Marriage equality in Australia

The cost of holding a plebiscite

March 2016



Overview

The purpose of this report is to provide evidencebased analysis to inform the current debate on marriage equality. In particular, this analysis considers the economic and social impacts of Australia's current definition of marriage and the costs of the process of change through a national plebiscite.

A plebiscite is the process used to decide a national question that does not require a change to the Australian Constitution (a change to the Constitution would require a national Referendum). In the current context, a plebiscite in this context is a national vote on the subject of marriage equality. For the purposes of this analysis, we have based our estimates on a plebiscite that would require compulsory voting. For the outcomes of a plebiscite to be binding, it will require the passage of a bill through the Australian Parliament.

Key findings on the estimates of the cost of a plebiscite include:

A standalone plebiscite would cost the
 Australian economy approximately
 \$525 million for the two year period from
 January 2016. This estimate includes costs
 incurred by the taxpayer, the Commonwealth
 Government, and the broader community.

- This cost comprises:
 - facilitation of a standalone plebiscite (\$158 million)
 - all funding of campaigns (\$66 million)
 - time impost for voters to participate (\$281 million)
 - impact on the mental health and wellbeing of impacted groups (\$20 million).

These costs are estimated over and above the expected costs of the election cycle over the coming 12 months. This means the cost of a Federal Election and the internal process costs of holding a vote in Parliament are not included in the costs as they will be incurred regardless of a plebiscite.

- This analysis considered costs across three scenarios a standalone plebiscite, a plebiscite as part of a Federal Election, and a Parliamentary vote on marriage equality (ie where no plebiscite is held). We estimate that approximately \$508 million of costs could be avoided by holding a Parliamentary vote on marriage equality instead of a standalone plebiscite.
- Although not a stated preference of the Australian Government, approximately \$412 million of costs to the economy could be avoided through conducting a plebiscite as part of a Federal Election.

Table 1: Estimated additional costs to the Australian economy of a plebiscite on marriage equality

Additional costs (\$ million) For the 2 year period from January 2016	1. Standalone plebiscite	2. Plebiscite as part of a Federal Election	3. Parliamentary vote on marriage equality
Cost of facilitating a plebiscite	\$158	\$44	-
2. Cost to community of funding campaigns	\$66	\$53	\$13
3. Cost of time for people to vote	\$281	-	-
Cost associated with the impact on mental health and wellbeing	\$20	\$16	\$4
Total additional costs to the economy	\$525	\$113	\$17

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1 Introduction

In recent months, the Australian community has discussed marriage equality as well as the merits of the mechanism for a change on marriage equality (changing the *Marriage Act* to allow same-sex couples to marry). Some sectors of the community support a plebiscite on the basis that it enables national discussion on an important social issue. Other segments of the community oppose a plebiscite on the basis that Parliament already has the ability to deal with the issue and that it would therefore be an additional, unnecessary step.

This report is the first of two that will assist in developing the evidence base on the economic and social impacts of marriage equality in Australia:

- This report focuses on the cost of a plebiscite the process which is currently being considered by the Australian Government
- The second report will look at the economic impacts from marriage equality.¹

A plebiscite is used to decide a national question that does not require a change to the Australian Constitution (a change to the Constitution would require a national Referendum). In the current environment, a plebiscite would be a national vote on the subject of marriage equality. It is anticipated that the outcomes of this vote would then inform the passage of legislation through parliament, through a parliamentary vote.

Three national plebiscites have previously been held in Australia: two of which were held in 1916 and 1917 on the subject of conscription, and in 1977 on the subject of the national song (though voting was voluntary). Unlike a referendum, the decision reached in a plebiscite does not have any legal force (Parliamentary Education Office, 2016). Hence, in order for marriage equality to be enabled, a plebiscite would be followed by the Australian Parliament passing legislation to amend the *Marriage Act*.

This report

In this report we estimate the following direct and indirect costs of holding a plebiscite, being the:

- cost to the taxpayer of facilitating a plebiscite
- cost to the community of funding the for and against arguments
- cost to the taxpayer and workplaces as a result
 of the impact on people who may be harmed
 by the negative messages portrayed as part
 of the debate (on both sides of the debate, and
 regardless of the outcome of the vote)
- opportunity cost of the community's time in undertaking a vote.

These costs are presented as gross costs; net impacts will be discussed as part of the second report on marriage equality. These costs are summarised in order to present and compare the cost of a plebiscite on marriage equality across three scenarios:

- Scenario 1: A standalone plebiscite held after the next Federal Election with a Parliamentary vote to follow. We assume a plebiscite occurring in early 2017 with a Parliamentary vote mid-2017 (time period equal to 15 months)
- 2 **Scenario 2:** A plebiscite held concurrently with the next Federal Election with a Parliamentary vote to follow. We assume a plebiscite and election occurring in late 2016 with a Parliamentary vote in early-2017 (time period equal to 12 months)
- 3 **Scenario 3:** A Parliamentary vote, which would not require a plebiscite to be held. We assume this could be held mid-2016 (time period equal to 3 months).

In addition to these estimates, other costs for which data was not available at this time are also discussed.

This second report will include sensitivity analysis of all included costs and benefits related to marriage equality in Australia, including those identified in this first report.

2 Cost of facilitating a plebiscite

A nation-wide vote will require facilitation by the Australian Electoral Commission

The details as to how a plebiscite would be held on the issue of marriage equality would need to be established by the Australian Parliament. Details would include the nature of the questions asked, whether voting is compulsory or voluntary, and the ballot form.

The AEC, in its submission to the Senate Standing Committees on Legal and Constitutional Affairs inquiry into marriage equality, estimated the cost of a stand-alone plebiscite with compulsory voting² at approximately \$158 million (AEC, 2015a, p. 10). This sum is based largely upon (including inflation):

- The cost of facilitating a vote equivalent to a federal election, with the last election in 2013 costing approximately \$140 million (public funding of political campaigns excluded) (AEC, 2015a, p. 10). Key costs included in this estimate were:
 - staff to manage the polling places
 - paper and storage requirements
 - education and promotion materials informing electors about the plebiscite

 the cost of developing and producing over 10 million copies of a pamphlet that summarises information for voters. This element alone in the last referendum (1999) cost \$16 million (AEC, 2011).

There would be a saving if the plebiscite were undertaken in conjunction with the next federal election. Using similar cost estimates, the AEC estimate this cost to be \$44 million (AEC, 2015a, p. 10).

Table 2: Estimated cost of facilitating a plebiscite

Sc	enario	Additional cost (\$ million)
1.	Standalone plebiscite	\$158
2.	Plebiscite as part of a Federal election	\$44
3.	Parliamentary vote on marriage equality	Cost of a parliamentary vote are already incurred as part of existing parliamentary process

Were the Marriage Equality Plebiscite Bill 2015 passed into law, a plebiscite would be run in the form of a referendum, which includes compulsory voting (AEC, 2015a).

3 Cost to community of funding campaigns

Groups for and against marriage equality will fund campaigns

A plebiscite will likely result in groups for and against marriage equality spending funds on campaign activities (eg advertising). These funds may be raised from the community or be redirected from other purposes.

This estimate considers campaign funds spent by both sides of this decision. It is important to note that the cost of LGBTI and faith-based NGOs funding a large, national campaign may be greater than the just the dollar value of campaigning; it may result in funds being redirected as both LGBTI and faith based groups currently fund a range of services that add considerable value to society especially through their impact on the most vulnerable in our communities.

To estimate the cost of funding campaigns:

• Publicly available estimates on the costs of six similar campaigns (Australian and International) were used to determine an average cost per eligible voter (in current day Australian dollar terms). The highest estimate was from the 2008 Californian vote on Proposition 8 (\$6.61 per voter). The lowest estimate, was from the recent 2015 Irish referendum on same-sex marriage (\$0.55 per voter), but this is considered an underestimate as there is less information available on the Irish cost of, and restrictions to, campaigns in that instance

- Also considered were additional costs per voter for both the Labor and Coalition parties in an election year relative to a non-election year, as an indicator of the additional campaign costs incurred by political parties
- Taking an average of these values, assuming they apply to a 12 month period and applying it to the estimated number of registered Australian voters in December 2016 (to allow for a plebiscite to take place at or after the next election) results in an estimate of \$53 million in direct costs to the community for Scenario 1
- As there would be the requirement for a parliamentary vote following a plebiscite, additional campaign costs (equal to three months of this cost) were added to Scenario 1, giving a total standalone cost of \$66 million
- Scenario 2 has a shorter timeframe than
 Scenario 1 12 months so the campaign costs are \$53 million
- For Scenario 3, it is assumed that even though there is only a parliamentary vote, campaign costs would still be required. However, the timeframe for this campaign would likely be shorter. To capture this, three months of campaign costs have been included in Scenario 3.

Table 3: Estimated campaign costs

Sc	enario	Additional cost (\$ million)
1.	Standalone plebiscite	\$66
2.	Plebiscite as part of a Federal election	\$53
3.	Parliamentary vote on marriage equality	\$13

4 Cost of time for people to vote

Voters will take time off work or out of their day to participate

A plebiscite (whether it is compulsory or voluntary) will impose a cost upon voters. The time taken to vote is the opportunity cost to the community as a result of taking time out of their work day or leisure time to vote. While not a financial cost, the concept of valuing a time cost is commonly used when measuring economic impacts as it accounts for the fact that people maximise their utility and this includes how they use their leisure time. Whether or not voting in an election forms the best use of people's time (some individuals may enjoy enacting their civil duty in voting; others may prefer different leisure activities), ascribing some value to people's time allows us to consider the time impost upon the community.

To estimate the time cost for voters, we assumed:

- Participation in a plebiscite is based on an average voter taking one hour in total to travel to a polling station, wait in line, vote and return to their normal activities
- It is assumed that 9% (AEC, 2013) of voters will participate through a postal vote and this will take 30 minutes to complete
- While various estimates of the cost of leisure time exist, this estimate is based on a proxy equal to the minimum wage of \$17.29 per hour (Fairwork, 2015). This is a conservative estimate as other official valuations of leisure time, are higher (eg the Office of Best Practice Regulation values leisure time at \$27 per hour (Department of Prime Minister and Cabinet, 2014, p. 11))

- In the case of those people who work on Saturday and choose to vote during their work time (we assume 50% of those who work on a Saturday would do a postal vote or vote before or after work), we have applied the average wage calculated as average weekly wage divided by average hour per week of \$34.65 per hour (ABS 2010; ABS 2015)
- Additional travel costs (public transport, petrol, etc) have not been estimated, though an assumption for travel time is included in this analysis.
- The total opportunity cost of voter time is approximately \$281 million (\$49 million attributable to those people who work on a Saturday (the day a plebiscite would likely be held), \$12 million to postal voters and \$220 million attributable to all other voters)
- The cost is assumed to not be applicable if a
 plebiscite is held in conjunction with an election
 as this analysis measures additional cost from
 the current electoral process.

Table 4: Estimated time costs for voters to participate

Sc	enario	Additional cost (\$ million)
1.	Standalone plebiscite	\$281
2.	Plebiscite as part of a Federal election	Cost of time would be incurred as part of an existing electoral process
3.	Parliamentary vote on marriage equality	No costs would be incurred as no public vote would be held

5 Cost associated with mental health and wellbeing

Negative commentary affects people's mental health

People from the LGBTI community experience greater levels of stress than the general population as a result of the experience of prejudiced events, expectations of rejection, and hiding and concealing their sexual identity, and internalised homophobia. This disrupts multiple life domains including social relationships, coping mechanisms, resources, income-earning potential and productivity. This is defined as minority stress and creates a hostile and stressful social environment that is linked to an increase in mental health conditions.

The impact of mental health on the LGBTI community compared to the rest of the population is significant with people from the LGBTI community twice as likely to have a high or very high level of psychological distress (18.2% vs 9.2%) (Rosenstreich 2013), and three times as likely to have had suicidal thoughts (34.7% vs 12.9%) (ABS 2010). ³

A plebiscite will be a high profile, national, public debate that will likely extend over a number of months. Evidence reviewed for this study⁴ shows the attention that arguments opposing marriage equality received in the media and in community forums during a referendum have an impact on mood disorders and mental health and wellbeing of people from the LGBTI community. There is also potentially an impact on those with strong beliefs against marriage equality, although limited evidence of the impacts on mental health were available publicly.⁵

For a segment of the community already more susceptible to mental health issues as a result of discrimination, the discussion of marriage equality opponents' opinions may further exacerbate health outcomes.

This analysis estimates the additional cost associated with minority stress that would result from a plebiscite and is measured across two metrics:

- 1 The direct cost to the health system through the increase use of mental health services in the community as a result of minority stress
- 2 The indirect cost of absenteeism and presenteeism in the workplace as a result of this increase in minority stress.

Direct mental health costs

There is no clear, comprehensive data (ie longitudinal studies of health impacts) on the impacts on the mental health of Australian LGBTI people, with a focus on discrimination. However research from the University of Queensland found that Australians from the LGBTI community exposed to articles opposing marriage equality were more likely to report feeling negative and depressed, lonely, weak and powerless (Barlow et. al 2012). This indicated that the effect of LGBTI people being continually exposed to negative media may lead to more serious mental health impacts.

Given the evidence of minority stress on the LGBTI population, but limited evidence on the specific mental health impacts in the Australian context, the costs estimated in this analysis are based on the impact of a conservative increase in the prevalence of low severity mental health conditions.

These specific impacts relate to LGB Australians. The impacts are higher for transgender and intersex Australians (Rosenstreich 2013). This section focusses on LGB Australians rather than all LGBTI Australians as there was generally less information available for transgender and intersex Australians in this part of the analysis. The estimates presented here may therefore be an underestimate in this context.

See Rostosky et al. (2009); Maisel and Fingerhut (2011); Barlow et al. (2012); and Hatzenbuehler et al. (2010).

This is supported by Kealy-Bateman and Pryor (2015), for example, which noted no evidence was found that marriage equality harms opposite-sex marriage.

It is assumed 5% of the Australian LGBTI community would be affected by the public debate of a plebiscite such that they experience a low level affective (mood) or anxiety disorder, 6 then 50,000 people would be impacted. This estimate is based on 2% of the Australian population identifying as LGBTI.7

The estimated impact on mental health is conservative when compared to local front-line service data. This analysis includes an assumed 5 percentage point increase in the LGB prevalence of anxiety and affective disorders which equates to a 16% and 26% increase in demand for mental health services respectively (assuming there is no change in the proportion of people who use mental health services). In comparison, recent data from Drummond Street Services (a Melbourne based family support agency that provides counselling and support to LGBTIQ people and their families) shows the number of clinical cases doubled between 2013-14 and 2014-15. The agency cites political debate about same-sex marriage as a cause for a spike in demand with recent debate surrounding an LGBTI support program related to a further surge. (Ireland, 2016b). Evidence of the impacts of minority stress is further captured in international literature (Hatzenbuehler, 2010).

By looking at the use and cost of health services for those experiencing a mental health condition the cost to the health system can be estimated. We assumed:

- In line with existing data on health service use, those with an anxiety disorder, 12% see a General Practitioner (GP) and 6% see a psychologist while for those with an affective disorder, 36% see a GP and 16% see a psychologist (ABS, 2008)
- Increased use of community mental health services are limited to interactions with a GP (1.7 times per year) and a Psychologist (4 times per year) (AIHW, 2016, pp. 6-8), for one year only, noting that the impact of a mental health condition can be experienced for a number of years.

Applying these assumptions, the direct cost of negative campaigning or commentary on the mental health of LGBTI people is estimated to be \$4 million in Scenario 1. Due to the shorter timeframe, the cost is estimated in Scenario 2 at \$3 million and \$1 million in Scenario 3.

These direct health impacts are conservative in that:

- In comparison to recent local service data (as outlined above), the assumptions used in the analysis on mental health service use are relatively low
- There may also be out-of-pocket costs to individuals that have not been included in this analysis – for example, travel costs and if people visit private health services they will pay for some portion of the fee themselves
- This cost does not include the direct and indirect impacts of any suicide or suicide attempt that could occur for which minority stress was a contributing factor.
- We have only included impacts on low severity mental health conditions, such as mood and anxiety disorders, however results from the US also showed statistically significant impacts in alcohol use and psychiatric comorbidity.

It is also important to consider that people opposed to marriage equality may also be impacted by the plebiscite in relation to their mental health.

An affective disorder is defined by the ABS as one or more of the following: depressive episode, dysthymia and bipolar affective disorder. An anxiety disorder is defined by the ABS as one or more of the following: panic disorder, agoraphobia, social phobia, generalised anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder. See ABS, 2008.

This is a conservative estimate consistent with Psychologists for Marriage Equality (2012). We note other evidence suggests this could be anywhere between 2.3%-10% – see Prestage et al. (2008), Yankelovich (1993) and Kinsey et al. (1948).

Indirect mental health costs

By analysing the potential change in levels of anxiety and mood disorders as a result of a negative media campaign it is estimated that approximately 50,000 people from the LGBTI community would be impacted by increased levels of anxiety or mood disorders. Using this estimate as a base, the indirect impacts of mental health on the workplace productivity can also be estimated. The relevant impacts on workplace productivity include both absenteeism (as people may take sick leave to manage their mental health condition or seek a health service), or presenteeism (as people may go to work but would be less than fully productive as a result of their mental health condition).

For the purpose of this analysis, it has been assumed that those who are affected by a mood disorder or anxiety are at the lower (mild) end of the scale of severity (none, mild, moderate, severe). Taking this population, assumptions consistent with those used in PwC's (2014) study on mental health in the workplace: 1 day of absenteeism, 4 days of presenteeism with a 50% productivity loss on days of presenteeism for those with mild mental health disorders, have been applied.

- Based on these assumptions, the indirect cost
 of negative commentary on the workplace
 productivity related to people from the LGBTI
 community is estimated to be \$16 million
 in Scenario 1 (with a cost of absenteeism equal
 to \$2 million and the cost of presenteeism equal
 to \$14 million)
- Due to the shorter time period assumed for Scenario 2, absenteeism and presenteeism are estimated to cost \$13 million
- In Scenario 3, where Parliament votes without a plebiscite there remains a cost estimated at \$3 million, as we assume that fewer will be impacted due to a shorter timeframe in this scenario.

Table 5: Estimated costs related to mental health

Additional health related costs (\$ millions)	1. Standalone plebiscite	2. Plebiscite as part of a Federal Election	3. Parliamentary vote on marriage equality
Direct – health system cost	4	3	1
Indirect – cost of absenteeism	2	2	-
Indirect – cost of presenteeism	14	11	3
Total costs related to mental health	20	16	4

6 Other possible costs not captured in this analysis

There are a number of qualitative impacts that can also be considered, but have not been captured in this cost analysis. Some examples of these include:

- The cost to society of the public agenda being absorbed by the issue of marriage equality. There is an opportunity cost of the public agenda, which although a sunk cost, does have implications for other public policy. For example, there is a certain amount of bureaucratic effort involved in undertaking preparation for a plebiscite (in addition to the facilitation costs quantified earlier). This is indicated by the four to five staff within the Attorney-General's Department as well as people within the Australian Government Solicitor advising the government on options for the plebiscite (Australian Parliament House, 2016, pp. 86-87). Another example is, to the extent that the public arena and media air time is utilised in debating public policy, the plebiscite will absorb some of this over the months leading up to and following the vote. This is effort that could be used to debate other important public issues
- The health and wellbeing impact. In addition to the direct and indirect health costs quantified above, there is also an impact on the sense of pain and suffering. The normal measure for this is to consider the World Health Organisation measure of Quality Adjusted Life Years, which is a standard by which different illnesses can be compared to one another in order to communicate the relative impact on the quality of life of a population. The 50,000 LGBTI people who are estimated to be affected by some form of anxiety or mood disorder will experience a lower quality of life over the period of the plebiscite as will those who strongly oppose marriage equality
- In addition to the health impact on LGBTI people from the debate there may be children of samesex parents affected. This may impact their health and educational outcomes.
- Educational outcomes may also be affected more broadly where teachers take time out of the curriculum to explain the issues or deal with additional instances bullying as a result of the public debate.
- The broader impact on funds for which some may be redirected for campaign costs. Although the estimate above considers campaign funds spent by both for and against sides, it is important to note that the cost of LGBTI and faith-based NGOs redirecting some funds to a large, national campaign may be greater than the dollar value of campaigning, and may detract from the valuable services these organisations provide in the community in the short-term.

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Appendix B Data sources and assumptions

This appendix aims to clarify the data and data sources that were used and all assumptions that were made to calculate an estimate of the economic impact of legalising same sex marriage in Australia. There are a number of tables below. The first lists out the general data sources and assumptions that were used in a number of the calculations with the remaining tables listing the assumptions and data used when calculating the campaigning costs, the opportunity cost of an election, the health costs and additional funding in the year of an election respectively..

The following data was used for a number of the calculations used in the report. For example, for those figures that were not in Australian dollars, the exchange rate from the time of the respective figures had to be used to estimate the cost in Australian dollars. Also, because we have used historical data, the consumer price index (CPI) was used to estimate the costs in today's dollars. In addition, since there are population differences between Australia and other nations, we used the number of voters to adjust the figures accordingly.

Table 6: General data sources and assumptions

Description	Units	Figure	Sources and assumptions (if applicable)
CPI	%	Quarterly data from 1999	Australian Bureau of Statistics, 6401.0 – Consumer price index, Australia, Dec 2015, Released 27 January 2016.
Population		23,781,200	Australian Bureau of Statistics, 3101.0 – Australian Demographic Statistics, June 2015, released 17 December 2015
			When estimating the population for December 2016, the population growth from 2014 – 2015 is used and it is assumed growth is the same as previous year's growth
Population growth	%	1.4%	Australian Bureau of Statistics, 3101.0 – Australian Demographic Statistics, June 2015, released 17 December 2015
FX Rates	FX Rates Monthlin nece		Reserve Bank of Australia, <i>Historical data</i> , Available at: http://www.rba.gov.au/statistics/historical-data.html
		years	Average monthly FX rates for the respective year used when calculating exchange rates
Average weekly wage	\$	\$1,136.60	Australian Bureau of Statistics, 6302.0 – Average Weekly Earnings, Australia, May 2015, Released 13 August 2015
Number of people who work in Australia (part time or full time)	#	11,866,400	Australian Bureau of Statistics, 6202.0 –Labour Force, Australia, June 2015, released 09 July 2015
Average hours per week worked	Hours	32.8	Australian Bureau of Statistics, 1370.0 – Measures of Australia's Progress, 2010, released 15 September 2010
			This includes all types of employees not just full time workers

Cost to community of funding campaign

A plebiscite will likely result in groups for and against marriage equality redirecting internal funds or raising new funds (private and public) from the community to be spent on campaign activities such as advertising.

We reviewed publicly available estimates on the costs of six similar campaigns (Australian and International) to determine an average per eligible voter cost in real Australian dollars. The average of all six of these figures was then multiplied by the number of registered voters in Australia today to get an estimate for the total costs in Australia today.

Table 7: Summary of estimated costs per voter

Proxy used	Est. AUD per voter
1999 Australian referendum (republic)	\$2.48
2013 Australian referendum (proposed re: local government)	\$1.56
2008 Californian referendum (same-sex marriage)	\$6.61
2012 Maine, Maryland, Minnesota, Washington referenda (same-sex marriage)	\$3.89
2015 Ireland referendum (same-sex marriage)	\$0.55
Labor & Coalition additional expenditure in the last three federal election years	\$5.35
Average	\$3.41

Table 8: Cost of campaign data and assumptions

Description	Units	Figure	Sources and assumptions (if applicable)
Number of eligible voters in Australia at 31 December 2015	Voters	15,338,686	Australian Electoral Commission, Enrolment Statistics, http://www.aec.gov.au/Enrolling to vote/Enrolment stats/ , Last updated 13 January 2016
Estimated number of eligible voters in Australia at 31 December 2016	Voters	16,405,465	Based on applying one year's population growth (see Table 6) to the electoral roll population at 31 December 2015.
Total California campaigning costs	US\$	\$83,000,000	Los Angeles Times, Proposition 8: Who gave in the gay marriage battle?, http://projects.latimes.com/prop8/
Californian voting population	Voters	Registered: 17,304,128 Votes cast: 13,402,566 Ratio of registered voters to votes cast: 1.29	David Fleischer, The Prop 8 Report, The official Final Vote on Prop 8, and the Margin, http://prop8report.lgbtmentoring.org/read-the-report/appendices-overview/appendix-b-prop-8, Accessed 8/02/2015 The ratio of registered voters to votes cast was used to estimate the registered voters for the four American states that held referendums in 2012. This was done because voting is not compulsory in the US and therefore votes cast should not be used as a proxy for an Australian vote.

Description	Units	Figure	Sources and assumptions (if applicable)
Estimated total Ireland campaigning costs	Euros	€1,200,000	Total of €500,000 and €700,000 noted in the following sources: Paola Totaro, 'Marriage equality: Chuck Feeney funds paved way for Irish 'yes'', The Australian, July 4 2015; Fiach Kelly, 'Campaigners to spend €700,000 on marriage referendum', The Irish Times, April 23 2015.
Registered Ireland voters	Voters	3,200,000 ABC, Ireland referendum: 'Yes' voters celebrate as votes in favour of gay marriage, 24 May 2015, http://www.abc.net.au/news/2015-05-24/ireland-apgay-marriage-in-referendum/6492698	
Total Minnesota campaigning costs	US\$	\$18,000,000	MPR News, How the Minnesota marriage amendment was defeated, November 9 2012
Total Maine campaigning costs	US\$	\$5,700,000	Susan M. Cover, Same-sex marriage foes raise close to \$950k in final weeks, http://www.centralmaine.com/2012/10/28/same-sex-marriage-foes-raise-close-to-950k-in-final-weeks 2012-10-27/, 28/10/2012
Total Washington campaigning costs	US\$	\$17,804,188	Public Disclosure Commission, Statewide Initiatives, www.pdc.wa.gov/public/ballotmap/ballotinitmap.aspx , Accessed 10/2/2016
Total Marylands campaigning costs	US\$	\$5,800,000	Brydum, Sunnivie, Advocate, Maryland Officially Becomes Gay Marry Land, http://www.advocate.com/politics/marriage-equality/2012/11/07/maryland-officially-becomes-gay-marry-land , Accessed 11/02/2016
Minnesota voting population	Population	2,950,780	The State Board of Elections, 2012 Presidential General Election Results, http://elections.state.md.us/elections/2012/results/general/gen_gresults_2012_4_00_1.html, Last updated_28/11/2012
Maine voting population	Population	707,610	Department of the Secretary of State, Tabulations for Elections held in 2012, Accessed 10/2/2016
Washington voting population	Population	3,091,200	Washington Secretary of State, November 06, 2012 General Election Results, Last updated 27/11/2012 http://results.vote.wa.gov/results/20121106/Measures-All.html
Marylands voting population	Population	2,91,350	The State Board of Elections, 2021 Presidential General Election Results, http://votersedge.org/maryland/http://www.governing.com/gov-data/state-census-population-migration-births-deaths-estimates.htmlballot-measures/2012/november/question-6/funding, Last updated 28/11/2012

Description	Units	Figure	Sources and assumptions (if applicable)
Australian voting population 2013, 2011, 2007	Population	2007 – 13,645, 073 2010 –14,086,869 2013 – 14,723,385 Average of 14,151,776 people	Australian Electoral Commission, Size of electoral roll and estimated participation rate 2013, http://results.aec.gov.au/17496/Website/GeneralDownloadsMenu-17496-csv.htm Australian Electoral Commission, Size of electoral roll and estimated participation rate 2010 http://results.aec.gov.au/15508/Website/GeneralDownloadsMenu-15508-csv.htm Australian Electoral Commission, Size of electoral roll and estimated participation rate 2007, http://results.aec.gov.au/13745/Website/GeneralDownloadsMenu-13745-csv.htm
Amount spent on 1999 and 2013 Australian Referendums	\$	1999 – \$19,500,000 2013 – \$22,100,000	Australian Electoral Commission, Submission to the inquiry into the matter of a popular vote, in the form of a plebiscite or referendum, on the matter of marriage in Australia, Submission 26, 2015.
Spending per party per year from 2006 – 2015	\$	Range of figures	Australian Electoral Commission, Periodic Disclosures, – Annual Returns, http://periodicdisclosures.aec.gov.au/

Cost of time for people to vote

A plebiscite will require voters to participate. The time to vote is the opportunity cost to the community as a result of taking time out of their work day or leisure time to vote. The calculation methodology for the cost of an election was to divide the voting population into three distinct groups of people; namely postal voters, those that worked on a Saturday and those that do not work on a Saturday and valuing their time at either the minimum wage (if it assumed they do not work on a Saturday as this is the value they are foregoing for their leisure time) or at the average wage for the population that work on a Saturday.

Table 9: Opportunity cost of an election

Description	Units	Value	Sources and assumptions
Number of registered voters in December 2015	#	15,338,686	Australian Electoral Commission, Enrolment Statistics as at 31 December 2015, 13 January 2016.
Assumed number of registered voters in December 2016	#	15,553,428	PwC assumption – Applying the latest data on population growth to project the number of registered voters forward 12 months. Source: Australian Bureau of Statistics, 3101.0 – Australian Demographic Statistics, Jun 2015, Released 17 December 2015.
Hours taken to vote – in person	Hours	1	PwC assumption – Assumption based on travel time and voting
Minimum wage	\$/hour	17.29	Fair Work Ombudsman, Minimum wages, Australian Government, July 2015. p.2.
Percentage of employed people who would be working on a Saturday in Australia	%	29.4%	Tony Daly, Evenings, nights and weekends: working unsocial hours and penalty rates, Centre for Work + Life, University of South Australia, October 2014.

Description	Units	Value	Sources and assumptions
Percentage of employed people who would be working on a Saturday in Australia but would vote outside of work hours	%	50%	PwC assumption – It has been assumed that half of these will be able to vote outside of work hours on a Saturday
People who work aged 15-19 in Australia	#	661,434	Australian Bureau of Statistics, 6202.0 – Labour Force, Australia, Dec 2015, Released 14 January 2016
Average weekly earnings	\$	1,136.60	Australian Bureau of Statistics, 6302.0 – Average Weekly Earnings, Australia, May 2015, Released 13 August 2015.
Average hours worked per week	Hours	32.8	Australian Bureau of Statistics, 1370.0 – Measures of Australia's Progress, 2010, 2010.
Percentage of people who vote through the post	%	9%	Australian Electoral Commission, Virtual tally room: The official election results, 4 November 2013.
Hours taken – by post	Hours	0.5	PwC assumption – Assumption based on time to fill out a voting form and post it.

Cost associated with mental health and wellbeing

A plebiscite will be a high profile, national, public debate that will likely extend over a number of months. This has the potential to have an impact of the mental health and wellbeing of people from the LGBTI community, but also with strong beliefs against marriage equality. In order to estimate the costs, the following approach was used.

Figure 1: Approach to estimating cost associated with mental health and wellbeing



The assumptions and figures used in the calculation are highlighted below.

Table 10: Cost associated with mental health and wellbeing

Description	Units	Figure	Sources and assumptions (if applicable)
Assumed proportion of Australians identifying as LGB	%	2%	2% is a conservative estimate. Studies show that it could be up to 10% however Psychologists for Marriage Equality note Australian evidence suggests around 2 – 3% and they apply 2% in their analysis. See:
			Alfred C. Kinsey, Wardell B. Pomeroy and Clyde E. Martin, Sexual behaviour in the human male, Philadelphia, 1948
			Yankelovich Partners Inc. Yankelovich monitor survey, 1993. Cited in Stuart Elliot, 'The media business: advertising; a sharper view of gay consumers', <i>The New York Times</i> , 9 June 1994
			Prestage, G., Ferris, J., Grierson, J., Thorpe, R., Zablotska, I., Imrie, J., Grulich, A. E. (2008). Homosexual men in Australia: population, distribution and HIV prevalence. <i>Sexual Health</i> , 5(2), 97-102.
			Smith A et al. (2003) 'Sex in Australia: Sexual identity, sexual attraction and sexual experience among a representative sample of adults', Australian and New Zealand Journal of Public Health, 27(2): 138-145
			Psychologists for Marriage Equality, Submission: Senate inquiry into the Marriage Equality Amendment Bill 2012 and the Marriage Amendment Bill 2012, 31 March 2012.
Prevalence of anxiety disorder amongst LBG Australians	%	31.50%	Australian Bureau of Statistics, 4326.0 National Survey of Mental Health and Wellbeing: Summary of Results, 2007, Released 23 October 2008. Table 5.
Prevalence of affective disorder amongst LBG Australians	%	19.20%	
Proportion of people with an anxiety disorder who visit a GP	%	11.5%	Australian Bureau of Statistics, 4326.0 National Survey of Mental Health and Wellbeing: Summary of Results, 2007, Released 23 October 2008. Table 13.
Proportion of people with an anxiety disorder who visit a psychologist	%	6.2%	
Proportion of people with an affective disorder who visit a GP	%	35.9%	
Proportion of people with an affective disorder who visit a psychologist	%	16.4%	
Days off work per year as a result of absenteeism and presenteeism	Days	1 and 4	PwC, Creating a mentally healthy workplace: Return on investment analysis, Report for beyondblue, the National Mental Health Commission and the Mentally Health Work Place Alliance, March 2014, pp. 26.

Description	Units	Figure	Sources and assumptions (if applicable)
Productivity of worker while exhibiting presenteeism	%	50%	PwC, Creating a mentally healthy workplace: Return on investment analysis, Report for beyondblue, the National Mental Health Commission and the Mentally Health Work Place Alliance, March 2014, pp. 29.
Average health cost to the system – Average GP visits per year	Number of visits	1.7	Australian Institute of Health and Welfare, <i>Mental health services – In brief 2015</i> , Cat. no. HSE 169, Canberra: AIHW, 2016, pp. 6-8.
Average health cost to the system – Average psychologist visits per year	Number of visits	4	
Average fee for a GP appointment	\$	\$71.70	Department of Health, <i>Medicare Benefits Schedule Book: Operating from 01 December 2015</i> , Australian Government, 2014, p. 173.
Average fee for a GP appointment	\$	\$62.25	Department of Health, <i>Medicare Benefits Schedule Book: Operating from 01 December 2015</i> , Australian Government, 2014, p. 871.

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