



Journal of Australian Taxation

(2021) Volume 23 (1)

TABLE OF CONTENTS

SUPPORTING TAXATION'S EXTENDED 'PURPOSE' TO ENCOMPASS THE OBJECTIVE OF SOCIALLY ENGINEERING HUMAN BEHAVIOURS

Lidia Xynas and Alexander Xynas1

FAIRNESS IN THE INDIAN TAX SYSTEM

S. A Mohan..... 16

AN EVALUATION OF THE PROPOSED CHANGES TO THE INDIVIDUAL TAX RESIDENCY RULES

Elizabeth Ng 38

A COMPREHENSIVE ANALYSIS OF THE BUSINESS LITERACIES OF AUSTRALIAN SMALL BUSINESSES

Melissa Belle Isle and Brett Freudenberg 67

TAX IMPLICATIONS ARISING FROM MERGERS AND ACQUISITIONS – AN INVESTIGATION OF AUSTRALIAN FIRMS

Amna Tariq Shah and Ken Devos 103

THE PLUG-IN HYBRID ELECTRIC VEHICLE IN REMOTE AUSTRALIA: A FURTHER CASE STUDY 2016–2021

Lex Fullarton and Dale Pinto138

EDITORIAL

There is one issue of the *Journal of Australian Taxation* for 2021. Volume 23(1) is the standard edition for each calendar year and consists of six articles covering a wide range of taxation topics. The year 2021 was still a difficult year with the Coronavirus pandemic continuing to have an impact on all of us involved in researching taxation law. It is heartening to see that tax academics, tax students and tax practitioners were able to find the inspiration to write about taxation issues during this period. The Editor is grateful for the contribution made by the authors in this edition of the journal.

The first article by Lidia Xynas and Alexander Xynas content that an expansion of the ‘purpose’ of taxation is to be supported where it is made to incorporate objectives of socially engineering human behaviours in those circumstances where government intervention is warranted. That is: to protect individuals and broader society from certain harms. The authors demonstrate that support for this extended purpose of taxation is based on three Pillars: Ethics, Law and Economics. This Article demonstrates how taxation can be a supported policy approach available to policymakers, and one which can still foster taxpayer confidence and acceptance.

The second article is written by Sashi Mohan and examines the concept of fairness in the taxation administrative system in India. This article discusses the views of around 30 interviewees, including retired ITD officials, former ITAT adjudicators, retired High Court judges, and tax practitioners, on fairness in tax assessments made by the ITD and adjudication at the levels of the CIT(A) and the ITAT. The article also references High Court caselaw supporting some of the discussed views. Hence, there is an immediate need to remedy the unfairness within the tax assessment process and at the level of the CIT(A).

The third article is written by Elizabeth Ng and provides a very comprehensive evaluation of the proposed changes to the individual tax residency rules as well as the current legal problems facing individuals in this area of taxation law. In the 2021-22 Federal Budget, the Australian Government announced that the current individual tax residency rules would be replaced with a new framework, which will be based on recommendations made by the Board of Taxation. The Proposed Reforms are based on a two-step model; a simple bright-line test as the primary test of residency, followed by more complex secondary tests if the primary test does not apply. A key focus of the Proposed Reforms is simplicity. The Proposed Reforms introduces a more targeted approach through the use of day-count tests, and four objective Australia-only factors. The author contends that the Proposed Reforms will meet the key policy objectives of equity, efficiency and simplicity to a large extent. The Proposed Reforms makes it easier for expatriates to determine their residency status and are a step in the right direction.

The fourth article written by Melissa Belle Isle and Brett Freudenberg provides a very comprehensive reports on their survey of small businesses in the service sector in terms of their literacy for financial statements, computer accounting software and business tax, and if there is any relationship between them. The results demonstrated that there was a linear relationship between them and that certain demographics were likely to have lower overall literacy. Their testing demonstrated that there was a lineal relationship between literacy

scores. When overall LSs were compared with the demographics, it was found that those service SBOs with the highest overall literacy were migrants who had been living in Australia for between 10 and 15 years, had a postgraduate degree and had been operating their business for more than 10 years. The authors found that low overall literacy was common for non-employing service SBOs who had immigrated to Australia between 15 and 20 years ago, and who had been operating a business for less than 10 years. The authors provide recommendations to try to assist those demographics which appeared to have lower overall literacy in these areas.

The fifth article is written by Amna Tariq Shah and Ken Devos and critically investigates the tax implications arising from mergers and acquisitions of Australian firms. The article investigates the presence of potential tax advantages obtained by Australian-based firms through M&A transactions. The authors made ninety-seven observations, comprising M&A deals completed between 2005 and 2015. These transactions were investigated to statistically support and explain the potential link between M&A decisions and certain corporate tax advantages gained. The authors contend that the findings of their research suggests that when firms make profit-maximising decisions as part of an M&A deal, a potential reduction in tax can transpire from such transactions.

The sixth and last article in this edition is written by Lex Fullarton and Dale Pinto and is an updated report on the taxation and economic implications of using a Hybrid Plug-In Electric vehicle in a remote part of Australia. The article presents further findings from a case study that was conducted on a Mitsubishi Outlander Plug-in Electric Hybrid Vehicle (PHEV) in remote Western Australia from 2016–17. The original article is found at ‘The Impact of the Changing Technology of Motor Vehicles on Road Tax Revenue’ (2018) 20(1) *Journal of Australian Taxation* 26. That study is updated and extended in this article to October 2021.

This Article builds on a previously published paper and uses the same research approach. It continues the aim of encouraging the transition in Australia’s transport sector from internal combustion engines to electrically powered vehicles, in order to reduce the nation’s GHG emissions. It also aims to encourage road users, governments and tax administrators to become aware of the impact of changing road tax revenue structures to fund the development and maintenance of road networks. To fulfil those aims it reviews the impact electric powered vehicles might have on the tax revenue currently raised through the fuel excises levied on the owners of motor vehicles powered by fossil fuels.

John McLaren

Editor

SUPPORTING TAXATION'S EXTENDED 'PURPOSE' TO ENCOMPASS THE OBJECTIVE OF SOCIALLY ENGINEERING HUMAN BEHAVIOURS

LIDIA XYNAS* AND ALEXANDER XYNAS#

Abstract

Taxation should not only be viewed as a legislative tool which provides revenues for policymakers to be able to then deliver social goods and services such as roads, health care, education and military protections. The fiscal raising aspect of taxation is also supplemented by another objective or purpose – the social engineering of human behaviours. This extended purpose of taxation can be supported by reference to three Pillars: Ethics, Law and Economics as bought together in this Article. This three Pillar approach can provide the basis for taxpayer confidence and acceptance of a policymaker's approach to extending purpose of taxation to encompass objectives of socially engineering human behaviours. This is especially important where the positives of such a policy approach outweigh the harms associated with certain defined human behaviours, for the individual and for broader society.

I INTRODUCTION

In order to foster taxpayer support and confidence for taxes to be used as social engineering tools, three Pillars are bought together in this Article: Ethics, Law and Economics. This Article discusses each Pillar, where arguments are put forward that support extending the purpose of taxation to encompass objectives of social engineering rather than taking a doctrinal view, that taxation's purpose is merely to raise government revenues for the provision of social goods and services.

Part 1 of this Article provides an examination the various views of the 'purpose' of taxation. One view is that taxation is required as a government mechanism to facilitate forced

* Professor and Dean, College of Law and Justice, Victoria University - Lidia.Xynas@vu.edu.au

Lecturer in Law, First Year College and the College of Law and Justice, Victoria University; Sessional Lecturer, School of Law, Deakin University.

contributions from people and property ‘for the support of policymakers and for all public needs.’¹ Another view maintains that a tax’s purpose is judged by ‘its effect on the *public* of influencing their economic behaviour.’² In this Article, this latter view of the ‘purpose’ of taxation is expanded upon in order to support its use to socially engineer human behaviours.

Part 2 of the Article explores Pillar 1: Ethics. Here, it is argued that the promotion of the well-being of many, in any one western society, should be a government’s prevailing objective. It is noted that policymakers in countries such as Australia, have an ‘overall obligation to maximise overall social welfare’,³ therefore, in designing any new taxes or in implementing tax reform, consideration should be given to the ‘maximisation of the sum across individuals of social utilities of consumption.’⁴ Arguments which posit that the imposition of taxes will impede upon free will are addressed by reference to the particular design of a tax, and counter arguments are presented which support their implementation in those circumstances where there are harmful effects for both the individual and society associated with certain defined human behaviours.

Part 2 of this Article then examines Pillar 2: Law, where it is firstly acknowledged that the taxing power of a policymaker is derived from the legislature. In Australia, it is the Australian Constitution. It is also recognised that the relationship a policymaker has with its people is vitally important, especially in the formulation of policies and in the implementation of strategies that are designed to protect and maximise its peoples’ welfare. Taking a paternalistic approach, it can be argued that a policymaker should know what is best for ‘society as a whole’. On this basis, it is suggested that it is legitimate for a policymaker to formulate policies and implement strategies (including the imposition of taxes or tax reform) which regulate those identifiable socially concerning undesirable human behaviours.

Also, in Part 2 of this Article, Pillar 3: Economics, is presented and examined. A major consideration is whether the imposition of a tax on certain commodities is an efficient way in which to regulate personal behaviours and change peoples’ consumption choices, while addressing associated negative harms (both internalities and externalities). To address these points, an economic overview from an individual perspective is firstly provided. Depending on whether the demand curves for particular commodities are elastic or inelastic, diverse outcomes for their consumption will result following the imposition of a tax on them. Supply elasticity and inelasticity will also have different impacts. The relative elasticities of both supply and demand also dictate who bears the burden of the tax imposed. This could rest on the consumer, the producer or importer, or a combination of both. In this Article, the Pigouvian tax theory is also referred to in order to explain the economic effect that applies after the imposition of a tax on a particular commodity.⁵ Based on this theory, following the implementation of tax on a commodity that has negative externalities associated with its consumption, consumer and producer surpluses can be diminished, where some of these losses can be converted into tax revenues for policymakers. Further, it is suggested that these

¹ Frederick N Judson, ‘Public Purposes for Which Taxation Is Justifiable’ (1908) 17(3) *The Yale Law Journal* 162, 162.

² Abba Lerner, *Economics of Employment* (McGraw-Hill, 1951) 131 (emphasis in original).

³ Nicholas Stern, *The Stern Review: The Economics of Climate Change* (HM Treasury, 2007) 28 <http://unionsforenergydemocracy.org/wpcontent/uploads/2015/08/sternreview_report_complete.pdf>.

⁴ *Ibid* 30.

⁵ See Ronald Coase, ‘The Problem of Social Cost’ (1960) 3 *The Journal of Law & Economics* 1, 1-44. Also see Herbert Hovenkamp, ‘The Coase Theorem and Arthur Cecil Pigou’ (2008) 51 *Arizona Law Review* 633, 633-649.

tax revenues can then be directed to other policy initiatives that will be able to address the negative externalities directly.

It is concluded that the three Pillars: Ethics, Law and Economics, as brought together in this Article, connect three separate but interrelated foundations that support the extension of the purpose of taxation to encompass aspects of social engineering of human behaviours. This Article demonstrates how taxation can be a supported policy approach available to policymakers, and one which can still foster taxpayer confidence and acceptance.

II TAXATION – ITS PURPOSE

There are two main schools of thought as to the purpose of taxation. Judson in 1908 noted that it is about applying the forced contributions from people and property ‘for the support of policymakers and for all public needs.’⁶ The public needs will include essential community goods and services such as education, health and roads; to achieve policymakers’ economic aims; and to also ‘redistribute income on a socially acceptable basis.’⁷ Taxes can thus ‘be considered as ex-ante payments for services obtained later on (allowing for de-coupling of the payment structure from consumption structure but not necessarily).’⁸ Supporting this view, the Australian Council of Social Service (ACOSS) maintains the position that ‘[t]he main purpose of taxation is to raise revenue for the services and income supports the community needs. Public revenues should be *adequate* for that purpose.’⁹

An alternative view is supported by Lerner. He states that:

...taxation is not a funding operation ... [and] decisions concerning taxation should be made only with regard to the economic effects in terms of promotion of full employment, price stability, or other economic goals, and not ever because the policymakers needs to make money payments.¹⁰

For Lerner, the ‘purpose’ of a taxation system is an economic one, where macroeconomic objectives are paramount, and ‘taxes should *never* be imposed for the sake of the tax revenues.’¹¹ He also states that a tax’s ‘purpose’ is judged by ‘its effect on the *public* of influencing their economic behaviour.’¹² Taking this view, the economic purpose of a tax can provide for a ‘broad benchmark against which variations can be measured and explained.’¹³

⁶ Judson (n 1) 162.

⁷ Clinton Alley and Duncan Bentley, ‘A Remodelling of Adam Smith’s Tax Design Principles’ (2005) 20 *Australian Tax Forum* 579, 583.

⁸ Valentina Piana, *Tax Revenue* (2003) Economics WEB Institute
<<http://www.economicwebinstitute.org/glossary/taxrev.htm>>.

⁹ See Australian Council of Social Service (ACOSS), *Tax Reform: Purpose, Principles and Process* (August 2013) <https://www.acoss.org.au/wpcontent/uploads/2015/06/Tax_reform_ACOSS_August_2013.pdf>. ACOSS is the Australian peak body of the community services and welfare sector and the national voice for the needs of people affected by poverty and inequality.

¹⁰ Lerner (n 2).

¹¹ *Ibid.*

¹² *Ibid.*

¹³ Alley and Bentley (n 7) 584.

A Extending the Purpose of Taxation

Regulation of persons' actions or behaviours in a society can cover a number of aspects including the controlling, governing or directing, facilitating or influencing behaviour towards or away from some purpose. There are a number of regulatory approaches or techniques that can be taken with respect to any one or a number of behaviours of people in a society to 'influence industrial, economic, or social activity.'¹⁴ In many jurisdictions, taxation has not only been viewed as a pecuniary burden exacted by legislative authority, laid upon individuals or property to support policymakers in providing social services such as education, health care, defence and roads, but also as a tool to alter human behaviours in particular circumstances. In this regard, many policymakers have used their taxation systems to promote extraneous social, economic and political objectives.¹⁵ These approaches have focused on the consumption of commodities and the engagement in activities that have not only negative individual consequences, but also negative external consequences (externalities) that are not considered in the price of those commodities or activities (also referred to as market failures). The underlying premise is that when faced with coercive or punitive measures, delivered via the tax system, undesirable human behaviours and consumption of certain commodities, together with their associated negative externalities, can be addressed.

Taxation is one tool that can foster 'good' and discourage or punish 'bad' behaviours. However, the question remains – how do policymakers attain taxpayers' acceptance and compliance, so that such an approach can have a positive long-term effect? Australia's tax system has been recognised as one which is underpinned by the concepts of fairness and integrity. This sentiment was echoed by the 2010 Henry Review, which observed:

The operation of Australia's tax system is fundamentally sound and there is general confidence in the system. The level of voluntary compliance is high, reflecting positive perceptions about the fairness and integrity of the system and how it is administered.¹⁶

In order to ensure that the purpose of taxation is extended to encapsulate its use to socially alter human behaviours, while still maintaining positive perceptions about the fairness and integrity of the Australian tax system and how it is to be administered, the three Pillars: Ethics, Law and Economics are drawn together in this Article. This approach can provide policymakers with a policy approach that can be supported and ultimately accepted by taxpayers.

¹⁴ Robert Baldwin and Martin Cave, *Understanding Regulation* (Oxford, 1994) 34.

¹⁵ For example, in 2018 the UK introduced a type of sugar tax (referred to as a levy) on sweetened sugary beverages (SSBs,) in order to deal with rising and concerning overweight and obesity issues for its people. See Katie Allen, Anushka Asthana and Rowena Mason, 'George Osborne unveils sugar tax in eighth budget as growth forecast falls', *The Guardian* (online), 17 March 2016 < <https://www.theguardian.com/uk-news/2016/mar/16/budget-2016-george-osborne-sugar-tax-growth-forecast-falls>>.

¹⁶ See Ken Henry et al, 'Australia's Future Tax System Review, Final Report' (*Henry Review*) (Australian Government, Treasury, 2 May 2010) Parts 1 and 2. <http://www.taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm>.

III THE THREE PILLARS

A Pillar 1: Ethics

Utility refers to general well-being or happiness, where according to John Stuart Mill, it is a consequence of good actions.¹⁷ Taking a hedonistic view, Mill postulates that pleasure or happiness is to be considered the highest good in life. In the context of utilitarianism, Mill posits such utility is acquired at an overall society level, by considering the wellbeing of many people.¹⁸ It can be argued that because people desire well-being or happiness at an individual level, then it may follow that the whole of society does as well. According to Mill, however, utilitarianism is more than an ethics of self-interest, but one where one must not advantage their own happiness over that of any other person.¹⁹ The greatest good for all of society therefore refers to the well-being or happiness of the greatest number of people as measured against the total pain. If the measure of happiness is greater, then the utilitarian calculus can permit an action.²⁰ It may be thus argued that as part of a policymaker's objective when implementing any policies and actions, they should do so on behalf of all its peoples, and not just for a select few. It is here that the implementation of taxation can be ethically possible, since the 'pain' imposed by policymakers can be offset by the pleasure or happiness created by the government services provided, which are associated with the tax revenues collected.²¹

However, there are those that argue that the imposition of taxes as a tool of social engineering is unethical because it is inefficient, noting at the very least that '[i]ndividuals' responses to taxation are inefficient not only because they give rise to negative externalities.'²² Therefore it may be argued that the imposition of taxes cannot maximise the wellbeing or happiness of many. In addition, the question arises as to how does one measure the impact of taxes on different classes of people, within one society, across many societies, and for current and future generations?

In this Article, it is recognised that there are many complexities to consider when addressing these above questions. It is here that standard welfare economics and the underlying ethics that underpins it can nevertheless assist. While policymakers have an overall obligation to maximise overall social welfare,²³ this of course depends on the welfare of each individual in society. Standard welfare economics looks at the consequences of actions 'in terms of impacts on utility.'²⁴ Accordingly, an overarching objective of any policy should 'consider the maximisation of the sum across individuals of social utilities of consumption.'²⁵ Based on this approach, policymakers determine which policies they should make on behalf of their

¹⁷ See generally John Stuart Mill, *Utilitarianism* (1863) ch 2 <<https://www.utilitarianism.com/mill2.htm>>.

¹⁸ *Ibid.*

¹⁹ *Ibid* 57.

²⁰ *Ibid* 63.

²¹ *Ibid* 102.

²² Alex Raskolnikov, 'Accepting the Limits of Tax Law and Economics' (2013) 98(3) *Cornell Law Review* 523, 525.

²³ Stern (n 3) 28.

²⁴ *Ibid* 29.

²⁵ *Ibid* 30.

constituents in order to ‘improve, or maximise, overall social welfare.’²⁶ Areas such as education, health and environment require close attention, as these are the areas that the international community has identified as important factors in determining human well-being.²⁷ Accordingly, policymakers, in the implementation of policies that deal with issues surrounding human well-being, should not only take into account individual concerns but also the impacts that such policies can have on society overall.

1 Equity Considerations

The imposition of taxation to socially engineer human behaviours is also arguably supported on the grounds of equity. While ethics examines the moral validity of choice, equity can be viewed as the expression of social justice, and rests on the notion of a fair distribution of benefits between human beings where ‘no one person or subgroup should reap a disproportionate share of benefit or bear a disproportionate share of costs.’²⁸ This too can relate to obligations owed by current generations to future ones. According to intergenerational equity principles, the current generation owes a duty to future generations to ensure that they leave a sustainable society intact. Based on the principles of Ecologically Sustainable Development (ESD) a sustainable society is ‘one that meets the needs of the present without compromising the ability of future generations to meet their own needs.’²⁹ In this regard, ‘[a] sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support.’³⁰ Indeed, the intergenerational equity concept establishes that humans ‘hold the natural and cultural environment of the Earth in common both with other members of the present generation and with other generations, past and future.’³¹ How to ensure these responsibilities are supported beyond individual obligations lies at the heart of a policymaker’s objective to ‘improve, or maximise, overall social welfare’³² for both current and future generations. Further, in 2015, the United Nations (UN) member countries adopted the 2030 Agenda for Sustainable Development together with the 17 Sustainable Development Goals whose aim is to ‘build a better world with no one left behind.’³³ Taxation, in this context can be utilised as one policy tool to alter human behaviours in those circumstances where individual behaviours have negative external effects on broader society – both for present society and for future ones.

²⁶ Ibid 28.

²⁷ Ibid.

²⁸ Paul B Thompson, ‘Ethics and Equity’ in: K Ludlow, S Smyth and J Falck-Zepeda (eds), *Socio-Economic Considerations in Biotechnology Regulation. Natural Resource Management and Policy* (vol. 37) (Springer, New York, NY, 2014).

²⁹ World Commission on Environment and Development, *Our Common Future: Report of the Commission*, (Oxford University Press, 1987) ch 2 <<http://www.un-documents.net/our-common-future.pdf>>.

³⁰ See generally Donatella H Meadows, Dennis L Meadows and Jorgen Randers, *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future* (Chelsea Green Publishing, 1992).

³¹ Edith Brown Weiss, ‘In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity’ (Transnational Publishers and the United Nations University, 1990) 8.

³² Stern (n 3) 28.

³³ United Nations, *Sustainable Development Goals – 17 Goals to Transform Our World* <<http://www.un.org/sustainabledevelopment/>>.

B *Pillar 2: Law*

Taxes can be viewed as mandatory payments, ruled by laws. In the Australian context, the power to impose taxation is derived from the *Australian Constitution*.³⁴

1 *Role of the Governments (Policymakers)*

From a legal perspective, a governments relationship with its people is paramount. There are two major views of the role of governments in modern democratic societies. One view is that governments exist in order to serve their people, where their goals are to protect property, freedoms and conduct other protective functions.³⁵ Where the people do not agree with an existing government's policies (including taxation), then it is through the peoples' voting power, that an existing government can be removed and replaced with another who may have more favourable policies. This approach views governments as servants of the people, and the people as its masters,³⁶ and as such, a government's set of policies that are implemented during their term in office are legitimised.

The opposite approach views a government as master and the people as its servants. Here a government may take on a paternalistic approach, given that one of its objectives as master is to protect its citizens. It can be argued that under this view, because a government know what is best for society as a whole, there actions in formulating policies and implementing strategies to regulate undesirable human behaviours are legitimised. There are some however who argue that such intrusions disrupt social harmony, and that they can 'divide individuals into classes for no legitimate reason.'³⁷ For example, it has been argued that tobacco policies aimed at reducing cigarette consumption, single out those persons who smoke cigarettes, stigmatising them in society based on their consumption choices.³⁸

2 *Free Will*

In this Article it is postulated that any anti-paternalistic attitudes should not be sustained in those circumstances where the engagement in human activities (including the consumption of certain commodities) need addressing because they impact negatively on 'the human condition and human flourishing.'³⁹ In Australia, legal paternalistic measures are already in place that have an objective to protect the general health and wellbeing of the population. It is arguable that these interventions are justified in those circumstances where individual choice

³⁴ *Commonwealth of Australia Constitution Act 1901* (Cth).

³⁵ See generally Walter E Williams, *More Liberty Means Less Government* (Hoover Institute Press, 1999) where the author notes that it is debatable that in providing other functions, western governments actually impede upon property rights and freedoms.

³⁶ This view of governments was established in 1690 by John Locke. See John Locke, *Two Treatises of Governments* (Awnsham Churchill, 1690). Locke's ideas are canvassed by many, for example see Richard A Epstein, *Principles for a Free Society: Reconciling Individual Liberty with the Common Good* (Perseus Books Group, 1998) 25–8, 251–64.

³⁷ Robert W McGee, *The Philosophy of Taxation and Public Finance* (Springer, 2004) 85.

³⁸ The legislative amendments to the *Tobacco Act 1987* (Vic) were imposed in Victoria, Australia in 2017 which mandate no smoking in outdoor areas when food is available for consumption.

³⁹ Mirko Bagaric and Sharon Erbacher, 'Fat and the Law: Who Should Take the Blame?' (2005) 12(3) *Journal of Law and Medicine* 323, 333.

and autonomy are perceived to harm the community as a whole. Take for example the hard legislative approaches that require drivers of motor vehicles to wear seatbelts, or to not use their mobile phone when driving, or even the 0.05% alcohol level drink driving laws.

Another example is the approach of the tobacco laws in Australia, where excise taxes have been imposed on tobacco products since 1901 in order to influence their consumption, and to address negative health consequences for individuals as well as the associated burdens on the Australian health system. Notably, in 2014 Australia became the only country in the world to index tobacco excise taxes to wage inflation so as to:

ensure that tobacco products do not become relatively more affordable over time. In 2015, many common brands of cigarettes (pack of 20) already cost more than 20 Australian dollars (US\$ 15.50), which are among the highest prices in the world.⁴⁰

In this context, a paternalistic approach to limiting consumption of tobacco products has been in place and has been accepted in its implementation in Australia over a number of decades.

By adopting a similar hard paternalistic approach to overweight issues and obesity as another example, a sugar or fat tax on commodities such as sweetened sugary beverages and highly processed foods may also be justified because it is in the interests of the health of both the individual and the impacts on a population as a whole. This position is supported by Bagaric and Erbacher who note in the context of the obesity problem:

[t]he law is a particularly suitable vehicle for dealing with the obesity problem because legal regulation is the most coercive and effective behaviour-modifying tool in society. It has the capacity to significantly shape and guide not only our judgments and mind-set but even more importantly our behaviour and activities.⁴¹

These examples illustrate that it would be remiss if laws were not implemented to deal with such important issues for both individuals and for broader society.

3 Soft Regulatory Approaches

Rather than relying on taxation to alter human behaviours, it is also recognised that other regulatory approaches may also be implemented. However, it can be argued that such approaches are not always as effective or as efficient. For example, with respect to addressing human induced climate change, environmental measures have traditionally been enforced through ‘command and control’ regulations which aim to ‘prohibit behaviour damaging to the environment.’⁴² Such approaches can, for example, seek to reduce greenhouse gas emissions and promote industry change through the introduction of regulatory controls whereby a regulatory body ‘enforce[s] statutory standards [set] for industrial emissions.’⁴³ It has been argued that these approaches:

⁴⁰ World Health Organisation, *Report on the Global Tobacco Epidemic, Raising Taxes on Tobacco* (2015) 39. <http://apps.who.int/iris/bitstream/10665/178574/1/9789240694606_eng.pdf?ua=1&ua=1>.

⁴¹ Bagaric and Erbacher (n 39).

⁴² Fanny Missfeldt and Jochen Hauff ‘The Role of Economic Instruments’ in AD Owen and N Hanley (eds), *The Economics of Climate Change* (Routledge, 2004) 115.

⁴³ Wayne Gumley, ‘Legal and Economic Responses to Global Warming – An Australian Perspective’ (1997) 14 *Environmental and Planning Law Journal* 341, 343.

...can be successful in dealing with point-source pollution such as discharges to air and water from industrial premises [as well as reducing certain] ... “mobile” sources of air pollution, a good example in the introduction of tougher emission standards for automobiles in the United States.⁴⁴

However, it is has also been argued that such an approach cannot respond adequately where pollution comes from a range of:

...varied and diffuse sources with an incremental or cumulative effect. [This is especially so where the necessary resources are not available to administer and monitor the] vast number of minor and widespread violations. Global warming presents this problem on a vast scale.⁴⁵

As another example, other regulatory measures and other softer paternalistic approaches to deal with overweight and obesity have also been implemented in many jurisdictions. In Australia, these have included, the educative approach under the ‘LiveLighter’ campaign, which has run since 2012 in the Australian Capital Territory, Victoria and Western Australia. This public educative campaign promotes healthy eating and physical activity, using resources that provide healthy recipes, meal and activity planners.⁴⁶ Similarly, since 2013, the ‘Let’s Take on Childhood Obesity’ campaign in Ireland has provided information regarding meal planning, and other healthy tips, to parents in so as to assist them with their approaches to childhood overweight and obesity.⁴⁷ Mexico too in 2013 introduced a mass media campaign via TV, radio etc, the objective being to reduce consumption of high calorie foods.⁴⁸

It is however postulated in this Article that on their own, such regulatory measures don’t always have the required effect. Taking the overweight and obesity issues as an example, such softer paternalistic measures have not been able to effectively curb the growing obesity epidemic. The incidence of obesity and overweight issues have continued to grow both in Australia and other developed countries over the last few decades.⁴⁹ An additional harder paternalistic approach may be what is required.

C Pillar 3: Economics

1 Economics, Taxes and the Individual

Economic strategies and policy approaches have been implemented as an accepted method to addressing problematic human behaviours and consumptions in many jurisdictions and in many circumstances. Using the example of consumption of sweetened sugary beverages and

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Organization for Economic Co-operation and Development, *Obesity Update* (OECD 2017) (2017) <<http://www.oecd.org/health/health-systems/Obesity-Update-2017.pdf>>. OECD, *Obesity Update* 2017, 12.

⁴⁸ Ibid.

⁴⁹ See generally Organization for Economic Co-operation and Development, *Obesity Update* (OECD 2017) (2017) <<http://www.oecd.org/health/health-systems/Obesity-Update-2017.pdf>>.

highly processed foods, which have been associated as one of the possible causes of overweight issues and obesity, taxes on such commodities have been supported by many as one way to address the negative consequences for individuals. Economic strategies to reduce the consumption of obesity inducing food and drink products (i.e. those that are considered to be less healthy options) have been recommended by the World Health Organization (WHO), who have noted:

[a]s appropriate to national context, [policymakers can] consider economic tools that are justified by evidence, and may include taxes and subsidies, that create incentives for behaviours associated with improved health outcomes, improve the affordability and encourage consumption of healthier food products and discourage the consumption of less healthy options.⁵⁰

Further, WHO, in their 2016 Ending Childhood Obesity Commission Report, also recommended taxation on sugar sweetened beverages (SSBs) where they set out that:

[t]he adoption of fiscal measures for obesity prevention has received a great deal of attention ... and is being implemented in a number of countries. ... Overall, the rationale for taxation measures to influence purchasing behaviours is strong and supported by the available evidence.⁵¹

Indeed, many countries have implemented sugar and fat taxes to deal with the negative impacts that overweight issues and obesity have for individuals.⁵² Japan for example introduced a ‘quasi obesity tax’ on the person in 2008. At the time, according to a 2008 report by the New York Times, it was noted:

... to reach its goal of shrinking the overweight population by 10 per cent over the next four years and 25 per cent over the next seven years, the [Japanese] government will impose financial penalties on companies and local governments that fail to meet specific targets. The country’s Ministry of Health argues that the campaign will keep the spread of diseases like diabetes and strokes in check.⁵³

The UK also introduced a sugar tax on sweetened sugary beverages in 2018 in order to deal with rising and concerning overweight and obesity issues for its people.⁵⁴

However, it is important to also note that depending on whether the demand for particular commodities is elastic or inelastic, different outcomes on their consumption will result following the imposition of a tax. In those circumstances where demand for a particular

⁵⁰ World Health Organization (WHO), *Global Action Plan for the Control and Prevention of Noncommunicable Disease 2013–2020*, Objective 3, Recommendation 39, 32

<http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf?ua=1>.

⁵¹ World Health Organization (WHO), *Report of the Commission on Ending Childhood Obesity* (2016) Recommendation 1.2, 18 <http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf>.

⁵² See Alberto Alemanno and Ignacio Carreno, ‘Fat Taxes in the European Union between Fiscal Austerity and the Fight Against Obesity’ (2011) 2(4) *European Journal of Risk Regulation* <<http://ssrn.com/abstract=1945804>>. The authors provide an analysis of the ‘genesis, rationale and legal implications’ of a number of ‘fat tax’ schemes across the European Union.

⁵³ Norimitsu Onishi, ‘Japan, Seeking Trim Waists, Measures Millions’, *The New York Times* (online), 13 June 2008 <<http://www.nytimes.com/2008/06/13/world/asia/13fat.html>>.

⁵⁴ HM Treasury, *Soft Drinks Industry Levy comes into effect*, (5 April 2018) GOV.UK <<https://www.gov.uk/government/news/soft-drinks-industry-levy-comes-into-effect>>.

commodity is highly inelastic, a price change (associated with the implementation of a tax) will have little effect on its demand, and therefore little effect on the quantity consumed.⁵⁵ Continuing to use sweetened sugary beverages or highly processed foods as examples, these commodities may be described as being highly palatable, where their consumption could be related to addiction or a genetic disposition.⁵⁶ If this is the case, then their demand curves will be highly inelastic, and so any price increases due to the imposition of a tax on them will not have any significant effect on reducing their consumption. There are arguments that also hold that price elasticity can vary amongst various groups of the population. For example, despite studies showing that eating and beverage behaviour may be more responsive to price increases than nutritional education, there is also data that indicates that individuals who are overweight or obese are less responsive to price changes than those individuals who are not.⁵⁷

Continuing with this example, an alternative argument is that demand for sweetened sugary beverages or highly processed foods may actually be relatively elastic. Why people consume such products, even where it has been shown to be detrimental to their own health can be due to other factors such as technological changes, urbanisation, aggressive marketing, lack of education, and even medical advances.⁵⁸ All these factors taken together can support the imposition of a tax on such commodities, which will have some effect on reducing peoples' consumptions. A tax on such undesirable commodities could also shift their consumption preferences to healthier foods and beverages.⁵⁹ Where this shift occurs, it is posited the imposition of taxation can positively affect human behaviours and address associated individual negative consequences.

⁵⁵ See generally James S Eustice, 'Tax Complexity and the Tax Practitioner' (1989) 45 *Tax Law Review* 7, 9.

⁵⁶ See Stephanie-May Ruchat and Michelle Mottola, 'Preventing Long-Term Risk of Obesity for Two Generations: Prenatal Physical Activity Is Part of the Puzzle' (2012) *Journal of Pregnancy* 133, 133.

⁵⁷ See generally Gideon Yaniv, Odelia Rosin and Yossef Tobol, 'Junk Food, Home Cooking and Physical Activity and Obesity: The Effect of the Fat Tax and the Thin Subsidy' (2009) 93(5-6) *Journal of Public Economics* 823-830.

⁵⁸ See L Sjostrom et al, "Bariatric Surgery and Long-term Cardiovascular Events" (2012) 307(1) *Journal of American Medical Association* 56, 63 who note bariatric surgery (used to treat obese patients) leads to a reduction in mortality. In particular, their study found that for those subjects who underwent the surgery, they had reduced cardiovascular deaths and first-time (fatal and nonfatal) cardiovascular events. Also see MF Fraga et al, "Epigenetic Differences Arise during the Lifetime of Monozygotic Twins" (2005) 102(30) *Proceedings of the National Academy of Sciences* 10604, for a discussion on how technological advances have contributed to the rising obesity epidemic. Also refer to B Swinburn, G Egger and F Raza, "Dissecting Obesogenic Environments: The Development and Application of a Framework for Identifying and Prioritizing Environmental Interventions for Obesity" (1999) 29(Pt 1), *Preventative Medicine* 563, 563. The authors comment that human beings are increasingly finding themselves in 'environment[s] that promote gaining weight and one that is not conducive to weight loss within the home or workplace'. Also refer to S Lvovich, "Advertising and Obesity: The Research Evidence" (2012) 4(2) *World Advertising Research Center* <<https://www.warc.com/fulltext/ijamc/77377.htm>>. The authors here contend that advertising is a factor that adds to the obesogenic environment in technologically advanced economies.

⁵⁹ See Jennifer Falbe, Hannah R Thompson, Christina M Becker, Nadia Rojas, Charles E McCulloch, and Kristine A Madsen, 'Impact of the Berkeley excise tax on sugar-sweetened beverage consumption' (2016) 106(10) *American Journal of Public Health*, 1865–1871. The authors highlight the positive outcomes of a SSB (sweetened sugary beverages) tax as imposed in California in 2014. The note that within 4 months of the introduction of the SSB tax, the city of Berkeley, California observed a 21% reduction in the consumption of SSBs and a 68% increase in the consumption of water.

2 Economics, Taxes and Broader Society

Under an optimal functioning market, consumers will have perfect information upon which to make their choices, with respect to costs and benefits of the transaction. For example, by reference to the above example concerning sweetened sugary beverages and highly processed foods, people who consume such products pay a certain price to do so, however that price paid will not necessarily reflect the negative externalities associated with their consumption. These negative externalities are a result of market failures where there has been sub-optimal production and consumption. For example, not all consumers will be aware of the total risks involved in the consumption such commodities to themselves and for broader society.

Consumers are driven to purchase and consume these commodities, in part based on the marketing campaigns of highly aggressive manufacturers, intent on selling their product, regardless of any associated real or perceived risks, in order to maximise profits. WHO has stated that ‘the heavy marketing of energy dense foods and fast food outlets is a probable cause of obesity’.⁶⁰ These marketing approaches can distort consumer behaviours, especially where they are not provided with full information about the risks involved in the consumption of such products. Even where they are aware of such risks, in some part, consumers will sacrifice any future consequences associated with the consumption of certain products in favour of short-term gratification. For example, poor diet, weight gain, obesity and obesity related diseases are all longer-term individual consequences of short-term consumption of sweetened sugary beverages and highly processed foods. In addition, longer term health care costs associated with their consumption are not reflected in the price of these commodities and are borne by society as a whole through increasing Medicare costs in Australia, for example.⁶¹ This means that their consumption is not affected by these negative external costs. It is theorised therefore that by imposing a tax on such undesirable commodities, their associated market failures can be addressed to a degree by incorporating the negative externalities into their price. This is best illustrated under the Pigouvian taxation theory approach.

3 Pigouvian Tax Theory and Negative Externalities

Pigou posited that taxes can be imposed on those goods or commodities in cases where their true social cost is not represented in their prices.⁶² Pigouvian taxes can be used to manage negative externalities by balancing the marginal social costs and marginal social benefits by

⁶⁰ World Health Organization, *Diet, Nutrition and the Prevention of Chronic Diseases: WHO Technical Report Series 916* (2003) <http://apps.who.int/iris/bitstream/handle/10665/42665/WHO_TRS_916.pdf;jsessionid=A2A80E617BE6FFF964D387B2D2A972CA?sequence=1>.

⁶¹ See Australian Tax Office, *Medicare Levy Surcharge* (27 October 2020) <<https://www.ato.gov.au/Individuals/Medicare-and-private-health-insurance/Medicare-levy-surcharge/>>. The Australian Medicare program is partly funded by taxpayers who currently pay a Medicare levy of 2 % of their taxable income. It provides Australian residents access to health care. For those taxpayers who do not have adequate private health insurance as well, there is a Medicare levy surcharge which is additional to the Medicare levy. This surcharge is an additional 1–1.5 % of taxable income levy which can be imposed.

⁶² See Arthur C Pigou, *The Economics of Welfare* (Macmillan and Co., 1932) Library of Economics and Liberty [Online] <<http://www.econlib.org/library/NPDBooks/Pigou/pgEW.html>>. The Pigouvian theory of taxation, posits that where there is the imposition of a Pigouvian tax on a commodity that has negative externalities associated with its consumption, consumer and producer surpluses can be diminished, and some of these losses can be converted into tax revenues for the government.

using the tax system to address particular human activity. Economic theory, which focuses on supply and demand, can be utilised when there are negative externalities present (for example: consumption of sweetened sugary beverages and highly processed foods = higher costs on the health system / lower GDP).

Figure 1 demonstrate how the implementation of a Pigouvian tax can be employed to address a commodity’s associated negative externalities. Here, supply of a commodity with a tax imposed actually shifts the supply curve upwards, because producers of the commodity with the negative externality associated with it will incorporate the tax amount into their price. Figure 1 also indicates that there is a smaller producer surplus. Producers will lose from reduced quantities demanded by consumers. Figure 1 also illustrates a reduction in the consumer surplus. However, some of the lost economic surpluses will be converted into tax revenues (as indicated by the black rectangle) collected by policymakers.

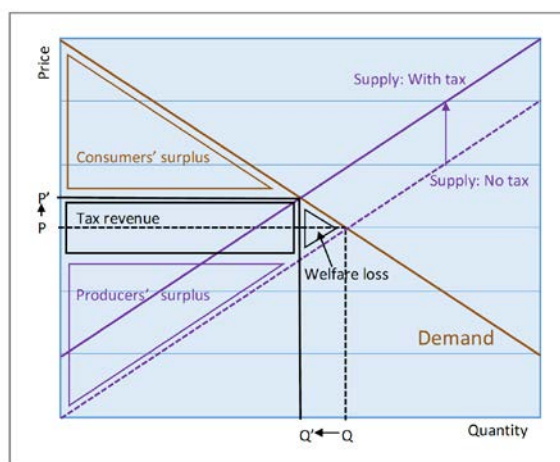


Figure 1: Consumer and Producer Surplus – with Taxes. (Authors own derivation)

By reference to Figure 1, it is apparent that not all negative externalities can be eliminated. However, costs associated with negative externalities can be kept to a minimum. As illustrated, such an approach can also provide tax revenues for policymakers, which can be then redirected to other policy initiatives that will be able to address the negative externalities directly. By using the example of addressing the causes of human induced climate change, under a Pigouvian taxation approach, some of the tax revenues collected from a ‘carbon tax’ on coal production for example, can be directed to encourage new technologies aimed at supporting alternative cleaner energy initiatives. As noted by van Zyl ‘[e]nvironmental taxes have a dual purpose: they can penalise the environmental “bads” through additional taxes and nurture the environmental “goods” through tax incentives (a stick and carrot approach)’.⁶³ Owens further posited that ‘the taxing system can be a powerful policy instrument for spurning innovation.’⁶⁴ By referring to the Canadian example, Owens highlighted that environmental taxes in Canada permit policymakers to offer a ‘broad-based R&D tax credit of up to 35% for expenditures towards experimental development, basic and applied research,

⁶³ Fanie van Zyl, ‘Do you really try to minimise your carbon footprint?’ (Speech delivered at the University of South Africa, 2 August 2017).

⁶⁴ Jeffrey Owens, *Taxes for Innovation* (2018) OECD Observer, < http://oecdobserver.org/news/fullstory.php/aid/3271/Taxes_for_innovation.html>.

and related supporting activities.’⁶⁵ However, Owen also noted that this approach may not be enough, in those circumstances where there is no cost to polluting. This requires therefore a cost to be imposed on pollution itself. Where the market cannot achieve this itself, it is imperative that government intervention is undertaken. Importantly:

[t]axes are generally considered the most effective environmental policy tool available to governments, alongside tradable permit systems, which have very similar properties. By placing a price on the pollutant, both approaches really can encourage firm-level action to reduce pollution and thereby stimulate innovation.⁶⁶

While the Pigouvian theory of taxation aims to explain human behaviours following the imposition of a tax on a commodity which has negative externalities associated with it, there are others who have put forward criticisms of this theory. For example, Ronald Coase was highly critical of the Pigouvian tax approach, viewing Pigou as a radical government interventionist.⁶⁷ Coase argued *inter alia* that the concept of externalities was very complex, where he was much more averse to government interventions.⁶⁸ Notably, Arthur Pigou in 1954 also conceded some shortcomings accompanying his theorised Pigouvian tax approach. He noted ‘[i]t must be confessed, however, that we seldom know enough to decide in what fields and to what extent the State, on account of [the gaps between private and public costs] could interfere with individual choice.’⁶⁹ In other words, the pure economic approach assumes that we have knowledge of what the market will actually do. In reality such knowledge is unknown. For example, it can be argued where consumers are inattentive to costs for certain commodities, they will not make optimal decisions, and this will affect the desired outcomes of the Pigouvian tax.⁷⁰ Despite these acknowledged shortcomings, it is argued that the Pigouvian theory of taxation does provide some support to policymakers in the design of a tax which is to deal with concerning individual impacts and broader externalities associated with the consumption of a commodity or in the engagement of a human activity.

III CONCLUSION

In this Article, support is given to the argument that a tax system is to be judged by ‘its effect on the public of influencing their economic behaviour.’⁷¹ On this basis, it is posited that an expansion of the ‘purpose’ of taxation is to be supported where it is made to incorporate objectives of socially engineering human behaviours in those circumstances where government intervention is warranted. That is: to protect individuals and broader society from certain harms. Support for this extended purpose of taxation is based on three Pillars: Ethics, Law and Economics, which have been drawn together in this Article. By drawing together

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ronald Coase, ‘The Problem of Social Cost’ (1960) 3 *The Journal of Law & Economics* 1, 1-44.

⁶⁸ Herbert Hovenkamp, ‘The Coase Theorem and Arthur Cecil Pigou’ (2008) 51 *Arizona Law Review* 633.

⁶⁹ Arthur Pigou, ‘Some Aspects of the Welfare State’ (1954) 2(7) *Diogenes* 1-11, 6.

⁷⁰ Hunt Allcott, Sendhil Mullainathan and Dmitry Taubinsky, ‘Externalities, Internalities, and the Targeting of Energy Policy’ (Working Article No 17977, National Bureau of Economic Research, March 2012) 2.

⁷¹ Lerner (n 2).

these three Pillars the question and answer to ‘How can taxation, as a social engineering tool, be supported and accepted by taxpayers?’ is explored.

Under the first Pillar: Ethics, it is noted that in most countries such as Australia, policymakers have an overall obligation to ‘maximise ... overall social welfare’,⁷² especially in those circumstances where consumption of certain commodities, have not only negative consequences for the individual, but also where there are associated harms to broader society. In addition, it is argued that intergenerational equity obligations which dictate that the current generation owes a duty to future generations to ensure that they leave a sustainable society intact, also support the acceptability of using taxes as part of the framework of commerce.

Under Pillar 2: Law, it is recognised that the relationship that policymakers have with its people is extremely important, especially in the formulating of paternalistic policies and in the implementation of strategies and policies that are designed to protect and maximise their welfare. In this Article, it is postulated that it would be remiss if laws are not implemented to deal with extremely concerning issues facing humans of the world today.

The acceptability of utilising taxation as a social engineering tool by reference to Pillar 3: Economics, was also examined in this Article. Basic supply and demand economic theory are referred to in order to illustrate how shifts in consumption and human behaviour can occur following the implementation of taxes on certain commodities depending on the relative elasticities of demand and supply. The Pigouvian theory of taxation illustrates how negative externalities associated with individual activities or consumptions can be dealt with in a positive way. These negative externalities are a result of market failures where there has been sub-optimal production and consumption. It is illustrated that after the imposition of a tax on a commodity that has negative externalities associated with its consumption, consumer and producer surpluses can be diminished, where some of these losses can be converted into tax revenues for the policymakers. These tax revenues can then be directed to other policy maker initiatives that will be able to address the negative externalities directly.

Overall, it is concluded that the three Pillar approach: Ethics, Law and Economics provides a supported underpinning basis to extend the purpose of taxation to encompass objectives to socially engineer human behaviours. In doing so, the attainment of a fair and community-subscribed tax system may be possible.

⁷² Stern (n 3) 28.

FAIRNESS IN THE INDIAN TAX SYSTEM

S. A. MOHAN*

Abstract

Fairness is the sine qua non of any administrative or judicial process. Interviews of retired tax officials, tax practitioners, and retired tax adjudicators reveal that fairness is not guaranteed to taxpayers in India during tax assessment and tax adjudication at the first level of appeal. Instead, there appear to be challenges to substantive justice in both cases and to procedural justice in the context of tax assessments. Case law substantiates the existence of unfairness in tax assessments, with judges in some cases making critical remarks about the unfair behaviour of tax officials. But reforms to address such unfairness are long overdue.

I INTRODUCTION

In India, the first level of appeal for taxpayers against the Income Tax Department ('ITD') lies before the Commissioner of Income Tax (Appeals) ('CIT(A)'), a quasi-judicial authority staffed by a senior ITD official of the rank of a commissioner.¹ The second stage of appeal for taxpayers against the CIT(A)'s orders lies before the Income Tax Appellate Tribunal ('ITAT'), which is independent of the ITD and is the first level of appeal for the ITD against the orders of the CIT(A).² Unlike the CIT(A), which is staffed by a senior officer of the ITD, the ITAT falls under the Ministry of Law and Justice, which is independent of the Ministry of Finance,³ under which the ITD and the Central Board of Direct Taxes ('CBDT') fall.⁴

* PhD candidate at Victoria University of Wellington. I would like to acknowledge the reviewer for their feedback on the published article

¹ Deloitte, *Reducing income tax disputes in India: A way forward* (Deloitte Tax Policy Paper 6, February 2020) ('*Deloitte Tax Policy Paper*').

² *Deloitte Tax Policy Paper*.

³ Interview with V, a tax accountant practitioner (Author, Online, February 2021).

⁴ The CBDT is the apex decision making body for income tax matters in the ministry and oversees the ITD.

Decisions of the ITAT may be appealed to the jurisdictional High Court, whose orders can further be appealed to the Supreme Court of India, which is the highest court of the land.⁵

This article discusses the views of around 30 interviewees, including retired ITD officials, former ITAT adjudicators, retired High Court judges, and tax practitioners, on fairness in tax assessments made by the ITD and adjudication at the levels of the CIT(A) and the ITAT. The article also references High Court caselaw supporting some of the discussed views. The article begins with a delineation of the term ‘fairness’ in the context of assessment and adjudication, followed by a discussion of fairness in the tax assessment process as well as a review of fairness in the tax adjudication process at the level of the CIT(A). The article concludes with recommendations to improve fairness in both assessment and adjudication.

II FAIRNESS

Fairness in this article refers to substantive justice and procedural justice. Substantive justice refers to the quality of adjudication whereas procedural justice ‘concerns the perceived fairness of the procedures involved in decision-making and the perceived treatment one receives from a decision maker’.⁶ Procedural justice in taxation is said to encompass ‘(a) the quality of treatment in interactions between taxpayers and tax authorities, (b) the degree to which taxpayers have a say (voice and control), (c) the extent and quality of information provided by tax authorities, and (d) compliance and administration costs [of taxpayers]’.⁷

As a senior practitioner astutely observed, fairness may be more easily defined as ‘our endeavour to eliminate unfairness as much as possible’, given that identifying unfairness may be easier than assessing fairness.⁸ Consequently, to enhance fairness, we ought to reduce the unfairness in the tax system.⁹ This article hence seeks to identify unfairness in the Indian tax system, specifically, unfairness in the process of assessing tax and adjudicating tax appeals as well as unfairness in the treatment of taxpayers by tax officials or appellate adjudicators. For example, taxpayers may not have a say or voice when tax authorities do not follow principles of natural justice. This article also seeks to identify unfairness in the quality of information provided to taxpayers, e.g., when tax authorities do not issue speaking orders, and unfairness vis-à-vis the burden of compliance costs on taxpayers. This exercise of identifying unfairness has been done at the levels of tax assessment in the ITD and adjudication before the CIT(A).

⁵ *Deloitte Tax Policy Paper*.

⁶ Kristina Murphy, ‘Regulating More Effectively: The Relationship Between Procedural Justice, Legitimacy, and Tax Non-Compliance’ (2005) 32(4) *Journal of Law and Society* 562, 566.

⁷ Michael Wenzel, ‘Tax compliance and the psychology of justice: mapping the field’ in Valerie Braithwaite (ed), *Taxing democracy: Understanding tax avoidance and evasion* (Routledge, 2002) 41, 54.

⁸ Interview with Y, a tax accountant practitioner (Author, Online, March 2021).

⁹ Interview with Y (n 8).

A *Substantive Justice*

A retired ITAT adjudicator judiciously remarked that tax assessment and tax appeal processes should ideally strive to assess or determine tax that is reasonable and justifiable.¹⁰ For example, the methods used to raise tax revenue and the impact of revenue generation on fairness may be just as important as or even more important than the amount of revenue collected.¹¹ The retired ITAT adjudicator noted however that tax assessment officials and the CIT(A) authorities may not always have the freedom to follow the above ideal because they administratively report to the ITD,¹² whose goal as per tax practitioners is to maximise tax revenue, sometimes at any cost.¹³ However, excessive tax enforcement at the cost of fairness may not be appropriate,¹⁴ given that fair and reasonable attitudes of tax authorities are said to underpin a good tax system.¹⁵ As a senior tax practitioner remarked, ‘if the government takes [a] very unreasonable extreme view on every provision of law hoping that it will be sustained ... before the courts and ... realize greater amount of revenue, they will be doing the wrong thing because it will only promote more litigation and a lot of wastage of resources’.¹⁶ Taxpayers having to navigate and pay for such unnecessary litigation foisted upon them by the ITD will be unfair. Bird therefore recommends that both private and public costs of tax administration and enforcement be accounted for to appreciate the true cost of compliance.¹⁷

B *Procedural Justice*

Procedural justice imbibes procedural safeguards such as the due process afforded to litigants in the course of adjudication or dispensation of justice and traces its roots to English common law and the *Magna Carta*. For example, Clause 39 of the *Magna Carta* notes that no one shall be condemned ‘except by the lawful judgement of his peers or by the law of the land.’¹⁸ This clause has been interpreted to include the right to due process.¹⁹ For example, legislation enacted during the rule of Edward III introduced the requirement of ‘due Process of the Law’ into the law of the land.²⁰ And Lord Coke advocated for ‘due process’ in *The Second Part of the Institutes of the Laws of England*.²¹ More recently, *Ridge v Baldwin* extended the

¹⁰ Interview with W, a retired ITAT adjudicator (Author, Online, February 2021).

¹¹ Richard M Bird, ‘Administrative dimensions of tax reform’ (2014) 15(2) *Annals of Economics and Finance* 269, 271.

¹² Interview with W (n 10).

¹³ Interview with AA, a former ITAT adjudicator and a retired High Court Judge (Author, Online, March 2021).

¹⁴ Kristina Murphy, ‘The role of trust in nurturing compliance: A study of accused tax avoiders’ (2004) 28(2) *Law and Human Behavior* 187, 187.

¹⁵ Bryan T Camp, ‘Theory and practice in tax administration’ (2009) 29(2) *Virginia Tax Review* 227, 275.

¹⁶ Interview with Y (n 8).

¹⁷ Bird (n 11) 271.

¹⁸ *Magna Carta* (1297) Cl 39 <https://magnacarta.cmp.uea.ac.uk/read/magna_carta_1215/Clause_39>.

¹⁹ David J Mullan, ‘Natural Justice and Fairness – Substantive as Well as Procedural Standards for the Review of Administrative Decision-Making?’ (1982) 27(2) *McGill Law Journal* 250, 272 (citing P Jackson, *Natural Justice* (2nd ed, 1979)).

²⁰ 28 Ed. III. Ch 1, 3 (1354) (England).

²¹ E Coke, *The Second Part of the Institutes of the Laws of England* (1797).

applicability of due process to administrative decision-making through the principles of natural justice.²² *Ridge v Baldwin* therefore permitted ‘greater judicial review of administrative action for breach of the rules of natural justice.’²³ *Ridge v Baldwin* also marked a return to the law of *Cooper v Wandsworth Board of Works*, where the court said that ‘although there are no positive words in a Statute requiring that the party shall be heard, yet the justice of the common law will supply the omission of the legislature’.²⁴ Also, Lord Denning held that the principles of natural justice apply to both judicial and administrative functions and found that a general duty of fairness applied to such decision-makers.²⁵ Natural justice in common law is thus a form of procedural justice and has been routinely applied by English courts to ensure procedural fairness and due process in administrative adjudication.

Principles of natural justice have been adopted by several commonwealth nations, including Australia, Canada, India, and New Zealand, where courts refer to English precedent such as *Ridge v Baldwin* and *Cooper v Wandsworth Board of Works* in the context of natural justice. For example, in Australia, natural justice has been part of the common law at least since the 1970s.²⁶ Also, in 1975, a Tax Review Committee commissioned by the government to review the Australian tax system noted that ‘fairness’ is a sought after quality of a tax system and advised that natural justice requires that a taxpayer should be provided ‘sufficient knowledge’ of the basis of a decision of the Commissioner of Taxation against the taxpayer.²⁷ The Tax Review Committee recommended that there should be ‘some remedy’ when taxpayers are deprived of such knowledge by the Commissioner.²⁸ Like Australia, Canadian courts²⁹ and New Zealand courts³⁰ refer to the principles of natural justice since the 1970s.

Indian courts and adjudicators also give a lot of importance to the principles of natural justice. As a retired ITAT adjudicator observed, the principles of natural justice require that decisions of a quasi-judicial authority such as a tax assessment official or a CIT(A) should be fair and unbiased.³¹ For example, no one should be a judge of their own cause (*‘nemo iudex pre propria causa sua’*), and everyone should be provided an opportunity of being heard (*‘audi alteram partem’*).³² The opportunity to be heard necessitates a hearing with effective

²² [1964] A.C. 40 (House of Lords) (England).

²³ Graeme Johnson, ‘Natural Justice and Legitimate Expectations in Australia’ (1985) 15(1) *Federal Law Review* 39, 39-40.

²⁴ [1863] 14 CB (NS) 180; 143 ER 414. See Johnson (n 23) 49. See also *Furnell v Whangarei High Schools Board* [1973] A.C. 660, 679 (stating that natural justice is ‘fairness writ large and juridically’ and is ‘fair play in action’).

²⁵ DJ Mullan, ‘The New Natural Justice?’ (1975) 25(3) *The University of Toronto Law Journal* 281, 285-86, 288. ‘[I]n the sphere of the so-called quasi-judicial ... and that in the administrative or executive field there is a general duty of fairness’. Ibid 303 (quoting from *Bates v Lord Hailsham* [1972] 1 W.L.R. 1373, 1378).

²⁶ Johnson (n 23) 42-49 (citing *Heatley v Tasmanian Racing and Gaming Commission* [1977] 137 CLR 487; *FAI Insurances Ltd v Winneke* [1982] 41 ALR 1; *Salemi v Minister for Immigration and Ethnic Affairs (No 2)* [1977] 14 ALR 1).

²⁷ KW Asprey et al., *Taxation Review Committee Full Report* (31 January 1975) 385.

²⁸ Ibid.

²⁹ Mullan (n 25) 293-94 (citing *Blais v Basford* [1972] F.C. 151 (FCA); *Lazarov v Secretary of State of Canada* [1973] F.C. 927 (FCA)).

³⁰ Mullan (n 25) 312 (citing *Lower Hutt City v Bank* [1974] 1 N.Z.L.R. 545 (CA)).

³¹ Interview with AD, a retired ITAT adjudicator (Author, Online, April 2021). See also David Phillip Jones, ‘Administrative Law – Natural Justice – “Nemo Iudex” Rule – The Appearance of Justice’ (1977) 55 *Canadian Bar Review* 718. See also JJ Bray, ‘Natural Justice’ (1970) XXIX(1) *Public Administration* 1, 11.

³² Interview with AD (n 31). See Jones (n 31); Bray (n 31); Chauhan (n 34). See also *Ridge v Baldwin* (n 22).

service of notice *ex ante*.³³ The Supreme Court of India added the requirement of reasoned administrative and quasi-judicial decisions to the above two traditional principles of natural justice.³⁴ The Supreme Court of India delineated the principles of natural justice as below:

The principle of natural justice has twin ingredients; firstly, the person who is likely to be adversely affected by the action of the authorities should be given notice to show cause thereof and [be] granted an opportunity of hearing[,] and secondly, the orders so passed by the authorities should give reason[s] for arriving at any conclusion[,] showing proper application of mind.³⁵

The Supreme Court further explained the principles of natural justice through the doctrine of *audi alteram partem* (i.e., hearing and listening to the other side) as below:

The doctrine of *audi alteram partem* has three basic essentials. Firstly, a person against whom an order is required to be passed or whose rights are likely to be affected adversely must be granted an opportunity of being heard. Secondly, the concerned authority should provide a fair and transparent procedure[,] and lastly, the authority concerned must apply its mind and dispose of the matter by a reasoned or speaking order. This has been uniformly applied by courts in India and abroad.³⁶

The Court therefore included requirements of procedural fairness and transparency as well as the need for a reasoned or speaking order into the doctrine of *audi alteram partem*. The Supreme Court further highlighted the importance of speaking orders as below:

Reasons are the soul of orders. Non-recording of reasons could lead to dual infirmities; firstly, it may cause prejudice to the affected party[,] and secondly, more particularly, hamper the proper administration of justice.³⁷

A High Court, relying on the Supreme Court's observation cited above, remarked that 'recording of "reasons" is [a] sine-qua-non' for a quasi-judicial authority deciding a matter.³⁸ The High Court said that 'reasons are the soul and heartbeat of the orders without which the order is lifeless and void' and explained that when 'reasons are not recorded in the orders it would be difficult for the Courts to ascertain the minds of the authorities while exercising the power of judicial review'.³⁹ Also, the extent and quality of information provided by tax authorities suffers in non-speaking orders, thereby impairing an aspect of procedural justice.⁴⁰

Furthermore, in *S.L. Kapoor v. Jagmohan*, the Supreme Court of India stated that:

³³ Interview with AD (n 31). See Bray (n 31); Chauhan (n 34). See also *Ridge v Baldwin* (n 22).

³⁴ SS Singh, 'Natural Justice' (1987) 33 *Indian Journal of Public Administration* 142-147. See VS Chauhan, 'Reasoned Decision: A Principle of Natural Justice' (1995) 37(1) *Journal of the Indian Law Institute* 92, 92. See also *A. K. Kraipak v Union of India* [1970] AIR S.C. 150 (noting that quasi-judicial enquiries cannot be arbitrary).

³⁵ *Assistant Commissioner, Commercial Tax Department, Works Contract & Leasing, Kota v M/S Shukla & Brothers* [2010] 4 S.C.R. 627 (Supreme Court of India) (15 April 2010).

³⁶ *Ibid.*

³⁷ *Ibid.*

³⁸ *Deepak Dhanaraj v Income Tax Officer, Circle 4(3), Bengaluru* [2019] 107 taxmann.com 76 (High Court of Karnataka, India) (28 May 2019).

³⁹ *Ibid.* See also *Corrtech International (P.) Ltd. v Deputy Commissioner of Income-tax* [2017] 86 taxmann.com 156 (High Court of Gujarat) (18 September 2017).

⁴⁰ Wenzel (n 7) 54.

In our view the principles of natural justice know of no exclusionary rule dependent on whether it would have made any difference if natural justice had been observed. The non-observance of natural justice is itself prejudice to any man and proof of prejudice independently of proof of denial of natural justice is unnecessary. It will come from a person who has denied justice that the person who has been denied justice is not prejudiced.⁴¹

And the Bombay High Court said that the purpose of natural justice is to ensure that a party's views and objections are considered, and that clarifications sought by either party are obtained by the quasi-judicial tax authority from the other party before deciding the matter.⁴² In the context of explaining natural justice, the High Court said that quasi-judicial officials cannot 'ignore the evidence/submissions' made by taxpayers while deciding a matter and that such authorities 'are not expected to take advantage of a [taxpayer's] ignorance'.⁴³ The Court added that natural justice requires that submissions of both parties be properly considered by the quasi-judicial authority in accordance with the Income Tax Act, 1961.⁴⁴ However, granting only a 'ritualistic' hearing or simply 'reproducing the submissions' of the parties without understanding their case 'would not satisfy the test of natural justice.'⁴⁵ The Court advised that quasi-judicial authorities should not merely 'confirm their prima facie view' but should 'find the correct facts and thereafter apply the law to those facts'.⁴⁶ Assessments made without considering the submissions of taxpayers impair another prong of procedural justice, i.e., the degree to which taxpayers have a say (voice and control) in the assessment process.⁴⁷

Also, tax practitioners complain that taxpayers are often treated with suspicion and sometimes even with disrespect by ITD officials and even honest taxpayers are meted out the same treatment as the dishonest ones⁴⁸ and a retired member of the CBDT conceded that ITD officials do view taxpayers with suspicion.⁴⁹ The quality of treatment of taxpayers by the ITD officials may therefore be poor in some cases, vitiating another aspect of procedural justice.⁵⁰

The cost of compliance and the cost of seeking justice should be reasonable as well. A senior lawyer remarked that arbitrary tax demands made during the assessment of tax foist unnecessary (and expensive) litigation on taxpayers.⁵¹ Costs incurred by the government for litigating unnecessary cases (e.g., administrative costs and lawyers' fees) and judicial time spent to adjudicate such cases may be substantial as well.⁵² Moreover, taxpayers are required to deposit 20 per cent of the disputed tax demand with the ITD in order to stay the recovery of the demand when filing an appeal against the demand, a practice that a senior lawyer termed as unjust.⁵³ Another lawyer elaborated that even in cases where a taxpayer's position is endorsed by Supreme Court precedent, the taxpayer still has to deposit 20 per cent of the

⁴¹ [1984] 4 SCC 379, 392.

⁴² *TLG India (P.) Ltd. v Deputy Commissioner of Income-tax, (TDS)* [2019] 111 taxmann.com 376 (Bombay High Court, India) (18 November 2019).

⁴³ *Ibid.* In India, taxpayers are referred to as 'assessee' (singular: assessee) by the ITD and tax practitioners.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ Wenzel (n 7) 54.

⁴⁸ Interview with AF, a tax lawyer practitioner (Author, Online, April 2021); Interview with E, a tax practitioner (Author, Online, January 2021). A retired ITAT adjudicator concurred. Interview with W (n 10).

⁴⁹ Interview with A, a former ITD official and a retired CBDT member (Author, Online, December 2020).

⁵⁰ Wenzel (n 7) 54.

⁵¹ Interview with AF (n 48).

⁵² Interview with N, a retired ITD official (Author, Online, January 2021).

⁵³ Interview with AF (n 48).

disputed tax, which is unfair.⁵⁴ Even courts have found that mechanically requiring that 20 per cent of the disputed tax be deposited without giving proper reasons is not appropriate.⁵⁵

A retired ITAT adjudicator said that, in India, justice is like a Rolls Royce car, which very few can afford.⁵⁶ Instead, justice should be like a public bus that everyone can afford.⁵⁷ Unfortunately, litigation is quite expensive today, making it affordable only to a few.⁵⁸

The next section discusses fairness in the context of the tax assessment process with respect to aspects of both substantive justice and procedural justice, e.g., natural justice.

III FAIRNESS IN THE TAX ASSESSMENT PROCESS

A Substantive Justice

Interviewees, including those who have served as CIT(A), Commissioners, or Chief Commissioners⁵⁹ in the ITD⁶⁰ or as retired ITAT adjudicators⁶¹ generally agree that a tax assessment that is inadequately supported either by facts or in law would ultimately be struck down by the ITAT or the courts. A retired member of the CBDT advised that some reasons for the ITD's poor assessments include not investigating thoroughly or not drafting orders properly,⁶² e.g., non-speaking orders. The retired CBDT member, who had previously served in the ITD at various levels, said that most of the ITD officers who assess tax (also known as

⁵⁴ Interview with T, a tax lawyer practitioner (Author, Online, February 2021).

⁵⁵ *Charishma Hotels (P.) Ltd. v Income-tax Officer, Ward-2(1)(3), Bengaluru* [2018] 92 taxmann.com 428 (High Court of Karnataka, India) (27 March 2018) (noting that the assessing officer had 'demanded 20% of the [tax] demand amount while disposing of the ... [stay of recovery] application' without 'any application of mind'); *Fincare Business Services Ltd. v Income-tax officer, Ward 3(1)(1), Bengaluru* [2018] 92 taxmann.com 355 (High Court of Karnataka, India) (4 April 2018) (setting aside a non-speaking order requiring a taxpayer to deposit 50 per cent of the disputed tax as a precondition for granting the stay of recovery of the remaining 50 per cent); *Equity Intelligence India (P.) Ltd. v Deputy Commissioner of Income-tax* [2020] 117 taxmann.com 612 (High Court of Kerala, India) (29 June 2020) (setting aside an order that mechanically asked the taxpayer to pay 20 per cent of the disputed tax to stay recovery of the remaining amount as the order was bereft of reasonings and therefore breached the principles of natural justice); *Mrs. Kannammal v Income-tax Officer-Ward-1(1), Tirupur* [2019] 103 taxmann.com 364 (Madras High Court, India) (13 February 2019) (setting aside an assessing officer's order that rejected a stay application and instructed the taxpayer to pay the demand immediately); *Uthangarai Sri Vidya Mandir Educational and Social Welfare Trust v Assistant Commissioner of Income-tax, Circle-1, Salem* [2019] 104 taxmann.com 248 (Madras High Court, India) (6 March 2019) (finding that the order 'mechanically call[s] upon the petitioner [taxpayer] to remit 20% of the [disputed tax] demand without examining the appropriateness of the direction to the facts and circumstances of the petitioners' case').

⁵⁶ Interview with AD (n 31).

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ In the ITD, Commissioners (Administration) and Commissioners (Appeals) report to Chief Commissioners. Commissioners (Administration) oversee the assessing officers, who make the income tax assessments.

⁶⁰ Interview with A (n 49); Interview with N (n 52).

⁶¹ Interview with W (n 10); Interview with AC, a retired ITAT adjudicator (Author, Online, April 2021); Interview with AD (n 31).

⁶² Interview with A (n 49).

‘assessing officers’) have between 3 and 5 years of experience in making tax assessments.⁶³ Such relatively inexperienced officers may suspend investigation during a tax assessment after finding one or two leads and may not take the investigation to its logical conclusion by exploring all feasible avenues.⁶⁴ The retired CBDT member added that officers may not even look for supporting evidence, let alone evidence that contradicts the original evidence and negates their assessment.⁶⁵ A senior tax accountant agreed that assessing officers ‘are not able to investigate properly’ and claimed that examination of accounts by assessing officers is often quite poor.⁶⁶ Poor assessments and non-speaking orders may raise arbitrary demands, leading to taxpayers having to appeal against such assessments through expensive litigation.

1 *Revenue-mindedness of ITD Officials*

A big reason underlying poor assessments is the overzealousness of the assessing officers in making unsustainable tax demands.⁶⁷ A retired ITAT adjudicator explained that officers do not properly apply the rules at times, with the case or statutory law also not being properly applied sometimes.⁶⁸ And a retired member of the CBDT observed that application of the law only begins from the level of the CIT(A).⁶⁹ The retired CBDT member added that assessing officers are only interested in maximising revenue,⁷⁰ implying that such officers are less concerned with the correct application of law, which is their duty as quasi-judicial authorities.⁷¹ Another retired member of the CBDT agreed, noting that ‘the assessing officer’s approach ... is to err on the side of revenue’.⁷² A retired ITAT adjudicator and former ITD official⁷³ remarked that officers who make high-pitched assessments, that is, ‘assessments which don’t have any bearing to real facts’,⁷⁴ are not penalized by superiors,⁷⁵ who feel that the ITD’s interests are protected by such ‘revenue-minded’ assessing officers.⁷⁶

Tax practitioners argue that such high-pitched assessments are ‘without [the] application of mind’,⁷⁷ which sometimes results in ‘absurd’ or even ‘laughable orders’.⁷⁸ For example, as mentioned previously, taxpayers are required to deposit 20 per cent of the disputed tax amount when they file an appeal against an assessment order.⁷⁹ Some tax practitioners believe that some assessing officers make demands several times in value of a reasonable

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Interview with V (n 3).

⁶⁷ Interview with AA (n 13).

⁶⁸ Interview with AD (n 31).

⁶⁹ Interview with A (n 49).

⁷⁰ Ibid.

⁷¹ Interview with AC (n 61).

⁷² Interview with C, a former ITD official and a retired CBDT member (Author, Online, December 2020). The ITD is colloquially referred to as ‘revenue’ by tax practitioners, ITD officials, and tax adjudicators.

⁷³ Interview with K, a former ITD official and a retired ITAT adjudicator (Author, Online, January 2021).

⁷⁴ Interview with V (n 3).

⁷⁵ Officials are said to be penalized for corruption but not for making high-pitched assessments. Interview with K (n 73). In fact, some officers are said to use such high-pitched assessments to make a case for their promotion. Interview with Z, a tax accountant practitioner (Author, Online, March 2021).

⁷⁶ Interview with K (n 73).

⁷⁷ Interview with L, a tax practitioner (Author, Online, January 2021).

⁷⁸ Interview with P, a tax practitioner (Author, Online, February 2021).

⁷⁹ Ibid.

addition in order to make the 20 per cent of the disputed tax collected from taxpayers count towards their revenue target.⁸⁰ Similarly, a senior tax lawyer argued that in some cases, ‘assessments are reopened only to meet the [revenue] target’ of a tax official, and that ‘just to meet revenue targets, very, very extreme positions are taken by the department’.⁸¹ The revenue-mindedness of officials appears to be systemic within the ITD.⁸² A tax lawyer claimed that ‘there is a sense of tax nationalism’ in the ITD, where ‘everybody is trying to be a so-called nationalist and save revenue for the government by disobeying judicial orders’.⁸³

However, as noted earlier, the Bombay High Court asserted that ‘it is not the object of [a] quasi judicial authority to confirm their prima facie view, but the object is to find the correct facts and thereafter apply the law to those facts and take a decision [accordingly]’.⁸⁴ Even former ITD officials denounce revenue-mindedness. A retired official insists that erring on the side of the ITD is a ‘very wrong concept,’ rather, a good tax officer should be ‘neutral,’ ‘objective,’ and ‘correct’.⁸⁵ Another former ITD official who retired as an ITAT adjudicator remarked that, as trainees, officers were told to not ‘collect even a paisa more than what is legitimately due to the government’ or ‘leave even a paisa which is due to the government’.⁸⁶ Today, this ideal is said to be ‘possibly ... observed more in breach than in observance’,⁸⁷ with taxes being collected by ‘hook or crook’ in some cases.⁸⁸ The former ITD official said that an ‘officer[’s] job is not simply to collect money by hook or crook’ but that taxes should be collected ‘the way the bee collects honey from the flowers’ or in a manner of ‘plucking the feathers without causing much hissing ... to the goose’.⁸⁹ Instead, per another retired ITAT adjudicator, today, ‘the only aim [of the ITD] is tax collection at any cost’.⁹⁰

2 *Disregard for Law or Precedent*

A senior tax practitioner remarked that the ‘quality of tax assessment[s] has been a matter of debate for decades’, and that judiciousness of orders has fallen over the years.⁹¹ To meet revenue targets, assessing officers under ‘tax demand pressure’ may at times not apply the law or not follow settled law or precedent.⁹² For example, a senior lawyer observed that,

⁸⁰ Ibid; Interview with V (n 3).

⁸¹ Interview with AF (n 48).

⁸² Interview with B, a former ITD official and a retired ITAT adjudicator (Author, Online, December 2020); Interview with C (n 72); Interview with G, a tax lawyer practitioner (Author, Online, January 2021); Interview with R, a tax practitioner (Author, Online, January 2021); Interview with S, a retired ITD official (Author, Online, January 2021); Interview with W (n 10); Interview with AB, a retired ITD official (Author, Online, March 2021); Interview with AC (n 61).

⁸³ Interview with AE, a tax lawyer practitioner (Author, Online, April 2021).

⁸⁴ *TLG India (P.) Ltd. v Deputy Commissioner of Income-tax, (TDS)* [2019] 111 taxmann.com 376 (Bombay High Court) (18 November 2019). In India, taxpayers are referred to as ‘assesseees’, those who are assessed for tax.

⁸⁵ Interview with N (n 52).

⁸⁶ Interview with B (n 82); Interview with AB (n 82). The Indian currency is denominated in rupees. A rupee comprises 100 paise (singular of paise is paisa).

⁸⁷ Interview with B (n 82).

⁸⁸ Interview with F, a tax practitioner (Author, Online, January 2021).

⁸⁹ Interview with B (n 82).

⁹⁰ Interview with W (n 10).

⁹¹ Interview with J, a tax accountant practitioner (Author, Online, January 2021).

⁹² Interview with AF (n 48); Interview with T (n 54).

sometimes, tax officials do not follow even Supreme Court precedent,⁹³ let alone High court precedent.⁹⁴ Not surprisingly, High Courts consistently rule against the ITD in cases where tax officials disregard High Court precedent and Supreme Court precedent.⁹⁵ For example, the Delhi High Court dismissed the ITD's appeals on the grounds that the issue raised in the appeals was covered by a Supreme Court decision and given that the High Court had rejected similar appeals filed by the ITD in past years.⁹⁶ In another case, the Delhi High Court noted that '[the] revenue has either chosen to ignore the ... [court's] decision or is oblivious of the same'.⁹⁷ Similarly, the Madras High Court commented that the assessing officer 'ignored the decision of the Division Bench of ... [the] Court' despite it being the jurisdictional court.⁹⁸

Senior tax practitioners also express concern that there is a tendency on the part of the assessing officers to disallow incentives provided to taxpayers by The Income Tax Act, 1961, e.g., exemptions, deductions, and rebates available to taxpayers, under some pretext or the other.⁹⁹ Such motivated tax assessments, for example, to meet the revenue targets of ITD officials, usually do not survive judicial scrutiny. For example, a High Court found that the tax official in a case 'acted beyond the scope of the provision of the [Income Tax] Act in [a] high handed manner' and set aside the contested order. However, in the process, taxpayers may incur considerable cost and spend many years waiting for relief from the judiciary.

⁹³ Interview with AF (n 48).

⁹⁴ Interview with J (n 91).

⁹⁵ *Pr. Commissioner of Income Tax-6 v Noida Software Technology Park Ltd.* [2020] 113 taxmann.com 144 (Delhi High Court, India) (28 November 2018) (holding that issues in the appeal were covered by the court's precedent); *Asstt. Commissioner of Income-tax v Laxman Das Khandelwal* [2019] 108 taxmann.com 182 (High Court of Madhya Pradesh, India) (27 April 2018) (finding that the issue in the case was covered by Supreme Court precedent); *Commissioner of Income Tax- Exemption v Praxis Institute for Participatory Practices* [2020] 113 taxmann.com 148 (Delhi High Court, India) (12 December 2018) (finding that the issue raised in the case was covered by the court's precedent); *Commissioner of Income-tax v Ernet India* [2019] 101 taxmann.com 59 (Delhi High Court, India) (finding that the issue raised in the case was covered by the court's precedent); *Commissioner of Income-tax v C.J. Exporters* [2020] 121 taxmann.com 8 (Bombay High Court, India) (8 January 2018) (finding that the issue raised in the case was covered by the court's precedent); *Commissioner of Income Tax-5 v Hickson & Dadajee (P.) Ltd.* [2020] 122 taxmann.com 93 (Bombay High Court, India) (28 February 2017) (finding that the issue raised in the case was covered by the court's precedent); *Commissioner of Income Tax (Exemptions) v GSI India (Formerly Ean India)* [2019] 109 taxmann.com 440 (Delhi High Court, India) (21 March 2018) (finding that 'the same issue for another A.Y. [(AY)] was held in favour of the assessee and against the Revenue' by the court); *Principal Commissioner of Income Tax-6, New Delhi v Maruti Suzuki India Ltd.* [2019] 107 taxmann.com 472 (Delhi High Court, India) (9 January 2018) (finding that for a different assessment year, 'on the same facts, the assessment was held to be invalid' by the same court); *Commissioner of Income Tax v Ranjit Projects (P.) Ltd.* [2019] 104 taxmann.com 391 (High Court of Gujarat, India) (25 June 2018) (finding that a precedent of that court vis-à-vis the same assessee but from an earlier year covered the issue in that case).

⁹⁶ *Pr. Commissioner of Income Tax-6 v Nabinagar Power Generating Company (P.) Ltd.* [2019] 103 taxmann.com 205 (Delhi High Court, India) (9 May 2018).

⁹⁷ *Ericsson India (P.) Ltd. v Additional Commissioner of Income Tax* [2020] 117 taxmann.com 381 (Delhi High Court, India) (18 February 2020).

⁹⁸ *LIC Employees Co-operative Bank Ltd. v Assistant Commissioner of Income-tax, Non Corporate Circle-11, Chennai* [2018] 91 taxmann.com 183 (Madras High Court, India) (18 January 2018). See also *Manambur Service Co-Operative Bank Ltd. v Income-tax Officer* [2020] 115 taxmann.com 336 (High Court of Kerala, India) (22 January 2020) (finding that the 'assessment was done against the [court's] judgment', defying precedent).

⁹⁹ Interview with AF (n 48).

B Procedural Justice

Tax practitioners claim that, typically, assessment ‘orders are not fully explained orders’ and ‘they are passed in [a] rush’.¹⁰⁰ For example, hurried assessments are made by assessing officers before the assessments get time-barred by the operation of law.¹⁰¹ In one matter, a High Court objected to the hurried assessments made by tax officials as below:

While it may be a fact that the assessing authority was limited by time constraints, in view of the statutory provisions mandating the completion of assessments within a particular time, the same cannot be cited as a reason for abdicating his role as an adjudicating authority in [a] tax assessment. In other words, the assessee cannot be prejudiced on account of the delay occasioned by the department in passing assessment orders, and the hasty manner in which an assessment order is passed without considering the material produced by an assessee, cannot be justified on the ground that the time limit for finalising assessment was nearing expiry.¹⁰²

Improper assessments may lead to no opportunity of being heard and non-speaking orders.

1 Opportunity of Being Heard

Tax practitioners complain that assessing officers at times wait until the eleventh hour to make assessments, leading to incomplete investigations.¹⁰³ For example, notices to produce material pertaining to tax assessments may be issued late, leaving little time for taxpayers to submit the requested information in time.¹⁰⁴ In the process, taxpayers may not be given the opportunity of being heard, thereby compromising natural justice. For example, the Madras High Court set aside an order passed by a tax official without providing to the taxpayer an opportunity of being heard,¹⁰⁵ and even refused to look at the merits of a case when principles of natural justice had been breached.¹⁰⁶ Also, the Bombay High Court found that principles of natural justice were breached when a tax official did not provide to the taxpayer the material used to frame orders and did not give the taxpayer an opportunity to rebut that material prior to issuing the orders.¹⁰⁷ And when assessing officers do not have enough time to make a thorough assessment, they may err on the side of making additions not substantiated by proper evidence to avoid missing out on revenue. However, as a High Court

¹⁰⁰ Interview with L (n 77).

¹⁰¹ Interview with M, a former ITAT adjudicator (Author, Online, January 2021); Interview with Z (n 75).

¹⁰² *IY TEE CEE Trading Company v Assistant Commissioner of Income Tax, Circle 2(1), Kozhikkode* [2020] 121 taxmann.com 305 (High Court of Kerala, India) (8 October 2020).

¹⁰³ Interview with M (n 101).

¹⁰⁴ Interview with P (n 78).

¹⁰⁵ *Aircel Ltd. v Deputy Commissioner of Income tax, Corporate Circle-I(1), Chennai* [2017] 87 taxmann.com 226 (Madras High Court, India) (12 October 2017).

¹⁰⁶ *Tamil Nadu State Marketing Corporation Ltd. v Deputy Commissioner of Income-tax, Corporate Circle-3(1)* [2020] 122 taxmann.com 230 (Madras High Court, India) (26 February 2020).

¹⁰⁷ *TLG India (P.) Ltd. v Income-tax Officer TDS* [2019] 109 taxmann.com 261 (Bombay High Court, India) (29 July 2019). In this case, the tax official ‘collected extensive material, [which was] ... attributable to his own research, [but] never put such material to the ... [taxpayer] for its comments’ and based his orders ‘on such research material’. The court added that ‘[t]he least that ... [the tax official] was expected to do was to share such material with the ... [taxpayer] giving an opportunity to rebut the same if so desired by the ... [taxpayer]’.

advised, ‘[t]he desire to collect more revenue cannot be at the expense of [the] Rule of law.’¹⁰⁸

2 *Speaking Orders*

In this context, a senior tax practitioner said that assessing officers should follow due process, for example, by issuing speaking orders that clearly give reasons for the decision arrived at,¹⁰⁹ as without such orders, natural justice would suffer.¹¹⁰ Courts have time and again insisted that speaking orders that clearly lay down the reasoning for a decision are non-negotiable and have consistently set aside orders passed by ITD officials, including the CIT(A), that do not present such reasoning.¹¹¹ For example, a High Court set aside an order of a senior tax assessment official that was not a speaking order, noting that ‘it is [a] well settled principle that any order passed without assigning reasons is a nullity and not valid in the eye of law’.¹¹² Another High Court set aside an order of a CIT(A) on the ground that it was ‘passed in a most sketchy and mechanical manner’ and was ‘bereft of ... reasonings’.¹¹³

3 *Mindset of ITD Officials*

There is also a mindset of prejudice¹¹⁴ and a trust deficit¹¹⁵ against taxpayers, leading to tax officials viewing taxpayers with suspicion. A retired ITAT adjudicator argued that taxpayers are sometimes treated by officials like criminals and the ‘blunt face of bureaucracy’ is shown

¹⁰⁸ *Milestone Real Estate Fund v Assistant Commissioner of Income tax, Circle 25(3), Mumbai* [2019] 105 taxmann.com 292 (Bombay High Court, India) (26 March 2019).

¹⁰⁹ Interview with H, a tax lawyer practitioner (Author, Online, January 2021).

¹¹⁰ Interview with M (n 101).

¹¹¹ *Huawei Telecommunications (India) Company (P.) Ltd. v Union of India* [2020] 122 taxmann.com 4 (High Court of Punjab and Haryana, India) (6 March 2020) (quashing an order that did not provide adequate reasons); *Mrs. Kannammal v Income-tax Officer-Ward-1(1), Tirupur* [2019] 103 taxmann.com 364 (Madras High Court, India) (13 February 2019) (finding that ‘the assessing officer has merely rejected the petition by way of a non-speaking order’); *Equity Intelligence India (P.) Ltd. v Deputy Commissioner of Income-tax* [2020] 117 taxmann.com 612 (High Court of Kerala, India) (29 June 2020) (finding that the order of the CIT(A) was ‘not only bereft of ... reasonings but ... [also] passed in a most sketchy and mechanical manner’); *Maple Logistics (P.) Ltd. v Principal Chief Commissioner of Income Tax* [2019] 112 taxmann.com 199 (Delhi High Court, India) (14 October 2019) (finding that ‘reasons ... relied upon by the Revenue to justify the withholding of the refund ... [were] abysmally lacking in reasoning’); *TLG India (P.) Ltd. v Deputy Commissioner of Income-tax (TDS)* [2019] 111 taxmann.com 376 (Bombay High Court, India) (18 November 2019) (finding that the appealed orders were ‘in breach of natural justice’ by virtue of being ‘non-speaking orders’); *Principal Commissioner of Income-tax Central-3 v Bhavi Chand Jindal* [2019] 105 taxmann.com 77 (Delhi High Court, India) (13 September 2018) (finding the order to be ‘a brief and cryptic order’); *Milestone Real Estate Fund v Assistant Commissioner of Income tax, Circle 25(3), Mumbai* [2019] 105 taxmann.com 292 (Bombay High Court, India) (26 March 2019) (finding that the order passed in the case did not ‘mention any basis’ for the conclusion in the appealed order).

¹¹² *Fincare Business Services Ltd. v Income-tax officer, Ward 3(1)(1), Bengaluru* [2018] 92 taxmann.com 355 (High Court of Karnataka, India) (4 April 2018). The High Court of Karnataka, in a different case, set aside the non-speaking order passed by an assessing officer. *Flipkart India (P.) Ltd. v Assistant Commissioner of Income-tax, Circle 3(1)(1), Bengaluru* [2017] 79 taxmann.com 159 (High Court of Karnataka, India) (23 February 2017).

¹¹³ *Equity Intelligence India (P.) Ltd. v Deputy Commissioner of Income-tax* [2020] 117 taxmann.com 612 (Kerala High Court, India) (29 June 2020).

¹¹⁴ Interview with G (n 82); Interview with H (n 109).

¹¹⁵ Interview with E (n 48).

to them at times.¹¹⁶ And a senior practitioner complained that ‘strong-arm methods’ such as threats have also been used by assessing officers in some cases to ‘squeeze money out of the assessee’.¹¹⁷ The senior practitioner remarked that ‘principles of natural justice exist in India only on paper as far as tax authorities at the lower level are concerned,’ adding that ‘[t]hey don’t exist at all’.¹¹⁸ For example, a former ITAT member and senior tax practitioner argued that natural justice is also not given effect when assessing officers collect evidence behind ‘the back of [the] assessee’, who is not afterwards confronted with the evidence.¹¹⁹ A retired ITD official agreed, noting that ‘anything adverse that is required to be done in an assessment cannot be done without giving the taxpayer an opportunity of being heard’.¹²⁰

On occasion, High Courts have also expressed displeasure regarding the treatment meted out to taxpayers by ITD officials. In one case, a High Court noted with dismay that the conduct of the assessing officer and a senior tax official in that case was ‘high handed and manifestly unfair towards the [the taxpayer]’.¹²¹ In a different case, another High Court found that the income tax official in that case ‘acted ... in [a] high handed manner’.¹²² In another case, a High Court said that the ITD ‘cannot be permitted ... to act like a Shylock.’¹²³ Yet another High Court advised that ‘the least that is expected of the Officers of the State is to apply the law equally to all and not be over zealous in seeking to collect the revenue ignoring the statutory provisions as well as the binding decisions of this Court’.¹²⁴ In this context, a retired ITAT adjudicator argued that those who are powerful are not touched by the ITD, adding that ‘those who never pay tax [are] always [spared]’ but one ‘who pays tax [is] always disturbed’.¹²⁵ A former ITAT adjudicator and retired High Court judge and a former ITD official insist that the implementation and enforcement of the law should be uniform.¹²⁶

Tax practitioners add that some ITD officers in the past adopted unfair practices such as backdating of orders to avoid assessments being time barred by the operation of law.¹²⁷ However, the new faceless assessment process instituted by the Government of India in 2020

¹¹⁶ Interview with W (n 10).

¹¹⁷ Interview with V (n 3).

¹¹⁸ Ibid.

¹¹⁹ Interview with M (n 101).

¹²⁰ Interview with S (n 82).

¹²¹ *Milestone Real Estate Fund v Assistant Commissioner of Income tax, Circle 25(3), Mumbai* [2019] 105 taxmann.com 292 (Bombay High Court, India) (26 March 2019).

¹²² *Bidar Nirmiti Kendra v Principal Commissioner of Income Tax, Kalaburgi* [2018] 98 taxmann.com 217 (High Court of Karnataka, India) (7 August 2018). The court noted that the ‘only thing this Court can understand is the pathetic incompetence of the officer either in understanding the legal provisions which is borne out from the book or in understanding the judgment, which governs the law with reference to the manner of recovery’. The court added that the ‘conduct of ... [the income tax officer] is nothing but causing harassment to assessee’.

¹²³ *Flipkart India (P.) Ltd. v Assistant Commissioner of Income-tax, Circle 3(1)(1), Bengaluru* [2017] 79 taxmann.com 159 (High Court of Karnataka, India) (23 February 2017).

¹²⁴ *Milestone Real Estate Fund v Assistant Commissioner of Income tax, Circle 25(3), Mumbai* [2019] 105 taxmann.com 292 (Bombay High Court, India) (26 March 2019).

¹²⁵ Interview with W (n 10).

¹²⁶ Interview with X, a former ITAT adjudicator and a retired High Court Judge (Author, Online, March 2021); Interview with AB (n 82).

¹²⁷ Interview with P (n 78); Interview with Q, a tax lawyer practitioner (Author, Online, February 2021).

may put an end to such practices as the electronic mode of communication between the ITD and taxpayers and electronic issuance of notices and orders renders back-dating infeasible.¹²⁸

Transitioning from the discussion of fairness in the tax assessment process to fairness in the tax appeal system, the following section reviews fairness in the process of filing of tax appeals by officials of the ITD and then explores fairness at the level of CIT(A) authorities.

IV FAIRNESS IN TAX ADJUDICATION

A retired ITAT adjudicator claimed that ‘at least 50 per cent of the appeals filed by [the] revenue are without merit’.¹²⁹ According to a retired CBDT member, in some cases, appeals are filed based on ‘one string of evidence’ and sometimes, appeals may be filed based on suspicion only, even in the absence of any credible evidence in favour of the appeal.¹³⁰ For example, a High Court noted that a part of the underlying assessment in an appeal was made by the assessing officer ‘in a mechanical manner without any basis’, adding that the ‘income ... [had] been estimated merely on the basis of imagination, presumption and suspicion.’¹³¹

Also, a retired tax official claimed that many ITD officials seek to re-litigate issues covered by the jurisdictional High Court precedent or even Supreme Court precedent and this leads to appeals even in such covered cases.¹³² Courts have also found the ITD relitigating settled issues.¹³³ For example, a High Court said that it was ‘pained to record ... [the] most unreasonable attitude on the part of the Advocate for the Revenue of seeking to reargue settled concluded issues, without having obtained any stay from the Apex Court’.¹³⁴ The High Court added that such practice ‘results in unnecessary wastage of the scarce judicial time available in the context of the large number of the appeals awaiting consideration’.¹³⁵ The Bombay High Court proceeded to reprimand the lawyer representing the ITD as below:

We would expect ... an Advocate to act with responsibility as an Officer of the Court and not merely argue for the sake of arguing when an issue is clearly covered by the decision of Co-

¹²⁸ Devesh K Pandey, ‘PM announces faceless assessment, taxpayers’ charter’, *The Hindu* (online, 13 August 2020) <<https://www.thehindu.com/news/national/pm-says-faceless-assessment-faceless-appeal-and-taxpayer-charter-part-of-new-platform/article32342005.ece>>

¹²⁹ Interview with W (n 10).

¹³⁰ Interview with A (n 49).

¹³¹ *Principal Commissioner of Income-tax v Gahoi Dal & Oil Mills* [2020] 117 taxmann.com 117 (High Court of Madhya Pradesh) (12 July 2019). The court concluded that an addition ‘based on imagination, presumption and suspicion’ cannot be ‘sustained’ and deleted the addition, finding it ‘unwarranted’ and ‘uncalled for’.

¹³² Interview with N (n 52).

¹³³ For example, the Supreme Court dismissed a petition filed by the ITD in a case where the issues involved were ‘completely covered by the decision of ... [the] Court’. *Principal Commissioner of Income Tax-4 v Zyduz Wellness Ltd.* [2020] 113 taxmann.com 154 (Supreme Court of India) (11 February 2019). Also, in one case, the Delhi High Court dismissed the ITD’s appeals on the ground that the issue raised by the ITD in the appeals was covered by a Supreme Court decision and the Delhi High Court had previously rejected similar appeals filed by the ITD in the past, in the years of 2015 and 2016. *Pr. Commissioner of Income Tax-6 v Nabinagar Power Generating Company (P.) Ltd.* [2019] 103 taxmann.com 205 (Delhi High Court, India) (9 May 2018).

¹³⁴ *Principal Commissioner of Income-tax, Central-1 v JWC Logistics Park (P.) Ltd.* [2018] 100 taxmann.com 355 (Bombay High Court, India) (11 April 2018).

¹³⁵ *Ibid.*

ordinate Bench of the Court and take up scarce judicial time. The Advocate must bear in mind that this is a Court of law and not an University/College debating Society, where debates are held for academic stimulation. We deal with real life disputes and decide them in accordance with the Rule of Law, of which an important limb is uniformity of application of law. This on the basis of judicial discipline and [the] law of precedents.¹³⁶

There is also ‘a wrong perception on the part of the departmental officers that they don’t really spend any money’ to file appeals ‘whereas a taxpayer will have to spend money in having an appeal filed’.¹³⁷ A retired ITD official claimed that the ITD probably files ‘two times or three times’ more appeals than taxpayers do, likely due to such wrong perceptions.¹³⁸ A senior tax practitioner similarly noted that ‘more than perhaps 75-80 per cent of the cases are filed by the tax department’ as ‘there is very little cost’ that ITD officials associate with the filing of a tax appeal.¹³⁹ Merit-less appeals filed by the ITD do not withstand judicial scrutiny but taxpayers have to often expend time and money to get relief because the ITD sometimes files merit-less appeals all the way to the Supreme Court.¹⁴⁰ Unfortunately, some feel that there appears to be little to no accountability of officials for filing such appeals.¹⁴¹

Appeals are also filed by the ITD to avoid refunding money due to taxpayers.¹⁴² A senior lawyer complained that ‘if the judgment is in [the taxpayer’s] favour, [the ITD] will file an appeal in Supreme Court [and] keep it pending for five years,’ even if Supreme Court precedent favours the taxpayer.¹⁴³ As the 20 per cent of disputed tax paid by taxpayers when they file an appeal counts towards the ITD’s revenue collection target,¹⁴⁴ to avoid refunding this amount when the taxpayer wins an appeal, the ITD is said to appeal to the next level.¹⁴⁵ Moreover, courts have on several occasions questioned ITD officials for delaying refunds to taxpayers.¹⁴⁶ In one case, a High Court noted that ‘[t]he action of the officer ... seems to be in complete variance with the higher echelons of administration [and] of the tax administration being an assessee friendly regime’ and found the attitude of the assessing

¹³⁶ Ibid.

¹³⁷ Interview with N (n 52).

¹³⁸ Ibid.

¹³⁹ Interview with Y (n 8).

¹⁴⁰ See *Principal Commissioner of Income Tax-4 v Zydus Wellness Ltd.* [2020] 113 taxmann.com 154 (Supreme Court of India) (11 February 2019).

¹⁴¹ Interview with M (n 101); Interview with P (n 78); Interview with AC (n 61); Interview with AD (n 31); Interview with AF (n 48).

¹⁴² Interview with AF (n 48).

¹⁴³ Ibid.

¹⁴⁴ Interview with V (n 3).

¹⁴⁵ Ibid.

¹⁴⁶ *Aircel Ltd. v Deputy Commissioner of Income tax, Corporate Circle-I(1), Chennai* [2017] 87 taxmann.com 226 (Madras High Court, India) (12 October 2017) (directing the ITD to act on a refund claim); *Madan Gopal Singh Nagi v Commissioner of Income-tax* [2020] 113 taxmann.com 581 (High Court of Madhya Pradesh, India) (28 February 2019) (chiding the ITD for making the taxpayer run ‘from pillar to post’ for a refund); *Tata Communications Ltd. v Deputy Commissioner of Income-tax - 1(3)(2)* [2020] 114 taxmann.com 728 (Bombay High Court, India) (8 July 2019) (finding the conduct of the assessing officer in not processing the refund application of the taxpayer inequitable and insisting that the ITD should expeditiously release refunds due); *Cooner Institute of Health Care & Research Centre (P.) Ltd. v Income Tax Officer* [2020] 118 taxmann.com 69 (Delhi High Court, India) (27 July 2020) (finding that ‘withholding of refund under section 241A of the [Income Tax] Act without recording justifiable reasons, is not in consonance with the legislative intent and mandate of the aforesaid provision’); *Aegis Customer Support Services (P.) Ltd. v Income Tax Officer, Ward-6(1)(1)* [2020] 116 taxmann.com 50 (Bombay High Court, India) (18 October 2019) (finding ‘undue hardship’ to the taxpayer due to income tax officials ‘not discharging their duties under the [Income Tax] Act’ by processing refunds).

officer in that case to be ‘preposterous’.¹⁴⁷ The court went on to chide the assessing officer in that case as below:

This attitude on the part of the Assessing Officer leaves us with a feeling (not based on any evidence) that the Officers of the Revenue seem to believe that it is not enough for the assessee to please the deity (Income Tax Act) but the assessee must also please the priest (Income Tax Officer) before getting what is due to him under the Act. The officers of the State must ensure that their conduct does not give rise to the above feeling even remotely.¹⁴⁸

The High Court in another case discouraged the practice of delaying refunds, noting that tax authorities are expected to ‘take a decision and not delay the matters’ as such delays may force taxpayers to approach the High Courts by way of a writ petition.¹⁴⁹ The Court added that it is ‘as if the authorities wait for a writ Court to issue direction’ so that they can process such taxpayers’ matters ‘out of the turn and grant [the] necessary reliefs.’¹⁵⁰ Another High Court noted that they did not find ‘any prudence’ in the withholding of the taxpayer’s refund by tax authorities in that case, adding that the Court was ‘not able to discern any application of mind by the revenue in declining the refund’.¹⁵¹ The Court found the withholding of refund ‘in anticipation of additions/disallowances that may be made after [the] completion of assessment proceedings’ to be ‘unjust and arbitrary’, especially as ‘there ... [was] no history of [a] high tax demand’ in that case’s record.¹⁵²

Another High Court explained the impact of denying legitimate refunds as below:

[I]t is pertinent to note that in the present case and also from [a] number of cases, it is evident that procedure for refund and withholding of refund is often being used as delaying tactics for various reasons including window dressing of collection of revenue. The method adopted is a short sighted vision. Apart from harassment to the assessee, it results in paying interest on the delayed amount of refund putting further burden on the exchequer. It cannot be lost sight of that trade and commerce is a life blood of the system, if the excess amount deposited as tax is not refunded to the entrepreneur/assessee, it has effect on the liquidity and business. There cannot be [a] second opinion that the revenue collection and securing the interest of the revenue is of great importance, at the same time[,] the revenue is to be collected like an apiarist extracts honey from [a] beehive without destroying it.¹⁵³

¹⁴⁷ *Group M. Media India (P.) Ltd. v Union of India* [2017] 77 taxmann.com 106 (Bombay High Court) (15 October 2016).

¹⁴⁸ *Ibid.*

¹⁴⁹ *Vodafone Idea Ltd. v Deputy Commissioner of Income-tax, Mumbai* [2018] 99 taxmann.com 57 (Bombay High Court, India) (1 October 2018). See also *Tata Projects Ltd. v Deputy Commissioner of Income Tax, Range-2(3)(2)* [2017] 88 taxmann.com 325 (Bombay High Court, India) (23 November 2017) (deprecating the practice of the assessing officer to wait until the last date to process tax returns and refunds despite the taxpayer’s pleas and discouraging the practice of prioritising the processing of returns of taxpayers who file writ petitions); *Tata Communications Ltd. v Deputy Commissioner of Income Tax-1(3)(2)* [2019] 111 taxmann.com 63 (Bombay High Court, India) (16 September 2019) (setting aside an ITD order withholding refund due to the taxpayer and finding that the taxpayer’s revised return was not processed despite numerous requests).

¹⁵⁰ *Vodafone Idea Ltd. v Deputy Commissioner of Income-tax, Mumbai* [2018] 99 taxmann.com 57 (Bombay High Court, India) (1 October 2018).

¹⁵¹ *Ericsson India (P.) Ltd. v Additional Commissioner of Income Tax* [2020] 117 taxmann.com 381 (Delhi High Court, India) (18 February 2020).

¹⁵² *Ibid.*

¹⁵³ *Huawei Telecommunications (India) Company (P.) Ltd. v Union of India* [2020] 122 taxmann.com 4 (High Court of Punjab & Haryana, India) (6 March 2020).

The Court considered imposing costs on the income tax officials ‘in their personal capacity’ in the above case as the refund appeared to have been withheld despite ‘there being no justifiable reason [to do so] as per provisions of the [income tax] statute’, thus leading to ‘statutory interest’ ultimately payable to the taxpayer at a loss to the ITD.¹⁵⁴

Having discussed fairness in the context of filing appeals, below section discusses fairness of adjudication at the level of the CIT(A), the first level of appeal for taxpayers.

A Fairness at the CIT(A) stage

A High Court described the judiciousness with which a CIT(A) should act as below:

[T]he Appellate Authority is also a fact finding authority and therefore, he has to consider the order of assessment on the grounds raised in the appeal[,] and thereafter, pass a speaking order on merits and in accordance with law by giving his own reasons and findings as to whether the order of assessment can be sustained or not. In other words, the order passed by the Appellate Authority should explicitly exhibit his application of mind to the facts and circumstances and the objections raised in the grounds of appeal, also by expressing his reasons and findings in support of his conclusion.¹⁵⁵

Tax practitioners note that the judiciousness of the CIT(A) authorities has declined over the years.¹⁵⁶ In the past, the CIT(A) authorities had a reputation of being dispassionate and knowledgeable.¹⁵⁷ They were also known for being judicious¹⁵⁸ and for following the principles of natural justice.¹⁵⁹ For example, a tax practitioner recalled that in the good old days, the CIT(A) would advise practitioners on how to argue a point of law so as to enable the CIT(A) to allow an appeal per law.¹⁶⁰ Thus, the CIT(A) would guide the practitioner so as to ensure a just outcome.¹⁶¹ For example, the CIT(A) would ask the taxpayers to check their facts if the facts had not been presented properly.¹⁶² However, practitioners argue that of late, the CIT(A) authorities are generally of a different mindset. A senior tax practitioner observed that the CIT(A) ‘now view themselves ... as an extension of the [tax] assessment authorities in the sense that they tend to fill up the deficiencies of the assessment authorities and try to strengthen the assessment orders rather than give relief [to taxpayers]’, leading to little fair play.¹⁶³ Even a retired ITD official commented that some CIT(A) authorities function ‘like assessing authorities even while dealing with appeals’.¹⁶⁴ For example, some CIT(A) authorities today openly refuse to provide relief to taxpayers where legally due and ask tax

¹⁵⁴ Ibid.

¹⁵⁵ *Ajji Basha v Commissioner of Income-tax, Chennai* [2019] 111 taxmann.com 348 (Madras High Court, India) (9 September 2019). The Court set aside the CIT(A)’s order based on a ‘single line finding’, noting that it was ‘an outcome of total non-application of mind’, and resulting in the order not qualifying as a speaking order.

¹⁵⁶ Interview with P (n 78); Interview with Q (n 127).

¹⁵⁷ Interview with V (n 3); Interview with W (n 10).

¹⁵⁸ Interview with Q (n 127); Interview with W (n 10).

¹⁵⁹ Interview with V (n 3).

¹⁶⁰ Interview with V (n 3).

¹⁶¹ Ibid.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ Interview with D, a retired ITD official (Author, Online, December 2020).

practitioners to seek relief at the ITAT instead.¹⁶⁵ A retired ITD official also remarked that the CIT(A) is ‘sometimes used also as a tool of tax collection,’ where the CIT(A) ‘makes a mistake in adopting the departmental goal [of collecting taxes] as the goal of his appeals’.¹⁶⁶

A retired ITAT adjudicator claimed that ‘90 per cent of the [taxpayer] appeals having some substance are dismissed by the CIT(Appeals),’ which is ‘the reason why a lot of appeals are [filed] before [the] ITAT’.¹⁶⁷ Retired ITAT adjudicators and retired ITD officials advise that if there is no jurisdictional High Court precedent on a point of law but conflicting non-judicial High Court views exist, one favouring taxpayers and the other favouring the ITD, the ‘CIT (Appeals) generally tend to favour the revenue’.¹⁶⁸ Tax practitioners assert that the CIT(A) does not usually adopt precedent favouring taxpayers unless it is of the jurisdictional High Court or the Supreme Court.¹⁶⁹ Even if there is no conflict among non-judicial High Court judgments, the CIT(A) generally ignores decisions which are in favour of taxpayers if no jurisdictional High Court or Supreme Court precedent exists.¹⁷⁰ This despite settled law that when there are two views possible, the view in favour of the taxpayer should be adopted by quasi-judicial authorities like the CIT(A).¹⁷¹ A tax practitioner therefore advised that ‘the Commissioner (Appeal) is now an institution more for the comfort of the department’ and serves primarily to check the quality of the assessment orders.¹⁷² In this context, a senior tax practitioner questioned the utility of the forum of the CIT(A) and the cost of implementing that forum if justice cannot be expected to be served by the CIT(A).¹⁷³

Even on the procedural front, a senior lawyer complained that there is inadequate accountability of the CIT(A) with regard to deciding an appeal within a time limit or for deciding appeals chronologically in the order filed, instead of hearing from out of turn.¹⁷⁴ In this context, a High Court noted the importance of expeditiously deciding appeals as below:

Needless to say, appeals cannot be kept in an animated suspension over a long period of time. Keeping any appeal pending will adversely affect not only the interest of the assessee, but also adversely affects the interest of the Revenue, and, therefore, of the nation at large.¹⁷⁵

¹⁶⁵ Interview with Q (n 127).

¹⁶⁶ Interview with S (n 82).

¹⁶⁷ Interview with W (n 10).

¹⁶⁸ Interview with K (n 73); Interview with C (n 72); Interview with M (n 101); Interview with AC (n 61).

¹⁶⁹ Interview with J (n 91).

¹⁷⁰ Interview with N (n 52).

¹⁷¹ Interview with AC (n 61). In *Dalmia Power Ltd. v Assistant Commissioner of Income-Tax* [2019] 265 Taxman 37 (Madras High Court, India) (30 April 2019), the Madras High Court said that ‘it is settled law that while dealing with the taxing provision, when two interpretations are possible, the Court would interpret the provisions in favour of the taxpayer and against the revenue.’ The High Court added that ‘[i]n cases of doubt or dispute, the construction should be made in favour of the taxpayer and against the revenue.’

¹⁷² Interview with Y (n 8).

¹⁷³ Interview with R (n 82).

¹⁷⁴ Interview with Q (n 127).

¹⁷⁵ *Flipkart India (P.) Ltd. v Assistant Commissioner of Income-tax, Circle 3(1)(1), Bengaluru* [2017] 79 taxmann.com 159 (High Court of Karnataka, India) (23 February 2017).

V RECOMMENDATIONS

A retired ITAT adjudicator remarked that the government always wins whenever justice is done.¹⁷⁶ And a High Court explained this in the context of refunds as below:

The revenue authorities cannot become a stifling force and a stumbling block for trade and commerce. They should realize and be sensitive to the fact that by their acts and omissions, they are impeding the growth of trade and commerce. They are filing the very hen that lays the golden egg. If businesses are not permitted to operate by clocking the fund flow due to unjustified acts and omissions of the revenue authorities in not granting refunds where due, the very source of revenue generation[,] i.e.[,] taxable income would fall. The revenue authorities have to be mindful of this. They cannot take a fool hardy and short sighted approach by withholding refunds where due. ...

The interest of revenue lies in collecting revenue in a legal and justified manner. It does not lie in retaining the collected taxes in excess of what is justified, since the excess collection cannot even be properly termed as ‘revenue’. The excess collection of tax is a liability of the State and it lies in the interest of the revenue of the State to discharge its interest bearing liability without any delay. The sovereign cannot, but, be seen as fair, honest and credible in its dealings with its subjects. Any lapse in this regard tarnishes the image and credibility of the sovereign. It certainly cannot act like any unscrupulous businessman, who is seen to dodge his liabilities by resort to frivolous excuses and devious ways.¹⁷⁷

If taxpayers perceive tax authorities to be ‘acting fairly and neutrally, and they feel treated with respect and dignity, they will be more willing to trust that authority and will voluntarily obey and defer to its decisions and rules.’¹⁷⁸ ‘The procedural justice literature specifically highlights the importance of an authority’s trustworthiness, interpersonal respect, and neutrality in its dealings with others’.¹⁷⁹ On the other hand, ‘perceptions of unfair treatment’ may affect taxpayers’ ‘judgments’ of the ‘legitimacy’ of a tax authority more than an unfavourable outcome may.¹⁸⁰ For example, perceptions of unfair treatment may result in lower compliance and possibly even evasion of taxes.¹⁸¹ Apart from the trust-deficit between taxpayers and tax authorities, lack of fairness may lead to uncertainty in the outcome of the adjudication. The Supreme Court of India advised that ‘[t]here is a value ... in promoting the interest of certainty in tax litigation’ and explained the importance of certainty as below:

¹⁷⁶ Interview with AD (n 31).

¹⁷⁷ *Ericsson India (P.) Ltd. v Additional Commissioner of Income Tax* [2020] 117 taxmann.com 381 (Delhi High Court, India) (18 February 2020). *Cooner Institute of Health Care & Research Centre (P.) Ltd. v Income Tax Officer* [2020] 118 taxmann.com 69 (Delhi) (27 July 2020), quoting *Ericsson India (P.) Ltd. v Additional Commissioner of Income Tax* [2020].

¹⁷⁸ Murphy (n 14) 190.

¹⁷⁹ Murphy (n 6) 566 (citing TR Tyler, ‘The psychology of legitimacy: A relational perspective on voluntary deference to authorities’ (1997) 1 *Personality and Social Psychology Review* 323). See also Hobson (n 181) 67.

¹⁸⁰ Murphy (n 6) 575. See also Tom R Tyler, ‘What is Procedural Justice?: Criteria used by Citizens to Assess the Fairness of Legal Procedures’ (1988) 22(1) *Law & Society Review* 103-136 (concluding that ‘those affected by the decisions of third parties in both formal and informal settings react to the procedural justice of the decision-making process at least as much, and often more, than they react to the decision itself’).

¹⁸¹ Murphy (n 6) 587. See also Kersty Hobson, ‘“Say No to the ATO”: The Cultural Politics of Protest Against the Australian Tax Office’ (2004) 3(1) *Social Movement Studies* 51–71, 67.

Individual affairs are conducted and business decisions are made in the expectation of consistency, uniformity and certainty. To detract from those principles is neither expedient nor desirable.¹⁸²

If the ITD and its officials follow these principles, substantive and procedural justice will prevail. Tax practitioners suggest that elimination of revenue targets is a simple way to ensure that both tax assessment officials, i.e., the assessing officers, and the CIT(A) are judicious in their assessment of tax and adjudication of appeals respectively.¹⁸³ A senior tax lawyer also suggested that tax officials should not be subjected to a witch-hunt for making an assessment or deciding an appeal in a manner that is favourable to taxpayers in cases where the law is in favour of the taxpayers.¹⁸⁴ For example, ITD officials should not be subjected to an inquiry or an investigation if they do not file an appeal in a case where the disputed issue has already been decided by the Supreme Court against the ITD.¹⁸⁵ On a more philosophical note, the senior lawyer advised the ITD to accept judgements of High Courts that are against the ITD instead of appealing, or worse, trying to amend the law to overcome every High Court judgement.¹⁸⁶ These are some suggestions to improve the judiciousness of ITD officials, which we believe will likely improve the quality of orders passed by such officials.

Another senior lawyer encouraged the ITD to be more friendly in their treatment of taxpayers, noting that the ITD should not punish 95 per cent of the taxpayers just because 5 per cent of the taxpayers evade taxes.¹⁸⁷ A retired ITAT adjudicator agreed, urging the ITD to also treat taxpayers with respect.¹⁸⁸ A senior tax practitioner concurred, adding that the right amount of tax should be collected based on a proper evaluation of the merits of each case.¹⁸⁹ Also, a retired member of the CBDT and a retired ITD official advised that tax assessment officials should be trained properly to help them investigate matters better and to improve the drafting of the assessment orders.¹⁹⁰ The retired ITD official also recommended training, even at the level of the CIT(A), to improve the understanding of and adherence to precedent by ITD officials.¹⁹¹ Former ITD officials also suggest improving the supervision and the monitoring of tax assessment officials and CIT(A) authorities, e.g., through random audits.¹⁹²

Also, to reduce the incidence of frivolous appeals filed against taxpayers, a senior lawyer suggested that when ITD officials reopen assessments, the officials should be made to give an undertaking that the new tax demand is not against a Supreme Court decision.¹⁹³ Further,

¹⁸² *Principal Commissioner of Income Tax, New Delhi v Maruti Suzuki India Ltd.* [2019] 416 ITR 613 (Supreme Court of India) (25 July 2019).

¹⁸³ Interview with AE (n 83); Interview with AF (n 48).

¹⁸⁴ Interview with AF (n 48); Interview with V (n 3); Interview with U, a tax lawyer practitioner (Author, Online, February 2021).

¹⁸⁵ Interview with AF (n 48). Another senior lawyer concurred, noting that if the ITD were to file appeals purely based on merit, there would likely be less litigation. Interview with U (n 184).

¹⁸⁶ Interview with AF (n 48). A former ITAT adjudicator and retired High Court judge observed that when an appellate authority decides against the ITD, the ITD does not have the grace to accept an adverse decision. Interview with X (n 126). Another former ITAT adjudicator and retired High Court judge remarked that 'judgement law is as good as statute law' and should be respected by the ITD. Interview with AA (n 13).

¹⁸⁷ Interview with AF (n 48).

¹⁸⁸ Interview with W (n 10).

¹⁸⁹ Interview with F (n 88).

¹⁹⁰ Interview with A (n 49); Interview with N (n 52).

¹⁹¹ Interview with N (n 52). A retired ITAT adjudicator agreed. Interview with W (n 10).

¹⁹² Interview with A (n 49); Interview with N (n 52); Interview with B (n 82).

¹⁹³ Interview with AF (n 48).

courts have found that assessments were reopened by tax officials without furnishing adequate reasons or in breach of the principles of natural justice.¹⁹⁴ A senior tax lawyer therefore recommends holding the ITD officials accountable for making unsustainable assessments or for filing frivolous appeals.¹⁹⁵ A tax accountant and lawyer agreed.¹⁹⁶ We agree that accountability is the *sine qua non* for governmental authorities to adhere to the law.

A retired ITD official suggested making the ITD autonomous to ensure judiciousness among ITD officials and to prevent the government from influencing the ITD's actions.¹⁹⁷ Similarly, tax practitioners seek CIT(A) authorities that are independent of the ITD.¹⁹⁸ We agree with these recommendations as apt solutions to many of the issues discussed herein.

VI CONCLUSION

Fairness is an integral part of both quasi-judicial and judicial processes. Therefore, examination of fairness or lack thereof in the context of tax assessment and tax adjudication is appropriate. In this article, unfairness in the tax assessment process and at the level of the CIT(A), the first stage of appeal for taxpayers, is discussed in the context of substantive and procedural justice, for example, the principles of natural justice. Indian courts, for instance, apply the common law principles of natural justice, which trace their roots to English law, to identify unfairness in and evaluate the soundness of administrative decisions. Natural justice is therefore a form of due process and procedural justice and has also been adopted by commonwealth nations such as Australia, Canada, New Zealand, and India.¹⁹⁹

Based on a review of High Court and Supreme Court cases and interviews of retired tax officials, tax practitioners, and retired adjudicators in India, this article discussed unfairness in the tax assessment process in India. For example, substantive justice may suffer due to poor assessments and revenue-mindedness of assessing officers whereas procedural justice may be compromised by non-speaking orders and prejudices of tax officials towards taxpayers. Some tax practitioners and retired adjudicators suggest that within the tax appeal system, at the level of the CIT(A), fairness has been on the decline in the recent past, with the primary concern relating to the CIT(A)'s unwillingness to give relief to taxpayers even where

¹⁹⁴ *North Eastern Electric Power Corporation v Principal Commissioner of Income-tax* [2019] 104 taxmann.com 268 (High Court of Meghalaya, India) (18 March 2019) (setting aside the reassessment orders as the principles of natural justice were breached); *CIT v Trend Electronics* [2015] 61 taxman.com 308 (Bombay High Court, India) (commenting that the court 'expect[s] the state to act more responsibly'); *Vinodbhai Jivrajbhai Rabdiya v Income Tax Officer, Ward-2* [2020] 114 taxmann.com 535 (High Court of Gujarat, India) (5 December 2019) (staying the reopening of an assessment as that reopening was based on 'a hypothesis or a contingency which may emerge in the future'); *Pandesara Infrastructure Ltd. v Deputy Commissioner of Income Tax* [2019] 105 taxmann.com 181 (High Court of Gujarat, India) (13 August 2018) (not permitting reopening of an assessment).

¹⁹⁵ Interview with U (n 184).

¹⁹⁶ Interview with F (n 88).

¹⁹⁷ Interview with AB (n 82).

¹⁹⁸ Interview with P (n 78); Interview with G (n 82). A retired ITAT adjudicator concurred, stating that the CIT(A) should be respected and given independence by the ITD. Interview with W (n 10).

¹⁹⁹ See Johnson (n 23) 42-49; Mullan (n 25) 293-94, 312.

such relief is statutorily or legally due. Declining fairness at the level of the CIT(A) and a low level of fairness at the tax assessment stage likely result in unnecessary appeals that translate into lost time and unnecessary expense for taxpayers. Therefore, there is an immediate need to remedy the unfairness within the tax assessment process and at the level of the CIT(A).

A comparative study of fairness in the tax system in India and that of another country that also follows common law traditions, e.g., Australia, may help identify solutions. More specifically, a study comparing procedural justice in the Indian and Australian tax systems may suggest steps for India to consider given Australia's efforts to improve the judiciousness, accountability, and the effectiveness of its tax administration. Notably, the full report of the Taxation Review Committee in 1975²⁰⁰ and reforms in the Australian Taxation Office in the 1990s, e.g., Valerie Braithwaite's compliance model for enforcement,²⁰¹ may offer insights.

A Limitations of the Research

This research is mostly based on a review of caselaw and interviews of lawyer and accountant practitioners, retired ITD officials, and former adjudicators and retired judges. Other sources include articles, case law, and reports. The interviews do not constitute a random sample and the interview sample is not representative of tax practitioners, retired ITD officials, former ITAT adjudicators, and retired judges. Also, this article discusses fairness in the tax system primarily from the perspective of taxpayers and not that of the government.

B Further Research

This article was written during the period of the ITD's transition to a faceless system of assessments and appeals (at the level of the CIT(A)) instituted by the government in 2020. We intend to undertake follow-up research next year to understand whether the new faceless system improved the fairness in tax assessments and adjudication at the level of the CIT(A).

²⁰⁰ Asprey (n 27).

²⁰¹ Valerie Braithwaite, 'A New Approach to Tax Compliance' in Valerie Braithwaite (ed), *Taxing democracy: Understanding tax avoidance and evasion* (Routledge, 2002) 1.

AN EVALUATION OF THE PROPOSED CHANGES TO THE INDIVIDUAL TAX RESIDENCY RULES

ELIZABETH NG*

ABSTRACT

In the 2021-22 Federal Budget, the Government announced that the current individual tax residency rules will be replaced with new tests, which will be based on recommendations made by the Board of Taxation. The current residency rules are difficult to apply in practice. This is evidenced by the large number of cases and private binding rulings from 2016 to 2021 on the issue of residency, which indicate that taxpayers are seeking guidance from the Australian Taxation Office before turning to the courts to determine their residency status. The paper evaluates the extent to which the proposed residency tests are able to meet the policy objectives of equity, efficiency, and simplicity. The paper concludes that the proposed residency tests will meet the policy objectives to a large extent, and that the tests are a step in the right direction.

I INTRODUCTION

Despite being a foundational concept in the tax system, the individual tax residency rules remain relatively unchanged since their enactment 91 years ago.

In recent years, the increase in global mobility has resulted in the issue of Australian tax residency to be a controversial area for many taxpayers. This is illustrated by the growing number of cases and private binding rulings ('PBRs') on the issue of individual tax residency. In the past five income years, there have been 18 cases and 830 PBRs dealing with the issue of individual tax residency. This is in contrast with the fact that only 25 cases were litigated

* Juris Doctor graduate, Melbourne Law School. Contact: elizabethmingyennng@gmail.com.

The author is grateful for the support and guidance of Sunita Jogarajan. This research topic builds on the author's experience taking part in the 2019 Melbourne Law School Tax Clinic. During the clinic, the author worked with vulnerable taxpayers who were confused over the operation of the individual tax residency rules and sought help from the clinic to determine their residency status.

in the 79 years between 1930 and 2009, when the residency rules were first enacted.¹ The rise in the number of cases and PBRs indicates that there is a problem with how the current residency rules operate in an increasingly globally mobile world. In 2016, the Board of Taxation ('the Board') undertook a review of the current residency rules and determined that the rules are outdated and require modernisation. In 2019, the Board proposed new tests to reform the existing individual tax residency rules.

In the 2021-22 Federal Budget, the Government announced that the current individual tax residency rules will be replaced with a new framework, which will be based on recommendations made by the Board ('the Proposed Reforms').² As of the date of completion of this paper, the Government has not indicated the exact form that the new residency rules will take. Therefore, this paper will assume that the new individual residency rules will largely mirror the proposals outlined by the Board in 2019.

This paper argues that there is a problem with the operation of the current residency rules, and that reform is required. This paper will examine the extent to which the Proposed Reforms are able to meet the key tax policy objectives of equity, efficiency, and simplicity. This paper argues that the Proposed Reforms will meet the three key tax policy objectives to a large extent. This paper will first outline current individual tax residency rules before analysing whether residency is a problem, and if taxpayers are actually turning to the courts or to the Australian Taxation Office ('ATO') to determine their residency status. A brief overview of the Proposed Reforms will be provided, before finally evaluating the extent to which the Proposed Reforms will meet the key tax policy objectives of equity, efficiency, and simplicity.

II THE CURRENT INDIVIDUAL TAX RESIDENCY RULES

A Brief background on the current individual tax residency rules

The income tax system in Australia is based upon the foundational concepts of residency and source.³ The residency status of an individual is key in determining their tax liability. An individual who is a tax resident of Australia is taxed on their worldwide income.⁴ On the other hand, an individual who is not a tax resident of Australia is only taxed on income derived from sources in Australia.⁵

The tax residency status of an individual is determined on a year-by-year basis.⁶ The definition of a tax resident of Australia is contained in paragraph (a) of section 6 of the

¹ Michael Dirkis, 'Moving to a More "Certain" Test for Tax Residence in Australia: Lessons for Canada?' (2020) 68(1) *Canadian Tax Journal*, 160.

² The Commonwealth of Australia, *Budget Measures* (Budget Paper No 2, 11 May 2021) 21 – 22.

³ Board of Taxation, *Reforming individual tax residency rules – a model for modernisation: a report to the Treasurer* (Report, 2019), [1.1] ('The Board of Taxation 2019 Report').

⁴ *Income Tax Assessment Act 1997* (Cth) s 6-5(2).

⁵ *Ibid* s 6-5(3).

⁶ *Federal Commissioner of Taxation v Applegate* (1979) 27 ALR 114.

Income Tax Assessment Act 1936 (Cth). That section prescribes four tests to determine whether an individual is a tax resident of Australia for the income year: the ‘resides’ test,⁷ the domicile test,⁸ the 183-day test,⁹ and the superannuation test.¹⁰ Only one of the four tests have to be satisfied in order for the individual to be a tax resident of Australia.

Under the ‘resides’ test, an individual is a resident if he or she resides in Australia according to the ordinary meaning of the word ‘resides’.¹¹ The ‘resides’ test is the primary test of residency; if an individual is a tax resident under the ‘resides’ test, the other three tests do not have to be considered. The second test of residency is the domicile test. An individual is a resident if they are domiciled in Australia, unless the Commissioner of Taxation (‘the Commissioner’) is satisfied that they have a permanent place of abode outside of Australia.¹²

The third test of residency is the 183-day test. An individual who is physically present in Australia for more than 183 days in an income year is a resident, unless the Commissioner is satisfied that the individual has a usual place of abode outside of Australia, and that he or she does not intend to take up residence in Australia.¹³ The fourth test is the superannuation test. An individual is a resident of Australia if he or she is a member of certain superannuation schemes, or if their spouse, or child that is under the age of 16, is a member of those schemes.¹⁴

The current individual tax residency rules were devised 91 years ago and remain relatively unchanged since their enactment.¹⁵ The ATO has published two public rulings on the issue of residency – TR 98/17 and IT 2650. TR 98/17 was issued 23 years ago and concerns the application of the ‘resides’ test to individuals entering Australia.¹⁶ IT 2650 was issued 30 years ago, and provides guidance on the application of the permanent place of abode exception to the domicile test.¹⁷ However, these rulings do not have the force of law, and are intended to be of guidance only.¹⁸

⁷ *Income Tax Assessment Act 1936* (Cth) s 6(a) (‘ITAA36’).

⁸ *Ibid* s 6(a)(i).

⁹ *Ibid* s 6(a)(ii).

¹⁰ *Ibid* s 6(a)(iii).

¹¹ *Federal Commissioner of Taxation v Miller* (1946) 73 CLR 93.

¹² ITAA36 (n 7).

¹³ ITAA36 (n 7) s 6(a)(ii).

¹⁴ *Ibid* s 6(a)(iii).

¹⁵ Board of Taxation, *Review of the Income Tax Residency Rules for Individuals* (Report, 2017), [1.37] (‘The Board of Taxation 2017 Report’).

¹⁶ Australian Taxation Office, *Income tax: residency status of individuals entering Australia* (TR 98/17), [1], [2].

¹⁷ Australian Taxation Office, *Income tax: residency - permanent place of abode outside Australia* (IT 2650).

¹⁸ *Taxation Administration Act 1953* (Cth) sch 1 div 357. Following *Harding v Commissioner of Taxation* [2019] FCAFC 29, the ATO has released a decision impact statement in which the ATO advised that IT 2650 will be reviewed to reflect the decision of the Full Federal Court that the phrase ‘place of abode’ refers not only to a dwelling but can also refer to a country. As of the date of completion of this paper, the ATO has yet to publish an updated ruling.

B Problems with the current individual tax residency rules

In the 2021-22 Federal Budget, the Government acknowledged that ‘Australia’s current tax residency rules are difficult to apply in practice, creating uncertainty and resulting in high compliance costs for individuals and their employers’.¹⁹ This statement echoes the sentiments expressed by the Board in their 2017 report. This paper will provide a brief summary of the issues with the existing individual residency rules as identified by the Board in their 2017 report.

According to the Board, the current individual residency rules require taxpayers to grapple with uncertain legal concepts. The following legal concepts were identified by the Board as being ambiguous:

- The meaning of ‘resides’ under the ‘resides’ test. The Board acknowledged that ‘there is no singular ordinary meaning of the word “resides”’.²⁰
- The phrase ‘permanent place of abode’ under the domicile test is not defined.²¹
- Under the 183-day test, the phrase ‘usual place of abode outside of Australia’ is not defined.²² The Board also noted that ‘the usual place of abode has not been the subject of many cases nor substantive ATO guidance’.²³

Given the lack of clarity over the meaning of key concepts in the residency rules, taxpayers are required to analyse their circumstances against common law principles, tribunal decisions, private binding rulings, and public rulings.²⁴ The Board noted that this is a significant undertaking even with professional assistance,²⁵ and that it imposes an inappropriate compliance burden on taxpayers with relatively simple tax affairs.²⁶ Thus, the Board concluded that the process of determining a taxpayer’s residency status results in considerable uncertainty to taxpayers, the judiciary, and administrators.²⁷

Furthermore, an increase in global mobility has impacted how taxpayers interact with the residency rules. Due to the nature of living and moving abroad, taxpayers are required to frequently reassess their residency status to account for changes in their circumstances overseas as well as in Australia.²⁸ The Board also noted that the increase in global mobility has also altered the relative importance of certain factors that are considered in the current residency rules.²⁹ Hence, the rise in global mobility have impacted both the frequency and

¹⁹ The Commonwealth of Australia (n 2).

²⁰ The Board of Taxation 2017 Report (n 15) [1.50].

²¹ The Board of Taxation 2017 Report (n 15) [1.79].

²² *Ibid* [1.64].

²³ *Ibid* [1.62].

²⁴ *Ibid* [1.55].

²⁵ Anton Joseph, ‘Australian Residence: Time to Change the Rules?’ (2019) 73(5) *Bulletin for International Taxation*, 5.

²⁶ The Board of Taxation 2017 Report (n 15) [1.100], [1.163(b)].

²⁷ *Ibid* [1.100].

²⁸ *Ibid* [1.163(a)].

²⁹ *Ibid* [1.163(a)].

nature of how taxpayers interact with the residency rules. This led the Board to conclude that the current residency rules are no longer appropriate and require modernisation.

Accordingly, the inherent uncertainty in the residency rules, coupled with the fact that the rules are no longer appropriate in light of an increasingly globally mobile workforce, led the Board to conclude that the current residency rules are deficient.

III TAXPAYERS ARE FACING DIFFICULTIES WITH DETERMINING THEIR RESIDENCY STATUS

This section will first examine the case law and PBRs from the 2016 to 2021 income year to discern whether taxpayers are turning to the courts or to the ATO to determine their residency status. This paper will then evaluate recent developments in the case law to determine whether these developments are able to adequately address the problems faced by taxpayers when determining their residency status.

A Trend in the case law and private binding rulings

1 Trend in the case law

From the 2016 to 2021 income year, there have been 18 cases on residency in the Full Federal Court of Australia, the Federal Court of Australia, and the Administrative Appeal Tribunal ('AAT').³⁰ The following table provides a summary of the cases by issue.

Table 1: Summary of the cases by issue from the 2016 to 2021 income year

Issue	Number of cases	Percentage
Residency – Expatriate	6	33.3%
Residency – Working holiday maker	7	38.9%
Section 23AG	3	16.7%
Double tax agreement tiebreaker provision	1	5.6%

³⁰ *Commissioner of Taxation v Addy* [2019] FCA 1768, rev'd [2020] FCAFC 135; *Joubert and Commissioner of Taxation* [2020] AATA 2645; *Dapper Coelho and Commissioner of Taxation* [2020] AATA 2474; *MacKinnon and Commissioner of Taxation* [2020] AATA 1647; *Schiele and Commissioner of Taxation* [2020] AATA 286; *Pike v Commissioner of Taxation* [2019] FCA 2185; *Stockton v Commissioner of Taxation* [2019] FCA 1679; *Lochtenberg v Commissioner of Taxation* [2019] FCA 1167; *Handsley and Commissioner of Taxation* [2019] AATA 917; *Harding v Commissioner of Taxation* [2018] FCA 837, rev'd [2019] FCAFC 29; *Lochtenberg and Commissioner of Taxation* [2018] AATA 4667; *Shord v Commissioner of Taxation* [2015] AATA 355, rev'd [2017] FCAFC 167; *Tan and Commissioner of Taxation* [2016] AATA 1062; *Landy and Commissioner of Taxation* [2016] AATA 754; *Hughes and Commissioner of Taxation* [2015] AATA 1007; *Koustrup and Commissioner of Taxation* [2015] AATA 126; *Jaczenko and Commissioner of Taxation* [2015] AATA 125; *Clemens and Commissioner of Taxation* [2015] AATA 124.

Validity of the backpacker tax	1	5.6%
Total	18	100%

2 Trend in the private binding rulings

From the 2016 to 2021 income year, there have been 830 PBRs dealing with the issue of individual tax residency.³¹

Table 2: Summary of the PBRs from the 2016 to 2021 income year

Income year	Expatriates	Incoming	Others ³²	Total number of private rulings
2021	85 (75%)	28 (25%) ³³	0	113
2020	93 (84%)	16 (15%)	1 (1%)	110
2019	91 (84%)	17 (16%)	0	108
2018	132 (82%)	28 (17%)	1 (1%)	161
2017	140 (83%)	20 (13%)	0	160
2016	148 (83%)	29 (16%)	1 (1%)	178
Total	689	138	3	830
%	84%	15%	1%	100%

An examination of the case law and PBRs from the 2016 to 2021 income year reveals that there are two groups of individuals who are facing difficulties with determining their residency status – working holiday makers and Australian expatriates. It is therefore necessary to determine whether the problems faced by working holiday makers and Australian expatriates are adequately addressed by recent developments in the case law.

B Working holiday makers

³¹ Edited Private Advice obtained through the Australian Taxation Office Legal Database. Please contact the author for more information.

³² This category includes PBRs on the issue of part-year residency and the application of the superannuation test.

³³ The number of cases concerning incoming individuals was arguably higher in the 2021 income year due to COVID-19 and the closure of international borders. Individuals were unable to return overseas and had to consider their Australian tax residency status as they were physically present in Australia for more than 183 days in the 2021 income year.

Based on table 1, 38.9% of the cases concern the application of the individual residency rules to working holiday makers. Although the cases involving working holiday makers appear to constitute the largest proportion of cases, a closer examination reveals that these cases are no longer controversial after the introduction of a new tax rate that is applicable to working holiday makers. This will be referred to as ‘the backpacker tax’.

Individuals who hold a Subclass 417 (Working Holiday) visa, a Subclass 462 (Work and Holiday), or a bridging visa in relation to one of those visas, are taxed at 15% on amounts up to \$37,000 for the 2020 income year and up to \$45,000 for the 2021 and future income years.³⁴ Ordinary tax rates apply to taxable income exceeding those amounts.

Working holiday makers are taxed at 15% regardless of their residency status; both resident and non-resident working holiday makers are taxed at 15%. Therefore, whether the backpacker tax applies depends on the individual’s visa status, rather than the application of the residency rules. The backpacker tax came into effect on 1 January 2017 and applies to taxable income derived after that date.³⁵ Before the backpacker tax was introduced, working holiday makers were taxed differently based on whether they were a tax resident or a non-tax resident of Australia. Hence, the residency status of working holiday makers was contentious since it determined the rate of tax to be applied, and whether the individual was entitled to the tax-free threshold.³⁶

The following table is a summary of the cases litigated between the 2016 to 2021 income year that concern the application of the current individual residency rules to working holiday makers. The table also examines whether the cases were litigated before or after the introduction of the backpacker tax.

Table 3: Summary of the cases by issue from the 2016 to 2021 income year that concern working holiday makers

Issue	Number of cases
Litigated before the backpacker tax was introduced ³⁷	4
Litigated after the backpacker tax was introduced but only relate to the residency status of the taxpayers before the backpacker tax was imposed ³⁸	2
Litigated after the backpacker tax was introduced and concerned the application of the residency rules ³⁹	1

³⁴ *Income Tax Rates Amendment (Working Holiday Maker Reform) Act 2016* (Cth) ss 3A and 8.

³⁵ *Ibid* s 8.

³⁶ *MacKinnon and Commissioner of Taxation* [2020] AATA 1647, [65].

³⁷ *Koustrup and Commissioner of Taxation* [2015] AATA 126, *Jaczenko and Commissioner of Taxation* [2015] AATA 125, *Clemens and Commissioner of Taxation* [2015] AATA 124, and *Schiele and Commissioner of Taxation* [2020] AATA 286.

³⁸ *Dapper Coelho and Commissioner of Taxation* [2020] AATA 2474 and *MacKinnon and Commissioner of Taxation* [2020] AATA 1647.

³⁹ *Stockton v Commissioner of Taxation* [2019] FCA 1679.

As indicated in table 3, four cases involved determining the residency status of individuals for income years that precede 1 January 2017, and thus were litigated before the backpacker tax was introduced.⁴⁰ Hence, if those cases were litigated now, they would be addressed by the backpacker tax.

The remaining three cases were litigated after the backpacker tax was introduced, and involved determining the residency status of the respective taxpayers for the 2017 income year.⁴¹ However, two cases involved determining the rate of tax to be applied to income derived by the respective taxpayers before 1 January 2017.⁴² The rate of tax to be applied after 1 January 2017 was not in issue. Only one case involved determining the residency status of the taxpayer, and was litigated after the backpacker tax was introduced.⁴³ However, that is only one out of seven cases, and today, the vast majority of cases concerning working holiday makers will be addressed by the backpacker tax.

In August 2020, the Full Federal Court in *Commissioner of Taxation v Addy* held that the backpacker tax was valid, and that it did not infringe the anti-discriminatory articles in Australia's tax treaties.⁴⁴ Therefore, despite working holiday makers comprising 38.9% of the cases from the 2015 to 2019 income year, given the decision in *Addy*, the backpacker tax adequately addresses cases concerning working holiday makers.

C Expatriates

As illustrated in tables 1 and 2, 33.3% of the cases, and 84% of the PBRs involved the application of the residency rules to expatriates. Given that cases concerning working holiday makers are no longer controversial after *Addy*, expatriates comprise the largest proportion of individuals who seek determination from the courts as to their residency status. Therefore, the large number of cases and PBRs indicates that expatriates are facing difficulty with determining their residency status, and that there is a problem with how the current individual residency rules operate with respect to expatriates. It is therefore necessary to determine whether recent developments in the case law are able to adequately address the problems faced by expatriates.

⁴⁰ *Koustrup and Commissioner of Taxation* [2015] AATA 126, *Jaczenko and Commissioner of Taxation* [2015] AATA 125, and *Clemens and Commissioner of Taxation* [2015] AATA 124 involved determining whether the respective taxpayers were a resident of Australia for income year ended 30 June 2013. *Schiele and Commissioner of Taxation* [2020] AATA 286 concerned determining the residency status of the individual for the income year ended 30 June 2016.

⁴¹ *Dapper Coelho and Commissioner of Taxation* [2020] AATA 2474, *MacKinnon and Commissioner of Taxation* [2020] AATA 1647, and *Stockton v Commissioner of Taxation* [2019] FCA 1679.

⁴² *Dapper Coelho and Commissioner of Taxation* [2020] AATA 2474, [12] and *MacKinnon and Commissioner of Taxation* [2020] AATA 1647, [65].

⁴³ *Stockton v Commissioner of Taxation* [2019] FCA 1679.

⁴⁴ [2020] FCAFC 135, [347] (Steward J), [227] (Derrington J) (*'Addy'*). The taxpayer has been granted special leave to appeal to the High Court of Australia (https://cdn.hcourt.gov.au/assets/registry/special-leave-results/2021/11-02-21_SLA_Canberra.pdf). As of the finalisation of this paper, the appeal to the High Court of Australia is still ongoing.

The recent decision of the Full Federal Court in *Harding v Commissioner of Taxation* clarified the operation of the permanent place of abode exception to the domicile test.⁴⁵

Harding involved an Australian citizen, Mr Harding, who worked in the Middle East in the relevant income year.⁴⁶ Mr Harding moved to Saudi Arabia in 1990 and only returned to Australia in 2006 due to social and political unrest in the Middle East.⁴⁷ In 2009, Mr Harding relocated permanently to Saudi Arabia, and did not intend on returning to Australia.⁴⁸ Although Mr Harding sold his significant personal possessions,⁴⁹ he still retained joint ownership of his home in Australia.⁵⁰ Mr Harding's now-former spouse and children remained in Australia when he relocated to the Middle East.⁵¹ In the Middle East, Mr Harding lived in fully furnished apartment units and also moved between units within the same apartment complex.⁵² Mr Harding was held not to reside in Australia under the 'resides' test.⁵³ Since Mr Harding was domiciled in Australia, an issue was whether he had a permanent place of abode in the Middle East.

The Full Federal Court held that the focus of the permanent place of abode exception is on determining whether the taxpayer has 'definitely abandoned' their residence in Australia.⁵⁴ The taxpayer is only required to identify a foreign country that he or she is living in permanently,⁵⁵ whether in a fixed home, or in various forms of accommodation.⁵⁶ Therefore, in *Harding*, Mr Harding was held to have a permanent place of abode in the Middle East notwithstanding the fact that he lived in temporary accommodation and moved between units within the same apartment complex.⁵⁷

The Commissioner's application for special leave was refused by the High Court of Australia.⁵⁸ Hence, the decision of the Full Federal Court is significant as it is an authoritative statement on the operation of the permanent place of abode exception.⁵⁹ The decision in *Harding* has been applied in the subsequent case of *Handsley and Commissioner of Taxation*.⁶⁰

⁴⁵ [2019] FCAFC 29 (*Harding*). The Commissioner's application for special leave was refused by the High Court of Australia.

⁴⁶ *Harding v Commissioner of Taxation* [2018] FCA 837, [8], [14].

⁴⁷ *Ibid* [9], [11].

⁴⁸ *Ibid* [15].

⁴⁹ *Ibid* [15].

⁵⁰ *Ibid* [16].

⁵¹ *Ibid* [14], [26].

⁵² *Ibid* [21], [22].

⁵³ *Ibid* [24].

⁵⁴ *Ibid* [36].

⁵⁵ *Ibid* [40].

⁵⁶ Sylvia Villios, Michael Blissenden and Paul Kenny, 'Residence Tests for Individuals: Impact of the Harding Decision' (2020) 54(6) *Taxation in Australia*, 3-4.

⁵⁷ *Harding* (n 46) [54].

⁵⁸ *Commissioner of Taxation v Harding* [2019] HCATrans 191.

⁵⁹ Following *Harding*, the ATO has released a decision impact statement in which the ATO advised that IT 2650 will be reviewed to reflect the decision of the Full Federal Court that the phrase 'place of abode' refers not only to a dwelling but can also refer to a country. As of the date of completion of this paper, the ATO has yet to publish an updated ruling.

⁶⁰ [2019] AATA 917, [53] (*Handsley*).

However, the utility of *Harding* is limited. This is because in most of the cases from the 2016 to 2021 income year, it was held that the taxpayer was a resident under the ‘resides’ test.⁶¹ Consequently, the domicile test was either not considered at all,⁶² or was dealt with briefly since it resulted in the same outcome as the ‘resides’ test.⁶³ For instance, in *Landy*, AAT Senior Member F D O’Loughlin referred to his analysis under the ‘resides’ test in coming to the same conclusion that the individual was a resident under the domicile test.⁶⁴ This indicates that the focus of the residency analysis is still on the ‘resides’ test. Although the case of *Harding* is seminal in providing clarity on the meaning of the phrase ‘permanent place of abode’ under the domicile test, the case does not provide guidance on the application of the ‘resides’ test. Accordingly, *Harding* may only make a difference in cases where the taxpayer is not a resident under the ‘resides’ test.

Expatriates are facing difficulty with determining their residency status. While the backpacker tax adequately addresses cases concerning working holiday makers, there has been no similar development to assist expatriates. This indicates that reform is necessary.

IV AN OVERVIEW OF THE PROPOSED REFORMS

As mentioned earlier, the Proposed Reforms will be based on recommendations made by the Board. This section will briefly outline the recommendations on which the Proposed Reforms are based on. The Board proposes a two-step approach. Firstly, a simple bright-lined test is to be applied as the primary test of residency.⁶⁵ The individual only has to apply more complex secondary tests if he or she is not a resident under the primary test.⁶⁶

A Primary test

The primary test of residency is a 183-day test based on the individual’s physical presence in Australia in an income year. An individual will be a tax resident if they are physically present in Australia for more than 183 days in an income year.

⁶¹ Out of six cases, only two cases, *Handsley* and *Harding*, were decided on the basis of the domicile test.

⁶² *Joubert and Commissioner of Taxation* [2020] AATA 2645 (*Joubert*).

⁶³ *Pike v Commissioner of Taxation* [2019] FCA 2185 (*Pike*), *Landy and Commissioner of Taxation* [2016] AATA 754 (*Landy*), *Hughes and Commissioner of Taxation* [2015] AATA 1007 (*Hughes*), and *Shord v Commissioner of Taxation* [2015] AATA 355, revd [2017] FCAFC 167 (*Shord*) were decided on the basis of the ‘resides’ test.

⁶⁴ *Landy* (n 63) [23].

⁶⁵ The Board of Taxation 2019 Report (n 3) 6.

⁶⁶ *Ibid.* The tests are outlined in chapters 4, 5 and 7 of the Board's 2019 report.

B *Secondary tests*

Individuals are only required to apply the secondary tests if they fail to meet the primary test. There are two secondary tests, a commencing residency test and a ceasing residency test. Determining which test applies depends on whether the individual was a tax resident in the preceding year. If the individual was not a resident in the preceding income year, he or she has to apply the commencing residency test. Conversely, if the individual was a resident in the preceding income year, the ceasing residency test is to be applied.

1 *The commencing residency test*

The commencing residency test is further divided into two sub-tests, an additional day-count test and a factor test. If the individual is physically present in Australia for less than 45 days in the current income year, the individual is not an Australian tax resident. If the individual is physically present in Australia for more than 45 days in the current income year, the individual is a tax resident if he or she satisfies two or more factors in the factor test. Further information on the factor test will be provided later in this paper.

2 *The ceasing residency test*

The ceasing residency test is composed of three separate sub-tests, the overseas employment rule, the ceasing short-term residency test, and the ceasing long-term residency test.

(a) *The overseas employment rule*

The overseas employment rule is aimed at providing clarity to the expatriate community. The overseas employment rule targets individuals who leave Australia in the given income year to work overseas. Broadly, it is a codification of the existing common law rules relating to overseas assignments. Under the overseas employment rule, an individual is not a tax resident if all of the following are satisfied:

An individual will cease residency on the day after departure from Australia if they:

- (a) are an Australian tax resident for the three consecutive income years prior;
- (b) undertake employment overseas that is mandated to be for a period of more than two years at the time employment commences;
- (c) have accommodation available continuously in the place of employment for the duration of their employment; and
- (d) return to Australia for less than 45 days in each income year that they continue their overseas employment after the year in which they depart.

(b) The ceasing short-term residency test

The ceasing short-term residency test applies to individuals who have been a tax resident of Australia for less than three consecutive income years. There are two sub-tests, a day-count test and the factor test. An individual is not a tax resident if they are physically present in Australia for less than 45 days in the current income year, and satisfy less than two factors in the factor test.

(c) The ceasing long-term residency test

The ceasing long-term residency test applies to individuals who have been a tax resident of Australia for more than three consecutive income years. An individual is not a tax resident if they are physically present in Australia for less than 45 days in the current income year and in each of the two preceding income years. This test is pure day-count test based on an individual's physical presence in Australia. The factor test is not applicable.

3 The factor test

The factor test applies in both the commencing residency test and the ceasing short-term residency test. The factor test is based on objective Australia-only factors that examines an individual's connections to Australia. The following factors are taken into account:

- Right to reside permanently in Australia;
- Australian accommodation;
- Australian family; and
- Australian economic interests

4 The Government Officials test

The Board also proposed to replace the current superannuation test with a Government Officials test.⁶⁷ Under the Government Officials test, Australian Government officials who are deployed overseas will be considered to be a tax resident for the duration of their deployment.⁶⁸ The Government Officials Test will not be covered in this paper.

This paper will focus on the primary 183-day test, the commencing residency test, and the ceasing residency test.

⁶⁷ The Board of Taxation 2019 Report (n 3). The test is outlined in chapter 6 of the Board's 2019 report.

⁶⁸ Ibid.

V EVALUATION CRITERIA

It has been established expatriates are facing difficulties with applying the residency rules, and that reform is required. Accordingly, it is necessary to evaluate whether the Proposed Reforms are able to address the problems faced by expatriates. This section will identify criteria that will be used to evaluate the Proposed Reforms.

The tax policy objectives of equity, efficiency and simplicity have been considered to be ‘the three dominant tests of merit for individual taxes and for the tax system as a whole’.⁶⁹ These principles have been widely used in tax reform reviews,⁷⁰ and they have also been regarded in the literature as generally accepted criteria for evaluating taxes and the tax system.⁷¹ This section will outline the key policy objectives equity, efficiency and simplicity.

A Equity

Equity is a crucial element of a tax system; it is ‘a quality of a tax or a tax system [that] everyone demands’.⁷² Equity is essential as it encourages the perception of fairness among taxpayers, which promotes voluntary compliance with the law.⁷³

1 What is equity?

There are two dimensions to equity – horizontal and vertical equity.⁷⁴ Horizontal equity requires that taxpayers in the same circumstances should be treated equally.⁷⁵ On the other hand, vertical equity is concerned with the redistribution of wealth from rich to poor under a progressive tax system;⁷⁶ taxpayers with a greater ability to pay should pay more taxes.⁷⁷

Horizontal and vertical equity are often classified as ‘individual’ equity since they are both concerned with equity as it relates to taxpayers.⁷⁸ ‘Individual’ equity is a national tax matter.⁷⁹ This is distinct from ‘inter-nation’ equity, an international tax issue that is focused on the equitable sharing of tax revenue between countries in a linked cross-border

⁶⁹ Taxation Review Committee, *Full Report January 31 1975* (Report, 1975) [3.27] (‘Asprey Review’).

⁷⁰ Michael Dirkis, ‘Is It Australia’s? Residency and Source Analysed’ (2005), *Australian Tax Research Foundation*, 41.

⁷¹ Michael Dirkis (n 70), Richard Edmonds, ‘A judicial perspective on tax reform’, (2011) 35(1) *Melbourne University Law Review*, 243, and John McLaren, ‘Should the international income of an Australian resident be taxed on a worldwide or territorial basis?’, (2006) *Faculty of Business - Papers (Archive)*, 72.

⁷² Asprey Review (n 69) [3.7].

⁷³ Nicole Wilson-Rogers and Dale Pinto, ‘Tax Reform: A Matter of Principle? An Integrated Framework for the Review of Australian Taxes’ (2009) 7(1) *eJournal of Tax Research*, 94.

⁷⁴ Asprey Review (n 69) [3.27].

⁷⁵ Asprey Review (n 69) [3.7], Michael Dirkis (n 70) 112.

⁷⁶ McLaren (n 71) 76.

⁷⁷ Asprey Review (n 69) [3.9].

⁷⁸ Michael Dirkis (n 70) 42.

⁷⁹ McLaren (n 71) 74.

transaction.⁸⁰ The focus of this paper is on assessing Australia's residency rules as they operate within Australia's jurisdictional claim.⁸¹ Hence, for the purposes of this paper, 'individual' equity is a more appropriate criterion than 'inter-nation' equity in evaluating the Proposed Reforms. 'Inter-nation' equity will not be covered in this paper. Vertical equity is less relevant to the issue of residency. This is because both residents and non-residents are subject to the progressive tax system in Australia, albeit on different amounts,⁸² and at different rates.⁸³

Horizontal equity is a more appropriate criterion than vertical equity when evaluating the Proposed Reforms. When analysing the residency status of individuals, it is important that individuals are treated equally. For instance, individuals should be considered to be a resident if they satisfy factors that are commonly associated with being a resident.

Therefore, this paper will assess the current residency tests and the Proposed Reforms based on the criterion of horizontal equity.

2 How is equity measured?

Equity is measured by comparing individuals. However, there are a number of difficulties in determining the basis on which individuals should be compared. For instance, in terms of horizontal equity, it is difficult to determine when individuals are in similar circumstances.⁸⁴ Moreover, there is also debate as to whether a comparison should be undertaken on an individual or family unit basis.⁸⁵

Nevertheless, despite the challenges associated with measuring equity, Dirkis asserts that 'it is possible to identify where there is a failure to achieve equity or where the system in operation results in inequitable outcomes'.⁸⁶ This paper will therefore measure horizontal equity based on whether individuals in like circumstances are treated alike under the existing residency rules and the Proposed Reforms.

B Efficiency

1 What is efficiency?

Efficiency has been historically defined in terms of economic efficiency and administrative efficiency.⁸⁷ Economic efficiency involves minimising distortions to economic activities, so as not to impede genuine commercial transactions.⁸⁸ In contrast, administrative efficiency is

⁸⁰ Ibid, Michael Dirkis (n 70) 42.

⁸¹ Ibid. The paper adopts the same approach as Michael Dirkis.

⁸² *Income Tax Assessment Act 1997* (Cth) ss 6-5 and 6-10. An individual who is a tax resident of Australia is taxed on their worldwide income, whereas a non-tax resident is only taxed on income derived from sources in Australia.

⁸³ *Income Tax Rates Act 1986* (Cth) sch 7. Non-tax residents are taxed at higher rates.

⁸⁴ Michael Dirkis (n 70) 44.

⁸⁵ Wilson-Rogers and Pinto (n 73) 78.

⁸⁶ Michael Dirkis (n 70) 45 – 46.

⁸⁷ Michael Dirkis (n 70) 47.

⁸⁸ Wilson-Rogers and Pinto (n 73) 78. Economic efficiency is also referred to as tax neutrality.

focused on minimising the cost of administering and complying with the law.⁸⁹ This paper will focus on administrative efficiency since an evaluation of the current residency rules against the criterion of economic efficiency has been extensively considered by Dirkis.⁹⁰

There are differing views as to whether administrative efficiency can be viewed as a subset of simplicity. For instance, Wilson-Rogers and Pinto note that the tax policy objective of simplicity is sometimes referred to as administrative efficiency.⁹¹ On the other hand, Dirkis considers that simplicity is often treated as a separate objective from administrative efficiency despite the fact that the minimisation of administrative and compliance costs is also a function of simplicity.⁹² In this paper, administrative efficiency will be examined separately to simplicity.

2 *How is efficiency measured?*

Administrative efficiency can be measured in terms of the cost of compliance and administration. Compliance costs includes direct financial costs, opportunity costs and non-financial compliance costs incurred by the taxpayer.⁹³ Administration costs includes ‘the costs of tax policy planning, resolving taxation disputes (including taxation litigation), and the costs of administering the law including taxpayer education, rulings, circulars and the provision of other types of ATO information’.⁹⁴

This paper will analyse the current residency tests and the Proposed Reforms based on whether it reduces the compliance and administrative costs incurred in determining an individual’s tax residency status.

C *Simplicity*

According to the Asprey Review, ‘[a]fter equity, simplicity is perhaps the next most universally sought after of qualities in individual taxes and tax systems as a whole’.⁹⁵

1 *What is simplicity?*

In the Asprey Review, simplicity is defined broadly: ‘a tax will be called simple, relatively to others, if for each dollar raised by it the cost of official administration is small, and if the

⁸⁹ Michael Dirkis (n 70) 47, Asprey Review (n 69) [3.7].

⁹⁰ Michael Dirkis (n 70) Chapter 3.

⁹¹ Wilson-Rogers and Pinto (n 73) 79.

⁹² Michael Dirkis (n 70) 49 citing Michael J Graetz ‘Taxing international income: Inadequate principles, outdated concepts, and unsatisfactory policies’ (2001) 26 *Brooklyn Journal of International Law*, 310.

⁹³ Wilson-Rogers and Pinto (n 73) 79. Includes ‘Direct financial costs include the costs to the taxpayer of engaging tax experts for managing their tax affairs. Opportunity costs include the time spent by the taxpayer complying with their tax obligations that may have been spent doing other activities (such as leisure or work). Non-financial compliance costs include any mental stress that may result from uncertainty placed on the taxpayer about whether they have discharged their tax obligations.’

⁹⁴ Wilson-Rogers and Pinto (n 73) 79.

⁹⁵ Asprey Review (n 69) [3.19].

“compliance costs”, the costs in money and effort of all kinds to the taxpayer, are also small’.⁹⁶

Simplicity is the most difficult criteria to define.⁹⁷ Based on the literature, it is clear that simplicity is a multifaceted concept,⁹⁸ and it is therefore necessary to determine what constitutes simplicity.

Tran-Nam notes that a commonly accepted definition of simplicity is ‘the ease by which a body of a tax law can be read and correctly understood and applied to practical situations’.⁹⁹ This definition contains several essential requirements:

- *Clarity*: tax legislation and rulings should be expressed in plain language and developed in a logical manner.
- *Consistency*: tax legislation and rulings should be consistent, both internally and externally and well coordinated.
- *Certainty*: any particular tax situation covered by the law must give rise to a unique tax liability.¹⁰⁰

This paper will adopt the definition posited by Tran-Nam, and will evaluate the current residency tests and the Proposed Reforms based on whether the tests can be easily understood and applied by taxpayers.

2 *How is simplicity measured?*

According to Tran-Nam, simplicity can be measured in the following ways:

- how simple is the tax legislation written; or
- how simple is the content of the tax legislation; or
- how taxpayers and tax administrators respond to the tax law; or
- how expensive it is to operate the tax.¹⁰¹

The first two measures can be classified as legal simplicity, and the remaining two measures can be referred to as economic simplicity.¹⁰²

⁹⁶ Ibid [3.20].

⁹⁷ Wilson-Rogers and Pinto (n 73) 78.

⁹⁸ Joel Slemrod ‘Complexity, compliance costs and tax evasion’ in JA Roth and JT Scholtz, *Taxpayer Compliance: Social Science Perspectives* (1986), 156 cited in Binh Tran-Nam, ‘Tax reform and tax simplicity: a new and ‘simpler’ tax system?’ (2000) 23(2) *The University of New South Wales Law Journal*, 242; Graeme Cooper, ‘Themes and issues in tax simplification’, (1993) 10(4) *Australian Tax Forum* 417, 424. According to Slemrod, there are four concepts embodied in the notion of simplicity: predictability, enforceability, difficulty and manipulability. On the other hand, Cooper suggests that simplicity encompasses seven concepts: predictability, proportionality, consistency, compliance, administration, coordination, and expression.

⁹⁹ Binh Tran-Nam, 424.

¹⁰⁰ Binh Tran-Nam (n 98) 424.

¹⁰¹ Ibid 244.

¹⁰² Ibid 244 – 245.

There is an overlap between economic simplicity and administrative efficiency as they can both be measured by examining the operating costs of complying with, and administering the residency rules. Since the operating costs of the current residency rules and the Proposed Reforms will be examined under the criterion of efficiency, this paper will focus on measuring simplicity based on legal simplicity – whether the residency rules are written in a way that can be easily understood by taxpayers, and whether the content of the rules can be simplified.

VI AN EVALUATION OF THE PROPOSED REFORMS

This section will evaluate the Proposed Reforms against the criteria of equity, efficiency and simplicity in how the tests operate with respect to expatriates.

A Ways in which the Proposed Reforms will meet the key policy objectives

1 No weighting of the individual's circumstances is required under the Proposed Reforms

Expatriates usually have to consider the 'resides' test and the domicile test.¹⁰³ Both the 'resides' and domicile tests involve fact-heavy analyses that require weighting of the individual's circumstances. Under the 'resides' test, the individual has to determine whether they reside in Australia according to the ordinary meaning of the word 'reside'.¹⁰⁴ This is a holistic analysis that requires examining whether the individual has maintained a 'continuity of association' with Australia.¹⁰⁵ This involves comparing the individual's connections overseas with their connections to Australia to determine whether the taxpayer's behaviour is consistent with residing in Australia.¹⁰⁶

It was noted in *Handsley* that determining whether the individual 'established a permanent place of abode outside of Australia requires the same or substantially the same analysis as required to determine whether he resided outside of Australia under ordinary principles'.¹⁰⁷ Therefore, this paper will focus on the weighting of factors under the 'resides' test since the analyses under the 'resides' and domicile tests are similar.

(a) Weighting of factors under the 'resides' test

In *Joubert*, AAT Senior Member Mrs J C Kelly identified the following objective factors that are frequently taken into account in determining the residency status of an individual:

physical presence; nationality; history of residence and movements; habits and "mode of life"; the frequency, regularity and duration of visits; the purpose of visits to or absences from

¹⁰³ The Board of Taxation 2017 Report (n 15) [1.65].

¹⁰⁴ *Federal Commissioner of Taxation v Miller* (1946) 73 CLR 93.

¹⁰⁵ *Harding* (n 46) [33] quoting *Hafza v Director-General of Social Security* (1985) 6 FCR 444, 449–50 (Wilcox J).

¹⁰⁶ Australian Taxation Office, *Income tax: residency status of individuals entering Australia* (TR 98/17) 4.

¹⁰⁷ *Handsley* (n 60) [23].

a country; family and business ties with a country; and the maintenance of a place of abode in a country even when absent from that country.¹⁰⁸

However, the weight to be accorded to each factor varies from case to case.¹⁰⁹ No single factor is determinative.¹¹⁰ Furthermore, in *Harding*, Logan J warned against the use of checklists, stating that ‘however useful such checklists may be, they are no substitute for the text of the statute and the recollection that ultimate appellate authority dictates that the word ‘resides’ be construed and applied to the facts according to its ordinary meaning’.¹¹¹ Thus, checklists are merely an evaluative tool to assist the taxpayer in determining whether they reside in a particular location.¹¹² Therefore, under the current rules, the focus is on the ordinary meaning of the word ‘resides’. There is no certainty over the weight that is to be accorded to each factor and the number of factors that have to be satisfied before the taxpayer is considered to reside in Australia.

Recent cases demonstrate the inconsistent approach taken by judges in determining the residency status of the taxpayer. In *Pike, Hughes, Joubert, and Landy*, the court viewed the following factors as indicative of maintaining a continuity of association with Australia:¹¹³

- Maintaining a home in Australia¹¹⁴
- Having dependent family in Australia¹¹⁵
- Making trips to Australia to visit family¹¹⁶
- Fixed term employment contract overseas¹¹⁷
- Occupying temporary accommodation overseas¹¹⁸

In *Harding*, the Commissioner argued that the taxpayer was a resident because in the relevant income year, he maintained the following objective connections to Australia:

- Despite living in the Middle East, Mr Harding maintained a house in Australia where his wife and children lived.¹¹⁹ Mr Harding returned to live in that house during his trips back to Australia to visit his family.¹²⁰

¹⁰⁸ *Joubert* (n 62) [62].

¹⁰⁹ *Joubert* (n 62) [63].

¹¹⁰ *Ibid*.

¹¹¹ *Harding* (n 46) [7] (Logan J).

¹¹² *Ibid* [47].

¹¹³ Michael Dirkis, ‘The Ghosts of Levene and Lysaght Still Haunting Ninety Years on: Australia’s ‘Great Age’ of Residence Litigation?’ (2018) 47(1) *Australian Tax Review*, 46 – 47.

¹¹⁴ *Pike* (n 63) [62], *Hughes* (n 63) [26], *Joubert* (n 62) [80], *Landy* (n 63) [12].

¹¹⁵ *Pike* (n 63) [62], *Hughes* (n 63) [26], *Joubert* (n 62) [72], *Landy* (n 63) [12].

¹¹⁶ *Pike* (n 63) [43], *Hughes* (n 63) [10], *Joubert* (n 72) [62], *Landy* (n 63) [12].

¹¹⁷ *Hughes* (n 63) [4], *Joubert* (n 62) [74], *Landy* (n 63) [10].

¹¹⁸ *Pike* (n 63) [15], *Hughes* (n 63) [28], *Joubert* (n 62) [75], *Landy* (n 63) [11].

¹¹⁹ *Harding* (n 45) [59].

¹²⁰ *Ibid* [60].

- Mr Harding also had a fixed-term employment contract that had a duration of less than two years.¹²¹ Any extension of his employment contract required the approval of his employer.¹²²
- In the Middle East, Mr Harding also lived in a fully furnished serviced apartment, a type of accommodation that is usually regarded in Australia as temporary.¹²³

Despite the existence of factors that were taken in previous cases to indicate a continuity of association with Australia, in *Harding*, those factors were given less weight due to the unusual circumstances of the case.¹²⁴ It was unusual that Mr Harding had previously worked in the Middle East for 15 years, and valued his employment overseas over his relationship with his wife and children.¹²⁵ Accordingly, those factors were viewed to be coextensive with his intention to leave Australia permanently, and should not be seen as an intention to maintain a continuity of association with Australia.¹²⁶

Therefore, the different approaches to weighting of the individual's circumstances raises implications for the ability of the tax system to meet the policy goals equity, efficiency and simplicity.

(b) Implications of the weighting of factors under the current residency rules

(i) Equity

The factors are weighted differently based on the circumstances of each taxpayer. This can lead to inequitable outcomes 'since minor variations in taxpayers' circumstances may result in taxpayers in similar circumstances being taxed differently'.¹²⁷

Furthermore, the approach of Derrington J in *Harding* introduces additional subjectivity when applying the 'resides' test. According to Derrington J, in unusual cases, objective factors that are usually considered to indicate a continuity of association with Australia can also support an intention to leave Australia permanently.¹²⁸ There is subjectivity involved in determining whether the circumstances of a case are unusual. For instance, in *Joubert*, the taxpayer argued that the facts are strongly aligned with *Harding*.¹²⁹ However, AAT Senior Member Mrs J C Kelly held that the circumstances of the case were not unusual.¹³⁰ Hence, the subjectivity involved in determining whether there are unusual circumstances can also result in inequitable outcomes.

¹²¹ *Harding* (n 45) [73].

¹²² *Ibid*.

¹²³ *Ibid* [75].

¹²⁴ *Ibid* [86].

¹²⁵ *Ibid* [51].

¹²⁶ *Ibid* [85].

¹²⁷ Michael Dirkis (n 70) 112.

¹²⁸ *Harding* (n 45) [56].

¹²⁹ *Joubert* (n 62) [65].

¹³⁰ *Ibid* [69].

(ii) *Efficiency*

The uncertainty involved in determining whether the individual resides in Australia necessitates taxpayers litigating or seeking guidance from the ATO in order to determine their residency status. This is supported by the large number of cases and PBRs, which suggests that there is a problem with how the individual residency rules operate with respect to expatriates. Since the tax system requires taxpayers to seek guidance to determine their residency status, it is clear that the current residency rules do not operate to minimise the cost of administering and complying with the law.

(iii) *Simplicity*

There is uncertainty as to the weight that is to be accorded to each factor. *Harding* illustrates that the process is not simple, and that the facts are open to many different interpretations. In *Harding*, both the primary judge and the Commissioner engaged in the same process of weighting the factors, but reached a different conclusion.¹³¹ It was also noted by Derrington J that the Commissioner’s conclusion that Mr Harding was a resident was ‘far from being unreasonable’.¹³² However, Derrington J emphasised that the unusual circumstances of the case warranted the conclusion that Mr Harding was not a resident. This inconsistent weighting of the individual’s circumstances creates uncertainty for taxpayers and makes it difficult for individuals to apply the residency rules to their own circumstances.

The uncertainty faced by taxpayers is exacerbated by the fact that previous cases do not carry any precedential value. Each case has to be decided on its own facts.¹³³ It was noted by Logan J in *Harding* that ‘it is of cardinal importance not to elevate into matters of principle in a later case particular facts found decisive in the different circumstances of an earlier case’.¹³⁴ The lack of guidance from previous cases makes it difficult for taxpayers to apply the ‘resides’ test.

Weighting under the current rules is excessively complex and results in numerous undesirable effects; ‘[i]t creates uncertainty for taxpayers, and reduces the system’s integrity and transparency ... [, undermining] trust in the fairness of a tax system.’¹³⁵ Therefore, the current rules fail to meet the criterion of simplicity due to the complexity involved in weighting of the individual’s circumstances.

¹³¹ Australian Taxation Office, ‘Decision impact statement *Harding v Commissioner of Taxation*’ <<https://www.ato.gov.au/law/view/document?LocID=%22LIT%2FICD%2FQUD442of2018%2F00001%22&PiT=99991231235958>>.

¹³² *Harding* (n 45) [87].

¹³³ *Joubert* (n 62) [65].

¹³⁴ *Harding* (n 46) [8] (Logan J).

¹³⁵ Cindy Chan, ‘A case for statutory simplification’ (2016) 19(3) *The Tax Specialist*, 119.

C The Proposed Reforms promotes simplicity and efficiency

The Proposed Reforms do not involve weighting of the individual’s circumstances.

(i) Factor test

The proposed factor test does not involve weighting of the individual’s circumstances. Under the factor test, only four factors need to be considered.¹³⁶ This is a more targeted approach as compared to the current residency rules. Furthermore, taxpayers need to satisfy a fixed number of factors to determine if they are a resident under the proposed tests. Under the commencing residency test, taxpayers need to satisfy two or more of the factors to be a resident.¹³⁷ On the other hand, under the short-term ceasing residency test, taxpayers need to satisfy less than two factors to be a non-resident.¹³⁸ This also provides taxpayers with certainty as to the number of factors that have to be met in each case. Therefore, by removing the need to engage in a weighting process and by prescribing a fixed number of factors that have to be satisfied, the proposed tests are written in a way that can be easily understood by taxpayers.

The proposed factor test is only focused on Australian connections.¹³⁹ The test does not involve comparing the individual’s connections to Australia with their connections overseas. In *Harding*, Derrington J emphasised that care must be taken when examining the nature of the taxpayer’s residence overseas, and that it is important to not assess it from an Australian perspective.¹⁴⁰ In that case, the taxpayer lived in fully furnished apartments in Bahrain.¹⁴¹ Derrington J noted that such form of accommodation is usually regarded in Australia as temporary accommodation,¹⁴² but that may not be the case in Bahrain. Therefore, by focusing only on Australian connections, the Proposed Reforms avoids situations in which the relevant decision-maker imposes their views on the nature of the taxpayer’s residence overseas based on standards observed in Australia. Hence, focusing on objective Australia-only factors reduces the complexity involved in determining the taxpayer’s residency status, and also promotes efficiency by reducing the costs involved in gathering evidence on the individual’s connections overseas.¹⁴³ This satisfies the tax policy objectives of simplicity and efficiency.

(ii) Overseas employment rule

The overseas employment rule targets a subset of individuals who leave Australia in the given income year to work overseas. The overseas employment rule provides certainty to those taxpayers since they will only need to consider whether four objective requirements

¹³⁶ The Board of Taxation 2019 Report (n 3) 97.

¹³⁷ Ibid 43.

¹³⁸ Ibid 65.

¹³⁹ Ibid 97.

¹⁴⁰ *Harding* (n 45) [75].

¹⁴¹ Ibid [22].

¹⁴² Ibid [75].

¹⁴³ Letter from The Law Council of Australia to Ms Karen Payne, The Board of Taxation, 9 November 2018 <<https://taxboard.gov.au/sites/taxboard.gov.au/files/migrated/2019/11/TRRI-Law-Council-of-Australia.pdf>>.

have been met for them to cease being a resident in the year that they leave Australia.¹⁴⁴ Such an approach is a simplification of the current rules since no weighting of factors is required to determine the taxpayer's residency status in the year they leave Australia.

2 The Proposed Reforms provide a simpler and more efficient pathway to determine the taxpayer's residency status

(a) Pathway under the current rules

If the taxpayer satisfies one of the four tests of residency, the taxpayer will be a tax resident of Australia. The primary test for determining residency is the 'resides' test; if an individual is a tax resident under the 'resides' test, the other three tests do not have to be considered.

As mentioned above, the 'resides' test involves weighting of the individual's circumstances to determine whether the individual is a resident of Australia. Such weighting is highly subjective and leads to uncertainty. Due to the uncertainty involved, the parties raise arguments under both the 'resides' and domicile test.¹⁴⁵

Although raising alternative arguments can be seen as a matter of good practice, it is unnecessary to do so if the taxpayer is a resident under the 'resides' test. Both the AAT and the ATO have concluded that the individual is a resident of Australia solely under the 'resides' test.¹⁴⁶ Similar sentiments were expressed by the Federal Court in *Pike*, in which Logan J stated that since the taxpayer was a resident under the 'resides' test, it was strictly unnecessary to consider whether that conclusion was additionally supported by the individual being a resident under the domicile test.¹⁴⁷

Therefore, due to the uncertainty involved in the 'resides' test, the parties spend resources to apply the domicile test although it may be unnecessary to do so. This undermines the ability of the tax system to satisfy the policy goal of efficiency.

(b) Pathway under the Proposed Reforms

Under the Proposed Reforms, the primary test is the 183-day test.¹⁴⁸ The 183-day test is a pure day-count test, and only involves determining the duration of the individual's physical presence in Australia in the income year.¹⁴⁹ The test is objective and does not require consideration of the intention of the taxpayer.¹⁵⁰

¹⁴⁴ The Board of Taxation 2019 Report (n 3) 66.

¹⁴⁵ *Joubert* (n 62) [10], the Commissioner argued that Mr Joubert should be characterised as a resident of Australia in the 2015 income year under the "ordinary concepts" test and/ or the "domicile" test.

¹⁴⁶ *Joubert* (n 62), Australian Taxation Office, 'Edited version of private advice 1051604179669' (Web page) <<https://www.ato.gov.au/law/view/document?src=hs&pit=99991231235958&arc=false&start=1&pageSize=10&total=1&num=0&docid=EV%2F1051604179669&dc=false&stype=find&tm=phrase-basic-1051604179669>>.

¹⁴⁷ *Pike* (n 63) [68].

¹⁴⁸ The Board of Taxation 2019 Report (n 3) 30.

¹⁴⁹ *Ibid* [3.3].

¹⁵⁰ *Ibid* [3.9].

The 183-day test is simple to apply. Under the 183-day test, the test period is limited to an income year, rather than a rolling 12-month period.¹⁵¹ This provides certainty to individuals since in each year, they will be aware of the duration of the test period.¹⁵² Furthermore, the 183-day test does not require identifying and comparing an individual's connections to Australia with their connections overseas. This is especially important for expatriates since expatriates often have connections both overseas and to Australia.

Therefore, the 183-day test is a simplification of the current residency rules. There is less uncertainty involved in the application of the primary 183-day test. It is clear when an individual will be a resident under this test, and in turn, whether the individual has to consider the secondary tests. Hence, the Proposed Reforms provides clarity over which tests taxpayers are required to apply. This leads to more efficient outcomes since taxpayers are no longer spending resources on tests that do not have to be argued.

3 Taxpayers are no longer required to determine if they have acquired Australia as a domicile of choice

(a) The domicile test

Under the current residency rules, if the individual does not reside in Australia under the 'resides' test, they have to apply the domicile test if they are domiciled in Australia. An individual is domiciled in Australia if they either acquired Australia as their domicile of origin at birth, or as a domicile of choice by having an intention to make Australia their home indefinitely.¹⁵³

In most cases, Australia is the domicile of origin for the individual.¹⁵⁴ However, there are also cases that involve determining whether an individual acquired Australia as a domicile of choice. *Pike* demonstrates that it can be difficult to determine when the individual acquired Australia as a domicile of choice.¹⁵⁵ Mr Pike was born in Zimbabwe,¹⁵⁶ and moved to Australia in 2005.¹⁵⁷ In 2006, Mr Pike left Australia to work in Thailand.¹⁵⁸ Mr Pike was granted Australian permanent residency in 2009,¹⁵⁹ and obtained Australian citizenship in 2014.¹⁶⁰ An issue in the case was whether Mr Pike abandoned Zimbabwe as his domicile of origin and acquired Australia as his domicile of choice.

Although Mr Pike was an Australian tax resident under the 'resides' test, Logan J still considered the domicile test since the question of whether Mr Pike was a resident under the

¹⁵¹ Ibid [3.32].

¹⁵² Ibid [3.35].

¹⁵³ Australian Taxation Office, *Income tax: residency - permanent place of abode outside Australia* (IT 2650) [10].

¹⁵⁴ *Handsley* (n 60), *Harding* (n 46), *Landy* (n 63), *Hughes* (n 63), *Shord* (n 63).

¹⁵⁵ *Pike* (n 63).

¹⁵⁶ Ibid [4].

¹⁵⁷ Ibid [8].

¹⁵⁸ Ibid [12].

¹⁵⁹ Ibid [23].

¹⁶⁰ Ibid [35].

domicile test was fully argued by the parties.¹⁶¹ Logan J held that Mr Pike did not acquire Australia as a domicile of choice upon his initial arrival to Australia because he did not completely cut ties with Zimbabwe.¹⁶² Upon his arrival to Australia, Mr Pike still retained his Zimbabwean citizenship, and ownership of his home in Zimbabwe.¹⁶³ Although he intended to make Australia his home, Logan J regarded that Mr Pike's stay in Australia was conditional upon his partner's employment in Australia; their ability to remain in Australia was linked to the duration of her visa.¹⁶⁴ Accordingly, the Commissioner was incorrect in regarding that Australia was Mr Pike's domicile of choice from his arrival.¹⁶⁵

Logan J held that Mr Pike acquired Australia as a domicile of choice when he became an Australian citizen.¹⁶⁶ However, there was uncertainty over whether Mr Pike acquired Australia as a domicile of choice earlier, when he became an Australian permanent resident.

Logan J stated that there were 'mixed signals ... sent by Mr Pike's conduct since his arrival in Australia in 2005'.¹⁶⁷ There were indicators that Mr Pike severed ties with Zimbabwe; in 2010, he sold his home in Zimbabwe and purchase land in Australia.¹⁶⁸ Furthermore, in 2010, his partner and his sons became Australian citizens, and he also enquired about obtaining Australian citizenship. Despite working in Thailand, Mr Pike also consistently returned to Australia to be with his partner and children. However, his length of stay in Australia varied between 32 days in one year and 155 days in another year.¹⁶⁹ Mr Pike also acted in ways that indicated that he still had ties to Zimbabwe. Notably, Mr Pike renewed his Zimbabwean passport in 2012, and used his Zimbabwean driver's licence when he worked overseas.¹⁷⁰ Therefore, Logan J could only definitively conclude that Mr Pike acquired Australia as a domicile of choice when he obtained Australian citizenship, but acknowledged that it is possible that he may have acquired it earlier while he was an Australian permanent resident.¹⁷¹

Pike demonstrates that there is difficulty in determining the exact moment in which an individual acquires Australia as their domicile of choice. This has implications for individuals who were not born in Australia, but moved to Australia before eventually leaving to work overseas. This results in uncertainty as to when they have acquired Australia as a domicile of choice, and accordingly, when they will be treated as residents under the domicile test.

(b) The Proposed Reforms

The Proposed Reforms will help to reduce the uncertainty faced by individuals like Mr Pike. By removing the need to determine whether the individual has acquired Australia as a

¹⁶¹ *Pike* (n 63) [68].

¹⁶² *Ibid* [75].

¹⁶³ *Ibid* [75].

¹⁶⁴ *Ibid* [75].

¹⁶⁵ *Ibid* [75].

¹⁶⁶ *Ibid* [79].

¹⁶⁷ *Ibid* [77].

¹⁶⁸ *Ibid*.

¹⁶⁹ *Ibid*.

¹⁷⁰ *Ibid*.

¹⁷¹ *Pike* (n 63) [79].

domicile of choice, the Proposed Reforms will help to simplify the process of determining the individual's residency status.

Under the Proposed Reforms, the nationality or permanent residency of the taxpayer is only relevant if the taxpayer has to apply the factor test. One of the factors in the factor test is whether the individual has a right to reside permanently in Australia for immigration purposes.¹⁷² This factor is satisfied if the individual is an Australian citizen or an Australian permanent resident.¹⁷³ There is no reference to antiquated terms such as domicile. This makes it easier for taxpayers to determine their residency status.

B Ways in which the Proposed Reforms will not meet the key policy objectives

The factor test requires individuals to determine if they satisfy any of the four factors.¹⁷⁴ The factor test raises implications for the ability of the Proposed Reforms to meet the key policy objectives in how the tests impact expatriates.

1 Australian bank account

Under the factor test, one of the factors is whether the individual has Australian economic connections.¹⁷⁵ The taxpayer will have Australian economic connections if any one of these factors are met:

- Employment located in Australia;
- Active participation in the carrying on of a business in Australia; or
- Directly or indirectly having interests in Australian assets.¹⁷⁶

An Australian bank account with significant cash deposits constitutes holding an interest in Australian assets.¹⁷⁷ Having an interest in Australian assets is of direct relevance to Australian expatriates because many expatriates maintain a bank account in Australia while living overseas.¹⁷⁸

(a) Implications for simplicity

The factor test contains a qualifier that the bank account must contain significant cash deposits. There is subjectivity involved in determining what amounts to 'significant cash deposits'. This makes it more difficult for expatriates to determine if they satisfy this factor.

¹⁷² The Board of Taxation 2019 Report (n 3) 100.

¹⁷³ Ibid.

¹⁷⁴ Ibid [7.15].

¹⁷⁵ The Board of Taxation 2019 Report (n 3) 97.

¹⁷⁶ Ibid [7.41].

¹⁷⁷ Ibid [7.50].

¹⁷⁸ Pike (n 63), Harding (n 46), Handsley (n 60), Landy (n 63), and Joubert (n 62).

The qualifier is also a departure from the current treatment under the case law. Although the courts and tribunals examined whether the taxpayer has a bank account in Australia, the value of the balance in the bank account was not in issue.¹⁷⁹

(b) Implications for equity

The cases illustrate that expatriates maintain a bank account in Australia for a variety of reasons.

(i) Bank account as a relic of the past

In *Handsley* and *Harding*, the taxpayer's Australian bank account was seen to be a relic of the taxpayer's past life in Australia, and was maintained as a matter of convenience to meet ongoing familial commitments in Australia.

Handsley concerned an individual who separated from his wife and left Australia. His former home in Australia was sold as part of his divorce, and the proceeds were deposited in his bank account. His only Australian assets were his superannuation fund balances and bank accounts. Mr Handsley intended to leave Australia permanently to live predominantly in the Philippines with his new partner. AAT Deputy President F D O'Loughlin considered that the taxpayer's 'life was outside of Australia'.¹⁸⁰ Therefore, maintaining an Australian bank account was not considered to be an ongoing connection to Australia. AAT Deputy President F D O'Loughlin considered that Mr Handsley's Australian bank account was maintained as a matter of convenience, so that he could meet his ongoing commitments in Australia to pay for school fees and make family allowance payments.¹⁸¹ Accordingly, Mr Handsley's investment and bank accounts were 'relics of the past and not indicators of [an] ongoing association with Australia'.¹⁸²

A similar view was expressed by Derrington J in *Harding*.¹⁸³ His Honour's statements were subsequently approved by Davies and Steward JJ on appeal.¹⁸⁴ In *Harding*, the taxpayer transferred money into a joint bank account in Australia.¹⁸⁵ The money was used to maintain and support his family.¹⁸⁶ He also held a bank account in his own name.¹⁸⁷ Derrington J stated that ordinarily, financial ties to Australia would weigh in favour of the conclusion that the individual resides in Australia.¹⁸⁸ However, given the unusual circumstances of the case, the financial arrangements which remained in place, or which were put in place subsequent to his departure, are more properly regarded as the *remnants of his prior residency* and the fact that he retained ongoing responsibilities to Mrs Tracy Harding and her children for whom Mr

¹⁷⁹ Ibid.

¹⁸⁰ *Handsley* (n 60) [45].

¹⁸¹ Ibid [44].

¹⁸² Ibid [43].

¹⁸³ *Harding* (n 46).

¹⁸⁴ *Harding* (n 46).

¹⁸⁵ *Harding* (n 45) [82](a).

¹⁸⁶ Ibid.

¹⁸⁷ Ibid [82](c).

¹⁸⁸ Ibid [83].

Harding provided. They should not be seen as indicators of a continuing intention to maintain residency in Australia.¹⁸⁹

Therefore, *Handsley* and *Harding* illustrates that a bank account in Australia does not necessarily mean that the individual has an ongoing connection to Australia. In cases where the taxpayer has a strained relationship and ongoing familial commitments in Australia, maintaining a bank account can be indicative of the taxpayer's past life in Australia, and should not be treated as a continuing association with Australia.

(ii) Better interest rates in Australia

The case of *Joubert* is an example of how expatriates may decide to hold an Australian bank account due to higher interest rates in Australia. *Joubert* concerned an Australian expatriate working in Singapore.¹⁹⁰ Despite working in Singapore, Mr Joubert maintained two joint bank accounts in Australia.¹⁹¹ Mr Joubert's reason for having a bank account in Australia was due to the fact that the interest rates were higher in Australia than in Singapore.¹⁹²

Hence, the cases demonstrate that expatriates maintain a bank account in Australia for a variety of reasons; maintaining a bank account does not necessarily mean that the individual has a connection to Australia.

(iii) Globalisation

Moreover, it was noted in *Handsley* and *Harding* that given the growing internationalisation of investment markets, where an individual maintains investments should be less relevant in the weighting process.¹⁹³

Therefore, by taking into account the taxpayer's Australian bank account, it is possible that the Proposed Reforms may apply too broadly. This can lead to inequitable outcomes.

2 The right to reside permanently in Australia

As mentioned earlier, one of the factors under the factor test is whether the individual has a right to reside permanently in Australia for immigration purposes.¹⁹⁴ This factor is satisfied if the individual is an Australian citizen or an Australian permanent resident.¹⁹⁵

Although this factor provides certainty to individuals, there is a risk that this factor will apply too broadly. This is because nationality has not been considered as a strong indicator of residency. In the context of the 'resides' test, Logan J in *Pike* stated that '[n]owhere does the definition in s 6(1) posit a nationality test'; although the acquisition of Australian citizenship

¹⁸⁹ *Harding* (n 46) [84]–[85] (emphasis added).

¹⁹⁰ *Joubert* (n 62) [13].

¹⁹¹ *Ibid* [39].

¹⁹² *Ibid* [39].

¹⁹³ *Handsley* (n 60) [43], *Harding* (n 46) [85] accepted in *Harding* (n 45) [63(d)].

¹⁹⁴ The Board of Taxation 2019 Report (n 3) 100.

¹⁹⁵ *Ibid*.

is relevant in determining whether the individual is a resident, it is far from being determinative.¹⁹⁶ Moreover, Logan J stated that ‘[i]t is trite that a person might hold Australian citizenship yet reside abroad and only abroad’.¹⁹⁷ Therefore, Logan J’s statements indicate that although the nationality of an individual is a relevant factor, it should not be treated as a determinative factor.

Furthermore, it was noted by the American Chamber of Commerce in Australia that the right to reside permanently in Australia may be inappropriate given that it is now common for individuals to be a citizen or permanent resident of more than one country.¹⁹⁸

Therefore, by adopting such a factor, there is a risk that the Proposed Reforms may lead to inequitable outcomes by expanding the scope of individuals who will be caught by the proposed rules. This is especially so for expatriates since from the 2016 to 2021 income year, all the cases concerning expatriates involved an Australian citizen.¹⁹⁹

VI THE PROPOSED REFORMS ARE A STEP IN THE RIGHT DIRECTION

The current tax residency rules are outdated and require modernisation. Taxpayers are required to apply inherently complex tests to determine their residency status. The large number of cases and PBRs involving expatriates indicates that there is a problem with how the current individual residency rules operate with respect to expatriates. *Harding* does not adequately address the challenges faced by expatriates, and reform of the current individual residency rules is required.

The Proposed Reforms are based on a two-step model; a simple bright-line test as the primary test of residency, followed by more complex secondary tests if the primary test does not apply. A key focus of the Proposed Reforms is simplicity. The Proposed Reforms introduces a more targeted approach through the use of day-count tests, and four objective Australia-only factors. By removing the need to determine whether they have acquired Australia as a domicile of choice, as well as any weighting of factors, the Proposed Reforms makes it easier for expatriates to determine their residency status.

The simpler tests also result in more efficient outcomes since less resources are spent on tests that do not have to be argued. Since the Proposed Reforms do not involve weighting of the individual’s circumstances, there is less subjectivity in the application of the proposed tests, which help to ensure that like cases are treated alike. However, by taking into account the taxpayer’s Australian bank account, and taxpayer’s right to reside permanently in Australia, there is a risk that the proposed factor test will apply too broadly. This is problematic for

¹⁹⁶ *Pike* (n 63) [65].

¹⁹⁷ *Ibid.*

¹⁹⁸ Letter from American Chamber of Commerce in Australia to Ms Karen Payne, The Board of Taxation, 26 October 2018 <<https://taxboard.gov.au/sites/taxboard.gov.au/files/migrated/2019/11/TRRI-AmCham.pdf>>.

¹⁹⁹ *Joubert* (n 62), *Pike* (n 63), *Handsley* (n 60), *Harding* (n 46), *Landy* (n 63), *Hughes* (n 63), and *Shord* (n 63).

expatriates as they will be taxed on their worldwide income, and may be exposed to double taxation.

The Proposed Reforms result in a trade-off between simplicity and equity. Nevertheless, the Proposed Reforms will still meet the key policy objectives of equity, efficiency and simplicity to a large extent. The Proposed Reforms makes it easier for expatriates to determine their residency status and are a step in the right direction.

A COMPREHENSIVE ANALYSIS OF THE BUSINESS LITERACIES OF AUSTRALIAN SMALL BUSINESSES

MELISSA BELLE ISLE #AND BRETT FREUDENBERG*

Abstract

Little is known about the knowledge (literacy) of small business owners (SBO). This is of concern as the capabilities of SBOs may be central to the success of their business. For example, such literacies might influence the SBO's ability to manage cashflow, know their obligations under the tax system and how to interpret the financial position of the business. This article reports a survey of small businesses in the service sector in terms of their literacy for financial statements, computer accounting software and business tax, and if there is any relationship between them. Results demonstrates that there is a linear relationship between them and that certain demographics are likely to have lower overall literacy.

Keywords: Small business, literacy, tax literacy, financial statements

Lecturer, Griffith University

* Professor, Griffith University

I INTRODUCTION

Maintaining a consistent cash flow can be a critical issue for all businesses, especially for small businesses¹ due to their restricted access to finance, whether it be debt or equity finance. Small business owners (SBOs)² have recognised cash flow to be of particular importance to their ongoing survival,³ although they can find it difficult to manage.⁴ Experts have suggested that for successful management of cash flow, SBOs need greater literacy in terms of financial statements, computerised accounting software (CAS) and business tax.⁵ This is because effective cash flow management practices consist of keeping financial accounts; maintaining a business plan and a cash budget; keeping records of revenue, expenses, creditor and debtor invoicing; and maintaining an inventory schedule.⁶ A CAS can help automate this process, as well as generate reports to provide insight into a businesses' performance. Part of this cash flow budgeting is understanding the tax implications of business transactions, provisioning for tax, tax reporting obligations and tax payments.

To what extent SBOs have a base level of literacy in these areas is not fully understood, and particularly any inter-relationship with each other. The skill strengths of SBOs at the commencement of their business can revolve around the technical skills that the owner possesses.⁷ Research suggests that SBOs not related to finance or accounting, lack financial management skills at the start-up of their business.⁸ Advances or procurements of new liquidity management skills are adopted with time and business development.⁹ This often occurs as a result of external events or due to stakeholders who force SBOs to learn new procedures and routines.¹⁰ For example, a bank may require such statements (including completed tax returns) when a SBO applies for a business loan.

¹ Small business is one that has an annual turnover of \$10 million or less and a full-time workforce of 20 or fewer employees, which is consistent that used by the Australian Taxation Office.

² It has been observed that small businesses are normally owned, managed and financed by a single or small number of individuals: House of Representatives Standing Committee on Industry, Science and Technology, *Small Business in Australia: Challenges, Problems & Opportunities* (Canberra: AGPS, January 1990), para. 1.26. Generally, this means that owners are responsible for decision making and the investment of working capital.

³ Melissa Belle Isle, Brett Freudenberg and Richard Copp, 'Cash Flow Benefit from GST: Is it Realised by Small Businesses in Australia?' (2014) 29(3) *Australian Tax Forum* 417; Ian Wallschutzky and Brian Gibson, 'Small Business Cost of Tax Compliance' (1993) 10(4) *Australian Tax Forum* 511, 527.

⁴ Melissa Belle Isle and Brett Freudenberg, 'Calm Waters: GST and Cash Flow Stability for Small Businesses in Australia' (2015) 13(2) *eJournal of Tax Research* 492.

⁵ Melissa Belle Isle, Brett Freudenberg and Tapan Sarker, 'Is the literacy of small business owners important for cash flow management?: The experts' perspective' (2018) 13(1) *Journal of Australasian Tax Teachers Association* 31.

⁶ Alejandro Drexler, Greg Fischer and Antoinette Schoar, 'Keeping it simple: Financial literacy and rules of thumb' (2014) 6(2) *American Economic Journal: Applied Economics* 1, 13; Ignatius Ekanem, 'Liquidity Management in Small Firms: A Learning Perspective' (2010) 17(1) *Journal of Small Business and Enterprise Development* 123, 125.

⁷ Arthur R DeThomas and William B Fredenberger, 'Accounting Needs of Very Small Business' (1985) 55(10) *The CPA Journal* 14.

⁸ Michael Peel, Nicholas Wilson and Carole Howorth, 'Late Payment and Credit Management in the Small Firm Sector: Some Empirical Evidence' (2000) 18(2) *International Small Business Journal* 17, 19.

⁹ David Deakins, Alana Morrison and Laura Galloway, 'Evolution, Financial Management and Learning in the Small Firm' (2002) 9(1) *Journal of Small Business and Enterprise Development* 7, 9.

¹⁰ *Ibid* 15-6.

However, SBOs appear to adopt a minimum standard rather than attempting to achieve a level of best practice.¹¹ This may be a result of SBOs being both naïve about the benefits of having an effective cash flow management system in place and how the implementation of one can be achieved.¹² It might also reflect the perceived value (or lack of value) that SBOs place on such practices.

Recent research by the Australian Taxation Office (ATO) has highlighted that advisors (more specifically tax agents) believe that, with the exception of tax-related advice, small businesses need more assistance with cash flow than with any other area of non-tax-related advice.¹³ Other areas where experts perceived that SBOs needed guidance included financial management, record keeping, business planning and staff-related advice.¹⁴

In managing cash flow, a small business can be heavily reliant on its owner, who is likely to have a number of roles essential for the businesses' operation. As part of being able to manage cash flow, the financial literacy of the SBO would be seen to be an important foundation skill. However, running a business would require more comprehensive literacy for the SBO extending to literacy about financial statements, CAS and business tax. Business owners should strive to hold a minimum level of financial literacy, which would allow them to understand financial statements, to manage cash flow, to implement internal control mechanisms and to maintain corporate governance.¹⁵ This type of financial literacy is referred to as professional financial literacy.¹⁶

Previous research has suggested that understanding financial statements is important for small business decision making, business growth and performance,¹⁷ for example, information contained in reports can be extracted in order to evaluate profitability measures, cash flow and ratio analysis.¹⁸ Research from Australia and the United States of America (USA) has indicated that SBOs do not have a reasonable level of understanding of financial statements.¹⁹ In the USA, SBOs suggested they are incapable of analysing the figures within financial statements so regard these as futile.²⁰ This can lead to SBOs just using the balance of their bank account as a pseudo indicator of their businesses' performance.²¹ It appears from these responses that low financial statement literacy can inhibit SBOs from utilising important information to ascertain the financial position of their business.

With increased utilisation of CAS by small businesses, SBOs may now have an added barrier in that their level of understanding of financial statements may be connected with their

¹¹ Ibid 9; Ekanem (n 6) 135.

¹² Deakins, Morrison and Galloway (n 9) 11.

¹³ Australian Taxation Office, 'Small Business Engagement 2017' (5 April 2018), 14.

¹⁴ Ibid.

¹⁵ Andrew Worthington, *The distribution of financial literacy in Australia* (No. 185) (School of Economics and Finance, Queensland University of Technology, 2004), 5.

¹⁶ Ibid.

¹⁷ DeThomas and Fredenberger (n 7) 21; Robyn Dyt and Abdel K. Halabi, 'Empirical Evidence Examining the Accounting Information Systems and Accounting Reports of Small and Micro Business in Australia' (2007) 15(2) *Small Enterprise Research* 1, 5; Abdel K. Halabi, Rowena Barrett and Robyn Dyt, 'Understanding Financial Information used to Assess Small Firm Performance' (2010) 7(2) *Qualitative Research in Accounting & Management* 163, 167.

¹⁸ Dyt and Halabi (n 17).

¹⁹ DeThomas and Fredenberger (n 7); Halabi, Barrett and Dyt (n 17).

²⁰ DeThomas and Fredenberger (n 7) 22-23.

²¹ Belle Isle and Freudenberg (n 4) 515.

information and communication technology ('ICT') skills and literacy.²² The combination of ICT, business management and financial literacy has been reported as being positively connected to small business growth and profitability, especially for small businesses employing fewer than 20 employees.²³ CAS literacy, therefore, appears to be linked to literacy in financial statements, cash flow management and ICT. However, it is uncertain what degree of literacy SBOs need to hold for each component in order to be CAS literate.

In addition to professional financial literacy and CAS literacy, a level of business tax literacy would appear to be beneficial to assist with managing cash flow. Research in Australia by Chardon advocated that tax literacy for individuals can improve overall wealth and can minimise financial difficulties.²⁴ With research focused mainly on taxes applying to individuals Chardon *et al.* found that broadly there were similar demographic characteristics for those that demonstrated either high or low tax literacy to other research focused on financial literacy.²⁵ Also, individuals who were self-employed (conducted their own business) had a higher level of taxation literacy than individuals who are not involved in operating a business.²⁶ Additional research by Freudenberg *et al.* considered some of the taxes applying to Australian small businesses and found that there was less reliance by SBOs on tax advisors for goods and services tax (GST) with higher reliance to meet income tax obligations.²⁷ Also, it was found that in terms of depreciation the majority of SBOs either had the correct knowledge about how to determine whether a business purchase was potentially depreciable or not; or would rely on their accountant's advice to determine this.²⁸ In recent related research the business tax literacy for Australian SBOs in the service sector was reported, and found that over 53% of service SBOs were found to have a business tax literacy score categorised in the group of poor or low.²⁹

This research seeks to expand this prior research and measure the level of literacy of Australian SBOs in terms of professional financial literacy, CAS, and the relationships of these literacies with business tax literacy. In particular those SBOs in the service sector will be the focus of this study, this is due to the sector's contribution to the Australian economy and the prevalence of small businesses in this sector. The service sector contributes approximately 49% of GVA to the Australian economy (equivalent to \$628 billion dollars).³⁰

²² Leonora C. Hamilton and Ramachandra Asundi, 'Technology usage and innovation: its effect on the profitability of SMEs' (2008) 31(11) *Management Research News* 830; Mike Rich, 'IT-Savvy Businesses are more Profitable' (2012) 25(11) *NZ Business* 26.

²³ Masayuki Morikawa, 'Information Technology and the Performance of Japanese SMEs' (2004) 23(3) *Small Business Economics* 171; Julien Pollack and Daniel Adler, 'Skills that improve profitability: the relationship between Project Management, IT Skills, and Small to Medium Enterprise Profitability' (2016) 34(5) *International Journal of Project Management* 831, 835.

²⁴ Toni Chardon, 'Weathering the Storm: Tax as a Component of Financial Capability' (2011) 5(2) *Australasian Accounting Business & Finance Journal* 53.

²⁵ Toni Chardon, Brett Freudenberg and Mark Brimble, 'Tax Literacy in Australia: Not Knowing Your Deduction from Your Offset' (2016) 31(2) *Australian Tax Forum* 321, 351.

²⁶ *Ibid* 348.

²⁷ Brett Freudenberg, Toni Chardon, Mark Brimble and Melissa Belle Isle, 'Tax Literacy of Australian Small Businesses' (2017) 18(2) *Journal of Australian Tax* 21.

²⁸ *Ibid*.

²⁹ Melissa Belle Isle, Brett Freudenberg and Tapan Sarker, (forthcoming) 'The Business Tax Literacy of Australian Small Businesses' *Australian Tax Forum*.

³⁰ Australian Trade Commission, 'Why Australia: Benchmark Report 2019' (8 April 2019) 21 ('ATC 2019 Benchmark'); Australian Bureau of Statistics, Australian Industry, 2018-19 (Catalogue No 8155.0, 29 March 2020), Table 5. Note: Unfortunately, calculation of Industry Value Added excludes figures for Division K –

Also, the service sector employs 74% of all Australian employees and is responsible for 89% of all business registrations.³¹ Overall, the small business sector was responsible for 32% of Australia's total GVA in 2018-19, equating to \$417.9 billion.³² More than 80% of this income can be attributed to small businesses in the service sector (\$349 billion).³³ Additionally, small businesses in the service sector are prevalent in providing nearly half of the employment in the sector: employing 4,095,000 (48%) of the total 8,541,000 service sector employees.³⁴

Section Two of this article will provide a broad summary of owner literacy in terms of the three areas of focus: professional financial, CAS and business tax. The third section will then provide an outline of the research methodology followed demographics of the participants in Section Four. The results are then discussed in Section Five. Through the analysis of the results recommendations will be proposed, with future research being outlined in the seventh section of the article before concluding.

II OWNER LITERACY

Literacy develops in individuals from infancy.³⁵ In general, literacy is an individual's understanding or knowledge of words, symbols and arithmetic operations and their ability to use that knowledge in an everyday sense to support or measure commonplace decisions.³⁶ Literacy can be extended to include the specific circumstances of the individual. For example, there are extended definitions for literacy in respect of finances, information technology, taxation, accounting, statistics and health, plus others that develop over time.³⁷ A business owner may need to possess many different literacy skills to manage a business. This could be problematic for SBOs, considering that they are often the sole decision maker in many areas of the business, which effectively requires their literacy to be multifaceted. From a cash flow management perspective, SBO literacy skills could relate to finance, taxation, information technology, cash management, economics and accounting.

Defining the exact literary requirements of SBOs could be a challenging exercise due to the heterogeneity of the small business sector. The level of literacy held by SBOs could be wide ranging as a result of education, experience and social backgrounds. In Australia, for migrant

Financial and Insurance Services which is currently the most rapidly growing service division in the economy and the largest contributor to GVA being responsible for 9.5% of all GVA.

³¹ Australian Trade Commission (n 30) 9; Australian Bureau of Statistics, Counts of Australian Businesses including Entries and Exits (Jun 2015 To Jun 2019) (Catalogue No 8165.0, 2 February 2020); Australian Bureau of Statistics (n 30).

³² Australian Bureau of Statistics (n 30).

³³ Ibid Table 5.

³⁴ Ibid.

³⁵ Sandra J. Huston, 'Measuring financial literacy' (2010) 44(2) *Journal of Consumer Affairs*, 296. Note: In recent times the notion of 'capability (compared to literacy) has arisen, as capability covers not only a person's understanding something but also the confidence and capability to actual use that knowledge.

³⁶ Reva Berman Brown, Mark N.K. Saunders and Richard Beresford, 'You owe it to Yourself: The Financially Literate Manager' (2006) 30(2) *Accounting Forum*, 171-191; Huston (n 277) 306.

³⁷ Huston (n 35) 307.

SBOs, their level of literacy could be further restrained by the challenges from having English as a second language.³⁸ Given the importance of cash flow to small businesses, this research focuses on the literacy of SBOs in terms of professional financial literacy, CAS literacy and business tax literacy. Each of these are discussed below.

A Professional Financial Literacy

This research has adopted the term ‘financial literacy’: this term should not be confused or interchanged with ‘financial knowledge’.³⁹ Financial knowledge is recognising what is required in order to be financially stable, whereas financial literacy is having the capacity and confidence to apply that knowledge to financial decisions.⁴⁰ Having financial literacy skills is an essential basis for both avoiding and solving financial problems.⁴¹

There are numerous definitions of financial literacy. Worthington⁴² defined financial literacy as the ability to make informed judgements and effective decisions in a financial situation especially in relation to saving, investing and debt control. Redmund⁴³ suggested that financial literacy is the degree to which an individual understands key financial concepts and possesses the ability and confidence to manage their personal finances through the appropriate short-term decision making and sound long-range financial planning. From these two definitions alone, we can infer that financial literacy relates to an individual’s financial confidence, decision-making ability and knowledge of the necessary financial concepts in order to carry out both short-term and long-term financial planning.

Limitations in financial literacy can have both immediate and long-term effects on an individual’s economic well-being.⁴⁴ Low levels of financial literacy are associated with poor financial decision making. International and Australian research suggests that individuals with limited financial literacy will possess certain demographics: for example, those aged less than 25 years, low numeracy skills, no tertiary education, a level of income of less than \$25000, minimal savings and investments, blue collar occupation, being female and being of an ethnic minority.⁴⁵ Higher levels of financial literacy have been associated with demand for

³⁸ L Chen, E Sinnewe and Michael Kortt, *Evidence of Migrant Business Ownership and Entrepreneurship in Regions* (Regional Australia Institute, 2018), 8.

³⁹ Huston (n 35) 296-307. Note for the purposes of this research the English literacy skills of the participants are beyond the scope of this research. However, this is one of the potential limitations of the research, as migrants may have been unable to do the survey due to their language skills – see the discussion in the ‘Limitations and Future Research’.

⁴⁰ Ibid 296-310; Worthington (n 15) 6.

⁴¹ Sonia Marcolin and Anne Abraham, ‘Financial literacy research: current literature and future opportunities’ in P. Basu, G.O'Neill and A. Travaglione (eds), *Proceedings of the 3rd International Conference on Contemporary Business*, Leura NSW, 21-22 September 2006, Australia, 3.

⁴² Andrew Worthington, ‘Financial Literacy in Australia’ in *Accounting and Finance Association of Australia and New Zealand Conference* (John Wiley & Sons Australia Ltd, 2005).

⁴³ David L. Remund, ‘Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy’ (2010) 44(2) *Journal of Consumer Affairs* 276.

⁴⁴ Sandra Braunstein and Carolyn Welch, ‘Financial Literacy: An Overview of Practice, Research, and Policy’ (2002) Nov (88) *Federal Reserve Bulletin* 445, 445.

⁴⁵ The Social Research Centre, ‘ANZ Survey of Adult Financial Literacy in Australia’ (May 2015), 2; Drexler, Fischer and Schoar (n 6) 1-2.

financial services, provision of incentives to open savings accounts and education in basic financial concepts.⁴⁶ This is broadly supported by recent research in Australia, where individuals identified as having the highest levels of financial literacy possessed one or more of the following characteristics: a tertiary education, professional occupation, business owner, member of a couple with no children.⁴⁷ It has also been suggested that personal financial skills and knowledge are acquired through trial and error.⁴⁸ Australian research has suggested that individuals aged between 45 and 49 years are the age group with the highest levels of financial literacy.⁴⁹ This may be attributed to having been exposed to various financial products and services throughout their adult life and also to still being actively employed in the workforce (not past retirement age). However, for a business owner, financial literacy and capability extend beyond the requirements needed for an ordinary individual not engaged in business activities.

Business owners have been identified as having greater financial literacy than other groups of individuals. This includes SBOs, who have a higher level of financial awareness in comparison to other individuals.⁵⁰ However, the financial literacy required for individual success is not as comprehensive as that required to operate a small business. Previous research has suggested that SBOs lack the required level of financial literacy to make important financial decisions for their business.⁵¹

Recent research has suggested that low levels of financial literacy can be illustrated by the inability of the SBO to make effective financial choices and to implement adequate financial management systems in their business.⁵² The level of financial literacy required can depend upon an individual's role in a specific situation. For example, the financial literacy expected of directors/owners/managers has been described as professional financial literacy, which includes understanding financial statements, the ability to implement and sustain effective cash flow management processes, implementation of internal control mechanisms and corporate governance.⁵³ The level of professional financial literacy held by the SBO is a critical part of ensuring the solvency of the business.⁵⁴ Solvency is achieved through careful cash planning and control, which requires the owner to understand the financial position and activities of the organisation.⁵⁵ Professional financial literacy of SBOs can impact firm growth and productivity: those with higher levels of financial literacy have been known to be more effective when using financial products, and are more engaged in using and offering trade credit.⁵⁶

⁴⁶ Drexler, Fischer and Schoar (n 6) 5.

⁴⁷ The Social Research Centre (n 45).

⁴⁸ Marcolin and Abraham (n 41) 7.

⁴⁹ Ibid 3.

⁵⁰ Berman Brown, Saunders and Beresford (n 36) 188.

⁵¹ Drexler, Fischer and Schoar (n 6) 1-2.

⁵² Dedy Suahputra Sijabat and Taufik Fathurohman, 'The Relationship of MSME Owners Financial Literacy Score and MSME's Performance: Case Study of MSME's in School of Business and Management Bandung Institute of Technology' (2017) 2(1) *Journal of Innovation, Business and Entrepreneurship* 23.

⁵³ Worthington (n 15) 5.

⁵⁴ Berman Brown, Saunders and Beresford (n 36) 179-80.

⁵⁵ DeThomas and Fredenberger (n 7) 21.

⁵⁶ Miriam Bruhn and Bilal Zia, 'Stimulating Managerial Capital in Emerging Markets: The Impact of Business Training for Young Entrepreneurs' (2013) 5(2) *Journal of Development Effectiveness* 232, 234 and 238.

The professional financial literacy of SBOs is important for small businesses when competing in the marketplace. Their larger competitors are more likely to employ experts in the fields of accounting or finance to propose financial decisions and implement effective cash flow management practices.⁵⁷ In contrast, the small business may rely on the knowledge and abilities of the SBO, or of an external advisor who is afforded a snap-shot view of the individual business situation.⁵⁸ This means that, in order to remain solvent in the market, SBOs need adequate financial foundations that allow them to make smart financial decisions. They also need to implement strategic business plans that allow them to recognise risk, maintain cash flow and utilise assets to ensure maximum profit generation.⁵⁹ This can be a tough ask, as SBOs are multitasking in their business and carrying out a multitude of roles from primary generator of income, human resource manager and administration assistant to financial controller.

It is suggested that SBOs having adequate professional financial literacy can assist with everyday functions in the workplace. The understanding of financial statements is a component of professional financial literacy. Important skills for professional financial literacy may include reading and understanding Balance Sheets, Income Statements, Cash Flow Statements⁶⁰ and preparation of a Cash Budget.⁶¹ It also includes the ability for SBOs to determine the limitations of their own financial ability and to know when it is necessary to seek advice if the information within the statements is confusing or inaccurate.⁶² Overall, for the purposes of this research ‘professional financial literacy’ is formulated as a level of knowledge which allows business owners to understand financial statements, manage cash flow, implement internal control mechanisms and maintain corporate governance.

B Computer Accounting Software (CAS) Literacy

In today’s business environment ICT is constantly evolving. Historically, large firms were the main player in the implementation of ICT due to the high cost in both hardware and

⁵⁷ Jack Foley, ‘We Really Need to Talk About Owner-Managers and Financial Awareness!’ (2018) 25(1) *Small Enterprise Research* 90.

⁵⁸ Ibid 90-98.

⁵⁹ Ibid; Jacob Nunoo and Francis Kwaw Andoh, ‘Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter?’ (Presentation, Seattle, Washington, 2012), 1-28; William T. Sucuahi, ‘Determinants of Financial Literacy of Micro Entrepreneurs in Davao City’ (2013) 1(1) *International Journal of Accounting Research* 44; Sean Wise, ‘The Impact of Financial Literacy on New Venture Survival’ (2013) 8(23) *International Journal of Business and Management* 30.

⁶⁰ The Australian Accounting Standards Board makes Accounting Standard AASB 107 *Statement of Cash Flows* under section 334 of the *Corporations Act 2001* outlines the benefits of a statement of cash flows; A statement of cash flows, when used in conjunction with the rest of the financial statements, provides information that enables users to evaluate the changes in net assets of an entity, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the entity to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different entities. It also enhances the comparability of the reporting of operating performance by different entities because it eliminates the effects of using different accounting treatments for the same transactions and events.

⁶¹ Berman Brown, Saunders and Beresford (n 36) 188.

⁶² Chukuakadibia E. Eresia-Eke and Catherine Raath, ‘SMME Owners’ Financial Literacy and Business Growth’ (2013) 4(13) *Mediterranean Journal of Social Sciences* 397.

software.⁶³ With improved usability and technological advances, the cost has diminished dramatically.⁶⁴ As a result, ICT can be more affordable to all business sizes. While acknowledging that some ICT technology is more sophisticated, in general it could be suggested that there is a form of ICT to suit each type of user. Small businesses actively using different forms of ICT in their business may have enhanced profitability.⁶⁵

Accessibility of ICT for small business may still be inhibited by such factors as limited financial, infrastructure and organisational resources.⁶⁶ In particular, small businesses may experience restrictions in attracting and retaining skilled ICT employees due to their inability to provide salary packages that reflect the expertise of the ICT expert.⁶⁷ This may result in the SBO or unskilled staff operating the ICT.⁶⁸ This can be particularly important if the SBO wants to retain 'control' rather than to delegate. ICT restrictions can also be evident where the user lacks confidence in their ability to operate the ICT and has difficulty retaining knowledge on how the ICT functions.⁶⁹ These restrictions can inhibit small businesses to be more competitive in the marketplace, as ICT knowledge can provide them with the ability to gather, store and analyse internal information to ensure that their business operates to maximum efficiency.⁷⁰

Previous literature suggested that small businesses in the early stages of their life cycle or during growth periods should allocate sufficient financial resources to ensure they have adequate knowledge in order to exploit the ICT that exists in their business.⁷¹ This in part can be explained by the necessity to have a comprehensive understanding of the current business circumstance, as small businesses operate in a constantly changing business environment.⁷² For many small businesses in Australia one such ICT software that can provide real-time reporting is a CAS system.⁷³

CAS has been advocated as providing managerial benefits to small businesses as their records are more likely to be up to date, allowing SBOs to access current information about the financial situation of their business.⁷⁴ However, if the CAS used does not correspond with the business size and staffing capabilities, then businesses may not realise the benefits that a CAS

⁶³ Timothy L. Pett and James A. Wolff, 'SME Identity and Homogeneity – Are There Meaningful Differences between Micro, Small, and Medium-Sized Enterprises?' (2012) 6(2) *Journal of Marketing Development and Competitiveness* 48.

⁶⁴ Ibid.

⁶⁵ Paul Matthews, 'ICT Assimilation and SME Expansion' (2007) 19(6) *Journal of International Development* 817, 818; Morikawa (n 23) 178; Rich (n 22) 26.

⁶⁶ Mohamed Kossai and Patrick Piget, 'Adoption of Information and Communication Technology and Firm Profitability: Empirical Evidence from Tunisian SMEs' (2014) 25(1) *The Journal of High Technology Management Research* 9, 10; Matthews (n 65) 819.

⁶⁷ Matthews (n 65) 819.

⁶⁸ Ibid.

⁶⁹ Ibid 819; Pett and Wolff (n 63) 49.

⁷⁰ Hamilton and Asundi (n 22); Pett and Wolff (n 63) 49.

⁷¹ Matthews (n 65) 819.

⁷² Stefanie De Bruyckere, Frederik Verplancke, Patricia Everaert, Gerrit Sarens and Carine Coppens, 'The importance of mutual Understanding between External Accountants and Owner-Managers of SMEs' (2018) *Australian Accounting Review* 1, 2.

⁷³ Rich (n 22) 27.

⁷⁴ Halabi, Barrett and Dyt (n 17) 170-71; Chris Evans, Shirley Carlon and Darren Massey, 'Record Keeping Practices and Tax Compliance of SMEs' (2005) 3(2) *eJournal of Tax Research* 288, 300; Philip Lignier and Chris Evans, 'The Rise and Rise of Tax Compliance Costs for the Small Business Sector in Australia' (2012) 27(3) *Australian Tax Forum* 615, 664.

system can offer.⁷⁵ The CAS data output should be meaningful to the business owner and consistent with the conditions of the business.⁷⁶ This creates a dilemma for both CAS developers and small businesses, considering that the small business sector is highly heterogeneous. The expenditure involved to develop a CAS system tailored to the individual needs and capabilities of each SBO would be impractical, especially considering that a major inhibitor of software adoption by small businesses is the initial cost outlay.⁷⁷ Consequently, it is useful to determine whether there is a particular level of literacy required to operate an off-the-shelf CAS system to support small businesses as a whole. Prior research has indicated that SBOs do not use their CAS to its full potential in order to ascertain the strengths and weaknesses of their business.⁷⁸ Although SBOs confirm that CAS improves the quality and accuracy of their records, findings suggest that CAS is not being used for effective cash flow management.⁷⁹ In Australia, the widespread adoption of CAS by small businesses was aided by the introduction of the goods and services tax (GST) from 1 July 2000,⁸⁰ although it may be questionable to what extent it is fully utilised and understood.⁸¹ Overall, for the purposes of this research ‘CAS literacy’ is formulated as the knowledge and ability to use the functions of a computer accounting system to generate financial reports compiled from previously recorded transactions.

C Business Tax Literacy

Tax literacy is commonly referred to in the literature as tax knowledge, and Bornman, and Ramutumbu propose that tax knowledge means:

... to have a tax awareness, and this includes having an understanding of the aims of governmental fiscal strategies (the “why” of paying taxes and the tax morality element) and to understand one’s own financial position (having a basic financial literacy) and the effect of taxation on one’s own finances (the “who” and “how” of paying taxes).⁸²

With this they proposed a framework to consider tax knowledge, which could be divided into three components of legal, procedural and general (with each of these components further sub-divided into various elements): Figure 1.

⁷⁵ Rich (n 22).

⁷⁶ DeThomas and Fredenberger (n 7) 21.

⁷⁷ Matthews (n 65).

⁷⁸ Belle Isle and Freudenberg (n 4) 517 and 529; Halabi, Barrett and Dyt (n 17) 166.

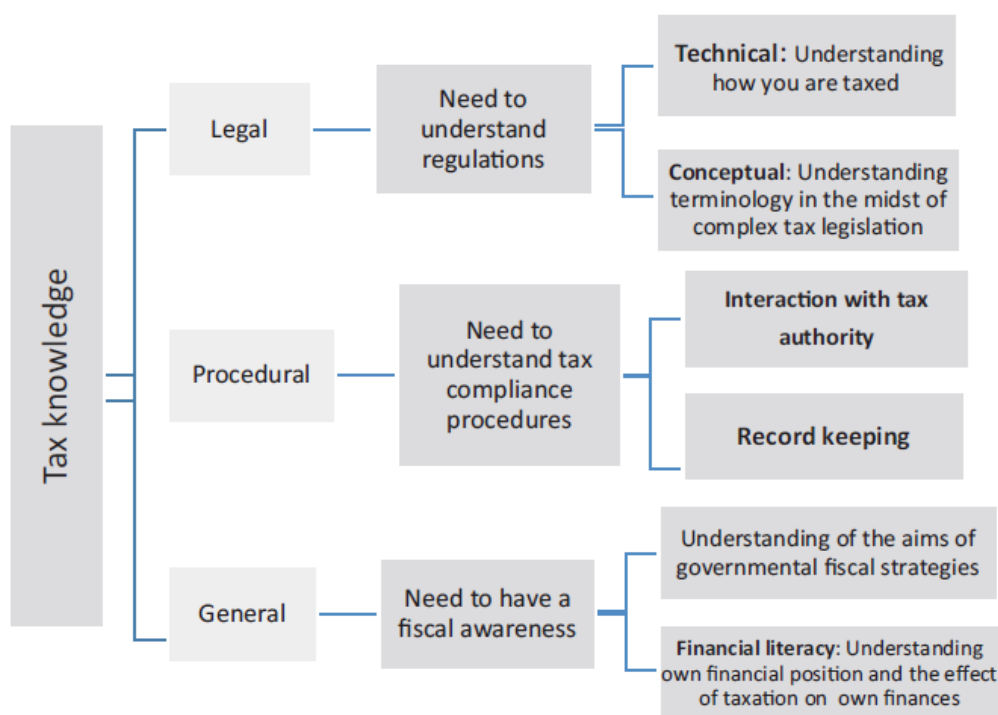
⁷⁹ Belle Isle and Freudenberg (n 4) 517; DeThomas and Fredenberger (n 7) 22-23.

⁸⁰ *A New Tax System (Goods and Services Tax) Act 1999 (Cth)* (‘GST Act’); Moreover, prior to the implementation of Malaysian GST, the smallest Malaysian business had to incur the highest cost of computer software for GST compliance, see Rametse, Nthati, Appadu Sathariah, Tshepiso Makara and Ken Devos. ‘Estimating Start-up Compliance Costs of the Malaysian Goods and Services Tax for Small- and Medium-sized Enterprises’ (2020) 26(6) *New Zealand Journal of Taxation Law and Policy* 153, 172.

⁸¹ Belle Isle, Freudenberg and Copp (n 3) 440.

⁸² Marina Bornman, and Pushetso Ramutumbu, ‘A conceptual framework of taxpayer knowledge’ (2019) 27(6) *Meditari Accountancy Research* 823, 828.

Figure 1: Tax Knowledge Framework



(Source: Marina Bornman, and Pushetso Ramutumbu, ‘A conceptual framework of taxpayer knowledge’ (2019) 27(6) *Meditari Accountancy Research* 823, 832: Figure 1)

Others have defined tax knowledge as an understanding of tax policy that is essential to a taxpayer’s situation within the region or country in which that taxpayer resides.⁸³ The definition has been extended to suggest that it is a taxpayer’s understanding and mindfulness of the tax legislation.⁸⁴ Tax knowledge can be obtained through formal education and/or everyday dealings with the tax system.⁸⁵ Tax knowledge contains elements of legal, technical and general knowledge.⁸⁶ For the purpose of this research, tax literacy and tax knowledge will be used interchangeably.

Increasing or possessing a high level of tax literacy is beneficial for ensuring that taxpayers fulfil their obligatory compliance duties. Much literacy is available that investigates the relationship between tax literacy and tax compliance.⁸⁷ Examination of this relationship has

⁸³ Newman Wadesango, N Mwandambira, Charity Mhaka and Ongayi Wadesango, ‘Literature Review on the Impact of Tax Knowledge on Tax Compliance among Small Medium Enterprises in a Developing Country’ (2018) 22(4) *International Journal of Entrepreneurship* 1, 2.

⁸⁴ *Ibid* 5.

⁸⁵ *Ibid* 2.

⁸⁶ *Ibid* 3.

⁸⁷ Chardon (n 24); Chardon, Freudenberg and Brimble (n 25); Guilia Mascagni and Fabrizio Santoro, ‘What is the Role of Taxpayer Education in Africa?’ (International Centre for Tax and Development, 2018); Elisabeth Poppelwell, Gail Kelly and Xin Wang, ‘Intervening to Reduce Risk: Identifying Sanction Thresholds Among SME Tax Debtors’ (2012) 10(2) *eJournal of Tax Research* 403; Natrah Saad, ‘Tax Knowledge, Tax Complexity

found that failure to possess a sufficient level of tax literacy can result in taxpayers engaging in both intentional and unintentional non-compliance behaviour.⁸⁸ For example, lacking the ability to recognise basic tax concepts can result in taxpayers not complying and incurring a tax debt with the tax authority.⁸⁹ Tax debts occur primarily as a result of administration mistakes or cash flow shortfalls.⁹⁰ Taxpayers with limited tax literacy may incur a tax debt in the form of late payment penalties due to their inability to determine the correct dates for lodging relevant tax returns, incorrectly declaring income and deduction amounts, as well as then paying late.⁹¹ In contrast, those taxpayers who are facing cash flow restraints may incur a tax debt due to lack of funds to satisfy the tax liability.⁹² In the latter circumstance the tax debt may be a combination of the tax liability, the late penalty and the interest, for failing to satisfy the outstanding debt in a timely manner. It can be suggested that inadequate tax literacy may result in higher compliance costs, as a result of the inability to forecast for the tax liability or to recognise when tax obligations are due and payable.

The level of tax literacy held by taxpayers can be influenced by four main elements: tax education, tax complexity, taxpayer confidence and ICT literacy. Research has suggested that business turnover and length of time in business have a strong connection to the level of tax knowledge of SBOs.⁹³ This could imply it is the interaction with the tax system that leads to higher tax literacy. Recent Australian research found that individuals who are involved in operating a business are more literate in regard to individual tax requirements than those who are not.⁹⁴

The current Australian Federal tax systems that relate to the majority of small business tax payers include fringe benefits tax (FBT),⁹⁵ GST,⁹⁶ income tax,⁹⁷ Pay-As-You-Go withholding⁹⁸ (PAYG-W) and superannuation guarantee (SG) on behalf of employees.⁹⁹ Although it is acknowledged that SG is not technically a tax system, it is included in this research because it is a regular obligation for businesses with employees and the calculation of the liability is reliant on the expenditure of the PAYG withholding system. For the purposes of this research 'business tax literacy' is formulated as the ability to make informed judgements and to make effective decisions relating to the management of business tax systems that a business is legally obligated to comply, with a focus on income tax, GST, FBT, PAYG-W and SG.

and Tax Compliance: Taxpayers' View' (2014) 109 *Procedia - Social and Behavioral Sciences* 1069; Wadesango, Mwandambira, Mhaka and Wadesango (n 83).

⁸⁸ Saad (n 87) 1070; Wadesango, Mwandambira, Mhaka and Wadesango (n 83) 2 and 4.

⁸⁹ Eliza Ahmed and Valerie Braithwaite, 'Understanding Small Business Taxpayers issues of Deterrence, Tax Morale, Fairness and Work Practice' (2005) 23(5) *International Small Business Journal* 539, 543; Chardon, Freudenberg and Brimble (n 25) 345; Mascagni and Santoro (n 87); Poppelwell, Kelly and Wang (n 87).

⁹⁰ Poppelwell, Kelly and Wang (n 87) 415.

⁹¹ *Ibid* 404 and 423.

⁹² Mascagni and Santoro (n 87) 6; Poppelwell, Kelly and Wang (n 87) 415.

⁹³ Margaret McKerchar, 'Understanding Small Business Taxpayers: Their Sources of Information and Level of Knowledge of Taxation' (1995) 12 *Australian Tax Forum* 25, 37 and 40.

⁹⁴ Freudenberg, Chardon, Brimble and Belle Isle (n 27).

⁹⁵ *Fringe Benefits Tax Assessment Act 1986* (Cth).

⁹⁶ *A New Tax System (Goods and Services Tax) Act 1999* (Cth).

⁹⁷ *Income Tax Assessment Act 1997* (Cth) ('ITAA97'); *Income Tax Assessment Act 1936* (Cth) ('ITAA 36').

⁹⁸ *A New Tax System (Pay As You Go) Act 1999* (Cth).

⁹⁹ *Superannuation Guarantee (Administration) Act 1992* (Cth).

There appears to be alignment between tax confidence and tax literacy of small business owners, with little evidence of over-confidence.¹⁰⁰ In related research, the business tax literacy of service SBOs on average realised a literacy score of 42%, and a majority of service SBOs were found to have a business tax literacy score categorised in the group of poor or low.¹⁰¹ In terms of the business tax systems examined, service SBO literacy is highest for GST, followed by income tax, FBT, PAYG-W and lastly SG.¹⁰²

Given that literacy is multi-faceted, especially SBOs, this research seeks to explore what is SBO literacy in terms of professional finance, CAS and business tax (and their possible inter-relationship).

III RESEARCH METHODOLOGY

Note that this research was conducted mainly from September 2016 to June 2019 and therefore prior to the economic effects of COVID-19.¹⁰³

To measure the various literacies of SBOs, prior research with small business experts assisted with the determination of the three literacies considered for this research.¹⁰⁴ Small business experts, provided with a list of possible literacy indicators that could make up the literacy framework and proposed a literacy framework (Table 1). This suggests that the literacy of service SBOs, as proposed by experts, is not overly comprehensive.¹⁰⁵ From these core concepts and with reference to prior research, literacy questions were developed. A total of 43 literacy questions were included in a survey, which comprised seven questions related to the understanding of financial statements, ten questions concerning the use of a CAS system and twenty-six business tax questions. See Appendix A for a list of the literacy questions.

¹⁰⁰ Freudenberg, Chardon, Brimble and Belle Isle (n 27).

¹⁰¹ Belle Isle, Freudenberg and Sarker (n 29).

¹⁰² Ibid.

¹⁰³ Covid -19 is a mild to severe respiratory illness that is caused by a coronavirus (*Severe acute respiratory syndrome coronavirus 2* of the genus *Betacoronavirus*), is transmitted chiefly by contact with infectious material (such as respiratory droplets) or with objects or surfaces contaminated by the causative virus, and is characterized especially by fever, cough, and shortness of breath and may progress to pneumonia and respiratory failure, see <https://www.merriam-webster.com/dictionary/COVID-19>

¹⁰⁴ Belle Isle, Freudenberg and Sarker (n 5).

¹⁰⁵ Ibid.

Table 1: Literacy framework as proposed by small business experts

General cash flow management literacy
<ul style="list-style-type: none"> • Understanding of debtor and creditor obligations
<ul style="list-style-type: none"> • Influence of aged receivables and payables on cash flow
<ul style="list-style-type: none"> • Identify and understand indicators of liquidity
Financial statement literacy for cash flow management
<ul style="list-style-type: none"> • Use of Cash budget as a financial foundation
<ul style="list-style-type: none"> • Use and understanding of the Statement of Cash Flow
<ul style="list-style-type: none"> • Use and understanding of the Profit and Loss Statement
Computer accounting software (CAS) literacy
<ul style="list-style-type: none"> • Enter all transactions in CAS
<ul style="list-style-type: none"> • Produce and understand financial statements and reports
General business tax literacy
<ul style="list-style-type: none"> • Awareness of tax reporting and payment dates
<ul style="list-style-type: none"> • Determination of the tax liability in the bank account
Goods and service tax (GST)
<ul style="list-style-type: none"> • Determine if GST registration is required
<ul style="list-style-type: none"> • Understand rules relating to taxable supplies and input tax credits
<ul style="list-style-type: none"> • Determination of GST treatment of goods and services supplied by the business
Income tax
<ul style="list-style-type: none"> • Identify allowable deductions
<ul style="list-style-type: none"> • Calculate depreciation on capital expenditure
<ul style="list-style-type: none"> • Forecast for tax liabilities
<ul style="list-style-type: none"> • Separate a portion of income to cover proposed income tax liability
Fringe benefit tax
<ul style="list-style-type: none"> • Identify when benefits are provided to employees or their associates

To ask the literacy questions a survey was constructed using a web-link to the survey created in the Survey Monkey online survey platform. This web-link was used on multiple platforms in order to engage with SBOs in the service sector. The advantages of surveys conducted

using a web-link are that they are both time and cost effective, along with their ability to reach larger geographical areas more effectively.¹⁰⁶

The sample of SBOs in Australia was achieved through three different sampling techniques: convenience, snowball and stratified sampling.¹⁰⁷ Convenience sampling was used to contact both professional and personal contacts of the research team using email, Facebook and LinkedIn. These contacts included participants of a qualitative stage of the project, students (current and past) and small businesses known to the research team. Engagement with these contacts also resulted in snowball sampling techniques, as possible participants were encouraged to share the survey with their own networks. Participants were also sought using snowball sampling by contacting industry associations and representatives of professional bodies. These groups shared the web-link for the survey with their network or member listing using newsletters, mass email distribution and website blogs. Groups involved in distributing the survey, included Business South Australia, The Tax Institute, Australian Institute of Credit Management and a variety of groups within Griffith University including the Griffith Alumni, Entrepreneurship Seminar Series and the Griffith News Blog.¹⁰⁸

The final method of sampling used for the large-scale survey was a stratified sample of businesses registered for an Australian Business Number (ABN) in Australia. Businesses were categorised by their geographical location and, as a result, the strata for the project were the States or Territories of Australia. Those chosen for stratified sampling included Tasmania, New South Wales, Victoria, Western Australia and the Australian Capital Territory. The Northern Territory was excluded due to time restrictions, as the random sample selection could not be concluded before the survey closing date. A conscious decision, made to exclude Queensland from the stratified sample method, was based on the fact that the research team are all based in Queensland, and that small business participants who were drawn from the convenience and snowball sampling were more likely to be in Queensland because the researcher's personal and professional networks were predominantly from Queensland.

As a result of the variety of sampling techniques employed for the large-scale survey, it is impossible to ascertain a specific response rate. An alternative in this situation is the identification of a completion rate. This is calculated by the number of participants who began the survey in comparison to those who completed the survey. A total of 259 started the survey and a total of 116 completed it, giving a completion rate of 45%. The survey was concluded in June 2019 and therefore the data was collected prior to the economic effect of the COVID-19 pandemic.

Once the survey closed for data collection, the results were extracted from Survey Monkey and imported into Microsoft Excel (Excel), a preparatory tool for initial data cleaning. The file of completed questionnaires was then imported into the research data analysis software, Statistical Package for the Social Sciences (SPSS).¹⁰⁹ Data coding was carried out once the

¹⁰⁶ Edith de Leeuw, 'To Mix or Not to Mix Data Collection Modes in Surveys' (2005) 21(2) *Journal of Official Statistics*, 233-255, 234; Floyd J Fowler, *Survey Research Methods* (Sage Publications, 4th ed, 2009).

¹⁰⁷ John W Creswell and Vicki L Plano Clark, *Designing and Conducting Mixed Methods Research* (Sage Publications, 1st Ed, 2007), 123; 'Stratified Random Sampling' Lærd Dissertation (2018) Dissertation.laerd.com (Web Page) <<http://dissertation.laerd.com/stratified-random-sampling.php>>.

¹⁰⁸ See listing at: <https://news.griffith.edu.au/2019/02/13/calling-small-businesses-griffith-researcher-wants-to-help-your-cash-flow/>

¹⁰⁹ Version 26 of SPSS was used to conduct data analysis for this research.

data was imported into SPSS. The variable types relevant to the survey data were scale and nominal categories.

For those questions structured in a Likert scale format, a new variable was created in ‘scale’ category to ensure that the coding of the data excluded answers where participants selected ‘not applicable’, ‘not sure’, ‘advisor’s job’ or ‘never thought of it’. Coding in such a way allowed for analysis of the results according to answers that fulfilled the Likert scale; this in turn prevented distortion of the values relevant to those who agreed or disagreed with statements being posed to participants.

To achieve a literacy score (‘LS’) for each participant, a new variable was created for each literacy question. This was possible as the questions were answered true, false or unsure. See Appendix A for the full list of questions. The new variable was categorised as a scale variable and only the correct answer was given a value. Each correct answer was allocated a score of one which when tallied could allow a participant to achieve an overall LS of 43. Similar scoring of knowledge has been carried out in prior tax literacy research by Chardon *et al.*¹¹⁰ Due to the focus of the research on different literacy areas, an LS was also created for financial statements, CAS and business tax. LSs were used to create a mean score which was applied in discussions related to the service SBOs of those businesses.

The first draft of the survey was pilot tested by the researchers and then tested by a sample of small business owners, business advisers and tax academics. Important feedback was received relating to formatting and grammatical errors.

IV PARTICIPANTS

The survey link was accessed by 259 respondents over the period between 1st October 2018 and 30 June 2019.¹¹¹ Of these 259, only 116 completed the survey in totality as some were excluded as not a relevant small business or did not complete all parts of the survey. It should be noted that not all questions were relevant to all participants. While 116 is slightly disappointing, engaging small businesses in research has been previously identified as problematic.¹¹² Nevertheless, the results are still useful to demonstrate insights into the literacy of SBOs and can be used as a foundation for future studies. Table 2 details the descriptive characteristics of the survey participants.

A total of 116 participants ranging across 16 ANZSIC categories completed the survey. The survey sample included almost two-thirds of Australian-born service SBOs and slightly more than one-third migrant service SBOs. In terms of education, more than 90% of service SBOs held a tertiary qualification, including postgraduate, undergraduate and TAFE qualifications. The most popular business structure, the company, was followed by sole traders, who collectively made up 72% of the participants. The business age categories of the participants

¹¹⁰ Chardon, Freudenberg and Brimble (n 25).

¹¹¹ The results of this research are not affected by the COVID 19 pandemic, as the survey was closed in June 2019.

¹¹² Belle Isle, Freudenberg and Copp (n 3); Wallschutzky and Gibson (n 3).

were all represented, with more than 40% of businesses being in operation for more than 10 years, and with 19% representing the youngest business category of less than two years. The participants primarily employed five or fewer employees, with 44% employing between 1 and 5 employees and 40% non-employing. In terms of annual income, more than 95% of the participants earned \$2,000,000 or less.

The results of this survey are now discussed.

Table 2: Summary of participant characteristics

Demographic	Categories	N = 116	Percentage	
Residency	Less than 5 years	1	0.9%	
	More than 5 years but less than 10 years	7	6.0%	
	More than 10 years but less than 15 years	8	6.9%	
	More than 15 years but less than 20 years	8	6.9%	
	More than 20 years	17	14.7%	
	I was born in Australia	75	64.7%	
Education	Left school before completion of year 10	1	0.9%	
	Year 10	1	0.9%	
	Year 12	8	6.9%	
	TAFE qualification	23	19.8%	
	University undergraduate degree	36	31.0%	
	University post graduate degree	47	40.5%	
ANZSIC Category	A	Agriculture, Forestry and Fishing	2	1.7%
	D	Electricity, Gas, Water and Waste services	0	0.0%
	E	Construction	7	6.0%
	F	Wholesale Trade	3	2.6%
	G	Retail Trade	8	6.9%
	H	Accommodation and Food Services	8	6.9%
	I	Transport, Postal and Warehousing	0	0.0%
	J	Information Media and Telecommunications	10	8.6%
	K	Financial and Insurance Services	0	0.0%
	L	Rental, Hiring and Real Estate Services	1	0.9%
	M	Professional, Scientific and Technical Services	46	39.7%
	N	Administrative and Support Services	4	3.4%
	O	Public Administration and Safety	0	0.0%
	P	Education and Training	6	5.2%
	Q	Health Care and Social Assistance	8	6.9%
	R	Arts and Recreation Services	6	5.2%
	S	Other Services	7	6.0%

Business Structure	Sole Trader	40	34.5%
	Partnership	6	5.2%
	Company	44	37.9%
	Trust	9	7.8%
	Combination of Company and Trust	16	13.8%
	I'm unsure of the business structure	1	0.9%
Business Age	Less than 2 years	22	19.0%
	More than 2 years but less than 5 years	19	16.4%
	More than 5 years but less than 10 years	28	24.1%
	More than 10 years	47	40.5%
Number of Employees (excluding the owner)	Zero	46	39.7%
	1 to 5	51	44.0%
	6 to 10	9	7.8%
	11 to 20	10	8.6%
Past Business Experience	Yes	62	53.4%
	No	54	46.6%
Annual Turnover	Under \$50000	30	25.9%
	\$50001-\$200000	36	31.0%
	\$200001-\$2000000	44	37.9%
	\$2000001-\$5000000	4	3.4%
	\$5000001-\$10000000	2	1.7%

V RESULTS: SBO LITERACY

Below is an analysis of the results in terms of literacy scores, the relationship between them, and a consideration of demographic characteristics.

A Literacy scores

Questions were posed to the participants to measure the service SBOs actual literacy. From the responses to these questions, four LSs were created an overall LS, a financial statement LS, a CAS LS and a business tax LS. An overall LS was created for each service SBO, based on the aggregated calculation of literacy scores for financial statements, CAS and business tax.

The financial statements literacy questions explored service SBOs' understanding of the information contained in financial statements and the use of that information to determine liquidity, working capital, profit and cash availability. Table 3 demonstrates that the mean LS

for financial statements achieved by participants was 4.70 of a possible 7, equating to 67.14%. This means overall that two-thirds of service SBOs answered their financial statement literacy questions correctly. It appears that their financial statement literacy is greater than their CAS and business tax literacy (see later).

Table 3: Mean Score for business tax LS, financial statement LS and CAS LS

Literacy score type	Total score available	Mean score of SBOs	Mean as a % of total
Financial statement LS	7	4.70	67.14%
CAS LS	10	5.52	55.20%
Business tax LS	26	10.89	41.88%

To determine whether service SBOs make use of CAS to implement cash flow practices, participants were asked to confirm whether they engaged in certain activities that have previously been identified as favourable to business success.¹¹³ These questions, used to create the LS for CAS, include six questions relevant to creating reports in CAS and four questions related to carrying out cash inflow activities. A mean CAS LS for participant service SBOs was determined to be 55.2% or 5.52/10 (see Table 3). Accordingly, just over half of the service SBOs overall demonstrated CAS literacy, placing it above business tax literacy but below financial statement literacy.

For the business tax LS service SBOs were asked questions related to each of the tax systems; income tax, PAYG withholding, SG, GST and FBT. A business tax LS and an LS relevant to each tax system was ascertained for each service SBO participant, which has been reported elsewhere (see Table 4).¹¹⁴ An overall business tax LS was achieved by adding the correct answers to the business tax literacy questions to achieve a total score for each service SBO. As displayed in Table 3 the mean business tax LS equates to 10.89 out of a possible 26. When calculated as a percentage, service SBOs have a mean business tax LS of 41.88%, which means that, on average, service SBOs get only 42% of tax questions correct. Here it means that business tax literacy is lower than financial statements and CAS.

¹¹³ Australian Taxation Office (n 13).

¹¹⁴ Belle Isle, Freudenberg and Sarker (n 29).

Table 4: Mean literacy score for tax systems

Literacy score type	Total score available	Mean score	Mean as % of total
Total SG LS	4	1.57	39.25%
Total GST LS	4	1.97	49.25%
Total FBT LS	4	1.64	41%
Total Income Tax LS	11	4.71	42.82%
Total PAYG Withholding LS	3	1.00	33.3%

By combining the business tax LS, financial statement LS and CAS LS of each participant, an overall LS score was created. Of the 116 participants engaged in the survey, only a total of 104 LSs were calculated. This was due to 12 participants not integrating a CAS system in their business, which in turn meant that a CAS LS was not created for those participants. A category range was then developed, with a band scale of ‘poor’ through to ‘high’, in order to group the scores of participants according to actual literacy. The categories of ‘poor’ to ‘high’ were adopted from categories previously created by Chardon *et al.* to calculate a tax literacy score of Australian individuals.¹¹⁵ The scale of the bands is not a mirror of those used by Chardon *et al.*,¹¹⁶ due to the difference in the number of questions used to create the LSs. Because the overall LS was based on 43 questions, it was not possible to create five equal groups. Therefore, four groups of nine were created for the top four bands and the remaining seven were used to represent the lowest category of ‘poor’. Chardon *et al.*¹¹⁷ also had a smaller band scale for the ‘poor’ category. Table 5 details the score range.

Table 5: Category score range for overall LS

Score Range	Category
0-7	Poor
8-16	Low
17-25	Basic
26-34	Medium
35-43	High

¹¹⁵ Chardon, Freudenberg and Brimble (n 25).

¹¹⁶ *Ibid.*

¹¹⁷ *Ibid.*

The results of service SBO overall literacy, in terms of categorical bands, are displayed in Table 6. The mean overall LS for all correctly answered literacy questions completed by the participants equates to 21.54 (50%). This indicates that service SBOs correctly answered one in every two literacy questions. Analysis of the results according to the literacy categories, demonstrates a little over one-third (35.6%) of service SBOs achieved a ‘poor’ or ‘low’ overall LS. At the other end of the spectrum, a little over a third of participants (34.6%) achieved a ‘medium’ or ‘high’ overall LS. The remaining 29.8% achieved a ‘basic’ overall LS. This means overall that nearly 65% of SBOs had a basic or better overall LS. With only 11.5% of service SBOs in Australian small service sector businesses have a level of literacy greater than 80% (‘high’ category).

Table 6: Mean SBO overall LS by category

Overall LS by Category	N	%
Poor	5	4.8%
Low	32	30.8%
Basic	31	29.8%
Medium	24	23.1%
High	12	11.5%
Mean score and percentage	21.54	50.1%

B *The relationship between literacy scores*

In order to determine whether a relationship exists between the areas of literacy in the research, linear regression analysis was conducted at a significance level of .05. Testing was carried out with business tax LS as the dependent variable and CAS LS and financial statement LS as the independent variables. The test was then repeated twice, replacing the dependent variable with CAS LS and then by financial statement LS, with the other two alternative scores becoming the independent variables. The test was carried out using the other two LSs as the dependent variables to determine whether there was a change in the relationship between the scores. Table 7 illustrates the results of the three tests.¹¹⁸ The outcome of the testing demonstrates that, regardless of which LS is the dependent variable, a significant relationship exists in all circumstances, with a highly significant result equal to or less than .001. This would suggest that there appears to be a relationship among all three LSs.

¹¹⁸ Note: It should be acknowledged that the results reported are for two-tail testing as the first hypothesis being tested is ‘Service SBO business taxation literacy is influenced by SBO CAS literacy and financial statement literacy.’

This means if a SBO has a low literacy with, for example, business tax literacy, then it is likely that their literacy for financial statements and CAS will be similarly weak. With the converse applying as well.

Table 7: Relationship between literacy scores

Is there a relationship between the three LS	Sum of Squares	df	Mean Square	F	Sig.
CAS LS (DV)	104.644	2	52.322	7.849	.001 ^b
Business tax LS (DV)	1716.950	2	858.475	26.676	.000 ^b
Financial statement LS (DV)	100.882	2	50.441	20.577	.000 ^b

* DV = dependent variable

Further analysis was undertaken to ascertain whether a relationship between two LSs was stronger than that of an alternative two LSs. Two tests were carried out where business tax LS was the independent variable and CAS LS and financial statement LS were the dependent variables, respectively. The results in Table 8 demonstrate that a significant relationship exists between business tax LS and financial statement LS, and business tax LS and CAS LS, with a significant outcome of $p < .001$ for both tests. This provides evidence that the level of service SBOs' business tax literacy appears to be related to their level of financial statement literacy and CAS literacy.

Table 8: The relationship between literacy scores when business tax LS is the IV

Business tax LS (IV)	Sum of Squares	df	Mean Square	F	Sig.
Financial statement LS (DV)	118.730	1	118.730	48.047	.000 ^b
CAS LS (DV)	102.464	1	102.464	15.472	.000 ^b

* DV = dependent variable, IV = independent variable

When tests were carried out with CAS LS as the independent variable, the test results suggest that it has a significant relationship with business tax LS and financial statement LS. It should be noted however, that the strength of the relationship between CAS LS and financial statement LS is not as strong as that of CAS LS and business tax literacy LS (see Table 9). The significance level for business tax LS of $p < .001$ was computed, compared to $p = .014$ for financial statement LS. This suggests that the CAS literacy of service SBOs provides more support to their business tax literacy than to their financial statement literacy, which may represent CAS being used to support tax lodgements.

Table 9: The relationship between literacy scores when CAS LS is the IV

CAS LS (IV)	Sum of Squares	df	Mean Square	F	Sig.
Business tax LS (DV)	654.239	1	654.239	15.472	.000 ^b
Financial statement LS (DV)	19.936	1	19.936	6.190	.014 ^b

* DV = dependent variable, IV = independent variable

The same test outcomes were found when the financial statement LS was the independent variable (see Table 10). Although the sum of squares and mean squares results are different, the significance results remain the same as for the previous test of financial statement LS and business tax LS, with a result of $p < .001$, and with financial statement LS and CAS LS significance was calculated at $p = .014$. This suggests that the business tax literacy of service SBOs is related to their CAS literacy and their financial statement literacy, to a high degree. To a lesser extent, service SBO CAS literacy and financial statement literacy are also dependent on each other.

Table 10: The relationship between literacy scores when financial statement LS is the IV

Financial statement LS (IV)	Sum of Squares	df	Mean Square	F	Sig.
Business tax LS (DV)	1704.137	1	1704.137	48.07	.000 ^b
CAS LS (DV)	44.509	1	44.509	6.190	.014 ^b

* DV = dependent variable, IV = independent variable

Next is consideration as to whether demographics can influence the overall literacy score of SBOs in the service sector.

C Demographics

Given that there appears to be a relationship between literacy scores, if we can determine which demographics have the lower literacy scores then it may be possible to intervene or assist these low literacy cohorts. An overview of the overall LS, compared to the participant demographic information, is displayed in Table 11, which illustrates the mean LS for each demographic category, along with the number (and percentage) of the participants who are classified within the literacy categories of poor, low, basic, medium and high for each

demographic group. Discussion and data analysis for each demographic group follows, along with comparative analysis to prior research where possible.

Table 11: Summary of SBO Overall Literacy Score compared with demographic information

Demographic	Category	Mean	Poor	Low	Basic	Medium	High
		Score	N = 116 (%)	N = 116 (%)	N = 116 (%)	N = 116 (%)	N = 116 (%)
Migrant status	I was born in Australia	21.54	3 (4.5%)	22 (32.8%)	19 (28.4%)	15 (22.4%)	8 (11.9%)
	< 5 years	19.00	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	5 years < 10 years	20.17	0 (0.0%)	2 (33.3%)	2 (33.3%)	2 (33.3%)	0 (0.0%)
	10 years < 15 years	26.50	0 (0.0%)	1 (12.5%)	2 (25.0%)	2 (25.0%)	3 (37.5%)
	15 years < 20 years	16.29	1 (14.3%)	4 (57.1%)	1 (14.3%)	1 (14.3%)	0 (0.0%)
	More than 20 years	22.07	1 (6.7%)	3 (20.0%)	6 (40.0%)	4 (26.7%)	1 (6.7%)
Education	Left school before completion of year 10	23.00	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Year 10	18.00	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Year 12	17.50	0 (0.0%)	5 (62.5%)	2 (25.0%)	1 (12.5%)	0 (0.0%)
	TAFE qualification	21.95	1 (5.0%)	4 (20.0%)	9 (45.0%)	4 (20.0%)	2 (10.0%)
	Undergraduate degree	20.20	3 (10.0%)	11 (36.7%)	6 (20.0%)	8 (26.7%)	2 (6.7%)
	Post-graduate degree	23.05	1 (2.3%)	12 (27.3%)	12 (27.3%)	11 (25.0%)	8 (18.2%)
Business Structure	Sole Trader	16.66	3 (9.4%)	14 (43.8%)	11 (34.4%)	3 (9.4%)	1 (3.1%)
	Partnership	16.80	0 (0.0%)	3 (60.0%)	2 (40.0%)	0 (0.0%)	0 (0.0%)
	Company	24.83	1 (2.4%)	9 (21.4%)	10 (23.8%)	15 (35.7%)	7 (16.7%)

	Trust	21.13	1 (12.5%)	2 (25.0%)	2 (25.0%)	2 (25.0%)	1 (12.5%)
	Combination Company/Trust	24.81	0 (0.0%)	3 (18.8%)	6 (37.5%)	4 (25.0%)	3 (18.8%)
	I'm unsure of the business structure	14.00	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Business Age	< 2 years	18.90	2 (10.0%)	7 (35.0%)	5 (25.0%)	5 (25.0%)	1 (5.0%)
	2 years < 5 years	20.17	0 (0.0%)	7 (38.9%)	7 (38.9%)	2 (11.1%)	2 (11.1%)
	5 years < 10 years	18.68	2 (8.0%)	9 (36.0%)	10 (40.0%)	2 (8.0%)	2 (8.0%)
	10 years <	25.17	1 (2.4%)	9 (22.0%)	9 (22.0%)	15 (36.6%)	7 (17.1%)
Number of Employees (excluding owner)	Zero	16.59	4 (10.3%)	17 (43.6%)	13 (33.3%)	4 (10.3%)	1 (2.6%)
	1 to 5	23.19	1 (2.1%)	13 (27.7%)	14 (29.8%)	13 (27.7%)	6 (12.8%)
	6 to 10	27.78	0 (0.0%)	1 (11.1%)	3 (33.3%)	2 (22.2%)	3 (33.3%)
	11 to 20	28.11	0 (0.0%)	1 (11.1%)	1 (11.1%)	5 (55.6%)	2 (22.2%)
Past Business Experience	Yes	16.48	1 (1.9%)	8 (14.8%)	19 (35.2%)	20 (37.0%)	6 (11.1%)
	No	18.38	4 (8.0%)	24 (48.0%)	12 (24.0%)	4 (8.0%)	6 (12.0%)

1 Migrant status

In the demographic questions of the survey, where the participating service SBOs were asked about Australian residency by birth, 41 (35%) of the participants were found to be migrant SBOs. When residency was compared to overall LS, the results in Table 11 demonstrate that service SBO migrants who have lived in Australia for more than 10 but less than 15 years achieved the highest mean overall LS of 26.5 (62%). This was followed by those residing in Australia for more than 20 years (22.07 overall LS). For Australian-born service SBOs (65% of the participants completing the survey), their mean overall LS was 21.57. These results suggest that, despite the challenges that migrant service SBOs face when operating businesses in Australia, it is possible to achieve a higher level of literacy than those who are non-migrants. However, for recent migrants it is likely the story is different. For migrant

service SBOs who have resided in Australia for less than 5 years, and who could be assumed to have more challenges than those who have resided in Australia for longer periods, it is difficult to ascertain their literacy levels due to the low number of survey participants satisfying this demographic. It is possible that recent migrants did not participate in the survey due to language barriers.

2 Education

Education demographics of participating service SBOs were dispersed between 6 groups. As displayed in Table 11, in education categories of ‘left school before completion of year 10’ and ‘completed year 10’, only one participant of the survey identified within each group. These results are therefore unlikely to provide a valid representation of other service SBOs with the same level of education. Analysis of the mean overall LS for the remaining education groups suggests that overall LS is higher where service SBOs completed a university post-graduate degree, who obtained a mean overall LS of 23.05 (54%). This was closely followed by those service SBOs who had achieved a TAFE qualification, with a mean overall LS of 21.95 (51%). Of concern was the mean overall LS of those with an undergraduate degree of 20.20 (47%), as this suggests that participants correctly answered the questions 47% of the time. The results of the survey are slightly skewed as there were more participants with post-graduate education than with other levels of education. It is therefore likely that the mean overall LS of education could have a different outcome if representative samples for all levels of education were equal.

3 Business structure

Analysis of the overall LS, in terms of the business structure, indicates that service SBOs who adopt a more complex business structure have a higher level of literacy than those with simpler business structures (see Table 11). The overall LS for service SBOs who are operating with a company or utilising a combination of a company and trust achieved a mean literacy percentage of 58%. In comparison, those service SBOs operating less complicated structures, such as sole traders or partnerships, achieved an overall LS mean of 16.66 (39%) and 16.8 (39%) respectively. Taking into consideration that sole traders make up more than one-fifth of all private sector businesses in Australia, it is concerning that their overall LS is at a ‘low’ classification.¹¹⁹ This could be self-selecting in a sense. Those people with more business sophistication utilise more sophisticated business structures.

4 Business age

Analysis demonstrates that SBOs operating for more than 10 years have a high percentage of service SBOs who achieve an overall LS within the ‘medium’ or ‘high’ category. For those SBOs operating for less than 10 years, the overall LS of service SBOs was predominantly categorised as ‘basic’ or lower (see Table 11). Further analysis of the data relating to those SBOs in operation for fewer than 10 years suggests that service SBOs were not able to

¹¹⁹ Australian Bureau of Statistics (n 30).

achieve a mean overall LS of greater than 50%. This would suggest that those businesses in existence for over 10 years are associated with higher literacy scores and that age of the business does have an influence on SBO literacy.

5 Employee numbers

Examination of the data according to the number of employees of the SBOs shows that for those employing '6 to 10' and '11 to 20' employees, the mean overall LS was 28.11 and 27.78 respectively, placing these groups in the 'medium' literacy category (see Table 11). For those employing '1 to 5' employees, the mean overall LS score of 23.19 places the group in the 'basic' literacy category. For non-employing businesses, a mean overall LS of 16.59 or 39% indicates that service SBOs who are not employing staff have a 'low' level of literacy. This would suggest that the more employees engaged by a business, the greater level of literacy is required, which results from the additional obligation of employing people. This outcome is consistent with prior research by Freudenberg *et al.*¹²⁰

6 Past business experience

Comparison of the literacy of service SBOs who have past business experience to that of those who do not, (see Table 11) suggests that business experience does not improve the possibility of having a higher level of literacy. The mean overall LS indicates that those service SBOs with no prior experience have an overall LS of 5% greater than those who have had business experience. This could suggest that service SBOs do not see value in improving literacy and/or knowledge over time, which could support prior research suggesting that SBOs do not attempt to advance their literacy if they believe it is at a reasonable level.¹²¹

D Summary

A set of LSs was created for each participant based on the literacy questions that formed part of the survey instrument. The mean business tax LS indicates that service SBO business tax literacy is slightly more than 40%. In contrast, financial statement literacy and CAS literacy are better than average at mean LS percentages of 67% and 55% respectively. Combining the three LSs allowed for the calculation of an overall LS. The mean overall LS of service SBOs was 21.54 of a possible 43 or 50%. The overall LS of each participant was then categorised into literacy groups of 'poor', 'low', 'basic', 'medium' and 'high.' Service SBOs categorised as having 'basic' or lower overall literacy equated to 65% of the participants. Only 23% of service SBOs achieved a 'medium' level of literacy and only 12% were categorised as having 'high' literacy.

To examine whether business tax literacy of SBOs is supported by their level of financial statement literacy and CAS literacy, statistical analysis was carried out on the LS of the service SBOs. The results suggest that there is a strong linear relationship between business

¹²⁰ Freudenberg, Chardon, Brimble and Belle Isle (n 27) 46.

¹²¹ McKerchar (n 93).

tax literacy, financial statement literacy and CAS literacy, indicating that business tax literacy is strengthened by the level of literacy that service SBOs hold in the other two literacy areas.

The service SBO overall LSs was compared to participant demographics in order to determine whether the individual circumstances of the service SBOs had any influence on their LSs. The outcome of testing found higher overall literacy was evident for service SBOs who had migrated to Australia more than 10 years ago and who held a postgraduate degree. The business demographics showed that participants in operation for more than 10 years, that employed staff, and were set up as either a company or a company/trust structure were operated by service SBOs with the highest overall LSs. The results relating to past business experience found that the overall LS of service SBOs was higher for those with no prior business experience.

VI RECOMMENDATIONS

If arguments about the importance of literacy, particularly tax literacy, professional financial statement literacy and CAS literacy are correct in terms of improving the overall financial performance of the business,¹²² then strategies to improve these literacies makes sense, particularly as they seem inter-related. It would appear better to focus on those businesses that are early on in their operations (business life-cycle), utilising a simple business structure, with little or no employees and/or recent immigrants. With this in mind a number of recommendations are made.

To improve the literacy of SBOs in Australia (including those operating service small businesses), a requirement could be made for new SBOs to undertake a series of education modules prior to business registration for an ABN or within the first 36 months of trading. There could be separate modules on financial statements, CAS and tax, as well as a module that is inter-rated between the three literacies. To contextualise these modules they could be linked to cash flow management to demonstrate the importance and relationship to their overall business operations. These modules could include an assessment component, dependant on the knowledge being acquired. Three possible topics identified in the research that are important prior to trading include the creation of a business plan, how and in what format business transactions will be recorded and what possible business tax liabilities will be incurred during the first year of trading. Formative assessment relating to these topics could include the creation of the business plan and an overview of the advantages and disadvantages of different methods of record keeping that could be implemented by the business. In terms of business taxes, the assessment could be summative, based on a set of small business case studies that require the prospective business owner to determine the possible tax implications and the resultant effect to cash flow from a range of different business transactions and interactions with different business tax systems. Of course, a problem with this recommendation is how such a system would be administered and enforced. One possibility is to use the model used with the current superannuation education

¹²² Melissa Belle Isle, Brett Freudenberg and Tapan Sarker, (forthcoming), 'Does tax literacy matter? The relationship between small business literacy and business performance and cash flow'.

course hosted on the ATO’s website.¹²³ Once the modules are completed then the system could be automated to notify the ATO that the module has been successfully completed, which could be kept on the client file by the ATO.

A possible incentive would be to provide a tax rebate for \$1,000 to \$5,000 when the business lodges its first tax return if they have certificates of completion.¹²⁴ Alternatively, the ATO could take such certificates into account in imposing lower penalties if administering penalties. Alternatively, the Commissioner of Tax could give directions for education if the SBO is found to have made errors, with modules developed on the ATO website.¹²⁵ This could also be used to encourage the use of the Cashflow Coaching Kit, with the advisers facilitating its use.¹²⁶

Because overall literacy was found to be lowest for those service SBOs operating a service small business for less than two years, processes should be enacted to assist in guiding them through the early stages of the business lifecycle. A proposed timeline of the activities that should be undertaken at different stages of the early business lifecycle has been created from the research findings and is presented in Table 12. This can provide a checklist of activities for small businesses and their advisors to consider. Of course, getting businesses to engage in educational activities can be problematic if they do not see them as connected to their business, or just the role of their advisors.

Further education assistance could be provided to small businesses that are entering a growth stage. The service SBOs who operate businesses that are non-employing have the lowest overall literacy, at the point that small businesses begin engaging employees, they should be eligible to obtain free or subsidised advice or training relevant to obligations as an employer. This can be in relation professional financial statement literacy, CAS and business tax. For example, it could focus on ensuring that CAS is set-up appropriately for employment, knowledge of awards and conditions, superannuation guarantee and PAYG-W obligations.

¹²³ See: <https://www.ato.gov.au/Business/Super-for-employers/Super-guarantee-employer-obligations-course/>

¹²⁴ Such an education certification has been used by Councils in terms of the compost rebates schemes, requiring people to learn about composting before getting the rebate. See: <https://www.brisbane.qld.gov.au/clean-and-green/green-home-and-community/sustainable-gardening/compost-and-organic-waste-recycling/compost-rebate-program>

¹²⁵ Such a “direction for education” for superannuation was contained in Treasury Laws Amendment (2018 Measures No 4) Bill 2018, Part 2, which inserted a new s 8C(1)(f)(fa) into the Taxation Administration Act 1953. See: <https://www.ato.gov.au/Business/Super-for-employers/Super-guarantee-employer-obligations-course/>

¹²⁶ See: <https://www.ato.gov.au/Tax-professionals/Support-and-communication/In-detail/Cash-flow-coaching-kit/>

Table 12: Activities to research and consider in the early stages of starting a business

Activity	Description
Prior to business registration	
	Engage an accountant or advisor to discuss your proposed business
	Obtain a tax file number for your business. Sole traders will use their own tax file number
	Creation of a business plan and estimate of cash flows for first 12 months
	Determine system for recording of business transactions
	Explore business tax obligations in 1 st year based on business circumstance.
	Determine which business structure and asset holdings
	Registration for an ABN
	Determine method for invoicing of sales
	Set up direct debit options for customer payments
	Decide on trading terms: cash, 7 days, 14 days, 21 days or 30 days end of month
	Set up a myGov ID to access your business ATO portal (dependant on structure of the business)
Continual	
GST	Determine whether registration for GST is necessary.
Start of business (1st 12 months)	
PAYG	Enter the voluntary PAYG instalment system
Tax and cash flow	Set up a bank account for tax liabilities. Transfer 20-30% of income received to tax bank account at the end of each week.
Cash flow	Seek advice on generation of financial reports/statement in computerised accounting system (CAS)
Cash flow	Seek advice on understanding of financial statements for cash flow management
Income tax	Maintain an asset register for depreciation purposes of all capital items purchased for use in your business.
Tax and cash flow	Record all revenue and expenses of the business, separate this information from personal records.
6 months after trading begins	
Cash flow	Prepare cash flow analysis of 1 st 6 months of trading
After the first 12 months	
Cash flow	Prepare a cash flow budget based on 1 st year of trading
Income tax	Review revenue and expenses for each quarter and determine whether the proposed PAYG instalment calculated by the ATO should be adjusted prior to lodging of BAS.
Tax and cash flow	Based on 1 st year tax liabilities, calculate a percentage of income that will likely be attributable to tax payments.
Cash flow	Prepare financial reports quarterly from CAS (if applicable) to understand cash flow situation and to determine outcome of past activities.

Prior to employing Staff	
PAYG withholding	Register for PAYG withholding before you make the first salary or wage payment to your staff.
CAS	If using CAS for payroll, set up single touch payroll
SG	Determine how superannuation will be recorded and how the reporting and payment will be made. If using CAS, this can be done via a Superannuation Clearing House.
SG	Research the current SG rate for employees
SG	Research what payments to employees are classified as ordinary times earnings for SG purposes
SG	Research which employees are entitled to SG
PAYG withholding	Determine the relevant award/pay scale for each employee, as this then affects PAYG withholding and SG.
PAYG withholding or FBT	Decide how staff will be remunerated. Will it be salary and wages only OR will they be provided with other benefits as part of their payment for services rendered.
FBT	Will benefits be provided to your staff, that are not considered wages? i.e., Benefits – determined to be fringe benefits. Examples: vehicle, a car park, entertainment (paying gym membership)
Prior to registering for GST	
GST	Create tax invoices that comply for GST
GST	Determine which goods or services are subject to GST for sales and purchases

This advice should relate to salary and wage conditions, tax and superannuation, insurances and licenses. This advice could be administered by the government¹²⁷ or by independent advisors. It is considered that independent advisors are more likely to be considered a more trusted business advisors compared to a government employee.¹²⁸ A small business engaging an independent advisor should be eligible for a tax offset in the year that the first employee is employed. In order to access the offset, it might be limited to businesses that are a micro business with a total business income of less than \$2 million.

Experts in the small business landscape identified that SBOs' financial statement literacy is improved by their engagement of an accountant or advisor, however, financial constraints might prevent SBOs from sourcing advice.¹²⁹ From the survey findings, it was found that their financial statement literacy was the highest of all LSs measured in the research. Because financial statement literacy was found to be linearly related to CAS and business tax literacy, SBOs should be eligible for the incentive, provided they engage an advisor in any of the three literacy areas. A further requirement for eligibility should be that the advice must be related to the application or acquisition of knowledge and not to compliance activities.

The activities that could be covered might include the importance of financial literacy and how accounting information is used in decision making; the difference between management

¹²⁷ Government services could be administered through the Department of employment, skills, small and family businesses.

¹²⁸ Brett Freudenberg, 'Change for Change's sake: are tax reforms required to assist the Australian arts sector?' (2011) 20(1) *Cultural Trends* 85.

¹²⁹ *Ibid.*

reporting and financial reporting; the various types of common business structures and the income tax and GST implications of each structure, an overview of the three key financial statements, including tips on how to read, analyse and interpret these statements and a brief overview of how financial ratios to help identify key financial areas that need addressing.¹³⁰

VII LIMITATIONS AND FUTURE RESEARCH

Several limitations were evident in this research that should be acknowledged. A limitation was that LSs for CAS were calculated based on feedback from service SBOs about whether they created reports and carried out cash flow activities in their CAS. Ideally, a more relevant approach to testing literacy would have been witnessing service SBOs carrying out these tasks or alternatively asking the participant to confirm the necessary steps required to successfully complete such a task. However, these alternatives were not possible using the survey method and were also restricted due to the variety of different CAS platforms that could be used by the participants.

The sample was also skewed towards those with higher education, meaning that the findings do not accurately represent those whose highest level of education is from secondary education.

A limitation of the research was the sample size of those SBOs who completed the survey. A higher number of SBOs would have resulted in a higher degree of validity when comparing the results to the small business population in Australia, although this small sample size was strengthened by the exploratory data collection used in prior stages of the research.¹³¹

Participant demographics showed that migrant service SBOs who had resided in Australia for less than five years were under-represented, which could relate to the language barrier in completing the survey in English. Future research could address this by preparing the survey in other languages to suit the recent ethnic population of SBOs in Australia.

Because this research focused on the service sector the study could be replicated to small businesses in industries other than the service sector. This would also allow for a variation on the current design by including data collection relevant to the treatment of inventory; it could also examine cash flow activities that might be specific to other industries.

Future research could attempt to measure whether business performance is related to SBO's literacy in terms of professional financial, CAS and business tax, as it could highlight the importance of these literacies to overall performance of the business.

¹³⁰ It these concepts that can be part of a professional course for business managers. For example, see: <https://www.qut.edu.au/study/professional-and-executive-education/courses/financial-literacy-for-sme-business-managers>

¹³¹ See: Belle Isle, Freudenberg and Sarker (n 5).

VIII CONCLUSION

Small businesses can struggle and be particularly reliant on the skills of the SBOs. Indeed, SBOs can have multiple responsibilities, including managing the cash flow. In managing a business cash flow, key knowledge relates to understanding financial statements, CAS and business tax.

To further understand the level of literacy of service SBOs, literacy questions were used to create a literacy score for understanding financial statements, CAS and business tax. A collective overall LS was also calculated, based on the correct answers to all literacy questions. Service SBOs were found to have average overall literacy, categorised within the 'basic' category, which suggests that service SBOs correctly answered one in every two questions. For financial statement literacy, service SBOs answered two-thirds accurately, and for CAS literacy, they answered just over half of the questions correctly. For business tax literacy, service SBOs on average realised an LS of 42%.

Testing demonstrated that there was a lineal relationship between literacy scores. When overall LSs was compared with the demographics, it was found that those service SBOs with the highest overall literacy were migrants who had been living in Australia for between 10 and 15 years, had a postgraduate degree and had been operating their business for more than 10 years. In terms of employment and past business experience, high overall literacy was associated with the employment of 11 to 20 employees and service SBOs with no previous business experience. Low overall literacy was common for non-employing service SBOs who had immigrated to Australia between 15 and 20 years ago, and who had been operating a business for less than 10 years.

With these findings recommendations were formulated to try to assist those demographics which appeared to have lower overall literacy in these areas. This insight provides the possibility to focus on those small businesses that need assistance, and thereby enabling them to better understand their business' financial performance, their computer accounting software systems and their tax obligations. With this knowledge, SBOs have the power to better understand how their business is performing, and better plan for their cash flow.

Appendix A

Overview of Survey questions and their relevance to literacy

Questions related to the financial year ending 30 June 2018

Question overview: <i>Questions are answered: True, False or Unsure</i>	Literacy area
Financial Statements	Financial statements
If you wanted to determine the liquidity (or solvency) of your business you would need to use information contained in both the Profit and Loss statement and the Balance Sheet?	
Working capital is calculated by dividing Current Assets by Current Liabilities?	
If you receive full payment for work completed you have made a profit on that job?	
Gross Profit is a better indicator of how your business is performing than Net Profit?	
Financial Statements	Financial statements
Examples of 'Current Assets' include: Cash at Bank, Trade Debtors, Short-term investments, Petty Cash and Stock?	
The Cash Flow Statement can be separated into three areas of cash flow from operations, financing and investment?	
A Cash Flow Forecast or Budget helps businesses to predict cash surpluses or shortages?	
CAS reporting	CAS
I create the following in the business computer accounting software:	
A Balance Sheet at least every 3 months.	
A Profit and Loss Statement at least every 3 months.	
A Statement of Cash Flows at least every 3 months.	
A Cash Budget at least once a year.	
Reports for taxation at least every 3 months.	
Reports for employee obligations eg. Superannuation and PAYG Withholding.	
CAS activities: Which of the following activities do you regularly carry out in your business computer accounting software?	CAS
Automated invoicing .	
Automated invoice reminders.	
Processing invoices on a weekly basis.	
Reconcile transactions monthly	
Superannuation Guarantee	Taxation
The rate of Superannuation Guarantee for 2017 is 9.25%?	

JOURNAL OF AUSTRALIAN TAXATION – (2021) VOL 23(1) – BELLE ISLE AND FREUDENBERG

For employees over the age of 18, Superannuation Guarantee only has to be paid for employees whose income per calendar month is \$450 or more?	
Payment of Superannuation Guarantee is not tax deductible for the employer?	
The amount of superannuation contributions to be paid is based on ordinary time earnings and does not include overtime?	
GST	Taxation
I must hold a tax invoice for all goods or services that I claim GST input tax credits for if they are over the value of \$50 + GST?	
Businesses (excluding non-for-profit organisations) should register for GST once their annual turnover is reaches \$100,000?	
Prices for the sale of goods or services to a consumer in Australia should be displayed or quoted as GST exclusive?	
If your receipt for purchasing fuel at a petrol station is \$80, the GST portion of that purchase is \$8?	
FBT	Taxation
A benefit provided to an employee's spouse will not be subject to Fringe Benefits Tax (FBT)?	
Generally, travel to and from work in an employer's vehicle is not considered as "private use" by the employee?	
The cost of providing staff with a light lunch whilst at work is exempt from FBT?	
The FBT reporting year runs from 1st July to 30th June?	
Income Tax	Taxation
Individuals can claim a 25% discount on capital gains for assets held > 12 months?	
An immediate deduction can be claimed for the purchase of work equipment for \$30,000 when it is used in the business over a number of years?	
Generally, a deduction for mortgage interest can be claimed by a business operating from a home in accordance to the percentage area of the home that is used for business purposes?	
If your business is GST registered then the business' assessable income for income tax will be excluding GST?	
Income Tax	Taxation
You can claim an immediate deduction for work clothing that you purchase from a supplier provided that it is made from durable material?	
For a person on a 30% tax rate the 'after tax cost' of a fully deductible work related item of \$1,000 will be \$700?	
For a person on a 30% tax rate who is entitled to a \$1,000 tax offset will save \$700 in tax?	
Income Tax	Taxation
Paying a PAYG Instalment offsets the final amount of income tax that the business has to pay at the end of the financial year?	
If you are required to pay a PAYG Instalment, you cannot vary the amount raised by the ATO from the assessment of your previous income?	
The company income tax rate of 27.5% is available only for businesses with an aggregated turnover of \$2 million dollars or less in the 2017-2018 year?	
Records should be kept for tax purposes for a minimum of 7 years?	

JOURNAL OF AUSTRALIAN TAXATION – (2021) VOL 23(1) – BELLE ISLE AND FREUDENBERG

PAYG Withholding	Taxation
PAYG Withholding and Payroll Tax are the same tax system?	
If the business employs staff or plans to employ staff it needs to register for PAYG withholding within the first month of paying that employee?	
Employers will never have to collect PAYG Withholding when they engage a contractor?	

TAX IMPLICATIONS ARISING FROM MERGERS AND ACQUISITIONS – AN INVESTIGATION OF AUSTRALIAN FIRMS

AMNA TARIQ SHAH[#] AND KEN DEVOS^{*}

Abstract

The tax and accounting literature indicates that mergers and acquisitions (M&As) have not been predominant in Australia until recently, but there is strong overseas evidence that suggests that this course of action can have significant tax implications. This paper investigates the presence, if any, of potential tax advantages obtained by Australian-based firms through M&A deals. Ninety-seven observations, comprising M&A deals completed between 2005 and 2015, were investigated to statistically support and explain the potential link between M&A decisions and certain corporate tax advantages gained. The findings suggest that when firms make profit-maximising decisions as part of an M&A deal, a potential reduction in tax can transpire from such transactions.

Keywords: merger, acquisition, tax advantage

[#] PhD student in the Department of Business Law and Taxation, Monash University.

^{*} Associate Professor, School of Business, Law and Entrepreneurship, Swinburne University of Technology.

I INTRODUCTION

This study examines the level and impact of tax advantages or gains derived through corporate mergers and acquisitions in Australia. The study investigates the emergence of firms that engage in mergers and acquisitions and the potential tax advantages that may arise from taking this action.

There is a fine distinction between ‘tax avoidance’ and ‘tax evasion’, which is vital to understand in this context. Tax avoidance refers to the mechanism used to reduce tax liabilities while staying within the limits of the law, followed by full disclosure of information to the tax administration.¹ In contrast, tax evasion refers to the non-payment of tax through illegal practices. Tax evasion is, therefore, the deliberate misinterpretation or concealment of the facts and information with the purpose of reducing tax liabilities.²

The other significant approach used by firms to reduce their tax burden is through ‘tax planning’ or ‘tax mitigation’. Tax planning can be described as a legal practice within the spirit and the letter of the law. It encompasses ways to minimise the tax burden without any illegal interference.³ Further, tax mitigation has been defined as when a taxpayer obtains a tax saving or advantage by reducing income or incurring an expenditure.⁴ A further definition of tax mitigation was provided in the case of *Ensign Shipping* which indicated that a taxpayer “suffers a loss or incurs expenditure in fact as well as in appearance.”⁵ Consequently, a distinction is drawn between tax mitigation⁶ and unacceptable tax avoidance.

The terms ‘merger and acquisition’ also needs to be clarified as adopted in this study. Although the terms ‘merger’ and ‘acquisition’ are often used interchangeably, they are fundamentally different.⁷ While mergers imply a unification of two entities into one, acquisitions involve one entity buying the other and absorbing it.⁸ Merger and acquisition is also an umbrella term used for different types of mergers and acquisitions, namely, takeovers,

¹ Fariz Huseynov and Bonnie K Klamm, ‘Tax Avoidance, Tax Management and Corporate Social Responsibility’ (2012) 18(4) *Journal of Corporate Finance* 804.

² Kristina Minnick and Tracy Noga, ‘Do Corporate Governance Characteristics Influence Tax Management?’ (2010) 16(5) *Journal of Corporate Finance* 703. For a detailed examination of the definitions of the concepts of tax evasion, avoidance and planning see Alexander Robert Fullarton, ‘Miners’ motivation - the mass-marketed tax avoidance schemes of the 1990s in the Pilbara region of Western Australia’ (PhD thesis, University of New South Wales, 2013) <<http://unsworks.unsw.edu.au/fapi/datastream/unsworks:11537/SOURCE01?view=true>>.

³ Ada Ferrer-i-Carbonell and Klarita Gërxhani, ‘Tax Evasion and Well-Being: A Study of the Social and Institutional Context in Central and Eastern Europe’ (2016) 45 *European Journal of Political Economy* 149.

⁴ See *CIR v Challenge Corporation Ltd* (1986). An example would be conducting a business by way of a company rather than a sole trader so as to take advantage of a lower corporate tax rate.

⁵ *Ensign Shipping Co Ltd v CIR* (12 TC 1169).

⁶ The hallmark of tax mitigation is that the taxpayer takes advantage of a fiscally attractive option afforded to him under the tax legislation, and genuinely suffers the economic consequences that Parliament intended to be suffered by those taking advantage of that option. (*Sabah Berjaya Sdn Bhd v Ketua Pengarah Jabatan Hasil Dalam Negeri* (1999), at http://phl.hasil.gov.my/pdf/pdfam/Eli_Lili_High_Court.pdf).

⁷ Kyeong Hun Lee, David C Mauer and Emma Qianying Xu, ‘Human Capital Relatedness and Mergers and Acquisitions’ (2018) 129(1) *Journal of Financial Economics* 111.

⁸ Johannes Becker and Clemens Fuest, ‘Source versus Residence Based Taxation with International Mergers and Acquisitions’ (2011) 95(1–2) *Journal of Public Economics* 28.

consolidations, amalgamation, schemes of arrangements, selective buybacks, splits, and scheme implementations, to name a few.

There has been increased debate around the rise of merger and acquisition deals in recent times in Australia. While some studies emphasise the positive role, these deals play in allocating resources in society and favourably impacting market competition, there is also evidence highlighting the negative implications upon social welfare.⁹ One prominent aspect frequently discussed in this context is that of tax rationale. It has been noted that in some cases, corporations and shareholders have had a clear rationale to reduce their taxes and increase personal and institutional financial gains.¹⁰ Much of this literature pertains to Europe, China and the USA. The act of amalgamating firms can largely facilitate a reduction in taxes. For instance, mergers and acquisitions can lead to an increase in tax losses and sharing of depreciation deductions, and multiplication of tax credits.¹¹

Given the definitional issues described above, the purpose of this study is to investigate the presence, if any, of potential tax advantages gained through merger and acquisition deals in Australia. While it is acknowledged that management's mindset and behavioural approach is a significant factor in determining the motivations behind such deals, this analysis is beyond the scope of the current study. Likewise, it is also not the intention of this research to conduct a legal analysis of potential tax avoidance established under *s 177* of the *ITAA 1936*.¹² Rather, the study aims to conduct a preliminary empirical investigation of the potential tax advantages and gains derived through merger and acquisition deals in Australia during 2005-2015.

This study will be of interest to academics and practitioners, given the growing trend in mergers and acquisitions, and the ever-increasing concern of the tax authorities to protect the revenue. The contribution of this paper is two-fold. Firstly, the study analyses Australian-based merger and acquisition firms,¹³ thus broadening the scope of previous research, which largely ignored the aspect of corporate tax advantages gained by merger and acquisition firms based in Australia. Secondly, the research is not limited to high revenue companies. As such, this allows conclusions to be drawn that can be potentially extrapolated to all Australian-based companies, and not only those with high market capitalisation. The scope of this study is, however, limited to Australian-based firms. Consequently, the rationale for conducting the study is based on two main reasons:

⁹ Theo Eicher and Jong Woo Kang, 'Trade, Foreign Direct Investment or Acquisition: Optimal Entry Modes for Multinationals' (2005) 77(1) *Journal of Development Economics* 207; Henrik Horn and Lars Persson, 'The Equilibrium Ownership of an International Oligopoly' (2001) 53(2) *Journal of International Economics* 307; Pehr-Johan Norbäck and Lars Persson, 'Investment Liberalization — Why a Restrictive Cross-Border Merger Policy Can Be Counterproductive' (2007) 72(2) *Journal of International Economics* 366.

¹⁰ Oliver Levine, 'Acquiring Growth' (2017) 126(2) *Journal of Financial Economics* 300.

¹¹ Grant Richardson, Bei Wang and Xinmin Zhang, 'Ownership Structure and Corporate Tax Avoidance: Evidence from Publicly Listed Private Firms in China' (2016) 12(2) *Journal of Contemporary Accounting & Economics* 141.

¹² *Income Tax Assessment Act 1936*.

¹³ The term 'M&A firms', wherever used in the paper, means those firms, which have been involved in M&A deals and form a part of the analysis.

- Firstly, the considerable increase in merger and acquisition deals in the Australian business landscape in recent years (post-2015);¹⁴ and
- Secondly, due to the increasing tax gap¹⁵ in the country¹⁶ the overall the study contributes to the literature by investigating the tax advantages, if any, gained by Australian companies with varied market capitalisation from different sectors involved in merger and acquisition deals, thereby enriching the study of corporate tax practices. As with other recent studies, this study has implications for Australia's budget that is highly dependent upon corporate tax,¹⁷ which happens to be the second-largest source of Federal government revenue.¹⁸

This paper is structured as follows – following this introduction, section two reviews the relevant literature, identifies the existing research gap, and consequently, forms the relevant research hypothesis based on this discussion. Section three describes the methodology adopted in the study and identifies the sample selection, data collection and variables tested. Section four analyses the findings from the correlation results and discusses the relationship, if any, between the variables employed. The final section concludes by summarising the findings and puts forward some suggestions for further research into potential tax policy implications that arise from this investigation.

II LITERATURE REVIEW

A review of accounting literature reveals that mergers and acquisitions have notably increased worldwide, not only in value but also in terms of the amount of agreements over the past two decades,¹⁹ thereby increasing their significance as a form of corporate investment or growth. Further, studies also reveal that the level of corporate tax advantages have crucially increased following the changing trends in businesses and the way firms operate in the contemporary environment.²⁰

¹⁴ 'Australian M&A Activity Is Booming, and the Recent Shift in Global Interest Rates May Help Explain Why', *Business Insider Australia* (29 October 2018) <<https://www.businessinsider.com.au/australian-ma-activity-booming-2018-10>>.

¹⁵ Tax gap is defined as difference between the tax properly payable under the law and the tax actually collected (Huseynov & Klamm 2012, p. 812).

¹⁶ Neil Warren, 'Estimating Tax Gap Is Everything to an Informed Response to the Digital Era' [2018] *SSRN Electronic Journal* <https://www.ssrn.com/abstract=3200838>; Grantley Taylor and Grant Richardson, 'Incentives for Corporate Tax Planning and Reporting: Empirical Evidence from Australia' (2014) 10(1) *Journal of Contemporary Accounting & Economics* 1; Grantley Taylor and Grant Richardson, 'International Corporate Tax Avoidance Practices: Evidence from Australian Firms' (2012) 47(4) *The International Journal of Accounting* 469.

¹⁷ 'Revenue Statistics - OECD Countries: Comparative Tables' (2014) OECD, <<https://stats.oecd.org/index.aspx?DataSetCode=REV>>.

¹⁸ As cited in Rodney Brown, Youngdeok Lim and Chris Evans, 'The impact of full franking credit refundability on corporate tax avoidance' (2020) 17(2) *eJournal of Tax Research* 134.

¹⁹ 'M&A Global Outlook', *JP Morgan* (January 2019) <<https://www.jpmorgan.com/insights/research/2019-ma-global-year-outlook>>.

²⁰ Jeremiah Harris and William O'Brien, 'U.S. Worldwide Taxation and Domestic Mergers and Acquisitions' (2018) 66(2–3) *Journal of Accounting and Economics* 419.

The primary purpose of this study is to investigate the potential presence of tax advantages and savings, if any, gained through corporate mergers and acquisitions in Australia during the period 2005-2015.²¹ It brings to light the critical question of whether or not firms that have been involved in merger and acquisition operations have gained tax advantages or savings as a result of the deals and whether firm size also contributed to the results achieved in conducting the merger and acquisition deal.

There is a plethora of literature covering the impact of merger and acquisition operations on corporate tax responsibilities. However, most studies and research are confined to those conducted in the United States and Europe. Since the research into the presence of mergers and acquisitions has been comparatively recent in Australia, it is noted that there is limited literature available covering this topic in the Australian context, therefore this study aims to address that gap in the research.

As suggested, this issue may also be significant due to the potential revenue leakage and distortion of business performance and reporting caused by merger and acquisition deals. Corporate tax compliance is an important issue that has concerned tax policymakers for a long time. It primarily impacts the tax collection and therefore, the ability of the government to meet its financial and policy targets. As economies become more globalised and the business environment continues to evolve, it is likely that the way tax regimes are designed and administered may also change.²²

A Corporate Tax Advantages

There is evidence that most European and US-based firms are becoming tax aggressive and undertake tax schemes and planning to reduce their tax liabilities.²³ The issue is whether the structuring of merger and acquisition deals has resulted in tax savings or advantages. Unfortunately, few studies have been conducted on this subject within the Australian setting, making it hard to gauge the behaviour of the Australian-based firms regarding merger and acquisition deals. For those studies that have been completed, it is evident that various factors have contributed to reducing tax payments. Those factors include – profitability; the size of the firm; the administration; investors; and so forth.²⁴

A variety of tax planning measures have also resulted in a decrease in tax payments.²⁵ However, one of the various measures found in the literature, among the most widely used,

²¹ Since this study employs a method of comparative analysis, recent observations could not be included due to the lack of sufficient data from comparative periods of study.

²² 'Taxation and electronic commerce: Implementing the Ottawa taxation framework conditions' (2001) OECD, <<https://www.oecd.org/ctp/consumption/Taxation%20and%20eCommerce%202001.pdf>>.

²³ Kenneth J Klassen and Stacie K Laplante, 'Are U.S. Multinational Corporations Becoming More Aggressive Income Shifters?': (2012) 50(5) *Journal of Accounting Research* 1245.

²⁴ See e.g. Sonja Olhofs Rego and Ryan Wilson, 'Equity Risk Incentives and Corporate Tax Aggressiveness' (2012) 50(3) *Journal of Accounting Research* 775; Cai Hongbiao and Rao Pingui, 'Institutional Investors, Tax Enforcement, and Corporate Tax Avoidance' (2015) 1(10) *Journal of Accounting Research* 59.

²⁵ Scott D Dyreng, Michelle Hanlon and Edward L Maydew, 'Long-Run Corporate Tax Avoidance' (2008) 83(1) *The Accounting Review* 61; Michelle Hanlon and Shane Heitzman, 'A Review of Tax Research' (2010) 50(2-3) *Journal of Accounting and Economics* 127.

are effective tax rates.²⁶ Other studies²⁷ have revealed that managers prefer using effective tax rates for decision-making processes.

Effective tax rates are average tax rates paid by corporations after other tax concessions have been taken into account. It is an especially useful metric for benchmarking two or more entities to understand the financial advantages or disadvantages that may have occurred due to several factors.²⁸

Ciobanu and Dobre²⁹ investigated the potential tax-related reasons that investors seek when entering into merger and acquisition transactions. They collected data from 46 developing and developed countries and found that effective tax rates play a decisive role in such deals. Instead of comparing companies, this study draws a comparison between periods (pre- and post-merger and acquisition) within the same companies. This will assist in determining whether any tax advantages or gains were achieved after the merger and acquisition decision. This study also incorporates companies of different sizes to examine how the firm's size may have contributed to any tax advantages derived after completing merger and acquisition deals.

Prior international literature regarding the various factors that impact corporate tax following mergers and acquisitions is extensive. These factors include the firm's size,³⁰ the costs³¹, and the effects of top management's strategy.³² Erickson³³ revealed that an increase in shareholder value or dividend payments could also affect corporate tax payments. Firms often engage in tax planning to increase dividends and this can also serve as a simple measure in determining the amount of corporate tax paid.

²⁶ Hanlon and Heitzman, (n 25).

²⁷ John R Graham, Michelle Hanlon, Terry Shevlin and Nemit Shroff, 'Incentives for Tax Planning and Avoidance: Evidence from the Field' (2014) 89(3) *The Accounting Review* 991.

²⁸ Alice Bonaime, Huseyin Gulen and Mihai Ion, 'Does Policy Uncertainty Affect Mergers and Acquisitions?' (2018) 129(3) *Journal of Financial Economics* 531.

²⁹ Radu Ciobanu and Elena Dobre, 'Are mergers and acquisitions influenced by taxation?' (2015) 3 *Journal of Financial and Actuarial Mathematics and Management* 57.

³⁰ For example see Lillian Mills, Merle Erickson and Edward L Maydew, 'Investments in Tax Planning' (1998) 20(1) *Journal of the American Taxation Association* 1; Sonja Olhott Rego, 'Tax-Avoidance Activities of U.S. Multinational Corporations' (2003) 20(4) *Contemporary Accounting Research* 805.

³¹ Rego (n 30) 805; Yudha Aryo Sudibyo and Sun Jianfu, 'Political Connections, State Owned Enterprises and Tax Avoidance: Evidence from Indonesia' (2016) 13(3) *Corporate Ownership and Control* 279.

³² Scott D Dyreng, Michelle Hanlon and Edward L Maydew, 'The Effects of Executives on Corporate Tax Avoidance' (2010) 85(4) *The Accounting Review* 1163.

³³ Merle Erickson, 'The effect of taxes of the structure of corporate acquisitions' (1998) 36(2) *Journal of Accounting Research* 279.

B Tax Considerations in Merger and Acquisition Deals

A significant part of academic research is based on the notion that tax is one of the determinants of mergers and acquisitions at the corporate level and provides various concessions that may drive merger and acquisition deals. These may include; unused tax credits and tax losses³⁴ managing the asset base prior to the deal so that higher deductions are possible in the future,³⁵ the form of organisations involved in the deal,³⁶ capital structure adjustments to allow for tax-deductible interests,³⁷ and the tax advantages discussed earlier derived from firms paying dividends.³⁸

Gul, Khedmati and Shams³⁹ found that those firms, which announce mergers or acquisitions and indulge in huge value acquisitions⁴⁰ demonstrate a greater desire to reduce tax. Gul et al.'s⁴¹ study specifically focused on US-based firms. However, the results correspond with those undertaken in Europe, where a similar relationship had been examined and proven between mergers and acquisitions and the level of corporate tax paid.⁴² Gul et al.⁴³ explain their findings on the basis of managerial opportunistic and efficiency motives by considering the characteristics of CEOs. Their research revealed how managerial acquisitiveness affects the desire to pay tax in the case of acquisitions, where managers base their decisions on self-interest and are opportunistically motivated.

Agency theory insists that the main focus of interest of the owners is the accumulation of wealth and higher financial gains, thus paying less tax is one way of doing that.⁴⁴ Under the proposition of this theory, the tax paid is correlated with the kind of ownership the firms have.⁴⁵ Agency theory is a management and economic theory which explains relationships and self-interest in organisations.⁴⁶ The theory highlights the relationship between the

³⁴ Michael Cooper and Matthew Knittel, 'Partial Loss Refundability: How Are Corporate Tax Losses Used?' (2006) 59(3) *National Tax Journal* 651.

³⁵ David T Brown and Michael D Ryngaert, 'The Mode of Acquisition in Takeovers: Taxes and Asymmetric Information' (1991) 46(2) *The Journal of Finance* 653.

³⁶ Merle Erickson and Shiing-wu Wang, 'Tax Benefits as a Source of Merger Premiums In Acquisitions of Private Corporations' (2007) 82(2) *The Accounting Review* 359.

³⁷ Alan Auerbach and David Reishus, *The Impact of Taxation on Mergers and Acquisitions* (NBER Chapters, National Bureau of Economic Research, Inc, 1987) 69
<<https://econpapers.repec.org/bookchap/nbrnberch/5822.htm>>.

³⁸ Harold Bierman, 'A Neglected Tax Incentive for Mergers' (1985) 14(2) *Financial Management* 29; Willard T Carleton, David K Guilkey, Robert S Harris and John F Stewart, 'An Empirical Analysis of the Role of the Medium of Exchange in Mergers' (1983) 38(3) *The Journal of Finance* 813.

³⁹ Ferdinand A Gul, Mehdi Khedmati and Syed MM Shams, 'Managerial Acquisitiveness and Corporate Tax Avoidance' (2020) 64 *Pacific-Basin Finance Journal* 101056.

⁴⁰ Note that the value shifting rules described in Divisions 725, 723 and 727 of the ITTAA 1997 are outside the scope of this study.

⁴¹ Gul et al., (n 39).

⁴² Daniel Duarte and Victor Barros, 'Corporate Tax Avoidance and Profitability Followed by Mergers and Acquisitions' (2018) 15(2-1) *Corporate Ownership and Control* 148.

⁴³ Gul et al., (n 39).

⁴⁴ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3(4) *Journal of Financial Economics* 305.

⁴⁵ Mark S Beasley, 'An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud' (1996) 71(4) *The Accounting Review* 443.

⁴⁶ Jensen and Meckling, (n 44).

various agents in a business; for instance, the role of management in satisfying the shareholders and, consequently, taking actions that bring economic benefits for the firm and the management itself.⁴⁷ The theory is also explained in terms of risk-sharing in businesses.⁴⁸

The study by Gul et al.⁴⁹ also reveals that the said association is weaker in cases where acquiring firms receive higher quality audits, the management receives high equity-based compensation, and when the deals are regarded as a means to create value. Merger and acquisition deals are primarily signed on the basis of ‘ownership advantages’.⁵⁰

Ownership advantages occur when a change in firm ownership results in some form of value creation, such as an increase in cash flows or a decrease in risk.⁵¹ The cash flow is often improved by adopting tax reduction strategies such as increasing tax shields due to acquiring accumulated losses that soak up the income, which is subject to tax.

The literature also highlights increased profitability by the acquiring firm.⁵² Brailsford and Knights⁵³ explain that merger and acquisitions occur on the basis of synergies – (where two companies combine as a result of a merger and acquisition deal), their worth multiplies compared to their previous independent values. Takeovers can also cause synergetic advantages by reducing operational costs and consolidation, resulting in an increased market share and revenue growth.⁵⁴ While mergers and acquisitions generate operational and financial synergies, tax synergies may also largely impact the operations.⁵⁵

Multiple datasets were collected by Auerbach and Reishus⁵⁶ pertaining to the years 1968-1983. On the contrary, they found that tax advantages were not one of the most prominent reasons behind the merger and acquisition transactions. They could only find 20% of the mergers having obvious potential tax advantages or reductions, such as the transfer of losses or credits. The total value of taxes they estimated was only 10% of the target’s market value, a percentage way below the acquisition premiums. However, it is important to note that their merger sample ended before financing acquisitions by debt became an important feature of takeovers during the mid-1980s.

⁴⁷ Mark D Schroeder, Christina Greer and Ulrike Gaul, ‘How to Make Stripes: Deciphering the Transition from Non-Periodic to Periodic Patterns in *Drosophila* Segmentation’ (2011) 138(14) *Development* 3067.

⁴⁸ Catherine M Daily, Dan R Dalton and Albert A Cannella, ‘Corporate Governance: Decades of Dialogue and Data’ (2003) 28(3) *The Academy of Management Review* 371.

⁴⁹ Gul et al., (n 39).

⁵⁰ Klassen and Laplante, (n 23) 1245.

⁵¹ Ibid.

⁵² Paul A Pautler, ‘Evidence on Mergers and Acquisitions’ (2003) 48 *Antitrust Bulletin* 119.

⁵³ Timothy J Brailsford and Stephen Knights, *The Financial and Non-Financial Effects of Corporate Takeovers* (1998), Parkville, Melbourne Institute of Applied Economics and Social Research, The University of Melbourne.

⁵⁴ Puspita Rani, Elvia R Shauki, Darminto and Ruslan Prijadi, ‘Motives, Governance, and Long-Term Performance of Mergers and Acquisitions in Asia’, ed Collins G Ntim (2020) 7(1) *Cogent Business & Management* 1791445.

⁵⁵ Marina Martynova and Luc Renneboog, ‘A Century of Corporate Takeovers: What Have We Learned and Where Do We Stand?’ (2008) 32(10) *Journal of Banking & Finance* 2148.

⁵⁶ Auerbach and Reishus, (n 37).

Different results were produced in studies that consider the high debt load in observing the tax effects. Kaplan and Strömberg⁵⁷ found that in cases where the returns to public shareholders were high, they were related to tax savings from a new capital structure. The estimated tax savings formed the basis of explaining most of the premium. In this regard, the findings of Schipper and Smith⁵⁸ are virtually identical. They also found a significant relationship between tax advantages and the payment of dividends to shareholders. Additionally, empirical evidence reveals a positive correlation between high market capitalisation firms engaging in merger and acquisition deals and an increase in dividends.⁵⁹

The literature reveals that the deregulation in economic conditions may lead firms to consider merger and acquisition deals for financial gains. The impact of tax motives cannot be ignored here as it plays a vital role in financial synergy. Gilson, Scholes and Wolfson⁶⁰ explain a relationship between merger and acquisition activities and tax advantages based on a certain percentage of mergers and acquisitions that they investigated. On the other hand, other studies reveal that potential tax advantages or reductions stem from net operating loss carry-forwards and shared tax credits.⁶¹ Further studies have revealed that positive anomalous returns during the pre-bid period are consistent with the premise that enterprises that do exceptionally well and have excess capital to invest, view takeovers as a lucrative way to invest those funds.⁶²

Economic Deterrence Theory sheds light on the importance of economic incentives in decision making. A number of other economic-based theories also propose a similar phenomenon. Milliron and Toy⁶³ explain that taxpayers use cost-benefit analysis for compliance decisions. According to economic deterrence theory, firms are utility maximisers influenced by economic benefits such as tax advantages. Therefore, when firms find that their tax advantages can increase as a result of a merger and acquisition deal, they may be motivated to undertake such transactions. On the other hand, regret theory suggests that ‘utility associated with any consequence of choice under uncertainty is not simply a function of the consequence itself, but may depend upon the consequence(s) of the other unchosen action(s) under the same state of the world.’⁶⁴ Hence, a firm’s decision regarding a merger and acquisition deal may not only be based on the expectation of increased tax advantages or

⁵⁷ Steven N Kaplan and Per Strömberg, ‘Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts’ (2003) 70(2) *Review of Economic Studies* 281.

⁵⁸ Katharine Schipper and Abbie Smith, Corporate income tax effects of management buyouts, (1988) Working paper (University of Chicago, Chicago, IL).

⁵⁹ Sydney Finkelstein and Cary L Cooper (eds), *Advances in Mergers and Acquisitions: Volume 17* (Emerald Publishing Limited, 2018).

⁶⁰ Ronald J. Gilson, Myron S. Scholes and Mark A. Wolfson, Taxation and the Dynamics of Corporate Control: The Uncertain Case for Tax Motivated Acquisitions, in, Knights, Raiders, and Targets, The Impact of the Hostile Takeover. John C. Coffee, Jr., Louis Lowenstein, Susan Rose-Ackerman, editors. New York, NY: Oxford University Press, 1988.

⁶¹ See Carla Hayn, ‘Tax Attributes as Determinants of Shareholder Gains in Corporate Acquisitions’ (1989) 23(1) *Journal of Financial Economics* 121; Eric Ohrn and Nathan Seegert, ‘The Impact of Investor-Level Taxation on Mergers and Acquisitions’ (2019) 177 *Journal of Public Economics* 104038.

⁶² Raymond da Silva Rosa and Terry Walter, ‘Australian Mergers and Acquisitions Since the 1980s: What Do We Know and What Remains to Be Done?’ (2004) 29(1) *Australian Journal of Management* i.

⁶³ Valerie C Milliron and Daniel R Toy, ‘Tax compliance: An investigation of key features’ (1988) 9 *The Journal of the American Tax Association* 84.

⁶⁴ Graham Loomes, ‘Preference Reversal: Explanations, Evidence and Implications’ (1990) 23(1) *Annals of Operations Research* 65.

a reduction in taxes but also to avoid a situation in which they may face an increased tax burden.

Rational Choice Theory proposes that taxpayers make analytical calculations to reach logical outcomes and achieve goals in line with their objectives. Studies reveal that in most cases, the goals are associated with maximising self-interest.⁶⁵ The use of rational choice theory provides taxpayers benefits and satisfaction in being able to increase their wealth and reduce taxes. This rationale aligns with the economic deterrence theory, which assumes that taxpayers are ‘profit seeking’.⁶⁶ Consequently, taxpayers apply economic rationale and choose the course of action that benefits them.

The determinants of corporate tax inversions⁶⁷ were studied by Desai and Hines.⁶⁸ In their study, they found that large and more leveraged corporations were more inclined to invert. However, they failed to find out if the leverage increases after mergers and acquisitions. It should be noted that inversions are an American structuring device that may not apply in the typical Australian setting. A further study conducted by Ghosh and Jain⁶⁹ provided solid empirical evidence that showed a high level of financial leverage following merger and acquisition deals. In contrast, Graham and Tucker⁷⁰ concluded that firms involved in tax shields have lower debt ratios and higher market capitalisation.

In most cases, the focus on increasing profitability results in opposing tax behaviours.⁷¹ Firms with higher profits can better disguise their understated income without being scrutinised by tax authorities. On the other hand, firms with decreased profits are pressured to indulge in tax minimisation strategies to obtain approved standards and reach targets by increasing pre-tax earnings or decreasing tax expenses.⁷² Other research has indicated that the main incentive for reducing taxes is simply to increase profits.⁷³

Another recent study employed a sample of 243 completed merger and acquisition deals in South Korea to assist in understanding the motivations behind those deals.⁷⁴ It was found

⁶⁵ Sarah Lichtenstein and Paul Slovic, ‘Reversals of Preference between Bids and Choices in Gambling Decisions.’ (1971) 89(1) *Journal of Experimental Psychology* 46.

⁶⁶ Ojochogwu Winnie Atawodi and Stephen Aanu Ojeka, ‘Factors That Affect Tax Compliance among Small and Medium Enterprises (SMEs) in North Central Nigeria’ (2012) 7(12) *International Journal of Business and Management*, 87.

⁶⁷ In Mihir A Desai and James R Hines, ‘Expectations and Expatriations: Tracing the Causes and Consequences of Corporate Inversions’ (2002) 55(3) *National Tax Journal* 409 ‘Tax inversions refer to restructuring of corporations by replacing the existing parent by a foreign parent, to gain tax advantages’.

⁶⁸ (Desai and Hines n 67).

⁶⁹ Alope Ghosh and Prem C Jain, ‘Financial Leverage Changes Associated with Corporate Mergers’ (2000) 6(4) *Journal of Corporate Finance* 377.

⁷⁰ John R Graham and Alan L Tucker, ‘Tax Shelters and Corporate Debt Policy’ (2006) 81(3) *Journal of Financial Economics* 563.

⁷¹ Eric M Rice, *The Corporate Tax Gap: Evidence on Tax Compliance by Small Corporations* (1990) University of Michigan Press.

⁷² Shumi Akhtar, Farida Akhtar, Kose John and Su-Wen Wong, ‘Multinationals’ Tax Evasion: A Financial and Governance Perspective’ (2019) 57 *Journal of Corporate Finance* 35.

⁷³ Amy Dunbar, Danielle M Higgins, John D Phillips and George A Plesko, ‘What do measures of tax aggressiveness measure?’ (2010) 103 *Proceedings of the National Tax Association Annual Conference on Taxation* 18.

⁷⁴ Joohyun Lim, ‘Tax Avoidance and M&A’ (2020) 5(3) *Research in Economics and Management* 142.

that merger and acquisition deals are regarded as a profit-maximising opportunity and were common in high market capitalisation firms with the potential to invest in such deals.

Belz et al.⁷⁵ studied the comparison and change in a target's effective tax rate prior to the deal and after the deal and found nearly a 3% reduction in payment of taxes after the deal. However, the analysis was conducted on European firms only and focused on higher market capitalisation firms. This study is differentiated in that it considers firms with high, medium, and low market capitalisation to investigate how market size may impact tax payments in Australia.

Consequently, the current literature indicates that taxation may be one of the reasons that influence management to engage in merger and acquisition deals, as some may view these deals as a means for obtaining tax advantages. Other possible tax advantages that a firm can obtain through merger and acquisition operations may include the elimination of inheritance taxes achieved by selling off the firm and tax-deductible interest payments on loans.⁷⁶ Recapitalisation also produces other tax advantages. In cases where the target firm has operating tax losses, the losses are often transferred to the acquirer to reduce tax liabilities.⁷⁷ Consequently, when the taxable income of the acquirer is offset, it allows them to reduce the effective amount of tax payable.⁷⁸

C Cross-Border Deals and International Tax Advantages

A number of studies indicate that in some cases, firms also relocate their headquarters to reduce their tax burden.⁷⁹ Alba, Park and Wang⁸⁰ explain that a merger and acquisition involving at least two firms from different countries qualify as a cross-border merger and acquisition. Shimizu et al.⁸¹ further elaborate that a cross-border acquisition happens

⁷⁵ Thomas Belz, Leslie Robinson, Martin Ruf and Christian Steffens, 'Tax avoidance as a driver of mergers and acquisitions' (2013) *SSRN Electronic Journal* <<http://www.ssrn.com/abstract=2371706>>.

⁷⁶ Fred M McDougall and David Keith Round (eds), *The Effects of Mergers & Takeovers in Australia: A Research Study*, Information Australia for the Australian Institute of Management – Victoria (1986).

⁷⁷ Auerbach and Reishus, (n 37) 69 <<https://econpapers.repec.org/bookchap/nbrnberch/5822.htm>>; Ohrn and Seegert, (n 61) 104038.

⁷⁸ Ohrn, and Seegert, (n 61).

⁷⁹ See corporate tax inversions discussed previously (e.g. Johannes Voget, 'Relocation of Headquarters and International Taxation' (2011) 95(9–10) *Journal of Public Economics* 1067; Joseph A Clougherty, Jin Uk Kim, Bradley R Skousen and Florian Szücs, 'The Foundations of International Business: Cross-Border Investment Activity and the Balance between Market-Power and Efficiency Effects: The Foundations of International Business' (2017) 54(3) *Journal of Management Studies* 340; Mike Geppert, Christoph Dörrenbächer, Ian Taplin, Jens Gammelgaard, 'Managerial Risk-Taking in International Acquisitions in the Brewery Industry: Institutional and Ownership Influences Compared: Managerial Risk-Taking in Brewery Industry' (2013) 24(3) *British Journal of Management* 316.

⁸⁰ Joseph D Alba, Donghyun Park and Peiming Wang, 'Corporate Governance and Merger and Acquisition (M&A) FDI: Firm-Level Evidence from Japanese FDI into the US' (2009) 19(1) *Journal of Multinational Financial Management* 1.

⁸¹ Katsuhiko Shimizu, Michael Hitt, Deepa Vaidyanath and Vincenzo Pisano, 'Theoretical Foundations of Cross-Border Mergers and Acquisitions: A Review of Current Research and Recommendations for the Future' (2004) 10(3) *Journal of International Management* 307.

between an ‘acquired’ firm and a ‘target’ firm with headquarters located in different countries.

There are mainly two types of transactions in cross-border deals, namely, inward and outward.⁸² Hitt and Pisano⁸³ explain that when a foreign firm acquires a local firm, a host country receives direct investment and this kind of cross-border acquisition is categorised as inward acquisition. They further explain that a cross-border outward acquisition is where a local company acquires a firm based in a foreign country resulting in investment outflow. Studies emphasise that cross-border merger and acquisition deals are costlier than domestic deals due to the higher cost of legal fees and other related expenses.⁸⁴

Voget⁸⁵ examined 140 multinational corporations and found that about 6% of firms were involved in cross-border mobility each year. He concluded that additional tax due with respect to repatriation of foreign profits and dividend repatriation tax in the home country was positively correlated to headquarter relocation. Further, he concluded that taxation of shareholders and personal income taxes also play a role in a firm’s decision to relocate its headquarters.⁸⁶ Contrary to this, Blonigen and Davies⁸⁷ investigated US-based firms and emphasised that bilateral tax treaties, which reduce double taxation, have no significant effect on Foreign direct investment (FDI) activity. Another study, by Becker and Fuest,⁸⁸ asserted that obtaining tax advantages was one of the reasons behind the cross-border acquisition. The study proved that tax advantages or reductions are likely to be gained when an acquiring firm in a high corporate tax country establishes an affiliate in a low tax country. This could also have implications for merger and acquisition deals in Australia.

Huizinga and Voget⁸⁹ asserted that amendments in tax laws and changes in tariffs also significantly influence a firm’s decision regarding overseas acquisitions. Similarly, Becker and Fuest⁹⁰ found that an increase in local corporate tax rates could increase the likelihood of domestic firms investing in countries with lower corporate tax rates. Becker and Fuest⁹¹ further noted that double taxation results in the form of non-resident dividend withholding taxes, and the parent country’s corporate income tax on repatriated dividends, meant that countries that levy higher overseas double taxation are less attractive to the parent firms of newly established multinational enterprises.

⁸² Michael A Hitt and Vincenzo Pisano, ‘The Cross-Border Merger and Acquisition Strategy: A Research Perspective’ (2003) 1(2) *Management Research: Journal of the Iberoamerican Academy of Management* 133.

⁸³ Ibid.

⁸⁴ For example Arturo Bris and Christos Cabolis, ‘The Value of Investor Protection: Firm Evidence from Cross-Border Mergers’ (2008) 21(2) *Review of Financial Studies* 605; Yenn-Ru Chen, Yu-Lin Huang and Chun-Nan Chen, ‘Financing Constraints, Ownership Control, and Cross-Border M&As: Evidence from Nine East Asian Economies’ (2009) 17(6) *Corporate Governance: An International Review* 665; Dutta, Malhotra, & Zhu, 2016.

⁸⁵ Johannes Voget, ‘Relocation of Headquarters and International Taxation’ (2011) 95(9–10) *Journal of Public Economics* 1067.

⁸⁶ Ibid.

⁸⁷ Bruce A Blonigen and Ronald B Davies, ‘The Effects of Bilateral Tax Treaties on U.S. FDI Activity’ (2004) 11(5) *International Tax and Public Finance* 601.

⁸⁸ Johannes Becker and Clemens Fuest, ‘Taxing foreign profits with international mergers and acquisitions’ (2010) 51(1) *International Economic Review* 171.

⁸⁹ Harry P Huizinga and Johannes Voget, ‘International Taxation and the Direction and Volume of Cross-Border M&As’ (2009) 64(3) *The Journal of Finance* 1217.

⁹⁰ Becker and Fuest, (n 8) 28.

⁹¹ Ibid.

Further studies reveal that macro-economic conditions also play a significant role in the firm's decision to adopt favourable tax strategies.⁹² In this regard, it is important to examine corporate tax behaviour during a crisis. It is believed that Australia's performance during the Global Financial Crisis of 2007-08 was better than the US and other developed economies, including the European Union.⁹³

However, Australia experienced the effects of the budget deficit and a reduction in interest rates.⁹⁴ Consequently, there was a sharp decline in the stock market and some large corporations, such as Babcock and Brown, Timber corp., and Great Southern witnessed bankruptcy.⁹⁵ As a result of the crisis, many Australian-based firms also became insolvent.

As experienced during the financial crises, macro-economic conditions resulted in businesses struggling to maintain their cash flows and solvency position.⁹⁶ As a result, management considered possible tax minimisation measures to maintain cash flow. Edwards, Schwab and Shevlin⁹⁷ explain that during financial crises, the managerial decisions regarding merger and acquisition deals are triggered by their instinct to survive. They further explain that survival is often based on minimising taxes to maintain cash flow and solvency.

D The Influence of Managerial Power upon Merger and Acquisition Deals

Prior studies further confirm that one of the significant ways firms benefit from tax minimisation is through increased tax savings, leading to an increase in cash flow.⁹⁸ In addition, several studies also reveal that senior management involved in the decision-making process of firms may influence the level of tax minimisation in their firms. As companies use performance indicators to determine incentives for executives, management is inclined to reduce taxes where possible with the motive of improving the company's performance.⁹⁹

⁹² Anthony Klan 2013, 'Company failures hit record high', *The Australian*, <<http://www.theaustralian.com.au/business/companies/company-failures-hit-record-high/story-fn91v9q3-1226582255301>>.

⁹³ Ibid.

⁹⁴ Robert W Kolb (ed.), *Lessons from the Financial Crisis: Causes, Consequences, and Our Economic Future*. 1st edn, John Wiley & Sons.

⁹⁵ Anthony Klan 2013 (n 92).

⁹⁶ John Brodonlo 2009, 'Collecting taxes during an economic crisis: challenges and policy options', IMF Staff Position Note, SPN/09/17 (14 July 2009) <<https://www.imf.org/external/pubs/ft/spn/2009/spn0917.pdf>>.

⁹⁷ Alexander S Edwards, Casey Schwab and Terry J Shevlin, 'Financial Constraints and the Incentive for Tax Planning' [2012] *SSRN Electronic Journal* <<http://www.ssrn.com/abstract=2163766>>.

⁹⁸ For example see Shuping Chen, Xia Chen, Qiang Cheng and Terry Shevlin, 'Are Family Firms More Tax Aggressive than Non-Family Firms?' (2010) 95(1) *Journal of Financial Economics* 41; John R Graham, Michelle Hanlon, Terry Shevlin and Nemit Shroff, 'Incentives for Tax Planning and Avoidance: Evidence from the Field' (2014) 89(3) *The Accounting Review* 991; Amilcar Armando Menichini, 'On the Value and Determinants of the Interest Tax Shields' [2014] *SSRN Electronic Journal* <<http://www.ssrn.com/abstract=2499835>>; Ling Cen, Edward L Maydew, Liandong Zhang and Luo Zuo, 'Customer-Supplier Relationships and Corporate Tax Avoidance' (2017) 123(2) *Journal of Financial Economics* 377.

⁹⁹ John D Phillips, 'Corporate Tax-Planning Effectiveness: The Role of Compensation-Based Incentives' (2003) 78(3) *The Accounting Review* 847.

Consequently, when executives receive fewer monetary gains, they may undertake transactions driven by self-interest, such as signing merger and acquisition deals that can then result in tax advantages for the corporation and, thereby, increase monetary benefits for themselves.¹⁰⁰

Brailsford and Knights¹⁰¹ found that merger and acquisition deals offer managers incentives to acquire firms to seek control of target firms, which, in most cases, are low market capitalisation firms. Jensen and Meckling¹⁰² explain that takeovers work as mechanisms to control externalities that restrict managerial actions from neglecting the aim of maximising shareholder wealth. Various other studies also reveal that increasing shareholder value often influences management to consider minimising taxes.¹⁰³

The above findings support the Upper Echelon Theory, which indicates that firms reflect the mindset of their top management, and the corporate strategies, thereof, are deeply influenced by managers and their personal attributes.¹⁰⁴ Hence, according to the central premise of this theory, if the senior management views all opportunities, alternatives, and threats through their own personal lenses, they are likely to accept deals or offers that benefit them in more than one way.¹⁰⁵ As such, merger and acquisition deals may be signed to benefit firms and shareholders, which may involve gaining deliberate tax advantages.¹⁰⁶

Upper Echelon Theory explains that every corporate strategy reflects the values, personalities and motives of management.¹⁰⁷ This can be explained through a simple example such as, while some firms may indulge in merger and acquisition deals once every few years, others may do it more frequently. The reoccurrence of such deals for management may explain their behaviour or motives of potentially growing their financial worth. However, for the purpose of this study, the aspect of managerial behaviour and mindset is not directly examined. Managerial psychology sheds light on the efficacy of individual managers' psyche through studying their behaviour patterns. Although it is acknowledged as an essential aspect of decision-making, it is outside the scope of this present study.

When merger and acquisition decisions are implemented by management, it can be expected that managers are acting in the best interest of the shareholder to maximise shareholder wealth. Similarly, the firm's strategy would be to reduce corporate tax obligations that then benefit the shareholder.¹⁰⁸ Arguably, managers who implement merger and acquisition deals

¹⁰⁰ Fabio B Gaertner, 'CEO After-Tax Compensation Incentives and Corporate Tax Avoidance' (2014) 31(4) *Contemporary Accounting Research* 1077.

¹⁰¹ Brailsford and Knights, (n 53).

¹⁰² Michael C Jensen and William H Meckling, 'The market for corporate control: The scientific evidence' (1983) 11(4) *Journal of Financial Economics* 5.

¹⁰³ For example see Shuping Chen, Xia Chen, Qiang Cheng and Terry Shevlin, 'Are Family Firms More Tax Aggressive than Non-Family Firms?' (2010) 95(1) *Journal of Financial Economics* 41; Fabio B Gaertner, (n 101) 1077.

¹⁰⁴ Donald C Hambrick and Phyllis A Mason, 'Upper Echelons: The Organization as a Reflection of Its Top Managers' (1984) 9(2) *The Academy of Management Review* 193.

¹⁰⁵ *Ibid.*

¹⁰⁶ Andrew Bartlett and David Preston, 'Can Ethical Behaviour Really Exist in Business?' (2000) 23(2) *Journal of Business Ethics* 199.

¹⁰⁷ Hambrick and Mason, (n 104) 193.

¹⁰⁸ Phillips, (n 100) 847; John R Robinson, Stephanie A Sikes and Connie D Weaver, 'Performance Measurement of Corporate Tax Departments' (2010) 85(3) *The Accounting Review* 1035.

for value-creation for shareholders may also engage in tax minimisation and accumulate large cash balances and resources to create value for the firm.¹⁰⁹ This incentive to increase their corporate wealth may be directly affiliated with managerial opportunistic tax minimisation strategies, which aim to extract revenue¹¹⁰ and again demonstrates the influence of managerial power upon merger and acquisition deals.

Overall, based on the review of the literature, there is strong evidence that suggests that potential tax advantages and reductions can be derived through merger and acquisition deals. Consequently, this study tests the following hypothesis:

H1: Australian acquirer firms with higher market capitalisation gain significant tax advantages through merger and acquisition deals

III RESEARCH METHOD

A quantitative research approach was adopted for this study which drew a comparison between figures from pre- and post-merger and acquisition periods employing secondary source data. This study then applied appropriate correlation statistical testing techniques to the data. The statistical tests examined multiple variables to indicate their relationship if any. Specifically, the research aim was to find whether there was an association between potential tax advantages, as identified in a number of ways and merger and acquisition deals.

It is important to acknowledge that this study does not evaluate any causation principle but rather the correlation evident between variables at varied points in time (before and after the merger and acquisition deals). The study takes a deductive approach towards the research. Employing secondary source data from authentic sources made this approach the most suitable for this particular study.¹¹¹ Employing secondary data also provided cost-efficiencies and time-saving attributes.¹¹²

A Sample Selection and Data Collection

The initial sample comprised all Australian merger and acquisition deals completed between 2000 and 2019. Australian mergers and acquisitions, in this study, are mainly defined as the deals in which both the acquirer and the target firms are Australian-based. The study sample was collected from the database of Morning Star.¹¹³ However, the final sample was

¹⁰⁹ Mihir A Desai, Alexander Dyck and Luigi Zingales, ‘Theft and Taxes’ (2007) 84(3) *Journal of Financial Economics* 591; Bartlett and Preston, (n 106) 199.

¹¹⁰ Ohrn and Seegert, (n 61) 104038.

¹¹¹ Morning Star and Thomson Reuters.

¹¹² Jane Frecknall-Hughes, ‘Research Methods in Taxation History’ (2016) 3(1) *Review of Behavioral Economics* 5.

¹¹³ Morning Star is an Australian-based database providing financial data of all Australian firms by using independent research, ratings and tools (Morning Star 2019).

narrowed down to include only those deals which were completed between 2005 and 2015. This was done to increase comparability between periods. For the sake of comparison, the study evaluates five years of data prior to the deal and five years following the deal. Hence, although the deals pertain to years between 2005 and 2015, the financial data pertains to years between 2000 and 2019 to cover five years, pre- and post-merger and acquisition deals.

Although, there has been a considerable increase in merger and acquisition deals during the past four to five years in Australia, this study was deliberately based on a comparison of observations between 2005-2015. As such, the findings relate to this period only.¹¹⁴

Although the initial sample identified 179 deals, the final sample used in the study consisted of 97 observations which included firms of various sizes.

Financial data for the identified deals were collected from the databases of Morning Star and Thomson Reuters Australia,¹¹⁵ and the financial statements of the acquirer and target firms between the period 2000 and 2019, available on their respective websites. After the data collection, the two databases (list of merger and acquisition deals and the financial data pertaining to the firms) were merged to associate each deal with its financial data. For the merger and acquisition process, only one deal of each acquirer and target firm was included in the sample. The initial sample was further narrowed down due to the restricted disclosure of financial data. The only firms kept in the analysis were those labelled as active for the entire observation period. All ownership percentages and forms of acquisitions were considered to cover a wide range of mergers and acquisitions, including; mergers, takeovers, acquisitions, schemes of arrangements, scheme implementations and consolidations.

¹¹⁴ David Heathcote, 'Australia's Evolving Deals Landscape: 2018 Survey Report - KPMG Australia', *KPMG* (2 August 2021) <<https://home.kpmg/au/en/home/insights/2018/08/australia-evolving-deals-landscape-survey-report.html>>.

¹¹⁵ Thomson Reuters Australia is a database providing financial data for businesses and professionals (Thomson Reuters Australia 2019).

B Variables Investigated

The tax literature introduces a variety of measures that depict corporate tax benefits and advantages. These measures indicate the amount and type of tax advantage generated by firms.¹¹⁶ The variables are listed and defined below in Table 1:

Table 1 Definition of variables

Variables	Represented by	Definition
Book Effective Tax Rate	- BETR ¹¹⁷	Tax expense divided by earnings before taxes (pre-tax accounting income)
Cash Effective Tax Rate	- CETR Cash tax paid divided by earnings before taxes	Cash tax paid divided by earnings before taxes (pre-tax accounting income)
Tax Shields	- TXSH	A means to minimise a firm’s taxable income and, therefore, tax liability
Number of Deals	- NoD	The number of deals during the period of observation
Value of Deals	- DVALUE	The total dollar value of deals
Global Financial Crisis	- GFC	The period in which the deal was completed; before or after the GFC
Dividends	- DIV	Payments to shareholders (as a distribution out of profits)
Market capitalisation	Mkt. Cap* -	Total dollar market value of a firm’s outstanding shares

*Dependent variable

The existing literature refers to a number of measures as gauging tax advantages. However, effective tax rates are considered the most useful as they are widely available and easily

¹¹⁶ Clive Lennox, Petro Lisowsky and Jeffrey Pittman, ‘Tax Aggressiveness and Accounting Fraud’ (2013) 51(4) *Journal of Accounting Research* 739.

¹¹⁷ To calculate the BETR for each firm in each year of study, values of ‘tax expense’ and ‘earnings before taxes’ were collected from the databases and saved in excel, the two values were then divided to obtain values for book ETR. Further, to evaluate the changes in book ETR over the years, the values were coded as ‘1’ and ‘0’ before running through SPSS; ‘0’ representing a decrease in book ETR after the deal, and ‘1’ representing an increase in the book ETR after the deal.

comparable.¹¹⁸ Effective tax rates are also useful in measuring a company's tax position because they reflect tax liability more accurately than marginal tax rates.¹¹⁹ Thus, one of the significant variables to measure tax advantages include effective tax rates. The effective tax rate is defined as the average rate at which a company is taxed on pre-tax profits. It is the ratio of total tax expenses to earnings before income tax (EBIT) or pre-tax accounting income. The higher the ETR of the firm, the less is the desirability for reducing taxes. A variation of annual ETR is the Cash Effective Tax Rate (CETR), the ratio of cash taxes paid to earnings before income tax.

A further measure employed in gauging corporate tax advantages used in various studies is Tax Shields.¹²⁰ Tax Shields are tax shelters or tax benefits that can comprise, for example, the utilisation of carried forward losses and depreciation deductions. Tax Shield figures were calculated from the figures found in the financial statements of the firms.¹²¹ Using Tax Shields to reduce taxes is considered to be one of the more aggressive forms of tax minimisation.¹²² This study considered the values of Tax Shields used by the firms before and after the merger and acquisition deals. Furthermore, the numbers of deals the firms have been involved in for the given period were also analysed.

Gul et al.¹²³ use Deal Value to determine the level of managerial acquisitiveness, which they explain as the management's motive to reduce taxes. However, in this study, the variable is used to examine if any association exists between the firms' merger and acquisition decisions and tax advantages associated with the deals. This value is defined as the total dollar value of the deal.¹²⁴ To conduct statistical analysis, the values were separated into two groups by the median. In addition, the frequency with which the sample firms sign merger and acquisition deals has also been taken into consideration to study the level of motivation.

While changes in dividends may not directly imply an association between a reduction in taxes and the merger and acquisition deals, it is considered a relevant variable in the tax literature.¹²⁵ An increase in dividends indicates increased profits, and retaining profits is also commonly used as a tax reduction measure.¹²⁶

In addition, Market Capitalisation is an indicator of the size of the firm. Details of the market capitalisation of each firm were obtained – the year 2010 was taken as the base year for this variable. This was appropriate given that the majority of the merger and acquisition deals in

¹¹⁸ Christopher S Armstrong, Jennifer L Blouin and David F Larcker, 'The Incentives for Tax Planning' (2012) 53(1–2) *Journal of Accounting and Economics* 391.

¹¹⁹ Thomas R Kubick, Daniel P Lynch, Michael A Mayberry and Thomas C Omer, 'Product Market Power and Tax Avoidance: Market Leaders, Mimicking Strategies, and Stock Returns' (2015) 90(2) *The Accounting Review* 675.

¹²⁰ Armstrong et al., (n 118) 391.

¹²¹ Tax shields were obtained by adding the various tax-deductible expenses and then multiplying the result by the applicable tax rates.

¹²² Lennox et al., (n 116) 739.

¹²³ Gul et al., (n 39) 01056.

¹²⁴ Michael Dowling and Zakaria Ali Aribi, 'Female Directors and UK Company Acquisitiveness' (2013) 29 *International Review of Financial Analysis* 79.

¹²⁵ Kubick et al., (n 119) 675.

¹²⁶ Dowling and Ali Aribi, (n 124) 79.

the sample took place in 2010. It also forms the mid-point of the sample (taken between 2005 to 2015).

The data was coded by grouping the companies based on their Market Capitalisation. To achieve this, two groups were formed. Further, the Global Financial Crisis of 2007-08 has also been employed as a variable to examine the nature of corporate behaviour in potentially seeking tax advantages during the environment of a financial crisis. Examining the correlation between the financial distress of a company and the potential tax advantages gained, if any, was carried out by observing the timing of the deals and whether or not the Global Financial Crisis increased or decreased the firm's interest to engage in merger and acquisition deals. This may also have implications in the current Covid-19 environment, where economic conditions have been severely impacted.

VI DISCUSSION AND ANALYSIS OF THE EMPIRICAL RESULTS

A Descriptive Statistics

The descriptive analysis of the variables, including their percentages, standard deviations and means, is provided below in Table 2.

Table 2 Descriptive Statistics

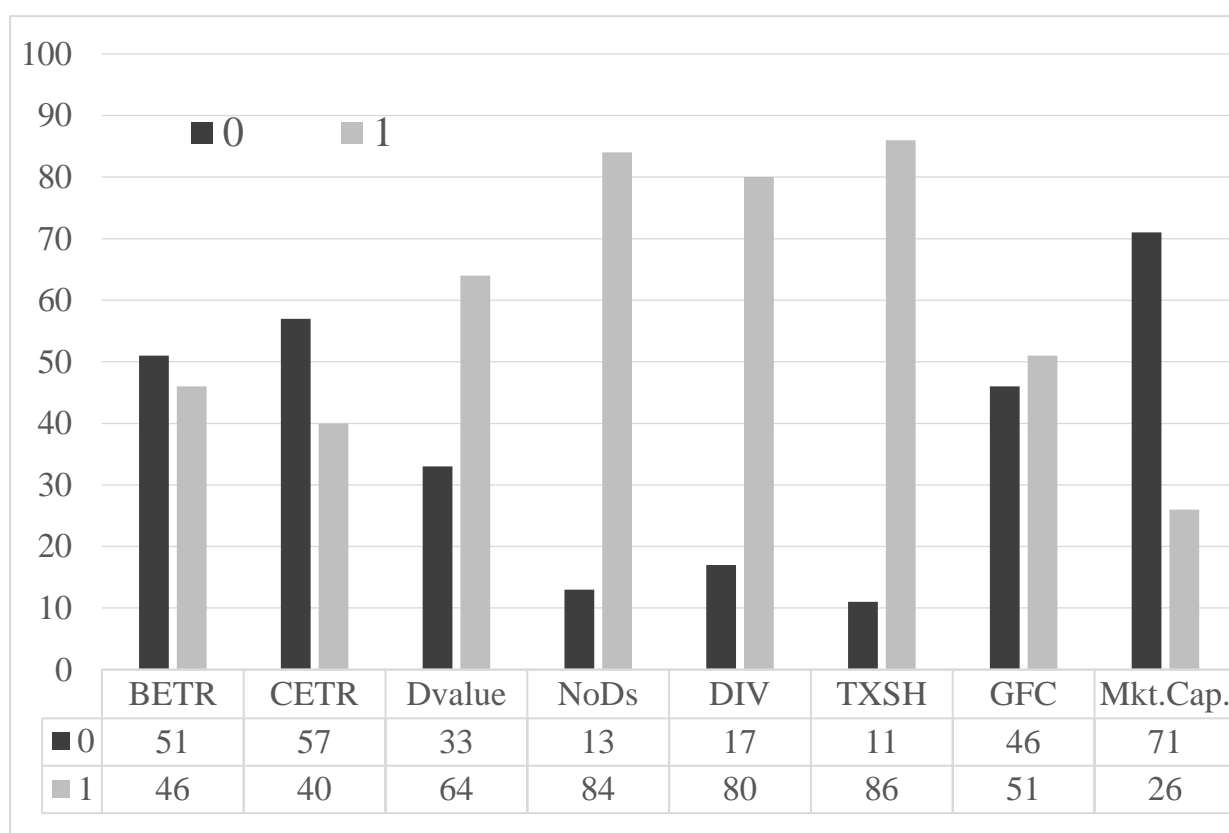
Variables	Mean	Std dev	Min	Max
BETR	.47	.502	0	1
CETR	.41	.492	0	1
TXSH	.89	.319	0	1
NoD	3.84	1.847	1	7
DVALUE	.659	.476	0	1
GFC	.525	.501	0	1
DIV	.824	.382	0	1
Mkt Cap	.27	.445	0	1

As illustrated in the table above, the mean for BETR stands at 0.47, while CETR at 0.41. The mean for Deal Value is calculated at 0.659, and the standard deviation is at 0.476. The variable has been included to examine the corporate strategy of firms and their motivation if any, to reduce taxes. Furthermore, the Number of Deals the sample firms were involved in

during the respective periods of the study has a minimum range of 1 deal in the ten years in question, whereas the maximum is 7 deals during this period.

The mean is calculated to be 3.84, and the standard deviation is 1.847, as shown above. The mean noted for Dividends is 0.824 and the standard deviation 0.382. In 11 cases (11.3%), the value of Tax Shields decreased after the deal, thus, implying a decrease in tax benefits obtained. However, in the case of 86 firms (88.7%), an increase in the value of Tax Shields after the merger and acquisition deals was noted. The figures indicate that most of the deals, 51 (52.6%), were completed after the crisis. The mean is calculated as 0.525 and the standard deviation as 0.501.

Table 3 Movement in the variables post-merger and acquisition deals



- Firms showing a decrease in variables (in years following the deals)
- Firms showing an increase in variables (in years following the deals) (see also Fig 1 Appendix)

The Book Effective Tax Rates of 97 firms in the sample were collected for a total number of 10 years, five years prior to the deals, and five years following the deals. Results in Table 3 show 51 firms (52.6%) saw a decrease in their Book Effective Tax Rates after the deals, suggesting a possible association with an increase in the level of tax advantages derived. In addition, it was also observed that 46 firms (47.4%) had an increase in their Book Effective Tax Rates, showing a potential decrease in the level of tax advantages gained. Results show that 57 firms (68%) had a reduction in their Cash Effective Tax Rates following the deals,

suggesting a possible increase in the level of tax advantages gained. It should also be noted that in 40 cases, the Cash Effective Tax Rate increased, indicating a potential decrease in the level of tax advantages gained.

Further in Table 3, the increase in ‘dividends’ was present in 80 firms (82.5%). In contrast, only 17 firms (17.5%) show a decrease in dividend payments following the deals with a mean of 0.82 and a standard deviation of 0.382. The figures also show that in 11 cases (11.3%), the value of the tax shield decreased after the deal, indicating a potential decrease in tax advantages obtained. However, in the case of 86 firms (88.7%), there was an increase in the value of tax shields and potential tax advantage after the merger and acquisition deal. Table 3 also indicates that 46 (47.4%) of the deals in the sample were made before the financial crisis of 2007-08. The sample contained 71 small and medium-sized market capitalisation firms, while 26 firms comprised high Market Capitalisation.

Deal Values were divided into two groups: those where the deals' values were below or equal to 500 million and those where the values were above 500 million (AUD). It was noted that 33 companies (34%) invested between 1 million to 500 million in each merger and acquisition deal. However, 64 deals (66%) invested less than this. The variable has been included to examine whether the deal's value has resulted in less tax being paid. The majority of firms completed 3 deals during the period of observation, as 20 firms (20.6%) signed 3 deals. This was followed closely by 4 deals signed by 16 firms and 6 deals signed by 15 firms. The maximum number of deals, of 7, was signed by 8 firms. This variable may assist in understanding the reasons why management engages in multiple merger and acquisition deals.

B Correlation Analysis

Correlation analysis was employed to identify and explain possible relationships between the variables and test the hypothesis. Results are displayed in Table 4 below.

Table 4 Correlation Matrix

Correlations		BETR	CETR	DValue	NoD	MktCap	DIV	TXSH	GFC
BETR	Pearson Corr	1	.127	.028	.018	.124	.003	.209*	.034
	Sig.		.215	.783	.862	.225	.974	.040	.743
CETR	Pearson Corr	.127	1	-.017	.052	.013	-.165	.035	-.127
	Sig.	.215		.866	.610	.898	.107	.731	.215
DValue	Pearson Corr	.028	-.017	1	.480**	.435**	.070	.155	.146
	Sig.	.783	.866		.000	.000	.498	.130	.154
NoD	Pearson Corr	.018	.052	.480**	1	.612**	.210*	.145	-.119
	Sig.	.862	.610	.000		.000	.039	.157	.246
MktCap	Pearson Corr	.124	.013	.435**	.612**	1	.218*	.216*	-.031
	Sig.	.225	.898	.000	.000		.032	.033	.761
DIV	Pearson Corr	.003	-.165	.070	.210*	.218*	1	.177	.051
	Sig.	.974	.107	.498	.039	.032		.082	.620
TXSH	Pearson Corr	.209*	.035	.155	.145	.216*	.177	1	-.144
	Sig.	.040	.731	.130	.157	.033	.082		.158
GFC	Pearson Corr	.034	-.127	.146	-.119	-.031	.051	-.144	1
	Sig.	.743	.215	.154	.246	.761	.620	.158	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Note: The table above shows intercorrelations among variables. N= 97.

In Table 4 the Pearson correlation coefficient between Market Capitalisation and Tax Shields is calculated at 0.216 and has a p-value of 0.033, which is significant. The association indicates a positive correlation between the two variables. Consequently, as Market Capitalisation increases, so does the value of Tax Shields (e.g. utilising carry-forward losses). Tax Shields is one of the main variables being tested in the study that potentially represents a tax advantage. Hence, the analysis indicates that the greater the firm size, the greater the Tax Shields (tax advantage) used by the merger and acquisition firms. Likewise, a higher level of tax minimisation can be associated with higher market capitalisation. It indicates that Tax Shields significantly grow as merger and acquisition deals are signed, and this increase is more prominent in larger firms. This is consistent with prior research that has shown that mergers and acquisitions are motivated by a desire to seek a tax advantage.¹²⁷

¹²⁷ Klassen and Laplante (n23) 1245; Ohrn and Seegert, (n 61) 104038.

While making decisions regarding merger and acquisition deals, the management of the firms is generally interested in the other firm's financial characteristics and history that could provide potential tax advantages. This result aligns with Brailsford and Knights' findings¹²⁸ that concluded that companies are merged or acquired on the basis of tax synergies (i.e. interaction or cooperation of two or more organisations, to produce a combined effect greater than the sum of their separate effects). The more the acquiring firm can benefit from combining with the target firm, the higher will be the synergistic value. It should be noted that synergistic value is one of many factors that can influence mergers and acquisitions, and indeed each situation is somewhat unique. As established in section 2 of the paper, the theories that support the notion of management being all-powerful in making decisions that benefit them, in the long run, might be why such deals would be signed and how the decision to merge with or acquire another firm would be based on how beneficial the transaction could be in leveraging tax advantages.

In Table 4, correlation analysis reveals that Market Capitalisation and Number of Deals is positively and significantly correlated (p-value of 0.000). This further indicated that as the firm's size increased, the Number of Deals signed, during the period of the study, also increased. Therefore, the results show a higher frequency of merger and acquisition decisions made by the management of the higher Market Capitalisation firms who are more frequently involved in signing merger and acquisition deals. Therefore, it is possible that the prospect of gaining tax advantages may influence merger and acquisition deals. The association between Market Capitalisation and Tax Shields indicated above further supports the hypothesis.

Further, Table 4 reveals that Market Capitalisation and Deal Value are also positively and significantly correlated. The strength of the relationship is calculated at 0.435, with a (p-value of 0.000). The strong association between these two variables is an indicator that the bigger the firm size, the higher the value of the deals. This further illustrates that the management of high Market Capitalisation firms may well be interested in investing even in the most expensive deals. Whether this is a result of management's self-interest, as indicated through agency theory, is arguable. If there is an incentive to increase shareholder value, profits and other financial incentives, the investment in such deals which promise high returns, as a result, illustrate that high Market Capitalisation firms may crystallise this tax advantage.

Another significant association was discovered between Market Capitalisation and Dividends (p-value at 0.032). Consequently, as Market Capitalisation increases, the dividends will also increase. A further significant association was found between Dividends and the Number of Deals, with a (p = 0.039). Firms with higher Market Capitalisation are more frequently involved in mergers and acquisitions and are investing more funds into such deals. They are yielding greater dividends, providing evidence that these firms are gaining tax advantages. Similar results were found by Kaplan and Strömberg,¹²⁹ who concluded that for most firms involved in merger and acquisition deals, the level of dividend payments (a form of tax advantage) increased considerably following the completion of such deals. This result has also been supported by past studies that explain the growth in merger and acquisition deals

¹²⁸ Brailsford and Knights, (n 53).

¹²⁹ Steven N Kaplan and Per Strömberg, 'Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts' (2003) 70(2) *Review of Economic Studies* 281.

via a significant relationship detected between high market capitalisation firms and an increase in dividends.¹³⁰

Number of Deals and Deal Value resulted in a positive significant relationship (p-value of 0.000). This result shows that the higher the number of deals, the higher the value of the deal being studied in the sample for each company. Arguably, higher Market Capitalisation firms are more actively involved in signing merger and acquisition deals even if the deals require high investment. Management makes decisions in favour of such deals in anticipation of tax advantages. The result is similar to other studies that found that higher market capitalisation firms are more readily open to merger and acquisition opportunities as they have the funds to invest and view this as a way to further maximise their profits.¹³¹ A positive and significant correlation was also found between Tax Shields and Book Effective Tax Rate (p = 0.040). This signifies that although the Tax Shields used by firms (high, medium and low Market Capitalisation) increase, at the same time, the Book Effective Tax Rate also increases.

However, the remaining associations were not found to be significant. This includes the relationship between Dividends and Book Effective Tax Rate. Consequently, merger and acquisition firms that pay higher dividends may also pay Book Effective Tax Rates but not as high as the Dividends, indicating some desire to obtain tax advantages within such firms. Likewise, the relationship between Dividends and Cash Effective Tax Rate was not significant, and further, the association between Dividends and Deal Value was not significant. This indicates that whether the Dividend payments increase or decrease, there is no relationship with the increase and decrease in the value of the deals. In other words, it means that firms with an increase in Dividends after the merger and acquisition deals may not have necessarily invested in high-value deals. This, perhaps, may also indicate that the increase in Dividends after merger and acquisition deals is also common in companies with medium or low Market Capitalisation. As opposed to larger firms, small and medium-sized firms do not acquire high-valued deals; however, they do experience an increase in dividends following merger and acquisition deals.

Further, the relationship between Dividends and the Global Financial Crisis was not significant, as was the case between Market Capitalisation and the Global Financial Crisis. The negative association indicates that the deals signed by higher Market Capitalisation firms increased in the years after the Global Financial Crisis. Consequently, potential tax advantages may be gained after a financial crisis to sustain profit/earnings after economic setbacks.¹³² Arguably, it could just be that firms are keen to retain earnings and look to business reinvestment during a period of uncertainty. This outcome accords with findings of previous research that show that during a financial crisis, investments that ensure survival are prevalent.¹³³ The result may also have implications in the current Covid -19 environment post-2020.

¹³⁰ For example see Sydney Finkelstein and Cary L Cooper (eds), *Advances in Mergers and Acquisitions: Volume 17* (Emerald Publishing Limited, 2018).

¹³¹ Lim (n 74) 142.

¹³² Andrew Hood, Robert Joyce and Jonathan Cribb, *Recessions, Income Inequality and the Role of the Tax and Benefit System* (The IFS, 8 November 2017) <<https://www.ifs.org.uk/uploads/publications/comms/R137.pdf>>.

¹³³ Brodonlo (n 96).

Finally, no significant relationship was observed between Deal Value and Cash Effective Tax Rate and Book Effective Tax Rate and Cash Effective Tax Rate. Consequently, the cash payments of taxes are lower than book payments, which arguably could be facilitated through tax shields and other tax advantages gained as a result of merger and acquisition deals. This is contrary to the findings of other studies that have found a close association between tax benefits and merger and acquisition deals.¹³⁴ The lack of association between the Effective Tax Rates and Market Capitalisation may be further explained with reference to the weak positive correlation between BETR and CETR. This association indicates that while merger and acquisition firms experience an increase in their BETR, they also may subsequently see some increase in their CETR. The difference between cash tax payments and book tax payments, could also be due to the presence of tax shields and other tax benefits obtained through merger and acquisition transactions.

Overall, the results of the correlations support hypothesis H1 in part. The significant relationships discovered between Market Capitalisation and Tax Shields, along with the payment of dividends and the number of deals done, suggest that tax advantages were present to some degree. The results support the findings of Raymond and Terry,¹³⁵ who also found a significant relationship between merger and acquisition deals, profits and tax benefits.

V CONCLUSION

A Summary and Findings

This study examined the potential tax advantages obtained by Australian-based acquiring firms with higher Market Capitalisation as a result of a merger and acquisition deal. To understand the tax advantages that firms with higher Market Capitalisation can gain following merger and acquisition deals, the study analysed the pattern and change in various tax characteristics, with a focus on effective tax rates, dividends, tax shields, the number of deals and the value of those deals.

The correlation results show a strong association between firms with higher market capitalisation and certain tax advantages through merger and acquisition deals. In particular, it was found that most high market capital firms were frequently involved in merger and acquisition transactions and continued to invest funds into such deals. Specifically, it was found that there was a strong association between higher market capitalisation firms and the increase in the payment of dividends following the signing of merger and acquisition deals and the frequency in the number of deals done. There was also a strong association between high market capital firms and the utilisation of tax shields. Consequently, the results partly support, H1 that Australian acquirer firms with higher market capitalisation gain significant tax advantages through merger and acquisition deals. The qualification is largely based on

¹³⁴ Ciobanu and Dobre, (n 29) 57.

¹³⁵ De Silva Rosa and Walter, (n 62).

the lack of association found between high market capitalisation firms and effective tax rates post-merger and acquisition deals.

B Tax Policy Implications

This study has potential tax policy implications with regard to merger and acquisition deals in Australia. In particular, policymakers need to be aware that companies may enter merger and acquisition deals for reasons that are not just purely commercial. This research has shown potentially significant tax advantages from such transactions can transpire, which may represent a risk to the revenue. However, further research needs to be undertaken to determine whether the extent of merger and acquisition deals necessarily constitutes tax avoidance/evasion, which is beyond the scope of this study.

As the study suggests that high market capitalisation firms in Australia actively participate in merger and acquisition deals, it may be necessary to monitor those deals more closely through moderate audit activity. For instance, those firms that frequently sign merger and acquisition deals may need to be audited on a regular basis to determine the presence, if any, of tax advantages gained. In addition, those firms that experience a significant increase in the distribution of dividends after merger and acquisition deals may also require closer scrutiny by the tax authorities, particularly in a post-COVID-19 environment.

VI STUDY LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

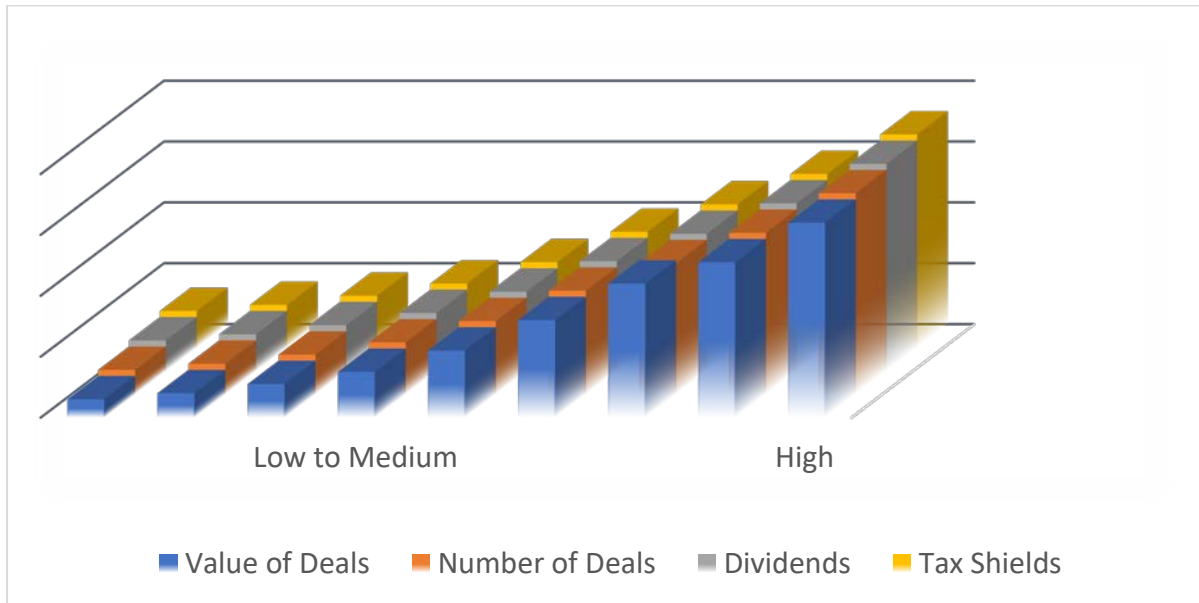
A limitation of this study is that its scope is confined to Australian-based merger and acquisition deals. It does not include deals that involve both Australian and international parties. Those deals could provide further insights and may be an area of interest for future research. Another limitation is that since it is based on a comparison of pre- and post-merger and acquisition periods, more recent examples could not be included in the analysis. Therefore, there are no observations from the year 2015 onwards. More recent data could provide more clarity into the present state of affairs. Instead of comparing periods further research could also draw a comparison between similar industry merger and acquisition firms or do a sector-wise comparison between merger and acquisition firms.

In addition, the scope of the study did not allow the research to take into account the behavioural aspect of the managerial role in merger and acquisition deals. Therefore, future studies could examine how management's mindset and personal beliefs may influence a firm's decision. Likewise, a legal analysis of the general anti-avoidance rules was also beyond the scope of this paper and may have an important place in any future research.

Nevertheless, this paper makes a valuable contribution to the existing literature by providing original empirical evidence which highlights that some merger and acquisition deals, in the Australian context, have led high market capitalisation firms to gain significant tax advantages, which pose a risk to the revenue and should not go unnoticed.

APPENDIX

Figure.1. Tax advantages of Australian acquirer firms with higher market capitalisation show an increase following merger and acquisition deals.



BIBLIOGRAPHY

A Articles/ Books/ Reports

Akhtar, Shumi, Farida Akhtar, Kose John and Su-Wen Wong, 'Multinationals' Tax Evasion: A Financial and Governance Perspective' (2019) 57 *Journal of Corporate Finance* 35

Alba, Joseph D, Donghyun Park and Peiming Wang, 'Corporate Governance and Merger and Acquisition (M&A) FDI: Firm-Level Evidence from Japanese FDI into the US' (2009) 19(1) *Journal of Multinational Financial Management* 1

Armstrong, Christopher S, Jennifer L Blouin and David F Larcker, 'The Incentives for Tax Planning' (2012) 53(1–2) *Journal of Accounting and Economics* 391

Atawodi, Ojochogwu Winnie and Stephen Aanu Ojeka, 'Factors That Affect Tax Compliance among Small and Medium Enterprises (SMEs) in North Central Nigeria' (2012) 7(12) *International Journal of Business and Management* 87

Auerbach, Alan and David Reishus, *The Impact of Taxation on Mergers and Acquisitions* (NBER Chapters, National Bureau of Economic Research, Inc, 1987) 69
<<https://econpapers.repec.org/bookchap/nbrnberch/5822.htm>>

Australian Treasury 2014, *Mid-Year Economic and Fiscal Outlook (MYEFO) 2013-14*, December. < https://archive.budget.gov.au/2013-14/myefo/2013_14_MYEFO.pdf>

Australian Treasury 2015, *Rethink: Better tax system, better Australia, discussion paper*

Bartlett, Andrew and David Preston, 'Can Ethical Behaviour Really Exist in Business?' (2000) 23(2) *Journal of Business Ethics* 199

Beasley, Mark S, 'An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud' (1996) 71(4) *The Accounting Review* 443

Becker, Johannes and Clemens Fuest, 'Source versus Residence Based Taxation with International Mergers and Acquisitions' (2011) 95(1–2) *Journal of Public Economics* 28

Becker, Johannes and Clemens Fuest, 'Taxing foreign profits with international mergers and acquisitions' (2010) 51(1) *International Economic Review* 171

Belz, Thomas, Leslie Robinson, Martin Ruf and Christian Steffens 'Tax avoidance as a driver of mergers and acquisitions' (2013) *SSRN Electronic Journal*<<http://www.ssrn.com/abstract=2371706>>

Bierman, Harold, 'A Neglected Tax Incentive for Mergers' (1985) 14(2) *Financial Management* 29

Blonigen, Bruce A and Ronald B Davies, 'The Effects of Bilateral Tax Treaties on US FDI Activity' (2004) 11(5) *International Tax and Public Finance* 601

Bonaime, Alice, Huseyin Gulen and Mihai Ion, 'Does Policy Uncertainty Affect Mergers and Acquisitions?' (2018) 129(3) *Journal of Financial Economics* 531

Brailsford, Timothy J and Stephen Knights, *The Financial and Non-Financial Effects of Corporate Takeovers* (1998), Parkville, Melbourne Institute of Applied Economics and Social Research, The University of Melbourne

Bris, Arturo and Christos Cabolis, 'The Value of Investor Protection: Firm Evidence from Cross-Border Mergers' (2008) 21(2) *Review of Financial Studies* 605

Brodonlo, John 2009, 'Collecting taxes during an economic crisis: challenges and policy options', IMF Staff Position Note, SPN/09/17 (14 July 2009)
<<https://www.imf.org/external/pubs/ft/spn/2009/spn0917.pdf>>

Brown, David T and Michael D Ryngaert, 'The Mode of Acquisition in Takeovers: Taxes and Asymmetric Information' (1991) 46(2) *The Journal of Finance*.

Brown, Rodney, Youngdeok Lim and Chris Evans, 'The impact of full franking credit refundability on corporate tax avoidance' (2020) 17(2) *eJournal of Tax Research* 134

Carleton, Willard T, David K Guilkey, Robert S Harris and John F Stewart, 'An Empirical Analysis of the Role of the Medium of Exchange in Mergers' (1983) 38(3) *The Journal of Finance* 813

Cen, Ling, Edward L Maydew, Liandong Zhang and Luo Zuo, 'Customer–Supplier Relationships and Corporate Tax Avoidance' (2017) 123(2) *Journal of Financial Economics* 377

Chen, Shuping, Xia Chen, Qiang Cheng and Terry Shevlin, 'Are Family Firms More Tax Aggressive than Non-Family Firms?' (2010) 95(1) *Journal of Financial Economics* 41

Chen, Yenn-Ru, Yu-Lin Huang and Chun-Nan Chen, 'Financing Constraints, Ownership Control, and Cross-Border M&As: Evidence from Nine East Asian Economies' (2009) 17(6) *Corporate Governance: An International Review* 665

Ciobanu, Radu and Elena Dobre, 'Are mergers and acquisitions influenced by taxation?' (2015) 3 *Journal of Financial and Actuarial Mathematics and Management* 57

Clougherty, Joseph A, Jin Uk Kim, Bradley R Skousen and Florian Szücs, 'The Foundations of International Business: Cross-Border Investment Activity and the Balance between Market-Power and Efficiency Effects: The Foundations of International Business' (2017) 54(3) *Journal of Management Studies* 340

Cooper, Michael and Matthew Knittel, 'Partial Loss Refundability: How Are Corporate Tax Losses Used?' (2006) 59(3) *National Tax Journal* 651

Daily, Catherine M, Dan R Dalton and Albert A Cannella, 'Corporate Governance: Decades of Dialogue and Data' (2003) 28(3) *The Academy of Management Review* 371

Desai, Mihir A, Alexander Dyck and Luigi Zingales, 'Theft and Taxes' (2007) 84(3) *Journal of Financial Economics* 591

Desai, Mihir A and James R Hines, 'Expectations and Expatriations: Tracing the Causes and Consequences of Corporate Inversions' (2002) 55(3) *National Tax Journal* 409

Dev K Dutta, Shavin Malhotra and PengCheng Zhu, 'Internationalization Process, Impact of Slack Resources, and Role of the CEO: The Duality of Structure and Agency in Evolution of Cross-Border Acquisition Decisions' (2016) 51(2) *Journal of World Business* 212

Dowling, Michael and Zakaria Ali Aribi, 'Female Directors and UK Company Acquisitiveness' (2013) 29 *International Review of Financial Analysis* 79

Duarte, Daniel and Victor Barros, 'Corporate Tax Avoidance and Profitability Followed by Mergers and Acquisitions' (2018) 15(2–1) *Corporate Ownership and Control* 148

Dyreng, Scott D, Michelle Hanlon and Edward L Maydew, 'Long-Run Corporate Tax Avoidance' (2008) 83(1) *The Accounting Review* 61

Dunbar, Amy, Danielle M Higgins, John D Phillips and George A Plesko, 'What do measures of tax aggressiveness measure?' (2010) 103 *Proceedings of the National Tax Association Annual Conference on Taxation* 18

Dyreng, Scott D, Michelle Hanlon and Edward L Maydew, 'The Effects of Executives on Corporate Tax Avoidance' (2010) 85(4) *The Accounting Review* 1163

Edwards, Alexander S, Casey Schwab and Terry J Shevlin, 'Financial Constraints and the Incentive for Tax Planning' [2012] *SSRN Electronic Journal*
<<http://www.ssrn.com/abstract=2163766>>

Eicher, Theo and Jong Woo Kang, 'Trade, Foreign Direct Investment or Acquisition: Optimal Entry Modes for Multinationals' (2005) 77(1) *Journal of Development Economics*

Erickson, Merle and Shiing-wu Wang, 'Tax Benefits as a Source of Merger Premiums in Acquisitions of Private Corporations' (2007) 82(2) *The Accounting Review* 359

Ferrer-i-Carbonell, Ada and Klarita Gërkhani, 'Tax Evasion and Well-Being: A Study of the Social and Institutional Context in Central and Eastern Europe' (2016) 45 *European Journal of Political Economy* 149

Finkelstein, Sydney and Cary L Cooper (eds), *Advances in Mergers and Acquisitions: Volume 17* (Emerald Publishing Limited, 2018)

Gaertner, Fabio B, 'CEO After-Tax Compensation Incentives and Corporate Tax Avoidance' (2014) 31(4) *Contemporary Accounting Research* 1077

Geppert, Mike, Christoph Dörrenbächer, Ian Taplin, Jens Gammelgaard, 'Managerial Risk-Taking in International Acquisitions in the Brewery Industry: Institutional and Ownership Influences Compared: Managerial Risk-Taking in Brewery Industry' (2013) 24(3) *British Journal of Management* 316

Ghosh, Alope and Prem C Jain, 'Financial Leverage Changes Associated with Corporate Mergers' (2000) 6(4) *Journal of Corporate Finance* 377

Gilson, Ronald J, Myron S. Scholes and Mark A. Wolfson, *Taxation and the Dynamics of Corporate Control: The Uncertain Case for Tax Motivated Acquisitions*, in, Knights, Raiders, and Targets, The Impact of the Hostile Takeover. John C. Coffee, Jr., Louis Lowenstein, Susan Rose-Ackerman, editors. New York, NY: Oxford University Press, 1988

- Graham, John R, Michelle Hanlon, Terry Shevlin and Nemit Shroff, 'Incentives for Tax Planning and Avoidance: Evidence from the Field' (2014) 89(3) *The Accounting Review* 991
- Graham, John R and Alan L Tucker, 'Tax Shelters and Corporate Debt Policy' (2006) 81(3) *Journal of Financial Economics* 563
- Gul, Ferdinand A, Mehdi Khedmati and Syed MM Shams, 'Managerial Acquisitiveness and Corporate Tax Avoidance' (2020) 64 *Pacific-Basin Finance Journal* 101056
- Hambrick, Donald C and Phyllis A Mason, 'Upper Echelons: The Organization as a Reflection of Its Top Managers' (1984) 9(2) *The Academy of Management Review* 193
- Hanlon, Michelle and Shane Heitzman, 'A Review of Tax Research' (2010) 50(2–3) *Journal of Accounting and Economics* 127
- Harris, Jeremiah and William O'Brien, 'US. Worldwide Taxation and Domestic Mergers and Acquisitions' (2018) 66(2–3) *Journal of Accounting and Economics* 419
- Hayn, Carla, 'Tax Attributes as Determinants of Shareholder Gains in Corporate Acquisitions' (1989) 23(1) *Journal of Financial Economics* 121
- Heathcote, David, 'Australia's Evolving Deals Landscape: 2018 Survey Report - KPMG Australia', *KPMG* (2 August 2021)
<<https://home.kpmg/au/en/home/insights/2018/08/australia-evolving-deals-landscape-survey-report.html>>
- Hitt, Michael A and Vincenzo Pisano, 'The Cross-Border Merger and Acquisition Strategy: A Research Perspective' (2003) 1(2) *Management Research: Journal of the Iberoamerican Academy of Management* 133
- Hongbiao, Cai and Rao Pingui, 'Institutional Investors, Tax Enforcement, and Corporate Tax Avoidance' (2015) 1(10) *Journal of Accounting Research* 59
- Hood, Andrew, Robert Joyce and Jonathan Cribb, *Recessions, Income Inequality and the Role of the Tax and Benefit System* (The IFS, 8 November 2017)
<<https://www.ifs.org.uk/uploads/publications/comms/R137.pdf>>
- Horn, Henrik and Lars Persson, 'The Equilibrium Ownership of an International Oligopoly' (2001) 53(2) *Journal of International Economics* 307
- Huizinga, Harry P and Johannes Voget, 'International Taxation and the Direction and Volume of Cross-Border M&As' (2009) 64(3) *The Journal of Finance* 1217
- Hun Lee, Kyeong, David C Mauer and Emma Qianying Xu, 'Human Capital Relatedness and Mergers and Acquisitions' (2018) 129(1) *Journal of Financial Economics* 111
- Huseynov, Fariz and Bonnie K Klamm, 'Tax Avoidance, Tax Management and Corporate Social Responsibility' (2012) 18(4) *Journal of Corporate Finance* 804
- Jensen, Michael C and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3(4) *Journal of Financial Economics* 305
- Jensen, Michael C and William H Meckling, 'The market for corporate control: The scientific evidence' (1983) 11(4) *Journal of Financial Economics* 5

- Kaplan, Steven N and Per Strömberg, 'Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts' (2003) 70(2) *Review of Economic Studies* 281
- Klassen, Kenneth J and Stacie K Laplante, 'Are US Multinational Corporations Becoming More Aggressive Income Shifters?: (2012) 50(5) *Journal of Accounting Research* 1245
- Kolb, Robert W (ed.), *Lessons from the Financial Crisis: Causes, Consequences, and Our Economic Future*. 1st edn, John Wiley & Sons
- Kubick, Thomas R, Daniel P Lynch, Michael A Mayberry and Thomas C Omer, 'Product Market Power and Tax Avoidance: Market Leaders, Mimicking Strategies, and Stock Returns' (2015) 90(2) *The Accounting Review* 675
- Lennox, Clive, Petro Lisowsky and Jeffrey Pittman, 'Tax Aggressiveness and Accounting Fraud' (2013) 51(4) *Journal of Accounting Research* 739
- Levine, Oliver, 'Acquiring Growth' (2017) 126(2) *Journal of Financial Economics* 300
- Lichtenstein, Sarah and Paul Slovic, 'Reversals of Preference between Bids and Choices in Gambling Decisions.' (1971) 89(1) *Journal of Experimental Psychology* 46
- Lim, Joohyun, 'Tax Avoidance and M&A' (2020) 5(3) *Research in Economics and Management* 142
- Loomes, Graham, 'Preference Reversal: Explanations, Evidence and Implications' (1990) 23(1) *Annals of Operations Research* 65
- Martynova, Marina and Luc Renneboog, 'A Century of Corporate Takeovers: What Have We Learned and Where Do We Stand?' (2008) 32(10) *Journal of Banking & Finance* 2148
- McDougall, Fred M and David Keith Round (eds), *The Effects of Mergers & Takeovers in Australia: A Research Study*, Information Australia for the Australian Institute of Management – Victoria (1986)
- Menichini, Amilcar Armando, 'On the Value and Determinants of the Interest Tax Shields' [2014] *SSRN Electronic Journal* <<http://www.ssrn.com/abstract=2499835>>
- Merle Erickson, 'The effect of taxes of the structure of corporate acquisitions' (1998) 36(2) *Journal of Accounting Research* 279
- Michelle Hanlon and Shane Heitzman, 'A Review of Tax Research' (2010) 50(2–3) *Journal of Accounting and Economics* 127
- Milliron, Valerie C and Daniel R Toy, 'Tax compliance: An investigation of key features' (1988) 9 *The Journal of the American Tax Association* 84
- Mills, Lillian, Merle Erickson and Edward L Maydew, 'Investments in Tax Planning' (1998) 20(1) *Journal of the American Taxation Association* 1
- Minnick, Kristina and Tracy Noga, 'Do Corporate Governance Characteristics Influence Tax Management?' (2010) 16(5) *Journal of Corporate Finance* 703

- Norbäck, Pehr-Johan and Lars Persson, 'Investment Liberalization — Why a Restrictive Cross-Border Merger Policy Can Be Counterproductive' (2007) 72(2) *Journal of International Economics* 366
- Ohrn, Eric and Nathan Seegert, 'The Impact of Investor-Level Taxation on Mergers and Acquisitions' (2019) 177 *Journal of Public Economics* 104038
- Pautler, Paul A, 'Evidence on Mergers and Acquisitions' (2003) 48 *Antitrust Bulletin* 119
- Phillips, John D, 'Corporate Tax-Planning Effectiveness: The Role of Compensation-Based Incentives' (2003) 78(3) *The Accounting Review* 847
- Rani, Puspita, Elvia R Shauki, Darminto and Ruslan Prijadi, 'Motives, Governance, and Long-Term Performance of Mergers and Acquisitions in Asia', ed Collins G Ntim (2020) 7(1) *Cogent Business & Management* 1791445
- Rego, Sonja Olhofs, 'Tax-Avoidance Activities of US Multinational Corporations' (2003) 20(4) *Contemporary Accounting Research* 805
- Rego, Sonja Olhofs and Ryan Wilson, 'Equity Risk Incentives and Corporate Tax Aggressiveness' (2012) 50(3) *Journal of Accounting Research* 775
- Rice, Eric M, *The Corporate Tax Gap: Evidence on Tax Compliance by Small Corporations* (1990) University of Michigan Press
- Richardson, Grant, Bei Wang and Xinmin Zhang, 'Ownership Structure and Corporate Tax Avoidance: Evidence from Publicly Listed Private Firms in China' (2016) 12(2) *Journal of Contemporary Accounting & Economics* 141
- Robinson, John R, Stephanie A Sikes and Connie D Weaver, 'Performance Measurement of Corporate Tax Departments' (2010) 85(3) *The Accounting Review* 1035
- Rosa, Raymond da Silva and Terry Walter, 'Australian Mergers and Acquisitions Since the 1980s: What Do We Know and What Remains to Be Done?' (2004) 29(1) *Australian Journal of Management*
- Schipper, Katharine and Abbie Smith, Corporate income tax effects of management buyouts, (1988) Working paper (University of Chicago, Chicago, IL)
- Schroeder, Mark D, Christina Greer and Ulrike Gaul, 'How to Make Stripes: Deciphering the Transition from Non-Periodic to Periodic Patterns in *Drosophila* Segmentation' (2011) 138(14) *Development* 3067
- Shimizu, Katsuhiko, Michael Hitt, Deepa Vaidyanath and Vincenzo Pisano, 'Theoretical Foundations of Cross-Border Mergers and Acquisitions: A Review of Current Research and Recommendations for the Future' (2004) 10(3) *Journal of International Management* 307
- Sudiby, Yudha Aryo and Sun Jianfu, 'Political Connections, State Owned Enterprises and Tax Avoidance: An Evidence from Indonesia' (2016) 13(3) *Corporate Ownership and Control* 279
- Taylor, Grantley and Grant Richardson, 'International Corporate Tax Avoidance Practices: Evidence from Australian Firms' (2012) 47(4) *The International Journal of Accounting* 469

Taylor, Grantley and Grant Richardson, 'Incentives for Corporate Tax Planning and Reporting: Empirical Evidence from Australia' (2014) 10(1) *Journal of Contemporary Accounting & Economics* 1

Voget, Johannes, 'Relocation of Headquarters and International Taxation' (2011) 95(9–10) *Journal of Public Economics* 1067

Warren, Neil, 'Estimating Tax Gap Is Everything to an Informed Response to the Digital Era' [2018] *SSRN Electronic Journal* <<https://www.ssrn.com/abstract=3200838>>

B Cases

CIR v Challenge Corporation Ltd (1986)

Ensign Shipping Co Ltd v CIR (12 TC 1169)

Sabah Berjaya Sdn Bhd v Ketua Pengarah Jabatan Hasil Dalam Negeri (1999)

C Legislation

Income Tax Assessment Act 1997

Income Tax Assessment Act 1936

D Other

'Australian M&A Activity Is Booming, and the Recent Shift in Global Interest Rates May Help Explain Why', *Business Insider Australia* (29 October 2018)

<<https://www.businessinsider.com.au/australian-ma-activity-booming-2018-10>>

Fullarton, Alexander Robert 'Miners' Motivation - the mass-marketed tax avoidance schemes of the 1990s in the Pilbara region of Western Australia' (PhD thesis, University of New South Wales, 2013)

<<http://unsworks.unsw.edu.au/fapi/datastream/unsworks:11537/SOURCE01?view=true>>

Klan, Anthony 2013, 'Company failures hit record high', *The Australian*,

<<http://www.theaustralian.com.au/business/companies/company-failures-hit-record-high/story-fn91v9q3-1226582255301>>

'M&A Global Outlook', *JP Morgan* (January

2019)<<https://www.jpmorgan.com/insights/research/2019-ma-global-year-outlook>>

Morning Star 2019, Home page, viewed 24 September

2019,<<https://www.morningstar.com.au/Home>>

‘Revenue Statistics - OECD Countries: Comparative Tables’ (2014) OECD,
<<https://stats.oecd.org/index.aspx?DataSetCode=REV>>

‘*Taxation and Electronic Commerce: Implementing the Ottawa taxation framework conditions*’ (2001) OECD,
<<https://www.oecd.org/ctp/consumption/Taxation%20and%20eCommerce%202001.pdf>>

Thomson Reuters Australia 2019, About us, viewed 24 September 2019, <<https://legal.thomsonreuters.com.au/about-us/>>

THE PLUG-IN HYBRID ELECTRIC VEHICLE IN REMOTE AUSTRALIA: A FURTHER CASE STUDY 2016–2021

LEX FULLARTON** AND DALE PINTO#

Abstract

Since the beginning of the 19th century, the natural environment of the planet has been placed under the dire threat of climate change. This has been caused by greenhouse gas (GHG) emissions from the burning of fossil fuels. GHG emissions threaten to alter the planet's ecosystems disastrously and permanently. Statistics reveal that Australian individuals are among the highest GHG emitters on the planet, and that the transport sector contributes nearly one-fifth of the nation's GHG emissions. It is suggested that significant reductions in Australian GHG emissions are urgently required, and it is considered that those reductions might be helped by a transition to electric vehicles (EVs) in the transport sector.

This paper looks at the consumption of motor vehicle fuels in Australia's transport sector and suggests how a reduction in GHG emissions might be achieved. It suggests that the electrification of Australian motor vehicles could eliminate up to 20 per cent of existing Australian GHG emissions. The paper presents further findings from a case study that was conducted on a Mitsubishi Outlander Plug-in Electric Hybrid Vehicle (PHEV) in remote Western Australia from 2016–17. That study is updated and extended in this paper to October 2021.

The paper uses published statistical data from the Organisation for Economic Co-operation and Development (OECD) and Australian government agencies to support its findings, conclusions and suggestions for further research. It looks at the rate of transition to electric vehicles and concludes that, while the transport sector's growing contribution to Australia's overall GHG emissions could be significantly reduced by the transition to electric vehicles, there is some way to go. The paper suggests that there are significant economic factors inhibiting the adoption of electric vehicles in Australia. However, rising fuel prices could encourage the transition away from vehicles powered by environmentally damaging internal combustion engines towards electric vehicles in Australia.

Keywords: Electric Vehicles, Fuel Excises, Renewable Energy Sourced EV Charging, Motor Vehicle Expenses.

* Adjunct Professor, Curtin Law School, Curtin University. Lex Fullarton is also a former provincial tax practitioner. This paper builds on research conducted in 2017 and published in an article by Lex Fullarton in the *Journal of Australian Taxation* in 2018. Alexander Robert Fullarton, 'The Impact of the Changing Technology of Motor Vehicles on Road Tax Revenue' (2018) 20(1) *Journal of Australian Taxation* 26.

Professor of Taxation Law, Curtin Law School, Curtin University.

I INTRODUCTION

Greenhouse gas (GHG) emissions threaten to alter the planet's ecosystems disastrously and permanently. Despite its relatively small total population, Australia is one of the highest per capita emitters of GHGs in the world. Therefore, Australia needs to reduce its carbon emissions substantially. This paper builds on a previously published paper and uses the same research approach. It continues the aim of encouraging the transition in Australia's transport sector from internal combustion engines to electrically powered vehicles, in order to reduce the nation's GHG emissions. It also aims to encourage road users, governments and tax administrators to become aware of the impact of changing road tax revenue structures to fund the development and maintenance of road networks. To fulfil those aims it reviews the impact electric powered vehicles might have on the tax revenue currently raised through the fuel excises levied on the owners of motor vehicles powered by fossil fuels.

The purpose of this paper is to review and update the research data and findings of the case study conducted in 2017 that was previously published in this journal in 2018. It further investigates the rate of adoption of electric vehicles on Australian roads and compares that take-up rate with the rate forecast in the previous paper. It suggests how electricity from renewable energy sources might promote the transition from fossil-fuelled internal combustion engine vehicles to electric vehicles to reduce GHG emissions from the transport sector of the Australian economy. It acknowledges, but does not address, the social and environmental impacts or benefits of the transition from internal combustion engines to vehicles powered by electric motors, which are beyond the scope of this paper.

Fullarton's previous paper acknowledged that the internal combustion engine has powered the world's motor vehicles for nearly 150 years. He noted that the atmospheric pollution caused by the burning of fossil fuels had reached unacceptable levels and was beginning to have a severe impact on the world's human and natural environments. It is possible that the respiratory disease known as Covid-19 could be attributed to a progressively polluted atmosphere, but detailed discussion of that is beyond the scope of this paper.

This paper looks at the contribution of Australia's transport sector to the nation's GHG emissions. It examines further research data obtained from a case study of a Mitsubishi Outlander Plug-in Electric Hybrid Vehicle (PHEV), which was the focus of a Fullarton's previously published paper. That earlier paper found that there has not been a hypothecation of road tax revenue for the construction and maintenance of Australia's roadways since 1959. The 'electrification' of Australia's road transport should therefore have no impact whatsoever on government expenditure on roadway construction and maintenance. This paper extends the research findings of the case study of the previous paper to support or refute that conclusion and suggests that existing and proposed federal and state taxes may be inhibiting, rather than encouraging, the 'electrification' of Australia's passenger vehicles.

The principal aims of transitioning from vehicles powered by an internal combustion engine to electric vehicles are as follows: to address Australia's contribution to the world's growing GHG emissions; to provide leadership to other nations; and to address the problem of GHG emissions and their contribution to a warming global atmosphere and climate change.

However, at very senior Australian government levels, there is a strong opinion that Australia makes a negligible contribution to GHG emissions and climate change generally. In 2019 the Prime Minister of Australia, Scott Morrison, expressed the opinion that:

the suggestion that any way shape or form that with Australia, accountable for 1.3 per cent of the world's emissions, that the individual actions of Australia are impacting directly on specific fire events, whether it's here or anywhere else in the world, that doesn't bear up to credible scientific evidence either. Climate change is a global phenomenon and we're doing our bit as part of the response to climate change. We're taking action on climate change. But I think to suggest that with just 1.3 per cent of global emissions that Australia doing something differently, more or less, would have changed the fire outcome this season [2019-20] – I don't think that stands up to any credible scientific evidence at all.¹

Detailed scrutiny of Australia's climate change policies is beyond the scope of this paper, which assumes that Australia can play a key role in reducing global GHG emissions.

To place Australia's GHG emissions in the global perspective, the following section looks at the nation's GHG emissions compared to those of other Organisation for Economic Co-operation and Development (OECD) nations, and the contribution that the transport sector makes to the nation's GHG emissions.

II AUSTRALIAN GHG EMISSIONS

Figure 1 shows Australia's ranking for the volume of GHG emissions per person in 2010, as shown in Fullarton's 2018 paper.² In 2010, each Australian citizen was contributing roughly twice the GHG emissions of the average fellow citizen of an OECD member country.³

¹ Radio interview with Scott Morrison, Prime Minister of Australia, (Sabra Lane, ABC AM, 21 November 2019) <<https://www.pm.gov.au/media/radio-interview-sabra-lane-abc-am-0>>. Written verbatim from the transcript.

² Fullarton (n 1).

³ Organisation for Economic Co-operation and Development (2021), Air and GHG emissions (indicator). doi: 10.1787/93d10cf7-en, (Web Page, 2021) <<https://data.oecd.org/air/air-and-ghg-emissions.htm>>.

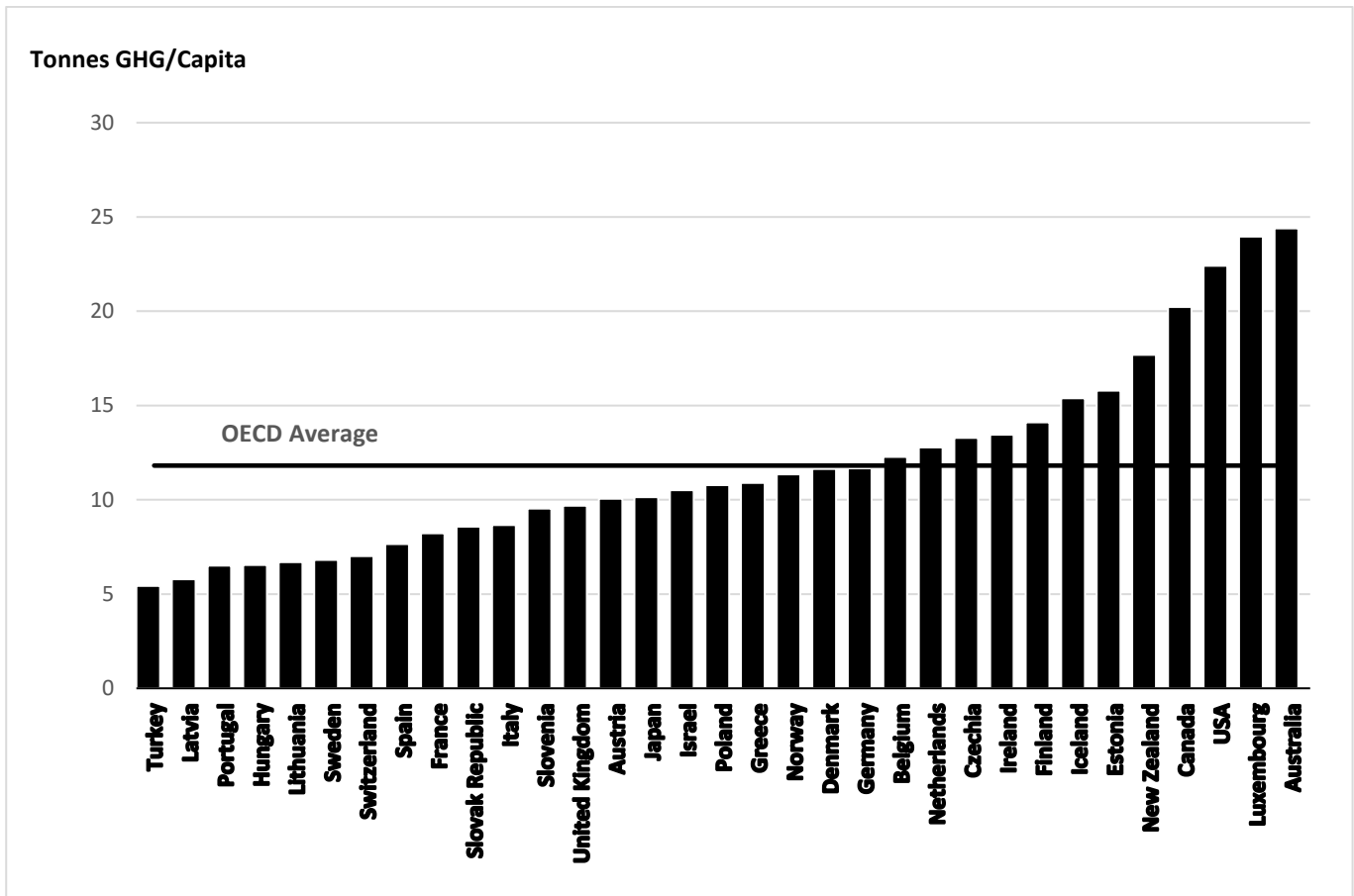


Figure 1: OECD national greenhouse gas emission intensities per capita, 2010.⁴

It was concluded by Oliphant in 2009 that ‘[a]lthough [Australia’s] responsibility for 1.2 per cent of global [greenhouse gas] emissions seems small, it is not. In both gross emissions and emissions per capita, Australia is in the world’s top 10 per cent’.⁵ However, Oliphant is not correct. Australia was not in the world’s top 10 per cent in gross emissions, but, more significantly, figure 1 reveals that in 2010, Australia was the highest emitter of greenhouse gases per capita of all of the OECD nations and figure 2 shows that in 2018 that ranking remained unchanged.

Therefore, it is suggested that, despite Australia’s relatively small total contribution to world atmospheric pollution, its position as a developed nation that proposes to lead the world in economic and social issues means that the contribution by each Australian citizen of nearly twice the volume of GHG emissions of the average world citizen must be addressed.

⁴ Ibid.

⁵ Monica Oliphant, ‘Australia’s Emissions Contribution: Does It Matter?’ in John O’Brien (ed), *Opportunities Beyond Carbon: Looking Forward to a Sustainable World* (Melbourne University Publishing, 2009) 328. Monica Oliphant is an experienced research scientist with expertise in renewable energy who specialises in solar energy, as well as in improved energy efficiency and reductions in greenhouse emissions. She has a Master’s degree in physics from the University of London and worked for almost 20 years as an energy research scientist for the Electricity Trust of South Australia. She is an Adjunct Associate Professor at the University of South Australia and a University Fellow at Charles Darwin University. She also runs her own consultancy, Monica Oliphant Research Scientist.

Figure 2 shows that by 2018 the average Australian had reduced his/her GHG emissions from 24.4 tonnes in 2010 to 22.4 tonnes. However, Australians remain the highest ranked atmospheric polluters among all the OECD nations.

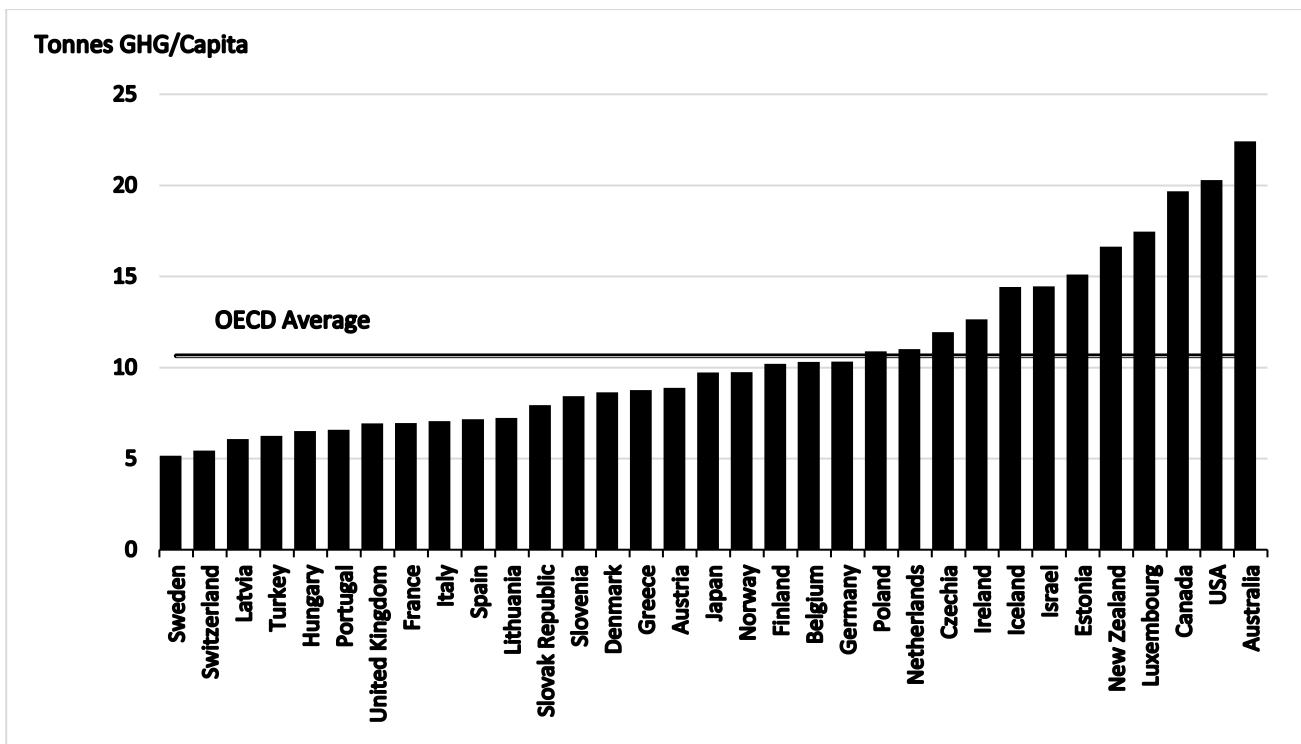


Figure 2: OECD national greenhouse gas emission intensities per capita, 2018.⁶

While a reduction of two tonnes per capita has been achieved, it appears that the total national emissions have plateaued rather than declined. Gains achieved in some sectors, such as through the roll-out of dispersed solar photovoltaic electricity generation that has displaced fossil fuels in the electricity generation sector, appear to be negated by the rise in GHG emissions in others.

It should be noted that, while Australians may contribute just over 1 per cent of the world’s GHG emissions,⁷ they make up just 0.33 per cent of the world’s population.⁸ That compares to the United Kingdom’s (UK’s) contribution of just under 1 per cent of the world’s GHG emissions.⁹ However, the UK has nearly three times the population (0.87% of the world’s population).¹⁰

⁶ Ibid.

⁷ Hannah Ritchie and Max Roser, ‘Greenhouse Gas Emissions’, *Our World in Data*, (Web Page, 2020) <<https://ourworldindata.org/greenhouse-gas-emissions#annual-greenhouse-gas-emissions-how-much-do-we-emit-each-year>>; Oxford University, ‘Total Greenhouse Gas Emissions, 2016’ *Our World in Data*, (Web Page, 2021) <<https://ourworldindata.org/grapher/total-ghg-emissions?tab=chart&time=latest&country=USA~GBR~CHN~IND~BRA~AUS>>.

⁸ Worldometer, *Countries in the World by Population (2021)* (Web Page, 2021) <<https://www.worldometers.info/world-population/population-by-country/>>.

⁹ Oxford University (n 9).

¹⁰ Worldometer (n 10).

The comparison with the UK reflects poorly on Australia in terms of combatting GHG emissions, but figure 3 reveals a possible key influencing factor and an explanation of why road transport emissions make up such a significant proportion of Australian per capita GHG emissions.

Physically, Australia is some 32 times larger than the UK. The area of Australia is approximately 7,741,220 sq km, while that of the UK is approximately 243,610 sq km.¹¹ Therefore, there is a significant difference between the population densities of the two nations. For illustrative purposes, figure 3 positions the outline of the UK near the middle of Australia.



Figure 3: The Australian landmass compared to that of the United Kingdom¹²

To provide some background to the distribution of the Australian population and the extent of the transport network, figure 4 shows how the population is concentrated along the southeastern and eastern coasts of Australia and the southwestern coast of Western Australia. If we consider the comparative road lengths of the two nations, in 2018 the UK government estimated the total road length in Great Britain to be 246,700 miles (or 397,000 km)¹³ while for the same

¹¹ My Life Elsewhere, *Country Size Comparison*, United Kingdom compared to Australia (Web Page, 2021) <<https://www.mylifeelsewhere.com/country-size-comparison/united-kingdom/australia>>.

¹² Australian Government, Geoscience Australia, *Australia's Size Compared* (Web Page, 2021) <<https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/australias-size-compared>>.

¹³ Government of the UK, *Road Lengths in Great Britain:2018* (Web Page, 2021) <<https://www.gov.uk/government/statistics/road-lengths-in-great-britain-2018>>.

year Australian government statistics showed Australia’s total road length to be over twice that of Great Britain, at 545,347 miles or 877,651 km.

In summary, Australia has roughly a third of the population of the UK, about 32 times the area, and two and one fifth times the road length.

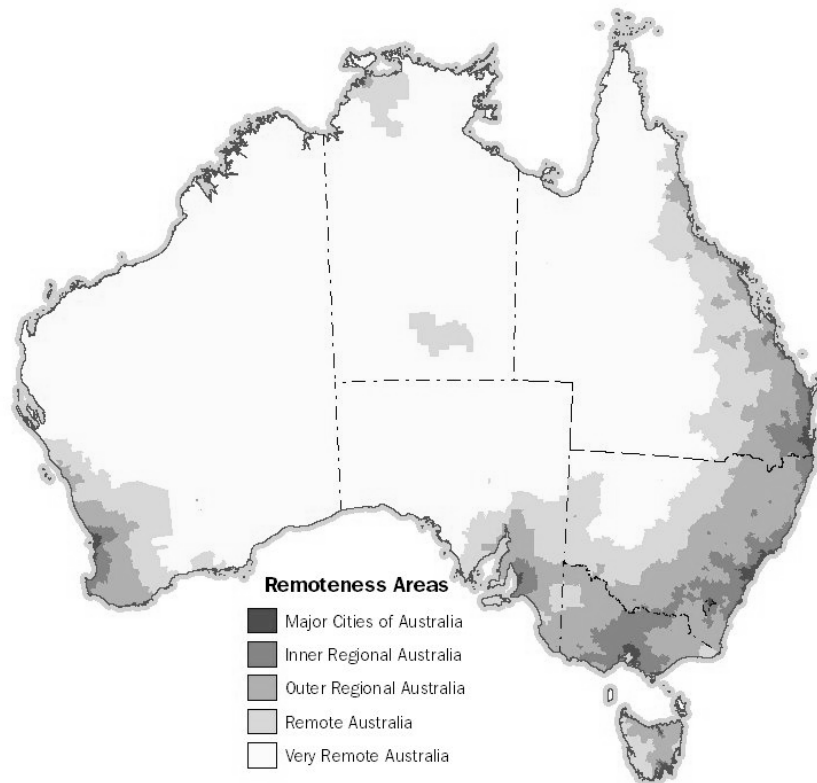


Figure 4: Map of the 2016 Remoteness Areas for Australia¹⁴

A detailed discussion of Australia’s road networks is beyond the scope of this paper, but the maps and basic statistics provide an understanding of the vast distances between the population centres and the challenges faced by the Australian population in reducing the GHG emissions from Australia’s transport sector. In addition, Australian decision-makers often point to the contribution made by other countries as some justification for the nation’s lack of an incentive to reduce GHG emissions.

While a detailed analysis of that political philosophy is somewhat beyond the scope of this paper, the case of Luxembourg tends to support this assertion. The tiny population of Luxembourg, which has just over 600,000 people, makes a significant contribution to global GHG emissions.

However, the OECD notes that there may be an explanation for the apparently distorted per capita GHG emissions attributable to Luxembourg. It notes that:

¹⁴ Australian Bureau of Statistics, ‘Remoteness Structure’ *The Australian Statistical Geography Standard (ASGS) Remoteness Structure* (Web Page, 2016), <<http://abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure#Anchor2e>>.

Luxembourg has made progress in decoupling environmental pressures from economic growth, treating wastewater and managing waste and materials. It has also positioned itself as an international centre for green finance. Yet, it remains one of the most carbon- and material-intensive economies in the OECD. The country is a crossroads for freight traffic and attracts thousands of daily cross-border commuters. This exacerbates greenhouse gas emissions, air pollution and road congestion.¹⁵

The apparent anomaly of Luxembourg, and the OECD’s explanation, point to the contribution that the transport sector can make to overall national GHG emissions. Given its geographical location, and the fact that it shares the burden of its larger neighbours, the disproportionate GHG emissions attributed statistically to the people of Luxembourg may have a valid explanation.

However, Australia has no international land borders and so the contribution of foreign commuters refuelling their motor vehicles as they transit the nation does not apply to Australia. The example of Luxembourg does, however, highlight the contribution that the road transport sector can make to national GHG emission levels. Therefore, the following section looks at the contribution that the road transport sector makes to Australia’s overall GHG emissions.

III AUSTRALIAN ROAD TRANSPORT GHG EMISSIONS

Figure 5 shows the total Australian GHG emissions and the percentages attributable to the road transport sector from 1990 to 2018. It shows that GHG emissions from the transport sector of the Australian economy continue to rise, in terms of both their volume and as a proportion of the overall national GHG emissions.

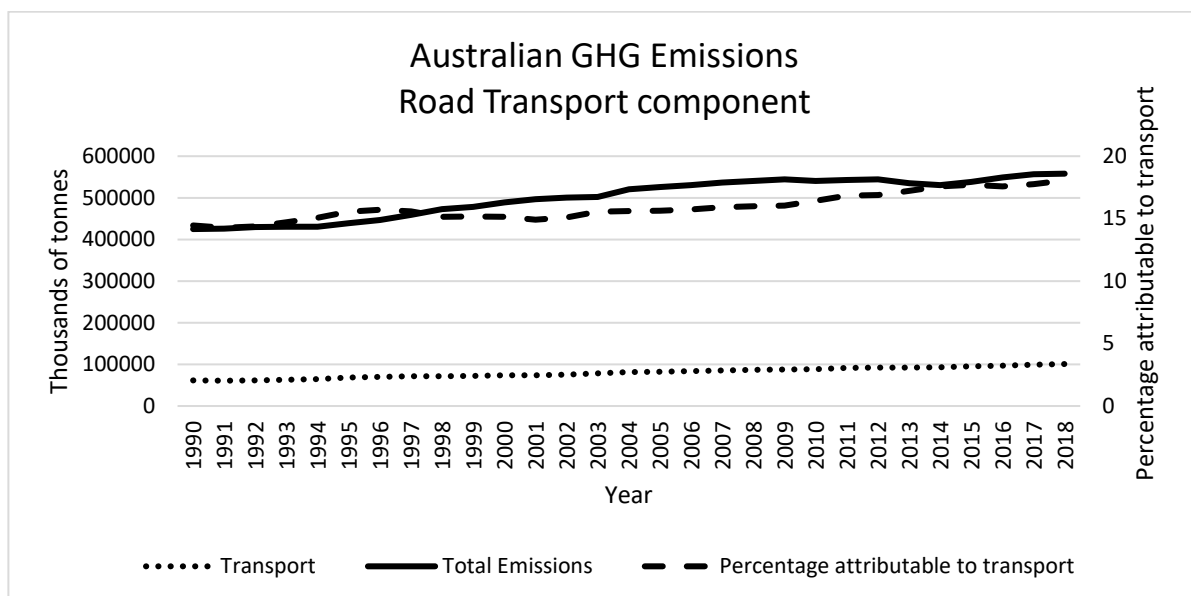


Figure 5: Australian Road Transport Emissions 1990–2018¹⁶

¹⁵ Organisation for Economic Co-operation and Development (n 5).

¹⁶ Organisation for Economic Co-Operation and Development, *Air Emissions by Source* (Web Page, 2021) <https://stats.oecd.org/viewhtml.aspx?datasetcode=AIR_EMISSIONS&lang=en#>.

In 1990, the transport sector contributed just 14.5 per cent, but by 2018 the GHG emissions from the transport sector had risen to 18.1 per cent. Therefore, significant reductions in national GHG emissions might be achieved by a focus on reducing the GHG emissions from the transport sector of the Australian economy. That might be achieved primarily through the adoption of electric vehicles, which would reduce the dependence on fossil fuels for transport and lead to a general reduction in GHG emissions.

In 2018 Fullarton's primary purpose was to refute a claim that the transition to electric vehicles would ultimately erode and endanger revenue set aside for the construction and maintenance of Australia's road network. He established that, while initially Australia's fuel excise had been hypothecated for the construction and maintenance of roadways, the practice had ceased in 1959 and therefore that this argument against transitioning away from internal combustion powered vehicles was no longer relevant.

However, despite this refutation, a key inhibitor of the transition to electrification in Australia's transport sector is the role of the taxes imposed on the nation's road users. This paper builds on the previous research, which was conducted in 2017, and further examines the impact of taxation on the transition of Australia's transport sector to electric vehicles, rather than the impact of the transition of electric vehicles on taxation revenue from Australia's transport sector.

It has been noted that electric vehicles sold in Australia often attract an added tax disincentive, in that most electric vehicles are sold at a price that exceeds Australia's luxury car tax threshold, and therefore an additional 33 per cent is added to the amount in excess of AUD 77,565 (2021).¹⁷ The luxury car tax appears to be an unfair addition to the total cost of purchasing a non-polluting vehicle compared to the cost of a vehicle of the same make and model powered by an internal combustion engine. Other taxes, such as state road maintenance taxes,¹⁸ are imposed that target EV road users to compensate for lost fuel excises, despite Fullarton arguing in the previous paper that the loss of revenue had no impact on expenditure on Australian roadways.¹⁹

The following section looks at Fullarton's paper,²⁰ and compares the most recent data with the forecasts in that paper, to monitor the data presented then and to provide a more up to date and accurate forecast of the transition to electric vehicles in Australia. It will also examine research that has been published since the research was conducted in 2017²¹ to provide confidence in Fullarton's findings.

¹⁷ Australian Taxation Office, *Luxury Car Tax* (Web Page, 27 May 2016) <<https://www.ato.gov.au/business/luxury-car-tax/>>.

¹⁸ *Zero And Low Emission Vehicle Distance-Based Charge Act 2021* (Vic). The purpose of this is to require registered operators of zero and low emission vehicles to pay a charge for the use of their vehicles on certain roads. However, this state legislation is currently being challenged in the High Court of Australia <https://climate-laws.org/geographies/australia/litigation_cases/vanderstock-and-anor-vs-the-state-of-victoria>.

¹⁹ Fullarton (n 1).

²⁰ *Ibid.*

²¹ For clarity it is iterated that the research of the case study was conducted in 2017 but published in this journal in 2018.

V THE IMPACT OF THE CHANGING TECHNOLOGY OF MOTOR VEHICLES ON ROAD TAX REVENUE

This section examines Fullarton’s previously published paper (which was based on data current in 2016) to summarise its findings and conclusions. The aim of this examination is to establish what changes have been made in the five years since 2016 that affect the estimates about the transition to electric vehicles by Australians which were considered reasonable in 2017.

The data presented in the previous paper are compared to the statistics available in 2021 to investigate the forecasts made in 2017 and to provide updated forecasts, noting any significant changes. This paper makes updated predictions on the transition in Australia’s transport sector towards the electrification of road transport and the corresponding reduction in GHG emissions from that sector.

This paper builds on the data and findings of the previous paper²² and monitors the progress of the transition to EVs in Australia. It updates those data to attempt to judge the accuracy of the trends predicted in the previous paper.

The research approach continues to use a quantitative analysis of published statistics, and this paper provides further case study data on the use of a Mitsubishi Outlander PHEV in the northwest of Western Australia, as first presented in 2018. The case study data now cover the five-year period from 30 May 2016 to 30 May 2021 to provide a comparison for the fossil fuel consumption of a PHEV used in the northwest of Western Australia.

The research supporting this paper is conducted by way of a further statistical analysis of motor vehicle census data published by the Australian Bureau of Statistics (ABS) and raw ABS data supporting its publications since 2016, and a further examination of Australian Taxation Office (ATO) statistics since 2016 to establish the revenue received by the Commonwealth of Australia from the fuel excise tax levied on motorists in Australia. From that revenue, the annual expenditure on the diesel fuel rebate tax is deducted to establish the net value of the taxation of petroleum products to the Commonwealth government.

The ABS data are compared to the findings from the examination of the ATO statistics to estimate the contribution of passenger vehicles powered by fossil fuels to the net revenue. The updated findings of the case study based on the operation of the Mitsubishi Outlander PHEV used in the previous research are examined to update the economic costs of using that vehicle on roads in a remote region of Australia.

The previous paper explored Galvin’s laboratory-based research for a Mitsubishi PHEV that was similar to, but not exactly the same as, the Mitsubishi Outlander PHEV used in this case study.²³ That examination provided a comparative analysis with the findings of the data of this field research. Fullarton found that Galvin’s research findings were strongly supported by the field data of this case study. Those field data are extended in this paper, but Galvin’s laboratory findings are not reviewed any further.

²² Ibid.

²³ Ray Galvin, ‘Energy Consumption Effects of Speed and Acceleration in Electric Vehicles: Laboratory Case Studies and Implications for Drivers and Policymakers’ (2017) 53 *Transportation Research Part D* 234.

Previously, Fullarton found

that unless fossil fuel-sourced electricity is displaced by renewable energy, there is no displacement of greenhouse gas emissions as a result of using electric vehicles. Due to losses in the generation and transmission of electricity, the use of electric vehicles may increase the volume of greenhouse gas emissions. Ultimately, the introduction of electric vehicles may have little or no significant impact on Australia's rate of greenhouse gas emissions. Rather, the source of the emissions moves from the exhaust pipes of motor vehicles to the chimney stacks of power stations.²⁴

He also found

that the transition from internal combustion engines to electric vehicles may have some impact on road tax revenues from fuel excises. Further, unless consumers can expect economic benefits, the transition to electric vehicles may not be significant in the transport sector.²⁵

He suggested that, despite Australia's reliance on heavy road transport, it was likely that passenger vehicles would be dominant in the rise of electrically powered vehicles in the foreseeable future, as the technology for heavy transport vehicles was not yet fully developed in the commercial market at that time.²⁶ Save for the impact on net fuel excise revenue this paper also focuses on passenger vehicles.

The 2018 paper considered that

The actual volume of electric vehicles on Australian roads is trivial, and certainly nowhere near the 20 per cent projected by the CSIRO, or 30 per cent according by Crowe's article. At a total rate of growth of 57 per cent, or 12 per cent per annum, the rate of growth is considerable, despite being established from a very low base of just 0.029 per cent of all vehicles. However, according to the ABS data, despite such a considerable growth rate in the number of electric vehicles on Australian roads, by 2035, electric vehicles will only make up less than 1 per cent of all passenger vehicles.²⁷

The paper noted that in 2016, the number of electric vehicles was just 6546 vehicles of a total of 13,815,108²⁸ and figure 6 shows that at that time there were a number of possible projections. They ranged from a growth rate of just 12 per cent per annum to as high as 42.5 per cent per annum and indicated what the proportion of electric vehicles to total passenger vehicles might be by 2035 according to the various trends.²⁹

²⁴ Fullarton (n 1) 38.

²⁵ Ibid 39.

²⁶ Ibid 41.

²⁷ Fullarton (n1) 42. The article referred to is David Crowe, 'Electric Cars Blow Hole in Road-Building Petrol Tax Revenues' *The Australian* (Sydney), 16 August 2016. It is unclear which CSIRO report Crowe is referencing. However, the modelling in the 2016 CSIRO report considers 'a medium projection of 20 percent light duty road electric vehicle adoption by 2035, consistent with other studies which tend to focus on the next 15-20 years.' It is possible Crowe has used a 'high projection rate for journalistic impact'. Calculated at a growth rate of 19 per cent against a growth rate of 6.2 per cent for all passenger vehicles.

²⁸ Fullarton (n1) 41.

²⁹ Ibid 43.

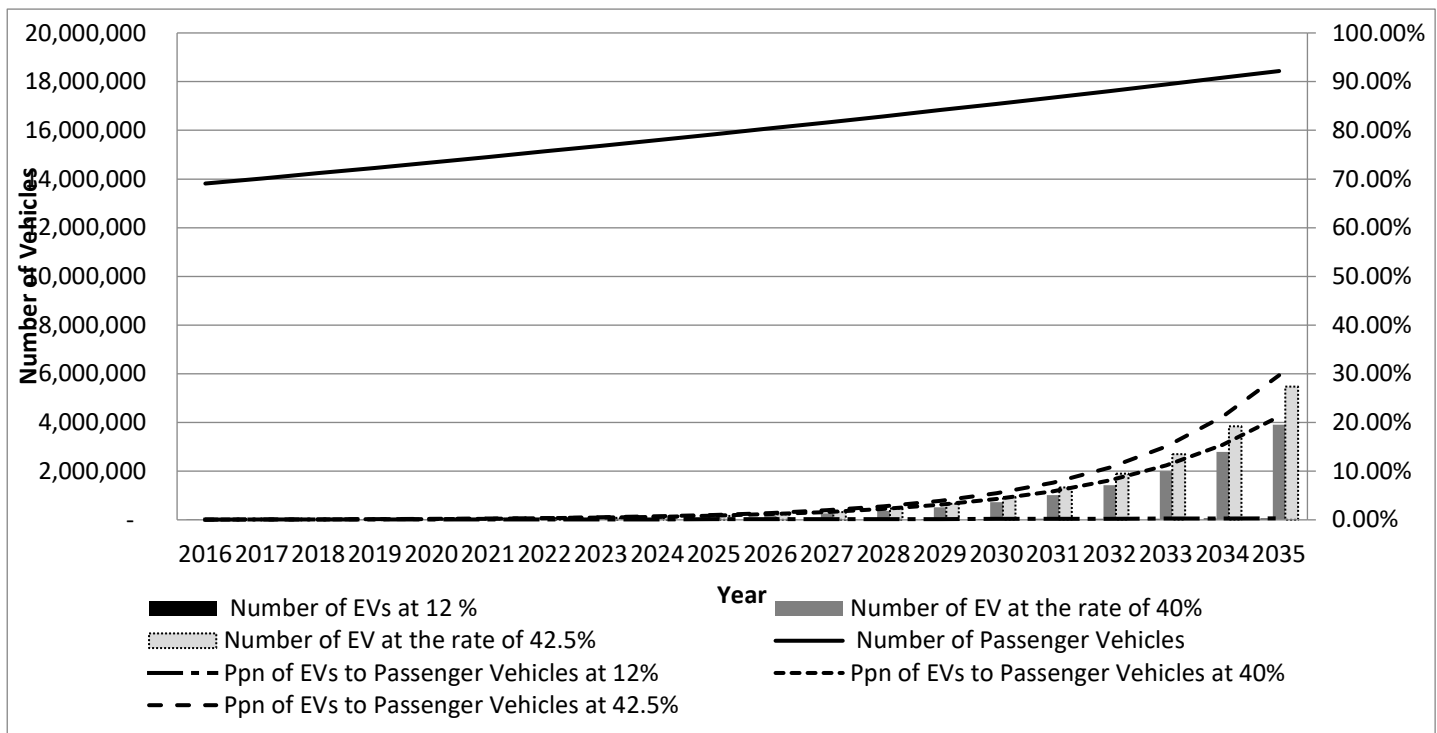


Figure 6: Possible Future Proportions of Electric Vehicles in Australia.
(Source: projected from ABS Motor Vehicle Census data 2013–16)³⁰

However further statistical data provided by the ABS in 2021 permits table 1 (which is an update of table 1 in Fullarton’s 2018 paper) to be created and those projections examined further.

Year	Electric Vehicles	Passenger Vehicles	Percentage of EVs	Total Vehicles	Percentage of EVs
2013	4,167	13,000,023	0.032	20,757,657	0.020
2014	4,705	13,297,170	0.035	21,313,721	0.022
2015	5,215	13,549,450	0.038	21,785,979	0.024
2016	6,546	13,815,108	0.047	22,249,088	0.029
2017	7,774	14,078,569	0.055	22,733,051	0.034
2018	9,728	14,330,429	0.068	23,215,235	0.042
2019	8,935	14,504,151	0.061	23,625,540	0.038
2020	15,688	14,679,246	0.107	24,002,745	0.065
2021	23,128	14,850,675	0.156	24,475,128	0.094

Table 1: Growth of Electric Vehicles in Australia 2013–21.³¹

³⁰ This graph was compiled from ABS raw data and does not necessarily precisely match published Australian Bureau of Statistics, *Catalogue 9309.0 – Motor Vehicle Census, Australia, 31 Jan 2016*, which is a count of registered vehicles.

³¹ ABS Motor Vehicle Census data 2013–20. This table is compiled from raw ABS data and there is not necessarily a precise match with the data published by the Australian Bureau of Statistics, *Catalogue 9309.0.55.003 – Microdata: Census of Motor Vehicles, Australia, 24 July 2020* <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/51BEF79A03CAE65DCA257C4400190474?OpenDocument>>.

The data from table 1 are used to update the graph shown in figure 6 and create the graph in figure 7. Figure 7 provides an updated projection of the expected proportions of electric vehicles on the Australian roads to 2035.

The earlier estimates, based on data from 2016 which showed uptakes of just 12 per cent and 40 and 42.5 per cent, have been omitted from this later graph. Rather, ABS data for 2021 indicate that the uptake growth rate exceeded the rate of 42.5 per cent and instead rose to 47.4 per cent from 2020 to 2021. Therefore, the earlier possible growth rates have been omitted from this paper and only the rate of 47.4 per cent has been adopted in figure 7.

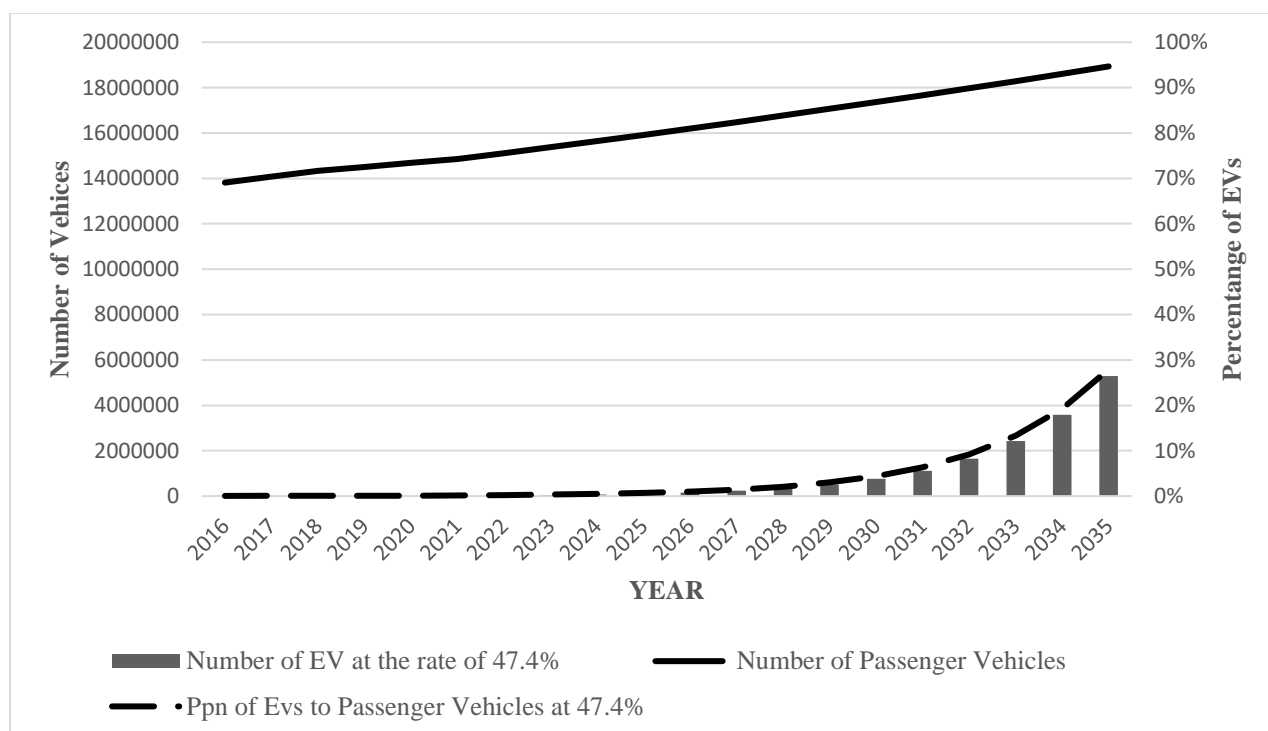


Figure 7: Possible Future Proportions of Electric Vehicles in Australia (2021 projections). (Source: projected from ABS Motor Vehicle Census data 2013–21)³²

In 2018 Fullarton noted that the uptake of roof-mounted solar pv installations in the late 2000s exceeded the expectations of governments and electricity utility companies, and suggested that ‘[g]iven similar social and economic influences, the uptake of electric vehicles could replicate the rate of uptake of solar pv installations.’³³

Figure 6 reproduced from the previous paper, shows the rate at which the Australian public had embraced renewable energy through the installation of solar pv systems from 2001-15. In particular, in the period 2007-11 the uptake had been a rate of 6341 per cent.³⁴

³² Ibid.

³³ Fullarton (n 1) 44.

³⁴ Ibid.

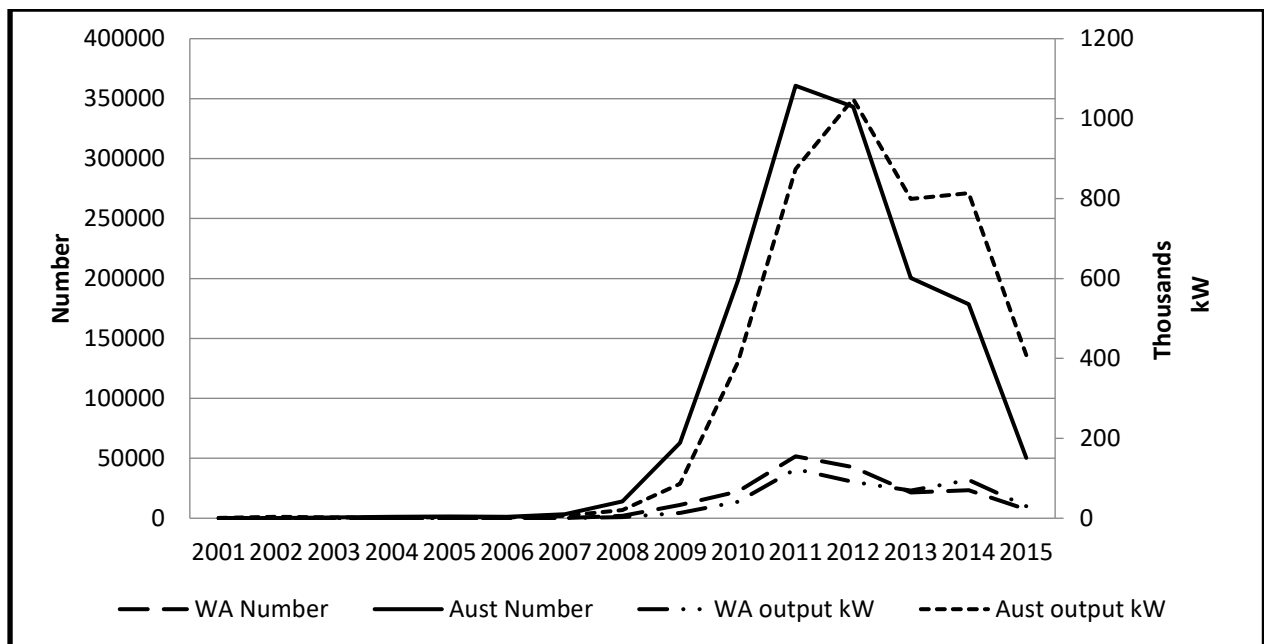


Figure 6: The number of small-scale solar photovoltaic installations by year for Western Australia and Australia: 2001–2015.

(Sources: Solex data, Australian Clean Energy Regulator, and Australian PV Institute³⁵)

Fullarton suggested that owners of solar photovoltaic electricity generation systems might already be aware of the benefits of self-generated renewable energy, and that charging electric vehicles from solar pv sources might be an extension of the use of renewable energy.³⁶

His anticipated correlation between residential solar pv energy systems and the adoption of electric vehicles to take advantage of ‘free’ electricity sources does not appear to have occurred at this point in time. It is possible that the significant difference between the heavily subsidised capital cost of solar pv installations and the highly taxed cost of electric vehicles could be a factor in reducing the rate of transition to electric vehicles. That correlation is beyond the scope of this research. However, it may influence consumer demand for electric vehicles in the future.

Detailed analysis of the correlation between the sales data provided by Mitsubishi Motors Australia Limited and the ABS statistics is beyond the scope of this research. However, it is noted that the company provided information that the total number of PHEVs sold (which was 1,660 in 2016) had risen to over 7,200 in 2021.³⁷ However, this is significantly different from the ABS statistics for June 2021, which reveal that only 422 Mitsubishi Outlander PHEVs are registered on the Australian roads.

There are a range of possible explanations for this. One possible explanation was illustrated in the previous paper:

³⁵ Sources: Solex data held by Alexander Fullarton, Australian Clean Energy Regulator, and Australian PV Institute, as quoted in Alexander Robert Fullarton, *Watts in the Desert: Pioneering Solar Farming in Australia’s Outback* (Ibidem Verlag, 2016) 4.

³⁶ Fullarton (n1) 44.

³⁷ Email from Tom Pitman (General Manager – Network Strategy and Operations, Mitsubishi Motors Australia Ltd) to Alexander Robert Fullarton, 2 November 2021. Note the figure does not include the 2017 statistics and that in 2018 the number was fused with the number of pure electric vehicles sold.

The ‘plug-in hybrid electric vehicle’ has been recorded as a petrol-powered vehicle. The error arises from the use of the term ‘petrol/hybrid’ by the motor vehicle dealer, instead of ‘plug-in’. One incorrect registration in 6546 is insignificant, but it does indicate a lack of awareness of the difference between internal combustion engine-powered and electric vehicles, even by motor vehicle distributors. However, as examined later in the case study section of this paper, the clerical misunderstanding of the terminology may not give rise to significant statistical errors at this point in time.³⁸

In 2016 the difference between the purchase cost of the Mitsubishi Outlander PHEV and the purchase cost of its ‘standard’ internal combustion engine powered variant was AUD 11,000³⁹ or 30 per cent. In 2021 the difference was the same, at AUD 11,000, or 29.7 per cent (as the base price had risen).⁴⁰

In terms of total ownership cost, the additional AUD 11,000 in capital cost will be returned through savings in the avoided cost of petrol. Because of the range of ULP prices and the cost and fuel consumption differentials, the following algebraic formulae have been developed to evaluate the duration of time and the distance that are required to recover the additional capital cost between the PHEV and the equivalent ICE make and model.

$$\text{km} = (\text{Capital cost difference/ULP price})/(\text{ULP consumption difference (L/100km)}*100)$$

and

$$\text{Months} = \text{km}/\text{average monthly distance travelled}$$

By substituting data into the formulae for the given variables, the distance required to be travelled and the duration can be estimated.

The time taken for the recovery of the additional capital cost is influenced by the difference between the purchase cost of the electric (or plug-in variant) vehicle and the purchase cost of the internal combustion engine powered make and model, the cost of ULP and the other ongoing operational costs of the vehicle. This paper recognises that there are other capital costs associated with charging the PHEV, and notes that there are reductions in other operational costs such as the cost of servicing the vehicle and tyre use compared to the ICE powered variant of the vehicle, but these are beyond the scope of this paper.

On current trends, it is almost certain that one in three passenger vehicles will be an electric vehicle by 2035. The reduction in the volume of traffic producing toxic exhaust fumes on Australian roads should be reflected in a significant reduction in GHG emissions from the transport sector.

A commensurate 30 per cent reduction in GHG emissions might not be achievable, as most electric passenger vehicles are currently at the lower end of vehicle size; heavier, less fuel efficient, vehicles will remain on Australian roadways. It is also worth noting that while

³⁸ Fullarton (n 1) 41.

³⁹ 2016 Mitsubishi Outlander PHEV \$47,490 and Outlander 4WD XLS \$36,490. Email from Tom Pitman (General Manager – Network Strategy and Operations, Mitsubishi Motors Australia Ltd) to Alexander Robert Fullarton, 2 November 2021.

⁴⁰ Ibid.

expenditure on Australian roadways is unrelated,⁴¹ net road tax revenue is therefore not expected to fall by the same 30 per cent.

A Fuel Excises and Fuel Tax Credits

Table 2 shows Australia’s fuel excise rates and the total annual fuel excise revenue for the period 2003–04 to 2020–21.

Year ended 30 June	Fuel Excise Rate Cents/Litre	Excise Revenue \$m
2004	38.143	13,186
2005	38.143	14,245
2006	38.143	13,926
2007	38.143	14,840
2008	38.143	15,115
2009	38.143	15,544
2010	38.143	15,667
2011	38.143	16,359
2012	38.143	17,282
2013	38.143	17,736
2014	38.143	17,806
2015	38.600	17,760
2016	39.200 - 39.500	17,804
2017	40.100 - 40.300	18,371
2018	40.300 - 41.200	19,472
2019	41.200 - 41.800	19,530
2020	41.800 - 42.300	tba
2021	42.300 - 42.700	tba

Table 2: Australia’s Fuel Excise Rates 2004–21.

(Sources: *Excise Tariff Amendment (Fuel Indexation) Act 2015* (Cth);⁴² Australian Government data.gov.au⁴³)

There is a detailed discussion comparing fuel excises and road construction and maintenance expenditure in the previous paper,⁴⁴ and this will not be repeated in this paper. Table 2 updates the fuel excise rates to 2021.

Table 3 shows the net revenue after fuel tax credits have been refunded to certain taxpayers in the heavy transport, mining and other industries, such as agriculture, forestry and fishing, which are not considered to be road users.⁴⁵

⁴¹ Fullarton (n 1) 54.

⁴² *Excise Tariff Amendment (Fuel Indexation) Act 2015* (Cth) No. 101, 2015.

⁴³ Australian Government, data.gov.au, (Web Page, 25 November 2021) Australian Tax Office Taxation Statistics 2014-15 <http://data.gov.au/dataset/taxation-statistics-2014-15/resource/37b0b252-7c5a-4895-a708-db071c54d5fd?inner_span=True>.

⁴⁴ Fullarton (n 1).

⁴⁵ Australian Taxation Office, *Fuel Schemes/Eligible Activities (2017)* (Web Page, 25 November 2021) <<https://www.ato.gov.au/business/fuel-schemes/fuel-tax-credits---business/eligibility/eligible-activities/>>.

Year	Fuel Excise \$m	Fuel Tax Credits \$m	Net Revenue \$m
2005	14,245	3,747	10,498
2006	13,926	3,814	10,112
2007	14,840	4,516	10,324
2008	15,115	4,703	10,412
2009	15,544	5,065	10,479
2010	15,667	4,994	10,673
2011	16,359	5,109	11,250
2012	17,282	5,527	11,755
2013	17,736	5,374	12,362
2014	17,806	5,706	12,100
2015	17,760	6,010	11,750
2016	17,804	6,095	11,709
2017	18,371	6,256	12,115
2018	19,472	6,796	12,676
2019	19,530	7,137	12,393
2020	19,308	7,382	11,926
2021	tba	tba	tba

Table 3: Tax Credits paid in Respect of Eligible Off-Road and Heavy Transport Activities
(data.gov.au Taxation Statistics 2017-20 Excise⁴⁶)

Table 3 reveals that fuel excises rose by 37.1 per cent during the period 2005–19 but fell slightly by 3.8 per cent in 2020. The previous paper revealed that during 2005–16 the increase was 28.44 per cent. The increased revenue is due to the removal of the cap on fuel excise in 2016, as shown in table 2.

Further, the fuel tax credits given in 2019 were 90.47 per cent higher than the credits in 2005, which should be compared to the 62.32 per cent increase in the period 2005–16. After the fuel tax credits had been given to the eligible businesses, the increase in net road revenue from this source was 18.05 per cent from 2005 to 2019; during 2005 to 2016 the increase was only 11.5 per cent. (Table 3 of the previous paper gave that figure as 15.56 per cent⁴⁷). Given the rise in fuel tax credits to eligible off-road users and the heavy transport sector, most taxed road users continue to be drivers of passenger vehicles.

It can be noted that the gross excise collections fell from 2019 to 2020, and yet the fuel tax credits rose in the same period. It is suggested that this may be due to the travel restrictions imposed on Australian citizens during the Covid-19 pandemic, at a time when heavy transport continued with its freighting activities and other industries continued to function. However, the impact of the Covid-19 counter measures is beyond the scope of this paper. It is also beyond

⁴⁶ Australian Taxation Office, *Research and Statistics; Taxation Statistics (2017-18)* (Web Page 23 October 2021) < <https://data.gov.au/dataset/taxation-statistics-2017-18>>. Table 3 in this paper varies a little from table 3 in the 2018 paper as the ATO has reviewed the previous figures. Further, it appears that condensate and heavy fuels have been added to the gross excise collection figures. Those fuels are chiefly consumed in shipping and very heavy industry. This paper focuses on roadway transport, and therefore the reviews and the addition of certain types of fuels may alter the figures for the collections and credits slightly but do not influence the principal argument.

⁴⁷ Fullarton (n1) 48.

the scope of this paper to suggest whether the electrification of passenger vehicles from renewable resources will have a significant impact on reducing the GHG emissions from Australia's transport sector, as the bulk of fossil fuel consumers are not being taxed.

ATO statistics for the fiscal year 2018–19 show that the volume of petrol sold was 14,476 megalitres compared to diesel sales of nearly twice that, at 27,771 megalitres.⁴⁸ Diesel is the preferred fuel for off-road users, such as those in the mining and the fishing industries, as well as the heavy transport sector. Therefore, increasing fuel excises may reduce fossil fuel consumption in passenger vehicles, but the major polluters will have no such disincentive to seek alternative, renewable, non-polluting fuel sources.

ABS data show that the total number of motor vehicles registered in Australia rose 12.33 per cent from 16,368,383 in 2011⁴⁹ to 18,387,136 in 2016.⁵⁰ That number continued to rise, to 18,824,136 in 2020.⁵¹ It can be seen that the rate of growth slowed from 12.33 per cent over the five years 2011–16, to just 2.38 per cent over the four years 2016–20. The impact of a reduction in the rate of growth of motor vehicles generally on Australian roadways is beyond the scope of this paper, but it is fair to observe that fewer vehicles must lead to fewer problems associated with road construction and maintenance, and fewer GHG emissions.

The following section focuses on the Mitsubishi Outlander PHEV travel and fuel consumption data derived from log books kept during the period 30 May 2016 – 31 October 2021 to establish actual fossil fuel reduction compared to its ICE variant in a rural setting in Australia.

V MITSUBISHI OUTLANDER PHEV CASE STUDY

This section examines a case study conducted on a Mitsubishi Outlander PHEV that is owned and operated by the Solex Solar Project in Carnarvon, Western Australia. In the previous paper, the vehicle was used in a rural/urban setting for a period of 17 months from May 2016 to October 2017. This paper extends that trial to October 2021.

As before, the main focus of this paper is the negative impact of fuel excise on the transition to electric vehicles, and therefore examination of other taxes such as goods and services tax and licence fees those taxes are outside the scope of this paper and will not be examined further in this paper.

For clarity the focus of the study is repeated from the previous paper.

⁴⁸ Australian Taxation Office, *Research and Statistics; Taxation Statistics (2018-19)* (Web Page 23 October 2021) <<https://data.gov.au/data/dataset/taxation-statistics-2018-19>>.

⁴⁹ Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2011* (Web Page 1 November 2021)
<<https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/DB874793F9B4083FCA257A61001705EB?opendocument#:~:text=There%20were%2016.4%20million%20motor,million%20vehicles%20registered%20in%20Australia>>.

⁵⁰ Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2016* (Web Page, 21 July 2016)
<<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/9309.031%20Jan%202016?OpenDocument>>.

⁵¹ Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2020* (Web Page, 2020)
<<https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release#data-download>>. Note that the 2020 census figures for non-freight carrying vehicles was unavailable in April 2021. The figure of 25,000 was extrapolated from previous data for 2015 and 2019 and projected forward to 2020.

The Outlander is garaged in Carnarvon Western Australia. It is primarily used for travel within the small town for round trips of less than 20km. Its fuel source, while in Carnarvon, is exclusively electricity sourced from renewable energy generated by the Solex Solar Farm. It is energised by way of a 15-amp general purpose outlet to a 240-volt AC supply. The vehicle is charged during daylight hours when not in use. The supply is metered. However, no data of charging times has been kept.⁵²

As in the previous case study, long-range trips of around 1000km were conducted in roughly three-month periods, but fewer trips took place in 2020–21 because of the Covid-19 measures implemented in the Perth metropolitan area

The previous research data is updated to extend the period under review from 30 May 2016 to 1 November 2017 to 31 October 2021. Appendix A shows that during the period 30 May 2016 to 31 October 2021 the vehicle travelled 78,462 km (48,754 miles) and consumed 3880.84L (853.67Imp gal) of unleaded petrol. Those data show an average fuel consumption of just 4.95L/100km (57.07mpg Imp) (previously 5.56L/100km or 50.81mpg Imp).

In addition to the unleaded petrol consumed, the vehicle also consumed 4476kWh of electricity. By applying an estimate of 330ml of petroleum to produce 1kWh of dispatchable electricity,⁵³ as applied in the previous paper, an additional 1477.08L (324.91 Imp gal) of unleaded petrol has been displaced. The total fuel consumption, including the electric charge in equivalent unleaded petrol, is now 5357.92L (1178.58 Imp gal) which produces an average fuel consumption, including the electric charge, of 6.83L/100km (41.36 mpg Imp). For comparison, the previous data from 30 May 2016 to 1 November calculated that the fuel consumption including the electric charge was 7.52L/100km (37.56 mpg Imp).

A detailed log of trips is shown in Appendix A. The log shows that ULP consumption varies considerably. It is as low as from 0.76L/100km (371.68 mpg Imp) on 31 August 2021 for local running in Carnarvon when constantly within battery capacity range and regularly charged with electricity, to 13.76L/100km (20.53mpg Imp) for a trip from Carnarvon to Perth against strong to moderate winds in July 2020.⁵⁴

As in the previous paper

It was noted that wind resistance has considerable influence on the fuel consumption rates of the Mitsubishi Outlander PHEV. When located in Carnarvon, the vehicle is charged regularly with electricity, and therefore uses very little unleaded petrol. All of the electricity is sourced from solar pv renewable sources generated from the Solex solar farm. The manufacturer has advertised fuel consumption rates of as low as 1.7L/100km (166mpg Imp).⁵⁵

⁵² Fullarton (n1) 50.

⁵³ Santiago Arnalich, *Epanet and Development: How to Calculate Water Networks by Computer* (Arnalich, Water and Habitat, Spain 2011) 153. Arnalich uses diesel to establish a calculation of 300ml/kWh. This calculation has been made on the basis that motor petroleum is 88 per cent of the energy contained in diesel. This paper uses the schedule in Part 3 of the National Greenhouse and Energy Reporting (Measurement) Determination 2008 made under subsection 10(3) of the *National Greenhouse and Energy Reporting Act 2007* to support the calculation used here.

⁵⁴ It is noted that the log reveals considerable higher ULP consumptions but these are anomalies caused by not filling the ULP fuel tank to capacity. When the fuel tank is eventually filled completely the consumption figures become distorted.

⁵⁵ Fullarton (n1) 50.

Galvin’s research findings and comparative ICE vehicle fuel consumptions were examined in detail in the previous paper and are not examined further in this paper.⁵⁶ It was concluded that Galvin’s ‘findings are consistent with the principles of physics of work, power and energy.’⁵⁷ It is simple physics that the energy required to carry out the movement of a certain mass, over a certain distance, within a certain time, will always be the same no matter what the energy source is.⁵⁸

The manufacturer’s publications, which disclose a fuel consumption rate of around 2L/100km, do not appear to take the fossil fuel equivalent for the generation of the electrical charge of around 24kWh/100km into consideration. Therefore, for the purpose of this analysis the fossil fuel equivalent of the consumption will also be ignored and the focus is solely on ULP consumption.

The data in this case study research can be applied to the formulae given in the previous section: the additional capital cost is AUD 10,524; the ULP difference is 2.25L/100km; the ULP price is AUD 1.759; and the average monthly distance travelled is 1,200km.

The distance required to recover the additional capital cost by way of ULP displaced by electricity is:⁵⁹

$$\begin{aligned} \text{km} &= ((\text{AUD } 10,524/\text{AUD } 1.759)/(2.25\text{L}/100\text{km}))*100 \\ &= (5,982.945/2.25)*100 \\ &= 2,659.086*100 \\ &= \mathbf{265,908\text{km}} \end{aligned}$$

$$\text{Months} = 265,908\text{km}/1,200\text{km}$$

$$= \mathbf{221 \text{ months or 18 years and 5 months}}$$

Therefore, using data from this case study, it is estimated that the additional capital cost might be recovered through the avoided fuel costs over as much as 265,908km or just short of 20 years.⁶⁰

On the other hand, if the PHEV were to be entirely used as an EV and no ULP were consumed then the entire 6.83L/100km would be avoided and the capital cost recovered in just over 70 months (assuming that the electricity was ‘free’ electricity sourced entirely from a solar pv installation and ignoring the capital cost of the installation).

⁵⁶ Ibid 51-3.

⁵⁷ Stanley Leonard Martin and Andrew Kenneth Connor, *Basic Physics 1* (Whitcombe and Tombs Pty Ltd, 1968) 64-76.

⁵⁸ Fullarton (n1) 53.

⁵⁹ Note: in this case the electricity used for on board generation is sourced from the Solex Solar Farm and is deemed to be a free renewable resource, ignoring the capital cost of the solar farm and the opportunity cost of ‘internal consumption’ rather than the sale of electricity to the state utility.

⁶⁰ The estimate is based on a ULP fuel saving of 2.25L/100km being the manufacturers estimate shown in table 5 and average consumption shown by the data in Appendix A. (7.2L/100km and 4.95L/100km). The price used in the median price for Carnarvon Western Australia on 30 October 2021 (175.9c/L). Petrol Spy Australia, <https://petrolspy.com.au/map/latlng/-24.872274736615623/113.68456647526159>.

$$\begin{aligned} \text{km} &= ((\text{AUD } 10,524/\text{AUD } 1.759)/(6.83\text{L}/100\text{km}))*100 \\ &= (5,982.945/6.83)*100 \\ &= 875.980*100 \\ &= \mathbf{87,598\text{km}} \end{aligned}$$

$$\text{Months} = 87,598\text{km}/1,200\text{km}$$

$$= \mathbf{73 \text{ months or 6 years and 1 month}}$$

A Case Study Conclusion

The previous paper focussed on road tax revenue and the opportunity cost of lost tax revenue caused by the transition to electric vehicles in Australia. This extension of the case study research has focused on the unleaded petrol savings and therefore reduction in GHG emissions caused from a transition to electric vehicles in Australia.

It finds that by using the Mitsubishi PHEV in the role of an EV, by constant charging from solar pv electricity sources considerable fiscal savings in avoided unleaded petrol costs can be achieved. The less the vehicle is used for long distance journeys the greater the fiscal savings. It notes there is a greater capital cost of the PHEV version over the comparable ICE version but that cost could be recovered in as short as six years or up to nearly 19 years if used in a remote location such as Carnarvon Western Australia. That cost recovery period remains within the expected effective lifespan of the vehicle.

Therefore, while the PHEV may cost more in capital cost operational savings will eventually cover that higher capital cost. There is an overall fiscal benefit in transitioning to a PHEV in remote Australia.

The capacity to generate electricity from an ‘on board generation system’ permits the vehicle to operate and have the same range as its comparative ICE version. The higher unleaded fuel costs rise in remote Australia and the more often the vehicle is used in an urban environment, compared to highway travel the shorter the cost recovery period.

VI CONCLUSION

The previous conclusion that ‘[i]n the modern world, where the reduction of greenhouse gas emissions from burning fossil fuel is viewed as a pressing environmental concern, the subsidisation of fossil fuels appears incongruous with society’s goals’⁶¹ remains the focus of

⁶¹ Fullarton (n1) 54.

this paper. However, this paper further contributes to the previous paper in that it finds that the transport sector contributes nearly one fifth of Australia's total atmospheric pollution emissions, and that transitioning to EVs and PHEVs could have a significant effect on reducing the nation's GHG emissions and its contribution to global climate change. This further examination of recent data from the ABS and ATO provides a clearer indication that the proportion of electric vehicles on Australian roadways will escalate to a level that may have a significant impact on reducing GHG emissions by 2035.

Previously ABS data indicated that the proportion electric vehicles to all passenger vehicles was less than one half of one per cent at the end of the 2016 calendar year. However, that figure rose to nearly one per cent by 2021. This indicates that electric vehicles might constitute nearly 30 per cent of Australia's entire national fleet of passenger vehicles by 2035 if the same rate of uptake experienced in 2020 and 2021 is continued in future years.

Examination of the ATO data in the previous paper, as updated in this paper, reveals that the reduction in fuel excise revenue caused by the transition to electric vehicles will be irrelevant to national road revenue collections. This paper re-iterates that the federal government removed the hypothecation of fuel excises to roadway construction and maintenance in 1959, and those assertions that the transition to non-petroleum-based passenger vehicles will have a severely negative impact on expenditure on Australian roads are not true. This paper has found no further evidence to refute that finding.

This updated study continues to illustrate that

The case study has proved that the 'hybridisation', of an internal combustion engine powered by an on-board generation system with an external electrical charging capability, works effectively and efficiently. The vehicle performs a dual role – it is an electric vehicle in an urban setting and an internal combustion engine powered vehicle for the purposes of long-distance travel.⁶²

VII RESEARCH LIMITATIONS

This research is limited to Australian legislation applicable to fuel excises levied on petroleum products used in the road transport industry. There are many other jurisdictions and enterprises that have not been examined, and the findings of this research should not be applied directly to other jurisdictions or economies.

Government-sponsored incentives and other influencing factors that may encourage the uptake of electric vehicles by Australian motor vehicle owners have not been considered in this research. While the cost of displaced unleaded petrol has been examined, the range of other costs of operating a motor vehicle, such as insurance, registration, servicing, tyres and the replacement of the PHEV's main drive battery, have not been considered, and nor have the social and environmental benefits been evaluated or reduced to monetary values. Therefore, the overall impact of those social, economic and environmental drivers on the uptake of electric vehicles is not investigated or estimated in this paper.

⁶² Ibid.

The case study is limited to a rural/urban environment in a remote hamlet some 900 km distant from Western Australia's capital city. Several long-distance journeys have been included in the fuel consumption data collated over 65 months and 78,462km. While the data portray a blend of urban and long-distance travel reasonably well, the use of the vehicle is far from being typical of average urban use, either in Western Australia or in any other urban environment.

In its current use pattern, the Mitsubishi Outlander PHEV can be readily recharged from renewable energy sources, and the short trips it makes are less than 25km. An urban commuter is likely to make far longer journeys. When the vehicle makes long-distance journeys, the distances are greater than 500km. A vehicle located in a city is unlikely to make such journeys on a regular basis.

A comparative cost of maintenance between a PHEV and a comparative ICE-powered vehicle has not been attempted. It is noted that the costs will vary widely from state to state, from manufacturer to manufacturer and from nation to nation. The costs of unleaded petrol, licensing and insurance and the source and supply costs of electricity will also vary considerably.

This case study has only indicated how costings could be carried out, not what the actual costs could be. That area could form the focus of future research. Suggestions for further research, which has been noted as beyond the scope of this research, are made in the following section.

VIII SUGGESTIONS FOR FURTHER RESEARCH

This section considers some of the areas of research that have been identified as being beyond the scope of this paper. These could be investigated to develop a broader understanding of the impact of changing technology on the manner in which passenger vehicles are used and powered.

- The social and environmental impacts or benefits of transitioning away from internal combustion engines to vehicles powered by electric motors are beyond the scope of this paper. A study could include a detailed scrutiny of Australia's GHG emission reduction policies in the transport sector, to identify Australia's role and conduct in reducing global GHG emissions.
- An investigation could be conducted into the contribution of GHG emissions from the transport sector towards air pollution, and therefore the influence of this sector on the causes of the respiratory disease known as Covid-19 pandemic. It is possible that GHG emissions could contribute to a progressively polluted atmosphere.
- A detailed study of Australia's road networks could be conducted to provide an understanding of the vast distances between population centres and the unique challenges faced by the Australia population in reducing GHG emissions from transport.
- An analysis could be conducted of the impact of the disparity between the capital cost of an electric vehicle and that of the alternative internal combustion engine powered

version of that vehicle make and model, to assess the economic impact of the capital cost on the total ownership cost of the vehicle. That analysis could attempt to predict the time it would take to recover that difference in the capital cost in terms of the reduced total operating costs over the effective lifespan of the vehicle.

- An investigation could be conducted as to a possible correlation between residential solar pv energy systems and the adoption of electric vehicles to take advantage of the ‘free’ electricity generated by solar pv installations.
- Other capital costs associated with charging a PHEV and the reductions in other operational costs such as the cost of servicing the vehicle and tyre use compared to the ICE powered variant of the vehicle could be considered, to contribute to a better understanding of the total ownership cost of EVs and PHEVs over the lifespan of the vehicles.
- This paper focuses on the impact of the rise in the proportion of electric vehicles on Australian roads. A study of the impact of a reduction in the overall rate of growth of motor vehicles generally on Australian roadways could support or refute the observation that fewer vehicles must lead to fewer problems associated with road construction and maintenance and fewer GHG emissions from the transport sector, in Australia and the other nations of the world.
- It is suggested that the terminology and definitions used by different organisations and manufacturers may be leading to inaccurate statistical conclusions. In turn, these inaccuracies could lead to faulty decision-making processes.

In this research it has been noted that a PHEV can be used to mean a ‘petrol hybrid electric vehicle’, which derives its energy solely from fossil fuels (ULP or diesel), or a ‘plug-in hybrid electric vehicle’. In this case study the energy for roughly half of the PHEV’s travel came from electricity sourced from a solar pv installation, and the balance from an ICE (an on-board ULP-fuelled generation system).

The case study found that the Mitsubishi Outlander PHEV has been classified by the licensing authority as a petrol-fuelled vehicle or ICE. In fact, it is not.⁶³ This may only apply to one vehicle, but the ABS data for the state of Western Australia for 2017 stated that there were no Mitsubishi Outlander PHEVs registered in that state. A misunderstanding of initials and terminology has resulted in an erroneous statistical analysis, on which governments and other decision-makers rely.

An investigation into the correlation between the sales data provided by motor manufacturing agencies and dealerships, the data of licensing and registration authorities and the data provided by the ABS could be conducted to reconcile the statistics produced by each organisation.

- A suggestion for further research made in the previous paper, but not covered in this research update, is an investigation into the introduction of electric vehicles in the

⁶³ It should be noted that the Mitsubishi Outlander PHEV used in this case study is clearly marked with the badge Plug-in Hybrid EV. All the documentation and service booklets are also titled Plug-in Hybrid EV.

workplace for the purpose of employees commuting from their residences to places of work.

It was suggested that employers could provide electric vehicle charging facilities powered from renewable energy sources. Employers could install roof mounted solar pv systems and provide employees with free, or heavily subsidised, electricity. Employees would benefit from a reduction in the costs of commuting to and from the workplace, and there would be environmental benefits from reduced greenhouse gas emissions. The economic savings of the reduced fuel costs could be shared between the employer and the employees.

Finally, the introduction of electric vehicles enables a transition to renewable energy sources for the road transport sector to develop readily. This transition is strongly recommended by this paper.

Appendix A

ULP Consumption					
Date	Distance	Odometer	ULP	ULP Consumption - L/100km	Highway Use (km)
30/05/2016	0				
2/06/2016	1088	1088	77.68	7.14	890
4/09/2016	1449	2537	23.32	1.61	
23/09/2016	725	3262	7.00	0.97	
23/09/2016	57	3319	32.65	57.28	
14/10/2016	1459	4778	145.38	9.96	1780
14/10/2016	1088	5866	35.61	3.27	
16/10/2016	225	6091	50.81	22.58	
28/10/2016	494	6585	13.34	2.70	
16/11/2016	1012	7597	27.01	2.67	
17/11/2016	476	8073	32.08	6.74	
17/11/2016	429	8502	45.21	10.54	1780
19/11/2016	168	8670	13.80	8.21	
19/11/2016	492	9162	33.27	6.76	
19/12/2016	939	10101	34.00	3.62	950
19/12/2016	377	10478	34.43	9.13	
23/01/2017	1096	11574	44.35	4.05	
25/01/2017	536	12110	44.15	8.24	950
20/03/2017	1018	13128	44.35	4.36	
20/03/2017	463	13591	44.57	9.63	1780
21/03/2017	480	14071	38.77	8.08	
23/03/2017	697	14768	44.58	6.40	
26/03/2017	549	15317	41.38	7.54	
29/04/2017	921	16238	38.06	4.13	
30/04/2017	542	16780	37.23	6.87	950
24/06/2017	1296	18076	36.55	2.82	
1/07/2017	380	18456	10.48	2.76	950
12/07/2017	230	18686	44.16	19.20	
25/07/2017	973	19659	47.04	4.83	
25/07/2017	524	20183	10.00	1.91	
26/07/2017	195	20378	46.41	23.80	1280
27/07/2017	502	20880	10.01	1.99	
14/09/2017	837	21717	41.23	4.93	
15/09/2017	479	22196	35.36	7.38	950
4/10/2017	905	23101	30.00	3.31	
1/11/2017	875	23976	21.43	2.45	950
12/11/2017	484	24460	27.01	5.58	

JOURNAL OF AUSTRALIAN TAXATION – (2021) VOL 23(1) – FULLARTON AND PINTO

13/11/2017	255	24715	23.01	9.02	950
10/01/2018	1303	26018	34.51	2.65	
15/01/2018	305	26323	17.61	5.77	
15/01/2018	240	26563	20.01	8.34	
20/01/2018	430	26993	34.27	7.97	1780
	409	27402	31.00	7.58	
	217	27619	14.10	6.50	
7/03/2018	983	28602	25.52	2.60	
	247	28849	7.00	2.83	
8/03/2018	249	29098	33.37	13.40	950
	238	29336	10.00	4.20	
25/03/2018	678	30014	15.01	2.21	
29/04/2018	770	30784	26.86	3.49	
30/04/2018	283	31067	18.80	6.64	
	270	31337	24.02	8.90	
4/05/2018	633	31970	15.17	2.40	
5/05/2018	460	32430	34.27	7.45	1780
	233	32663	6.85	2.94	
9/06/2018	748	33411	36.33	4.86	
10/06/2018	207	33618	9.48	4.58	
	275	33893	27.29	9.92	
	411	34304	35.02	8.52	
12/06/2018	124	34428	3.00	2.42	
	442	34870	35.90	8.12	
13/06/2018	281	35151	7.99	2.84	
28/07/2018	1122	36273	12.00	1.07	
25/10/2018	1500	37773	28.00	1.87	
	249	38022	20.01	8.04	
26/10/2018	250	38272	22.40	8.96	950
	232	38504	17.18	7.41	
23/11/2018	725	39229	21.54	2.97	
6/01/2019	915	40144	27.03	2.95	
7/01/2019	264	40408	20.88	7.91	
	235	40643	19.35	8.23	
	439	41082	35.22	8.02	
19/01/2019	321	41403	25.05	7.80	1780
20/01/2019	432	41835	35.74	8.27	
	262	42097	23.04	8.79	
12/02/2019	789	42886	15.00	1.90	
	129	43015	29.49	22.86	
	231	43246	19.73	8.54	
	246	43492	17.93	7.29	
5/05/2019	1484	44976	28.00	1.89	
	134	45110	7.80	5.82	

JOURNAL OF AUSTRALIAN TAXATION – (2021) VOL 23(1) – FULLARTON AND PINTO

	227	45337	5.00	2.20	
	163	45500	6.00	3.68	
	109	45609	33.61	30.83	
6/05/2019	244	45853	21.29	8.73	
7/05/2019	401	46254	25.72	6.41	
	389	46643	10.00	2.57	1734
16/05/2019	247	46890	13.17	5.33	
26/07/2019	1285	48175	28.00	2.18	
	242	48417	19.23	7.95	
27/07/2019	259	48676	21.79	8.41	950
	218	48894	15.81	7.25	
3/11/2019	1806	50700	15.59	0.86	
5/11/2019	276	50976	19.26	6.98	
6/11/2019	255	51231	21.16	8.30	
	423	51654	34.04	8.05	
9/11/2019	229	51883	15.90	6.94	
	416	52299	33.00	7.93	1780
10/11/2019	235	52534	19.00	8.09	
7/01/2020	933	53467	24.65	2.64	
8/01/2020	259	53726	20.27	7.83	
9/01/2020	251	53977	24.00	9.56	950
	233	54210	15.01	6.44	
5/03/2020	1137	55347	22.00	1.93	
	241	55588	18.83	7.81	
6/03/2020	252	55840	22.00	8.73	950
	479	56319	11.00	2.30	
20/05/2020	1321	57640	16.42	1.24	
16/07/2020	1021	58661	16.40	1.61	
	242	58903	23.06	9.53	
	297	59200	8.07	2.72	
18/07/2020	218	59418	30.00	13.76	1340
	384	59802	28.01	7.29	
10/09/2020	1250	61052	38.01	3.04	
11/09/2020	303	61355	22.00	7.26	950
	180	61535	13.02	7.23	
13/11/2020	1127	62662	26.11	2.32	
14/11/2020	157	62819	18.00	11.46	
15/11/2020	505	63324	31.00	6.14	
21/11/2020	491	63815	26.00	5.30	
22/11/2020	409	64224	30.00	7.33	1780
	242	64466	20.00	8.26	
3/12/2020	435	64901	20.00	4.60	
29/01/2021	1141	66042	32.24	2.83	
30/01/2021	247	66289	18.00	7.29	

JOURNAL OF AUSTRALIAN TAXATION – (2021) VOL 23(1) – FULLARTON AND PINTO

31/01/2021	617	66906	31.00	5.02	
1/02/2021	424	67330	31.00	7.31	950
3/02/2021	278	67608	22.00	7.91	
21/02/2021	556	68164	19.00	3.42	
22/02/2021	249	68413	21.00	8.43	
23/02/2021	265	68678	21.00	7.92	
23/02/2021	231	68909	20.00	8.66	950
12/03/2021	436	69345	24.00	5.50	
13/03/2021	372	69717	31.00	8.33	
14/03/2021	314	70031	28.00	8.92	
17/03/2021	394	70425	21.00	5.33	
18/03/2021	260	70685	32.00	12.31	700
18/03/2021	216	70901	18.00	8.33	
29/04/2021	755	71656	23.75	3.15	
29/04/2021	246	71902	19.00	7.72	
30/04/2021	311	72213	23.59	7.59	950
2/05/2021	427	72640	34.27	8.03	
30/05/2021	414	73054	0.00	0.00	0
3/06/2021	288	73342	23.05	8.00	
4/06/2021	249	73591	19.10	7.67	
4/06/2021	357	73948	10.00	2.80	950
29/06/2021	407	74355	10.00	2.46	
6/08/2021	810	75165	34.00	4.20	
8/08/2021	253	75418	12.00	4.74	
9/08/2021	242	75660	23.00	9.50	
9/08/2021	256	75916	20.00	7.81	
14/08/2021	537	76453	17.00	3.17	
14/08/2021	27	76480	21.00	77.78	
15/08/2021	272	76752	20.00	7.35	1780
31/08/2021	777	77529	5.92	0.76	
31/10/2021	918	78462	0.00	0.00	
Total	<u>78462</u>		<u>3880.84</u>	<u>4.95</u>	<u>38114</u>

BIBLIOGRAPHY

A Articles/Books/Reports

Arnalich, Santiago, *Epanet and Development: How to Calculate Water Networks by Computer* (Arnalich, Water and Habitat, Spain, 2011)

Fullarton, Alexander Robert, *Watts in the Desert: Pioneering Solar Farming in Australia's Outback*, (Ibidem Verlag, 2016)

Fullarton, Alexander Robert, 'The Impact of the Changing Technology of Motor Vehicles on Road Tax Revenue' (2018) 20(1) *Journal of Australian Taxation* 26

Galvin, Ray, 'Energy Consumption Effects of Speed and Acceleration in Electric Vehicles: Laboratory Case Studies and Implications for Drivers and Policymakers' (2017) 53 *Transportation Research Part D* 234

Martin, Stanley Leonard, and Connor, Andrew Kenneth, *Basic Physics 1* (Whitcombe and Tombs Pty Ltd, 1968)

Oliphant, Monica 'Australia's Emissions Contribution: Does It Matter?' in John O'Brien (ed), *Opportunities Beyond Carbon: Looking Forward to a Sustainable World* (Melbourne University Publishing, 2009)

B Legislation

Excise Tariff Amendment (Fuel Indexation) Act 2015 (Cth) No. 101, 2015

Zero And Low Emission Vehicle Distance-Based Charge Act 2021 (Vic)

C Other

Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2011* (Web Page, 1 November 2021)

<<https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/DB874793F9B4083FCA257A61001705EB?opendocument#:~:text=There%20were%2016.4%20million%20motor,million%20vehicles%20registered%20in%20Australia>>

Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2016* (Web Page, 21 July 2016)

<<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/9309.031%20Jan%202016?OpenDocument>>

Australian Bureau of Statistics, *9309.0 - Motor Vehicle Census, Australia, 31 Jan 2020* (2020) <<https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release#data-download>>

Australian Bureau of Statistics, ‘Remoteness Structure’ *The Australian Statistical Geography Standard (ASGS) Remoteness Structure* (Web Page, 2016),
<<http://abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure#Anchor2e>>

Australian Government, *data.gov.au*, (Web Page, 25 November 2021) Australian Tax Office Taxation Statistics 2014-15 <http://data.gov.au/dataset/taxation-statistics-2014-15/resource/37b0b252-7c5a-4895-a708-db071c54d5fd?inner_span=True>

Australian Government, Geoscience Australia, *Australia’s Size Compared*, (Web Page, 2021) <<https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/australias-size-compared>>

Australian Taxation Office, *Fuel Schemes/Eligible Activities (2017)* (Web Page, 25 November 2017) <<https://www.ato.gov.au/business/fuel-schemes/fuel-tax-credits---business/eligibility/eligible-activities/>>

Australian Taxation Office, *Luxury Car Tax* (Web Page, 27 May 2016) <<https://www.ato.gov.au/business/luxury-car-tax/>>

Crowe, David, ‘Electric Cars Blow Hole in Road-Building Petrol Tax Revenues’ *The Australian* (Sydney), 16 August 2016

Email from Karl Gehling (Head of Corporate Communications, Mitsubishi Motors Australia Ltd) to Alexander Robert Fullarton, 10 May 2017

Email from Tom Pitman (General Manager – Network Strategy and Operations, Mitsubishi Motors Australia Ltd) to Alexander Robert Fullarton, 2 November 2021

Government of the UK, *Road Lengths in Great Britain: 2018*, (Web Page, 2021) <<https://www.gov.uk/government/statistics/road-lengths-in-great-britain-2018>>

Mitsubishi Motors, *Outlander AWD Petrol* (Web Page, 2017) <<https://www.mitsubishi-motors.com.au/vehicles/outlander/specifications/outlander-awd-petrol>>

Mitsubishi Motors, *Outlander PHEV* (Web Page, 2017) <<https://www.mitsubishi-motors.com.au/vehicles/outlander-phev>>

My Life Elsewhere, *Country Size Comparison*, United Kingdom compared to Australia (Web Page, 2021) <<https://www.mylifeelsewhere.com/country-size-comparison/united-kingdom/australia>>

Organisation for Economic Co-operation and Development (2021), Air and GHG emissions (indicator). doi: 10.1787/93d10cf7-en, (Web Page, 2021) <<https://data.oecd.org/air/air-and-ghg-emissions.htm>>

Organisation for Economic Co-Operation and Development, *Air Emissions by Source* (Web Page, 2021) <https://stats.oecd.org/viewhtml.aspx?datasetcode=AIR_EMISSIONS&lang=en#>

Oxford University, ‘Total Greenhouse Gas Emissions, 2016’ *Our World in Data*, (Web Page, 2021) <<https://ourworldindata.org/grapher/total-ghg-emissions?tab=chart&time=latest&country=USA~GBR~CHN~IND~BRA~AUS>>

Radio interview with Scott Morrison, Prime Minister of Australia, (Sabra Lane, ABC AM, 21 November 2019) <<https://www.pm.gov.au/media/radio-interview-sabra-lane-abc-am-0>>

Ritchie, Hannah, and Max Roser, ‘Greenhouse Gas Emissions’, *Our World in Data*, (Web Page, 2020) <<https://ourworldindata.org/greenhouse-gas-emissions#annual-greenhouse-gas-emissions-how-much-do-we-emit-each-year>>.

Worldometer, *Countries in the World by Population (2021)* (Web Page, 2021) <<https://www.worldometers.info/world-population/population-by-country/>>