

FAIR WORK COMMISSION

Fair Work Act

s.156 - 4 Yearly Review of Modern Awards

Family and Domestic Violence Leave (AM2015/1)

Statement of Dr Martin O'Brien

I, Dr Martin O'Brien, of the University of Wollongong, Wollongong, New South Wales, Building 40, Room 348, state:

1. I am a Senior Lecturer in Economics in the School of Accounting Economics and Finance at the University of Wollongong. I have held this position since July 2002.
2. Prior to this I worked as a statistical analyst at the Australian Bureau of Statistics.
3. I have a PhD in Economics from the University of Newcastle. I have published labour economics research widely in peer reviewed academic journals both in Australia and internationally.
4. In addition, I have taught numerous business statistics and quantitative subjects at undergraduate and postgraduate levels. I am co-author of the *Basic Business Statistics* textbook published by Pearson Education that is widely adopted across Australasian Universities.
5. A copy of my curriculum vitae is attached to this Statement and marked **Annexure MO-1**.
6. I was requested by the Australian Council of Trade Unions to prepare a report for the purpose of the Fair Work Commission proceedings relating to the ACTU's application for Family and Domestic Violence Leave. Attached to this Statement and marked **Annexure MO-2 and MO-3** is a copy of an email and letter of instructions I received from the Australian Council of Trade Unions.
7. I subsequently prepared a report in accordance with the letter of instructions, a copy of which is attached to this Statement and marked **Annexure MO-4**, and dated 17 October 2016⁵.

8. I have been provided with, read, understood and complied with Federal Court of Australia Practice Note CM-7 - Expert witnesses in proceedings in the Federal Court of Australia in the preparation of the Report.
9. The Report reflects my specialised knowledge gained through training, study, research and experience as outlined in this Statement and Annexure MO-1.



Signed:

Dr Martin O'Brien

17 October 2016

ANNEXURE MO-1

CURRICULUM VITAE OF DR MARTIN O'BRIEN

Dr Martin John O'Brien – Curriculum Vitae

Personal Details

Dr Martin O'Brien
3 Boundary Rd
Windang NSW 2528

Room 40.348
Economics Discipline
School of Accounting Economics and Finance
Faculty of Business
University of Wollongong
NSW 2522

DOB: 6th February 1973

Email: martinob@uow.edu.au

Phone: 0407 271267 (mob)
02 42214701 (work)

Qualifications

PhD in Economics University of Newcastle (2004) – Thesis entitled “Older Male Labour Force Participation: An Empirical Analysis”, awarded in the Discipline of Economics.

BCom (Hons – 1st class) University of Newcastle (1995)

BCom University of Newcastle (1994)

Employment Positions Held

Senior Lecturer 2009 to present
Head of Discipline 2014
Head of School 2013
Associate Head of School of Economics 2010 to 2012
Head of Postgraduate Studies 2009 to 2010
School/Discipline of Economics
University of Wollongong

Lecturer 2004 to 2008
Director of Postgraduate Studies 2005 to 2008
School of Economics
University of Wollongong

Associate Lecturer 2002 to 2003
School of Economics and Information Systems
University of Wollongong

Casual/Part-time Lecturer and Tutor 1998, 2000 to 2002
Department of Economics / School of Policy
University of Newcastle

Statistical Analyst 1996-1997, 1999
APS level 6
Australian Bureau of Statistics

RESEARCH

Research Interests

The Australian labour market, financial market volatility, older worker employment issues, workplace redundancy, ageing society policy, welfare reform, youth employment issues, hidden unemployment, economic restructuring, applied econometrics.

Journal Articles

Burrows, S. and O'Brien, M.J. (2016) "Youth as a Reserve Army: Australia's Regional Unemployment Conundrum", *Labour and Industry*, 26 (2), 90-102.

Jayanthakumaran, K., Sangkaew, P. and O'Brien, M.J. (2013) "Trade liberalisation and manufacturing wage premiums: evidence from Thailand", *Journal of Asian Economics* 29 (December), 15-23.

Valadkhani, A., O'Brien, M. J. and Arjomandi, A. (2013) "Measuring efficiency and productivity changes in Iran's financial institutions using the Hicks-Moorsteen TFP index", *Research in International Business and Finance*, 40 (2014), 111-125.

Valadkhani, A., Arjomandi, A. and O'Brien, M. J. (2013) "Does the interest rate for business loans respond asymmetrically to changes in the cash rate?", *Applied Economics Letters*, 20 (9), 869-874.

Valadkhani, A., O'Brien, M. J. and Arjomandi, A. (2013) "Examining the nature of the relationship between Tapis crude oil and Singapore petrol prices", *International Journal of Global Energy Issues*, 36 (1), 27-41.

Karunanayake, I., Valadkhani, A., and O'Brien, M. J. (2012) "GDP Growth and the Interdependency of Volatility Spillovers", *Australasian Accounting Business and Finance Journal*, 6 (1), 83-96.

O'Brien, M. J. (2011) "Discouraged Older Male Workers and the Discouraged Worker Effect", *Australian Journal of Labour Economics*, 14 (3), 217-35.

O'Brien, M. J. (2011) "The Asymmetric Response of Older Male Labour Force Participation Rates to Pension Reform and Labour Market Variables", *Journal of Modern Accounting and Auditing*, 7 (4), 358-67.

O'Brien, M. J. (2010) "Older male labour force participation in OECD countries: pension reform and 'the reserve army of labour'" *International Labour Review*, 149 (3), 239-259.

Karunanayake, I., Valadkhani, A. & O'Brien, M. J. (2010). Financial crises and international stock market volatility transmission. *Australian Economic Papers*, 49 (3), 209-221.

O'Brien, M.J., Valadkhani, A., & Townsend, K. (2008) "The Australian Labour Market in 2007", *Journal of Industrial Relations*, 50 (3), 383-98.

O'Brien, M.J. (2007) "The Youth Labour Market in Australia and WorkChoices Legislation", *International Employment Relations Review*, 13 (1), 33-42.

O'Brien, M. J., Valadkhani, A., Waring, P. & Denniss, R. (2007). "The Australian Labour Market in 2006", *Journal of Industrial Relations*, 49 (3), 311-26.

O'Brien, M.J. (2007) "Older Male Workers and Job Mobility in Australia", *International Journal of Employment Studies*, 15 (2), 1-26.

O'Brien, M.J., Denniss, R. and Burgess, J., (2006) "The Australian Labour Market in 2005", *Journal of Industrial Relations*, 48 (3) 305-18.

Ville, S., Valadkhani, A. and O'Brien, M.J., (2006) "The Distribution of Research Performance Across Australian Universities, 1992-2003, and Its Implications for Higher Education Funding Models" *Australian Economic Papers*, 45 (4) 343-361.

O'Brien, M.J. (2005) "Industry Representation, Structural Change and the Older Male Worker in Australia (1985 to 2005)", *Australian Bulletin of Labour*, 31(3), 270-94.

Burgess, J., Lee, J. and O'Brien, M.J., (2004) "The Australian Labour Market 2003", *The Journal of Industrial Relations*, 46(2), 141-59.

O'Brien, M.J., and Burgess, J., (2004) "Workforce Developments Affecting the Adequacy of Superannuation", *The Journal of Australian Political Economy*, No 53 June 2004, pp179-90.

Biddle, D., Burgess, J., Mitchell, W., O'Brien, M.J., (2002) "The Australian Labour Market 2001", *The Journal of Industrial Relations*, 44(2), 171-97.

O'Brien, M.J. (2001) "Older Male Labour Force Participation: the Role of Social Security and Hidden Unemployment", *Australian Journal of Labour Economics* 4 (3), 206-23.

Book Chapters

O'Brien, M.J. (2001) "Older Males and Social Security Reliance", in Mitchell, W.F. and Carlson, E. (eds) *The Tip of the Iceberg*, CAER, Sydney, 135-56.

O'Brien, M.J. (1999) "Old Enough for the Scrapheap? Employment Issues for the Baby Boomers", in Lee, J., Probert, B. and Watts, R. (eds) *Work in the New Economy: Policies, Programs, Populations*, Centre for Applied Social Research, RMIT University, 207-23.

Work in Progress

"Steel Town Blues? A Study of the Post Redundancy Experiences of BlueScope Port Kembla Steelworkers" (to be submitted to *Work Employment Society*)

"Changing Influences on the AUD/JPY Exchange Rate", with Paul Mazzola (Finance Discipline)

"Stock Exchange Returns, Pension Accrual and Retirement in OECD Countries", with Kelly Burns (Curtin University)

Research Grants

Faculty of Commerce ARC Application Support Grant (2012) "Light at the End of the Tunnel: Investigating the Economic and Social Consequences of Job Losses at BlueScope Port Kembla", \$5000.

University of Wollongong URC Small Grant (2007) "The Reserve Army of Labour: An Analysis of Older Worker Labour Markets in OECD Countries in the Context of an Ageing Society", \$5470.

University of Wollongong URC Strategic Research Development Grant (2004) "The Job Mobility of Older Workers in Australia", \$2496.

Consultancy Reports

Markey, R, O'Brien, M and McIvor, J (2016) "Second Supplementary Report: Casual and Part-Time Employment in Australia" prepared on behalf of the Australia Council of Trade Unions for the Four Yearly Review of Modern Awards – Casual employment and Part-time employment (AM2014/196 and AM2014/197) <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/common/am2014196-197-sub-actu-22022016.pdf>

O'Brien, M (2016) "Fourth Supplementary Report: Casual and Part-Time Employment in Australia" prepared on behalf of the Australia Council of Trade Unions for the Four Yearly Review of Modern Awards – Casual employment and Part-time employment (AM2014/196 and AM2014/197) <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/common/obrien.pdf>

O'Brien, M (2015) "National Fast Food Workers Report", prepared on behalf of the Australia Council of Trade Unions for the Four Yearly Review of Modern Awards – Penalty Rates AM2014/305 <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/am2014305-obrienreport-actu-040915.pdf>

O'Brien, M (2015) "Regression Analysis in section 3.2 of the Report of Lynne Pezzullo, The Effect of Pharmacy Industry Award 2010 on Community Pharmacy in Australia", prepared on behalf of the Shop, Distributed and Allied Employees' Association for the Four Yearly Review of Modern Awards- Penalty Rates AM2014/305 <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/am2014305-experts-sda-040915.pdf>

Markey, R, McIvor, J and O'Brien, M (2015) "Supplementary Expert Report" prepared on behalf of the Australia Council of Trade Unions for the Four Yearly Review of Modern Awards – Casual employment and Part-time employment (AM2014/196 and AM2014/197) <https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/am2014196-197-sub-actu-191015.pdf>

Student Supervision

Current HDR students:

Beatrice Lim: *The Effect of Household Appliances on Female Labour Force Participation in Malaysia* (PhD commenced 2012, submitted Aug 2016).

Van Phuc Phan: *Urban-Rural Income Inequality in Vietnam* (PhD commenced 2012, submitted Aug 2016).

Ilona Valeikaite: *Socio-economic and environmental effects of regional bioenergy production* (PhD commenced 2013)

Completed HDR Students:

Teerawat Charoenrat: *Measuring the Technical Efficiency of Thai Manufacturing SMEs: A comparison between the pre and post financial crisis of 1997* (PhD awarded 2013).

Piyapong Sangkaew: *Trade Liberalisation and Wage Inequality in Thai Industrial Sector* (PhD awarded 2013).

Amir Arjomandi: *Efficiency and Productivity in Iran's Financial Institutions* (PhD awarded 2011).

Indika Karunanayake: *Modelling Australian Stock Market Volatility* (PhD awarded 2011).

Chirangivi Bista: *Poverty and Inequality in Nepal: An Analysis of the Deprivation Index 2003-04* (MRes awarded 2009).

Completed Honours Students:

Marthe Kinnerud (2013 2nd class 2nd division).

Nathan Kettlewell (2010 1st class and recipient of Australian Agricultural and Resource Economics Society Undergraduate Prize for NSW).

Mitchell Worsley (2008 2nd class 1st division).

Leanne van Keulan (2007 1st class and University Medal).

Simon Young (2006 1st class).

Research Awards

Global Academy of Business and Economics Research International Conference Best Paper Award (2010)

Faculty Commerce Excellence in Research Award (2009)

University of Newcastle Postgraduate Research Scholarship (1998)

Ken Gordon Memorial Honours Scholarship (1995) (University of Newcastle)

Media Interviews, Comments and Articles

Australia Wide ABC TV 14/11/15 "The human toll of the declining steel industry"
<http://iview.abc.net.au/programs/australia-wide/NC1579H033S00>

Sydney Morning Herald 18/9/15 "Wollongong unites on campaign to buy local steel and save Port Kembla's steelworks"
<http://www.smh.com.au/business/wollongong-unites-on-campaign-to-buy-local-steel-and-save-port-kemblas-steelworks-20150918-gjpolx.html>

ABC Radio Illawarra 8/9/15 Comment on BlueScope job losses and IRIIF.

Australian Financial Review 20/6/15 Does Australia's Steel Industry Have a Future?
<http://www.afr.com/business/does-australias-steel-industry-have-a-future-20150619-ghs0r7>

The Conversation 5/3/15 Hockey looks to "armies" in Intergenerational report: experts react
<http://theconversation.com/hockey-looks-to-armies-in-intergenerational-report-experts-react-38372>

Illawarra Mercury 14/4/14 "Pension age rise: job hunt harder for older Australians"

730 Report ABC TV 22/5/13, Retrenched BlueScope workers "ripped off" by Government rescue fund
<http://www.abc.net.au/news/2013-05-21/retrenched-bluescope-workers-hit-out-at-government-rescue-fund/4704496> and
<http://www.abc.net.au/7.30/content/2013/s3806004.htm>

2GB comment on single parent payment reform March 14 2013

Illawarra Mercury 21/6/12 "Quarter of region's population over 55"

Australian Financial Review 18/6/11 "Unemployed lost in the statistics"

<http://www.afr.com/news/politics/national/unemployed-army-lost-in-the-statistics-20110618-icbpb>

The Drum (ABC) 29/9/10 "Hidden Unemployment"

<http://www.abc.net.au/news/2009-10-08/26958>

TEACHING

Subjects Co-ordinated

COMM121 Statistics for Business (1st year BCOMM core 400+ students, 2002 to 2012).*

COMM330 Applied Research Project** (Capstone subject for BECONFIN, 2013 to present).

COMM980 Business Research Methods / Research Proposal (PhD, MRes and Honours, 2008, 2009, 2013).

ECON101 Macroeconomics Essentials for Business (2002).

ECON111 Introductory Microeconomics (2002).

ECON230 Quantitative Analysis for Decision Making (2004, 2005).*

ECON240 Financial Modelling (200+ students, 2011 to 2015).*

ECON308 Labour Economics (2005, 2006).

ECON939 Quantitative Methods for Economists (PhD and MRes, 2005, 2006, 2012).

ECON940 Statistics for Decision Making (Master of Professional Accounting 200+ students, 2005, 2015, 2016).

TBS902 Statistics for Decision Making (MBA 2004 to 2007).***

TBS905 Economics Analysis of Business (MBA 2011 to present).* ***

TBS910 Business Analytics (MBA 2015)***

TBS912 Quantitative Analysis for Decision Making (MBA 2004 to present).***

TBS950 Quality in Management (MBA 2008)***

ACCY407/907 Empirical Research Methods (PhD, MRes and honours).

* Also delivered at Satellite campuses (Southern Sydney, Shoalhaven, Bega, Batemans Bay, Southern Highlands), PSB Singapore, INTI Malaysia and UOW Dubai

** Also proposed and developed subject

*** Also delivered at Sydney Business School

Competitive Teaching and Learning Grants

Faculty of Business Educational Inclusion Grant (2013) “Lecture Attendance and Study Performance”, \$10000 (with Reetu Verma).

Faculty of Business Educational Inclusion Grant (2013) “The Causal Effects of the Peer Assisted Study Sessions (PASS) on educational outcomes for students from low socio-economic, rural and indigenous backgrounds”, \$8787 (with Peter Siminski).

Faculty of Business Educational Inclusion Grant (2013) “Effect of Active Teaching Strategies on Minority Students”, \$2500.

Faculty of Commerce, Creating Better Futures: Teaching and Learning Grants (2013) “Enhancing the effectiveness of econometrics teaching”, \$3054.50 (with Indika Karunayake).

Educational Strategies Development Fund (2013) “Developing Best Practice Support and Assessment Guidelines for the Utilisation of Social Media within a Flexible Assessment Design”, \$4500 (with Katharina Freund).

Faculty of Commerce Creating Better Futures: Teaching and Learning Grant (2012) “Developing Comprehensive Assessment Tools for the Utilisation of New Technologies in an Action Based Learning Setting”, \$2828 (with Katharina Freund).

Australian Learning and Teaching Council Grant (2008) “Building leadership capacity for development and sharing of mathematics learning resources across disciplines and universities”, (Faculty of Commerce Leader) \$220,000.

University of Wollongong Teaching and Learning Grant (2007) “Embedding Mathematics and Statistics Learning Support across the disciplines”, (Faculty of Commerce Leader) \$100,000.

Teaching Resources Developed

Berenson, Levine, Krehbiel, Stephan, O'Brien, Jayne, Watson (2016) *Basic Business Statistics: Concepts and Applications* (4th Ed), Pearson Education Australia (author of 6/15 chapters).

Berenson, Levine, Krehbiel, Stephan, O'Brien, Jayne, Watson (2013) *Basic Business Statistics: Concepts and Applications* (3rd Ed), Pearson Education Australia (author of 6/15 chapters).

Berenson, Levine, Krehbiel, Stephan, O'Brien, Jayne, Watson (2013) *Business Statistics: Concepts and Applications* (2nd Ed), Pearson Education Australia (author of 8/19 chapters).

Berenson, Levine, Krehbiel, Watson, Jayne, Turner, O'Brien (2010) *Basic Business Statistics: Concepts and Applications* (2nd Ed), Pearson Education Australia (author of 5/14 chapters).

Author of Powerpoint slides to accompany *Basic Business Statistics: Concepts and Applications* (2013).

Whiteboard demonstration videos for Pearson Education to accompany *Basic Business Statistics Concepts and Applications* (2010).

Author of powerpoint slides for *Australasian Business Statistics* (1st edition) published by John Wiley and Sons Australia (2007).

Teaching and Learning Research

O'Brien, M.J. and Verma, R. (2016) "Analysing Student Engagement With Lecture Resources In First Year Business Classes", paper presented to the Discipline of Economics Research Workshop, 30 September 2016.

O'Brien, M. J. and Freund, K. (2013) "Harnessing the potential of social media and digital literacy skills for undergraduate economics research", paper presented to the 18th Australasian Teaching Economics Conference (ATEC 2013) Newcastle, Australia 1st July.

"Teaching Econometrics Effectively in Computerised Classes", with Indika Karunanayake (work in progress).

"Authentic Learning and the Teaching of Basic Business Statistics in an Australian Higher Education Setting", with Brian Cambourne (work in progress).

Lewis, D. E., O'Brien, M. J., Rogan, S. G. & Shorten, B. (2004). Do Students Benefit From Supplemental Instruction? Evidence From a First Year Statistics Subject for Commerce Students. *Economic Education Conference* (pp. 1-21). University of Wollongong: Centre for Health Service Development.

Consultation Services

Student Services (UOW) – Analysis of Peer Assisted Study Session (PASS) for MATH141 and CHEM105 (2006)

Awards

OCTAL Award Faculty of Business (2015)

Faculty of Commerce Teaching and Learning Award (2009)

UOW OCTAL Award Nominations (2009, 2011, 2014)

GOVERNANCE

Substantive Roles

Head of Discipline (2014 to Jan 2105)

Head of School (2013)

Associate Head of School (November 2010 to 2012)

Head of Postgraduate Studies (2009 to 2010)

Director of Postgraduate Studies (2005 to 2008)

Committees

School

Chair of Economics Teaching Committee (2010 to 2012)

Chair of Economics Examiners Committee (2010 to 2012)

Faculty

Faculty Education Committee (2010 to present)

Chair of Learning Platform Working Party (2012 to 2014)

Social Inclusion / Core Curriculum Committee (2009 to 2012)

Faculty Research Committee (2005 to 2010)

University

Learning Platform Steering Group (2014 to present)

Learning Platform Reference Group (2012 to 2014)

Academic Senate (2010 to 2014)

Learning Environment and Technology Subcommittee (2012 to 2014)

Learning Platform Offshore Working Party (2013 to 2014)

COMMUNITY / PROFESSIONAL ACTIVITIES

Professional Activities

Journal Referee

Australian Journal of Labour Economics

Journal of Economic Policy Reform

Australian Journal of Social Issues

Social Policy and Society

The International Employment Relations Review

Australian Economic Review

Australasian Accounting Business and Finance Journal

Economic Analysis and Policy

Australian Economic Papers

International Journal of Manpower

Book Reviewer

For *Labour and Industry* (twice),

Work Employment Society

Membership

International Employment Relations Association (current Vice-President)

The Australian Society of Labour Economists

Pacific Employment Relations Association

IZA Who's who in Labor Economics

ANNEXURE MO-2

EMAIL RECEIVED FROM ACTU

From: Sophie Ismail <sismail@actu.org.au>

Date: Thursday, 29 September 2016 at 10:54 AM

To: Martin O'Brien <martinob@uow.edu.au>

Subject: Privileged and Confidential - Family and Domestic Violence Leave test case - Costing Work

Good morning Martin,

I was referred to you by my colleagues here at the ACTU.

The ACTU is considering engaging an expert to provide the ACTU with a written report containing an expert opinion on the matters set out below and to give evidence at the FWC hearing, scheduled to occur from 14 November 2016 to 2 December 2016 at the Fair Work Commission in Melbourne.

Our timeframes are a little tight, so I'd be most grateful if you could contact me today if possible to discuss your availability to complete this work.

A bit of background is set out below.

Background

The Australian Council of Trade Unions (ACTU) is the peak body for Australian unions, consisting of 46 affiliates who together represent about 1.8 million workers.

In accordance with s. 156 of the *Fair Work Act 2009* (Cth), the Fair Work Commission (Commission) is required to conduct a four yearly review of modern awards. As part of this review, the ACTU has made an application seeking to include a new entitlement of paid leave for workers who experience FDV in all modern awards.

The ACTU's application would provide employees experiencing family and domestic violence with 10 days' paid leave (followed by 2 days unpaid leave on each occasion) in order to, for example, make re-location and other safety arrangements, seek legal advice, or to make court appearances or attend relevant appointments.

The ACTU has made this application on behalf of, and with the support of its affiliates who represent workers across all industries and therefore,

modern awards.

Attached is a copy of the proposed family and domestic leave clause pursuant to the ACTU's application.

Expert Opinion

Below is some further detail regarding the expert opinion we are considering seeking.

The Australian Council of Commerce and Industry has filed a submission in opposition to the ACTU's proposed clause:

<https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/am20151-sub-acci-160916.pdf>

At paragraphs 8.64 to 9.1 (including Table E), ACCI makes a number of claims regarding the likely cost of the proposed leave.

We are considering further expert opinion about:

- 1 The accuracy of the exercise conducted by ACCI;
- 2 The appropriate methodology of costing the ACTU's proposal, and potentially
- 3 The cost of the ACTU's proposal.

In addition, we are considering seeking further expert opinion on:

- 4 The projected cost to the average award-covered employer of a new award entitlement to 10 days paid family and domestic violence leave per year, where [xx per cent of permanent full-time employees]:
 - require 10 days off work;
 - require 5 days off work;
 - require [the average number of days] off work
- 5 The portion of the financial or other impact that would likely be offset for an average award-covered employer.

I look forward to hearing from you.

Sophie

Sophie Ismail Legal and Industrial Officer ACTU Level 4/365 Queen Street, Melbourne, Victoria 3000 **t** (03) 9664-7218 **f** (03) 9600-0050 **e** sismail@actu.org.au **w** actu.org.au follow us on twitter [@unionsaustralia](https://twitter.com/unionsaustralia) and [@thisworkinglife](https://twitter.com/thisworkinglife) like us at facebook.com/AustralianUnions



The ACTU respectfully acknowledges that our building stands on the lands of the traditional owners and continuing custodians of Melbourne, the Boon Wurrung and Wurrung language groups of the greater Kulin Nation.

This email has been scanned by the ACTU Symantec Email Security.cloud service.

ANNEXURE MO-3

LETTER OF INSTRUCTION FROM ACTU



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f +613 9600 0050
w actu.org.au

President Gerardine (Ged) Kearney
Secretary Dave Oliver

4 October 2016

Dr Martin O'Brien

Building 40 Room 209
School of Economics and Information Systems
University of Wollongong
Wollongong NSW 2522

Via e-mail: martinob@uow.edu.au

CONFIDENTIAL: SUBJECT TO LEGAL PROFESSIONAL PRIVILEGE

Dear Dr O'Brien

FOUR YEARLY REVIEW OF MODERN AWARDS – FAMILY & DOMESTIC VIOLENCE LEAVE

The Australian Council of Trade Unions (ACTU) is the peak body for Australian unions, consisting of 46 affiliates who together represent about 1.8 million workers.

In accordance with s. 156 of the *Fair Work Act 2009* (Cth), the Fair Work Commission (Commission) is required to conduct a four yearly review of modern awards. As part of this review, the ACTU has made an application to include a new modern award entitlement to 10 days paid leave for employees subjected to family and domestic violence (FDV) to, for example, make re-location and other safety arrangements, seek legal advice, or to make court appearances or attend relevant appointments.

The ACTU has made this application on behalf of, and with the support of its affiliates who represent workers across all industries and modern awards.

Attached to this letter is a copy of the ACTU's proposed family and domestic leave clause.

Engagement

The ACTU's claim is opposed by a number of employer parties.

One of those parties, the Australian Chamber of Commerce and Industry (ACCI) has prepared a model calculating the potential direct cost of the ACTU's proposed award variation.

We wish to engage you to provide the ACTU with a written report containing your expert opinion on the direct cost model prepared by ACCI, and to give evidence at the hearing of the review.

**Australian
Unions**
**Join. For a
better life.**

We confirm that we have accepted the financial terms of your engagement specified by you.

Hearings are scheduled to occur from 14 November 2016 to 2 December 2016 in Melbourne. It is likely that you will be required to give evidence in the earlier stage of the hearing. The precise date will be confirmed closer to 14 November 2016.

Your role as an expert witness

As an expert witness, you are required to assist the Commission on matters relevant to your area of expertise. It is not the role of the expert to support the application of the ACTU, rather the role of the expert is to give an independent opinion about those matters as sought by the ACTU. Accordingly, you are engaged by the ACTU to assist the Commission by providing your expert opinion in accordance with our instructions to you. Your overriding duty is to assist the Commission. You are not an advocate for the ACTU or any other party.

Attached to this letter is a copy of the Expert Witness Code of Conduct published by the Federal Court of Australia. Although you are not formally bound by the Code, as a matter of proper practice we intend to adopt the Federal Court Rules concerning the engagement of expert witnesses, and the terms of the Code that govern your conduct under this engagement. Please read the document carefully.

Expert Opinion

The ACTU seeks a written report containing your expert opinion on the questions set out below.

Please prepare the report as soon as practicable but no later than **17 October 2016**.

In your written report, please set out the reasons for your opinions as well as any factual findings, assumptions and data sources on which your opinions are based.

Relevant material

We direct you to the following background material:

1) ACTU submissions and evidence dated 1 June 2016:

<https://www.fwc.gov.au/sites/awardsmodernfouryr/common/am2051-sub-actu-010616.pdf>

2) AiG submissions and evidence dated 19 September 2016:

<https://www.fwc.gov.au/sites/awardsmodernfouryr/am20151-aig-replysub-190916.pdf>

3) ACCI submission dated 16 September 2016:

<https://www.fwc.gov.au/documents/sites/awardsmodernfourvr/am2015-sub-acc-160916.pdf>

Questions for your opinion

Please review ACCI's submissions at paragraphs 8.64 to 8.76 and Table E, which present "a model examining the potential direct cost of the [ACTU's] claim."

Please analyse the methodology adopted by ACCI to examine the direct cost of the ACTU's claim, and prepare a written report describing your analysis. Please ensure that your report addresses the following matters:

- a) The adequacy of the methodology;
- b) Your assessment of the inputs/assumptions and the outputs/results;
- c) Whether any alterations to the methodology are recommended;
- a) If required, alternative estimates on the potential direct cost of the ACTU's claim.

Communications

Please note that all communications between you, the ACTU and its legal representatives can, on request, be provided to the employer organisations and the Commission. This includes any draft of your report, including your working notes.

Report Format

Your role is to assist the Commission by providing your expert opinion in accordance with our instructions to you.

As a matter of formality, it is likely that your expert report will be annexed to a brief witness statement (which we will assist to prepare in due course). In order to ensure your report can be used easily at the hearing of this matter, we ask that you include the following matters in the report:

- (a) a brief summary of your opinion/s at the beginning of the report;
- (b) a glossary of any specialised terminology;
- (c) references to any literature or other materials cited in support of your opinions. Please use a uniform citation method throughout the report. If you use parenthetical referencing (Chicago-style citation), please provide pinpoint citations where applicable;
- (d) a bibliography;
- (e) numbered paragraphs and page numbers, and headings where appropriate;

and

- (f) margins of at least 2.5 centimetres, and line spacing of at least 1.5 points, with 12 points between paragraphs.

Please annexe to your report:

- (g) a detailed curriculum vitae, setting out the study, training, and experience that establishes your expertise in relation to the issues raised by these instructions; and
- (h) this letter of instruction.

At the conclusion of your report, please include a declaration to the following effect:

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance that I regard as relevant have, to my knowledge, been withheld from the Commission.

If you have any questions, or wish to discuss further, please do not hesitate to contact Sophie Ismail on (03) 9664 7218 or sismail@actu.org.au.

Yours sincerely,



Sophie Ismail

Legal and Industrial Officer

Attachments:

1. Expert Witness Code of Conduct.
2. The ACTU's proposed clause.

ANNEXURE MO-4

EXPERT REPORT OF DR MARTIN O'BRIEN

Executive Summary

The purpose of this report is to provide an expert opinion on the following matters provided by the ACTU:

“Please review ACCI’s submissions at paragraph 8.64 to 8.76 and Table E, which present *“a model examining the potential direct cost of the [ACTU’s] claim.”*”

Please analyse the methodology adopted by ACCI to examine the direct cost of the ACTU’s claim, and prepare a written report describing your analysis. Please ensure your report addresses the following matters:

- a) The adequacy of the methodology;
- b) Your assessment of the inputs/assumptions and the outputs/results;
- c) Whether any alterations to the methodology are recommended;
- d) If required, alternative estimates on the potential cost of the ACTU’s claim.”

The formula used by ACCI to estimate the direct costs per year of the ACTU’s claim is adequate and suitable for the task. However, it is evident that there are a number of flaws in the remainder of the methodology employed by ACCI that have large implications for the quality and reliability of their cost estimates. In particular, a number of misleading and unsuitable assumptions are applied to the data, many of which are not disclosed in their report. Rather than representing a “low base line” as claimed by ACCI, the main consequence of these dubious assumptions are numerous upward biases to the estimates and an unrealistic depiction of the likely costs of FDV leave per year. In this respect, the ACCI model is considered to be not valid, as it does not measure what it claims to.

An alternative set of cost estimates are presented in this report using the same basic formula, but complemented with data driven assumptions and appropriate data sources. The consequence of which is FDV leave cost estimates that are between 1.4 – 5.8% of the magnitude of those provided by ACCI. Furthermore, sensitivity analyses are conducted to depict how responsive the estimates are to alterations in key assumptions. An Excel spreadsheet containing the baseline estimate and sensitivity analysis calculations is provided as Attachment A to this report.

Glossary of Terms

ABS	Australian Bureau of Statistics
ACCI	Australian Chamber of Commerce and Industry
ACTU	Australian Council of Trade Unions
AIG	Australian Industry Group
EETUB	Employee Earnings, Benefits and Trade Union Membership
EEH	Employee Earnings and Hours
FDV	Family and Domestic Violence
PSS	Personal Safety Survey

1. The Adequacy of the Methodology

1.1 The Australia Chamber of Commerce and Industry (ACCI) present a methodology for the estimation of the direct cost of the Australian Council of Trade Unions' (ACTU) Family and Domestic Violence (FDV) leave within paragraphs 8.68 to 8.72 of their submission, with estimation results contained in Table E of their report. The methodology used by ACCI consists of a basic cost formula, various assumptions regarding the variables or inputs fed into this formula, as well as the choice of Australia Bureau of Statistics (ABS) employment data.

1.2 The cost formula consists of a simple multiplication of three components and can be replicated as follows:

$$FDV \text{ leave cost} = \text{adjusted workforce number taking leave} \times \text{daily wage} \times \text{days leave} / \text{year}$$

The units of measurement are \$ per day of leave per year, thereby representing an annual estimated cost.

1.3 As the existence of FDV leave in modern awards represents a hypothetical scenario, the exact number of employees taking this leave per year is uncertain and thus the *adjusted workforce number taking leave* must be in turn be estimated using a number of assumptions. A small number of assumptions are thus asserted by ACCI that have the effect of adjusting aggregate ABS employment data to approximate a hypothetical subpopulation of interest that may access FDV leave. Namely, the removal of public sector employees, and also restricting leave access to only 25% of females and 10% of males.

1.4 A further assumption is used regarding the *daily wage*, which is to be paid at the minimum wage rate of \$17.70 an hour. Likewise, a number of scenarios are presented with regard to *days leave / year* in Table E of the ACCI report. The cost of the adjusted workforce taking one day's leave per year is first presented, followed by two further scenarios for five and ten days' leave per year. The latter are simply calculated as the cost for one day per year multiplied by five and ten, respectively.

1.5 In my opinion, many facets of the methodology employed by ACCI for estimating a direct cost to employers of the FDV leave are adequate and appropriate.

1.6 The basic daily cost formula itself is uncontroversial and appropriate for the task of calculating a simple wage cost per annum.

1.7 The need for industry sector disaggregation of estimates is appropriate, as is the use of ABS employment data.

1.8 Finally, the need to use various assumptions to estimate a hypothetical population of interest, being that subset of employees likely to access the FDV leave per year, is also agreed to be a necessary and essential task.

1.9 However, fundamental weaknesses exist within the methodology which in turn affect the accuracy, usefulness and validity of the resulting direct cost estimates. Specifically, the model assumptions put forth by ACCI are unsatisfactory in a number of ways and generally lead to an upward bias in cost estimates.

1.10 First, the rationale for key assumptions are not provided nor are they supported by available data. Apart from the use of a minimum wage of \$17.70 per hour, there is no justification nor rationale provided for the parameter values put forth by ACCI in their remaining assumptions. For example, the assumption that 25% of females and 10% of male employees will access FDV leave per year entails that over one million females and over four hundred thousand male employees would access the FDV leave on an annual basis. Publically available data does not support such an assertion.

1.11 Second, there are a number of implicit assumptions that have been used in the calculations that have not been disclosed in the ACCI report. For example, the FDV leave clause proposed by the ACTU applies solely to employees covered by award conditions. However, the estimates presented in Table E are calculated assuming that all employees covered by awards, collective agreements, individual contracts as well as owner

managers of incorporated enterprises will access this leave. In addition, there is a further undisclosed assumption that daily wages are calculated under the belief that all employees taking FDV leave are employed on a full-time hourly basis.

1.12 Thirdly, there is an absence of any analysis regarding the reaction of model estimates to alterations in the assumptions used. That is, sensitivity analysis. Once a mathematical model is developed as a simple depiction of a complex process, sensitivity analysis should be used to assess the robustness of results to changes in model inputs, particularly when there is a high level of uncertainty involved in the assumptions used.

1.13 In research methodology and statistics, validity refers to whether a measure is truthful or genuine. That is, whether the computation measures what it claims to measure (Jackson 2009). The concerns listed above, and explored in more detail in Section 2, cast doubt on the validity of the ACCI model.

2. Assessment of Assumptions and the Output

2.1 As the FDV leave clause is simply being proposed at this stage we do not know the actual number of employees that will access FDV leave, nor their daily wage or the number of days per year they will use. As such a number of assumptions are required by ACCI to calculate the *adjusted workforce number taking leave, daily wage and days leave per year* values. ACCI claim that:

“The assumptions do not represent a factual concession but rather a low base line that should be relatively uncontroversial” (ACCI report, para 8.70).

2.2 Assumptions do not have to represent factual concessions as they are used in mathematical modelling to simplify the analysis of a relatively complex system of interest. However, assumptions should be based on available data where possible or otherwise on rational arguments. Furthermore, if a “low base line” is proposed we would expect these assumptions to reflect the minimum magnitude of the potential variable(s) of interest. It shall be established below that this is not the case.

2.3 The specific assumptions used by ACCI are listed in paragraph 8.71. of their report, consisting of:

- a) Minimum wage of \$17.70.
- b) Reduction in the size of the employee workforce by 17% to remove public sector employees.
- c) Only 25% of females and 10% of male employees are proposed to access the FDV leave.

2.4 Each assumption listed above affects either the adjusted workforce number taking leave or the daily wage. However, no explanation or rationale is given as to why these assumptions are relevant, nor the parameter value chosen. One would presume that the use of minimum wages, removing public sector employees and applying the costs to only a percentage of male and female employees are all intended to allow a “low base line”. However, further scrutiny of the explicit and implicit assumptions used by ACCI show that there are numerous facets of the methodology that have an unambiguous consequence of introducing an upward bias to the cost estimates.

2.5 The daily wage used in the cost formula is comprised of the hourly wage rate multiplied by the number of hours worked. The use of the minimum wage rate (\$17.70) in depressing the daily wage estimate and providing a low base line is indisputable.

2.6 However, further analysis of the calculations used in Table E reveals that the daily wage is calculated using a 7.6 hour working day. This assumption is not disclosed in the ACCI report. The value of 7.6 would presumably be based on a standard full-time week consisting of a 38 hours spread over 5 days ($38 \div 5 = 7.6$). It is likely that a significant proportion of potential ~~of~~-FDV leave applicants, particularly females, will only be working part-time hours and therefore seeking less than 7.6 hours per day of leave. The use of 7.6 hours in daily wage calculations effectively assumes all applicants work full-time hours and will therefore impart an upward bias to the cost estimate via the daily wage variable.

2.7 Moving now to the assumptions affecting the *adjusted workforce number taking leave*, the 17% reduction of employee numbers to remove public sector employees has been applied incorrectly to the employee data in Table E. The exact reasoning for the 17% value is not provided by ACCI. Presumably it is based on the ABS Employee Earnings

Benefits and Trade Union Membership (EEBTUM) data cited elsewhere by ACCI. Using the public and private sector employee estimates in Table 13 of this survey it can be manually calculated that 8,535,400/10,258,500 or 83.2% of total employees work in the private sector, with the remainder (16.8%) in the public sector (ABS 2014a). Therefore, total and industry employment estimates should be multiplied by 0.83 to effectively remove public sector employment.

2.8 However, a reduction of only 13%, rather than 17%, has been applied to the data in Table E. Using the numerical figures presented in Table E, which have been verified as the correct numbers from the ABS EEBTU publication, 25% of female employees ($0.25 \times 4,843,400 = 1,210,850$ employees) plus 10% of male employees ($0.10 \times 5,415,100 = 541,510$ employees) equals 1,752,360 employees. Multiplying by 0.83 gives an adjusted workforce number of 1,454,459 employees. However, the adjusted workforce figure presented by ACCI in Table E is larger figure of 1524553.20 employees. This latter figure can be replicated as applying only a 13% reduction to the 1,752,360 workforce. That is, multiplying by only 0.87, rather than 0.83. Again, this results in an upward bias to cost calculations.

2.9 Notwithstanding the above calculation error, it was inappropriate to apply the 17% public sector employment adjustment across all of the disaggregated industry estimates anyway. Public sector employment would be expected to be minimal in Manufacturing, Retail Trade, and Accommodation and Food Services and thus the 17% will artificially deflate the employee population of interest. However, we may expect to see public sector employment of over 17% within the composition of Education and Training, as well as Health Care and Social Assistance industries. Public Sector employment by industry information is contained in Table 2 of the ABS Employment and Earnings, Public Sector survey (ABS 2015a) and could easily have been applied to calculate a more appropriate adjustment.

2.10 In comparison to the public sector adjustment to the data, which can be readily verified using the ABS EEBTUM source data used elsewhere by ACCI, the assumption that “only” 25% of females and 10% of males represent the hypothetical population of interest accessing the FDV leave cannot be replicated using any available data. One may assume that the 25% figure reflects the estimate that a quarter of females have been subject to

intimate partner violence since the age of 15, which is derived from the analysis by Dr Peta Cox in the Cox report and is referred to throughout various submissions by both the ACTU as well as AIG.

2.11 However, the use of 25% of female employees in the cost calculations represents a gross overestimate of the hypothetical population of interest that may potentially access FDV leave per year. The direct cost estimates provided by ACCI in Table E, specifically presented as \$ per day of leave per year, are by definition purported to measure employer costs on a per annum basis only. However, the widely quoted figure of 25% of females that may be have been subjected to partner violence represents a time horizon from the age of 15 to the present. Furthermore, the assertion that 25% of females will access the FDV leave presumes that a quarter of females will both experience FDV and furthermore require access to the leave for the stated purposes of attending legal proceedings, counselling, appointments with medical or legal practitioners, or relocation.

2.12 Firstly, it is likely that the relevant population of employees that may potentially access the FDV leave in any one year would be restricted to that subset who have experienced the violence in the preceding 12 months only, rather than all of those that had experienced such violence since the age of 15. Partner violence estimates for the preceding 12 months are reported in the ABS Personal Safety Survey (PSS) and have been cited in both the Cox report (paragraph 7.4) and the AIG reply submission (paragraphs 412, 420). Namely, that 2.1% of females experienced at least one incident of violence by an intimate (cohabitating or non-cohabitating) partner in the preceding 12 months. This figure drops to 1.5% of females if we limit this to violence from cohabitating partners only. Furthermore, Table 21 of the PSS reports that only 0.6% of males experienced violence from their (cohabitating) partner in the 12 months prior to survey (ABS 2013a).

2.13 Second, in addition to the assumption regarding the hypothetical population of employees that may be affected by family or partner violence in any year, we must make a further assumption regarding the proportion of the victims that may actually take up the leave for the intended purposes of legal proceedings, counselling and relocation. The implicit assumption used by ACCI postulates that 25% of female employees and 10% of male employees will both experience family and domestic violence in a given year as well

as take up the FDV leave to access one, five and ten days of paid leave. This assumption that all affected employees take up the FDV leave provision for anywhere up to ten days compounds the earlier assumption regarding the proportion of employees likely to experience FDV in any given year and leads to a gross overestimate of costs per year.

2.14 Next, there is another implicit assumption in the use of the EEBTUM employee data that the FDV leave will cover all employees regardless of their method of pay setting. That is, employees covered by collective agreements, individual arrangements and owner managers of incorporated enterprises, in addition to those covered by awards. However, the FDV leave entitlement currently under consideration is directly relevant to employees paid by awards only. Employment data reported by method of pay setting by industry is readily available from the ABS Employee Earnings and Hours (EEH) survey, the latest survey conducted in May 2014 and could easily have been used in the cost calculations rather than the EEBTUM survey used.

2.15 EEH data shows that there were 9,898,900 employees in May 2014, of which only 1,860,700 (19%) were paid by award conditions, compared to 4,070,100 paid under collective agreements (41%), 3,627,700 (37%) by individual arrangement and 340,300 (3%) as owner managers of incorporated enterprises (ABS 2015b). Therefore, the use of employment data from Table 13 of the EEBTUM survey that includes employees covered by all methods of pay setting results in a substantial over-coverage of the employee population of interest. This will also result in a substantial upward bias to cost estimates.

2.16 Finally, the calculations used to present costs associated with one, five and ten days of FDV leave per year implicitly assume that all employees both have access to these incremental amounts of leave, and furthermore that all employees taking one day of leave will automatically also take the additional number of days leave. The first assumption ignores any potential pro rata issues and means that all part-time and casual employees would be eligible to take five or ten days' paid leave. The second assumes that all of those taking one day of leave will also require five or ten days. To the contrary, it is likely that only a proportion of those requiring one day off for legal proceedings, counselling, appointments with medical or legal practitioners, or relocation would need five days off, with a smaller proportion again needing to take ten days. Once more, the implicit assumptions applied by ACCI lead to an overestimate of likely costs.

2.17 In summary, while it is claimed by ACCI in paragraph 8.70 that the assumptions used in their cost model would result in a “low base line”, it is apparent that the only assumption that would lead to a truncated cost estimate is the use of the minimum wage rate. Other explicit assumptions, and more so the numerous undisclosed implicit assumptions, result in an upward bias to cost estimates and thus overestimate the true probable cost of FDV leave to employers.

2.18 First, the implicit assumption that daily wage calculations are based upon full-time employment hours of 7.6 hours will lead to a relatively high base line cost estimate.

2.19 Second, the adjustment to remove public sector employment was incorrectly applied, resulting in a reduction to the employee population of interest of only 13% rather than the stated 17%. Furthermore, it was inappropriate to apply this adjustment across the board to all industries as public sector employment is not evenly spread across the industries.

2.20 Third, the assumption regarding the proportion of males and females potentially accessing FDV leave per year was grossly overstated. The figure of 25% of females accessing the FDV leave used by ACCI was presumably based upon lifetime exposure to partner violence reported elsewhere in submissions. However, it would be more appropriate to assume that those requiring FDV leave for the stated purposes would be only those that experienced violence in the previous 12 months. This point is particularly relevant to the direct costs of FDV leave being reported in Table E as cost per day of leave per year, and thus on a per annum basis. Readily available estimates referred to in both ACTU and AIG submissions indicated that the proportion of females subject to partner violence in the previous year was between 1.5-2.1%. Similarly, only 0.6% of males were subject to partner violence in the previous year. The assumption that 25% of females and 10% of males would be subject to FDV in a given year was a gross overestimate.

2.21 Fourth, it was implicitly assumed that all of those experiencing FDV would require paid leave. However, it is likely that only a proportion of these individuals experiencing violence would be likely to access the FDV leave for the purposes of legal proceedings,

counselling and relocation, thereby bringing the likely estimate of those taking leave down even further. The assumption of 100% uptake of leave for those experiencing FDV leads to a further upward bias to cost estimates.

2.22 Fifth, ACCI implicitly assumed the FDV leave costs would apply to all employees paid by award, collective agreement, individual arrangement and owner managers of incorporated enterprises. Award employees, to which the FDV leave clause directly applies, constitute less than 20% of total employees.

2.23 Sixth, in the only sensitivity analysis undertaken by ACCI it was assumed that all employees that took one day leave would hypothetically also take the five and ten days leave. For this to be possible, all employees must be eligible to take the five or ten days of leave. However, this is likely to be the case for full-time permanent employees with uncertainty surrounding the extent of eligibility for part-time employees, and more so casual employees. Furthermore, of those accessing one day's leave, it would be likely only a reduced proportion would require 5 days off, and a lower proportion again accessing 10 days leave for the stated purposes of the leave.

2.24 The use of assumptions that were over-simplistic, vague or not reflective of observable data ultimately influence the utility of the aggregate cost estimates presented by ACCI in Table E. For the reasons stated above, it is likely that estimates provide an unrealistically high base line of direct costs, rather than a "low base line that should be relatively uncontroversial" (ACCI para 8.70). As such, a number of recommendations regarding more appropriate assumptions and data sources are explored in Section 3 below.

3. Recommendations to Methodology

3.1 There is nothing inherently wrong with the basic formula used by ACCI for their cost estimates. However, it is recommended that changes to both the assumptions as well as data sources be applied when attempting to overcome the many methodology deficiencies established in Section 1 and explored in Section 2. Where possible, the emphasis should be on formulating data driven assumptions and using readily available ABS data that is fit for purpose.

- 3.2 A baseline estimate should first be established. The recommended baseline estimate is claimed to be neither a low nor high estimate, but rather the most appropriate given available data. Where the data to inform assumptions is unavailable, the sensitivity of cost estimates to alternative parameter values should be analysed and reported to allow one to judge the potential influence of the uncertainties on the outcome.
- 3.3 First, there is no need to assume minimum wages. It is recommended that average hourly earnings data is used rather than the minimum wage. This data is available for non-managerial employees by industry and method of pay setting in Table 4 of the EEH survey (ABS 2015c).
- 3.4 Second, full-time employees should be assumed to work 7.6 hours per day, however, it is recommended that we assume that part-time employees work only 75% of this, or 5.7 hours. One day of paid leave will therefore consist of 7.6 hours for a full-time employee and 5.7 hours for a part-time employee for the purposes of the daily wage calculations. As no hard data is available on the average number of hours a part-time employee works per day or shift, sensitivity analysis should later be used to ascertain the influence of this assumption on cost estimates.
- 3.5 Third, the pool of employees that could potentially access FDV leave should be assumed to reflect only those people that had experienced partner and family violence in the recent past only, namely the preceding 12 months. Table 21 of the PSS reports that 1.5% of females and 0.6% of males experienced violence from a cohabitating partner in the past 12 months (ABS 2013a). The Cox report (para 7.4) further states that the percentage of females who experienced violence from both cohabitating and non-cohabitating partners in the previous 12 months increases this percentage to 2.1%. The estimates for males experiencing violence from both cohabitating and non-cohabitating partners is not reported in either the PSS or Cox Report. Therefore, if we assume a similar pattern for both males and females, the percentage of males that may have experienced violence from either cohabitating or non-cohabitating partner increases by the same proportion, from 0.6 to 0.84%.
- 3.6 This does not include *family* (as opposed to intimate partner) violence, which is not reported in the PSS or Cox report. Without further data to inform the likely proportion of

employees that may be subject to family violence it is recommended we simply assume a further 50% of those affected by (cohabitating and non-cohabitating) partner violence may be affected by family violence. That is, 3.15% of females and 1.26% of males are assumed to experience either partner or family violence in the last 12 months (1.5 X 2.1 and 1.5 X 0.84, respectively). Sensitivity analysis should be conducted with respect to the assumption regarding the prevalence of family violence (such as changing the 50% of partner violence assumption to 25% or 100%).

3.7 Fourth, only a proportion of those experiencing family or domestic leave should be assumed to actually access the leave for the stated purposes of legal proceedings, counselling, relocation, medical or legal appointments. Data from the ACTU submission (para 7.32) states that 17 out of 33,000 employees from Telstra accessed their family violence leave entitlement in the 9 months following its introduction in 2014. Further data cited by the ACTU (para 7.29) from the UNSW report stated that 35.3% of employers that provided domestic or family violence leave received any leave requests in the previous 12 months. Unfortunately, further analysis of the UNSW report did not reveal how many, or what percentage of, employees this encompassed.

3.8 Other data that may help assess the proportion of those experiencing FDV that will require access to leave is available in the Cox report. Of the female employees who experienced male cohabitating violence from their current partner in the previous 12 months, 23.1% contacted the police, while 40.4% of those who experienced violence from a previous partner contacted police (para 8.2).

3.9 Furthermore, 61.9% of employed females who experienced (current) partner violence in the previous 12 months sought advice or support, increasing to 94% for those who experienced violence from a previous partner (para 8.8). However, with reference to Table 24 from the PSS which reports the percentage of males and females accessing advice or support regardless of employment status (ABS 2013b), the statistics reported by Cox for those accessing advice or support are likely to be overstated for our purposes as they include those seeking advice from friends and family, as well as for legal / medical / relocation reasons.

3.10 Finally, the Cox report also states that over one quarter of females that experienced physical assault from a male cohabitating partner took time off in the 12 months following the incident, while 19.8% of those who had been sexually assaulted by a male cohabitating partner took time off (paras 8.14 and 8.15).

3.11 Therefore, using these statistics as a reference point and guide, it is recommended that we assume that 50% of those experiencing family and domestic violence may actually require access to FDV leave entitlements for medical, legal or relocation reasons. Due to the uncertain nature of this assumption, sensitivity analysis regarding the take up rate of leave for those experiencing FDV violence should also be undertaken.

3.12 Fifth, the proposed FDV leave clause applies to modern awards only, therefore, cost calculations should be restricted to award employees only in the first instance. However, noting the potential for FDV provisions to eventually spread to collective agreements under a better off overall test (BOOT), it is recommended to also calculate potential FDV leave costs for collective agreement employees as a separate exercise.

3.13 As some collective agreement employees already have access to FDV leave, we must only calculate costs for that subset of employees that will be eligible for the first time if it is introduced. Enterprise agreement data from the AIG's Mandel report can be used to estimate the number of employees covered by collective agreements that already have access to FDV leave. Mandel states that 15% of all enterprise agreements approved in 2016 contain provisions regarding domestic violence (para 26). Further data presented states that 38.4% of agreements with a domestic violence provision specifically contain domestic violence leave entitlements (para 27). It is therefore assumed that 5.8% of collective agreements and therefore collective agreement employees already have access to FDV leave (38.4% X 15%). Similar adjustments can be applied to industry employment estimates using other data supplied in the Mandel report on page 14/25. Using the same 38.4% adjustment to industry estimates results in industry employment discounts for collective agreement employees ranging from between 0.7% (Accommodation and Food Services) to 10.7% (Health Care and Social Assistance).

3.14 Sixth, the number of employees paid by award and collective agreement rates by industry are reported in Table 4 of the EEH survey (ABS 2015b). However, these figures

are not disaggregated by sex or part-time / full-time status. Employee data from the EEBTUM survey in Tables 9 and 13 (ABS 2014a, 2014b) can be used to impute the sex and part-time / full-time distribution of award and collective agreement employees.

3.15 Seventh, it is recommended that a public sector employment adjustment is based upon data reflecting public sector employment by industry rather than a blanket adjustment of 17% across the board. Public sector employment by industry is published for June 2014 in Table 2 of the Employment and Earnings, Public Sector survey (ABS 2015a). It is evident that there is a negligible number of public sector employees in Manufacturing, Retail Trade, and Accommodation and Food Services. As such, no public sector adjustment is recommended for these industries' employment estimates. However, Transport, Postal and Warehousing, Education and Training, and Health Care and Social Assistance contain 90300, 599600 and 458600 employees, respectively. Assuming that these employees are equally distributed across award and collective agreement methods of pay setting, adjustments of 20.59% (Transport), 63.92% (Education) and 36.33% (Health) are required. The 17% adjustment previously used by ACCI is applied to total industry employment only.

3.16 As there is uncertainty to the data informing some of the assumptions, a number of sensitivity analyses are also recommended to test the responsiveness of cost estimates to changes in the parameter values within these assumptions.

3.17 First, the number of hours for which the FDV leave is taken is uncertain, particularly for part-time employees. The baseline solution assumed that part-time employees' work day was 75% of the hours of a full-time employee, or 5.7 hours. Two further scenarios are recommended for downward (50% / 3.8 hours) and upward adjustments (100% / 7.6 hours).

3.18 Second, data relating to family violence was not available and as such was estimated as an additional 50% of number of employees experiencing partner violence. It is recommended that the sensitivity of this assumption is also undertaken, with alternative downward (25%) and upward (100%) adjustments to this parameter.

3.19 Third, the take up rate of FDV leave for those experiencing violence was assumed to be 50% of those experiencing partner or family violence in the previous 12 months. That is, half of those subject to FDV would require leave for the purposes of attending to legal or medical issues, or for relocation. Further sensitivity analysis will determine how much costs change if instead 25 or 75% of eligible employees access the leave.

3.20 Finally, it is recommended that cost estimates are provided for one day of leave only for the purpose of comparison with ACCI. This is not to say that employees are likely to access one day of leave only. However, further assumptions regarding the pro rata nature of FDV leave for part-time or casual employees is not known. As such, it will be implicitly assumed that casual employees also have access to the FDV leave. Estimates can be adjusted to remove casual employees if this is deemed appropriate. More so, the proportion of those that take one day of leave that would further require five and then ten days of leave would require further additional layers of conjecture and assumptions that are deemed as beyond the scope of this exercise.

4. Alternative Estimates

4.1 The baseline employee and cost estimates presented in Table 1 reflect the recommended assumptions discussed in Section 3. Namely:

4.2 Employees taking leave are paid at non-managerial average hourly total cash earnings by industry and method of pay setting (award or collective agreement), taken from EEH survey data (ABS 2015c).

4.3 Full-time employees are assumed to be paid 7.6 hours for a standard day, with part-time employees paid 5.7 hours, being 75% of the full-time day.

4.4 Employee estimates by industry are disaggregated by award and collective agreement using EEH data (ABS 2015b). The sex and part-time / full-time employment distribution is imputed using EEBTUM data (ABS 2014a and 2014b).

4.5 Collective agreement employee estimates are discounted by between 0.7% (Accommodation and Food Services) to 10.7% (Health Care and Social Assistance) to

account for employees already covered by existing FDV paid leave provisions, using enterprise agreement data from the Mandel Report.

4.6 Employee estimates are discounted to account for public sector employment, using data from the Employment and Earnings, Public Sector survey (ABS 2015a).

4.7 The relevant populations of interest that access FDV leave consists of 1.575% of females and 0.673% of male employees. This is based upon a 50% take up rate for FDV leave for the 3.15% of females, and 1.26% of males estimated to be subject to family and domestic violence in the previous 12 months (ABS 2013a, Cox report).

4.8 Estimates presented in Table 1 indicate that 16,620 award covered employees are estimated to access FDV leave per annum. This compares to 1,525,553.2 employees presented by ACCI. The cost of award covered employees taking one day of FDV leave per year is just under \$3 million per annum, or 1.4% of the estimate provided by ACCI of \$205 million.

4.9 Retail Trade, Accommodation and Food Services, and Health Care and Social Assistance are impacted the most with estimated costs of over \$500,000 per annum in each of these industries. However, putting this in perspective, ACCI estimated the annual cost to be approximately \$15 million to \$35 million per year for each for these particular industries.

4.10 If we assume that FDV leave subsequently spreads to collective agreements via a BOOT, it is estimated that this will approximately cost a further \$9 million per annum shared across all industries. Education and Training, and Health Care and Social Assistance are the most affected, due to both a high prevalence of female employment covered by collective agreements in addition to relatively high average wage rates of nearly \$40 per hour.

4.11 When combining the cost estimates of both award and collective agreement employees we reach a total estimated cost of \$11.9 million per annum, which is 5.8% of the ACCI estimate.

Table 1. Baseline Cost Estimates for Award and Collective Agreement (CA) Employees

	Award employee population of interest		CA employee population of interest		Award Cost	CA Cost	Total Cost
	Female	Male	Female	Male			
All Industries	11,484	5,136	23,664	10,583	\$2,965,503	\$8,918,053	\$11,883,556
Manufacturing	452	511	913	1,031	\$159,057	\$472,071	\$631,128
Retail Trade	2,907	855	4,219	1,241	\$553,464	\$795,055	\$1,349,519
Accommodation and Food Services	2,865	850	2,127	631	\$537,844	\$381,742	\$919,585
Transport, Postal and Warehousing	135	186	622	856	\$61,877	\$398,807	\$460,684
Education and Training	191	32	3,070	507	\$42,112	\$1,014,130	\$1,056,242
Health Care and Social Assistance	2,273	220	5,270	509	\$543,021	\$1,474,146	\$2,017,167

4.12 Starting with sensitivity analysis of part-time employee hours, increasing part-time daily hours from 5.7 to 7.6 hours (that is, from 75% to 100% of full-time hours), would increase the total cost estimate by 10.32%. Manufacturing (5.47%) and Transport, Postal and Warehousing (6.15%) are least affected because of their relatively low part-time workforce. In contrast, Accommodation and Food Services (19.71%) and Retail Trade (16.75%) are the most sensitive to the assumption regarding how many hours a part-time employee would take for a day's leave. It should also be noted that FDV leave costs would decrease by the same percentages across industries if we assumed that a part-time employee's day consisted of only 50% of the full-time employee's day or 3.8 hours.

4.13 Next, with respect to the proportion of employees experiencing family, as opposed to partner, violence. The baseline assumption was that a further 50% of those subject to partner violence may be affected by family violence. Assuming this percentage is only 25%, the FDV leave costs would decrease by 16.3%, equally shared across all industries. Alternatively, at the other end of the spectrum if we assumed a one for one relationship between partner and family violence, and applied a 100% increase to the known partner violence statistics, FDV leave costs would increase by 33%.

4.14 Finally, if we decrease take up rates of FDV leave from 50% of those experiencing partner and family violence to only 25%, costs decrease equally across industry by 50%. Similarly, estimated costs would increase by 50% if we now assume 75% of those

experiencing family and partner violence will access the leave for medical, legal and relocation purposes.

5. Conclusion

5.1 Analysis of the methodology used by ACCI to estimate the direct costs of FDV leave per year revealed a number of flaws, predominantly relating to dubious assumptions used to construct the variables used in their cost formula. The explicit and implicit assumptions within the cost model primarily led to large upward biases in the cost estimates. This was in stark contrast to the ACCI claim that the assumptions used in their model would result in "... a low base line that should be relatively uncontroversial" (para 8.70).

5.2 It has been argued in this report that the combined influence of the assumptions used by ACCI has led to a gross overestimate of costs per year. The cost model presented by ACCI is not valid from a methodological point of view. Put simply, the estimates put forth by ACCI do not measure what they claim to.

5.3 Of particular concern was the assumption that 25% of all female employees and 10% of all male employees would access the FDV leave in any particular year. In contrast, using readily available data used by both the ACTU and AIG in their submissions, a much more realistic assumption is that only those experiencing partner and family violence in the preceding 12 months would potentially be eligible for FDV leave. Furthermore, only a subset of this group would require access to the leave requirements for the stated purposes of attending legal proceedings, counselling, appointments with medical or legal practitioners, and relocation. Data driven analysis suggest that, in contrast to the assumptions presented by ACCI, less than 2% of females and less than 1% of males were likely to access FDV in any given year.

5.4 In addition, ACCI calculations were applied to a large over-coverage of workers, including a sizable proportion to which FDV leave costs are not relevant. ACCI implicitly assumed that workers covered by individual contracts as well as owner managers of incorporated enterprises would access FDV leave, comprising 40% of the employee workforce. However, FDV leave provisions are proposed to apply to modern awards only, or just under 20% of total employees. Yet, even assuming that FDV leave may subsequently infiltrate collective agreements, this would only affect another 40% of workers. Using an

inappropriate data source and applying the formula to the incorrect cohort of workers led to another large overestimate of potential costs of FDV leave.

5.5 Other assumptions used in the ACCI cost estimates that were typically undisclosed in their report were that all workers were employed on a full-time basis, further inflating the cost estimates. Finally, a substantial error in their calculations was uncovered in the attempt to remove public sector employees from their estimates, again resulting in an upward bias to the cost estimate.

5.6 After exploring more realistic assumptions based upon sound analysis and appropriate data sources, alternative cost estimates were presented in this report, showing that the likely direct cost of FDV leave was under \$3 million per annum for award employees, and just under \$9 million for collective agreement employees under a liberal assumption that FDV leave would subsequently be dispersed more widely. As such, annual costs were estimated to be 1.4 to 5.8% of the ACCI projections. Similarly, the FDV leave was estimated to affect approximately 16,000 to 50,000 employees per annum, rather than the 1.5 million plus employees put forth by ACCI. Finally, sensitivity analyses applied to the cost model showed that the cost estimates provided were relatively robust to reasonable changes in the parameter values within assumptions.

I have made all the enquiries that I believe are desirable and appropriate and no matters I regard as relevant have, to my knowledge, been withheld from the court.



Dr Martin O'Brien 17/10/16

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ATTACHMENT A

EXCEL SPREADSHEET CONTAINING BASELINE ESTIMATE AND SENSITIVITY ANALYSIS
CALCULATIONS

