading hours;
- a decrease in casual FTEs and an increase in permanent FTEs with an overall fall in FTEs; and
- an increase in proprietor hours worked.

To the extent that the GFC suppressed economic activity, it would have had effects that suppressed wage costs, trading hours, and FTEs in 2009 (i.e. a low base period) and then seen these variables return to more normal levels by 2014 i.e. observed increase in wage costs, but higher trading hours and higher FTEs by 2014. (The impact on proprietor hours worked from a negative economic shock is not predictable from theory due to potential substitution effects.)

In other words, if the PIA coefficients were biased due to the PIA dummy including the effect of the GFC, then the bias would be to *underestimate* the effect of the PIA on trading hours and FTEs i.e. without the effects of the GFC resolving, the base would have been higher and the fall in trading hours and FTEs would have been even more pronounced. This would have occurred with wages rising due to both the PIA and the restoration of higher economic activity. So the GFC impact would underscore our findings.

It is difficult to envisage other impacts that could be affecting the PIA variable, that are not the macroeconomic environment nor the micro variables included in the modelling.

B. O'Brien questions the statistical significance of coefficients and claims that the results are symptomatic of the issue of multicollinearity.

First, we consider the question of multicollinearity:

- Multicollinearity occurs in a linear regression model when two or more of the explanatory variables are highly correlated. More specifically, multicollinearity results when one of the explanatory variables can be linearly predicted from the others with a high degree of accuracy. Multicollinearity affects the precision with which the variables' impact on the dependent variable can be measured, leading to lower power.
- There is no precise test for multicollinearity, meaning that there is no strict way of quantifying the word 'high' in the previous paragraph. Instead, a number of indicators have been suggested. O'Brien mentions some of these, such as a relatively high R-squared together with individual coefficients that are not statistically significant, and regression results being very sensitive to small changes in the specification. However, each of these three factors can also be explained in other ways. High R-squared can simply mean the model is well specified and has strong explanatory power. Individual coefficients being insignificant means these particular variables may not be a major part of the explanation in a statistical sense but, rather, the ones that are statistically significant have greater explanatory power. And sensitivity to small changes in

specification can emphasise the importance of correct specification, but in any event, this is not an issue in our model.

- Our report employed the pair-wise correlations between the variables in the model. None of those exceeded 0.8. Again, there is no strict rule for saying that a correlation is too high, but this is not excessive in our extensive experience.
- Extensions of the pair-wise correlations are the variance inflation factors (VIFs). These factors are obtained through running the linear regressions of each of the explanatory variables on the other explanatory variables. A high fit (R^2) in a regression gives a high VIF. For example an R^2 of 0.9 translates into a VIF of 10.³⁰
- Variance inflation factors (VIFs) of the explanatory variables included in the models were checked and they do not provide evidence of multicollinearity. The VIFs are all below 5, whereas a VIF of 10 is often considered the threshold for indicating multicollinearity.³¹ In fact, [Robert] O'Brien (2007) shows that values of the VIF of 10, 20, 40 or even higher do not, by themselves, discount the results of regression analysis or call for the elimination of one or more independent variables^{32, 33}.
- We also undertook F-tests of the joint significance of the explanatory variables other than the PIA variable. Multicollinearity would be indicated if the variables are jointly significant while also being individually insignificant. (In some sense, the estimation recognises that one or more of the variables are 'important', but because of the relationships between the variables, it cannot work out which.) We tested the other variables (i.e. other than PIA and sales_total) for joint significance and established they were not jointly significant in almost all cases, meaning there is no multicollinearity.
- Considering all of the above: given that the VIFs are not excessive and the correlations between variables were assessed as part of determining the model specifications, the high R-squared indicates that the overall model has good explanatory power (even though individual coefficients are insignificant). This makes sense since the included variables have a strong economic rationale for inclusion. O'Brien, however, does not admit that this is a possibility.

Next, we consider the statistical significance of many of the coefficients.

- We acknowledge that many of the explanatory variables other than the PIA dummy variable have low statistical significance. In other words, the variables are not important (statistically) for explaining the dependent variables. But many sources,³⁴ state that just because a variable is insignificant does not mean it should be excluded from the model. Economic rationale is the most important factor for variable inclusion, and the variables are left in the model so that the reader can assess their significance for themselves.

³⁰ $VIF = 1 / (1 - R^2)$, so $10 = 1 / (1 - 0.9)$.

³¹ Hair, J, Anderson, R.E, Tatham, R.L and Black, W.C (1995) *Multivariate Data Analysis*, 3rd Edition, Macmillan Publishing Company, New York

³² O'Brien, Robert (2007) "A caution regarding rules of thumb for variance inflation factors", *Quality & Quantity*, Vol 41

³³ The price disclosure and competition variables have a correlation of 0.71 over all the observations, but the corresponding VIFs are less than 5.

³⁴ See for example Studenmund, AH (2011) *Using Econometrics - A Practical Guide*, 6th Edition Chapter 6, or Harrell, F (2015) *Regression Modelling Strategies*, Chapter 4.3.

- The 1% level of significance suggested by O’Brien is a stringent level of significance rarely used in empirical work. The empirical standard is 5%.
- The PIA dummy variable is significant at 10% level of significance in all cases, and most are significant at the 5% level. PIA has the dominant effect relative to the other potential explanatory variables and if, as argued above (in relation to the GFC), the effect of the PIA is underestimated, then the true effect may be even more significant.
- In interpreting these results, it should also be remembered that the data is in the form of a panel and the models are estimated by fixed effects. For example, the wage cost equation is given by:

$$wagecost_{it} = \beta_1 PIA_{it} + \dots + E_{it}$$

- Here, the E_{it} includes the individual effect. That is,

$$E_{it} = \alpha_i + e_{it}$$

where α_i is the individual effect for pharmacy i and e_{it} is an idiosyncratic error term. Here, α_i includes the factors specific to pharmacy i which do not change between 2009 and 2014, such as location, shop size, affiliation and so on. It may be the case that, if data were observed on such variables, then the R-squared values would be higher and the variables statistically significant.

C. O’Brien claims that there is simultaneous equation bias in the models

Simultaneity may result in bias in ordinary least squares estimation of a model, with the direction and size of any bias depending on the signs and magnitudes of the coefficients in the model.

The coefficients likely to be most affected are the coefficients of the included variables that are endogenous in other equations, such as Wklyhrs and Prophrs in the wage cost equation in Table 3.4 of the report. That potential bias could affect the coefficients of the exogenous variables to the extent that those exogenous variables are correlated with the ‘endogenous’ right hand side variables (e.g. Wklyhrs and Prophrs). In the models in the report, the PIA dummy is correlated with the right hand side endogenous variables (as evidenced by its statistical significance in the equations for those variables).

The models in the paper are aiming at estimating the effects of PIA on the dependent variables given the values of the right hand side variables. That gives the ‘direct’ effect of PIA on wage cost, for example. It does not include ‘indirect’ channels such as PIA to Wklyhrs and Prophrs and then from those variables to wage cost.

The sum of the direct and indirect effects is the ‘total’ effect. This may be estimated directly from the reduced form equation of wage cost on the exogenous variables, PIA, Sales_total, Competition and Pricedisclosure, with findings as shown in Table 3.2.

Table 3.2: Change in average annual wage cost due the PIA

Variable	Report	Reduced form	Reduced form – all data
PIA	60,462**	62,201**	59,011**

	[16,896]	[11,788]	[24,046]
Sales_total	0.11** [0.03]	0.11** [0.03]	0.09** [0.02]
Competition	4,603 [10,326]	3,821 [9,808]	(2,879) [6,311]
Pricedisclosure	(10,521) [9,198]	(10,431) [8,357]	479 [7067]
Wklyhrs	(2,855) [2,817]		
Prophrs	(749) [1,119]		
Constant	243,869 [225,278]	42,898 [123,443]	127,760 [82,775]
Observations	108	108	223
Number of pharmacies	61	61	127
R-squared	0.443	0.43	0.347
F stat	6.67	10.11	12.75
Prob > F	0.0000	0.0000	0.0000

** indicates a significance value of 5%, * indicates a significance value of 10%, standard error is reported in [] these can be used to calculate the confidence intervals, as reported in text.

All negative numbers depicted in tables are in brackets e.g. (x) means -x.

The second column shows the results on the same data as the model in the report, while the third column uses all the available data. (There is missing data on wklyhrs and prophrs.)

For wage cost, the coefficient on the PIA dummy is essentially unchanged and remains statistically significant at 5%. Hence any potential endogeneity is not impacting the findings, which remain robust using reduced form as well as full form equations.

O'Brien suggests that a more complex testing and estimation method should be used. Apart from the reduced form equations above, it is not feasible to undertake other reductions without specific exclusion restrictions.

In other words, we would need to exclude one or more of the exogenous variables from each of the equations. The excluded variables could then be used to perform instrumental variables or two stage least squares. We do not have obvious nor defensible exclusion

restrictions. Also, the instruments would probably be weak since exogenous variables such as competition are only weakly correlated with the endogenous variables.³⁵

³⁵ Instrumental variables estimation can have poor properties when the instruments are weak. Finally, there has been a move in the profession away from using instrumental variables estimation in cross-sections and short panels. In long panels such as HILDA (about 13 years of data) one may be able to use lags of variables, but that may not work in this data since there are only two waves and again, in any case, the instruments are weak.

Appendix A: PIA Survey

Pharmacy Industry Award Online Survey

WELCOME

WHAT THIS SURVEY IS ABOUT

We would like to understand whether the Pharmacy Industry Award (PIA) 2010 has had an impact on your business.

The Pharmacy Guild of Australia has appointed Deloitte Access Economics to assess the current state of community pharmacies in Australia, with a specific aim of understanding the effect that PIA has had on community pharmacies since its introduction on 1 January 2010.

HOW YOU CAN HELP

We would welcome your response to this survey by 23 July 2014.

If you are the proprietor or manager of a number of pharmacies, please complete one survey at one time, separately for each of the pharmacies, with consideration to the specific business context of that pharmacy. For pharmacies with more than one owner or manager, please nominate one person to complete the survey so that only one survey is completed per pharmacy.

ABOUT THE SURVEY

The survey is divided into four sections:

- o brief information about the pharmacy
- o information about the operation of this business
- o your view on the impact and components of the PIA
- o the impact of PIA on your future business decisions

This survey requires information from the 2008-2009 financial year i.e. the full financial year before the PIA commenced, and the 2013-14 financial year.

You do not need to complete the survey in one sitting. If you are unable to complete the survey in one attempt, simply close the browser using the "x" button on the top right corner of your screen; the survey will save your answers to the last completed page, and you can come back at any time later to finish it. However, once you submit the completed survey by pressing "done" on the last page, you will not be able to revise it.

The survey can be submitted once you have had time to answer all the questions. Including preparation time (e.g. retrieving your financial reports), the survey is estimated to take around 45 minutes to complete.

SOMETHING YOU NEED TO KNOW

Your participation in this survey is entirely voluntary. You may choose not to answer any question(s).

A copy of the current PIA can be obtained from: <http://www.guild.org.au/docs/default-source/public-documents/tab--the-guild/PIA/PIA-Compliance/PIA/pharmacy-industry-award.pdf?sfvrsn=2>

YOUR PRIVACY

Deloitte Access Economics will treat all information gathered in the strictest confidence. None of the questions enable individuals to be identified. In addition, we will only report aggregated summaries of the survey results to ensure individuals and businesses cannot be identified.

Pharmacy Industry Award Online Survey

CONTACT

Please contact Deloitte Access Economics for any questions about this survey on (03) 9671 7551 or (03) 9671 7037.



Page 2

Pharmacy Industry Award Online Survey

ABOUT THIS PHARMACY

1. Please select the state/territory in which this pharmacy is located:

- Australian Capital Territory
- New South Wales
- Northern Territory
- Queensland
- South Australia
- Tasmania
- Victoria
- Western Australia

2. Please provide the postcode in which this pharmacy is located:

Postcode in which this pharmacy is located:

3. Please select the geographic location of this pharmacy:

- Metropolitan area
- Non-metropolitan area (i.e. **outside** cities that have 100,000 or more population)

4. Please select the type of business model that best describe this pharmacy:

- Large Banner group with 50 or more pharmacies in the group
- Small Banner group with 15 to 49 pharmacies in the group
- Micro Banner group with less than 14 pharmacies in the group
- Australian Friendly Society Pharmacies Association group
- Buying group
- Independent pharmacy
- Medical centre pharmacy
- Other

5. Has this pharmacy been in business since before 1 January 2010?

- Yes
- No



Pharmacy Industry Award Online Survey

6. Please indicate the estimated annual sales revenue, the number of prescriptions dispensed and the annual revenue from prescriptions dispensed at this pharmacy for the 2013-14 financial year and if applicable, the 2008-09 financial year (the year before the PIA commenced).
Please indicate to the nearest thousand (e.g. \$110000 or \$555000).
Please do not use any decimal places, spaces or commas in your response.

2013-14: Total sales revenue \$

2013-14: Number of prescriptions

2013-14: Revenue from prescriptions dispensed \$

2008-09: Total sales revenue \$

2008-09: Number of prescriptions

2008-09: Revenue from prescriptions dispensed \$

7. The following issues may have influenced your business decisions since 2010. Please rate them in terms of the level of impact.

	Greatest negative impact	-4	-3	-2	-1	No impact	+1	+2	+3	+4	Greatest positive impact
Availability of pharmacists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of other staff members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competition from other pharmacies or other retailers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes to the pharmacy location rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation of the Fifth Community Pharmacy Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation of the Pharmacy Industry Award	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price disclosure and other PBS price reductions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pharmacy Industry Award Online Survey

ABOUT THE OPERATION OF THIS BUSINESS

The following questions relate to how this pharmacy currently structures its trading hours, staffing levels, and wages, and if applicable, comparisons relative to the period prior to 1 January 2010 when the PIA was introduced.

Trading hours

8. Please select the current opening and closing time for this pharmacy

	Opening time	Closing time	Not open
Monday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tuesday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wednesday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thursday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Friday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Saturday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sunday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Most public holidays	<input type="text"/>	<input type="text"/>	<input type="text"/>

9. Have your trading hours changed since 1 January 2010?

Yes
 No
 I don't know or not applicable

Pharmacy Industry Award Online Survey

10. Please select the trading hours of this pharmacy as at December 2009:

	Opening time	Closing time	Not open
Monday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tuesday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wednesday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thursday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Friday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Saturday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sunday	<input type="text"/>	<input type="text"/>	<input type="text"/>
Most public holidays	<input type="text"/>	<input type="text"/>	<input type="text"/>

11. Why did this pharmacy change trading hours?
 Please tick all that apply.

- To align with the demand for services
- To align with competitors trading hours
- To accommodate staff availability
- To reduce expenses on wages
- To reduce other expenses

Please specify other reasons in 15 words:

Pharmacy Industry Award Online Survey

ABOUT THE OPERATION OF YOUR BUSINESS

Staffing levels in this pharmacy

12. Please indicate the number of staff employed in this pharmacy currently as full time equivalent(s) (FTE).

NOTE: An FTE of 1.0 is equivalent to working 38 hours paid hours per week, therefore, an FTE of 0.5 is equivalent to working 19 hours per week;
An Experienced pharmacist is a Pharmacist who has gained at least four years full-time experience or the part-time equivalent as a Community Pharmacist;
A Pharmacist in Charge is a pharmacist who assumes responsibility for the day to day supervision and functioning of a community pharmacy practice;
A Pharmacist Manager is a pharmacist responsible to the proprietor for all aspects of the business.

	Junior employee	Pharmacy students	Pharmacy assistants	Pharmacy interns	Pharmacist	Experienced pharmacist	Pharmacist in charge
FTE for permanently employed full-time and part-time staff	▼	▼	▼	▼	▼	▼	▼
FTE for casual staff	▼	▼	▼	▼	▼	▼	▼

13. Has the number of hours worked within this pharmacy by the proprietor(s) providing professional pharmacist services (e.g. dispensing medicines and counselling) changed since 1 January 2010?

Yes
 No
 I don't know or not applicable

Pharmacy Industry Award Online Survey

14. Please provide the total number of hours worked per week within this pharmacy by the proprietor(s) providing professional pharmacist services (e.g. dispensing medicines and counselling) currently and as at December 2009

	Current	As at December 2009
Weekdays standard hours (8am to 7pm)	<input type="text"/>	<input type="text"/>
Weekdays 'after hours' (Before 8am and after 7pm)	<input type="text"/>	<input type="text"/>
Saturday standard hours (8am to 6pm)	<input type="text"/>	<input type="text"/>
Saturday after hours (Before 8am and after 6pm)	<input type="text"/>	<input type="text"/>
Sunday (7am to midnight)	<input type="text"/>	<input type="text"/>
Public holiday (7am to midnight)	<input type="text"/>	<input type="text"/>

15. Has the number of staff this pharmacy business employs or the composition of staff level changed since 1 January 2010?

Yes
 No
 I don't know or not applicable

Pharmacy Industry Award Online Survey

16. Please indicate the number of staff employed in this pharmacy as at December 2009 as full time equivalent(s) (FTE).

NOTE: An FTE of 1.0 is equivalent to working 38 hours paid hours per week, therefore, an FTE of 0.5 is equivalent to working 19 hours per week;
An Experienced pharmacist is a Pharmacist who has gained at least four years full-time experience or the part-time equivalent as a Community Pharmacist;
A Pharmacist in Charge is a pharmacist who assumes responsibility for the day to day supervision and functioning of a community pharmacy practice;
A Pharmacist Manager is a pharmacist responsible to the proprietor for all aspects of the business.

	Junior employee	Pharmacy students	Pharmacy assistants	Pharmacy interns	Pharmacist	Experienced pharmacist	Pharmacist in charge
FTE for permanently employed full-time and part-time staff	<input type="text"/>	<input type="text"/>					
FTE for casual staff	<input type="text"/>	<input type="text"/>					

17. Why did you change the staffing level or composition of this pharmacy after 1 January 2010?
Please tick all that apply.

To align with the demand for services
 To accommodate staff availability
 To reduce expenses on wages
 To reduce other expenses

Please specify other reasons in 15 words:

Pharmacy Industry Award Online Survey

ABOUT THE OPERATION OF YOUR BUSINESS

Wage level

18. Please indicate the average standard hourly wage rates you are currently paying this pharmacy's permanent staff (full-time and part-time staff) and the average standard hourly wage rates you were paying these staff in December 2009.
NOTE: Please exclude all allowances, incentives and superannuation.
Standard hourly wage rate refers to the base wage rate without any penalties

	Junior employee	Pharmacy students	Pharmacy assistants	Pharmacy interns	Pharmacist	Experienced pharmacist	Pharmacist in charge
Current standard hourly wage rate	<input type="text"/>	<input type="text"/>					
December 2009 standard hourly wage rate	<input type="text"/>	<input type="text"/>					

19. What is this pharmacy's total expense on salaries and wages to the nearest thousand (e.g. \$110000 or \$555000) in the following financial years?
NOTE: Please do not use any decimal places, spaces or commas in your response.

2013-14	\$	<input type="text"/>
2008-09	\$	<input type="text"/>

Pharmacy Industry Award Online Survey

ABOUT YOUR VIEW ON THE IMPACT AND THE COMPONENTS OF...

The following questions relate to your view on the overall impact that the PIA has had on your business and the impact of different components of the PIA.

20. Please indicate your overall assessment of the impact of the PIA has had on this pharmacy business to date.

No impact
 Positive
 Negative
 Unsure

21. Please rate the following provisions in the PIA according to the level of concern you have for their impact on your business.
1 = least concerning; 10 = most concerning

NOTE: A copy of the current PIA can be obtained from:
<http://www.guild.org.au/docs/default-source/public-documents/tab---the-guild/PIA/PIA-Compliance/PIA/pharmacy-industry-award.pdf?sfvrsn=2>

	No concern	1	2	3	4	5	6	7	8	9	10
Individual flexibility arrangement (Clause 7)	<input type="radio"/>										
Part-time provisions (Clause 12)	<input type="radio"/>										
Casual provisions (Clause 13)	<input type="radio"/>										
Minimum engagement for part-time and casual employees (clauses 12 & 13)	<input type="radio"/>										
Allowances (clause 19)	<input type="radio"/>										
Rostering of staff (Clauses 12 and 25)	<input type="radio"/>										
Overtime and penalty rates (clause 26)	<input type="radio"/>										
Annualised salary provisions (clause 27)	<input type="radio"/>										

Pharmacy Industry Award Online Survey

22. If you find overtime and penalty rates are of concern, please rate your level of concern for the following situations where penalty rates apply.

NOTE: The penalty rates required under the current PIA are denoted as percentages below. For example, 'Weekdays-before 8am (currently set at an additional 50%)', means that on weekdays before 8am, the current PIA requires that staff are paid an additional 50% on top of their current standard hourly wage.

	No concern	Minor or moderate concern	Major concern	Not applicable to this pharmacy business
Weekdays - before 8am (currently set at an additional 50%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weekdays - after 7pm (currently set at an additional 25%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weekdays - after 9pm (currently set at an additional 50%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday - before 8am (currently set at an additional 100%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday - 8am-6pm (currently set at an additional 25%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday - 6pm-9pm (currently set at an additional 50%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday - after 9pm (currently set at an additional 75%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sunday (currently set at an additional 100%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Holidays (currently set at an additional 150%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Considering your answers to the previous question, do you believe there should be a change in penalty rates?

Yes
 No
 Not sure

Pharmacy Industry Award Online Survey

24. Please indicate what you believe would be a fair penalty loading on top of the standard hourly wage for each of the following time frames:
If you do not think there should be any change in the current penalty loading, please select the same loading as is currently set by the PIA for the designated timeframe from the drop down list.

NOTE: The penalty rates required under the current PIA are denoted as percentages below. For example, 'Weekdays-before 8am (currently set at an additional 50%)', means that on weekdays before 8am, the current PIA requires that staff are paid an additional 50% on top of their current standard hourly wage.

% penalty loading on top of the standard hourly wage

Weekdays - before 8am (currently set at an additional 50%)	<input type="text" value="50"/>
Weekdays - after 7pm (currently set at an additional 25%)	<input type="text" value="25"/>
Weekdays - after 5pm (currently set at an additional 50%)	<input type="text" value="50"/>
Saturday - before 8am (currently set at an additional 100%)	<input type="text" value="100"/>
Saturday - 8am-6pm (currently set at an additional 25%)	<input type="text" value="25"/>
Saturday - 6pm-9pm (currently set at an additional 50%)	<input type="text" value="50"/>
Saturday - after 9pm (currently set at an additional 75%)	<input type="text" value="75"/>
Sunday (currently set at an additional 100%)	<input type="text" value="100"/>
Public Holidays (currently set at an additional 150%)	<input type="text" value="150"/>

Pharmacy Industry Award Online Survey

25. What standard hourly rates would you be willing to pay if the penalty rates you suggested in the previous question were adopted?

NOTE: Please exclude all allowances, incentives and superannuation ; mark as NA if you do not wish to provide a response for the specified staff member; Standard hourly wage rate refers to the base wage rate without any penalties e.g. the rate paid on weekdays from 8am to 7pm.

	Junior employee	Pharmacy students	Pharmacy assistants	Pharmacy interns	Pharmacist	Experienced pharmacist	Pharmacist in charge
Standard hourly wage rate you would be willing to pay for permanently employed full-time and part-time staff	<input type="text"/>	<input type="text"/>					

26. Does your pharmacy lease or any other stipulations (e.g. affiliation with a 7-day a week medical centre) force you to open during specified hours?

Yes

No

Not sure

Pharmacy Industry Award Online Survey

27. Does the PIA make any of these hours unviable or unprofitable?
Please tick all that apply.

NOTE: The penalty rates required under the current PIA are denoted as percentages below. For example, 'Weekdays-before 8am (currently set at an additional 50%)', means that on weekdays before 8am, the current PIA requires that staff are paid an additional 50% on top of their current standard hourly wage. ;
Reasons for unviable or unprofitable opening hours may include the terms in retail lease or being affiliated with a 7-day medical center.

- Never
- Weekdays - before 8am (currently set at an additional 50%)
- Weekdays - after 7pm (currently set at an additional 25%)
- Weekdays - after 9pm (currently set at an additional 50%)
- Saturday - before 8am (currently set at an additional 100%)
- Saturday - 8am-6pm (currently set at an additional 25%)
- Saturday - 6pm-9pm (currently set at an additional 50%)
- Saturday - after 9pm (currently set at an additional 75%)
- Sunday (currently set at an additional 100%)
- Public Holidays (currently set at an additional 150%)

Pharmacy Industry Award Online Survey

28. To what extent do you agree or disagree with the following statements.

The Pharmacy Industry Award has ...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Not applicable
... reduced the number of staff working during standard hours in this pharmacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced the number of staff working during after-hours, on weekends, or public holidays in this pharmacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced or will reduce the potential for pharmacy opening hours after 7pm during the week.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced or will reduce the potential for pharmacy opening hours on weekends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced or will reduce the potential for pharmacy opening hours on public holidays.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... Improved the flexibility of working arrangements for my employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced business ability to incentivise remuneration through performance and willingness to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... Increased administration required to organise staff rostering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... Increased the time required to process staff remuneration.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced my ability to employ new permanent staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced my ability to employ pharmacy interns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced my ability to employ pharmacy students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced my ability to employ casual staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced the financial viability of my business.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduced the confusion surrounding minimum employment entitlements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pharmacy Industry Award Online Survey

THE IMPACT OF PIA ON YOUR FUTURE BUSINESS DECISIONS

29. To what extent are you concerned that the PIA will influence the following characteristics of this pharmacy business in the future?

	No concern	Minor or moderate concern	Major concern	Not applicable
Operating hours of this community pharmacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of full time employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staffing levels during standard hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staffing levels during after-hours and on weekends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability for this pharmacy to provide training places for pharmacy interns and students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of professional services this community pharmacy can offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall cost of compliance with the PIA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wage increases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Penalties and overtime paid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business profitability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. If you could change one component in the PIA that would have the best outcome for this pharmacy, what would that change be and why?
Please answer in 50 words or less.

Please click "done" below to submit the survey. Once submitted you will no longer be able to edit any responses.

Limitation of our work

General use restriction

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