THE GEOGRAPHY OF BANKRUPTCY IN AUSTRALIA

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This study analyzes a unique data set to explore geographic variations in bankruptcy across Australia, drawing upon United States research that points to striking differences between urban and rural bankruptcies. The U.S. research finds that rural debtors enter bankruptcy in much more severe financial distress than their urban counterparts. The present study draws upon data obtained from the Australian Financial Security Authority, as well as data gathered by the Australian Bureau of Statistics. It finds that, compared with debtors in regional areas, debtors in major cities earn higher incomes, are more likely to be employed and more likely to cite the "excessive use of credit," rather than unemployment, as the cause of their financial problems. In most respects, however, it finds that differences between Australian bankruptcies in urban and non-urban locations are neither consistent nor pronounced. It concludes that broad generalizations about financial hardship in regional areas cannot do justice to the complex geography of bankruptcy in Australia. In this sense, the study poses a contrast to the U.S. research, which identifies stark differences between urban and rural debtors. It offers a nuanced account, one that links bankruptcy rates to localized factors such as housing prices and the impact of specific industries, such as mining.

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INTRODUCTION

This article explores the role of geography in personal bankruptcy, drawing on recent Australian data and original statistical analysis. It complements research carried out in the United States ("U.S."), which found evidence of "extraordinary" and exceptional financial distress among "rural" households.[1] Katherine Porter has produced a detailed examination of "the economics of rural failure" in the U.S., drawing on the court records of 691 "rural" and "urban" bankruptcies in the states of Iowa and Tennessee.[2] Porter finds that although these groups are similar in demographic terms, they reveal "strikingly different economic profiles."[3] She finds that the rural debtors in her sample are in "much worse financial shape" than those in urban areas, having fewer assets, larger non-mortgage debts and much higher debt-to-income ratios.[4] Porter offers several possible explanations for this disparity. She speculates that such households may accumulate more significant non-mortgage debts because they have fewer assets to draw upon in the event of an unexpected crisis.[5] Compared with urban households, their homes are less valuable, meaning they have less equity upon which to draw and less capacity to take out loans using their homes as security. She also points to the higher unemployment rates in many rural areas to argue that rural debtors are at greater risk of experiencing such crises.[6] Porter also challenges the "myth" that rural living entails lower costs of living, pointing out that rural households pay higher prices for many essential goods and services.[7] She contends that rural households face unique financial pressures. Earning lower incomes, while also being forced to devote a higher proportion of their incomes to fixed living expenses, they are more vulnerable to bankruptcy in the event of a sudden economic shock.[8]

This study poses a contrast to Porter's findings of stark differences between rural and urban households. It finds evidence of considerable geographic variation in bankruptcy rates, across Australia, but concludes that it is difficult to draw overarching distinctions between debtors in major cities and those in regional locations. It suggests that Australia is a "patchwork economy,"[9] containing pockets of concentrated wealth *and* hardship both within and outside the major cities. It concludes that geographic variations in the bankruptcy rate may reflect highly

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[1] Katherine Porter, *Going Broke the Hard Way: The Economics of Rural Failure*, 2005 WIS. L. REV. 969, 972 (2005).

[2] *Id.* at 969.

[3] *Id.* at 994.

[4] *Id.* at 994–96, 1001.

[5] *Id.* at 995–96 (highlighting the fact that rural families filing for bankruptcy "exhibit larger net worth deficits" than urban families in bankruptcy due to a lack of assets and arguing that "[f]ewer assets leave rural families with reduced flexibility in managing their debts and responding to financial crisis").

[6] *Id.* at 1011–12 (noting that job problems are the leading cause of bankruptcy and that individuals living in rural areas are more likely to be affected by the job problems that lead to bankruptcy, particularly "the worst sort of job problem—unemployment").

[7] *Id.* at 1005.

[8] *Id.* at 1006–07 ("Rural workers have fewer dollars left over from their incomes after making ends meet. Thus, they have fewer dollars to . . . use as a cushion to address financial downturns.").

[9] *See* JOHN DALEY & ANNETTE LANCY, GRATTAN INST., REPORT NO. 2011-4, INVESTING IN REGIONS: MAKING A DIFFERENCE 3 (2011) (defining a "patchwork economy" as one in which some parts of the country boom and others lag).

localized economic factors, such as housing costs, or the impact of particular geographically specific industries, such as mining.

Part I presents an outline of Australian bankruptcy law, highlighting the most significant differences between the Australian and U.S. bankruptcy systems. It also summarizes recent public data and scholarly research regarding the typical characteristics of Australians in bankruptcy. Part II outlines the methodology of the present study. Part III outlines the study's findings regarding geographic variations in the bankruptcy rate and the attributes of Australian debtors in urban and regional locations. Employing advanced statistical tests, Part IV interrogates the extent to which bankruptcy incidence rates reflect the demographic attributes of specific local areas. Part V considers the potential influence of localized economic factors upon bankruptcy incidence rates, focusing on two major cities and two outer regional areas.

I. BANKRUPTCY IN AUSTRALIA

A. Australian Bankruptcy Law

Bankruptcy is a legal process enabling people in severe financial difficulty to seek release from unmanageable debts. In many respects, Australian bankruptcy law is broadly similar to that of the U.S.[10] As in the U.S., Australian bankruptcy law has a redistributive function, seeking to ensure that the assets of debtors are shared equitably among creditors. To achieve this goal, the Australian *Bankruptcy Act*[11] provides that, when a debtor becomes bankrupt, all his or her assets are vested in a trustee in bankruptcy.[12] The trustee will generally sell these assets and distribute the proceeds to creditors.[13] As in the U.S., Australian bankruptcy also has a protective purpose, serving to shield debtors from creditors' recovery action[14] and to provide them with a fresh start.[15] It culminates in the discharge of all debts proved in bankruptcy, after the three-year bankruptcy period has come to an end.[16] This means that discharged debtors can no longer be held liable for these debts and can begin to re-establish themselves financially.

In some respects, however, the Australian system differs substantially from that of the U.S. Australian debtors can declare bankruptcy by submitting an application directly to the Australian Financial Security Authority ("AFSA").[17] AFSA can only

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[10] For a comparison of the U.S. and Australian bankruptcy regimes, see Paul B. Lewis, *Can't Pay Your Debts Mate? A Comparison of the Australian and American Personal Bankruptcy Systems*, 18 BANKR. DEV. J. 297 (2002).

[11] *Bankruptcy Act 1966* (Cth) (Austl.).

[12] *Id.* div 4 s 58. The trustee is usually the Australian Financial Security Authority, acting in its capacity as the Official Receiver, a role created by statute. *See id.* ss 15, 18, 160.

[13] *See id.* ss 129–47.

[14] *See id.* s 58 ("Except as provided in this Act, after a debtor has become bankrupt, it is not competent for a creditor . . . to enforce any remedy against the person or the property of the bankrupt . . . .").

[15] *See* Nicola Howell, *The Fresh Start Goal of the* Bankruptcy Act: *Giving A Temporary Reprieve or Facilitating Debtor Rehabilitation?* 14 QUT L. REV. 29, 29–30 (2014).

[16] *See Bankruptcy Act 1966* (Cth) s 149 (Austl.).

[17] Prior to January 2, 2020, this application was made in hard copy and was submitted by post or email. Since January 2, 2020, applications have been made through an online portal. *See Apply for Bankruptcy*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/insolvency/cant-pay-my-debts/apply-bankruptcy.

reject such applications upon very narrow grounds.[18] There is no fee for lodging this application and the process is designed to be simple, making it unnecessary for debtors to seek professional assistance.[19] By contrast, in the U.S., debtors must apply to a court to enter bankruptcy.[20] Such applications can be rejected if they are deemed by a court to constitute an "abuse" of the bankruptcy process.[21] Due to the complexity of the U.S. system, debtors typically require legal representation, attracting filing fees[22] and thousands of dollars in legal costs.[23] Often, debtors must save up to pay these fees before they can apply for bankruptcy.[24] As well as being more accessible for individual debtors, the Australian bankruptcy system also affords debtors greater privacy than the U.S. system. Australian debtors need only disclose their debts and other financial information in their Statement of Affairs—a document that is not publicly available. The National Personal Insolvency Index retains a permanent record of all bankruptcies, but a search of this register requires payment of a fee. It contains the debtor's name, address and date of birth, as well as contact details for the trustee in bankruptcy and the current status of the bankruptcy, but does not contain details of the debtor's assets, income or particular debts discharged in bankruptcy.[25] This differs considerably from the U.S. system, in which debtors must file court documents containing detailed information about their personal finances, which are considered "public records" and can be examined at any time by any member of the

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[18] For example, the Official Receiver can reject an application if the applicant has voluntarily become bankrupt at least three times, *and*

> it appears from the information in the statement of affairs (and any additional information supplied by the debtor) that, if the debtor did not become a bankrupt, the debtor would be likely (either immediately or within a reasonable time) to be able to pay all the debts specified in the statement of affairs.

Bankruptcy Act 1966 (Cth) s 55(3AA) (Austl.).

[19] AFSA's website contains detailed information, in plain language, regarding the process for declaring bankruptcy. This information is addressed directly to individual debtors and does not presume that debtors have access to legal representation or other assistance. *See I Can't Pay My Debts*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/insolvency/cant-pay-my-debts/apply-bankruptcy.

[20] *See* 11 U.S.C. § 301 (2018) ("A voluntary case under a chapter of this title is commenced by the filing with the bankruptcy court of a petition under such chapter by an entity that may be a debtor under such chapter (b).").

[21] *See id.* § 707(b)(1); Lewis, *supra* note 10, at 306.

[22] *See* Andrew P. MacArthur, *Pay to Play: The Poor's Problems in the BAPCPA*, 25 EMORY BANKR. DEV. J. 407, 439–40 (2009) (discussing debtors' obligation to pay a filing fee upon bankruptcy, and noting that while these fees "may not seem significant to most people, most poor debtors enter bankruptcy with insufficient income to afford these fees").

[23] *See* Angela Littwin, *The Do-It-Yourself Mirage: Complexity in the Bankruptcy System*, *in* BROKE: HOW DEBT BANKRUPTS THE MIDDLE CLASS 157–58 (Katherine Porter ed., 2012) ("[L]awyers' fees have increased to the point at which, in many cases, legal fees are higher than debtors' monthly incomes."). For a more detailed discussion of Australian bankruptcy law, see MICHAEL MURRAY & JASON HARRIS, KEAY'S INSOLVENCY: PERSONAL AND CORPORATE LAW AND PRACTICE (10th ed. 2018).

[24] *See* Dov Cohen & Robert M. Lawless, *Less Forgiven: Race and Chapter 13 Bankruptcy*, *in* BROKE: HOW DEBT BANKRUPTS THE MIDDLE CLASS 175, 176 (Katherine Porter ed., 2012); *see also* Ronald J. Mann, *Bankruptcy Reform and the "Sweat Box" of Credit Card Debt*, 2007 U. ILL. L. REV. 375, 395–96 (2007).

[25] *See Bankruptcy Act 1966* (Cth) s 315 (Austl.); *Bankruptcy Regulations 1996* (Cth) regs 13.01–13.10 (Austl.).

public.[26] In the U.S. system, debtors must also submit to examination under oath in open court.[27]

In other respects, the Australian system may be regarded as stricter than the U.S. bankruptcy regime, or at least the procedure known as "chapter 7" bankruptcy. Australian bankruptcies last much longer than chapter 7 bankruptcies. Whereas a chapter 7 bankruptcy can be concluded within months, an Australian bankruptcy cannot be discharged in less than three years, from the date on which the individual lodges his or her Statement of Affairs.[28] Throughout this time, debtors must submit to a range of legal restrictions. They are prohibited from serving as company directors[29] or engaging in legal action[30] and must seek the trustee's permission before travelling overseas.[31] In a chapter 7 bankruptcy in the U.S., a debtor obtaining a discharge is free to retain all future income.[32] By contrast, Australian debtors must make financial contributions towards their outstanding debts, if their incomes exceed a prescribed threshold, throughout the three year period of bankruptcy.[33] In this respect, Australian bankruptcy has been described as "a hybrid of American chapter 7 and chapter 13."[34]

With respect to the retention of assets in bankruptcy, Australian bankruptcy laws are strikingly different from those of the U.S. U.S. bankruptcy law features a generous "homestead exemption," which, depending on the U.S. debtor's state of domicile, may enable him or her to retain a primary place of residence during and after bankruptcy.[35] Even the stricter chapter 13 regime offers debtors various means of restructuring their mortgage debts, so as to avoid the loss of a home.[36] By contrast, in Australia, debtors who declare bankruptcy must relinquish *all* significant assets in bankruptcy, including real property assets. While most Australians who declare bankruptcy do not own a home, those who do will see their homes sold by the bankruptcy trustee, and the proceeds distributed to creditors. Perhaps because of the inevitable loss of such assets,

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[26] *See* 11 U.S.C. § 107 (2018).

[27] *See id.* §§ 341, 343.

[28] *Bankruptcy Act 1966* (Cth) s 149 (Austl.).

[29] *Corporations Act 2001* (Cth) ss 206B(3), (4) (Austl.) (disqualifying a person from managing corporations if: (1) the person is an undischarged bankrupt under the law of Australia, its external territories or another country; (2) the person has executed a personal insolvency agreement under Part X of the *Bankruptcy Act 1966* or a similar law of an external Territory or a foreign country, and the terms of the agreement have not been fully complied with).

[30] *Bankruptcy Act 1966* (Cth) s 60(2) (Austl.) ("An action commenced by a person who subsequently becomes a bankrupt is, upon his or her becoming a bankrupt, stayed until the trustee makes election, in writing, to prosecute or discontinue the action.").

[31] *Id.* ss 77(1)(a)(ii), 272(1)(c).

[32] 11 U.S.C. § 524(a); *see also* Lewis, *supra* note 10, at 324 ("[A chapter 7] debtor, irrespective of income, can opt to retain all future income.").

[33] This threshold is currently $59,031.70 per year after tax, for those with no dependents. Bankrupts with dependents are subject to higher thresholds of up to $79,330.16 per year, after tax. *See Bankruptcy Act 1966* (Cth) s 139K (Austl.); *see also Indexed Amounts*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/insolvency/how-we-can-help/indexed-amounts-0#contributions.

[34] Lewis, *supra* note 10, at 323.

[35] *See* 11 U.S.C. § 522(b), (d)(1); *see also* Lawrence R. Ahern, III, *Homestead and Other Exemptions under the Bankruptcy Abuse Prevention and Consumer Protection Act: Observations on "Asset Protection" after 2005*, 13 AM. BANKR. INST. L. REV. 585, 586–87 (2005). The exemptions under Australian bankruptcy law are much narrower: individuals declaring bankruptcy are allowed to keep household furnishings, sentimental items, tools of trade and vehicles of modest value. *See Bankruptcy Act 1966* (Cth) s 116(2) (Austl.).

[36] *See* Cohen & Lawless, *supra* note 24, at 176 ("Chapter 13 [is] often . . . advantageous for those trying to save a house from foreclosure.").

in the event of bankruptcy, Australian debtors are far more likely than their U.S. counterparts to enter into bankruptcy involuntarily. Whereas in the U.S., involuntary bankruptcies constitute less than one percent of all bankruptcies,[37] in Australia they account for approximately ten percent of the total.[38] Australian debtors who go bankrupt involuntarily are far more likely to be homeowners than those who go bankrupt of their own volition.[39]

B. Recent Bankruptcy Data

AFSA publishes extensive data regarding the bankruptcy system, including some data relating to the "social characteristics" of debtors.[40] This data indicates that most Australians entering bankruptcy are male,[41] with a particularly high concentration of men in business-related bankruptcy.[42] It shows that most Australian debtors are middle-aged, with debtors aged 40 to 50 being significantly overrepresented in bankruptcy, compared with the general population.[43] AFSA data also indicates that "single people without dependents are consistently the most represented family situation in bankruptcies," and that "unemployment or loss of income" is the most commonly cited cause of Australian bankruptcies that are not business-related.[44] In recent years, a number of empirical studies have provided more detailed insight into the characteristics of Australian debtors,[45] including specific groups such as older people,[46] those declaring business-related bankruptcy[47] and those who go bankrupt involuntarily.[48] To date, however, there have been no empirical studies of geographic variations in bankruptcy or the distinctive characteristics of bankruptcy in urban and regional Australia.[49]

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[37] *See* Seth Webster, *Collateral Damage: Non-Debtor Recovery for Bad Faith Involuntary Bankruptcy Petitions*, 35 EMORY BANKR. DEV. J. 111, 113–14 (2019) (illustrating the decline in the number of involuntary bankruptcies in recent decades).

[38] Lucinda O'Brien, Malcolm Anderson, Ian Ramsay & Paul Ali, *More to Lose: The Attributes of Involuntary Bankruptcy*, 38 ECON. PAPERS 15, 16 (2019) [hereinafter *Attributes of Involuntary Bankruptcy*].

[39] *Id.* at 22–23 ("[T]he single most important variable that determines whether a bankruptcy is voluntary is whether the debtor is a home owner.").

[40] *See generally Social Characteristics*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/statistics/social-characteristics. The "social characteristics" data currently available on AFSA's website encompasses the years 2008 to 2015. *Id.*

[41] *See Bankrupts*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/statistics/bankrupts# ("Most bankrupts were male in each year since 2008. In 2015 . . . 61% were male.").

[42] AFSA stated, "[i]n 2015, 29% of male debtors entered a business related bankruptcy compared to 18% of female debtors." *Id.* AFSA defines a "business related bankruptcy" as "one in which an individual's bankruptcy is directly related to his or her proprietary interest in a business." *Profiles of Debtors*, AUSTL. FIN. SEC. AUTH. 15 (2011), https://www.afsa.gov.au/sites/default/files/profiles-of-debtors-2011.pdf [hereinafter *Profiles of Debtors*].

[43] *See Bankrupts*, AUSTL. FIN. SEC. AUTH. (2016), https://www.afsa.gov.au/statistics/bankrupts-0.

[44] *Profiles of Debtors*, *supra* note 42, at 7.

[45] *See* Paul Ali, Malcolm Anderson, Lucinda O'Brien & Ian Ramsay, *The Incidence and Causes of Personal Bankruptcy in Australia*, 4 JASSA: FINSIA J. APPLIED FIN. 27, 28 (2016) (examining data collected by AFSA).

[46] *See* Lev Bromberg, Ian Ramsay & Paul Ali, *The Vulnerability of Older Australians in Bankruptcy: Insights From an Empirical Study*, 39 ADEL. L. REV. 393 (2018).

[47] *See* Lucinda O'Brien, Ian Ramsay & Paul Ali, *The Hidden Dimension of Business Bankruptcy in Australia*, 46 AUSTL. BUS. L. REV. 291 (2018).

[48] *See Attributes of Involuntary Bankruptcy*, *supra* note 38, at 15.

[49] The term "regional Australia" is used to describe "all of the towns, small cities and areas that lie beyond the major capital cities (Sydney, Melbourne, Brisbane, Perth, Adelaide and Canberra)." *What is Regional*

II. METHODOLOGY

This study analyzes recent Australian bankruptcy data in order to interrogate the widespread perception that financial hardship is particularly acute in regional Australia.[50] This perception has its roots in a pervasive and longstanding narrative of rural "decline,"[51] however, in the last decade it has been accentuated by the end of Australia's commodities boom and the subsequent contraction of the mining sector.[52] Gauging the true extent of financial hardship in regional Australia has important implications for public policy. As the Australian Productivity Commission noted in its recent inquiry into "transitioning" regional economies, all levels of government devote significant funds to supporting living standards in, and developing the economies of, regional areas.[53] The desirability and effectiveness of such measures depend, in large part, on an accurate, evidence-based understanding of the geographic distribution of financial hardship.

To provide a new perspective on this question, the present study draws upon a unique data set, relating to more than 28,000 individual bankruptcies, obtained from AFSA. It also draws upon demographic data gathered by the Australian Bureau of Statistics ("ABS"). The authors have analyzed this data in order to identify the salient characteristics of bankruptcies in major cities, regional and remote Australia, and to determine whether or not the phenomenon of bankruptcy varies in important ways according to geographic location. The study finds that debtors in regional Australia exhibit a number of distinguishing financial features, including lower incomes, lower debt levels and greater reliance on government benefits. On the whole, however, it finds that the differences between debtors in major cities and those in regional locations are neither consistent nor pronounced.

A. Definitions

Australia?, REGIONAL AUSTL. INST., http://www.regionalaustralia.org.au/home/what-is-regional-australia/ (last updated 2017).

[50] *See, e.g.*, Bronwyn Herbert, *Warnings Australia in Rural Financial Crisis as Farmers Look to Take on ANZ*, ABC NEWS (Dec. 29, 2014, 3:30 PM), https://www.abc.net.au/news/2014-12-29/warnings-of-rural-financial-crisis-as-farmers-take-on-anz/5992188; Claire Campbell, *Rural Families Desperate as Private School and Boarding Costs Push Them Into Financial Hardship*, ABC NEWS (Aug. 1, 2019, 1:51 AM), https://www.abc.net.au/news/2019-08-01/private-school-costs-pushing-rural-parents-to-financialhardship/11373354. Historian Helen Doyle observes that this narrative has been part of Australian culture since the mid-nineteenth century, writing that "[t]he countryside had not been long settled . . . before it was being romanticised and its decline lamented." Helen Doyle, *Local History And Decline In Country Victoria*, *in* STRUGGLE COUNTRY: THE RURAL IDEAL IN TWENTIETH-CENTURY AUSTRALIA 04.1, 04.6 (Graeme Davidson & Marc Brodie eds., 2005).

[51] *See* Doyle, *supra* note 50, at 04.6.

[52] *See* Press Release, Scott Morrison, Treasurer, *Productivity Commission Study On The Transition Of Regional Economies Following The Resources Boom* (Dec. 14, 2016), https://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/4995186/upload_binary/4995186.pdf;fileType=application%2Fpdf#search=%22media/pressrel/4995186%22 (announcing the commencement of a study analyzing "Australia's transition away from the resources-led boom" and its impact on regional economies).

[53] AUSTL. PRODUCTIVITY COMMISSION, TRANSITIONING REGIONAL ECONOMIES: STUDY REPORT iii (2017) [hereinafter STUDY REPORT]; *see also* DALEY & LANCY, *supra* note 9, at 3 ("Australian governments spend over $2 billion per year on explicit programs to promote regional growth.").

This paper seeks to identify whether or not the incidence and characteristics of Australian personal bankruptcies vary according to geographic location. In particular, it seeks to identify distinguishing features of debtors in major cities, as distinct from those in regional and remote locations. These categories are based upon the *Index of Accessibility and Remoteness* employed by the ABS.[54] The *Index of Accessibility and Remoteness* divides the Australian continent into five categories—Major Cities, Inner Regional, Outer Regional, Remote and Very Remote. For the purposes of this article, the term "location" is used in preference to the ABS term, "remoteness area."

Australia is a highly urbanized nation, as shown in Figure 1. The great majority of Australians (71.2 percent according the 2016 Census) live in a location included in the "major cities" category.[55] This category includes all capital cities, with the exception of Hobart, the capital of Tasmania, and Darwin, the capital of the Northern Territory. A further 18.2 percent live in "inner regional" locations, fanning out from the metropolitan centers.[56] The "inner regional" category includes the following substantial strips of land along the east and south-east coast: a part of South Australia, which surrounds Adelaide, its capital city; areas south and west of Perth, the capital of Western Australia; and Hobart.[57] The "outer regional" category accounts for 8.5 percent of the population.[58] This area forms a buffer between the "inner regional" locations, on one side, and a much larger "remote" location on the other. Adjacent to these "outer regional" locations are "remote" locations, which in turn give way to the "very remote" expanse that constitutes the vast majority of the continent. The populations of these locational categories are shown in Table 1.

Table 1: Australian Population by Location

Location	**Total Population**	**Population Spread (%)**
Major cities	16,634,079	71.2
Inner regional	4,254,997	18.2
Outer regional	1,992,707	8.5
Remote	282,888	1.2
Very remote	186,324	0.8
All	**23,350,995**	**100.0**

Source: *2016 Census Quickstats*, AUSTL. BUREAU OF STATISTICS (Mar. 29, 2019), https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/2016%20QuickStats.

[54] *Australian Statistical Geography Standard (ASGS) Remoteness Structure*, AUSTL. BUREAU OF STATISTICS (Mar. 15, 2018), https://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure (dividing Australia into five classes of remoteness on the basis of a measure of relative access to services).

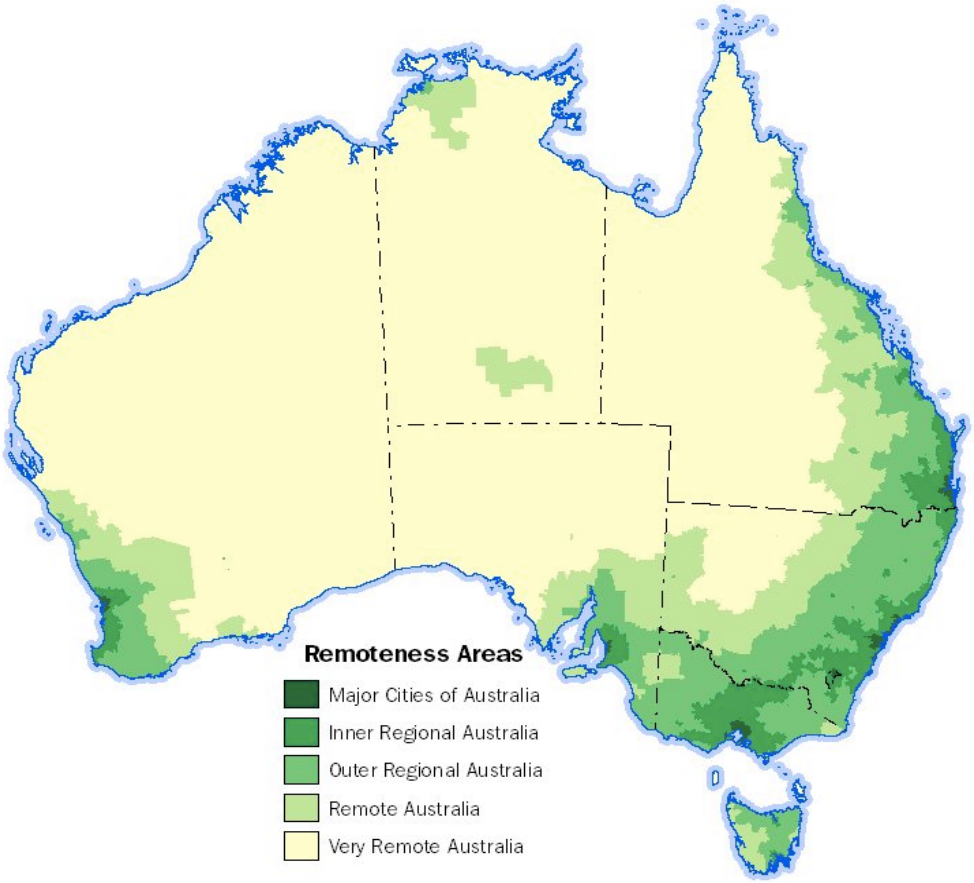
[55] *See 2016 Census Quickstats*, AUSTL. BUREAU OF STATISTICS (Mar. 29, 2019), https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/2016%20QuickStats.

[56] *See id.*

[57] *See id.*

[58] *See id.*

Figure 1: Map of the 2016 Remoteness Areas for Australia[59]



B. The Sample

AFSA supplied the authors with a data set of 28,675 de-identified records of individual bankruptcies initiated between July 1, 2007, and June 20, 2016.[60] The data is based upon information provided by debtors in their Statement of Affairs forms, lodged at the commencement of bankruptcy.[61] It includes each individual's gender, age, occupation, income, source of income, family situation and, if appropriate, spouse's income. The data includes details of each person's unsecured and secured

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[59] *Map of 2016 Remoteness Areas, 1270.0.55.005 - Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2016*, AUSTL. BUREAU OF STATISTICS, https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/1270.0.55.005Main%20Features5July%202016?opendocument&tabname=Summary&prodno=1270.0.55.005&issue=July%202016&num=&view=# (last updated July 24, 2020).

[60] July 1, 2007 was the date on which AFSA adopted its current data management and reporting system. The data file was produced on June 20, 2016 and includes all records entered up until that date.

[61] In cases of involuntary bankruptcy, initiated by creditors, this information is supplied by creditors. AFSA advises that this information is updated as more details become available. For example, when AFSA receives the bankrupt's Statement of Affairs.

assets and liabilities at the time of bankruptcy. It lists the primary source from which each individual obtained information about bankruptcy and whether or not he or she had a prior history of bankruptcy. It also records the "main cause" of bankruptcy, which is selected by each individual from a list in the Statement of Affairs.[62] The data sample represents ten percent of all bankruptcies filed during this period, selected randomly so as to be broadly representative of the bankrupt population as a whole.

While this data set is extremely rich, it is subject to certain limitations. Since the information is primarily gathered from the debtor's Statement of Affairs, it is likely that some records are inaccurate or incomplete, due to error or misunderstanding on the part of individual debtors. AFSA advises that the data relating to real estate and mortgage debt is particularly problematic in this respect.[63] For this reason, secured assets and liabilities were excluded from the analysis. Other limitations relate to the format in which the data is recorded. Individuals' incomes, assets and unsecured liabilities are recorded by AFSA in bands, such as "$0.01–$4999.99," rather than in precise figures. This tends to reduce the accuracy of statistical calculations such as means and medians.

Table 2 lists the sample sizes from the AFSA data set for each of the five locational categories.

Table 2: AFSA Dataset Sample Sizes by Location and Type of Bankruptcy

Location	**Personal Bankruptcies**		**Business Related Bankruptcies**	
	Number	**%**	**Number**	**%**
Major cities	15,639	69.6	4,209	68.4
Inner regional	4,662	20.7	1,248	20.3
Outer regional	1,978	8.8	607	9.9
Remote	172	0.8	67	1.1
Very remote	66	0.3	27	0.4
All	22,517	100	6,158	100

Note: The bankruptcies recorded in this table represent approximately 10 percent of all bankruptcies commenced in Australia between July 1, 2007, and June 20, 2016.

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[62] *See Statement of Affairs*, AUSTL. FIN. SEC. AUTH., https://www.afsa.gov.au/sites/default/files/3_form-3-statement-of-affairs24re.pdf (last updated Dec. 1, 2010) (requiring debtors to indicate the main cause of insolvency, either from the "[n]on business related" category or the "business related" category).

[63] Lucinda O'Brien, Ian Ramsay & Paul Ali, *The Hidden Dimension of Business Bankruptcy in Australia*, 46 AUSTL. BUS. L. REV. 291, n.57 (2018) ("AFSA has advised that when individuals complete the Statement of Affairs, they frequently record a mortgage but no real property asset. Others list their homes as assets, but do not list a corresponding mortgage debt, though in subsequent dealings with AFSA they disclose that they do in fact have mortgage debts. Still others fail to record either real property assets or mortgage debts, though these are subsequently identified by AFSA. AFSA speculates that this may be due to people misunderstanding the form, or, in some cases, being unsure of value of their homes or the extent of their mortgage debts. For this reason, AFSA has devised its own business rules to determine whether or not an individual owned or was purchasing real property, by gathering and cross-referencing information from various parts of the Statement of Affairs. The authors used AFSA's business rules to gauge the extent of real property ownership among personal and business bankrupts in the sample.").

Table 2 divides the sample into personal or business-related bankruptcies.[64] Since this discussion focuses on the experiences and characteristics of personal debtors only, the latter category has been excluded from the data set. Due to the very small numbers in each of the "remote" and "very remote" categories, these have been aggregated into a single "remote" category for the remainder of the article, except in Figure 2, where these groups are shown separately. The data in all tables is derived from the AFSA data set, unless otherwise indicated.

C. Statistical Analysis

The statistical analysis outlined in this paper utilizes the data set provided by AFSA in conjunction with data published by the ABS. Analysis was carried out in order to identify distinctive demographic attributes of debtors in major cities, inner regional, outer regional and remote locations. This analysis compared the age, gender, income, sources of income, unsecured assets and liabilities, home ownership rates and stated causes of bankruptcy of debtors in these four locational categories. Bankruptcy incidence rates for 24 specific areas (within the broad locational categories) were calculated using AFSA's data, together with base adult population figures from chronologically relevant ABS Census data sets. The authors used Ordinary Least Squares ("OLS") regressions to determine whether or not geographic differences in bankruptcy incidence rates can be attributed to demographic differences between areas. In addition, the authors used *correlation r* and Analysis of Variance ("ANOVA") for a range of other tests. Key data were also extracted in relation to four areas—the major cities of New South Wales and Victoria (Sydney and Melbourne, respectively), outer regional Tasmania and outer regional Western Australia, to seek evidence of more specific, localized influences on bankruptcy rates and characteristics. For the remainder of the article, all figures have been rounded to the nearest whole number.

[64] AFSA's data is based upon information provided by individuals when completing the Statement of Affairs form lodged by bankrupts at the commencement of bankruptcy. Since the data under discussion does not include *secured* debts or assets, for reasons outlined in Part II(b), the data cannot afford any insight into the differences in mortgage debt owed by Sydney and Melbourne bankrupts. Even so, it is reasonable to assume that mortgage debt among debtors in Sydney is higher than elsewhere in the country, given that house prices in Sydney are much higher, and have increased far more rapidly, than elsewhere. When considering this limitation in the data, it must be remembered that 76 percent of debtors in the "major cities" category were not homeowners and were therefore likely to be renting their homes. A recent study noted that while "the capital value of Sydney housing has fallen by an average of 10%" from the market's peak in 2017, there is still a "chronic undersupply" of affordable rental properties in the city. JOHN BELLAMY ET AL., ANGLICARE DIOCESE OF SYDNEY, RENTAL AFFORDABILITY SNAPSHOT 2019: GREATER SYDNEY AND THE ILLAWARRA 26 (2019).

III. GEOGRAPHIC VARIATION IN BANKRUPTCY RATES AND THE ATTRIBUTES OF DEBTORS

A. The Incidence of Bankruptcy

Table 3 reports estimates of bankruptcy incidence by location. It shows that bankruptcy rates are markedly higher in inner regional locations than in either major cities or in outer regional locations. In remote areas, the rate of bankruptcy is dramatically lower, almost exactly half the rate observed in other locations.

Table 3: Incidence of Bankruptcy by Location (per 100,000)	
Location	**Rate (per 100,000)**
Major cities	102
Inner regional	115
Outer regional	102
Remote	52
All	**103**

B. Causes of Bankruptcy

The causes of bankruptcy, as nominated by individual debtors, vary slightly according to location, as shown in Table 4. Debtors in major cities are more likely to cite "excessive use of credit," while those in inner and outer regional locations are more likely to cite unemployment. Domestic discord and ill health may be more common in inner and outer regional locations than in major cities, but the difference is negligible. With respect to the causes of bankruptcy, debtors in remote locations are not markedly different from those in other locations.

Table 4: Leading Causes of Personal Bankruptcy by Location (percentage of debtors identifying this as the "main cause" of their bankruptcy, in each location)				
Location	**Unemployment**	**Excessive use of credit**	**Domestic discord**	**Ill health**
Major cities	33	25	12	10
Inner regional	39	21	14	11
Outer regional	39	22	14	12
Remote	36	21	13	11
All	**34**	**24**	**13**	**11**

C. Age and Gender

There is little variation in the gender profile of debtors between the major cities, inner regional and outer regional locations. As shown in Table 5, men make up between 51 and 55 percent of debtors, while women make up between 45 and 49 percent, in all but the remote category. In remote locations, men account for 63 percent of debtors. Women are most strongly represented among debtors in inner regional locations, where they make up 49 percent of debtors overall.

Table 5: Gender of Debtors by Location		
	Male (%)	**Female (%)**
Major cities	55	45
Inner Regional	51	49
Outer Regional	54	46
Remote	63	37
All	**54**	**46**

The age profile of debtors shows even less variation according to location. The age profile of debtors is highly consistent across major cities, inner regional, outer regional and remote locations, as shown in Table 6. In all four categories, those aged 35 to 54 constitute half of all debtors. Those aged 20 to 34 make up the next largest category (ranging from 27 percent in major cities to 30 percent in inner regional and remote locations). Debtors aged 55 to 64 make up 13 to 14 percent of the total in all locations, with those aged 65 to 89 making up the remaining six to seven percent.

Table 6: Age of Debtors by Location				
	20 to 34 (%)	**35–54 (%)**	**55 to 64 (%)**	**65 to 89 (%)**
Major cities	27	52	14	6
Inner regional	30	49	13	7
Outer regional	28	51	14	7
Remote	30	52	13	6
All	**28**	**51**	**14**	**7**

D. Financial Attributes

The financial attributes of debtors show greater variation according to location. Debtors in major cities earn substantially more than their counterparts in inner and outer regions, as shown in Table 7. Compared with debtors in inner or outer regional locations, those in major cities are more likely to derive their incomes from wages or salary and less likely to rely on government benefits, as shown in Table 8. Debtors in major cities also report higher unsecured liabilities than those in inner or outer

regional locations, as shown in Table 9. In terms of their financial profiles, debtors in remote location bear a closer resemblance to those in major cities than to those in inner or outer regional areas. This finding is discussed further below.

Table 7: Average Incomes by Location		
Location	**Average income (A$)**	**Median income (A$)**
Major cities	38,862	33,156
Inner regional	33,032	25,711
Outer regional	34,447	25,322
Remote	41,444	30,474
All	**37,293**	**31,425**

Note: Incomes are calculated in constant 2015-16 Australian dollars. Some individuals reported extremely high incomes. To avoid undue distortion of the data, a small number of debtors (n = 35), comprising those with incomes of A$200,000 and above, were excluded when calculating average incomes.

Table 8: Sources of Income by Location				
Location	Wages and salaries (%)	Government benefits (%)	Self-employment (%)	Business earnings (%)
Major cities	51	42	4	1
Inner Regional	41	54	2	1
Outer Regional	42	55	2	1
Remote	51	44	3	1
All	**48**	**46**	**3**	**1**

Table 9: Banded Unsecured Liabilities by Location			
Location	**Under A$20,000 (%)**	**A$20,000 to A$49,999 (%)**	**A$50,000 and over (%)**
Major cities	24	35	41
Inner Regional	34	37	30
Outer Regional	33	34	34
Remote	22	39	39
All	**27**	**35**	**38**

Note: Liability bands are determined in constant 2015-16 Australian dollars.

Yet by some financial measures, the distinction between debtors in major cities and those in other locations is less clear than might be expected. Debtors in major cities do not own substantially more unsecured assets than those in inner or outer regional locations. In fact, the unsecured asset holdings of debtors across these categories are remarkably consistent, as shown in Table 10. As shown in Table 11,

home ownership is characteristic of about one-quarter of all debtors. There is very little difference in home ownership level across the categories.

Table 10: Banded Unsecured Assets by Location			
Location	**Under A$5,000 (%)**	**A$5,000 to A$19,999 (%)**	**A$20,000 and Over (%)**
Major cities	34	21	45
Inner regional	38	21	41
Outer regional	35	20	45
Remote	34	21	45
All	**35**	**21**	**44**

Note: Asset bands are determined in constant 2015-16 Australian dollars.

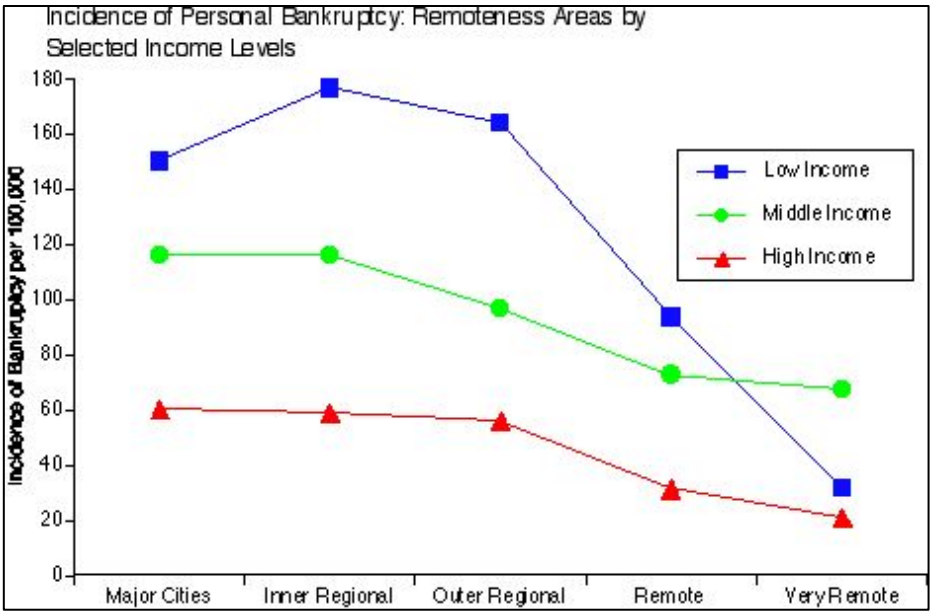
Table 11: Home Ownership Rates by Location	
Location	**Homeowners (%)**
Major cities	24
Inner regional	24
Outer regional	27
Remote	26
All	25

E. Incidence Rates in Remote Locations

As reported above, debtors in remote locations exhibit a number of characteristics that distinguish them sharply from the rest of the bankrupt population. While remote locations account for two percent of the Australian population (Table 1), they account for only 1.1 percent of all personal bankruptcies (Table 2). The proportion of male debtors in remote locations is quite high: 63 percent, as shown in Table 5. At the same time, the bankruptcy incidence rate in remote locations is much lower than in other parts of Australia (Table 3). This may, in part, be explained by the fact that there are very few low-income bankruptcies in remote locations, compared with other areas. As noted above, in terms of their financial profile, debtors in remote locations are more similar to debtors in major cities than they are to debtors in regional locations: they report higher average and median incomes and higher levels of unsecured debt. The scarcity of low-income bankruptcies in remote locations is shown in Figure 2. Figure 2 presents a comparison of incidence rates, according to income level, across the five locational categories. While incidence rates are generally much higher for low income earners, the incidence rate of bankruptcy in the low-income category drops dramatically in remote locations. It appears that heavily indebted low-income earners in these locations are less likely to declare bankruptcy than those in other parts of Australia. This may be due to lack of awareness of the

bankruptcy system or lack of access to support services, such as financial counselors or community lawyers. It could also be due to the fact that creditors find it more difficult or less cost-effective to pursue low income debtors in remote locations, meaning that these individuals have less incentive to declare bankruptcy than those in more accessible locations. This may explain why the average and median income levels of debtors in these more isolated parts of Australia appear relatively high.

Figure 2



IV. THE RELATIONSHIP BETWEEN DEMOGRAPHIC ATTRIBUTES AND BANKRUPTCY INCIDENCE RATES

The authors conducted further analysis in order to determine whether or not the demographic attributes of specific locations can be used to predict bankruptcy rates in those locations. As AFSA has noted, "the average bankrupt is male, aged between 35 and 54 years."[65] This individual is also likely to be a low income earner[66] and to work in a trade, laboring, sales or clerical occupation, rather than a professional or managerial occupation.[67] Accordingly, it might be expected that incidence rates would be higher in the following locations: where men outnumber women; where those in the age range 35 to 54 predominate; where incomes are lower; and where more people are employed in traditionally "blue collar" occupations. An analysis of bankruptcy

[65] *Profiles of Debtors*, *supra* note 42, at 10.

[66] *See id.* at 10, 18 (comparing the average taxable income for individuals in 2009-10, which "was $48,027," with the fact that "over half of all bankrupts earned less than $30,000 in 2011").

[67] *See id.* at 27–29.

incidence rates, therefore, might proceed on the assumption that these rates vary, and can be predicted, on the basis of the known demographic attributes of each location.

For the purposes of this analysis, the bankrupt populations of each of the eight states and territories were divided into four categories, based on the five ABS "remoteness" categories ("major cities," "inner regional," "outer regional," and a fourth category combining "remote" and "very remote" categories). Each category was then subdivided into smaller "areas" within each state or territory. Some states and territories were not allocated an area for each category, as they lacked data for some categories. For example, the Australian Capital Territory ("ACT") only yielded data in the "major cities" and "inner regional" categories, while the Northern Territory only yielded data in the "outer regional" and "remote"/"very remote" categories. The initial subdivision produced 28 areas. Four areas were excluded because they contained too few cases, leaving 24 areas available for analysis.

The AFSA data was then analyzed to determine the extent to which the bankrupt population of each area reflected the demographic attributes of the general population of that area. Table 12 reports these correlations between AFSA's data and Australian Census data, across the 24 areas. Correlations are presented for six attributes: high income, low income, being aged 35 to 54, female gender, managerial or professional occupation, and blue-collar occupation. As shown in Table 12, there were strong correlations between the attributes of debtors in each area and the attributes of its overall population, as reflected by Census data. Even so, there was still substantial variation between these groups. For example, the ratio (expressed as a percentage) of female debtors to the overall female adult population ranged from just above 100, in inner and outer regional Tasmania, to 76 in outer regional Victoria. The ratio was even lower in three of the remote areas, though the sample sizes for these remote areas were small and therefore more subject to extreme variation. Similarly, the ratio of "blue collar" debtors to the "blue collar" population overall ranged from 196, in the ACT major city area, to 98 in the Tasmanian outer regional area and 58 in the WA remote region.

Table 12: Correlation Between AFSA Data and Census Data, with Regard to Six Demographic Attributes of 24 Regions

Demographic characteristic	**Correlation r**	**Significance (p-values)**
High income	0.907	0.0000
Low income	0.800	0.0000
Aged 35 to 54	0.470	0.0236
Female	0.596	0.0021
Managers and professionals	0.473	0.0227
Blue collar occupation	0.750	0.0000

Source: ABS, *Census 2016: Employment, Education and Income*, TableBuilder (2016). Findings based on use of ABS TableBuilder data.[68]

[68] *See About Tablebuilder*, AUSTL. BUREAU OF STATISTICS (Oct. 2, 2019), https://www.abs.gov.au/websitedbs/d3310114.nsf/home/about+tablebuilder (providing a method for users to create data tables using current and past Census data).

Having established a strong correlation between the AFSA data and Australian Census data, with respect to the demographic attributes of particular areas, the authors conducted further analysis to determine whether or not bankruptcy incidence rates for particular areas could be predicted on the basis of the known demographic attributes of those areas. Because the number of areas was small, it was difficult to design tests that accounted for multiple demographic determinants while not violating OLS regression assumptions. The authors sought to overcome this difficulty by exploring a range of regression methodologies: first, a series of simple one variable regressions; second, a selection of two-variable regressions which included the most likely predictor from the one-variable regressions; and third, a five-variable model. Table 13 reports the results of eight common demographic attributes which are known to impact the likelihood of bankruptcy. The sign of the coefficient—positive or negative—indicates whether areas with higher proportions of people with this attribute were *more* or *less* likely to have higher bankruptcy incidence rates. As set out in Table 13, only the two income-related variables were reasonably successful in predicting the incidence of bankruptcy across the individual areas. The proportion of high-income earners in an area correlated negatively with bankruptcy incidence, in other words, those areas with a higher proportion of high-income earners were less likely to have high bankruptcy incidence rates. Similarly, the proportion of low-income earners in an area correlated positively with bankruptcy incidence. That is, areas with a higher proportion of low-income earners were more likely to have high bankruptcy incidence rates. This is consistent with AFSA's public data, which shows that the typical debtor is a low-income earner.[69] Based on these findings, it is possible to conclude that in general, the higher the proportion of high income earners within a location, the lower the level of bankruptcy incidence.

Apart from this, however, the demographic attributes of specific areas seemed to have little bearing on their bankruptcy incidence rates. Apart from the income-related variables, and the age-related variable, the variables listed in Table 13 were not statistically significant. In several cases, the results of the analysis appeared to be inconsistent with known characteristics of debtors overall. For example, areas with higher proportions of individuals aged 35 to 54 were *less* likely to have high bankruptcy incidence rates (as shown by the negative coefficient). Those areas with proportionally larger female populations were *more* likely than others to report higher bankruptcy incidence rates (as indicated by the positive coefficient). These results are inconsistent with AFSA's public data, which indicates that Australian debtors generally are more likely to be male and aged between 35 and 54 years.[70] When an income variable was used in combination with any other variable, only the income variable was significant and showed the expected coefficient sign. When a five-variable regression was employed, only the proportion of managers and professionals in an area correlated with the level of bankruptcy in that area. These results are not shown in Table 13.

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[69] *See Profiles of Debtors*, *supra* note 42, at 10.
[70] *Id.*

Table 13: Influence of Demographic Factors on Bankruptcy Incidence Rates		
Explanatory variable: percent of population in this demographic group	**Coefficient**	**Significance (p-values)**
High income (A$52,000 and over)	**Negative**	**0.0090**
Low income (A$1 to A$20,800)	**Positive**	**0.0164**
Aged 35 to 54	**Negative**	**0.0340**
Female	Positive	0.0714
Low education level*	Positive	0.0774
Degree holder	Negative	0.2353
Managers and professionals	Negative	0.2438
Blue collar occupation	Positive	0.3311

Note: Incidence is calculated as number of debtors per 100,000 in population aged 15 to 89. Significant explanatory variables are indicated in bold. Since all regressions have only one explanatory variable, the regression F-stat is the equivalent to t-stat values. This category is defined by the ABS as "Secondary Education Years 9 and Below."[71]

Two important results are evident from this analysis. First, the analysis bears out the critical importance of income level, as a predictor of bankruptcy incidence rates. Second, the extraordinary range of bankruptcy incidence rates across the areas, even between demographically similar areas, suggests that bankruptcy rates in specific areas are highly influenced by localized economic factors. This finding is discussed further below.

V. THE INFLUENCE OF LOCALIZED ECONOMIC FACTORS ON BANKRUPTCY INCIDENCE RATES IN FOUR SELECTED AREAS

It is possible that while the characteristics of debtors in bankruptcy differ, according to geographic location, it may not be viable or useful to make overarching generalizations about all bankruptcies in "major cities," "inner regional," "outer regional" or "remote" locations. Instead, the geographic differences within the bankrupt population may be linked to specific economic characteristics of particular areas. In order to explore this, key data was extracted relating to four specific areas: two major cities and two outer regional areas. Table 14 compares select financial characteristics of debtors in the major cities in New South Wales ("NSW") and Victoria, outer regional Tasmania and outer regional Western Australia ("WA"). The "major cities" areas of NSW and Victoria were selected because they include Australia's two most populous cities, Sydney and Melbourne respectively. It was expected that the data derived from these two areas would provide an insight into the degree of variation within the "major cities" category. Outer regional Tasmania and WA were selected because of their distinct economic profiles, the former being heavily reliant on tourism and agriculture, the latter on mining. It was expected that

[71] *See 2901.0 - Census of Population and Housing: Census Dictionary, 2016,* AUSTL. BUREAU OF STATISTICS, https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Chapter4402016 (last updated Oct. 19, 2017).

the different economic factors at play in these two outer regional areas would be reflected in the demographic attributes of debtors in each area.

Table 14: Key Financial Characteristics of Selected Regions				
Characteristic	**New South Wales (Major cities)**	**Victoria (Major cities)**	**Tasmania (Outer Regional)**	**Western Australia (Outer Regional)**
	(n=5849)	***(n=3325)***	***(n=202)***	***(n=142)***
Bankruptcy incidence rate	113	79	128	81
Cause of bankruptcy: unemployment (% of debtors)	31	31	41	41
Debtors' average income (A$)	36,430	35,656	27,748	34,331
Debtors' median income (A$)	32,500	32,500	17,500	22,500
Main source of income: wages (% of debtors)	52	51	34	45
Main source of income: government benefits (% of debtors)	41	42	63	49
Total unsecured assets over A$20K (% of debtors)	45	45	39	42
Total unsecured liabilities over A$50K (% of debtors)	45	43	30	34

As anticipated, Table 14 reveals striking differences between outer regional debtors in Tasmania and those in WA. It shows, for example, that outer regional Tasmanian debtors earn low incomes, in comparison with their counterparts in WA. They are less likely to earn these incomes from employment and are far more likely to rely on government benefits. They are also somewhat less likely to own unsecured assets over A$20,000 (though they are also less likely to owe unsecured liabilities exceeding A$50,000). The comparison also shows a stark disparity in bankruptcy incidence rates between these two areas. In outer regional WA, the bankruptcy incidence rate is 81 per 100,000, but this rises to 128 per 100,000 in outer regional Tasmania. These figures bear out this study's finding that low average income is a strong determinant of bankruptcy incidence rates. They also suggest that the drivers

of personal bankruptcy differ substantially between outer regional Tasmania and WA. This may reflect state-specific economic factors, for example the concentration of mining activity in WA and the wealth generated by this industry.[72]

Yet, Table 14 also reveals a significant and unexpected contrast between the "major cities" areas of NSW and Victoria. The table shows that these two groups of debtors are strikingly similar with respect to key financial characteristics. In these areas, debtors' median incomes are identical. Similar proportions of the bankrupt population in each area owe unsecured debts exceeding A$50,000, while the same proportion (45 percent) own unsecured assets exceeding A$20,000. In both areas, just over 50 percent of debtors derive their main income from employment while just over 40 percent rely on government benefits. In both areas, 31 percent of debtors attribute their bankruptcies to unemployment. Yet the table shows a striking difference in the bankruptcy incidence rates of these two areas. In Victoria, the incidence rate is 79 per 100,000, contrasting markedly with NSW, where it rises to 113 per 100,000. This suggests that incidence rates in these areas are also largely driven by localized factors. These could include housing costs. House prices have risen in Sydney much more dramatically than elsewhere in the country over the last two decades,[73] while Sydney rents have historically been the highest in the country.[74] It may be that in Sydney, higher levels of mortgage debt and higher rents are causing additional financial stress and leading to elevated levels of bankruptcy.

CONCLUSION

This study identifies some important differences between debtors in major cities in Australia and those in regional and remote locations. Debtors in major cities earn higher incomes than those in regional locations. They are more likely to derive these incomes from employment than from government benefits. They also have higher unsecured liabilities. These attributes are reflected in the causes of bankruptcy nominated by debtors at the commencement of bankruptcy. Consistent with their higher debt levels, debtors in major cities are more likely to link their financial problems to "excessive use of credit." Debtors in regional locations are more likely to cite unemployment. This is consistent with their higher reported reliance on government benefits. Debtors in remote locations are much more likely to be male than those in other locations. They also have higher incomes and higher levels of unsecured debt than those in inner and outer regional areas, making them more similar, in financial terms, to debtors in the major cities. Yet the incidence of

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[72] *See* JOHN DALEY, DANIELLE WOOD & CARMELA CHIVERS, GRATTAN INST., REGIONAL PATTERNS OF AUSTRALIA'S ECONOMY AND POPULATION 5 (2017).

[73] *See* JOHN DALEY & BRENDAN COATES, GRATTAN INST., HOUSING AFFORDABILITY: RE-IMAGINING THE AUSTRALIAN DREAM 3 (2018) (noting that Australian house prices have "more than doubled in real terms over the past 20 years," and that "[t]he strains are most acute in Sydney and Melbourne," with prices rising "50 per cent in Melbourne, and 70 per cent in Sydney since 2012"); Matt Wade, *Call that a housing slump? As prices rise again, many will be stuck renting*, THE SYDNEY MORNING HERALD (Jul. 28, 2019, 12:00 AM), https://www.smh.com.au/business/the-economy/call-that-a-housing-slump-as-prices-rise-again-many-will-be-stuck-renting-20190726-p52b7y.html ("Sydney and Melbourne have both experienced two big property booms since the late 1990s.").

[74] *See* Nour Haydar, *Sydney rents drop for first time in 12 years, domain report finds*, ABC NEWS (Jan. 11, 2019), https://www.abc.net.au/news/2019-01-10/sydney-house-rent-prices-drop-according-to-domain-data/10704468 (describing Sydney's longstanding status as the "most expensive capital city to rent a house").

bankruptcy in remote locations is half that of other parts of Australia. It seems plausible that heavily indebted low-income earners in remote locations are much less likely to resort to bankruptcy than those in other parts of Australia, meaning that average incomes and debt levels of debtors in these locations appear artificially high.

In other respects, the results of this analysis are more ambiguous. The analysis reveals few statistically significant links between bankruptcy rates and the demographic attributes of specific areas, apart from a clear link between low income and high bankruptcy incidence rates. Indeed, the analysis showed that areas with proportionally higher numbers of those aged 35 to 54 were in fact *less* likely to have higher bankruptcy incidence rates. It also showed that areas with proportionally higher female populations were *more* likely to have higher bankruptcy rates. This is surprising, given that the "average" Australian declaring bankruptcy is a man aged between 35 and 54.[75] Adding a further element of complexity, the analysis showed that bankruptcy incidence rates are almost identical in major cities and in outer regional locations, but rise sharply in inner regional locations. This result is difficult to interpret, given that in many respects, there appears to be very little difference between debtors in inner regional and outer regional Australia.

While the study affirms the critical importance of income level, as a predictor of bankruptcy rates, it also identifies an extraordinary range in bankruptcy incidence rates across Australia, even between areas that appear to be demographically similar. This finding suggests that bankruptcy rates in specific areas are highly influenced by localized economic factors. In support of this finding, the study presents evidence of striking differences between the bankrupt populations of outer regional WA and Tasmania. It is suggested that these variations may be attributable, at least in part, to the wealth generated by mining activity in WA. The study also finds evidence of striking differences in the bankruptcy incidence rates of Sydney and Melbourne, despite the fact that debtors in these areas revealed very similar financial characteristics. It hypothesizes that the higher rate of bankruptcy in Sydney may be due, at least in part, to that city's exceptionally high housing costs.

In contrast to Katherine Porter's U.S. research, which found stark and persistent differences between "urban" and "rural" debtors,[75] this study finds that, in Australia at least, the geography of financial hardship is far more complex. Rather than illustrating sharp contrasts between urban and non-urban Australia, in a general sense, the study suggests that bankruptcy rates are closely linked to local economic factors. In this respect, it supports the contention that Australia is a "patchwork economy," in which wealth and economic growth are unevenly distributed, leading to concentrated areas of financial hardship both outside and within the major cities.[76] It confirms the importance of a highly nuanced and targeted approach to regional development, one that delivers support and assistance to those outside the urban centers who exhibit the greatest need,[77] without reinforcing stereotypical narratives of urban wealth and regional hardship.

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[75] *Profiles of Debtors*, *supra* note 42, at 10.

[75] Porter, *supra* note 1, at 994.

[76] *See* DALEY & LANCY, *supra* note 9, at 3.

[77] *See* STUDY REPORT, *supra* note 53, at 37; DALEY & LANCY, *supra* note 9, at 42–47.