Deloitte.
Access Economics

Economic contribution of the Australian charity sector

Australian Charities and Not-for-profits Commission

November 2017

Contents

Acronyms 1

Glossary 3

Executive summary 7

1 Introduction 11

1.1 Background 11
1.2 Defining the charity sector 11
1.3 Accounting concepts and framework 12
1.4 Datasets used 13

2 Profiling the charity sector 14

2.1 Charities by sub-sector 14
2.2 Charities by size 14
2.3 Charities by location 16
2.4 Charities by groups helped 17
2.5 Charities by staff numbers 18
2.6 Charities by volunteers 19

3 Economic contribution 21

3.1 Measurement approach 21
3.2 Direct economic contribution 22
3.3 Indirect economic contribution 26
3.4 Total economic contribution 28
3.5 Contribution of volunteers 30

4 Financial health of the sector 33

4.1 Understanding the financial health of the sector 33
4.2 Types of financial indicators 33
4.3 Financial indicators of the sector 33
4.4 Benchmarking and interpreting financial indicators 35
4.5 Results 36

5 Economic outlook 44

5.1 Economic trends 44
5.2 Social context 53

References 59

Appendix A Data cleansing 62

A.1. Exclusions and sensitivities 62
A.2. Data cleansing 62
A.3. Data limitations 64
A.4. Defined sub-sectoral categorisation 66
A.5. Comparison with Australian Charities Report 2015 68

Appendix B : Detailed literature review 69

B.1. Overview of economic value measures 69
B.2. Key literature 71

B.3. Existing study limitations 74

Appendix C : Volunteering 77

C.1. Measuring the dollar value of volunteering 77
C.2. Informal volunteering 78
C.3. Hourly value of volunteering – financial component 78
C.4. Hourly value of volunteering – non-wage component 79
C.5. Key takeaways: 79

Appendix D : Economic contribution approach 80

D.1. Overview of estimates reported 80
D.2. Input-output analysis 83
D.3. Weighted average of ANZSIC industry multipliers 83
D.4. Measuring output for charities 84
D.5. Valuing volunteer time 85
D.6. Limitation of economic contribution studies 85

Appendix E : Economic contribution for charity groups 87

E.1. Economic contribution by charity groups 87

Appendix F : Detailed financial indicator tables 90

Limitation of our work 94

General use restriction 94

Charts

Chart ii : Direct contribution for the Australian charity sector compared to select industries, 2015 9
Chart 2.1 : Proportion of charities by size across sub-sector, 2014-15..... 16
Chart 2.2 : Proportion of Australian charities helping particular groups, 2014-15 17
Chart 2.3 : Total employment by charity sub-sector, 2014-15 18
Chart 2.4 : Charities with volunteers by sub-sector, 2014-15 19
Chart 3.1 : Direct value add by charity sub-sectors, 2014-15 23
Chart 3.2 : Indirect value add by charity sub-sectors, 2014-15..... 27
Chart 3.3 : Total value add by charity sub-sectors, 2014-15..... 29
Chart 3.4 : Total FTE direct and indirect employment by charity sub-sectors, 2014-15..... 30
Chart 3.5 : Total value of volunteering by charity sub-sectors, 2014-15 32
Chart 4.1 : Net income ratio for sub-sectors, 2014-15 (Data quality = 8 or above)..... 36
Chart 4.2 : Net asset ratio for all sub-sectors, 2014-15 (Data quality = 8 or above) 37
Chart 4.3 : Current ratio for all sub-sectors, 2014-15 (Data quality = 10)..... 39
Chart 4.4 : Net current assets expenditure cover for all sub-sectors, 2014-15 (Data quality = 10)..... 40
Chart 4.5 : Asset growth, 2014-15 (Data quality = 8+)..... 41
Chart 4.6 : Income source – Donations and bequests, 2014-15 (Data quality = 8+)..... 42
Chart 4.7 : Income source – Grants and Donations, 2014-15 (Data quality = 8+)..... 43
Chart 5.1 : Wages and household disposable income growth (year on year change) 45
Chart 5.2 : Relationship between income and donation as a share of weekly expenditure on goods and services..... 45
Chart 5.3 : Relationship between weekly goods and services expenditure and share of donation..... 46
Chart 5.4 : Total public sector income (% of GDP)..... 46
Chart 5.5 : Total public sector spending and income (% of GDP)..... 47

Chart 5.6 : Historical public sector grant expenses 48
Chart 5.7 : ABS projection of population demographics in 2061 compared with 2011 49
Chart 5.8 : Education and Health growth (change on year earlier) 50
Chart 5.9 : Wages and labour costs growth (change on year earlier) 50
Chart 5.10 : Historical trend for Unemployment rate and Youth Unemployment Rate 51
Chart 5.11 : Volunteered rate by gross household income quintiles 52
Chart 5.12 : PC projected number of volunteers working for organisations, 2007 to 2057 52
Chart 5.13 : High level relationship between charity sub-sectors and various measures of social disadvantage 53
Chart 5.14 : Proportion of household receiving x% of their income from government payments overtime 54
Chart 5.15 : Number of homeless people in census 2006 vs 2011 54
Chart 5.16 : Percentage of disadvantaged people (has need for assistance with core activities) receiving unpaid assistance 55
Chart 5.17 : Number of people with long-term health conditions 55
Chart 5.18 : Number of places and people in government subsidised aged care services 56
Chart 5.19 : Breakdown of income support recipients by payment type, 2003 to 2013 57
Chart 5.20 : Equivalised average household disposable income per week by income quintiles, real $2013/14, 1994-2014 58
Chart E.1 : Total value add ($m) of charity groups by sub-sectors, 2014-15 89
Chart E.2 : Total FTE employment of charity groups by sub-sectors, 2014-15 89

Tables

Table 2.1 : Australian charities in the dataset by subsector, 2014-15 14
Table 2.2 : Size of Australian charities in the dataset, 2014-15 15
Table 2.3 : Size of Australian charities in the dataset, 2014-15 16
Table 2.4 : Number of states in which charity operates, 2014-15 17
Table 2.5 : Staff employment in charities, 2014-15 18
Table 2.6 : Employment type by charity sub-sector, 2014-15 19
Table 2.7 : Volunteers by charity sub-sector, 2014-15 20
Table 3.1 : Direct economic contribution by charity sub-sectors, 2014-15 22
Table 3.2 : Direct value add by charity size and sub-sector, 2014-15 24
Table 3.3 : Direct GOS by charity size and sub-sector, 2014-15 24
Table 3.4 : Direct labour income by charity size and sub-sector, 2014-15 25
Table 3.5 : Direct FTE employment by charity size and sub-sector, 2014-15 26
Table 3.6 : Indirect economic contribution by charity sub-sectors, 2014-15 26
Table 3.7 : Total economic contribution by charity sub-sectors, 2014-15 28
Table 3.8 : Total number, hours and value of volunteers by charity sub-sector, 2014-15 31
Table 4.1 : Financial indicators used 34
Table A.1 : Ten subtotal checks used for 2015 individual charities dataset 63
Table A.2 : Subtotal checks – ACNC key financial data for 2015 individual charities dataset 64
Table A.3 : Subtotal checks – ACNC key financial data for 2015 group charities dataset 66
Table A.4 : Concordance between charity main activity and broad categories 67
Table B.1 : Key charity sector valuation studies 71
Table B.2 : limitations of existing studies 74
Table D.2 : Concordance between charity main activity and ANZSIC industries 83
Table E.1 : Direct economic contribution of charity groups by sub-sectors, 2014-15 87
Table E.2 : Indirect economic contribution of charity groups by sub-sectors, 2014-15 88
Table E.3 : Total economic contribution by charity sub-sectors, 2014-15 88
Table F.1 : Net income ratio 90
Table F.2 : Net asset ratio 91
Table F.3 : Current ratio 91

Table F.4 : Net current assets expenditure cover 92
Table F.5 : Asset growth 92
Table F.6 : Revenue – Donations and bequests 93
Table F.7 : Revenue – Government grants 93

Figures

Figure D.1 : Economic activity accounting framework 82

Acronyms

Acronym	Full name
ABS	Australian Bureau of Statistics
ACNC	Australian Charities and Not-for-profits Commission
AIS	Annual Information Statement
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARACY	Australian Research Alliance for Children and Youth
ASNA	Australian System of National Accounts
BRC	Basic Religious Charities
CGE	Computerised General Equilibrium
CO	Community Organisations
CSI	Centre for Social Impact
CSR	Corporate Social Responsibility
DET	Department of Education and Training
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation[1]
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFS	Government Finance Statistics
GOS	Gross Operating Surplus
GSS	Gross Social Survey
GVA	Gross Value Added
HES	Household Expenditure Survey
HPC	Health Promotion Charity
IO	Input-Output
ICNPO	International Classification of Non-Profit Organizations
L	Charities with a gross income of at least $1 million but less than $10 million in 2015

[1]Noting that most charities do not pay tax.

M	Charities with a gross income of at least $250,000 but less than $1 million in 2015
MFP	Multi-factor productivity
NFP	Not-For-Profit
NPI	Non-profit institution
NGS	Non-Government Schools
ORIC	Office of Registrar of Indigenous Corporations
PBI	Public Benevolent Institution
PC	Productivity Commission
S	Charities with a gross income of at least $50,000 but less than $250,000 in 2015
TFP	Total factor productivity
XL	Charities with a gross income of at least $10 million but less than $100 million in 2015
XS	Charities with a gross income of less than $50,000 in 2015 (including negative gross inco
XXL	Charities with a gross income of $100 million or more in 2015

Glossary

Measure	Definition
Asset growth	Asset Growth is the ratio of net income over net assets, and captures the rate at which charities are growing (if the rate is positive), or using up their net assets (if the rate is negative).
Current ratio	The current ratio is a short term measure of financial liquidity – it represents the ability to pay debts as they fall due. The current ratio is defined as current assets divided by current liabilities. Current assets and liabilities are expected to be sold, consumed or exhausted within the current fiscal year or operating cycle.
Direct economic contribution	The direct economic contribution is a representation of the flow from labour and capital committed in the economic activity.
Employment (FTE)	Employment is a fundamentally different measure of activity to those above. It measures the number of workers (measured in full-time equivalent terms) that are employed by the entity, rather than the value of the workers' output.
Gross operating surplus (GOS)	GOS represents the value of income generated by the entity's direct capital inputs. In the context of the charity sector, it is calculated as total income less total expenditure although is traditionally measured as the earnings before interest, tax, depreciation, and amortisation (EBITDA).
Gross value added (GVA)	GVA or 'value added' measures the value of output (i.e. goods and services) generated by the entity's factors of production (i.e. labour and capital) as measured in the income to those factors of production. The sum of value add across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value add measure can be thought of as the increased contribution to welfare.
Income	There are two income or 'factor income' components that contribute to the income approach of measuring Gross Domestic Product (GDP). As defined in the Australian Bureau of Statistics (ABS) National Accounting Standards "factor incomes consist of compensation of employees (the income of the labour factor of production) and operating surplus (the income of the capital factor of production)."
Revenue source, donations and bequests	Proportion of revenue that comes from donation and bequests.
Revenue source, government grants	Proportion of revenue that comes from government grants. In the context of this report, this does not include non-grant government funding.
Indirect economic contribution	The indirect contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by economic activity.
Labour income	Labour income is a subcomponent of value add. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.
Net asset ratio	The net asset ratio is the ratio between a charity's net assets (its total assets minus total liabilities) and its total assets.
Net current assets expenditure cover	Net Current Assets Expenditure Cover is another short term measure, which is the ratio of a charity's net current assets with its total expenses
Net income ratio	The net income ratio is the ratio between a charity's net income (its total income minus total expenses) and its total income.
Total economic contribution	The total economic contribution to the economy is the sum of the direct and indirect economic contributions.
Volunteer	An individual who provides unpaid help willingly. Undertaken in the form of time, service or skills to an organisation or group. Excludes community work under mutual obligation, work experience or unpaid work trial, community service order, student placement and emergency work during industrial dispute.

Report context

Australian Charities and Not-for-Profits Commission

The Australian Charities and Not-for-profits Commission (ACNC) is the independent national regulator of charities. The ACNC recognises, protects and supports the important role charities play in contributing to society, mobilising volunteers and delivering aid and services to the community. The focus of this report, however, is to comprehensively **measure the economic contribution charities make to the national economy** - a contribution which is arguably not yet fully appreciated by Government, the general public nor even the sector itself.

A key reason for this is the lack of a complete information set on the activities of charities within Australia, expressed in a manner that can be readily compared to other industries. Since December 2012, charities wishing to access Commonwealth charity tax concessions and other benefits have needed to register with the ACNC. Registration is voluntary, but it is required to receive Government concessions and exemptions, thus while the registered charity set is not comprehensive, **the data is expected to capture the majority of economically significant charities**.

All registered charities, with a few exceptions, are required to lodge an Annual Information Statement (AIS) with the ACNC. It is this dataset that forms the basis of this economic contribution analysis. While there are still some reporting gaps and inconsistencies, this dataset provides a reasonable foundation upon which to establish a measurable economic contribution method for the charity sector going forward. This research is expected to benefit charities, academics, policy-makers and donors by assisting them to make more informed evidence-based decisions. Overall, an enhanced understanding of the sector, how it operates, and the contribution it makes to the national economy will contribute to greater public confidence and trust.

The dataset – comparison with dataset used in the Australian Charities Report 2015

A database of registered charities was provided by the ACNC and has been used in this report.

Three datasets were provided as input to this report. These were:

- A 2015 extract of the AIS database, containing 47,288 charities, including data on withheld entities. Data provided was as at 19 April 2017.
- A 2014 extract of the AIS database, containing 2014 financial data, and 47,795 entities. Data provided was as at 19 April 2017.
- Data from the government open data portal (data.gov.au) on charities choosing to report as a group as of 2015, totalling 114 groups and covering 885 component charities[2].
    - Financial data is only provided at the group level, and in most cases, data cannot be disaggregated into the component charities.

A number of data cleaning procedures were employed to convert the raw data into a format suitable for analysis. Detailed in Appendix A, these procedures included:

- Identifying and removing outliers across key financial items.
- Using 2014 data to fill in for non-reported 2015 values.
- Removing duplicate entries present in both group and individual datasets.
- Imputing "average" values for non-reporting charities, using averages computed from the sample of peer charities which did report data.
- Computing totals using component data, where it made sense to do so.
- Identifying line entities which are considered more "robust", via a series of 10 checks, used to identify a robust sample for the financial analysis.

Data cleansing was conducted on the reported volunteer numbers in the individual dataset by the ACNC team, broadly reflecting the following:

- Replacing date fields (data entry errors) in the raw dataset with numbers

[2] Cleansed data.

- Replacing estimated ranges with midpoints
- Removing duplicates
- A case-by-case review of all entities reporting volunteer numbers in excess of 10,000. Outliers were identified via a range of methods, including:
    - A comparison with the figures reported in 2016 AIS data
    - In some instances, comparison of relative entity sizes across states (i.e. expect that branches under the same umbrella organisation operating across multiple states should not be, without reason, significantly different in scale).

The cleansed volunteer numbers across the individual entity dataset total 3,259,856 volunteers. The group dataset, less duplicate, reports an additional 93,311 volunteers across the 114 groups.

A previous review of ACNC charities was conducted in 2015 by a team from the University of New South Wales' Centre for Social Impact (UNSW-CSI) published as *The Australian Charities Report 2015* and employed similar, though slightly different data cleaning methodologies. The datasets used by UNSW included:

- A 2015 extract from the AIS, noting that a number of charities had not yet submitted data as at the analysis date (44,670 charities).
- 2015 extract of charities which chose to report as a group, totalling 114 entities and 885 component members.
- 2014 AIS data for 2015 charities that had not yet submitted an AIS as of the analysis date, totalling 3,672 charities.
- 2013 AIS data for a small subset of charities, covering 500 entities.
- Additional data from the ACNC register covering an additional 1,952 charities.

Since the UNSW-CSI Charities Report was published, a number of improvements have also been made to the base data (2015 AIS extract) which are reflected in this report. It is also worth noting that the data used in the UNSW-CSI Charities Report is for a different purpose to this report, which is focussed on estimating the economic contribution of the charity sector.

The checks used by the UNSW-CSI team as described in the UNSW-CSI Charities Report appear to be broadly similar to those employed in this report, though some differences do exist. UNSW-CSI calculations in their financial section also rely on sample sizes which differ to those outlined in this report.

Comparing the final datasets used in each report, from a gross income perspective, the key figures are:

- Deloitte Access Economics' dataset totalling $137.6 billion gross income (2015 dollars) from a sample of 47,288 individual charities, plus 83 relevant group entities with 885 individual charities (i.e. removing duplicate entries).
- UNSW-CSI's dataset totalling $134.5 billion gross income (2015 dollars), from a sample of 50,908 charities, including 114 groups with 885 component members.

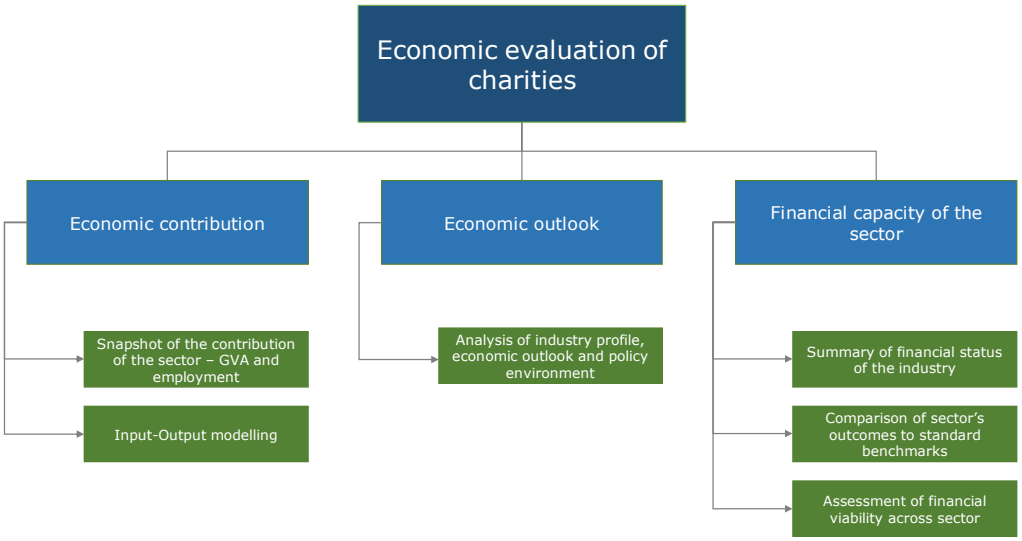
These differences should be kept in mind when comparing the analyses presented in the two reports – estimates (particularly at a granular level) do not necessarily closely align between the two reports.

Reading the report

This report focuses on three key areas of charity sector performance:

1. an overview of the current economic contribution of the charity sector;
2. a snapshot of the financial health of the charity sector, using a number of financial indicators; and,
3. a picture of the outlook for the sector given the changing environment in which the participants operate.

Figure i: Framework for the analysis



In addition, supplementary data, detailed literature review, methodology notes and results to support the analysis are included in the Appendices.

Executive summary

Deloitte Access Economics was engaged by the Australian Charities and Not-for-profits Commission (ACNC) to (1) identify and quantify the economic health and contribution of Australian charities, and (2) to provide an assessment on the economic outlook for the Australian charity sector. **The outcomes of the analysis will be used to boost understanding and recognition of the contribution of the Australian charity sector and to support future strategic decisions**. The analysis primarily uses ACNC registered charity data for the 2014 and 2015 reporting years.

Key Highlights

- This report evaluates the economic contribution of 47,288 individual charities plus 885 group registered charities in Australia. The charities covered in this analysis account for the majority of the 55,000 charities in Australia.
- The economic contribution of these charities is estimated at $129 billion, comprising $71.8 billion direct contribution and a further $57 billion flow-on contribution.
- The sector directly employs 840,500 full time equivalent paid workers, and its upstream activities results in a further 471,700 FTE workers being indirectly employed.
- Collectively, the sector is roughly equivalent in size to the Australian retail sector, education and training, or the public administration and safety sector.
- The above does not include the value of formal volunteering conducted across charities. Formal volunteers are estimated to contribute a total of 328 million unpaid volunteering hours, who would have cost around $12.8 billion in wages to hire, if paid.
- Most charities operate on a small surplus, though most also do not have a large liquid asset base to cope with unanticipated increases in costs or decreases in revenue.
- There may be increasing pressures on charity budgets arising from
    - the cost of labour increasing
    - greater demand for services, in part due to an aging population and increasing income inequality and
    - continuing pressure on government's budgets putting grant funding at risk. Governments at both Federal and State level are facing budget deficits, driven by limited growth in government revenues concurrent with significant expenditure commitments.

Economic contribution of the sector

Economic contribution modelling captures the economic footprint resulting from the activities of a particular industry or entity, in this case the charity sector.

Based on the modelling, the estimated **total economic contribution of the charity sector to Australia in the 2014-15 financial year (FY 2015) was $128.8 billion[3],** comprised of a $71.8 billion direct contribution through the value created by its operations and a $57.0 billion indirect contribution through its expenditure in upstream industries.

The charity sector is also a significant employer of Australians. **The sector directly employs around 840,500 full time equivalent (FTE) paid workers. A further 471,700 Australian FTE workers are employed indirectly** as a result of the sector's upstream effects.

The economic contribution results are summarised in Table ii below.

Table ii: Economic contribution of the Australian charity sector, 2014-15

	Direct	Indirect	Total
Value Added ($m)	71,771	56,995	128,766
Paid employment (FTE)	840,471	471,682	1,312,153

Source: Deloitte Access Economics. Note totals may not add up due to rounding.

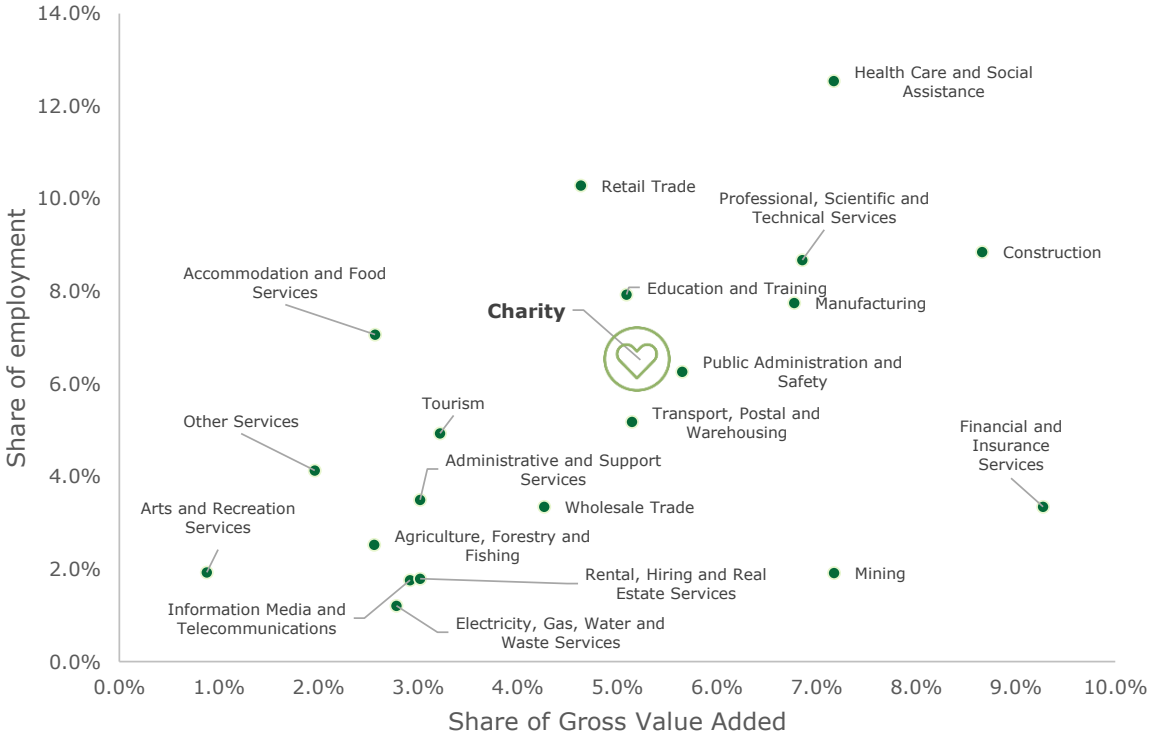
Box i: Volunteer contribution

In 2014-15, the charity sector benefited from a total of **328 million unpaid volunteering hours**. Assuming that the value of an hour of unpaid volunteering time is equivalent to the average value of an hour of labour in the charity sector - which is estimated to be **$39** - the **total contribution of volunteer time was approximately $12.8 billion in 2014-15.**

To provide some context as to the significance of the charity sector to the Australian economy, Chart ii shows the size of the charity sector compared to key industries in Australia. In terms of employment, the direct economic contribution of the charity sector is equivalent to **4.8% of Australia's gross value added** and **10.6% of total Australian employment (FTE)** in 2015.

[3] The concept of economic contribution is different to the total "size" of the sector, measured by gross income. Economic contribution is the value add created by labour and capital inputs employed by the sector, where value add can be thought of as the revenue earned by an economic entity for the goods and services it generates from applying its workers and capital equipment, excluding the cost of inputs it bought from other sectors.

Chart i : Direct contribution for the Australian charity sector compared to select industries, 2015



Source: Deloitte Access Economics (2017)

Note: The aim of the chart above is to compare the relative size of the charity sector, as defined for the purposes of this report, with published data on the size of other sectors. However, in doing so it is important to note that a number of entities in the charity sector, will also be counted in other sectors in the chart (i.e. there is some double counting.) For example, the Education and Training sector includes a number of Universities, which are also included in the charity sector. If this double counting was removed, the relative positions of a small number of sectors would change – notably the Education and Training and Health Care and Social Assistance sectors.

Socio-economic outlook

Key findings in relation to the socio-economic outlook for charities are:

- Household donations and government grants are the two major sources of income for charities in Australia.
- Both household disposable income and average weekly earnings are expected to record a gradual turnaround from recent lows thanks to the recovery in Australian corporate profitability. **With household disposable income and wages rising over the horizon, it is reasonable to expect a similar trend in donations to charities in Australia**.
- Similar to national income, public sector income is going to benefit from the rising corporate profitability. However, **while there is no sign of decline in Government contributions to the charity sector, the opportunity for growth looks constrained** as the Government continues to struggle with balancing its spending with income.
- The **cost of labour makes up a significant share of the operating costs for charities**. In terms of outlook, labour costs will remain stable in the short run, but increase at a faster rate in the medium to long run. **This may place strain on charity sector budgets.**
- The changing population demographics will require the sector to accommodate the changing desires and structure of its workforce. The **changing structure and inherent training costs of unpaid volunteer services is expected to remain a key challenge to charity sector service provision**.

- **Population ageing and income inequality have been identified as two of the major social challenges** for Australia in the coming decades. The ageing population will put increasing pressure on health related service provision such as aged care, disability support and community health services. And, to the extent that the gap between rich and poor widens into the future, demand for charity support from lower income households will become a critical issue for the outlook for charity sector services.
- The ageing population also poses an interesting challenge for the sector to **accommodate the evolving demographics and desires of the next generation of volunteers**. The Productivity Commission (PC) has estimated that population ageing is going to increase volunteering as older volunteers typically contribute more hours, but it will also impact the skillset and productivity levels of the volunteer workforce.

Deloitte Access Economics

1 Introduction

This section provides background on the Australian charity sector and the analytical approach.

1.1 Background

Deloitte Access Economics was engaged by the Australian Charities and Not-for-profits Commission (ACNC) to (1) identify and quantify the economic health and contribution of Australian charities, and (2) to provide an assessment on the economic outlook of the Australian charity sector. The engagement was undertaken using a collaborative approach between ACNC and Deloitte Access Economics. A key aim to measure the value of the charity sector to the national economy and to boost recognition of the important role the sector plays in delivering services and economic outcomes for Australia.

The ACNC is the independent national regulator of charities and has been set up to achieve the following statutory objectives, as outlined in the *Australian Charities and Not-for-profits Commission Act 2012*:

- maintain, protect and enhance public trust and confidence in the not-for-profit sector;
- support and sustain a robust, vibrant, independent and innovative not-for-profit sector; and
- promote the reduction of unnecessary regulatory obligations on the not-for-profit sector.

Since December 2012, charities wishing to access Commonwealth charity tax concessions and other benefits have needed to register with the ACNC. Registration is voluntary, however it is required to receive Government concessions, thus while the registered charity set is not comprehensive, preliminary discussions with ACNC staff indicate **the data is expected to capture the majority of economically significant charities**.

All registered charities, with a few exceptions, are required to lodge an Annual Information Statement (AIS) with the ACNC. This dataset forms the basis of the economic contribution analysis for the 2015 financial year. As of 2015, there were 47,288 individual registered charities, and 855 group registered charities (for 114 groups) that had submitted an AIS and approximately 55,000 registered charities.[4] The AIS requests general administrative and main activity information, as well as financial, employment and operating data.

The ACNC recognises the important role charities play in contributing to society, mobilising volunteers and delivering aid and services to the community. Aside from this, charities are also a significant part of the national economy. This research is expected to benefit charities, academics, policy-makers and donors by assisting them to make more informed evidence-based decisions. Overall, an enhanced understanding of the sector, how it operates, and the contribution it makes to the national economy will contribute to greater public trust and confidence.

1.2 Defining the charity sector

The charity sector comprises a diverse range and size of not-for-profit organisations, with recognised charitable purposes that include preventing and relieving sickness, disease or human suffering, relieving poverty or disadvantage; advancing education; supporting and caring for the

[4] While there are some definitional differences, in its 2012-13, *Non-Profit Institutions (NPI) Satellite Account*, the ABS identified 56,894 NPI organisations registered with the ATO. It should be noted that the number of charities required to submit an AIS is different from the number of registered charities due to factors such as different lodgement dates.

aged or individuals with disabilities; and other charitable purposes considered beneficial to the community. Note that for the purposes of this report we have used the term 'charities' to cover only registered charities.

Given the broad-based nature of the sector, it is useful, for the purposes of analysis to divide its participants into sub-sectors with similar economic and social characteristics. For consistency and transparency, Deloitte Access Economics has conducted this analysis at a sub-sectoral basis consistent with *The Australian Charities Report 2015*. This sub-sector categorisation is:

- **Culture and recreation** – Activities that benefit the community by enhancing participation in culture and arts, and other recreational and social activities.
- **Development and housing** – Activities that specifically target the provision and development of housing for disadvantaged groups, as well as providing employment and training services and other economic, social and community development services for the public benefit.
- **Education and research** – Education and training services that seek to improve individual and community wellbeing through research activities, primary and secondary education, higher education and other forms of education (e.g. adult/continuing education).
- **Environment** – Activities that benefit the community by enhancing their participation in supporting and nurturing the environment, as well as providing animal protection.
- **Health** – Health and wellness services that seek to improve individual and community wellbeing, such as aged care services, hospital services, rehabilitation services, mental health and crisis intervention services.
- **International** – Activities that target the broader international community, such as international development assistance and international disaster and relief.
- **Law and advocacy** – Activities that are delivered through law and legal services and political, civic and advocacy platforms.
- **Philanthropic and grant-making activities** – Activities related to the planned and structured giving of money and other resources to individuals, groups or organisations. (Text not updated)
- **Other/unknown** –Unknown main charity activities or organisations.
- **Religion** – Organisations that may promote and support religious beliefs, services and rituals.
- **Social services** – Social services that specifically target groups facing social disadvantage (such as family and youth services) and provide emergency relief and financial support.

Charities were classified by assigning their reported 'main activity' in the database to a sub-sector classification. Further, charities were also classified in terms of their gross income size, from XS through to XXL. These were based on the size classifications used for *The Australian Charities Report 2015* and defined as follows:

- **XS** – Gross income of less than $50,000 (including charities with negative gross income)
- **S** – Gross income of at least $50,000 but less than $250,000
- **M** – Gross income of at least $250,000 but less than $1 million
- **L** – Gross income of at least $1 million but less than $10 million
- **XL** – Gross income of at least $10 million but less than $100 million
- **XXL** – Gross income of $100 million or more

1.3 Accounting concepts and framework

Currently, there is no widely accepted 'gold standard' approach to measuring the contribution of the charity sector. This analysis is the first step in bringing together the collective thinking and standardising an approach to measuring the economic contribution of charities.

The economic contribution approach adopted for this study has been guided by three core pre-existing publications[5], all of which adhere to national input-output accounting standards, these are:

- Australian Bureau of Statistics (ABS), *Australian System of National Accounts: Concepts, Sources and Methods*, 2015.
  - This is the pre-eminent national accounting publication and is the basis for all Deloitte Access Economics Input-Output driven economic contribution studies.
- Productivity Commission (PC), *Contribution of the Not-for-Profit Sector*, 2010.
  - The report recognised the rapid growth and significant contribution of the sector, and the need for improving its efficiency, effectiveness and broader community understanding and acceptance.
- Australian Bureau of Statistics (ABS), *Australian National Accounts: Non-Profit Institutions (NPI) Satellite Account*, 2006-07 and 2012-13.
  - This analysis estimated the direct contribution of NPIs to the economy in terms of gross value added (GVA), income, use of income (largely labour costs), employment and volunteering.

However, it is important to note that in measuring the 'contribution' of the sector, we have not attempted to measure the direct benefits that the activities of the sector endow on stakeholders (including individuals, the environment, the community and government). This would be a much more complex piece of work. It is also likely that these benefits will significantly exceed the contribution measured in this report.

1.4 Datasets used

For analysing the economic contribution of individual charities, the main dataset used was a complete list of entries collected by the ACNC for 2015. This was a non-public dataset that was provided by the ACNC for the purposes of this report. Before data cleansing was undertaken, this dataset consisted of 47,288 charity entries and 165 columns where data could have been potentially entered (including basic information such as the ABN of the charity and date the AIS was received).

To support the analysis of this dataset, the ACNC also provided the 2014 dataset, which consisted of 47,795 charity entries and 154 columns for data categories. While there was overlap between the two datasets in terms of charities represented, there were also a significant number of charities that were only represented in either the 2014 or 2015 dataset.

Further, under the ACNC Act, in some circumstances multiple related charities are able to report as a group. For analysing the economic contribution of registered group charities, the main dataset used was a 2015 dataset which was publicly available from the Australian government data.gov.au website. This dataset consisted of 885 charities reporting in 2015 as part of 114 reporting groups, with 114 group entry rows and 133 columns for data categories.

Details on the data cleansing we undertook is provided in Appendix A.

[5] Cortis, N., Young, A., Powell, A., Reeve, R., Simnett, R., Ho, K., and Ramia, I. (2016) Australian Charities Report 2015. Centre for Social Impact and Social Policy Research Centre, UNSW Australia; henceforth UNSW-CSI. The UNSW-CSI report does not utilise an economic contribution framework, and hence is not referenced for the input-output modelling component of this report.

2 Profiling the charity sector

This section builds a profile of the charity sector and highlights the relationships the sector holds with the broader social and economic status of the community.

2.1 Charities by sub-sector

Approximately half of all registered charities in Australia reported their main activity as relating to either the religion or education and research sub-sectors; with the remaining nine sub-sectors making up the other half of Australian charities. Table 2.1 below reports them from largest to smallest sub-sectors:

Table 2.1 : Australian charities in the dataset by subsector, 2014-15

Size	Total	%	Data bars
Religion	14,147	29.9%	
Education and research	9,312	19.7%	
Social services	4,911	10.4%	
Health	4,214	8.9%	
Development and housing	3,624	7.7%	
Culture and recreation	3,606	7.6%	
Philanthropic activities	2,773	5.9%	
Other/unknown	2,244	4.7%	
Environment	1,350	2.9%	
Law and advocacy	678	1.4%	
International	429	0.9%	
Total	**47,288**	**100%**	

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. *Excludes* group datasets – which comprise an additional 114 groups/885 entities.

Almost 30% of Australian charities – over 14,100 in the dataset, classify their main activity as religion. Nearly 20% of charities classify their main activity as education and research and around 10.4% of charities classified their main activity by social services. The three smallest sub-sectors are environment, law and advocacy and the international sub-sector, collectively making up less than 6% of all charities in Australia.

2.2 Charities by size

Almost two-thirds of all Australian charities have less than $250,000 in gross income in 2014-15, according to the dataset. Over a quarter of all charities have a gross income of at least $250,000 and less than $10 million. Just over 4% of charities have over $10 million in gross income. A breakdown by charity size is presented in Table 2.2.

Table 2.2 : Size of Australian charities in the dataset, 2014-15

Size	Total	%	Data bars
XS (<$50k)	14,165	30.0%	
S ($50k-<$250k)	16,910	35.8%	
M ($250k-<$1m)	7,739	16.4%	
L ($1m-<$10m)	6,520	13.8%	
XL ($10m-<$100m)	1,781	3.8%	
XXL (>$100m)	173	0.4%	
All charity sizes	**47,288**	**100%**	

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. *Excludes* group datasets – which comprise an additional 114 groups/885 entities.

In terms of their specific size category, one third of Australia's charities are classified as XS, i.e. with income less than $50,000. This is in comparison to 173, or 0.4%, of Australia's charities which can be classified as XXL, with income greater than $100 million[6].

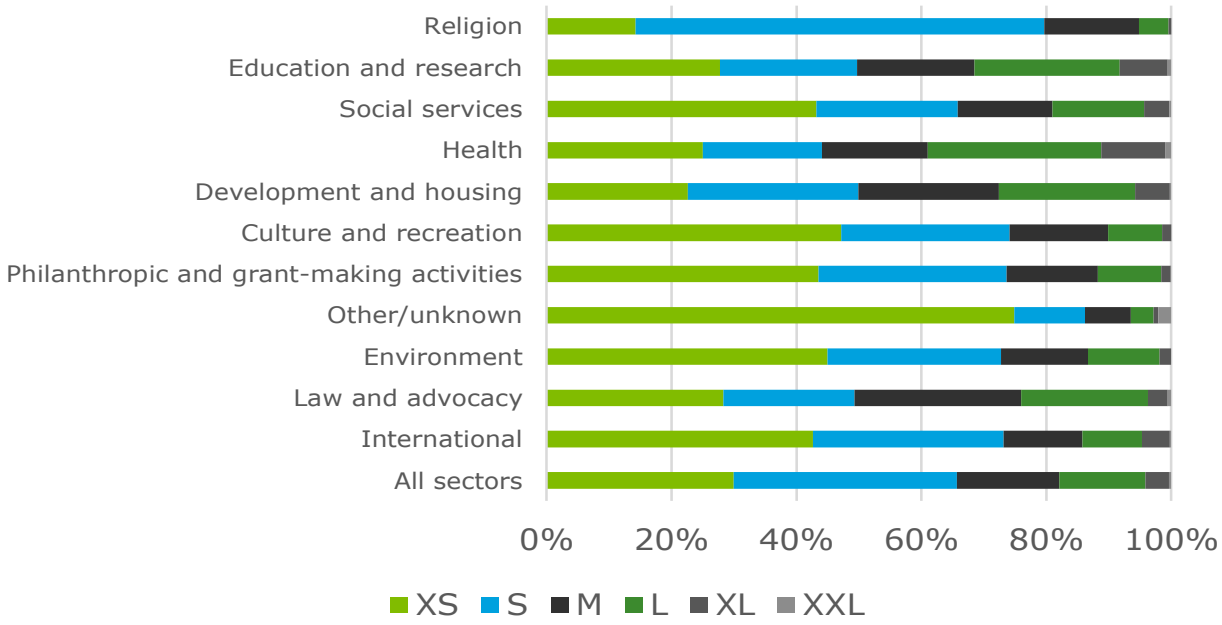
There are some differences in the distribution of charity sizes for each sub-sector of main activity, despite the majority being relatively similar. Religion, for example, has the greatest proportion of extra small charities. Education and research and health have noticeably larger charities.

The breakdown of charities by size in this report is different to that presented in the *Australian Charities Report* 2015. These differences reflect:

- The difference in sample sizes used. The numbers in Table 2.2 above reflect a sample size of 47,288 charities, while *The Australian Charities Report 2015* is informed by a sample size of 50,908 charities. The additional 3,620 entities in the *Australian Charities Report 2015* would largely be XS (there are 14,165 XS entities in this report and 18,892 in *The Australian Charities Report 2015*).
- The number of charities classified as small in this report (gross income between $50,000 and $250,000) totals 16,910. In *The Australian Charities Report 2015*, this figure was 15,356. Over the time period between the two reports, some previously XS charities may have been reclassified to S. Differences in data cleansing approaches may also contribute to this difference.
- Sample sizes across M to XXL are broadly consistent between the two reports.

[6] These percentage distributions relate only charities which reported as individual entities (i.e. 47,288 entities). The analysis excludes charities which reported as part of a group, as disaggregation into component entities was not possible.

Chart 2.1 : Proportion of charities by size across sub-sector, 2014-15



Source: ACNC, Deloitte Access Economics. Excludes group data.

2.3 Charities by location

The charities dataset also reported the main business address of registered charities by postcode and state. New South Wales holds the most main business addressees of charities in Australia, with 35.2% of charities basing their operations there. Victoria and Queensland are the next largest jurisdictions, with 26% and 14.9% of Australian charities respectively.

Table 2.3 : Size of Australian charities in the dataset, 2014-15

Size	Total	%	Data bars
NSW	16,654	35.2%	
VIC	12,283	26.0%	
QLD	7,068	14.9%	
WA	4,839	10.2%	
SA	3,696	7.8%	
TAS	1,224	2.6%	
ACT	1,072	2.3%	
NT	452	1.0%	
Total	**47,288**	**100%**	

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. Excludes group data.

As would be expected, the three smallest states and territories in terms of population – that is, Tasmania, the ACT and the Northern Territory - have significantly fewer charities reporting their jurisdiction as the main business address.

Further, the dataset also reported the jurisdictions that charities actually operate in. As indicated below in Table 2.4, the vast majority (86.8%) of charities only operate in one jurisdiction, with 4% operating across two and just 4.4% operating across all 8 Australian States and Territories.

Table 2.4 : Number of states in which charity operates, 2014-15

Number of States and Territories	Total	%
One	39,464	86.8%
Two	1,801	4.0%
Three	715	1.6%
Four	470	1.0%
Five	353	0.8%
Six	325	0.7%
Seven	347	0.8%
Eight	1,990	4.4%
Total	**45,465**[7]	**100%**

Source: ACNC, Deloitte Access Economics.

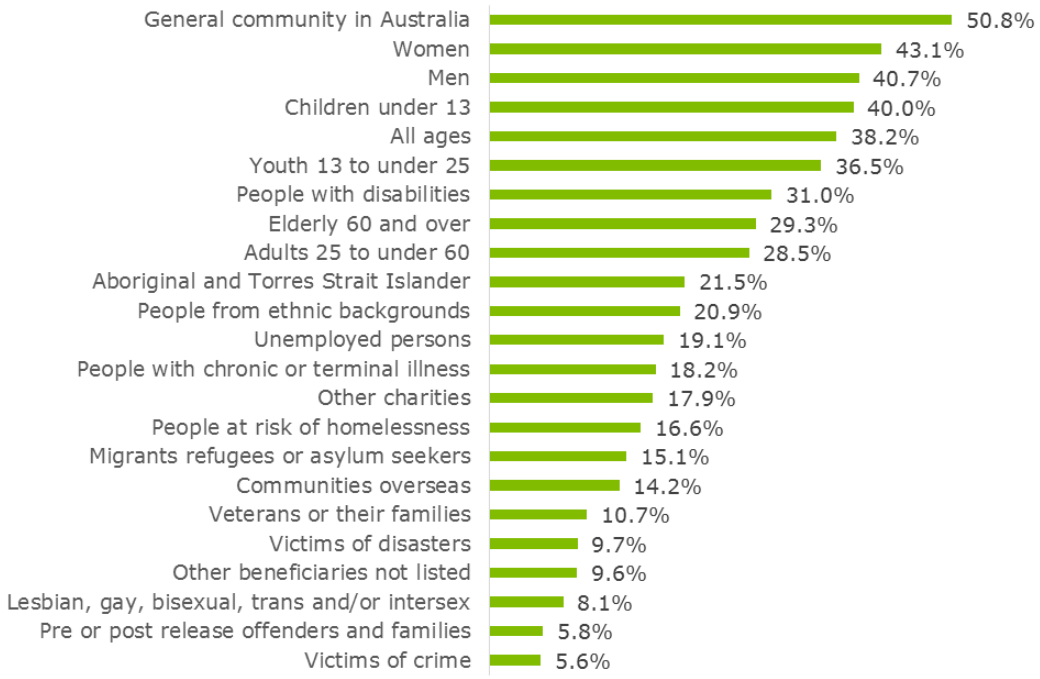
Note: Due to rounding, totals may not add up to sub-totals. Excludes group data.

Further, 3,818 charities (or approximately 8% of charities in the dataset) reported as having overseas operations in the dataset.

2.4 Charities by groups helped

Over 50% of charities identify as helping the general community in Australia, with smaller percentages targeting specific cohorts of the population.[8]

Chart 2.2 : Proportion of Australian charities helping particular groups, 2014-15



Source: ACNC, Deloitte Access Economics

Note: Excludes group data. A given charity may assist more than one group – hence percentages do not sum to 100%

[7] 1,823 entities reported as being operational in zero states, despite recording an address for their principal place of operation.

[8] It should be noted that these groups are not mutually exclusive. For example, it may be possible that charities which reported as helping the 'general community' also provided charitable goods and services to any of the other groups listed in the dataset. This is similarly the case for other categories such 'women' or 'men'.

2.5 Charities by staff numbers

The staffing structure of charities, as reported across the individual and group charities, is slightly over one-third full-time, one-third part-time, and slightly under one-third casual.

Across Australia, this contrasts against approximately 69% full-time and 31% part-time arrangements, across the 11.6 million employed Australians in 2014-15.[9] Of these individuals, a proportion of both full-time and part-time staff will be in casual employment arrangements – noting that the ABS has ceased formal collection of the quantum of casual employment across Australia since 2012.[10] No formal definition of "casualization" currently exists – though a commonly used proxy is the proportion of employees without leave entitlements. In November 2015, ABS Labour Force data suggested that roughly 20.1% of the total workforce are employed under casual arrangements. In terms of headcount, the average charity employs approximately 25.6 staff (whether full, part or casual).

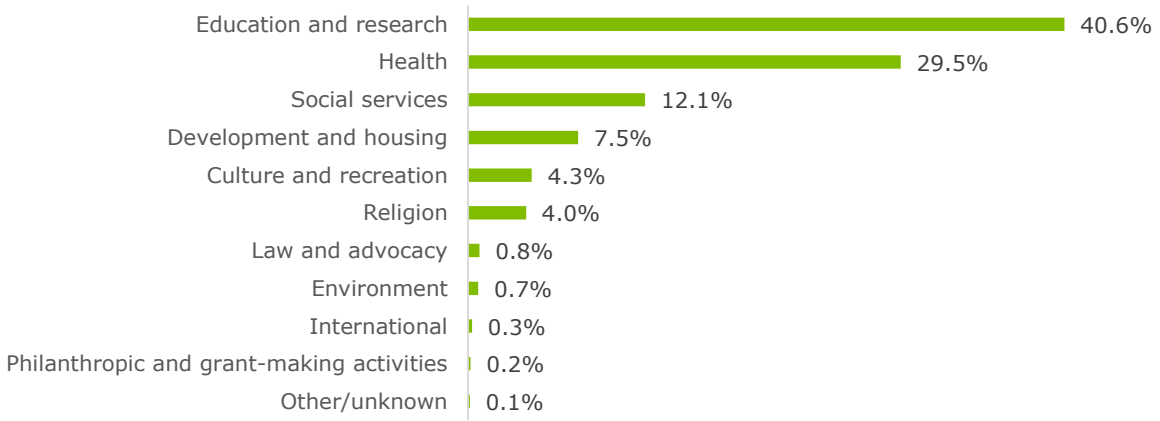
Table 2.5 : Staff employment in charities, 2014-15

Staff	Full time	Part time	Casual	Total
Mean	10.23	9.41	6.97	25.62
Sum	467,188	429,352	316,945	1,213,485
%	**38.5%**	**35.4%**	**26.1%**	**100%**
Australia total	*8,042,734*	*3,567,869*		*11,610,603*
Australia %	*69.3%*	*30.7%*		*100%*

Source: ACNC, Deloitte Access Economics. ABS Cat. 6202.0 – Labour Force, Australia (seasonally adjusted)
Note: Sub-totals may not add up to totals. Casual employment is not currently reported as a separate category by the ABS.

It is also interesting that 64.7% of charities in the dataset reported no full time staff. 59.3% of charities reported no part time staff and 72.6% of charities reported no casual staff.
Slightly over 40% of all paid employment by charities occurs in education and research, and particularly the university sector. The two other main activity areas by employment are health and social services, employing 29.5% and 12.1% of the charity workforce respectively. Interestingly, despite representing 30% of all charities in Australia, the religion sub-sector has only 4.0% of total paid employment.

Chart 2.3 : Total employment by charity sub-sector, 2014-15



[9] ABS Cat. 6202.0 – Labour Force, Australia.
[10] For further information, see: http://www.aph.gov.au/%20About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1415/Quick_Guides/CasualEmploy

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. Includes group data.

According to the dataset, the education and research sub-sector employed nearly half a million staff in 2014-15 in either a full time, part time or casual capacity. This was followed by the health sub-sector with over 310,000 staff. In contrast, the philanthropic and grant-making activities sub-sector employed only around 2,100 staff and other/unknown charities employed around 1,600 staff. This is detailed below in Table 2.6

Table 2.6 : Employment type by charity sub-sector, 2014-15

Sub-sector	Full time	Part time	Casual	Total	%
Education and research	236,392	128,416	127,925	492,733	40.6%
Health	95,608	184,633	77,368	357,609	29.5%
Social services	50,459	58,403	37,470	146,332	12.1%
Development and housing	43,984	26,095	20,941	91,020	7.5%
Culture and recreation	7,689	5,842	39,216	52,747	4.3%
Religion	19,970	18,744	9,304	48,017	4.0%
Law and advocacy	5,822	2,819	905	9,546	0.8%
Environment	3,529	2,529	2,425	8,483	0.7%
International	2,187	740	333	3,260	0.3%
Philanthropic and grant-making activities	921	700	511	2,132	0.2%
Other/unknown	627	431	547	1,605	0.1%

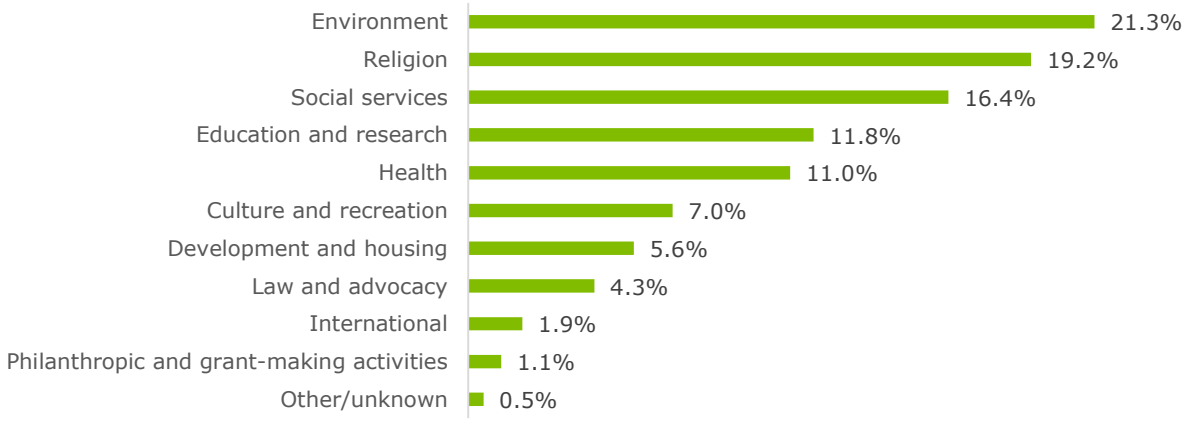
Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. Includes group data.

2.6 Charities by volunteers

The cleansed 2015 individual charities dataset records just over 3.2 million total volunteers across 47,288 charities, with an average of 85.4 volunteers per charity. Chart 2.4 illustrates the breakdown of these 3.2 million volunteers by charity sub-sector.

Chart 2.4 : Charities with volunteers by sub-sector, 2014-15



Source: ACNC, Deloitte Access Economics. Includes individual charities only (n = 47,288)

The environment sub-sector accounted for just under 700,000 volunteers across 1,350 total charities in 2014-15. 532,000 of these environment sub-sector volunteers are associated with a single entity, and are not likely to volunteer on a weekly basis.

Over 90% of charities recorded some volunteer numbers, bar the three sub-sectors of development and housing (79.6%), philanthropic and grant-making (30.3%) and other charities (16%).

Table 2.7 : Volunteers by charity sub-sector, 2014-15

Sub-sector	% with any volunteers	Mean Volunteers	Sum	% of total
Environment	92.8%	554.9	695,266	21.3%
Religion	90.5%	48.8	624,836	19.2%
Social services	92.3%	117.6	533,161	16.4%
Education and research	80.4%	51.2	383,391	11.8%
Health	86.2%	98.4	357,452	11.0%
Culture and recreation	92.9%	67.8	227,131	7.0%
Development and housing	79.6%	63.8	184,079	5.6%
Law and advocacy	90.1%	229.5	140,253	4.3%
International	94.2%	149.5	60,393	1.9%
Philanthropic and grant-making activities	30.3%	43.9	36,838	1.1%
Other	16.0%	47.6	17,056[11]	0.5%

Source: ACNC, Deloitte Access Economics. Includes individual charities only.

Note: Due to rounding, totals may not add up to sub-totals.

[11] The total number of volunteers by sub-sector differs between *The Australian Charities Report 2015* by UNSW-CSI, and this report. Emphasis is made that the data underpinning each report is as at different dates, and that the data cleaning approaches also differ (for example this report draws on 2016 AIS datasets). Nonetheless the overall distribution patterns are broadly similar.

3 Economic contribution

This section identifies and quantifies the economic contribution of Australian charities.

3.1 Measurement approach

Economic contribution studies provide a snapshot of the contribution of a company or industry, or in this case the Australian charity sector, to the economy at a point in time. Such studies quantify both the direct and indirect contribution the charity sector makes to economic measures such as value added and employment.

While income or expenditure is more commonly reported, value added provides a more accurate assessment of an organisation's contribution to the Australian economy because it nets out the value that is created by imported inputs.

The different economic measures that are captured in the economic contribution are set out below:

Direct value added is the sum of the returns to the primary factors of production – labour and capital – and can be calculated by adding Gross Operating Surplus (GOS) and wages paid to employees. This approach is consistent with the framework used by the ABS in compiling the *Australian National Accounts*. The direct value added by all industries/entities in the economy plus net taxes minus subsidies on products is equal to GDP.

There are two points to note in relation to the direct value add estimates of the charity sector:

- Charity sector GOS would mainly reflect the depreciation and amortisation of capital and would not be the most accurate measure of the economic value added by the sector. As such Deloitte Access Economics has used a proxy for sectoral 'market-based output' to derive the economic contribution based on input-output multipliers.
- Wages would also make up a significant portion of direct value added. However, in addition to the monetary contribution of paid staff would be the significant amount of volunteer time contributed to the charity sector need to be considered.

Indirect value added is a measure of the demand for goods and services produced in other sectors of the economy as a result of the proxy spends or income to the charitable organisations. The size of the flow-on is determined by the extent of linkages with other sectors of the economy. Indirect value added is determined based on industry specific economic multipliers from the National Input-Output tables, published by the ABS as part of the National Accounts. Indirect value add is also broken down into GOS and wage components.

Direct employment captures the contribution of charities to national employment. A key component here, will be the measurement of in-kind support through the imputed value of volunteer time.

Indirect employment captures the contribution of charities to employment in upstream industries who experience an increase in demand as a result of direct economic activity associated with the sector.

It should be noted that economic contribution exercises capture the current contribution of Australian charities to economic activity for a given time period. This is not the same as capturing the net impact on the economy if charities were not to exist as some of the activity associated with the sector may then occur elsewhere.

Further, Australian charities' estimated contribution to GDP is also conceptually different from measures of its broader outcomes and benefits to society which are out of scope for this study. Measuring the broader outcomes and benefits to a country would be complex, and to our knowledge, has not been done anywhere in the world. GDP is just one measure of economic welfare and does not capture the full impact on welfare of non-market goods and social benefits.

The input-output approach used to determine the economic contribution is explained in detail in Appendix D.

3.2 Direct economic contribution

In 2014-15, the charity sector is estimated to have had a combined total revenue of $132.9 billion.[12] The total expenditure of the charity sector was estimated at approximately $126.7 billion.[13,14]

In terms of direct economic contribution, the **direct value add for the charity sector was $71.8 billion in 2014-15, which is composed of $65.6 billion in direct labour income and $6.2 billion in direct GOS**. As is expected of a not-for-profit sector, direct GOS represents only 9% of direct value add, with the vast majority of direct value add coming from direct labour income.

The direct economic contribution of the charity sector is equivalent to **4.8% of Australia's gross value added** and **10.6% of total Australian employment (FTE)** in 2015.

Table 3.1 : Direct economic contribution by charity sub-sectors, 2014-15

Direct	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	34,367	2,425	31,942	364,684
Health	18,954	1,001	17,953	226,547
Social services	6,622	336	6,286	98,396
Development and housing	4,160	36	4,125	67,502
Religion	2,655	288	2,367	34,071
Philanthropic and grant-making activities	1,824	1,644	180	1,527
Culture and recreation	1,230	81	1,149	30,217
Law and advocacy	720	-1	722	7,684
Other/unknown	516	261	254	1,116
Environment	480	69	411	6,006
International	243	45	198	2,724
All sub-sectors	**71,771**	**6,184**	**65,587**	**840,471**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

The largest contributors to direct value add is the education and research sub-sector ($34.4 billion) followed by the health sub-sector ($19.0 billion). The largest direct GOS was generated by education and research charities, followed by charities involved in philanthropic and grant-making activities. Education and research, as well as health also generated the largest direct labour income out of all the charity sub-sectors. Similarly, the largest FTE employment is education and research (around 364,700 FTE employees) followed by health (around 226,500 FTE employees).

[12] Revenue was used for the economic contribution modelling, instead of total gross income. That is, once-off income items for each charity were not considered.

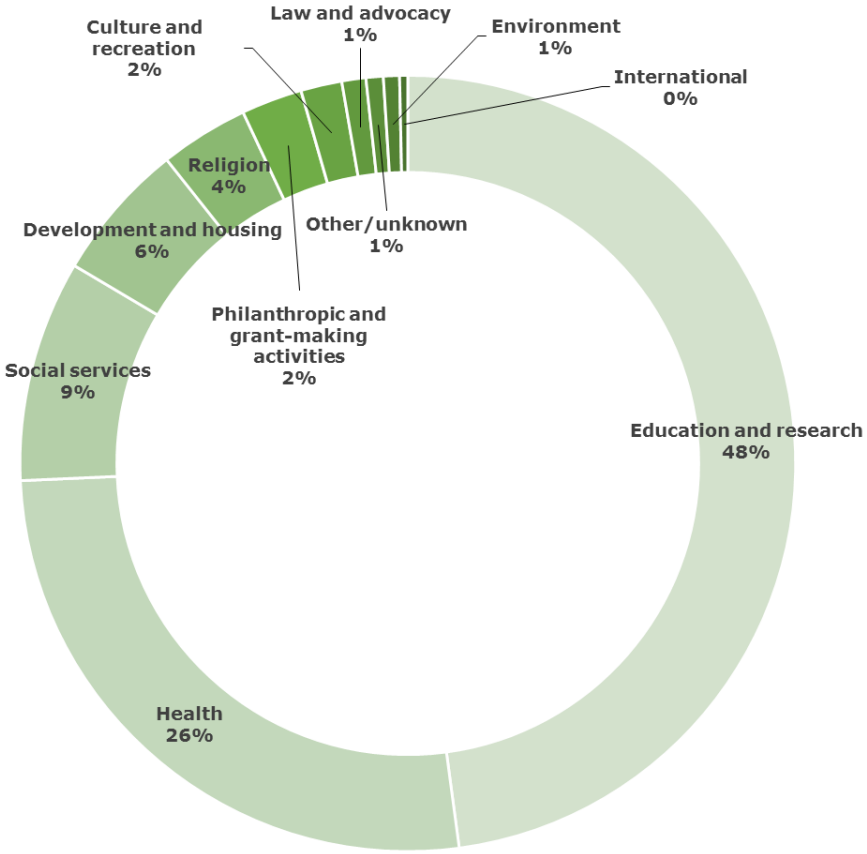
[13] This dataset used provides a record of AISs submitted by charities for the 2015 reporting period. For most charities this is the financial year 1 July 2014 – 30 June 2015, for others it is the 2015 calendar year. There are also a small number of charities that have other alternative reporting periods. For the purposes of this report, the findings are consolidated and reported under the 2014-15 financial year.

[14] A number of entities in the charity sector will also be counted in Australian industry. For example, the Education and Training sector includes a number of Universities, which are also included in the charity sector.

The smallest contribution was made by the international sub-sector with less than $250 million in direct value add and the environment sub-sector with approximately $480 million in direct value add. The law and advocacy sub-sector produced the lowest level of direct GOS, with a negative direct GOS of -$1 million. Philanthropic and grant-making activities – despite producing one of the highest levels of direct GOS – had one of the lowest levels of direct labour income. This is likely due to the lower labour costs required for philanthropy and transfers of grants compared to other charity sub-sectors.

A diagrammatic breakdown of direct value add across the eleven sub-sectors is provided below:

Chart 3.1 : Direct value add by charity sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

3.2.2 Direct value add across charity sizes

The direct value add of the charity sector can also be broken down by their size categories. As would be expected, the direct value add of sub-sectors - as well as the charity sector overall - tended to increase with the charity size category.

Table 3.2 : Direct value add by charity size and sub-sector, 2014-15

Direct ($m)	XS	S	M	L	XL	XXL	All sizes
Education and research	-1	76	493	4,569	10,768	18,461	34,367
Health	-1	25	172	2,570	6,586	9,602	18,954
Social services	0	39	186	1,312	3,064	2,021	6,622
Development and housing	-1	29	187	1,189	1,979	778	4,160
Religion	14	566	522	934	591	28	2,655
Philanthropic and grant-making	-7	14	33	231	484	1,069	1,824
Culture and recreation	-4	27	107	342	682	76	1,230
Law and advocacy	0	7	63	189	263	198	720
Other/unknown	-1	9	34	140	259	75	516
Environment	0	10	40	204	226		480
International	0	2	6	19	183	34	243
All sub-sectors	**-1**	**804**	**1,843**	**11,700**	**25,084**	**32,341**	**71,771**

Source: ACNC, Deloitte Access Economics.

Notes: (1) Due to rounding, totals may not add up to sub-totals. (2) The absence of an entry for XXL environment charities is due to the fact that there were no such examples in the dataset.

Most charity sub-sectors in the XS size category had a negative direct value add, with the direct value add of all XS sized charities being -$1 million.

3.2.3 Direct GOS across charity sizes

Similar to direct value add across charity sizes, every sub-sector in the XS size category had a negative GOS, with a direct GOS across all XS charities of -$113 million. A negative GOS was also observed in some small and medium charities, as well as for some XL and XXL charities. For example, XL charities involved in development and housing had a negative direct GOS of -$276 million.

Table 3.3 : Direct GOS by charity size and sub-sector, 2014-15

Direct ($m)	XS	S	M	L	XL	XXL	All sizes
Education and research	-55	-30	5	435	974	1,096	2,425
Philanthropic and grant-making	-8	7	9	158	410	1,069	1,644
Health	-4	-10	-15	126	421	483	1,001
Social services	-5	8	19	91	210	13	336
Religion	-9	50	59	122	67	-1	288
Other/unknown	-17	5	19	73	179	2	261
Culture and recreation	-7	4	2	21	64	-3	81
Environment	-1	1	4	41	24		69
International	0	1	1	0	62	-19	45
Development and housing	-6	-15	-10	63	-276	279	36
Law and advocacy	0	-3	1	4	-1	-1	-1
All sub-sectors	**-113**	**17**	**95**	**1,134**	**2,134**	**2,918**	**6,184**

Source: ACNC, Deloitte Access Economics.

Notes: (1) Due to rounding, totals may not add up to sub-totals. (2) The absence of an entry for XXL environment charities is due to the fact that there were no such examples in the dataset.

3.2.4 Direct labour income across charity sizes

The direct labour income of sub-sectors generally increased with the charity size category. This correlates with the findings below in Table 3.5 for direct FTE employment and suggests, as would be expected, charities with larger gross income sizes tend to employ more and have greater labour costs.

Table 3.4 : Direct labour income by charity size and sub-sector, 2014-15

Direct ($m)	XS	S	M	L	XL	XXL	All sizes
Education and research	54	106	488	4,135	9,794	17,365	31,942
Health	3	35	187	2,445	6,165	9,119	17,953
Social services	5	32	167	1,221	2,854	2,008	6,286
Development and housing	5	44	197	1,126	2,254	499	4,125
Religion	23	516	463	812	524	29	2,367
Culture and recreation	3	23	105	321	618	78	1,149
Law and advocacy	1	10	62	185	265	200	722
Environment	1	9	36	163	202		411
Other/unknown	16	4	14	68	80	73	254
International	0	1	5	19	121	53	198
Philanthropic and grant-making	1	7	24	73	75		180
All sub-sectors	**112**	**788**	**1,748**	**10,566**	**22,950**	**29,423**	**65,587**

Source: ACNC, Deloitte Access Economics.

Notes: (1) Due to rounding, totals may not add up to sub-totals. (2) The absence of an entry for XXL environment charities is due to the fact that there were no such examples in the dataset. (3) Direct labour income for XXL charities in philanthropic and grant-making activities was not reported due to insufficient data.

Across the entire charity sector, labour costs[15] were 52% of total charity expenses. It should be noted that the direct labour income is slightly smaller than the employment expenses reported by in the individual charities dataset. This is because employee expenses also includes other expenses that do not accrue to labour such as workers' compensation premiums, payroll tax and fringe benefits tax.

Across the whole charity sector, the average annual earnings for labour (including items such as income tax and superannuation) was approximately $78,000. Moreover, assuming a 40 hour work week and 50 weeks of work (the full-time equivalent work time per year), **the average hourly earnings for labour was estimated at approximately $39** (also including income tax and superannuation).

3.2.5 Direct FTE employment across charity sizes

Direct FTE employment across charity sizes was calculated by taking the reported full-time, part-time and casual staff numbers in the dataset and converting them into full-time equivalents. As with direct value add, labour income and GOS, FTE employment generally increased with charity size category, although the sum of direct FTE employment across the XXL charity size was somewhat smaller than across the XL charity size (around 263,900 FTE compared to around 283,800 FTE).

Direct FTE employment for XXL charities in philanthropic and grant-making activities, as well as in the other/unknown sub-sector category, was not reported due to insufficient data.

[15] Employee expense data from the ABS Non-Profit Institutions Satellite Account, 2012-13 was used to scale down reported employee expenses to direct labour income.

Table 3.5 : Direct FTE employment by charity size and sub-sector, 2014-15

FTE employment	XS	S	M	L	XL	XXL	All sizes
Education and research	3,350	3,109	10,119	53,820	109,532	184,754	364,684
Health	4,311	1,514	3,370	34,563	79,695	103,095	226,547
Social services	602	799	3,097	19,444	43,360	31,096	98,396
Development and housing	898	1,056	4,254	20,761	35,700	4,835	67,502
Religion	758	8,189	6,856	11,820	6,199	250	34,071
Culture and recreation	7,571	1,030	3,524	6,508	9,191	2,395	30,217
Law and advocacy	18	158	817	2,401	2,284	2,007	7,684
Environment	64	257	637	2,275	2,775		6,006
International	58	78	152	402	1,436	598	2,724
Philanthropic and grant-making	70	75	179	700	504		1,527
Other/unknown	77	56	114	314.5	554.5		1,116
All sub-sectors	**17,775**	**16,319**	**33,116**	**153,006**	**291,228**	**329,029**	**840,471**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals. (2) The absence of an entry for XXL environment charities is due to the fact that there were no such examples in the dataset. (3) Outcomes for XXL charities in philanthropic and grant-making, and unknown sub-sectors were not reported due to insufficient data.

One limitation to note is that employment data was not always reported for charities – indeed, some charities had a significant income, yet reported few or no actual paid staff. Further, the staff figures that were reported were only a snapshot for the last pay period in the reporting period and in some cases may not be representative of their average annual paid employment.

3.3 Indirect economic contribution

The indirect economic contribution captures the flow-on contribution made by charities due to their demand for other goods and services. As a point of reference, total intermediate expenditure across the charity sector was estimated at approximately $53.1 billion out of a total expenditure of $114.9 billion, which suggests that this flow-on contribution was significant to the Australian economy.

The indirect value add of the charity sector was $57.0 billion in 2014-15, consisting of $44.2 billion in labour income and $12.8 billion in GOS. **The indirect employment was approximately 471,700 FTE in 2014-15**. The economic contribution for indirect value add, labour income and FTE employment are smaller than the direct economic contribution of the charity sector. However, indirect GOS ($12.8 billion) is double the direct GOS ($6.2 billion), reflecting the fact that the charity sector draws on services from the for-profit section of the economy.

The education and research sub-sector provided the largest indirect value add (around $26.5 billion) followed by the health sub-sector (around $12.5 billion). The smallest indirect value add was generated by the other/unknown and environment sub-sector ($477 million and $596 million, respectively).

Table 3.6 : Indirect economic contribution by charity sub-sectors, 2014-15

Indirect	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	26,543	5,033	21,510	221,368
Health	12,475	2,688	9,786	126,322
Social services	4,852	1,087	3,765	45,455
Development and housing	4,805	1,663	3,142	26,478
Religion	2,893	766	2,127	16,653
Culture and recreation	1,412	454	958	10,595
Philanthropic and grant-making activities	1,095	288	806	6,315
International	951	250	700	5,485
Law and advocacy	898	334	564	6,821

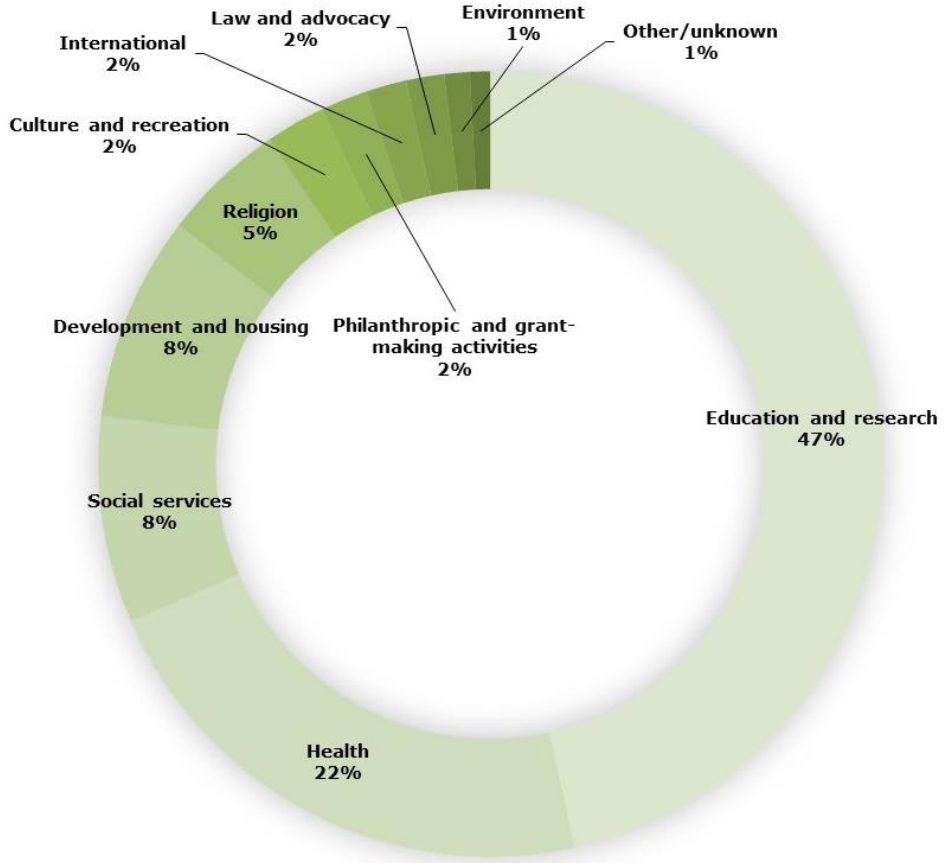
Environment	596	157	439	3,436
Other/unknown	477	124	353	2,752
All sub-sectors	**56,995**	**12,844**	**44,150**	**471,682**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

In terms of intermediate expenditure, these include purchases in industries such as insurance, publishing (such as for marketing purposes) and transport and freight. A number of these intermediate expenses were calculated by taking the sub-sector expenditure figures from the dataset and proportioning it by expense items from the ABS Non-Profit Institutions Satellite Account.[16] This was used to determine the indirect economic contribution for a number of expenses made by Australian charities. Any unknown intermediate expenditure was attributed to a *weighted average of ANZSIC industry multipliers* for each sub-sector in order to calculate the remaining indirect contribution of these charities. This approach is described in further detail in Appendix D.

Chart 3.2 : Indirect value add by charity sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics

[16] The ABS NPI Satellite Account lists, for example, the expenditure made for purposes such as 'advertising, marketing and promotion' or 'outward freight, cartage, delivery and transport expenses' by various NPI categories, such as 'culture and recreation' or 'education and research'.

3.4 Total economic contribution

The total economic contribution of the charity sector is the sum of the direct contribution and indirect contribution. All in all, **the total economic contribution of the charity sector in 2014-15 was $128.8 billion in total value add and 1.3 million in employment FTE**. As a point of comparison, this is equivalent to **8.5% of Australia's GDP** and **16.6% of total Australian employment (FTE)** in 2014-15.

Table 3.7 : Total economic contribution by charity sub-sectors, 2014-15

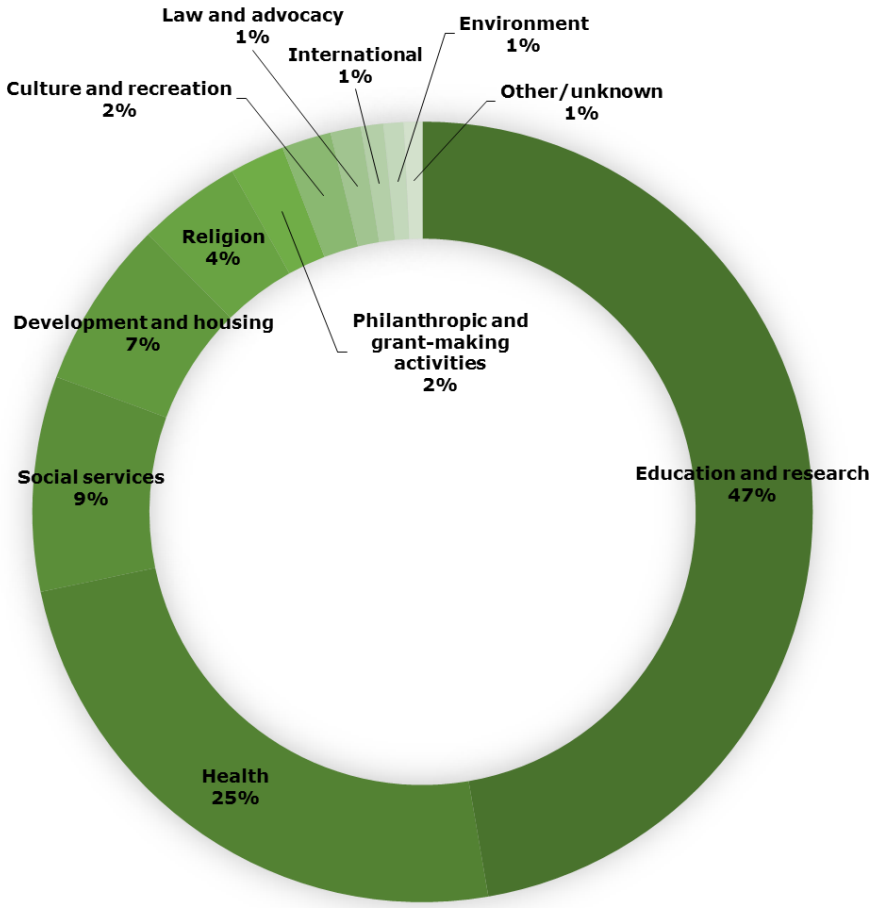
Total	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	60,909	7,458	53,451	586,052
Health	31,429	3,689	27,740	352,868
Social services	11,474	1,423	10,051	143,851
Development and housing	8,966	1,699	7,266	93,980
Religion	5,548	1,054	4,494	50,723
Philanthropic and grant-making activities	2,919	1,932	987	7,842
Culture and recreation	2,642	534	2,107	40,811
Law and advocacy	1,618	333	1,285	14,505
International	1,194	295	899	8,209
Environment	1,075	226	850	9,442
Other/unknown	993	385	607	3,868
All sub-sectors	**128,765**	**19,028**	**109,737**	**1,312,153**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

In terms of the total value add, the largest contributors were education and research, with $60.9 billion, and health with $31.4 billion. The smallest contributor in terms of value add was the other/unknown sub-sector, with under $1 billion, and the environment sub-sector with around $1.1 billion. Even with the indirect economic contribution considered, the total GOS of the charity sector was $19.0 billion, which is just 15% of total value add, with the remainder being composed of labour income.

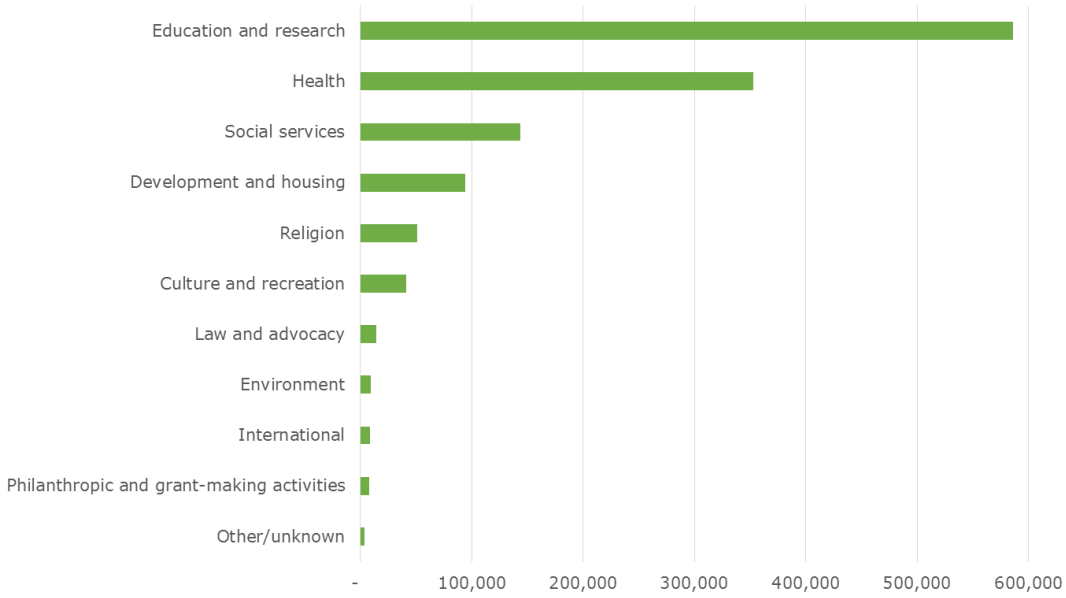
Chart 3.3 : Total value add by charity sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

In terms of the total employment, the largest contributor was the education and research sub-sector, with around 586,100 FTE employment. This is followed by the health sub-sector with over 352,900 FTE employment. The smallest contributor to total employment was the philanthropic and grant-making activities sub-sector with nearly 7,800 FTE employment and the other/unknown sub-sector with around 3,900 FTE employment.

Chart 3.4 : Total FTE direct and indirect employment by charity sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

3.5 Contribution of volunteers

The total hours of volunteering was estimated using the number of volunteers reported in the cleansed individual charities dataset. This figure was multiplied by the average annual number of unpaid hours volunteered per volunteer as reported by the ABS General Social Survey, 2014 (ABS Cat. 4159.0). Where the organisation type was specified (for example, 'culture and recreation' or 'health'), the average number of unpaid hours per volunteer for that organisation type was used. Otherwise, the overall average volunteering hours (approximately 86.5 hours per volunteer) was applied to the sub-sectors.

To estimate the value of volunteering, the "replacement cost" method was used (see Appendix D). It is assumed that the value of an hour of unpaid volunteering time is equivalent to the cost of a paid hour of labour in the charity sector, which is calculated to be $39 in section 3.2.4 above.[17]

The result is that in 2014-15, the charity sector received a total of 327.7 million hours of unpaid volunteering. The environment sub-sector had the largest number of volunteers - with around 695,000 volunteers, followed by religion totalling 627,000 volunteers, and social services with nearly 592,000 volunteers.

The **total value of this volunteering is estimated at $12.8 billion in 2014-15**. This is 19% of the size of the actual direct labour income of the charity sector. A further review of the assumptions and approach described above is provided in Appendix C.

[17] An average value of an hour of labour across all subsectors was used because data provided for individual sub-sectors varied substantially, potentially due to data limitations.

Table 3.8 : Total number, hours and value of volunteers by charity sub-sector, 2014-15

Sub-sector	Volunteers[18]	Total hours (millions of hours)	Value of volunteering ($m)
Environment	695,266	82.5	3,219
Religion	626,599	80.7	3,149
Social services	591,590	61.4	2,394
Health	375,682	25.6	1,000
Development and housing	187,100	19.4	757
Education and research	393,744	18.8	733
Culture and recreation	227,596	17.2	672
Law and advocacy	140,253	12.1	473
International	60,463	5.2	204
Philanthropic and grant-making activities	37,818	3.3	128
Other/unknown	17,056	1.5	58
All sub-sectors	**3,353,167**	**327.7**	**12,786**

Source: ACNC, Deloitte Access Economics.

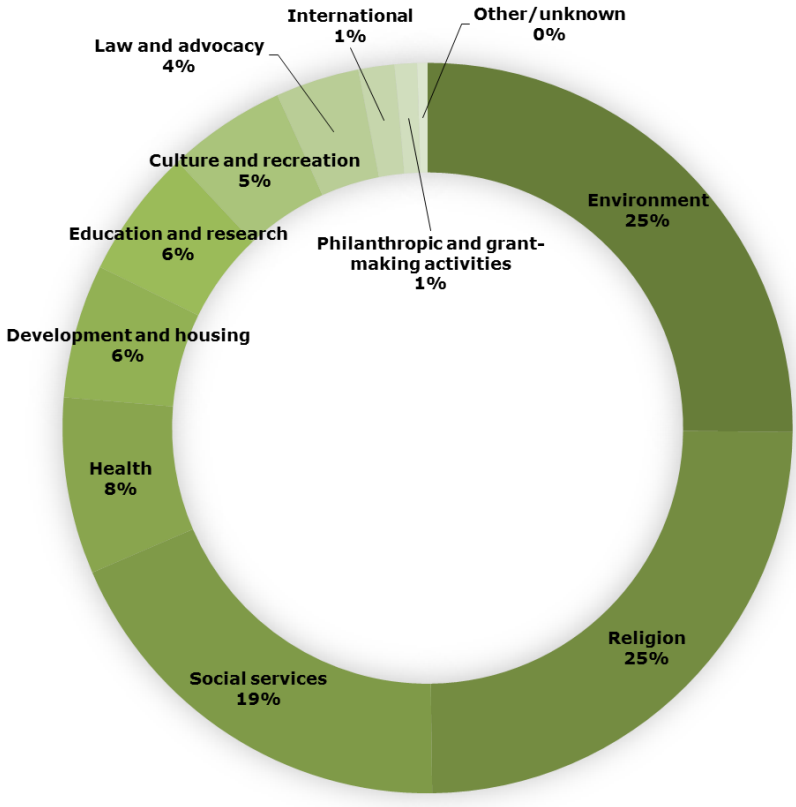
Note: Due to rounding, sub-totals may not add up to total. Includes both group and individual datasets.

It should be noted, that it is entirely possible that individuals volunteer across multiple sub-sectors and across organisations in the same sub-sector, so the 3.4 million volunteer figure is likely to be larger than the actual number of unique individual volunteers in the charity sector. As such, the figure should be best treated as the number of volunteering "roles" recorded across all charities in the dataset, rather than an actual headcount. As such, the figures presented in Table 3.8 are best interpreted as *upper bound* estimates on volunteering activity in the charity sector.

The total value of volunteering was highest in the environment sub-sector (valued at $3.2 billion), followed by the religion sub-sector (valued at $3.1 billion) and social services sub-sector (valued at $2.4 billion). A proportional breakdown is provided below in Chart 3.5.

[18] As noted in earlier sections, the volunteer figures in this report differ from those reported in the UNSW-CSI Charities Report. This is due to differences in data cleansing methodologies between the two reports, and differences in the currency of source datasets.

Chart 3.5 : Total value of volunteering by charity sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

While the overall value of volunteering is smaller than the direct labour income for the charity sector, the value of volunteering is almost 8 times as large as the direct labour income for the environment sub-sector. Likewise, the value of volunteering also exceeds the direct labour income for the religion sub-sector and the international sub-sector.

4 Financial health of the sector

This section describes indicators assessing the financial health of the Australian charity sector.

4.1 Understanding the financial health of the sector

As noted in *The Australian Charities Report 2015*, there are a number of measures of financial performance, financial position and sustainability which can be used to give a view of the financial status of charities in Australia. We have undertaken an analysis of a small number of financial indicators in order to:

- provide a summary of the apparent financial status of the industry, including the net asset position, using a sub-set of indicators in the report, as well as a number of standard indicators of financial health that are used for private sector entities; and
- interpret the sector's apparent financial position against standard benchmarks for these indicators.

While the focus is primarily on the charity sector as a whole, insights into variability in financial health across individual sub-sectors are provided where data is sufficiently robust.

4.2 Types of financial indicators

There are a wide number of financial indicators, each measuring different aspects of an organisations' financial health.

Broadly, these can be classified into measures of:

- Profitability (how well an organisation is performing).
    - E.g. net income ratio, diversity of funding sources.
- Operational efficiency (how efficiently an organisation is using its resources to engage in its activities).
    - E.g. operating expense ratio.
- Liquidity (the ability of an organisation to meet its operational obligations via existing sources of funding).
    - E.g. current ratio.
- Leverage (the degree to which an organisation uses borrowed money (debt)).
    - E.g. interest coverage, gearing.

An analysis of the financial health of a sector should ideally capture the various aspects highlighted above.

4.3 Financial indicators of the sector

The financial indicators used to gauge the financial health of the charity sector have been informed by the availability of data in the group and individual charities datasets. The following financial indicators have been used to capture the financial health of the sector:

Table 4.1 : Financial indicators used

Financial indicator	Formula	Description	Interpretation in context of charities
Net income ratio	Net Income/Total Income (%)	The net income ratio is the ratio between a charity's net income (its total income minus total expenses) and its total income.	A positive number for net income indicates that the charity operated at a surplus over the reporting period, while a negative number indicates a deficit. The indicator is a measure of **profitability**. While a measure of financial sustainability, a high net income ratio may not necessarily be the goal for a charity.
Net asset ratio	Net Assets/ Total Assets (%)	The net asset ratio is the ratio between a charity's net assets (its total assets minus total liabilities) and its total assets.	The net asset ratio broadly indicates an organisations' net worth, that is, what an organisation owns, less what it owes. Dividing net assets by total assets provides a way of comparing this net worth across organisations of different size.
Current ratio	Current Assets/Current Liabilities	The current ratio is a short term measure, examining assets and liabilities that are likely to be realised in the next 12 month period. The current ratio is an indicator of short-term financial liquidity.	Current assets and liabilities are assets and liabilities which can be converted into cash within 12 months. The current ratio is a measure of how readily an organisation can meet its short-term financial obligations with its current assets, if they became due, and is a measure of **liquidity**. A ratio of under 1 indicates that a company's short-term liabilities are greater than its assets. Conversely, a high ratio (>3) could indicate inefficient usage of resources.
Net current assets expenditure cover	Net Current Assets/Total Expenses	Net current assets expenditure cover is another short term measure, which is the ratio of a charity's net current assets with its total expenses	This indicator represents an organisation's short term net worth, expressed as a proportion of total expenses across the reporting period. A measure of **liquidity**, it can be interpreted as the percentage of an organisation's annual expenses which can be paid for by its net assets.
Asset growth	Net Income/Net Assets (%)	Asset Growth is the ratio of net income over net assets. It captures the rate at which charities are growing (if the rate is positive), or using up their net assets (if the rate is negative).	Also known as "return on equity" when applied to for-profit companies, this indicator captures the rate at which a charity can generate income, given net investment into that charity. A measure of **profitability**, this indicator can be less instructive for charities than it is for for-profit organisations, as the purpose of some charities may be to spend rather than earn money.
Income source, donations	Income from Donations and	Proportion of income that comes from donation and	Viewed in conjunction with the below (income source – governments), this metric provides a snapshot of the breakdown of income sources for

and bequests	bequests/Total Income (%)	bequests compared to other sources.	charities. It can be construed as a contextual **profitability** indicator, particularly when a given source of funding is expected to be unstable. A charity which is highly dependent on donations and bequests as a source of income may need to understand whether the source of funding is sustainable.
Income source, government	Income from Government/Total Income (%)	Proportion of income that comes from government compared to other sources.	As above, a charity with a high proportion of government funding may need to better understand the likelihood of such funding continuing to be available. For example, a change in government policy may impair a dependent organisation's ability to continue operations, if they are unable to source alternative sources of income.

The average for each of the financial indicators was calculated by sub-sector and size across the charity sector. Charities which did not have the appropriate data for each indicator (e.g. insufficient asset data to calculate net asset ratio) were omitted.

Financial indicators are calculated based on a sample of charities, which are subjected to and pass a data quality criteria. For net income ratio and net asset ratio, charities meeting more than 8 of 10 data checks were included (see Table A.1 for the list of ten financial data checks). For current ratio and net current asset expenditure cover, where data quality was not as strong, only charities that passed all data checks (data quality of exactly '10') were used.

Entities which pass more checks are considered to have more robust and accurate data (within the specified tolerances outlined in Appendix A). This approach differs from that used in *The Australian Charities Report 2015*, and as such the calculated indicators present different values (though broadly similar in trend).

In some instances, sub-sectors of a particular size (e.g. environmental charities that were XXL size) simply did not have the charity entries available in the dataset under these criteria for a financial indicator to be calculated.

4.4 Benchmarking and interpreting financial indicators

The ideal financial position for a charity will be highly dependent on its circumstances and purposes. It may differ substantially for different charities, even when these charities are of similar scale and conduct operations within similar sectors.

Caution is urged when interpreting the estimates for the selected financial indicators, and the results should be regarded as indicative only. In providing these estimates, this report avoids discussing what an "ideal" level for each indicator is, and instead provides guidance on how to interpret the ratio.

It is noted that the **financial indicators in this section provide insight only into one part of a charity's operations**, and that financial performance is usually not the major focus of charities' operations. At the same time, charities do need to have a sustainable financial position in order to provide services into the future.

Indicative benchmarks for the indicators outlined in Table 4.1 are calculated using the 2015 ATO *Taxation Statistics* publication, which includes summary financial information on the median and average for various Income Statement and Balance Sheet line items, calculated from a sample of

over 900,000 companies across Australia. These benchmarks are provided to contextualise the results in this section, and echoing the above, are not intended to provide a target for charities to work towards as objectives for charities and companies differ substantially.

Median figures were used to impute the various benchmarks used in this report, using the formulae outlined in Table 4.1. Line items used to construct these benchmarks are not necessarily from like-for-like organisations, and some benchmarks may imply a view contrary to true market conditions.

As with all benchmarks, the unique circumstances of an individual organisation should be considered when comparing their financial position against the results illustrated in this section.

4.5 Results

4.5.1 Net income ratio

The net income ratio averages 8.08% across the charities sector, and on average is positive for all sub-sectors. That is, income exceeds expenses on average for charities, and they can be interpreted as operating under a surplus.

The net income ratio is highest for charities operating primarily in the philanthropic and grant-making space, with a net income ratio of 60.4%. Put another way, gross income exceeds gross expenses by 60.4% for charities in the philanthropic and grant-making sub-sector on average.

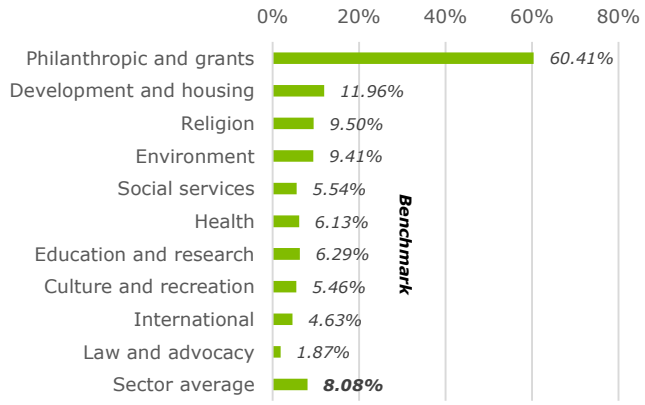
On average, charities in other sub-sectors also operate on surpluses, albeit thinner than those in the philanthropic space.

When viewed on a size basis, extra small charities on average operate with a deficit. When broken down further, roughly half of the 14,165 extra small entities operate on an average deficit of around -$22,100, while the other half on a smaller surplus averaging +$5,600. As charity size increases, the net income ratio improves, averaging around 8% for all charities. Charities of Small size and above (i.e. above $50,000 gross annual income) are estimated to have a net income ratio of above zero.

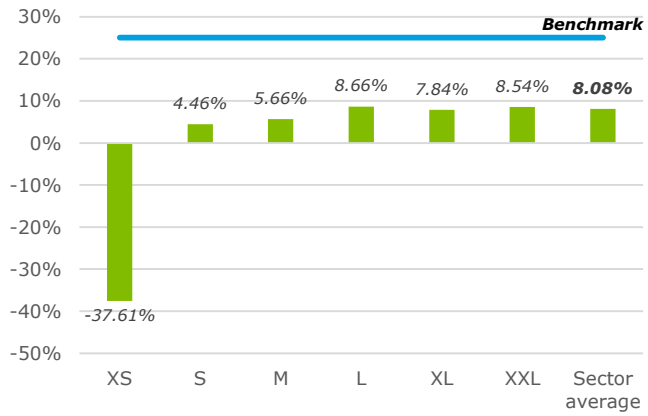
The industry-wide benchmark for the net income ratio is 25.1%, which most charities fall below. By sub-sector, only philanthropic and grant making organisations exceeds this benchmark. **Whether a charity falls above or below the benchmark is not necessarily an issue for this sector.** Some charities are designed to raise money for the purpose of redistribution (as is the case with philanthropic and grant making charities), and their operations will manifest as a high net income ratio. Conversely, some other charities may seek to only raise sufficient funds to meet their operating requirements – in those instances, their net income ratio will fall below. However, ultimately no entity can continue to run indefinitely on a deficit.

Chart 4.1 : Net income ratio for sub-sectors, 2014-15 (Data quality = 8 or above)

By sub-sector



By size



Source: Deloitte Access Economics, ACNC

n = 42,459 – data quality 8+ and excluding null values. Excludes group data, which could not be disaggregated into group member data.

4.5.2 Net asset ratio

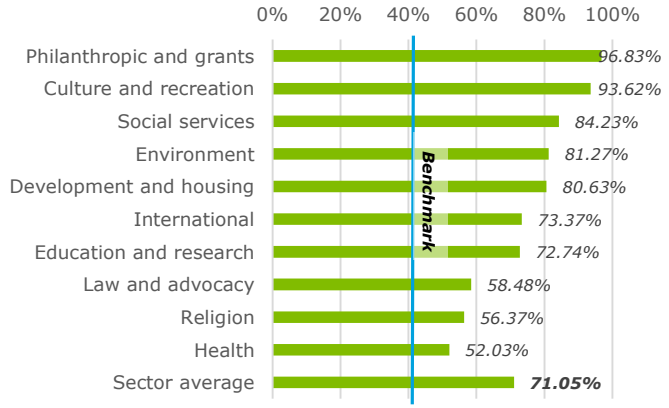
The net asset ratio averages out to be positive at a sub-sector level, and also across charities of different sizes. A high ratio (above 50%) indicates that the charity holds more assets than it does liabilities, and suggests that the organisation is "worth more". Conversely, a ratio below 50% indicates that the charity holds a large amount of debt, relative to its asset base.

The sector-wide net asset ratio is 71%, indicating that on balance, charities own more than they owe. Three sub-sectors lie below this – law and advocacy, religion and health, while the remainder lie above. The net asset ratio decreases as charity size increases, from close to 100% for XS charities, to 66% for XXL charities. It is noted that data reporting may be less precise for smaller charities – for example, there were 11,150 (mostly XS) charities reporting asset data, but no data for liabilities.

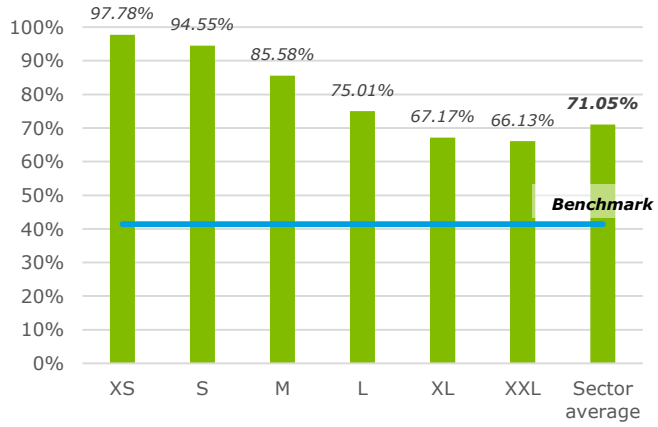
A higher ratio implies greater flexibility in the ways which an organisation can choose to manage its operations, though it should be viewed in conjunction with the current ratio, i.e. the subset of assets versus liabilities which are not restricted.

Chart 4.2 : Net asset ratio for all sub-sectors, 2014-15 (Data quality = 8 or above)

By sub-sector



By size



Source: Deloitte Access Economics, ACNC

n = 31,562 – data quality 8+ and excluding null values. Excludes group data.

4.5.3 Current ratio

The current ratio is estimated to average 1.2 across all charities, underlining a general ability of charities to meet their short term financial obligations. This ratio is calculated from the subset of charities which meet all data quality checks. A current ratio of below 1 can be problematic for an organisation, as it suggests an inability to meet its short-term obligations (liabilities) with its short term assets (e.g. cash, cash equivalents), if they became due. However a ratio of below 1 does not necessarily imply that the organisation is not financially sustainable, as they may be able to source alternative financing should it become necessary.

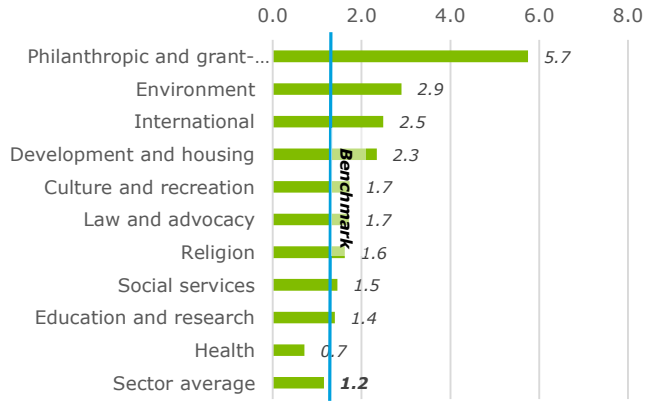
The current ratio decreases as sector size increases, from 3.2 for medium sized charities (annual gross income between $250,000 and $1,000,000), to 0.9 for XXL. By sub-sector, only the health sub-sector is estimated to have a current ratio below 1, while others are above 1. As small charities (gross income below $250,000) do not report current assets and liabilities, no results are reported for these entities.

The current ratio across the whole charity sector is close to the calculated ATO industry benchmark of 1.2, suggesting similar practices in management of short-term liquid assets. Higher ratios are considered as better from a lender's perspective, as higher ratios imply higher capacity to repay loans. However debt in the charity sector is very low.

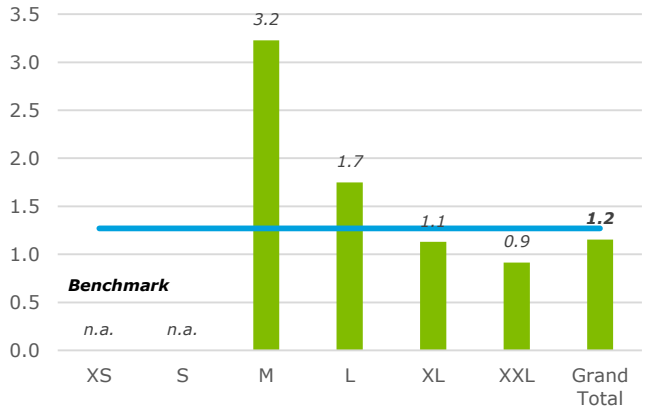
As is the case with total assets and liabilities, recorded data for current assets and liabilities may be less precise for smaller entities.

Chart 4.3 : Current ratio for all sub-sectors, 2014-15 (Data quality = 10)

By sub-sector



By size



Source: Deloitte Access Economics, ACNC

n = 10,516 – data quality 10, excluding null values, XS and S entities. Also excludes group data.

4.5.4 Net current assets expenditure cover

The net current assets expenditure cover indicator comprises two components – net current assets (the ability of an organisation to meet its short-term obligations and a measure of liquidity), and total expenses.

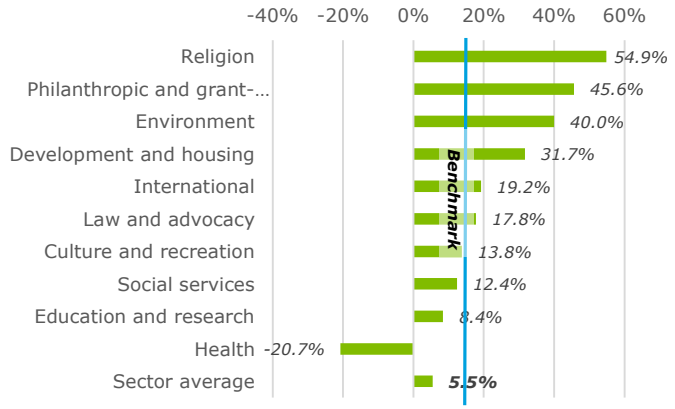
The average net current assets expenditure cover across the whole charity sector is 5.5%. **That is, less than 1 month (5.5% of 12 months) of charities' expenditure can be met by its net current assets**. The charity sector average also lies below the industry benchmark of 15%.

While it is greater than zero across most sub-sectors and charity sizes, this is not the case with the whole of the health sub-sector which has an average net current assets expenditure cover of -20.7%.

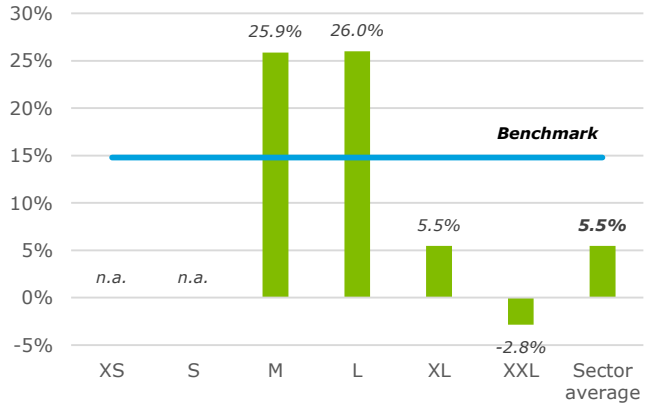
The sector-wide ratio appears to be low, and if charities experience a large income or funding shortfall to plan (that is, if income falls to zero), then they may have issues meeting their expenditure requirements with liquid assets.

Chart 4.4 : Net current assets expenditure cover for all sub-sectors, 2014-15 (Data quality = 10)

By sub-sector



By sub-size



Source: Deloitte Access Economics, ACNC

n = 12,406 – data quality 10 and excluding null values, XS and S entities.

4.5.5 Asset growth ratio

The asset growth ratio is broadly comparable to "return on equity" across for-profit companies. It comprises two components, the numerator being net income, and the denominator being net assets. The concept of a "return" does not apply to charities in the same manner as it does to for-profit organisations. **While lower than "benchmark" rates for the private sector, charities appear to perform reasonably**[19].

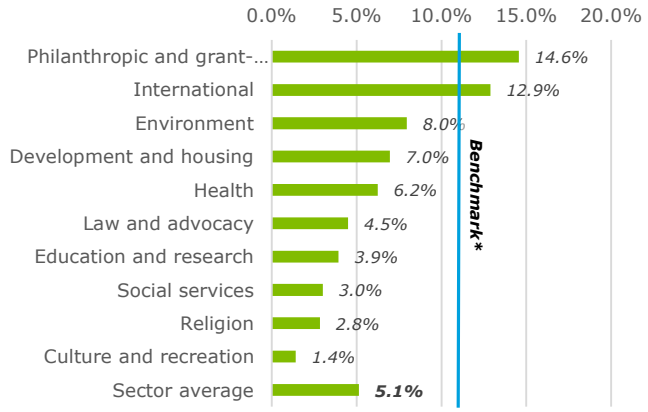
The ASX return on equity historical average performance is used to benchmark the performance of the charity sector. The asset growth ratio for all charities, averaging 5.14%, falls below the ASX 5 year historical average for Return on Equity of around 11%.

Broken down further by sub-sector, culture and recreation has low asset growth due to the larger entities in this sub-sector, which run at a loss and off small net asset bases. Overall, larger entities appear to have higher asset growth, with XXL entities (gross income in excess of $100 million) with estimated asset growth of 7%. Smaller charities may be at risk, with negative (in the case of XS charities) or low (for S and M charities) asset growth, suggesting difficulty in accumulating surpluses given their resource base.

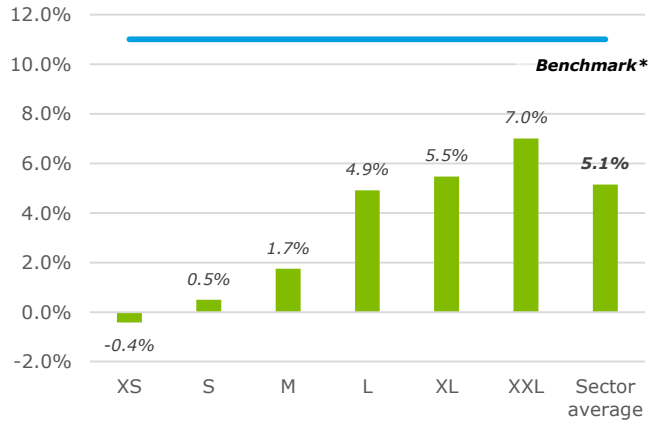
[19] ASX ROE averages around 11% over last 5 years https://ycharts.com/companies/ASXFY/return_on_equity

Chart 4.5 : Asset growth, 2014-15 (Data quality = 8+)

By sub-sector



By size



Source: Deloitte Access Economics, ACNC

n = 31,562 – data quality 8 and excluding null values. Excludes group data. Note limited data on liabilities may distort ratio for smaller entities.

4.5.6 Revenue source - Donations and bequests

Understanding the sustainability of funding (i.e. whether the revenue received by the charity this year can be expected at similar levels in the future) is important to help shape a charity's future strategy.

Income data examined as part of this report is categorised into three main areas – donations and bequests, government grants, and other income (including for example sales made by the charity). Dependence on any one source is not in itself an issue – though should be reflective of the charity's strategy.

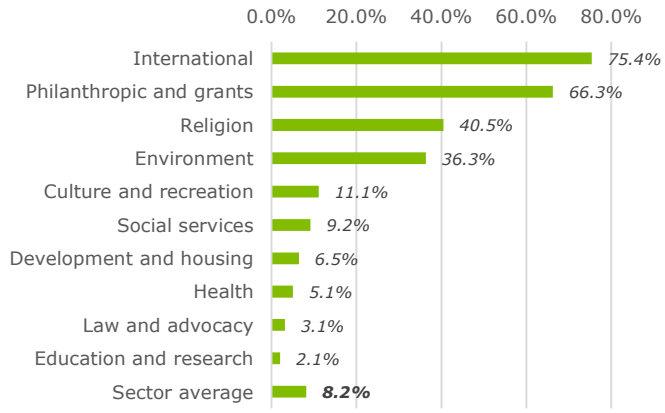
An estimated 8.2% of income comes from donations and bequests, a relatively small amount. Charities differ substantially in their reliance on grants and donations as a source of funding. 75.4% of income for charities operating mainly in the International sphere are from donations; contrasted with 2% for those in Education and research. When Education and research is broken down further by size, XXL entities, which are mainly universities, have an even lower proportion of donation/bequest funding, averaging 1%.

By size, smaller charities tend to be more reliant on donations and grants (around 40% of income), while larger organisations are less so (e.g. 5% for XXL charities). With regards to larger

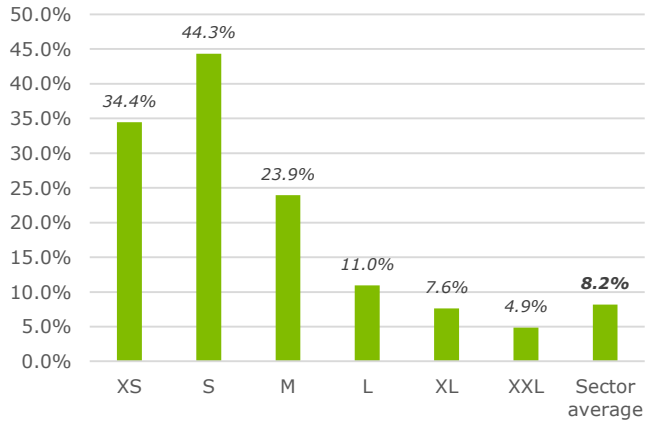
entities- this lower ratio may be skewed by differences in data reporting requirements; for example a number of large religious organisations do not record any data on donations and bequests.

Chart 4.6 : Income source – Donations and bequests, 2014-15 (Data quality = 8+)

By sub-sector



By size



Source: Deloitte Access Economics

n = 38,714 – data quality 8 and excluding null values. Note limited data on liabilities may distort ratio for smaller entities. Excludes group data.

4.5.7 Revenue source – Government grants

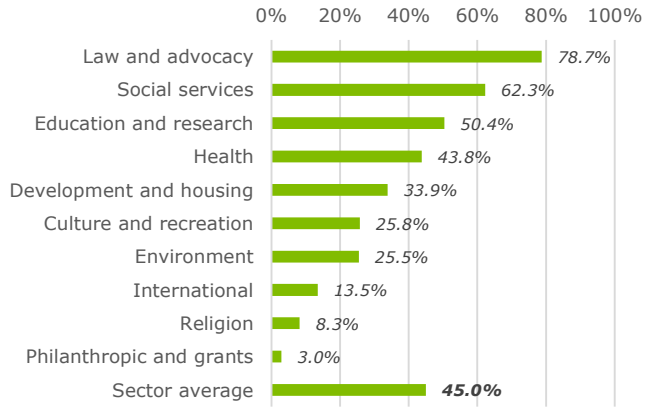
The pattern of revenue for charities dependent on government grants is broadly opposite to that of the donations snapshot above.

Some 45% of charity income is estimated to come from government grants, and grants are significantly higher sector-wide than donations and bequests. By sub-sector, government grants as a proportion of revenue are highest for Education and research. Conversely, only 8% of revenue for charities in the Religious and Philanthropic and grant making sub-sectors is from government.

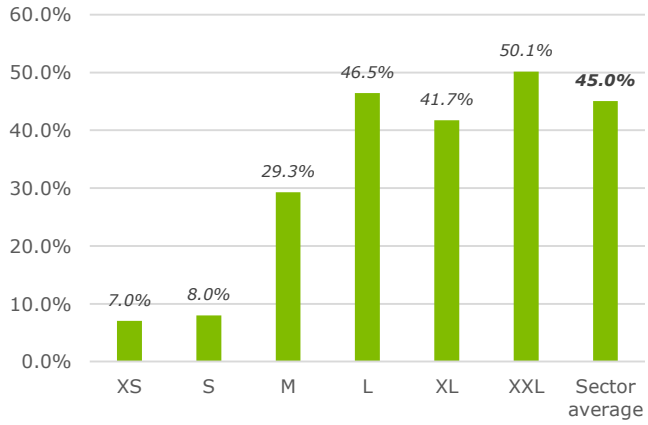
By size, larger charities tend to obtain a higher proportion of government funding.

Chart 4.7 : Income source – Grants and Donations, 2014-15 (Data quality = 8+)

By sub-sector



By size



Source: Deloitte Access Economics

n = 38,714 – data quality 8 and excluding null values. Note limited data on liabilities may distort ratio for smaller entities. Excludes group data.

5 Economic outlook

This section discusses trends in some key socioeconomic factors that have implications for the outlook of the charity sector.

In this component of the analysis, Deloitte Access Economics considers the current and future context in which Australia's charity sector operates. It matches the industry profiling, to the key economic and demographic parameters that may affect the demand for charity services.

Unfortunately, there is not yet a deep enough time series of charity sector data to allow detailed econometric testing of linkages between the health of the charity sector and the broader economy. However, as the richness of the AIS database grows over time, this type of analysis will become an option. In the meantime, this analysis provides a more qualitative assessment of future trends and directions that may influence the industry.

Guiding the outlook is the macroeconomic historical performance and forecasts from Deloitte Access Economics', *Business Outlook*, a quarterly publication analysing the prospects of core industries in each of Australia's States and Territories. The publication provides facts, figures and forecasts on key Australian macroeconomic indicators such as growth, interest rates, wages and prices, jobs and employment.

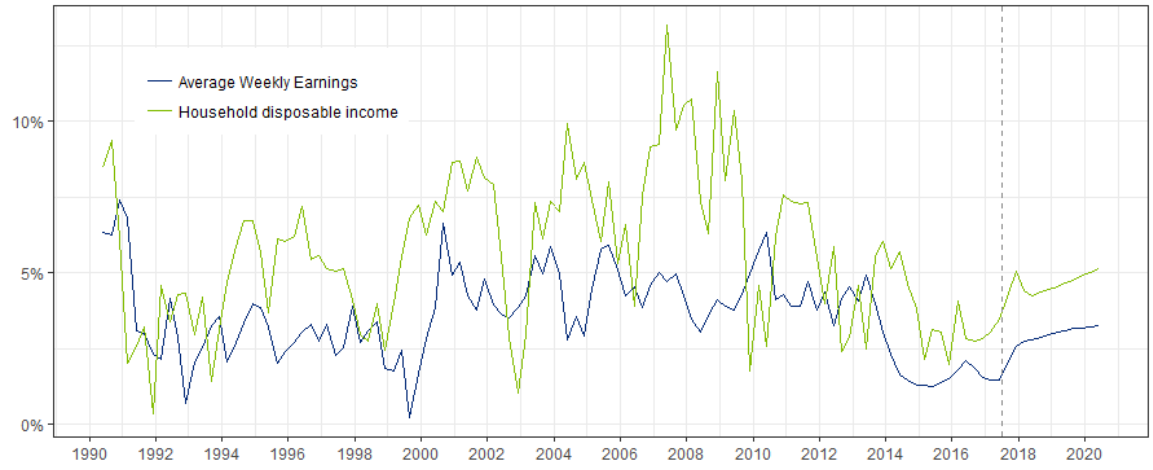
5.1 Economic trends

Household donations and government grants are the two major sources of income for charities in Australia. The most relevant macroeconomic variables in this regard are real household disposable income and public sector incomes. **Likewise, the charity sector makes a significant contribution to national employment**. Therefore, macroeconomic factors such as wage growth, labour participation and unemployment could have an impact on the ability of the industry to attract and retain a skilled workforce.

5.1.1 Household Income

Both household disposable income and average weekly earnings are expected to record a gradual turnaround from recent lows thanks to the recovery in Australian corporate profitability. Indeed, the ABS measure of company profits before income tax rose by 65% in 2016. Commodity prices play a significant role in the volatility of national income, therefore it is no surprise that the key driver behind rebounding corporate growth was mining profits. Looking forward, the resultant predicted rebound in household income is supported by the solid prospects of iron ore prices in the short term given international demand especially from China.

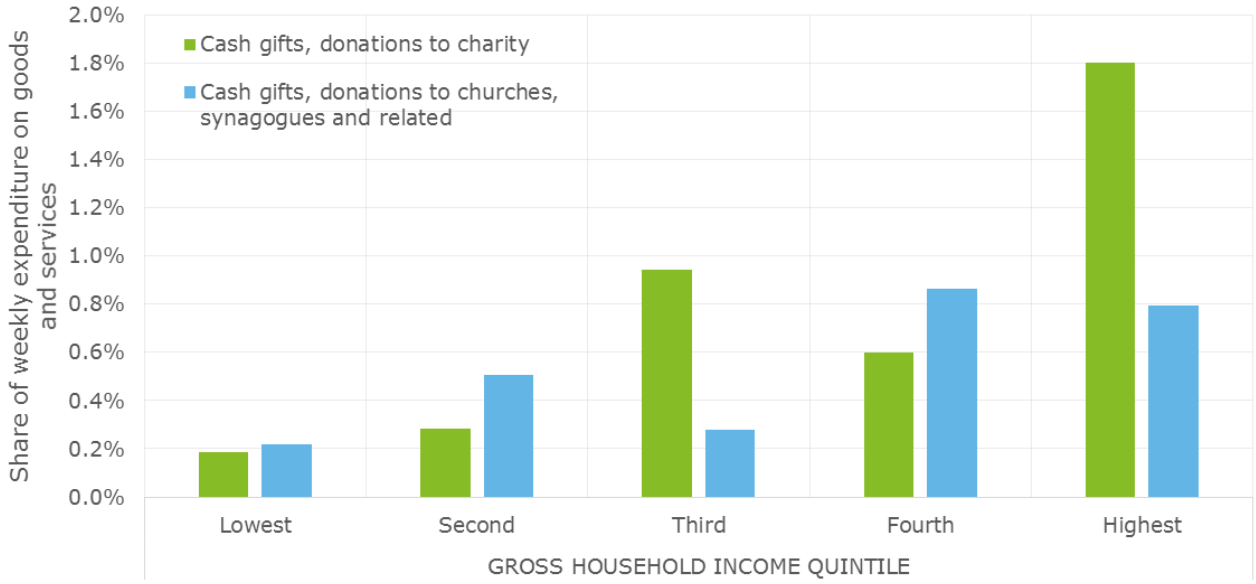
Chart 5.1 : Wages and household disposable income growth (year on year change)



Source: Deloitte Access Economics, Business Outlook, March 2017.

With rising income, the charity sector can likely expect higher donations from households. The reasoning is intuitive and evidenced by the Household Expenditure Survey (HES) conducted by the ABS. Chart 5.2 below shows household charity donations as a percentage of weekly expenditure on goods and services by gross income quintiles. It can be seen that households from higher income quintiles tend to allocate more of their expenditure to donations.

Chart 5.2 : Relationship between income and donation as a share of weekly expenditure on goods and services



Source: ABS, Household Expenditure Survey (HES), 2009-10

At a jurisdictional level, the ABS HES (2009-10) data reveals that people who live in regions with higher expenditure on goods and services, on average, are often associated with a higher share of donation to charity. Chart 5.3 below shows this relationship for all capital cities and States/Territories.

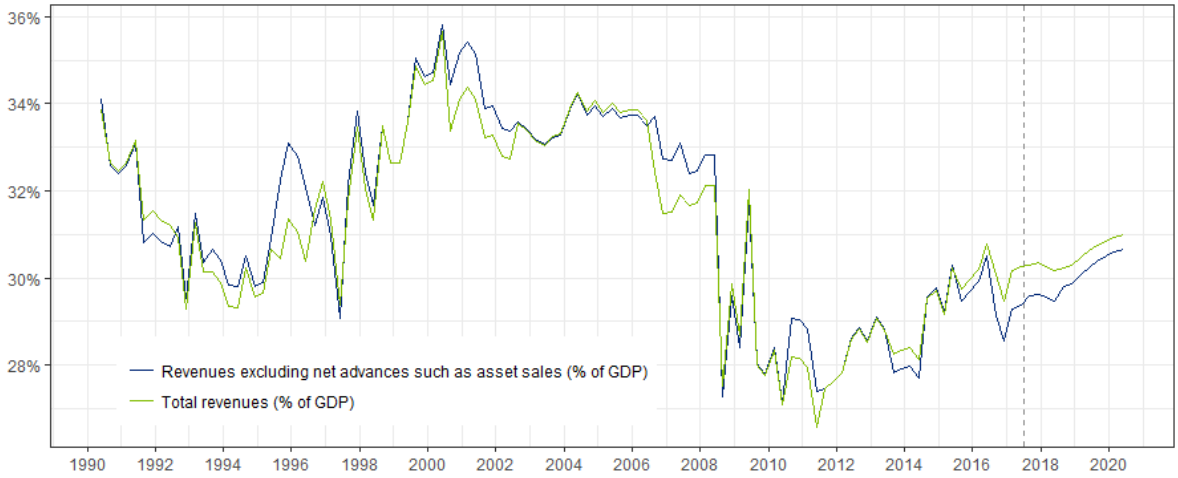
Chart 5.3 : Relationship between weekly goods and services expenditure and share of donation

Source: ABS, Household Expenditure Survey (HES), 2009-10

5.1.2 Government income

Similar to national income, **public sector income is going to benefit from the rising corporate profitability**. The Federal Budget update released late in 2016 was dominated by revised views on income as prospects for growth in profit-related tax income look positive. Chart 5.4 below shows the historical and forecasted public sector income as a share of GDP, which have been rising since the dip induced by the Global Financial Crisis (GFC).

Chart 5.4 : Total public sector income (% of GDP)

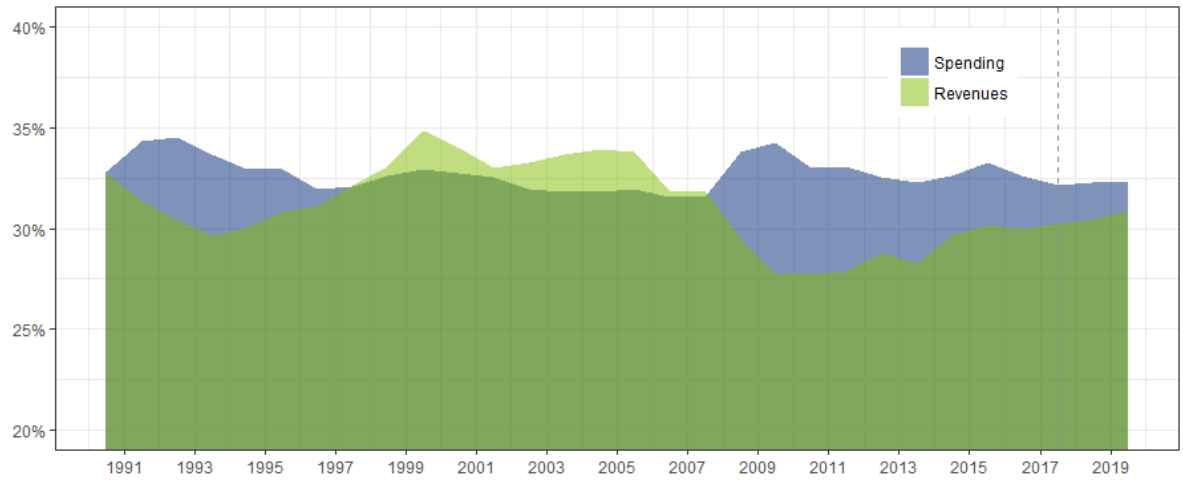


Source: Deloitte Access Economics, Business Outlook, March 2017.

However, it should be noted that **the Government has been struggling to balance its spending with income** since the GFC. Volatility in the Federal Budget is largely driven by tax take, where the impact from the resource sector (i.e. China) is paramount. Chart 5.5 below shows

the relative share of public sector spending and income since 1990, it is forecasted that the gap between the two will narrow thanks to the favourable movement in commodity prices.

Chart 5.5 : Total public sector spending and income (% of GDP)

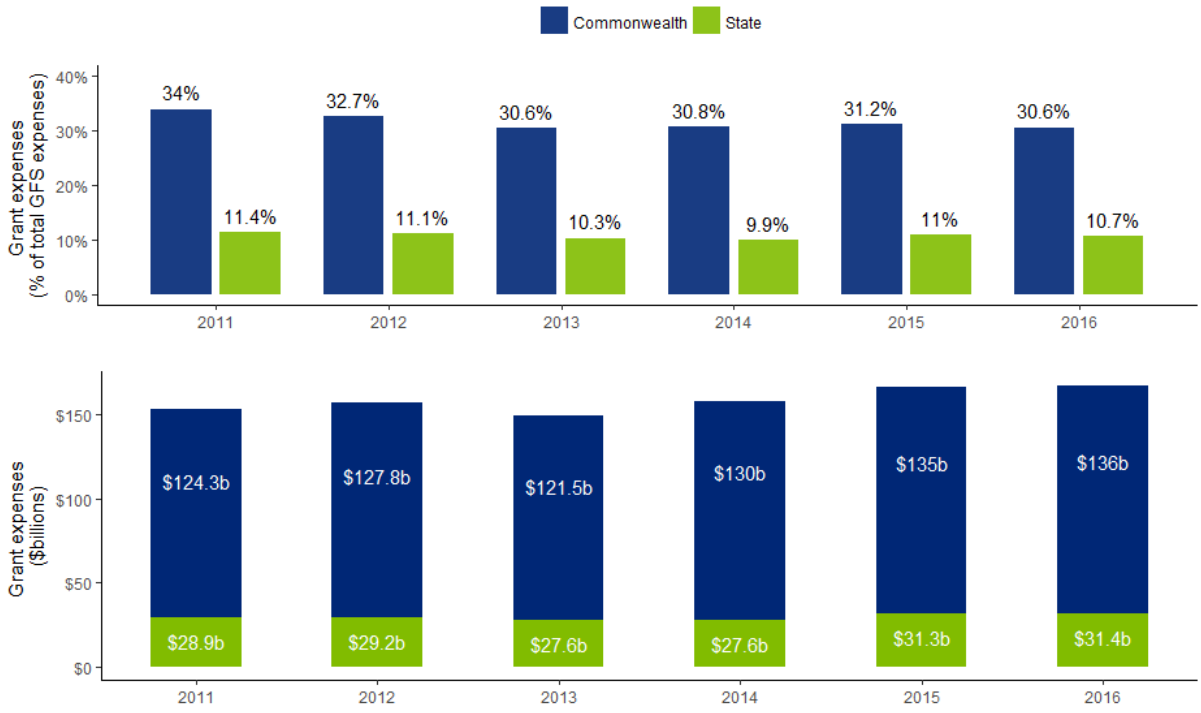


Source: Deloitte Access Economics, Business Outlook, March 2017.

That said, **the relationship between a budget surplus and grants to charity is less obvious**. In particular, State governments' contribution to charities as a result from the boost in public sector income will be constrained by their commitments to the existing and upcoming mega projects (e.g. Western Sydney Airport, Melbourne Metro Rail etc.).

ACNC data shows that **government grants are a key source of income for Australia's charities**, especially in sub-sectors where charities are contracted to provide government services (e.g. education, health, law and advocacy etc.). Chart 5.6 below shows the historical grant expenses for the public sector in Australia, where the second chart shows the dollar value and the first shows the share of total Government Finance Statistics (GFS) expenses reported by the ABS.

Chart 5.6 : Historical public sector grant expenses



Source: ABS, Government Finance Statistics, 2011-16

It is notable that, over the past six years, the total dollar amount of grant expenses[20] has increased gradually while its share of total expenses has declined slightly. Thus, while the outlook on public income looks positive, **government grants as a share of charity sector gross income may yet be squeezed, at least in the near term**.

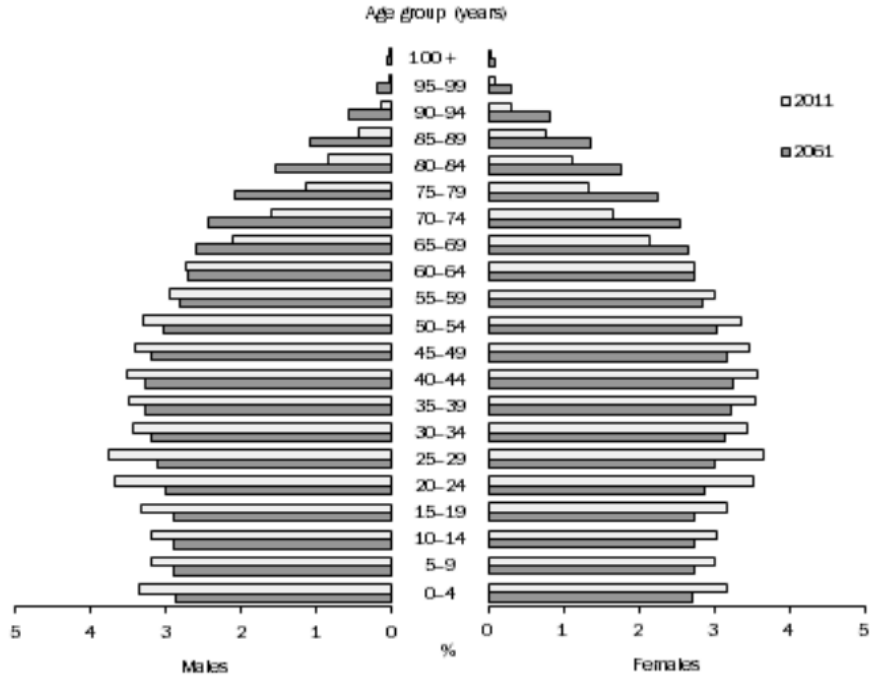
5.1.3 Population

The outlook for population in Australia is important for the charity sector as it **influences not only economic growth, but also the type of charity services that will be demanded**. Treasury (2015) has projected that Australians will live longer and continue to have one of the longest life expectancies in the world. Life expectancy at birth is projected to be 95.1 years for men and 96.6 years for women. This would result in around 40,000 people aged over 100 in 2054-55.

Chart 5.7 compares the Australian population profile in 2011 with the projected population in 50 years by the ABS. It can been seen that the growth in working age population falls far behind growth in the elder age cohorts (age above 60).

[20] Grant expenses includes capital and current transfers.

Chart 5.7 : ABS projection of population demographics in 2061 compared with 2011



Source: ABS, Population Projections, Australia 2012 to 2101

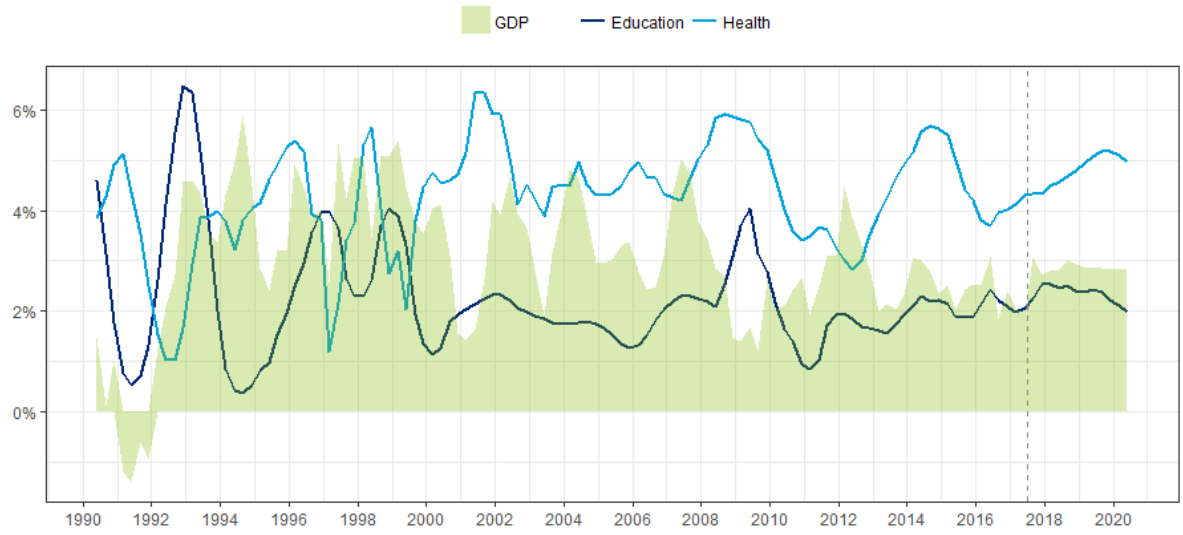
The Treasury (2015) has further projected that a greater proportion of the population will be aged 65 and over. The number of Australians in this age group is projected to more than double by 2054-55 compared with today. The **ageing population has important implications for the demand for health and aged care services and retirement incomes**. It may mean, for example:

- There are large increases in demand for charitable services in the health and social services sector
- If people feel they need to save more because they expect to live longer, this could reduce their contributions to charity

5.1.4 Relevant Sectors

Education and health are the top two charity sub-sectors in terms of contribution to the Australian economy. The economic outlook for the two sectors is thus highly relevant here. Interestingly, the growth from the two sectors are roughly correlated since the turn of the decade. Chart 5.8 below shows the historical year-on-year growth of the education and health sectors, along with the green area to demonstrate the GDP growth rate in the same period. Note that the education and health sectors as represented in the chart include both registered charities and for-profit institutions.

Chart 5.8 : Education and Health growth (change on year earlier)



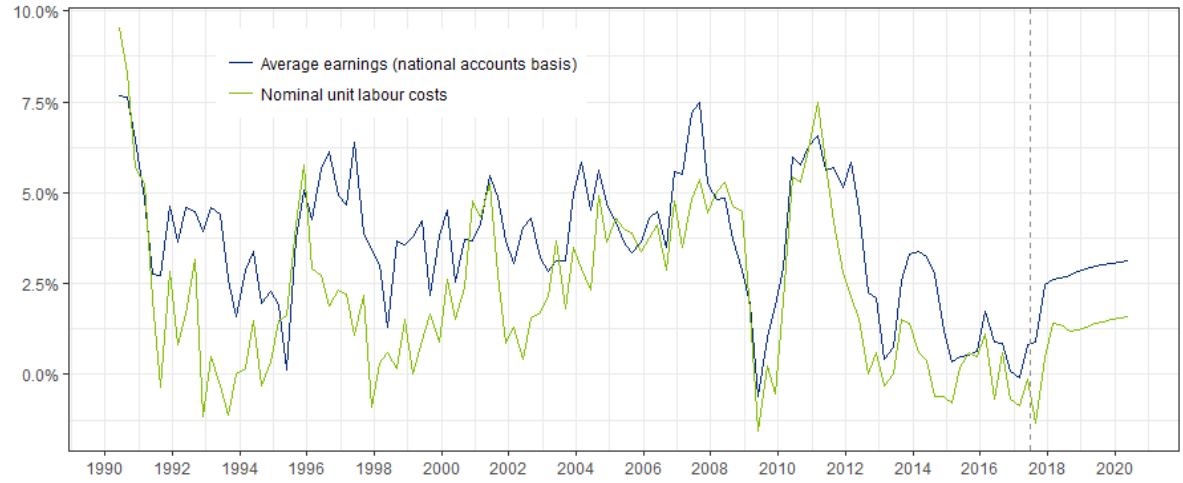
Source: Deloitte Access Economics, Business Outlook, March 2017.

It can be seen that both sectors are expecting continued and solid growth, with around a 2% per annum growth rate for education and around 5% per annum for health. Growth for both sectors is led fundamentally by population growth, however the context of this driver differs for the two sectors**. For education, the outlook is for solid growth among "student age" population, including immigrants and international students; while the ageing demographic will continue to strain demand for health sector services**. The slight tempering of the growth rate of the education sector is forecasted as a result of subsiding international demand as the impact of a low Australian dollar fades as a driver of growth.

5.1.5 Labour market

The charity sector employs over 1.3 million staff and nearly 5 million volunteers. The economic outlook for the labour market is highly relevant given the **cost of labour has a significant share in the operating cost for charities** according to the ACNC data. Chart 5.9 below shows that nominal unit labour costs are yet to recover from historical downturns. **Labour cost will remain stable in the short run, but increase at a faster rate in the medium to long run. This may place strain on charity sector budgets**.

Chart 5.9 : Wages and labour costs growth (change on year earlier)

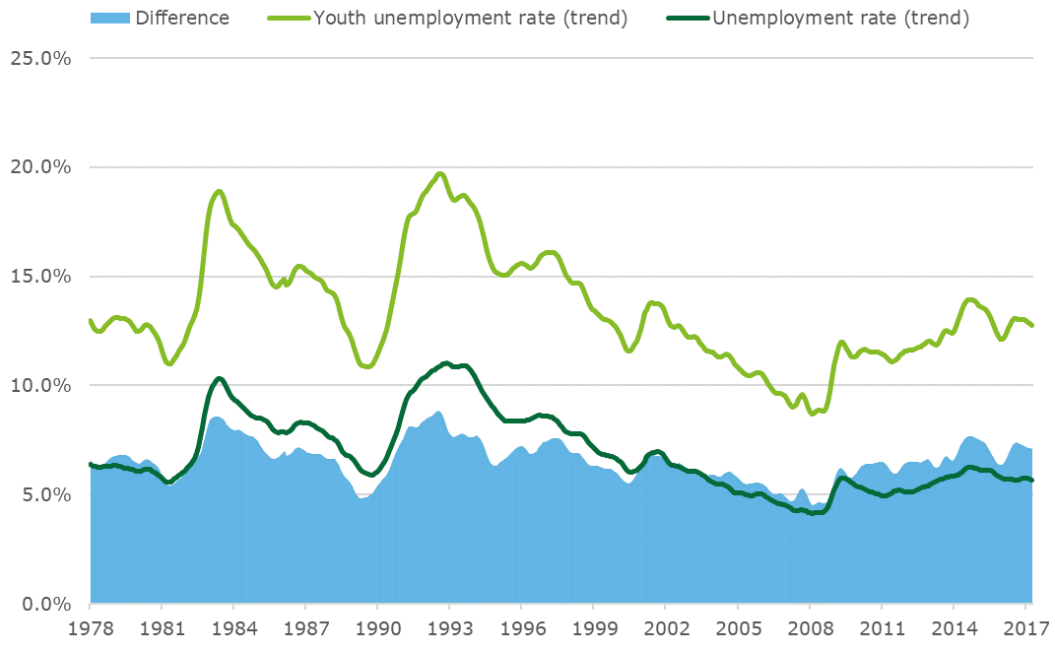


Source: Deloitte Access Economics, Business Outlook, March 2017.

Labour supply and employment are also expected to grow slowly in the short term, with **employment and labour supply advancing at around 1% per annum over the next three years**. Although income is not a direct driver of job gains in the same way production is, the expected lift in national income will bring improvement to current conditions.

That said, labour statistics from the ABS (2017) show that the **gap between unemployment and youth unemployment has been growing gradually over the past decade**. This is shown in Chart 5.10 below. The likely continuation of this trend will increase demand for employment and social services, meaning either Government welfare or job services will need to expand and/or the charity sector will need to further support youth service demand.

Chart 5.10 : Historical trend for Unemployment rate and Youth Unemployment Rate

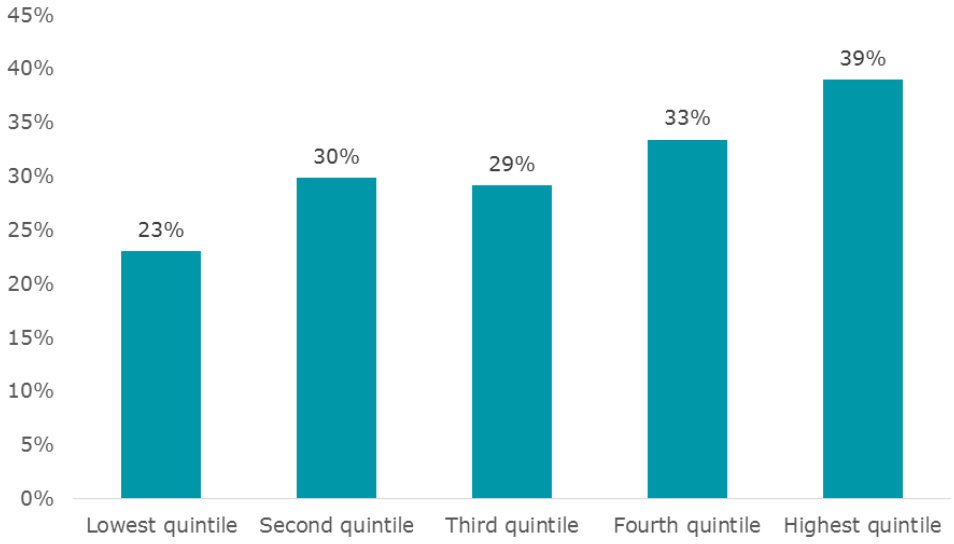


Source: ABS, Labour force survey, May 2017

Contribution of volunteers

ACNC data reveals that 84% of Australia's charities engage volunteers and 49.2% are operated by volunteers only. The supply of volunteering activities is much more difficult to forecast given the lack of a consistently recorded time series data. The most relevant statistics are sourced from the General Social Survey (GSS) conducted by the ABS in 2014. Based on the GSS data, Chart 5.11 below shows the percentage of people volunteering by household income quintiles.

Chart 5.11 : Volunteered rate by gross household income quintiles

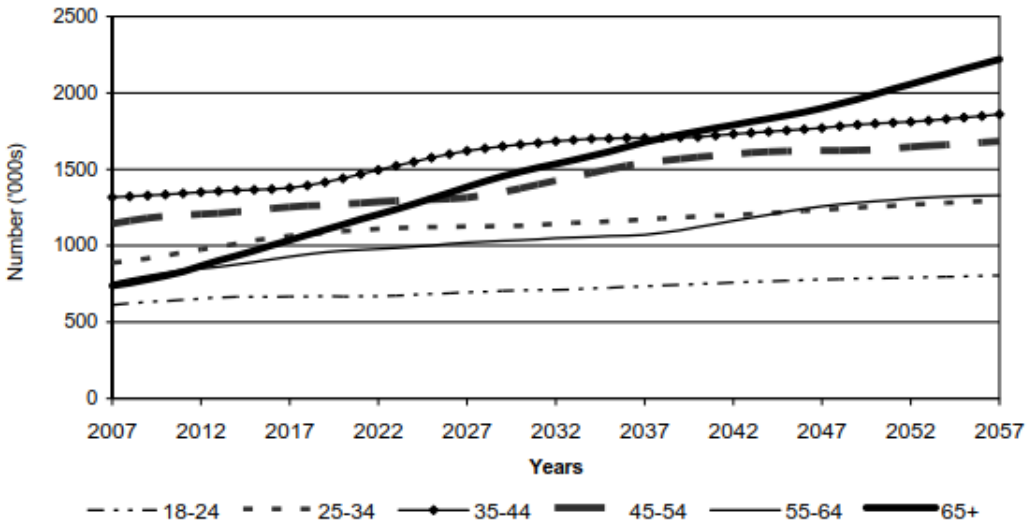


Source: ABS, General Social Survey, 2014

It can be seen that the volunteering rate increases with income. Economic theory suggests that as income rises, people become motivated to pursue other forms of self-actualisation (i.e. there are diminishing returns on the marginal utility ('or induced happiness') from income). Consequently, wealthy people are more likely to devote their time to social activities such as volunteering, and often have the time to do so.

As the growing economy is expected to stimulate both the capital and labour supply to the charity sector, the challenge would be for the sector to accommodate the evolving demographics and desires of the new generation of volunteers. The Productivity Commission (PC) has estimated that population ageing is going to increase volunteering as older volunteers typically contribute more hours, but it will also impact the skillset and productivity levels of the volunteer workforce. The projected number of volunteers working for organisations from PC's report (2010) is extracted in the chart below.

Chart 5.12 : PC projected number of volunteers working for organisations, 2007 to 2057



Source: Productivity Commission (PC), Contribution of the Not-for-Profit Sector, 2010, Figure 10.2

Besides financial challenges to charity sector labour supply, the changing demographics also requires the sector to accommodate the changing desires of its workforce in order to access the growing labour resources.

5.2 Social context

Social context is of particular interest for the charity sector given demand for services is driven by levels of disadvantage for many of the charity sub-sectors. **The most relevant statistics on the national level are the proportion of population receiving welfare assistance and the distribution of household income**. Other things that are influential to demand for charity services include incarceration rates; homelessness; unemployment; incidences of domestic violence; health measures such as prevalence of overweight or obese individuals, disability rates, and suicide rates; and other geographic and cultural factors (such as inherent disadvantages of living remotely or those relating to the Aboriginal and Torres Strait Islander community).

Chart 5.13 : High level relationship between charity sub-sectors and various measures of social disadvantage

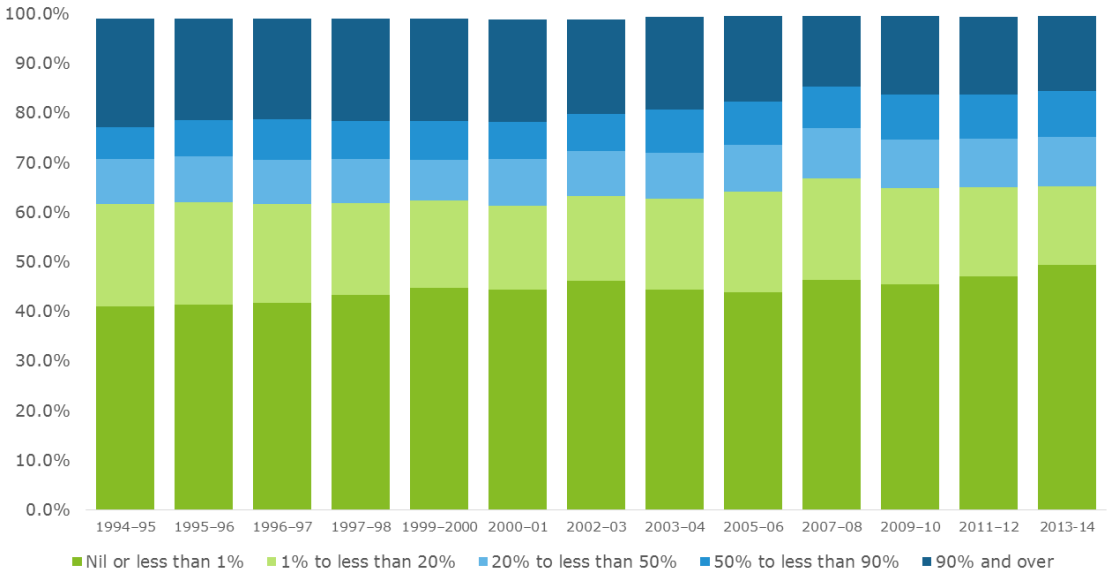
Sub-sector	Welfare	Income disparity	Health	Incarceration rates	Homelessness	Unemployment	Incidences of domestic violence
Culture and recreation	✓		✓		✓		
Development and housing	✓	✓		✓	✓	✓	✓
Education and research	✓	✓	✓	✓	✓	✓	
Environment			✓				
Health	✓	✓	✓		✓		✓
Law and advocacy	✓	✓	✓	✓	✓	✓	✓
Philanthropic and grant-making activities	✓	✓	✓		✓	✓	✓
Religion	✓	✓	✓	✓	✓	✓	✓
Social services	✓	✓	✓	✓	✓	✓	✓
Other/unknown							
International	✓		✓		✓		

Source: Deloitte Access Economics

5.2.1 Welfare

Chart 5.14 below shows that between 1994-95 and 2013-14, the proportion of households receiving zero or less than 1% of their income from government payments rose from about 41% to 49%. Meanwhile, the overall number of Australians who rely on government benefits as their main source (greater than 50%) of income has gone down from above 30% in the early-1990s to just below 25% in 2013-14. **Combined, these indicate that the proportion of Australian households receiving government payments are shrinking.**

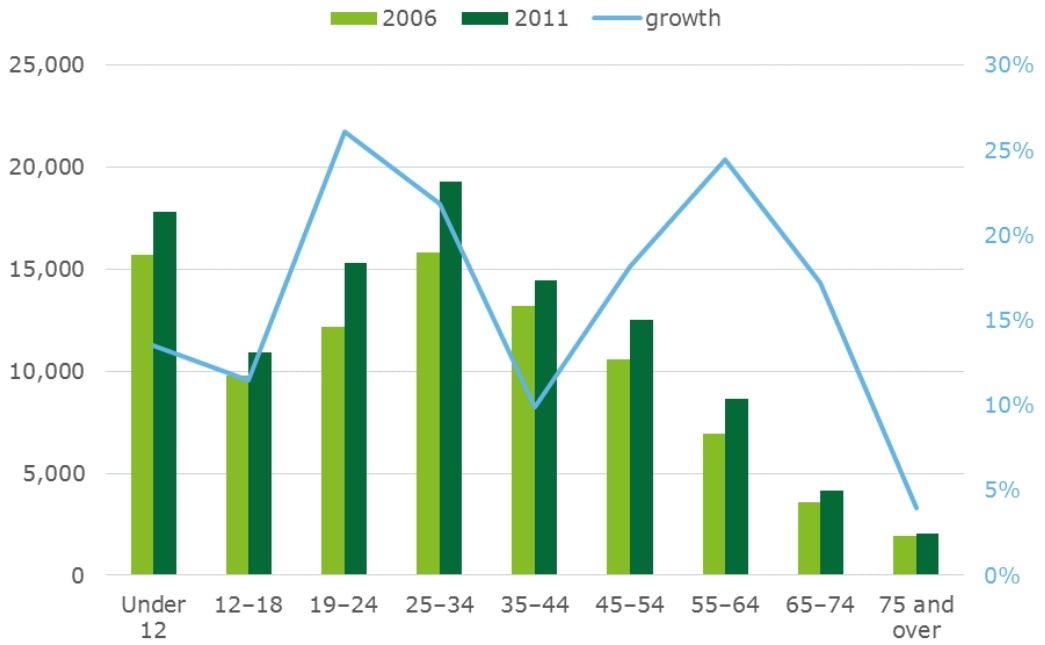
Chart 5.14 : Proportion of household receiving x% of their income from government payments overtime



Source: ABS, Household Income and Income Distribution, 2013-14, Table 1.4

On the other hand, the **number of homeless people increased between 2006 and 2011** (the ABS is yet to release the latest 2016 census data, but it is expected to show an increase). The homeless rate per 10,000 of the population has also increased from 45.2 to 48.9. Chart 5.15 shows that the growth in **homelessness is particularly prominent among the young and senior working age population** (19-24 & 45-64).

Chart 5.15 : Number of homeless people in census 2006 vs 2011

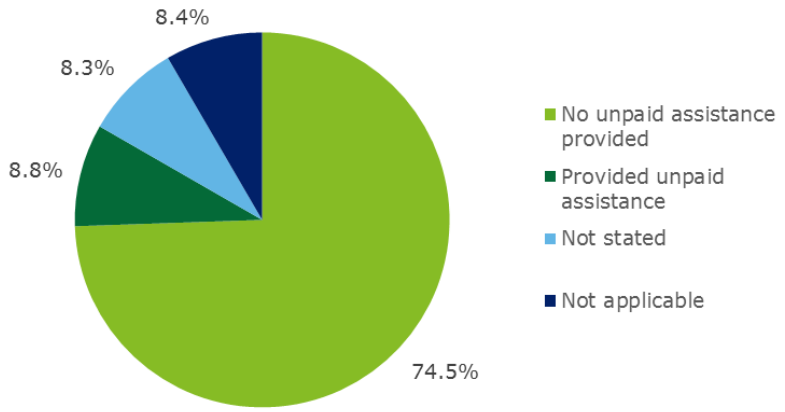


Source: ABS census 2011

5.2.2 Health

The charity sector is a major source for unpaid assistance to people in need. According to the 2011 census data from the ABS, around 5% of the Australia population (i.e. around 1 million people) stated that they had a need for assistance with core activities. However, more than 70% of these people reported that they had not received unpaid assistance.

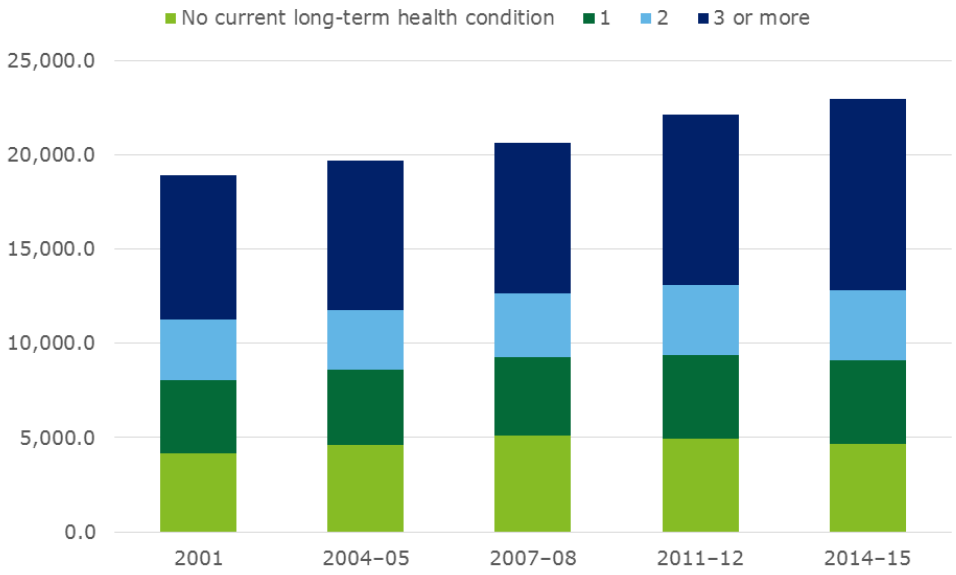
Chart 5.16 : Percentage of disadvantaged people (has need for assistance with core activities) receiving unpaid assistance



Source: ABS census 2011

The shortage of unpaid services reflects the continued challenge for the charity sector to attract capital and labour to provide these services. Chart 5.17 shows that the number of people with long-term health conditions has also been increasing, and there is no reason to expect that this will not continue. **The most rapid growth has been in the number of people experiencing three or more health conditions.**

Chart 5.17 : Number of people with long-term health conditions



Source: ABS, National Health Survey 2014–15, Table 1.1

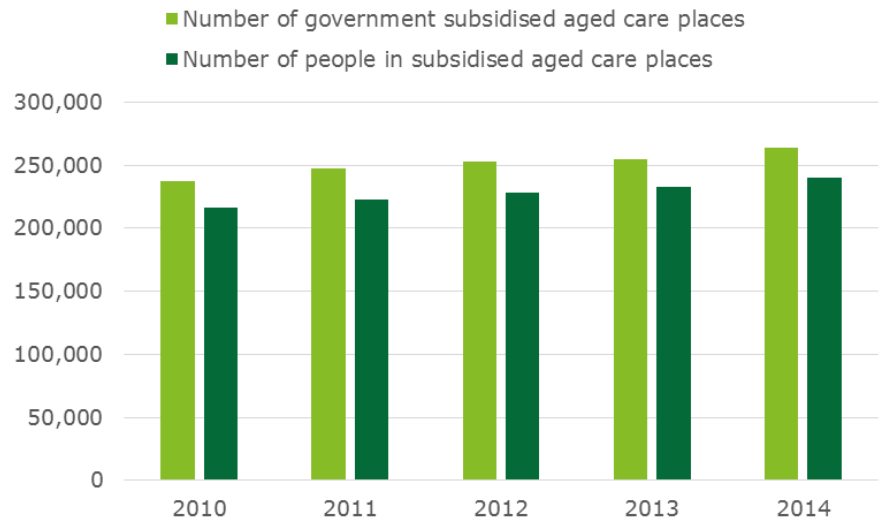
Apart from people who need assistance with core ability, the disability prevalence rate in **Australia has remained relatively stable since 2009,** with 18.3% of people reporting disability

in 2015, 18.5% in 2012 and 2009 (ABS, 2015). The need for voluntary assistance is expected to increase further as population grows.

5.2.3 Population ageing

The ageing of the population is set to significantly increase demand for aged care, disability and community health services over coming decades. This is evidenced by the increase in the number of places/people in government subsidised aged care services as reported by Department of Social Services (2014).

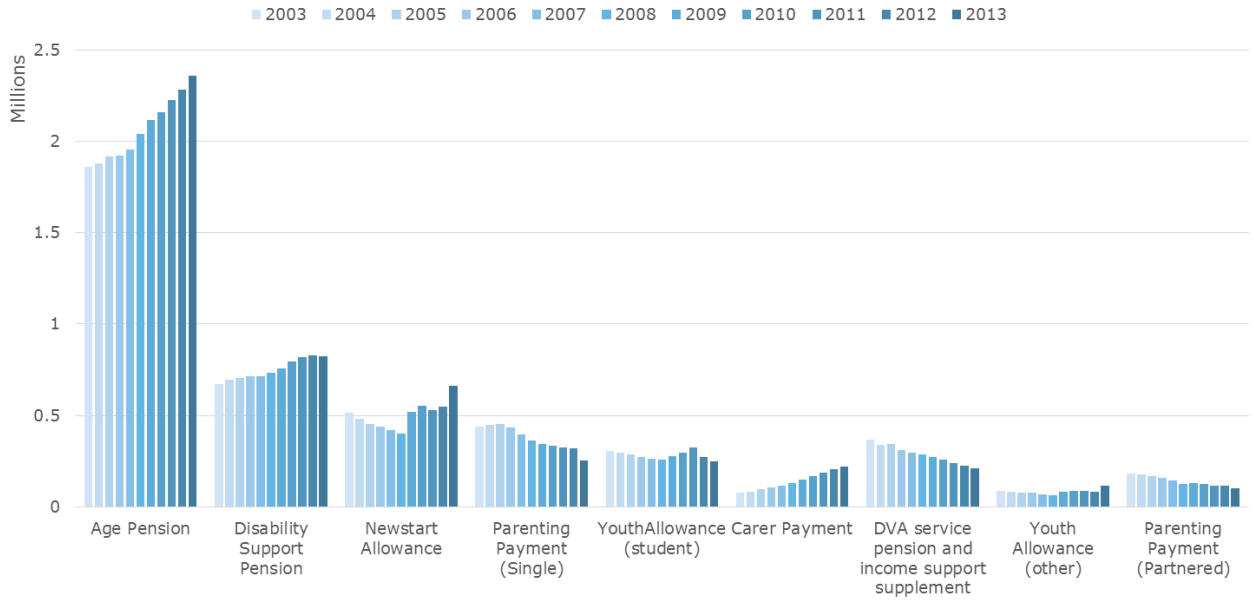
Chart 5.18 : Number of places and people in government subsidised aged care services



Source: Department of Social Services, Concise Facts & Figures in Aged Care 2013-14, Table 1.4 & 2.1

Population ageing also has a significant impact on the number of recipients of the age pension. Chart 5.19 below shows the breakdown of the number of historical income support recipients by payment type published by the Department of Social Services in 2013. **Over the decade to 2013, the number of age pension recipients increased by about 30%.** This trend is likely to continue into the future, possibly leading the government to tighten their outlay on other types of income support payments. If this occurs there will be an important role for the charity sector to bridge the gap.

Chart 5.19 : Breakdown of income support recipients by payment type, 2003 to 2013



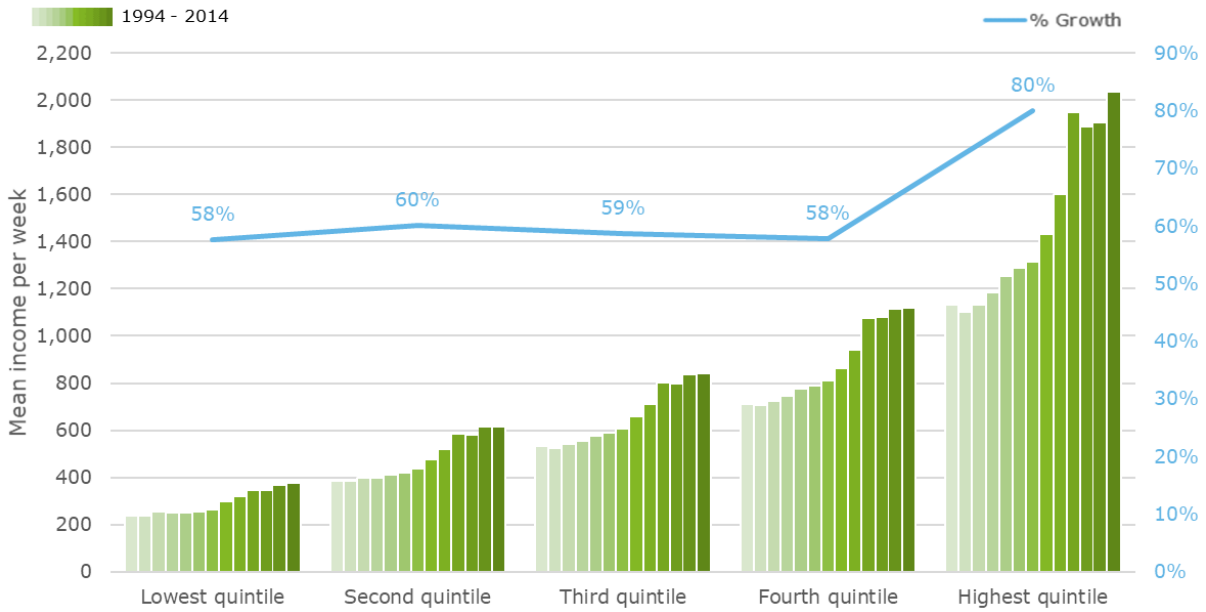
Source: Department of Social Services (DSS), Income support customers: a statistical overview 2013, Table 1

5.2.4 Income distribution

Income disparity is another measure of social disadvantage and where this disparity is high there may be greater demand for charitable services. Chart 5.20 below shows the average (real) household income per week by quintiles from 1994 to 2014 as collected by the ABS. The green bars represent the real equivalised[21] average household disposable income over year, with darker columns representing more recent years. The blue line on the secondary y-axis shows the total percentage increase over the twelve year period. **It can be seen that, the growth in household income for the highest quintile had been significantly higher than the four lower quintiles. Consequently, the gap between the rich and poor has widened over the decade.**

[21] Equivalisation was applied by the ABS to adjust for different household sizes. Equivalised household income is total household income adjusted by the application of an equivalence scale to facilitate comparison of income levels between households of differing size and composition, reflecting the requirement of a larger household to have a higher level of income to achieve the same standard of living as a smaller household.

Chart 5.20 : Equivalised average household disposable income per week by income quintiles, real $2013/14, 1994-2014



Source: ABS, Household Income and Income Distribution, 2013-14, Table 1.1

The observed trend in income distribution is consistent with the widely quoted study from Atkinson and Leigh (2006), which reported that the proportion of income received by the top 1, 0.5 and 0.1 percent of income earners in Australia has increased significantly since 1980s. The authors suggest that the change in the trend may be caused by a number of factors: higher executive pay caused by the internationalisation of the chief executive market; the reduction in top income tax rates in the 1980s and 1990s; skill-biased technological change; and changes in societal norms relating to inequality (Treasury, 2013).

As illustrated above, the past decade has witnessed a divergence of average incomes between the upper and lower quintiles households – with high income households experiencing strongest gains in both absolute and percentage terms. Tax incentives to make charitable donations are also strongest for high income households, where donations can be offset against their higher taxes paid. As a result of this income growth, there could be a higher propensity of donation/volunteering by people from high income households.

That said, real income growth across all quintiles, including lower income households, over past years may suggest an increased propensity for donations across the board as a result.

References

Atkinson, AB & Leigh, A, (2006, updated 2011), *The Distribution of Top Incomes in Australia*, ANU Centre for Economic Policy Research Discussion Paper No. 514, Canberra.

Andreoni, J (1990) Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving. *The Economic Journal,* Volume 100, Issue 401 (June 1990), pp 464-477. Accessed online at http://econweb.ucsd.edu/~jandreon/Publications/ej90.pdf

Australia Department of Social Services (2014), *Concise Facts & Figures in Aged Care.*

Australian Bureau of Statistics (2009-10), *Household Expenditure Survey, 2009-10.*

Australian Bureau of Statistics (2010-14), *Government Finance Statistics, 2010-2014.*

Australian Bureau of Statistics (2011-12), *Household Income and Income Distribution, 2011-12.*

Australian Bureau of Statistics (2012-13), *Australian National Accounts: Non-Profit Institutions Satellite Account* 2012-13.

Australian Bureau of Statistics (2013-14), *Australian National Accounts: Input-Output Tables, 2013-14.*

Australian Bureau of Statistics (2014), *General Social Survey: Summary Results, Australia, 2014.*

Australian Bureau of Statistics (2015), *Australian System of National Accounts: Concepts, Sources and Methods, Australia, 2015.*

Australian Bureau of Statistics (2015), *National Health Survey, 2001 to 2014-15.*

Australian Bureau of Statistics (2016), *Australian Industry, 2014-15.*

Australian Charities and Not-for-profits Commission (2017), 'What is a charitable purpose?' retrieved from https://www.acnc.gov.au/ACNC/Register_my_charity/Who_can_register/What_char_purp/ACNC/Reg/What_char_purpose.aspx

Australian Department of Social Services (2013), *Income Support Customers: A Statistical Overview.*

Australia Department of Social Services (2014), *Concise Facts & Figures in Aged Care.*

Australian Government Productivity Commission (2010), *Contribution of the Not-for-profit sector*, research report.

Australian Institute of Company Directors (2016), *NFP Governance and Performance Study*.

Australian Research Alliance for Children and Youth (2009), *Measuring the outcomes of community organisations*.

Australian Taxation Office (2013), *Benchmarks by industry.*

Carson, R., Flores, N.E. and Meades, N.F. (2001). Contingent Valuation: Controversies and Evidence. *Environmental and Resource Economics 19*(2): 173–210.

Commonwealth Treasury (2010), *Australia to 2050: future challenges*.

Commonwealth Treasury (2013), *Income Inequality in Australia*, Economic Roundup Issus 2.

Community Services Industry Alliance (2015), *The State of Queensland Charities*.

Cortis, N., Young, A., Powell, A. Reeve, R., Simnett, R., Ho, K., and Ramia, I. (2016) Australian Charities Report 2015. Centre for Social Impact and Social Policy Research Centre, UNSW Australia

Deloitte Access Economics (2010), *Telehealth for aged care.*

Deloitte Access Economics (2014), *Economic and social value of UnitingCare Queensland*, prepared for UnitingCare Queensland.

Deloitte Access Economics (2016), *Forecasting the future: Community Services in Queensland 2025*, prepared for Community Services Industry Alliance and the Department of Communities, Child Safety and Disability Services.

Deloitte Access Economics (2017), *Business outlook March 2017.*

Deloitte, *Responsible Business*, May 2015.

Fehr, E and Schmidt, K (2003) Theories of Fairness and Reciprocity – Evidence and Economic Applications. *Advances in Economics and Econometrics, Econometric Society Monographs,* Eight World Congress, Volume 1, PP 208 – 257. Accessed online at http://web.mit.edu/14.193/www/WorldCongress-IEW-Version6Oct03.pdf

Flinders University (2014) Volunteering worth $290 billion a year. Accessed online at http://news.flinders.edu.au/blog/2014/10/31/volunteering-worth-290-billion-a-year/

Frey, B and Oberholzer-Gee (1997) The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding-Out. The *American Economic Review*, Vol 87, No. 4 (Sep 1997), pp 746-755. Accessed online at https://www.jstor.org/stable/2951373

Frey, B.S. (1997). Evaluating Cultural Property: The Economic Approach. *International Journal of Cultural Property* 6(2): 231–246.

Ironmonger, D (2012) The Economic Value of Volunteering in Victoria. *Department of Planning and Community Development,* December 2012. Accessed online at https://www.volunteeringaustralia.org/wp-content/uploads/The-Economic-Value-of-Volunteering-in-Victoria.pdf

Productivity Commission (2010), *Contribution of the not-for-Profit Sector*.

Ross (1994) How to Estimate the Economic Contribution of Volunteer Work. *Department of Canadian Heritage.* Accessed online at http://en.copian.ca/library/research/heritage/compartne/pdfdocs/estvole.pdf

Smith, V (2010) Enhancing employability: Human, cultural and social capital in an era of turbulent unpredictability. Accessed online at http://journals.sagepub.com/doi/abs/10.1177/0018726709353639?journalCode=huma

TD Economics (2014), *The Impact of Volunteerism and Charitable Giving*, retrieved from https://www.td.com/document/PDF/economics/special/CharityVolunteering.pdf

Treasury (2010), *Australia to 2050: future challenges*.

Treasury (2013), *Income Inequality in Australia*, Economic Roundup Issus 2.

Treasury (2015), *Intergenerational Report Australia in 2055.*

UK Civil Society Almanac (2017), 'Volunteering Overview', retrieved from https://data.ncvo.org.uk/a/almanac17/volunteering-overview/

Volunteering Australia (2015) Key statistics about Australian volunteering. Accessed online at https://www.volunteeringaustralia.org/wp-content/uploads/VA-Key-statistics-about-Australian-volunteering-16-April-2015.pdf

Volunteering WA and The Institute of Project Management (2015) The Economic, Social and Cultural value of volunteering to WA. Accessed online at https://volunteeringwa.org.au/assets/downloads/vwa_report%20book_web.pdf

Western Australia Council of Social Service (2017), *WA's Not-for-profit Sector 2017,* prepared jointly with Curtin University.

XE.com (2017) Currency converter (AUD to USD) http://www.xe.com/currencyconverter/convert/?From=USD&To=AUD

Appendix A Data cleansing

This section investigates the registered charity database and summarises the detailed database cleansing and analysis process undertaken in this report.

A.1. Exclusions and sensitivities

The ACNC has advised that the dataset is not exhaustive and some charities are not required to provide financial information. However, as discussed in *The Australian Charities Report 2015* (refer to Section 2.1.1) and through discussions with ACNC staff, these organisations are estimated to make up only a small portion of the economic value of the charity sector. Further, while there may be some information missing from the ACNC's raw dataset, Deloitte Access Economics has used an estimation method to construct a full dataset from the existing records.

Exclusions in the current dataset include:

- Basic Religious Charities (BRC) which are charities whose only subtype is advancing religion and are unincorporated.[22] They are not required to provide any financial information and/or financial reports regardless of size.
- Charities that are regulated by the Office of Registrar of Indigenous Corporations (ORIC) are not required to submit an AIS or financial reports to the ACNC. They submit directly with ORIC. There is no current data available on charities registered with ORIC unless they have voluntarily submitted an AIS.
- Non-government schools (NGS) are not required to provide financial reports. Financial information within the AIS is provided by the Department of Education and Training (DET) via the submission of a financial questionnaire that NGS lodge directly with DET. DET may not have previously requested schools to provide information for balance sheet items.
- Charities that are sub-entity Public Benevolent Institution (PBI) or Health Promotion Charities (HPC).
- Charities that are Trustee companies that usually provide zero in financials.

There are also other sensitivities in the existing dataset which may affect the analysis. These sensitivities include:

- Two or more registered charities can request to report as a group – where this is approved, the group will only need to submit one single AIS and one consolidated financial report. The data analysed is at the group level.
- The ACNC allows for charities to maintain their previous charity size for a year if they experienced an unusual event (e.g. a bequest which may push them to another charity size level). If the request is approved, the charity will be allowed to maintain the smaller size and not comply with the reporting requirements at the higher level.

Deloitte Access Economics acknowledges these exclusions and sensitivities. That said, the AIS databases (individuals and groups) were used as the primary sources of information for the sector, while *The Australian Charities Report 2015* was used to check high level results. These exclusions result in contribution estimates which may be viewed as 'conservative'.

A.2. Data cleansing

The dataset is based on self-reported entries, thus there is potential for human or reporting errors to be present in the quantitative data. Indeed *The Australian Charities Report 2015* highlights a

[22] For the list of criteria required for a registered charity to be recognised as a BRC, see: http://www.acnc.gov.au/ACNC/Manage/ManageType/Basic_rel_ent/ACNC/Edu/Basic_rel_char.aspx

number of areas where there are data gaps or inconsistencies. In order to manage data quality, 10 checks were used for the individual charities database and group charities database:

Table A.1 : Ten subtotal checks used for 2015 individual charities dataset

Check	Description
Check_1	*Donations and bequests+Grants+Income_Other=Income_Total*
Check_2	*Income_Total+Income_Other=Income_Gross*
Check_3	*Expense_Employee+Expense_Other+Expense_Interest + Grants_Donations_AUS + Grants_Donations_NOTAUS = Expenses_Total*
Check_4	*Income_Gross - Expenses Total = NetSurplusDeficit*
Check_5	*Assets_NonCurrent_Other + Non-current loans = Assets_NonCurrent_Total*
Check_6	*Assets_Current_Total+Assets_NonCurrent_Total=Assets_Total*
Check_7	*Liabilities_NonCurrent + Liabilities_NonCurrent_Other = Liabilities_NonCurrent_Total*
Check_8	*Liabilities_Current_Total+Liabilities_NonCurrent_Total=Liabilities_Total*
Check_9	*Assets_Total - Liabilities_Total = NetAssets_Liabilities*
Check_10	Employee expenses/FTE staff <$150,000

Deloitte Access Economics has undertaken the following data cleansing process to address these gaps and inconsistencies in the individual charities database:

a) Within the individual charities data sheet, a number of entities have FTEs reported across multiple ABNs, but their income, expenses and balance sheet items are reported across a single entity (presumably a parent entity).
   - Where this exists, all FTEs are consolidated into one single charity, summing up by Charity Name.

b) Imputing total category values where those cells are 0, but where component values exist.
   - For example, a number of entities reported no Gross Income, but reported data for Total Income and Other Income. In these instances, Gross Income is calculated as the sum of Total Income plus Other Income.

c) Using data from the 2014 individual charities database where possible to fill in blanks in instances where the same charity organisation exists in both the 2015 and 2014 datasets.
   - Gross Income for matched entities is inflated at 1.9% + 1.51% per annum from 2014 to 2015. This reflects two components:
     - The average increase in size for charities (1.9% p.a., based on the average annual growth in size between the 2007 and 2013 Australian Not-Profit Institutions Satellite Account (ABS Cat. 5256.0).
     - Headline inflation across Australia, averaging 1.51% p.a. over 2014 to 2015.
   - The ratio between Gross Income and other key metrics (e.g. Total Income, Employee Expenses, Total Expenses) is calculated using 2015 data. Ratios are calculated by size/ICNPO code, and multiplied against Gross Income in the cleansed dataset.

d) Estimating key financial metrics for entities which have no data, for either the component or total columns.
   - Around 13,000 charities record no data for either the component or the total values. These are mostly small religious charities, who have less stringent reporting requirements or BRCs.
   - This group of around 13,000 charities is divided between those that are a BRC and those that are not a BRC. The purpose of segregating BRCs from other charities is that these charities often have significant assets, even if they may be classified as 'small' due to their income.

- For the BRCs group, the sample average is generated from the data of other BRCs that have voluntarily provided their financial data in the AIS dataset and used to replace missing BRC data.
- For all other charities, the sample averages are generated, by the charity's main activity, size and state. Null values for key metrics are estimated from the sample who do report data.

e) Removing outliers
- A check was run on an entity-by entity basis, i.e. looking at the relativities between all metrics for that entity. Values for each entity were compared against the sample average by size/ICNPO, where data is available. Values which are +/-10x (1,000%) different from the sample average are reviewed and amended accordingly.
- For example, an entity reporting gross income of $8.5 billion recorded total revenue of $85,112 and expenses of $30,822. Gross income for this entity was amended to $85,122.

f) Re-running the data checks, once the above amendments have been applied.
- Applying another check by gross income size (from XS through to XXL) – any further errors in excess of the defined bounds are identified, and entity values are repaired using the same approach above of using sample averages.

g) Checking FTE/Employee expenses
- Once totals broadly make sense, running a check on employee expenses divided by FTEs, where Casual and Part time staff are each treated as 0.5 FTE per employee.[23]
- This check involves making sure that the ratio of employee expenses divided by FTE is reasonable. A threshold check of $150,000 has been chosen to indicate whether any data errors have occurred.[24]

A.3. Data limitations

A critical aspect of the methodology refinement process is a detailed examination of the available data, including its limitations. Data scoping and investigations have highlighted the following issues with the original individual charities database:

Table A.2 : Subtotal checks – ACNC key financial data for 2015 individual charities dataset

Check	Description	% error
Check_1	Donations and bequests+Grants+Income_Other=Income_Total	**0.2%**
Check_2	Income_Total+Income_Other=Income_Gross	**0.9%**
Check_3	Expense_Employee+Expense_Other+Expense_Interest + Grants_Donations_AUS + Grants_Donations_NOTAUS = Expenses_Total	**4.2%**
Check_4	Income_Gross - Expenses Total = NetSurplusDeficit	**5.6%**
Check_5	Assets_NonCurrent_Other + Non-current loans = Assets_NonCurrent_Total	**5.7%**
Check_6	Assets_Current_Total+Assets_NonCurrent_Total=Assets_Total	**29.5%**[25]
Check_7	Liabilities_NonCurrent + Liabilities_NonCurrent_Other = Liabilities_NonCurrent_Total	**1.5%**

[23] Casual and part time staff are treated as 0.5 FTE per employee based on the following reasoning: Across Australia in May 2015, the average number of hours worked for full time staff was approximately 39 hours, while part time staff worked 17.8 hours (Table EQ4, ABS Cat 6291.0.55.003). A part time worker therefore works on average 0.5 of a full-time workers' week, equating to 0.5 FTEs. We assume casual workers follow the same pattern as part time workers.

[24] ABS data on labour costs across Australian industries (Table 2, ABS Cat 8155.0) indicates that over 80% of labour costs are wages and salaries. The average full-time ordinary time earnings in Health Care and Social Assistance is just under $75,000 a year (as of May 2016, according to ABS Cat. 6302.0). If we use this as our reference point and conservatively suppose that the labour costs could be potentially twice as large as wages and salaries, this gives us a threshold of approximately $150,000. Therefore, any charity which expresses an Employee Expenses/FTE ratio in excess of twice the average wage, or $150,000, may indicate a data error.

[25] This level of error largely reflects that XS and S charities (i.e. those reporting gross annual income below $250,000 are not required to report data on current assets, though report data on total assets. A similar picture is present for liabilities (Check 8) – where the use of cash accounting results in zero reported liabilities.

Check_8	Liabilities_Current_Total+Liabilities_NonCurrent_Total=Liabilities_Total	**7.2%**
Check_9	Assets_Total - Liabilities_Total = NetAssets_Liabilities	**2.6%**
Check_10	Employee_Expenses/(Staff_FT+(0.5*Staff_PT+0.5*Staff_Casual)<150,000	**2.9%**

Minor issues were also found with the 2015 group charities dataset as well, overleaf.

Table A.3 : Subtotal checks – ACNC key financial data for 2015 group charities dataset

Check	Description	% error
Check_1	Donations and bequests+Grants+Income_Other=Income_Total	**1%**
Check_2	Income_Total+Income_Other=Income_Gross	**0%**
Check_3	Expense_Employee+Expense_Other+Expense_Interest + Grants_Donations_AUS + Grants_Donations_NOTAUS = Expenses_Total	**3%**
Check_4	Income_Gross - Expenses Total = NetSurplusDeficit	**1%**
Check_5	Assets_NonCurrent_Other + Non-current loans = Assets_NonCurrent_Total	**1%**
Check_6	Assets_Current_Total+Assets_NonCurrent_Total=Assets_Total	**3%**
Check_7	Liabilities_NonCurrent + Liabilities_NonCurrent_Other = Liabilities_NonCurrent_Total	**7%**
Check_8	Liabilities_Current_Total+Liabilities_NonCurrent_Total=Liabilities_Total	**1%**
Check_9	Assets_Total - Liabilities_Total = NetAssets_Liabilities	**8%**

A number of charities present in the group dataset were also recorded in the individual dataset. These were removed from the final combined sample to avoid double counting.

Further, a number of additional observations are made regarding the original uncleansed 2015 individual charities database:

- The first AIS was collected in 2013, but the AIS did not include financial data until the 2014 and years after that. A longer time series of data will enable further economic analysis to quantitatively identify economic linkages and trends.
- If a charity is required to report finances, then it is required to report assets and liabilities. However, the level of detail can differ based on the size of the charity. Further, some charities are exempt from financial reporting, such as basic religious charities, and/or report through streamlined arrangements, which are adapted for ACNC reporting requirements. Deloitte Access Economics has addressed this limitation by assuming average sub-sector ratios apply to those organisations that did not provide balance sheet details and by reviewing all alternate available data sources for further information.
- Organisational income and expenditure details are required to be reported only at a very aggregate level. A more detailed profile of charity sector business cashflows, and in particular, payments to providers, would provide a basis for a more tailored economic contribution analysis.

A.4. Defined sub-sectoral categorisation

For this analysis, charities were organised and analysed in line with *The Australian Charities Report 2015* categorisation:

- **Culture and recreation** – Activities that benefit the community by enhancing participation in culture and arts, sporting activities and other recreational and social activities.
- **Development and housing** – Activities that specifically target the provision and development of housing for disadvantaged groups, as well as providing employment and training services and other economic, social and community development services for the public benefit.
- **Education and research** – Education and training services that seek to improve individual and community wellbeing through research activities, primary and secondary education, higher education and other forms of education (e.g. adult/continuing education).
- **Environment** – Activities that benefit the community by enhancing their participation in supporting and nurturing the environment, as well as providing animal protection.

- **Health** – Health and wellness services that seek to improve individual and community wellbeing, such as aged care services, hospital and rehabilitation services and mental health and crisis intervention services.
- **International** – Activities that target the broader international community, such as international development assistance and international disaster and relief.
- **Law and advocacy** – Activities that are delivered through law and legal services and political, civic and advocacy platforms.
- **Philanthropic and grant-making activities** – Activities related to the planned and structured giving of money and other resources to individuals, groups or organisations.
- **Other/unknown** –Unknown main charity activities or organisations.
- **Religion** – Organisations that promote and support religious beliefs, services and rituals.
- **Social services** – Social services that specifically target groups facing social disadvantage (such as family and youth services) and provide emergency relief and financial support.

Charities were classified by taking their 'main activity' reported by charities in the database and having that classified against each of the categories. The classification was informed by guidance provided by the ACNC in in relation to activities listed in the 2017 Annual Information Statement, noting that some charities and their main activity do not necessarily fit entirely within a single sub-sector category. This concordance is described below in Table A.4.

Table A.4 : Concordance between charity main activity and broad categories

Main activity	Categories
Aged Care Activities	Health
Animal Protection	Environment
Civic and advocacy activities	Law and advocacy
Culture and arts	Culture and recreation
Economic, social and community development	Development and housing
Emergency Relief	Social services
Employment and training	Development and housing
Environmental activities	Environment
Grant-making activities	Philanthropic and grant-making activities
Higher education	Education and research
Hospital services and rehabilitation activities	Health
Housing activities	Development and housing
Income support and maintenance	Social services
International activities	International
Law and legal services	Law and advocacy
Mental health and crisis intervention	Health
Other	Other/unknown
Other Education	Education and research
Other health service delivery	Health
Other philanthropic	Philanthropic and grant-making activities
Other recreation and social club activity	Culture and recreation
Political activities	Law and advocacy
Primary and secondary education	Education and research
Religious activities	Religion
Research	Education and research

Main activity	Categories
Social services	Social services
Sports	Culture and recreation
No classification	Other/unknown

Further, charities were also classified in terms of their gross income size. These were based on the size classifications used for *The Australian Charities Report 2015* and defined as follows:

- **XS** – Gross income of less than $50,000 (including negative gross income)
- **S** – Gross income of at least $50,000 but less than $250,000
- **M** – Gross income of at least $250,000 but less than $1 million
- **L** – Gross income of at least $1 million but less than $10 million
- **XL** – Gross income of at least $10 million but less than $100 million
- **XXL** – Gross income of $100 million or more

A.5. Comparison with Australian Charities Report 2015

The approach described in this section appears to broadly align with the methodologies described in *The Australian Charities Report 2015* by the University of New South Wales' Centre for Social Impact (UNSW-CSI). A detailed outline of the UNSW-CSI approach is described on pages 15-18, and 115-117 of *The Australian Charities Report 2015*.

A number of differences in the source datasets between the two reports also exist, and render the two reports not directly comparable.

A key methodological difference is that this report does not amend raw volunteer data (totalling 5.1 volunteer positions), whereas the UNSW-CSI report appears to have done so (3 million volunteer positions). Consequently estimates reliant on the total number of volunteers will differ between the two reports.

Appendix B : Detailed literature review

The literature framework was structured to build an understanding of the literature, theories and concepts that underpin the valuation of charity based activities and non-market valuation techniques.

The core objectives of the review are threefold:

1. To understand the contemporary thinking and design of measuring the economic contribution of charities, both domestically and internationally.
2. To catalogue the full range of existing studies in the sector; to identify the data sources and measurement approaches adopted, and run a gap analysis on the current information set.
3. To understand sectoral linkages and relationships with the broader macro economy, and its implications on the charity sector's financial capacity and viability.

The following section provides a condensed overview of the key literature as it relates to charity organisations and outlines the relevance of various market and non-market valuation techniques in this context.

B.1. Overview of economic value measures

Three common ways to examine the value of an entity or activity to the overall economy is to measure its:

1. value-added and FTE employment (i.e. economic contribution);
2. productive capacity; and
3. total economic welfare.

Economic value-add and FTE employment

Value add can be thought of as the income earned from the goods and services an economic entity (e.g. a company or sector) sells that are generated by its factors of production (i.e. its labour and capital), excluding the cost of intermediate inputs it purchased from other sectors. This is considered the standard economic contribution measure of a sector or entity.

The value add of an entity is comprised of the labour income earned by workers it employs and the income earned by its capital equipment (called Gross Operating Surplus or GOS).[26] Theoretically, the sum of value added across all entities in a national economy is its Gross Domestic Product (GDP). Hence, the value added of an entity can be interpreted as an accounting exercise which determines the entity's contribution to GDP in a national context, to Gross State Product (GSP) in a state (or territory) context and to Gross Regional Product (GRP) in a regional context. An in-depth discussion of this approach is included in Appendix D.

Related to this definition of economic value added is the idea of full-time equivalent (FTE) employment. One FTE is the amount of workload time that is equivalent to one employee working full-time for an entity. This is distinct from headcount employment, which is the actual number of workers employed by an entity, regardless of how many hours each work.

[26] Value add excludes any subsidies that have been granted to the entity by the government or similar public bodies.

Limitation of economic contribution studies

It should be noted that in a fundamental sense, economic contribution studies are simply historical accounting exercises. Indeed, the use of labour and capital by demand created from an entity comes at an opportunity cost as it may reduce the amount of resources available to spend on other economic activities.

That is to say, the contribution is independent of a counterfactual scenario, it is simply a measure of the value add or employment created by the industry. Contribution studies therefore cannot be used to say anything about how much larger the economy is relative to a counterfactual and, in particular, the results cannot be interpreted as the benefit created by the industry or saying that the economy is larger by the contribution measured relative to if the industry did not exist.

Productive capacity

Another economic value measure is the effect of something on the productive capacity of the economy – the value of output that can be produced with a given value of inputs. A common measure of this in the literature is total-factor productivity (TFP), also known as multi-factor productivity (MFP) which is often measured as a residual of effects in total output not accounted for by factor inputs.

Growth in TFP/MFP results in the economy "doing more with less" - the economy is able to expand total income from the same basis of resources. Indeed, like any other sector, the charity sector of Australia can be said to have some measure of productivity capacity. This is also different to economic value add which is merely an accounting exercise that allocates up existing total output and attributes contribution to economic entities through their application of labour and capital.

Related measures are capital and labour productivity, where capital productivity measures the total amount of output per unit of capital worked in the economy and similarly, labour productivity measures the total amount of output per hour worked in the economy.

Total economy welfare

Total economic welfare is an important measure that is not picked up in national accounting exercises. It is essentially the total monetary benefits from individuals consuming and utilising scare resources in the economy. It includes both the market value of the transactions that occurs due to these market transactions, as well as the value individuals place on the outputs of the economy (their 'willingness to pay'), above and beyond the price that consumers actually spent on them.

In most instances, this extra value that consumers were willing to spend on goods and services to acquire them is known as the consumer surplus. Often, the consumer surplus is estimated through survey based economic techniques. By adding up the actual amount spent and the consumer surplus of a good or service, including those provided by charities, it is possible to measure the total economic welfare that this good or service generated.

Given that some charities provide outputs to people that are free or at prices which are not economically significant, this can be a significant component of the economic value that charities generate. Various methodologies have to be developed which can measure the non-monetary value of charities. Methodologies include contingent valuation, consumer willingness-to-pay/surplus surveys, and/or time-use opportunity cost estimation. For example:

- As mentioned above, consumers who would pay more than the actual cost of a charity's goods and services receive a **consumer surplus**.
- In the case of charities which produce free goods and services which are free, another valuation method would be to capture the **value of time** spent by Australians using it, which provides a useful measure of the benefit received by consumers.

- The value of Australian charities might also be measured as the **value of having the option to using the goods and services of charities**, either for an individual personally or for society at large. This provides a measure of value of the sector even for those who are not actively consuming the products of charities.
- Recognising the value of government financial assistance to the charity sector, and that there is public support for a strong charity sector in Australia, the total value of the sector can be measured as the degree to which Australians would forego a personal tax cut to see more funding to charities – the **public support value** of the sector.

B.2. Key literature

Key literature that is cited in this section includes:

- Australian Government Productivity Commission, *Contribution of the Not-for-profit sector*¸2010.
- Australian Charities and Not-for-profits Commission, *The Australian Charities Report*, 2015
- Community Services Industry Alliance, *The State of Queensland Charities*, 2015
- Australian Bureau of Statistics, *Australian National Accounts: Non-Profit Institutions Satellite Account*, 2012-13
- Australian Institute of Company Directors, *NFP Governance and Performance Study*, 2016
- Australian Research Alliance for Children and Youth, *Measuring the outcomes of community organisations*, 2009
- Western Australia Council of Social Service, *WA's Not-for-profit Sector,* 2017.

Table B.1 provides a summary of the foremost recent studies in Australia that have focused on the domestic charity sector and not-for-profit sector.

Table B.1 : Key charity sector valuation studies

Reference	Scope of study	Technique	Economic Measure	Key Findings
Australian Institute of Company Director - NFP governance and performance study (2016)	Challenges and Expectations of the NFP sector	Change in income and survey answers	Income and profit	NFPs need to understand importance of profit for long term sustainability; Government plays important role for strategy, collaboration and performance measurement
Australian charities report (2015)	Comprehensive record of Australian charities	Estimates of change and new indicators of charity sustainability	Income and expenses	Australian charity sector grew 2.0% between 2014 and 2015; majority of charities are relatively small; most charities operate in single State or Territory
Deloitte Access Economics: Community Services in Queensland 2025	Future profile of the Community Services industry in Queensland	Forecasts and projected growth	Output ($)	Community services industry needs to focus on both social and economic contributions with the industry having a strong role to play across the state

Reference	Scope of study	Technique	Economic Measure	Key Findings
Economic and social contribution of Deloitte Responsible Business	Corporate Social Responsibility (CSR) contribution	Measuring value added contributions by capital and labour through donations and volunteering	Value added contribution ($)	Deloitte Access Economics' CSR contribution in 'equivalent' value is between $3.36M and$ $3.37M
Deloitte Access Economics: Economic and social value of UnitingCare Queensland (UCQ) (2014)	Economic contribution study of UCQ	Direct and indirect contributions	TVA ($ million) and Total employment (FTE jobs)	In 2012-2013, UCQ contributes $1.3B to GDP
ARACY: Measuring the outcomes of community organisations (COs) (2009)[27]	Research into how to best measure outcomes of COs	N/A	N/A	N/A
Contribution of the Not-for-Profit Sector – Productivity Commission (2010)	Economic contribution of not-for-profit sector	Measuring and combining contributions from each NFP sub-sector	Gross Value Added(GVA)	NFP sector has 600,000 organisations with 59,000 economically significant, contributing $43B to Australia's GDP, and 8 per cent of employment in 2006-07. The NFP sector has grown 7.7 per cent from 1999-2000 to 2006-07.
Victorian Council of Social Service (2016)	Contribution of Victorian community sector charities	measuring contribution by charity size and main activity	Income and expenses	Victorian community sector charities is an $11 billion industry
The State Of Queensland Charities	Examination of first annual statements of charities operating in Queensland	N/A	N/A	N/A
WACOSS*:* WA's Not-for-profit Sector 2017	Report of the breakdown of WA's charity sector with a focus on community services. The report also measures the	Assessment of various measures, for example: employment and volunteering; balance sheets; income,	Employment, income and expenses	The WA charity sector employs 7% of the State's workforce (mining employs 8% in comparison). The sector raises 59% of its income from its own sources with $16.4bn in net assets (this is 14% of the State Government's net assets, and

[27] This paper does not measure outcomes of community organisations empirically, rather it discusses measurement techniques.

Reference	Scope of study	Technique	Economic Measure	Key Findings
	contribution of the sector to WA's economy.	expenditure and profit		annual income of the charity sector is $12.7bn. Over half of the charity sector made a profit, one in five made a loss and a quarter broke even.

B.3. Existing study limitations

As already noted, the contribution of the charity sector is arguably not fully appreciated by Government, the general public nor even the industry itself. One reason being the lack of a comprehensive source of information on the contribution that charities currently provide to society, expressed in a manner that can be readily compared to other industries.

The preliminary literature review has shown that there are a number of partial studies on the economic contribution of charities, however none can act as a fully comprehensive model in this specific context.

In many papers, the most salient limitations faced by previous studies was the paucity and low quality of available data. Further to this, the studies identified the weak relationship between a charity's economic contribution as measured by value added and the welfare of living standard of the community.

With regard to sectoral linkages, it was commonly noted that the charity sector's linkages with the rest of the economy was manifested predominantly through the expenses incurred via outsourcing of goods or services beyond the capabilities of the organisation. Additionally it was highlighted that the emergence of new organisations occurred in order to match charities to other businesses, such as pro bono legal services.

Table B.2 : limitations of existing studies

Reference	Limitations of study
Australian Institute of Company Director - NFP governance and performance study (2016)	No data available on the distribution of income of Australian NFPs
Australian Charities Report (2015)	General data limitations: availability of 2015 data in some instances. In the case of charities who have not reported financial data, that data was estimated. Data that is self-reported by charities may contain some errors.
Deloitte Access Economics: Community Services in Queensland 2025	The data framework included all metrics of interest, with a view to identify gaps in the ideal data framework, representing data which may not be collected or, indeed, may not be made available.
Economic and social contribution of Deloitte Responsible Business	The report only focuses measurement of the Economic and social contribution to one organisation.
Deloitte Access Economics: Economic and social value of UnitingCare Queensland (UCQ) (2014)	The report only focuses measurement of the Economic and social contribution to one organisation.
ARACY: Measuring the outcomes of community organisations (COs) (2009)	The report does not conduct any empirical measurement of economic contributions.
Contribution of the Not-for-Profit Sector – Productivity Commission (2010)	Measurement results in the NFP sector cannot be taken on face value, and require that any results derived from the measurement framework mentioned in the report are subject to the necessary qualifications and interpreted in the context of the sector's activities. Careful interpretation is required based on the issues of comparability (differences in performance outcomes make it difficult to compare two

Reference	Limitations of study
	NFPs), quantification (most benefits are not amenable to quantification), and applicability (appropriateness of the structured measurement framework for all charities)

Reference	Sectoral linkages
Australian Institute of Company Director - NFP governance and performance study (2016)	The study cites that outsourcing back office functions and sub-contract some services and products are in scope for NFPs
Australian Charities Report (2015)	The report cites that charities are looking to expand scope of collaborations, or utilising newly established infrastructure suggesting potential connections to sectoral linkages
Deloitte Access Economics: Community Services in Queensland 2025	The report indicates sectors with key collaborators to address complex social issues through their capacity to research and innovate are: education, employment services, research, technology development and private enterprise. This multi-sector approach or collective impact has been cited as a common agenda amongst public and private organisations.
Deloitte Access Economics: Economic and social value of UnitingCare Queensland (UCQ) (2014)	The report indicates that other sectors are exposed to UCQ's indirect contributions via expenses. Example sectors include: cleaning, electricity, marketing, and other business services.
Contribution of the Not-for-Profit Sector – Productivity Commission (2010)	The report indicates that corporate contributions were estimated to be over $3 billion in 2003-04, with leading corporate organisations having moves away cash donations to active involvement. Corporate organisations report that the benefits of collaboration are developing their staff skills and understanding and improving the operating environment for their business. The report notes that the main reasons for businesses forming relationships with NFPs is: 1. PR and marketing benefits; 2. Reputation benefits; 3. Due to connections between CEO/Board and NFP community organisations. The report highlights the emergence of intermediaries connecting businesses and NFPs, some of these connections include: pro-bono legal services to NFPs, matching skilled staff to NFPs, advisory services to plan and provide frameworks for better corporate giving.

Reference	Broader macroeconomic implications
Deloitte Access Economics: Community Services in Queensland 2025	Factors such as population growth, levels of employment, and broader economic prosperity impact the demand for services. The economic context also impacts the ability of the Industry to attract

Reference	Broader macroeconomic implications
	and retain a skilled workforce, maintain sustainable service through government and other investment

Appendix C : Volunteering

C.1. Measuring the dollar value of volunteering

In addition to the substantial economic contribution of Australian charities, unpaid volunteer work contributes significantly in the creation and maintenance of strong, vibrant communities. The study of volunteering is important and involved, and the few pages dedicated here to the subject should be considered as a thought starter rather than a fully-fledged review. The main purpose of this sub-section is to contextualise the economic approach to measuring volunteering activity

Deloitte Access Economics estimates that in 2015, there were **3.35 million individuals** who volunteered with ACNC registered charities and collectively **contributed 327.7 million hours** of volunteer time. This total volunteering time has been **valued at $12.8 billion** in 2015 dollars.

These estimates are underpinned by a number of assumptions, detailed in Section 3.5. Specifically:

- The 3.35 million reported volunteers draw on ACNC databases. They include:
    - 3.26 million volunteers from a cleansed ACNC individual dataset (provided by ACNC to Deloitte Access Economics).
    - 0.09 million volunteers from the ACNC group dataset, removing entities which are already accounted for in the individual dataset.
- The estimated number of hours contributed per volunteer is based on the 2014 General Social Survey, averaging around 86.5 hours per volunteer per annum across all charity sectors. The General Social Survey allows for a breakdown by sub-sector, and this data is used where available.
- Multiplying the average annual hours per volunteer, by the number of volunteers, yields 327.7 million total estimated hours of volunteering time contributed.
- Volunteer work is valued at $39.0 per hour, reflecting an annual wage (including tax and superannuation) of around $80,000. Multiplying 327.7 million hours by this rate yields the total estimate of $12.8 billion.

In developing the above estimates, the methodology considers:

- The value of formal volunteer labour (i.e. volunteers with ACNC-registered charities).
- The hourly wage associated with volunteer labour, reflecting circa $80,000 earnings per annum, pre-tax and including superannuation.

While the framework used in this report broadly echoes that used across peer studies, this methodology does not estimate the value of:

- The value of informal volunteer labour (i.e. volunteering not done via registered charity).
- Employee/corporate volunteering.
- The non-wage impacts of volunteering, for example the value of lives saved (for example, with emergency services volunteers).

As such, the $12.9 billion estimate should be considered a conservative figure that provides a lower bound for the likely total economic benefit which volunteering contributes to Australia.

A literature review was conducted to test the scale and scope of assumptions outlined above. A selection of domestic and international peer studies were examined to better understand:

- The scale of informal volunteering relative to formal volunteering.
- The value of an hour of volunteering time, comprising:
    - A direct financial component, the opportunity cost of one hour of volunteering time, broadly equal to the wage foregone by an individual volunteering.
    - Non-financial benefits of volunteering, to the extent that these benefits have been identified and quantified.

C.2. Informal volunteering

Ironmonger (2012) defines informal volunteering as "unpaid help and care that occurs within the personal networks of family, friends, neighbours, and acquaintances", and that it may "include regular, spontaneous and sporadic help that takes place between friends and neighbours such as giving advice, looking after other peoples' children or helping an elderly neighbour".

There is relatively limited data on the scale of informal volunteering across Australia.

In April 2017, the ABS released a discussion paper outlining the need for additional information to be collected on volunteering. In that release, the ABS cites a 2013 review of the definition of volunteering conducted by Volunteering Australia.[28] They note that, prior to the review, the prevailing definitions did not include formal volunteering and consequently a lack of data was collected.

Consistent with the ABS's review, and to our knowledge, there is no single off-the-shelf measure of informal volunteering, though an estimate can be derived from a range of sources, chiefly ABS Time Use and Voluntary Work surveys, as well as the Census.

A review of Victorian volunteering in 2012 for the Victorian Department of Planning, Community and Development (DPCD) used the above data sources to estimate the value attributable to informal volunteering (Ironmonger, 2012). The report placed the value of Victorian volunteering at $16.4 billion in 2006, comprising $4.9 billion of formal volunteering value, and $9.0 billion of informal volunteering value. A further $2.5 billion is contributed by volunteers via travel.

The review estimates the total hours spent on volunteering in Victoria based on ABS Time Use and Voluntary Work surveys, and supplemented with Census 2011. Across Victoria, the review estimates 84 hours per adult resident spent annually on unorganised volunteering (in contrast to 46 hours on organised volunteering), totalling 331.2 million hours in 2006.

Volunteering Australia (2015) estimate that 49% of people provide informal assistance to people not living in the same household[29]. This is contrasted against the 36.2% of people aged 18 and over who participated in formal volunteering, some 6.1 million individuals in Australia (Volunteering Australia, 2015).

C.3. Hourly value of volunteering – financial component

The financial component is commonly estimated by applying an hourly wage to the number of hours volunteered.

The ABS provides guidance on estimating this value, based on the United Nations' *Handbook on Not-Profit Institutions in the System of National Accounts, 2003*. Three alternative methods are recommended:

- Opportunity cost of wages, where the opportunity cost is what the volunteer could earn in their usual occupation.
- Replacement cost, where the cost of replacing volunteers with paid staff is estimated.
- Fallback approach, which values each hour of volunteer time at the average gross wage for the community, welfare and social service occupation category.

Across Australia, in 2012-13, all three options yield a broadly similar wage rate – around $71,000 annual income as at 2013.[30] Assuming a 38 hour work week and 50 paid weeks a year, this equates to $37.36 per hour in 2013 dollars. In real terms, this hourly rate is very close to the value used in this report.

In Victoria, Ironmonger (2012) uses a wage rate of $24.09 per hour in 2006, based on ABS *Unpaid Work and the Australian Economy* data.

Further abroad, hourly values typically range between $20 and $30 in respective local currencies. An estimate for American volunteers places the value of volunteer time per hour at US$24.14 in 2016, equivalent to around AU$32.[31]

---

[28] https://www.volunteeringaustralia.org/policy-and-best-practise/definition-of-volunteering/
[29] pp2, https://www.volunteeringaustralia.org/wp-content/uploads/VA-Key-statistics-about-Australian-volunteering-16-April-2015.pdf, citing Volunteering Australia (2010).
[30] Calculations based on table in http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/5256.0Appendix62012-13
[31] At an exchange rate of 1 USD to 1.32 AUD, as at 28 June 2017 per http://www.xe.com/currencyconverter/convert/?From=USD&To=AUD

In Canada, Ross (1994), on behalf of the Canadian government, provides guidance on valuing volunteer work. Ross suggests the usage of an hourly wage of CAD$16.49 in 1994 dollars.

Also in Canada, Alexander and Gulati (2012) recommend the use of an average hourly wage to estimate the total value of volunteering, of CAD$24 in 2012.

C.4. Hourly value of volunteering – non-wage component

A number of other non-wage benefits can also be considered in relation to volunteering. These include for example:

- The opportunity to develop or improve on skills that may be required for paid work, discussed extensively and for example in Smith (2010).
- The opportunity to try out a job/field prior to committing to formal training.
- Increased social cohesion (e.g. Meier and Stutzer 2004)
- Improved socio-economic outcomes for beneficiaries of volunteering (Wu, 2011)
- Increased life satisfaction for volunteers (e.g. Frey, 1997 and Andreoni, 1990).
- An "altruism" factor, where people care about the outcomes experienced by others, even when they are not the giver nor recipient (e.g. Fehr and Schmidt, 2003).

Various techniques have been developed to estimate the dollar value of these non-wage benefits. A common methodology used to estimate the value of a non-market good or service, where its price cannot be observed through market transactions, is through an approach known as Contingent Valuation (CV). CV is a method of placing a market value on non-market resource, good or service (such as volunteering activity) through survey based economic techniques (Carson et al, 2001). The survey questions seek to estimate the willingness-to-pay of respondents for various scenarios related to the use and non-use of the resource, good or service. These estimates can be extrapolated to calculate the total value of the resource, good or service to a group of people.

An unpublished report by O'Dwyer (2014) places total economic benefit of volunteering across Australia at $290 billion. While the report is not currently publicly available, the news release notes the inclusion of items such as the value of lives saved and the financial worth of emotions[32]. Compared against wage-only estimates such as those estimated in this report ($12.9 billion) or the ABS estimates ($17.2 billion), it is likely that the majority of this $290 billion comprises non-wage benefits.

A state-specific estimate is available for Western Australia, with a 2014 estimating the total value of WA volunteering (including informal volunteering) at $39 billion (IPM, 2015). Of this $39 billion, $9.9 billion is estimated to be well-being benefits[33].

C.5. Key takeaways:

- The total estimated contribution of volunteering to Australia differs widely across different studies, due to varying scope of inclusions/exclusions.
- The estimate calculated in this report is on the lower end of the range of estimates Australia-wide, and reflects the inclusion of only formal ACNC related volunteers, and the calculation of benefits in line with hourly wages. As with paid labour, this report does not attempt to measure non-wage benefits to providers or the impact of charitable activities on recipients.
- Available data on informal volunteering is less structured. Estimates suggest that across Australia, the hours spent on informal volunteering is likely more than formal, and may be around one and a half to two times more than formal volunteering.
- The benefit of volunteering comprises two components, the financial benefit and non-financial benefits. The former is generally measured by some form of hourly wage, and around $30 to $40 in 2016 dollars.
- The potential range of relevant non-financial benefits is extensive, and there is no one correct way to quantify the dollar value of these benefits. Depending on how the benefits are accounted for, these benefits can be very significant. For example, an unpublished study places the total value of volunteering in Australia in 2014 at $290 billion, including a wide range of non-financial benefits.

[32] http://news.flinders.edu.au/blog/2014/10/31/volunteering-worth-290-billion-a-year/
[33] https://volunteeringwa.org.au/assets/downloads/vwa_report%20book_web.pdf, pp88

Appendix D : Economic contribution approach

Economic contribution studies are intended to quantify measures such as value added, exports, imports and employment associated with a given industry or firm, in a historical reference year. The economic contribution is a measure of the value of production by a firm or industry.

D.1. Overview of estimates reported

All direct, indirect and total contributions are reported as gross operating surplus (GOS), labour income, value add and employment (with these terms defined in Table D.1).

Table D.1 : Definitions of economic contribution estimates

Estimate	Definition
Gross operating surplus (GOS)	GOS represents the value of income generated by the entity's direct capital inputs, generally measured as the earnings before interest, tax, depreciation, and amortisation (EBITDA). In the context of the charity sector, it is calculated as total income less total expenditure.
Labour income	Labour income is a subcomponent of value add. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.
Value add	Value add measures the value of output (i.e. goods and services) generated by the entity's factors of production (i.e. labour and capital) as measured in the income to those factors of production. The sum of value add across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value add measure can be thought of as the increased contribution to welfare.
Employment (FTE)	Employment is a fundamentally different measure of activity to those above. It measures the number of workers (measured in full-time equivalent terms) that are employed by the entity, rather than the value of the workers' output.
Direct economic contribution	The direct economic contribution is a representation of the flow from labour and capital committed in the economic activity.
Indirect economic contribution	The indirect contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by economic activity.
Total economic contribution	The total economic contribution to the economy is the sum of the direct and indirect economic contributions.

Source: Deloitte Access Economics (2017)

Economic contribution studies provide a snapshot of the contribution of a company or industry, or in this case the Australian charity sector, to the economy at a point in time. Such studies quantify both the direct and indirect contributions the charity sector makes by using economic measures such as value added and employment.

While income or expenditure is more commonly reported than value, value added provides a more accurate assessment of an organisation's contribution to the Australian economy because it nets out the value that is created by imported inputs.

The different economic measures that are captured in the economic contribution are set out below:

Direct value added is the sum of the returns to the primary factors of production – labour and capital – and can be calculated by adding Gross Operating Surplus (GOS) and wages paid to employees. This approach is consistent with the framework used by the ABS in compiling the *Australian National Accounts*. The direct value added by all industries/entities in the economy plus net taxes minus subsidies on products is equal to GDP.

- In the case of the charity sector – which is not-for-profit - GOS would mainly reflect the depreciation and amortisation of capital and would not be the most accurate measure of the economic value added by the sector. As such Deloitte Access Economics has used a proxy for sectoral 'market-based output' to derive the economic contribution based on input-output multipliers (discussed further in Section D.3).
- Wages would also make up a significant portion of direct value added. However, compounding the monetary contribution of paid staff would be the significant amount of volunteer time contributed to the charity sector. The measurement of the value of volunteer time is discussed further in Section D.5.

Indirect value added is a measure of the demand for goods and services produced in other sectors of the economy as a result of the proxy spends or income to the charitable organisations. The size of the flow-on is determined by the extent of linkages with other sectors of the economy. Indirect value added is determined based on industry specific economic multipliers from the National Input-Output tables, published by the ABS as part of the National Accounts.

Direct employment captures the contribution of charities to national employment. A key component here, will be the measurement of in-kind support through the imputed value of volunteer time.

Indirect employment captures the contribution of charities to employment in upstream industries who experience an increase in demand as a result of direct economic activity associated with the sector.

It should be noted that economic contribution exercises capture the current contribution of Australian charities to economic activity for a given time period. This is not the same as capturing the net impact on the economy if charities were not to exist as some of the activity associated with the sector may still occur elsewhere.

Australian charities estimated contribution to GDP is also conceptually different from measures of its economic value that will be captured elsewhere in the methodology and in the broader outcomes and benefits to society that are out of scope for this study. GDP is just one measure of economic welfare and does not capture the full impact on welfare of non-market goods and social benefits.

Definitional notes

When calculating the GOS for a typical for-profit firm or industry, income streams from government (such as transfers or production subsidies) are excluded as they are a transfer of public funds, not reflective of income generated by the activities of the firm or industry.

Similarly, value added is typically calculated as GOS plus labour income net of subsidies; under the ABS Australian System of National Accounts (ASNA):[34]

> *A subsidy on a product is a subsidy payable per unit of a good or service. An enterprise may regard a subsidy as little different from sales proceeds. However, in the national accounts, subsidies are regarded as transfer payments from general government, enabling enterprises to sell their output for less than would otherwise be the case.*

Value added

The measures of economic activity provided by this contribution study are consistent with those provided by the Australian Bureau of Statistics. For example, value added is the contribution the sector makes to total factor income and gross domestic product (GDP).

There are a number of ways to measure GDP, including:

- **expenditure approach** – measures expenditure: of households, on investment, government and net exports; and
- **income approach** – measures the income in an economy by measuring the payments of wages and profits to workers and owners.

Below is a discussion measuring the value added by an industry using the income approach.

[34] Australian Bureau of Statistics (2013). *Australian System of National Accounts – Concepts, Sources and Methods*

Measuring the economic contribution – income approach

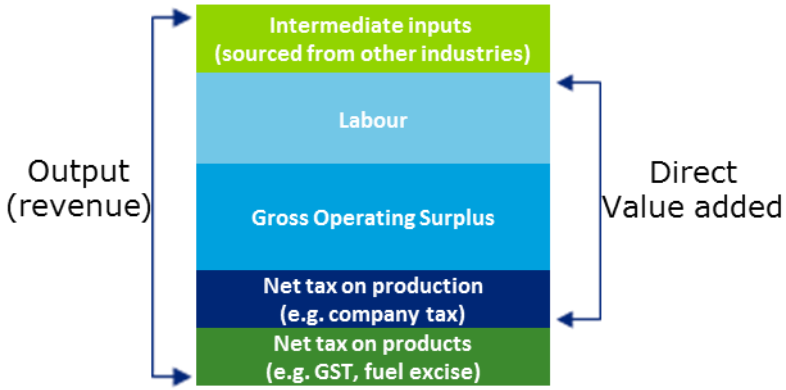
There are several commonly used measures of economic activity, each of which describes a different aspect of an industry's economic contribution:

- **Value added** measures the value of output (i.e. goods and services) generated by the entity's factors of production (i.e. labour and capital) as measured in the income to those factors of production. The sum of value added across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value added measure can be thought of as the increased contribution to welfare.
  Value added is the sum of:
  - Gross operating surplus (GOS) represents the value of income generated by the entity's capital inputs, generally measured as the earnings before interest, tax, depreciation and amortisation (EBITDA).
  - Tax on production less subsidy provided for production. Note: given the manner in which returns to capital before tax are calculated, company tax is not included or this would double-count that tax. In addition it excludes goods and services tax, which is a tax on consumption (i.e. levied on households).
  - Labour income is a subcomponent of value added. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.

Figure D.1 shows the accounting framework used to evaluate economic activity, along with the components that make up *output*. Output is the sum of value added and the value of intermediate inputs used by the firm or industry.

The value of intermediate inputs can also be calculated directly by summing up expenses related to non-primary factor inputs.

Figure D.1 : Economic activity accounting framework



Source: Deloitte Access Economics (2017)

Contribution studies generally outline employment generated by a sector. Employment is a fundamentally different measure of activity to those above. It measures the number of workers that are employed by the entity, rather than the value of the workers' output.

Direct and indirect contributions

The **direct** economic contribution is a representation of the flow of labour and capital in the sector.

The **indirect** contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by the direct economic activity of the airport. Estimation of the indirect economic contribution is undertaken in an input-output (IO) framework using Australian Bureau of Statistics IO tables which report the inputs and outputs of specific sectors of the economy (ABS 2013).

The total economic contribution to the economy is the sum of the direct and indirect economic contributions.

Other measures, such as total income or total exports are useful measures of economic activity, but these measures alone cannot account for the contribution made to GDP. Such measures overstate the contribution to

value added because they include activity by external firms supplying inputs. In addition, they do not discount the inputs supplied from outside Australia.

D.2. Input-output analysis

Input-output tables are required to account for the intermediate flows between sectors. These tables measure the direct economic activity of every sector in the economy at the national level. Importantly, these tables allow intermediate inputs to be further broken down by source. These detailed intermediate flows can be used to derive the total change in economic activity associated with a given direct change in activity for a given sector.

A widely used measure of the spill-over of activity from one sector to another is captured by the ratio of the total to direct change in economic activity. The resulting estimate is typically referred to as 'the multiplier'. A multiplier greater than one implies some indirect activity, with higher multipliers indicating relatively larger indirect and total activity flowing from a given level of direct activity.

The IO matrix used for Australia is derived from the ABS 2013-14 IO tables, the latest available IO data at the time of the analysis. The industry classification used for IO tables is based on the Australian and New Zealand Standard Industrial Classification (ANZSIC), with 114 sectors in the modelling framework.

D.3. Weighted average of ANZSIC industry multipliers

In order to attribute unknown intermediate expenditure to existing industries, it was assumed that each charity's unknown intermediate expenditure was roughly analogous to the charity's private sector counterpart. For example, a charity involved in higher education as its main activity is likely to have intermediate inputs similar to higher education organisations as reported by the ABS.

However, it should be noted that there is not always a direct match between reported main activity in the charity dataset and the ANZSIC industries presented in ABS data, with some charitable activities such as "social services" covering multiple ANZSIC industries.

To address this, a **weighted average of ANZSIC industry multipliers** was estimated for each charity main activity type. This was done in the following way:

1. Finding the relevant International Classification of Non-Profit Organizations (ICNPO) category corresponding with each main activity reported in the charity dataset. This is then linked it to its relevant ANZSIC industries.[35]
2. For each set of ANSZIC industries corresponding to an ICNPO category, a weighted average of ANZSIC industries is estimated, based on the implicit assumption that each ICNPO charity category's share of each ANZSIC industry is the same.
    a. For example, if an ICNPO category concords with ANZSIC industry *A* and *B*, where *A* has a value add three times the size of *B*, then it is assumed that a charity with that ICNPO category has unknown intermediate expenditure which is a weighted average of 75% of the indirect multiplier of *A* and 25% of the indirect multiplier of *B*.

The concordance which was constructed between charity main activity and ANZSIC industries in order to estimate the weighted average of the ANZSIC industry multipliers is described below in Table D.2

Table D.2 : Concordance between charity main activity and ANZSIC industries

Main activity	ANZSIC industries	
Aged Care Activities	8601	Residential Care and Social Assistance Services
Animal Protection	9502	Other Services
Civic and advocacy activities	6901	Professional, Scientific and Technical Services
Culture and arts	5501	Motion Picture and Sound Recording
	5601	Broadcasting (except Internet)
	6001	Library and Other Information Services
	7210	Employment, Travel Agency and Other Administrative Services
	8901	Heritage, Creative and Performing Arts
	9101	Sports and Recreation

[35] An ICNPO-ANZSIC concordance is provided by the ABS: http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/5256.0Appendix22012-13?opendocument&tabname=Notes&prodno=5256.0&issue=2012-13&num=&view=

Main activity	ANZSIC industries
Economic, social and community development	9502 Other Services
Emergency Relief	7701 Public Order and Safety 8601 Residential Care and Social Assistance Services
Employment and training	7210 Employment, Travel Agency and Other Administrative Services
Environmental activities	9502 Other Services
Grant-making activities	9502 Other Services
Higher education	8110 Technical, Vocational and Tertiary Education Services (incl undergraduate and postgraduate)
Hospital services and rehabilitation activities	8401 Health Care Services
Housing activities	6702 Non-Residential Property Operators and Real Estate Services
Income support and maintenance	9502 Other Services
International activities	9502 Other Services
Law and legal services	6901 Professional, Scientific and Technical Services
Mental health and crisis intervention	8401 Health Care Services
Other	9502 Other Services
Other Education	8010 Primary and Secondary Education Services (incl Pre-Schools and Special Schools) 8210 Arts, Sports, Adult and Other Education Services (incl community education)
Other health service delivery	8401 Health Care Services
Other philanthropic	9502 Other Services
Other recreation and social club activity	4501 Food and Beverage Services 8901 Heritage, Creative and Performing Arts 9101 Sports and Recreation 9201 Gambling
Political activities	9502 Other Services
Primary and secondary education	8010 Primary and Secondary Education Services (incl Pre-Schools and Special Schools)
Religious activities	9502 Other Services
Research	6901 Professional, Scientific and Technical Services
Social services	4401 Accommodation 7701 Public Order and Safety 8601 Residential Care and Social Assistance Services
Sports	8210 Arts, Sports, Adult and Other Education Services (incl community education) 9101 Sports and Recreation
No classification	9502 Other Services

D.4. Measuring output for charities

In the absence of market prices for the output of charities, Deloitte Access Economics has used donations and bequests as a proxy for the economic value of charity output. Where charities receive income from the provision of goods and services (e.g. Oxfam) that would also be incorporated into the charity output. As a final step, any amount of 'grants and donations made for use outside Australia' must be netted out of this measure of 'output', as monies redirected internationally do not form part of the economic contribution to Australia.

Donations and bequests that a charity receives can be seen as the 'payment' that supporters give to the organisation as a result of its services (e.g. its previous charitable activities). If it is assumed that there exists a reasonably competitive environment where charities are vying for donations, donors must therefore give charities an amount that is approximate to the 'consumer benefit' that accrues from the charitable activities.

Deloitte Access Economics has also attempted to categorise each charity into one of the Australian and New Zealand Standard Industrial Classification (ANZSIC) codes depending on the organisations primary activity. If the 'main activity' reported by the charity in the dataset does not provide sufficient information for a concordance with the ANZSIC codes, the modelling will also examine the other activity types that are recorded for the organisations. This is then combined with the appropriate input-output economic multipliers to determine the indirect or flow-on contribution to the economy.

The unitised results provide an estimate of the additional economic contribution brought about by an additional dollar of investment in the charity sector.

D.5. Valuing volunteer time

Volunteer labour is critical to the output of the charity sector and their ability to produce a desired level and quality of service. As such it is important to capture and value this activity as part of the economic contribution of the charity sector.

The AIS database provides data on the number of volunteer staff and their total unpaid hours for each organisation / sub-sector. Deloitte Access Economics has converted these data to a measure of the value of volunteer time by assigning a wage rate to the total number of hours worked by volunteers. This report uses this approach to calculate the 'replacement cost' of volunteer services if they had to be rendered at an equivalent market wage and this replacement cost can be considered the economic value of volunteer labour.

Volunteer hours

While unpaid hours are reported in the AIS, there is a significant number of information gaps in this line item. Thus, as part of the data cleansing process Deloitte Access Economics has identified these gaps and used other means to convert the available data on the number of volunteer staff into an estimate of total volunteer hours worked. This report draws on the Australian Bureau of Statistics, *General Social Survey* (ABS 2014), to estimate the average number of volunteer hours worked by type of organisation. This figure is applied to the raw data to provide an estimate of total volunteer hours for each organisation that does not report on unpaid hours.

Wage rate

There are three generally accepted methods by which volunteer services can be valued (ABS 2009):

- **Opportunity cost** – value based on what volunteers could earn in their usual occupations. The value varies by: whether volunteers are male/female; average ordinary time hourly rate for all occupation categories within a specific industry.
- **Replacement cost** – appropriate wage rate to each volunteer hour is associated with the activity being undertaken by the volunteer.
- **Other options** – e.g. average gross wage for community welfare and social service occupation category.

In the case of charitable volunteer work, and without prior knowledge of the opportunity cost for each volunteer, the replacement cost method is recommended as the most appropriate approach to valuing volunteer hours.

D.6. Limitation of economic contribution studies

While describing the geographic origin of production inputs may be a guide to a firm or industry's linkages with the local economy, it should be recognised that these are the type of normal industry linkages that characterise all economic activities.

Unless there is unused capacity in the economy (such as unemployed labour) there may not be a strong relationship between a firm's economic contribution as measured by value added (or other static aggregates) and the welfare or living standard of the community. The use of labour and capital by demand created from the industry comes at an opportunity cost as it may reduce the amount of resources available to spend on other economic activities.

In a fundamental sense, economic contribution studies are simply historical accounting exercises. No 'what-if', or counterfactual inferences – such as 'what would happen to living standards if the firm or industry disappeared?' – should be drawn from them.

The analysis – as discussed in the report – relies on a national IO table modelling framework and there are some limitations to this modelling framework. The analysis assumes that goods and services provided to the sector are produced by factors of production that are located completely within the state or region defined and that income flows do not leak to other states.

The IO framework and the derivation of the multipliers also assume that the relevant economic activity takes place within an unconstrained environment. That is, an increase in economic activity in one area of the economy does not increase prices and subsequently crowd out economic activity in another area of the economy. As a result, the modelled total and indirect contribution can be regarded as an upper-bound estimate of the contribution made by the supply of intermediate inputs.

Similarly the IO framework does not account for further flow-on benefits as captured in a more dynamic modelling environment like a Computerised General Equilibrium (CGE) model.

Appendix E : Economic contribution for charity groups

E.1. Economic contribution by charity groups

As part of the analysis we calculated the economic contribution of charity groups, as subset of the total economic contribution of the sector. As there were only 114 group charities reported in the 2014-15 dataset, a breakdown by charity size has not been provided.

E.1.1. Direct economic contribution

The direct economic contribution of all charity groups was nearly $7.5 billion and the direct FTE employment was 80,200. As with individual Australian charities, groups which were involved in education and research provided the largest direct value add (over $3.5 billion) followed by those involved in health (nearly $3.1 billion). These two groups were also the largest direct employers.

However, the contrast in the greatest direct economic contribution and the smallest is stark. Groups which were part of the international sub-sector and law and advocacy sub-sector had a minimal direct economic contribution of $1 million or less. Similarly, these groups, along with those involved in philanthropic and grant-making activities had less than 25 direct FTE employment. A number of charity group sub-sectors also reported minimal or negative direct GOS in 2014-15. For example, law and advocacy groups had a direct GOS of -$5 million and environment charity groups reported -$4 million.

Table E.1 : Direct economic contribution of charity groups by sub-sectors, 2014-15

Direct	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	3,528	304	3,224	31,116
Health	3,056	66	2,990	34,829
Social services	686	5	682	12,096
Culture and recreation	67	2	65	511
Religion	45	3	42	618
Development and housing	43	1	43	792
Philanthropic and grant-making activities	12	10	2	19
Environment	12	-4	16	177
International	1	0	1	21
Law and advocacy	0	-5	5	24
All sub-sectors	**7,450**	**381**	**7,069**	**80,200**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

The direct value add of charity groups across all sub-sectors is approximately 11% of the direct value add of all individual charities. Likewise, the direct FTE employment was approximately 10% that of all individual charities.

E.1.2. Indirect economic contribution

The indirect economic contribution of all charity groups in Australia was approximately $5.5 billion in 2014-15 and the indirect FTE employment was nearly 48,000 FTE. Compared to the direct economic contribution, the indirect economic contribution of charity groups was smaller, with the exception of indirect GOS being larger with the direct GOS. This is consistent with the findings of above of all individual charities in Australia.

As with their direct contribution, the education and research sub-sector, followed by the health sub-sector and social services sub-sector had the greatest indirect value add. Interestingly, despite having a very low direct

value add (which is reported as $0, after rounding), the law and advocacy sub-sector – due to its intermediate expenditure – generates a significant flow-on contribution of nearly $230 million in indirect value add.

Table E.2 : Indirect economic contribution of charity groups by sub-sectors, 2014-15

Indirect	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	2,440	451	1,989	18,638
Health	2,090	480	1,610	21,412
Social services	561	131	430	5,253
Law and advocacy	227	84	142	1,723
Religion	60	16	44	346
Culture and recreation	45	13	32	269
Development and housing	26	10	16	142
Environment	15	4	11	88
Philanthropic and grant-making activities	14	4	10	81
International	4	1	3	26
All sub-sectors	**5,483**	**1,195**	**4,289**	**47,977**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

E.1.3. Total economic contribution

When the direct and indirect economic contribution of Australian charity groups are combined, it is estimated that **the total economic contribution of charity groups was a total value add of $12.9 billion and nearly 128,200 FTE employment for 2014-15**.

Table E.3 : Total economic contribution by charity sub-sectors, 2014-15

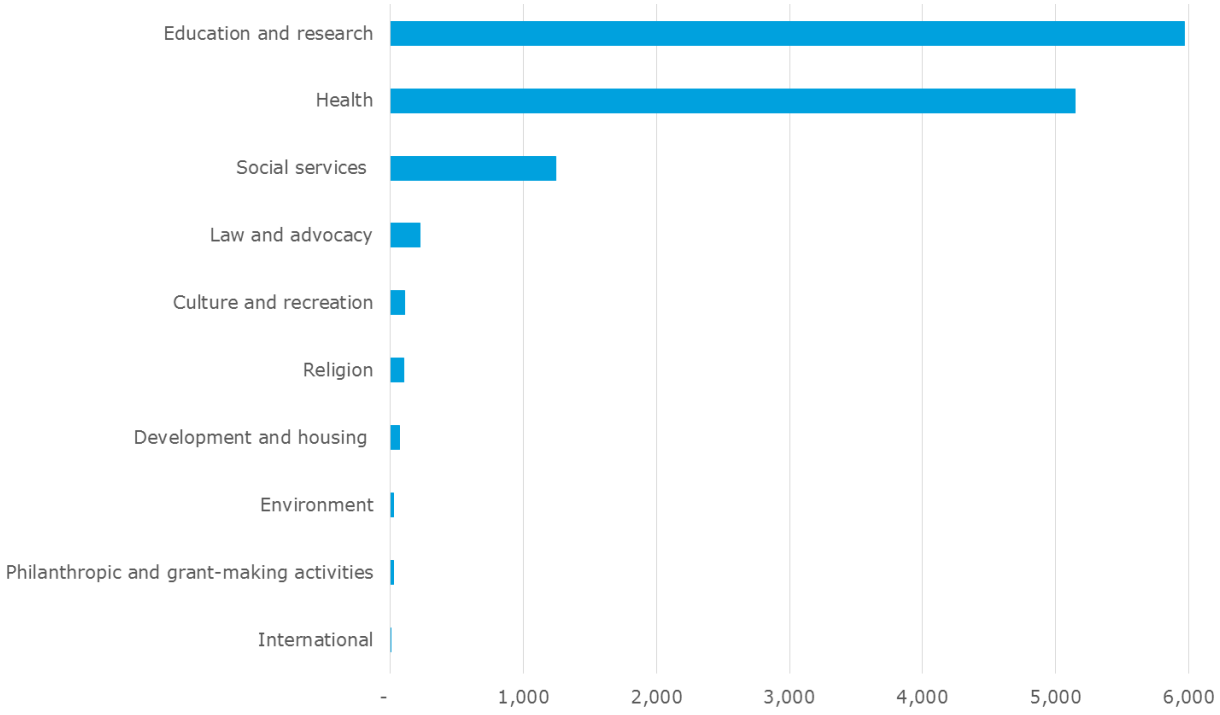
Total	Value add ($m)	GOS ($m)	Labour income ($m)	Employment (FTE)
Education and research	5,968	755	5,212	49,754
Health	5,146	546	4,600	56,240
Social services	1,247	136	1,112	17,348
Law and advocacy	227	79	147	1,747
Culture and recreation	113	15	98	780
Religion	105	19	86	964
Development and housing	69	11	58	934
Environment	27	0	27	264
Philanthropic and grant-making	26	14	12	100
International	5	1	4	47
All sub-sectors	**12,933**	**1,576**	**11,357**	**128,177**

Source: ACNC, Deloitte Access Economics.

Note: Due to rounding, totals may not add up to sub-totals.

Chart E.1 below shows the total value add of charity groups by sub-sectors. The three largest sub-sectors contribute 96% of the total value add of charity groups (education and research with 46%, health with 40% and social services with 10%). The remaining charity groups total to 4% of the total value add.

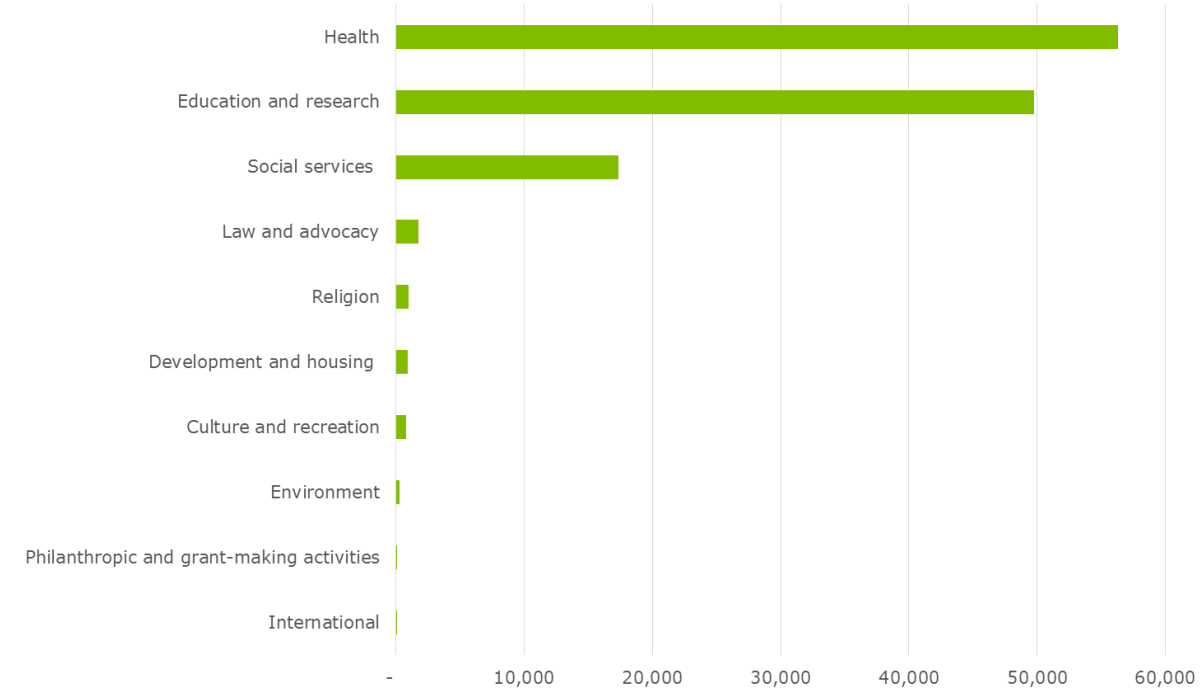
Chart E.1 : Total value add ($m) of charity groups by sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

Chart E.2 below shows the total employment of charity groups by sub-sectors. Health generates the largest total employment (compared to being the second largest in terms of total value add). As with total value add, the three largest sub-sectors contribute 96% of the total employment of charity groups (education and research with 44%, health with 39% and social services with 14%).

Chart E.2 : Total FTE employment of charity groups by sub-sectors, 2014-15



Source: ACNC, Deloitte Access Economics.

Appendix F : Detailed financial indicator tables

Table F.1 : Net income ratio

Sub-sector	XS	S	M	L	XL	XXL	Sector average
Philanthropic and grants	-30.56%	13.30%	12.82%	31.20%	56.54%	-	60.41%
Development and housing	-34.63%	-3.24%	1.24%	7.28%	1.40%	-	11.96%
Religion	-22.23%	6.24%	10.03%	11.57%	11.76%	1.70%	9.50%
Environment	-4.85%	3.43%	7.61%	11.54%	8.41%	-	9.41%
Social services	-8.47%	7.23%	7.28%	7.96%	6.16%	-	5.54%
Health	-13.10%	-0.95%	-0.69%	6.38%	7.88%	4.80%	6.13%
Education and research	-107.15%	-2.03%	4.09%	8.01%	7.44%	5.58%	6.29%
Culture and recreation	-21.75%	4.48%	3.91%	7.26%	6.04%	-	5.46%
International	-8.89%	6.78%	6.31%	2.06%	11.08%	-	4.63%
Law and advocacy	-9.96%	-17.04%	3.25%	3.03%	3.25%	-	1.87%
Sector average	**-37.61%**	**4.46%**	**5.66%**	**8.66%**	**7.84%**	**8.54%**	**8.08%**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.2 : Net asset ratio

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
Philanthropic and grants	99.50%	99.64%	97.46%	97.36%	93.61%	-	**96.83%**
Culture and recreation	94.02%	95.97%	85.64%	85.32%	96.00%	-	**93.62%**
Social services	99.95%	97.17%	88.46%	76.02%	68.26%	-	**84.23%**
Environment	94.67%	94.23%	84.96%	73.43%	85.70%	-	**81.27%**
Development and housing	88.98%	90.53%	83.35%	80.44%	78.63%	-	**80.63%**
International	78.25%	93.23%	88.19%	77.50%	68.87%	-	**73.37%**
Education and research	65.72%	94.97%	79.17%	75.99%	72.90%	71.89%	**72.74%**
Law and advocacy	93.00%	67.14%	58.56%	66.56%	62.16%	-	**58.48%**
Religion	95.64%	90.86%	85.82%	72.03%	31.69%	-	**56.37%**
Health	88.25%	92.15%	77.47%	57.66%	51.01%	48.77%	**52.03%**
Sector average	**97.78%**	**94.55%**	**85.58%**	**75.01%**	**67.17%**	**66.13%**	**71.05%**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.3 : Current ratio

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
Philanthropic and grants	-	-	19.20	4.47	6.52	-	**5.75**
Environment	-	-	3.74	2.86	2.83	-	**2.90**
International	-	-	3.39	3.14	2.20	-	**2.49**
Development and housing	-	-	2.28	2.20	2.80	-	**2.35**
Culture and recreation	-	-	2.20	2.18	1.44	-	**1.73**
Law and advocacy	-	-	2.15	1.94	1.73	-	**1.72**
Religion	-	-	5.77	1.76	1.07	-	**1.62**
Social services	-	-	3.18	2.46	1.67	-	**1.46**
Education and research	-	-	3.24	2.05	1.26	1.34	**1.39**
Health	-	-	2.91	1.21	0.74	0.50	**0.71**
Sector average	-	-	**3.23**	**1.75**	**1.13**	**0.92**	**1.15**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.4 : Net current assets expenditure cover

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
Religion	-	-	26.7%	41.6%	10.5%	-	**54.9%**
Philanthropic and grants	-	-	55.0%	44.9%	43.6%	-	**45.6%**
Environment	-	-	38.3%	54.1%	27.1%	-	**40.0%**
Development and housing	-	-	24.1%	29.5%	37.3%	-	**31.7%**
International	-	-	37.4%	39.6%	24.0%	-	**19.2%**
Law and advocacy	-	-	30.4%	31.4%	19.0%	-	**17.8%**
Culture and recreation	-	-	15.7%	21.5%	9.7%	-	**13.8%**
Social services	-	-	24.6%	34.7%	14.5%	-	**12.4%**
Education and research	-	-	22.7%	24.4%	6.9%	6.5%	**8.4%**
Health	-	-	26.6%	12.5%	-21.5%	-32.7%	**-20.7%**
Sector average	-	-	**25.9%**	**26.0%**	**5.5%**	**-2.8%**	**5.5%**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.5 : Asset growth

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
Philanthropic and grants	-1.14%	1.00%	1.59%	4.96%	14.80%	-	**14.55%**
International	-6.54%	4.86%	6.93%	3.82%	26.02%	-	**12.88%**
Environment	-1.54%	1.25%	6.21%	11.41%	6.93%	-	**7.95%**
Development and housing	-5.65%	-0.75%	0.43%	4.28%	0.80%	-	**6.96%**
Health	-1.08%	-0.31%	-0.38%	5.44%	7.49%	5.97%	**6.24%**
Law and advocacy	-1.44%	-9.98%	6.11%	4.25%	5.93%	-	**4.50%**
Education and research	-6.48%	-0.57%	2.73%	4.74%	5.31%	3.42%	**3.94%**
Social services	-0.02%	1.42%	3.29%	7.36%	9.81%	-	**3.01%**
Religion	-1.79%	0.67%	1.71%	2.74%	6.21%	-	**2.84%**
Culture and recreation	-4.28%	1.36%	1.75%	4.35%	1.01%	-	**1.41%**
Sector average	**-0.42%**	**0.49%**	**1.74%**	**4.91%**	**5.47%**	**7.01%**	**5.14%**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.6 : Revenue – Donations and bequests

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
International	81.03%	73.69%	57.68%	64.12%	75.21%	-	**75.38%**
Philanthropic and grants	11.94%	19.57%	41.23%	38.04%	56.88%	-	**66.27%**
Religion	59.70%	59.35%	62.56%	37.93%	25.64%	-	**40.50%**
Environment	40.05%	29.91%	30.81%	28.59%	46.49%	-	**36.34%**
Culture and recreation	20.33%	19.53%	13.22%	16.23%	7.72%	-	**11.14%**
Social services	35.93%	28.08%	20.27%	11.48%	7.29%	-	**9.21%**
Development and housing	37.24%	21.64%	14.86%	8.68%	5.68%	-	**6.46%**
Health	35.18%	28.20%	17.12%	6.71%	6.28%	2.78%	**5.07%**
Law and advocacy	35.00%	19.90%	8.35%	6.26%	2.91%	-	**3.13%**
Education and research	25.72%	18.00%	10.72%	4.52%	2.32%	0.91%	**2.07%**
Sector average	**34.44%**	**44.31%**	**23.95%**	**10.95%**	**7.64%**	**4.88%**	**8.18%**

**Greyed out cells = No data reported, or sample size too small to present values*

Table F.7 : Revenue – Government grants

Sub-sector	XS	S	M	L	XL	XXL	Whole sector
Law and advocacy	14.22%	42.99%	67.45%	62.04%	69.22%	-	**78.71%**
Social services	13.87%	23.71%	44.56%	56.95%	61.94%	-	**62.27%**
Education and research	4.63%	14.30%	31.37%	55.28%	38.87%	57.01%	**50.44%**
Health	9.65%	24.84%	42.26%	52.20%	50.52%	34.90%	**43.82%**
Development and housing	8.79%	25.82%	39.02%	36.89%	30.68%	-	**33.87%**
Culture and recreation	10.56%	19.45%	28.23%	25.85%	28.81%	-	**25.75%**
Environment	16.47%	17.15%	23.85%	33.65%	18.09%	-	**25.51%**
International	0.04%	0.55%	4.83%	20.19%	15.16%	-	**13.50%**
Religion	1.11%	0.77%	1.90%	14.84%	13.43%	-	**8.25%**
Philanthropic and grants	0.61%	0.90%	1.42%	5.91%	5.02%	-	**2.95%**
Sector average	**7.02%**	**7.96%**	**29.27%**	**46.45%**	**41.74%**	**50.12%**	**45.05%**

**Greyed out cells = No data reported, or sample size too small to present values*

Limitation of our work

General use restriction

This report is prepared for the Australian Charities and Not-for-profits Commission. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of calculating the total economic value of charities in Australia. You should not refer to or use our name or the advice for any other purpose.

Deloitte.

Contact us

Deloitte Access Economics
ACN: 149 633 116
8 Brindabella Circuit
Brindabella Business Park
Canberra Airport ACT 2609
Tel: +61 2 6263 7000
Fax: +61 2 6263 7004

Deloitte Access Economics is Australia's pre-eminent economics advisory practice and a member of Deloitte Access Economics' global economics group. For more information, please visit our website