THE STRESSED FINANCE LANDSCAPE DATA ANALYSIS

OCTOBER 2015

A report by Digital Finance Analytics and Monash University Centre for Commercial Law and Regulatory Studies (CLARS)





This research was commissioned by Consumer Action Law Centre, Good Shepherd Microfinance, and Financial Rights Legal Centre.

Research was conducted by Digital Finance Analytics and the Centre for Commercial Law and Regulatory Studies at Monash University, using their proprietary tools and methods.

This research was supported by a grant from Financial Literacy Australia.



1.1 ABOUT DIGITAL FINANCE ANALYTICS AND CLARS

Digital Finance Analytics (DFA) is a boutique research, analysis and consulting firm that provides custom research and advice to Australian and international clients.

DFA maintains industry models, authors various industry reports and collaborates on mortgage, SME and housing sector publications. It combines primary consumer research, industry modelling, economic analysis and segmentation analytics to offer insight into the dynamics of the mortgage, lending, savings, payments and superannuation sectors. Its research focuses in particular on changing channel preferences and how products, services and customer experience should be tailored to this new environment. DFA is able to pinpoint opportunities created by changing customer needs in the evolving market using experience derived from more than 25 years of analysis.

The DFA Household survey is an omnibus survey that interfaces with more than 26,000 Australian households each year. We look specifically at the financial profile of these households. The data included in this report was drawn from the survey results between March 2005 and 20 July 2015. DFA has been supplying insight and analysis to the finance industry in Australia for more than 20 years.

Gill North heads the finance, investment and taxation group within the Centre for Commercial Law & Regulatory Studies (CLARS) at Monash University. CLARS brings together a multidisciplinary approach to address and identify key issues in commercial law and regulatory practice.

Note we have not offered interpretations of the data, but merely present the facts from objective analysis.

1.2 This Report

This report was commissioned jointly by the Consumer Action Law Centre, Good Shepherd Microfinance, and Financial Rights Legal Centre.

Digital Finance Analytics (**DFA**) completed the analysis drawing insights from the DFA household survey. Associate Professor Gill North, Law Facility, University of Monash added content and insight.

We review detailed data from the 2005, 2010 and 2015 surveys as a means to dissect and analyse the longitudinal trends. The data results are averaged across Australia to provide a comprehensive national picture. We segment Australian households in order to provide layered evidence on the financial behaviour of Australians, with a particular focus on the role and impact of payday lending.

In order to rigorously generalise our findings through the surveys, the survey is undertaken across postcodes on a statistical distribution basis which matches the Australian Bureau of Statistics (ABS) census. We then scale up the survey results, at a post code level to the total number of households per postcode. Each post code is handled separately to give statistically accurate results. Note that because of low population some regionals post codes have very low representation, and we call these out in the surveys. The overall correlation between the survey and the total is better than +/- 1.5%. We tune the survey each year to ensure it tracks the census and ABS datasets. The data is statistically robust (and with a 26,000 base sample which equates to 0.3% of households each year we have an

excellent foundation). The confidence level within the methodology is 95% (representing a significance level of 0.05).

Initially, we define and identify the segment of households who are financially stressed among the 26,000 surveys collected. We then identify a subset of this group which we define as financially distressed. From Section 3 onwards, we have deducted the numbers of financially distressed from the total number of stressed households in the analysis to ensure there is no double counting. In the survey, all payday borrowers were either financially stressed or distressed. However, the existence of a payday loan was not *per se* an indicator of financial stress. The factors for determining whether households are stressed or distressed, and the size of each group, are set out in Section 2. We examine the underlying drivers of household financial stress and distress, and the impact of payday lending. We highlight the changing nature of the payday lending industry over the last decade and the current trends. We note the increasing importance of web based services to the industry's continued growth.

For 2015 payday lending has been defined as loans of \$2,000 or less for terms between 16 days and 12 months, in accordance with the *National Consumer Credit Protection Act 2009* definition of a small amount credit contract. For earlier years we have used a variety of indicators to approximate the equivalent market sector. Essentially for the 2005 data, the industry had not defined payday loans as a separate category, so in our analysis we removed other types of borrowing (e.g. mortgages, credit cards, personal loans) and by a process of elimination identified payday-type loans. In 2010, and 2015 snapshots, payday loans were separately identified.

1.3 Survey methodology

The DFA omnibus survey comprises more than 30 discrete questions, constructed in a series of data branches. Data is recorded direct to a Structured Query Language (**SQL**) database. Here are some examples. The full survey is proprietary. We illustrate the approach from two of the 30 potential questions.

The first area relates to basic demography. A sample of the survey questions is set out below:

- 1. "Thinking about your household, tell us:
 - I. How old are you?
 - II. What type of household are you? (prompt: sole, single parent, married, divorced, family, other)
 - III. What is the occupation of the primary household member? (prompt: if multiple members, prompt for other occupations)
 - IV. What type of employment do you have? (prompt: full-time, part-time, part-time multiple, casual, unemployed, in education, career break, full-time career, other)
 - V. What is you level of employment? (prompt: executive, manager, team leader, worker, self-employed other)"

The second area relates to financial footprint. A sample of the survey questions is set out below:

2. "Thinking about your financial status, tell us:

- I. What was your estimated income in the last 12 months? (prompt: \$ amount, How confident of value?)
- II. What were the sources of income, and relative contribution? (prompt: salary, Centrelink benefits, investment income, superannuation, -- % breakdown)
- III. {Investment Branch If investment income} "What type of investments paid income last year? (prompt: shares, property, bonds, bank deposits, other, relative share and \$ value)
- IV. How much would the household currently owe on loans? (prompt: \$ value, How confident of value?)
- V. Thinking about your loans, what type do you have? (prompt: mortgage, investment mortgage, credit card, personal loan, lease, payday/small loan, other, -- % breakdown)
- VI. {Payday Branch If payday borrower}
 - a. "How much have your borrowed payday last year? (prompt: \$); how many loans did you take last 12 months (prompt: number of discrete loans, number of parallel loans).
 - b. How will you pay off the loan? (prompt: source? When? How? No Plans is OK, but press as payday will have firm end date)
 - c. How did you choose payday (prompt: only choice, easy access, repeat borrower, recommended by friend, recommended by family, TV advert, internet search, flier, telephone call, other)
 - d. How did you apply for the loan (prompt: looking for source/channel, internet, phone, local shop, post, agent, other)
 - e. How long did it take to get the cash? (prompt: looking for time in days; also press for payment in account, or cash in hand (bank account most likely))
 - f. Would you use payday again?
 - g. How happy were you with the payday loan? (prompt: rate 1 to 5, 1=excellent, 2=OK, 3=adequate, 4=poor, 5=very poor; get a sentence to explain their rating; what worked and what did not."

Data is captured into a database, which can subsequently be interrogated by custom SQL queries.

The survey is statistically tested against the ABS census data, and results are grossed up to the 8.47 million households currently in Australia. The sample is statistically optimised by state, age profile, segment and other factors. It is statistically correct +/- 1.5%. The confidence level within the methodology is 95% (representing a significance level of 0.05).

2 How Many Households Are Financially Stressed?

Our analysis segments Australian households into various groups in order to identify those that are financially stressed, and a subset that are financially distressed. Financially stressed households are generally coping with their current financial situation (even if using unconventional means), while financially distressed households are not. By coping, we mean for example, short term borrowing from family, friends, or payday loans, as well as juggling multiple credit cards, moving debts from one credit source to another and deliberately making late payments. The distinction between financially stressed and financially distressed households is important, because a broader spectrum of financially stressed households are now using payday lending facilities. These classifications of households are, of course, dynamic, with financially stressed households moving into a position of distress and vice versa.

2.1 Financially Stressed Households

The 2014 ABS Social Survey indicated there were 8.4 million households¹ in Australia. Our database assumes there are now 8.47 million households.

The DFA surveys apply a range of leading indicators to households that identify them as being in financial stress. These include:

- Those in mortgage stress;²
- Those who are behind with loan repayments;
- Those who have been declined some form of credit;
- Those who consistently borrow again to repay an existing loan (excluding mortgage refinancings):
- Those who seek debt counselling or credit repair services;
- Those who have had difficulty getting or keeping a bank account;
- Those in bankruptcy or a deed of arrangement.³

DFA selected these indicators because they have proved to be reliable over the long term. We have not sought to match other indicators of stress which may be used by other parties. Our omnibus survey looks at a variety of the household's circumstances. Our datasets are wider than those used by other parties, and are more likely to identify the graduation between stressed and distressed households. The datasets are repeatable over the long term, which provides more stable data. Essentially in summary, we define financial stress as a household which is not able to meet their financial commitments as they fall due.

¹ Australian Bureau of Statistics, 41590D0015 2014 General Social Survey, Summary Results, Australia, 2014

² Mortgage stress is defined as households that are in some form of loan default or are struggling to pay their mortgage on time

³ Deed of arrangement in this context means a formal or informal mechanism where debtors agree to make scheduled payments to reduce debt and creditors agree not to enforce the in the meantime. This may include structured arrangements under the Bankruptcy Act such as Debt Agreements and Personal Insolvency Agreements, hardship variations under the credit law or other informal arrangements

Different characteristics are given a score and a weighting for severity. Respondents are then classified as stressed, distressed or not stressed at all according to their score.

Since 2005, there has been a rise in the absolute number and relative percentage of financially stressed Australian households. Our surveys indicate that in 2015 2.69 million households are in financial stress, representing 31.8 per cent of all households.

Figure 1: Percentage of households in Australia that are financially stressed

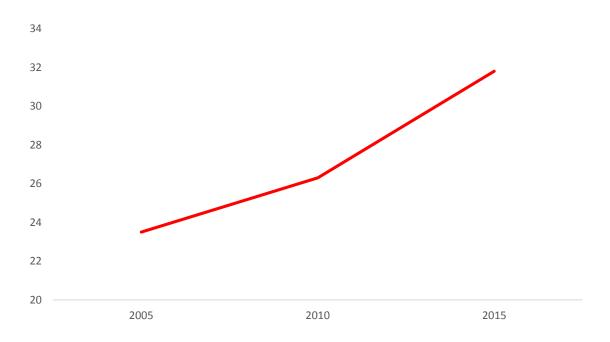
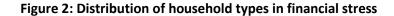


Table 1: Number of financially stressed households in Australia				
	2005	2010	2015	
Number of households in Australia	8,056,000	8,335,000	8,470,000	
Number of households in Australia that are	1,894,379	2,195,145	2,697,192	
financially stressed				
% of households in Australia that are financially	23.5%	26.3%	31.8%	
stressed				

In June 2015, 59 per cent of the households in financial stress included more than one adult member, while the remainder were lone member or one-parent families. One-parent families with a female parent were more likely to be in financial stress than those with a male parent. The poor financial position of sole female parent households was commonly associated with a lack of child support income.



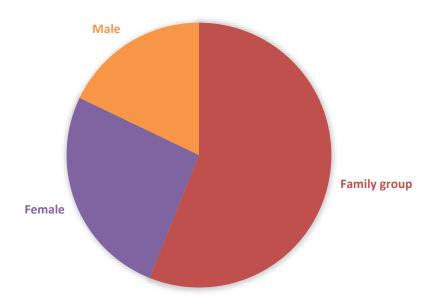


Table 2: Household types in financial stress (%)		
Family group	59.44%	
Female	21.59%	
Male	18.96%	

2.2 FINANCIALLY DISTRESSED HOUSEHOLDS

The leading indicators we apply to identify households in financial distress include:

- Those who are repeat borrowers;
- Those with limited credit options;
- Those with chronically insufficient regular cash flow to meet obligations as they fall due;
- Those unable to find \$2,000 in an emergency within 7 days;
- Those with no or limited access to traditional banking facilities (including transaction accounts, loans and credit cards).

In summary, distressed households are first not meeting their financial commitments as they fall due, and are also exhibiting chronic repeat behaviour, and have limited financial resources available.

Since 2005, there has been a significant rise in the number and relative percentage of households who are in financial distress. The 2015 survey data indicates that 1.8 million households (just over 20 per cent of all households) are now financially distressed.



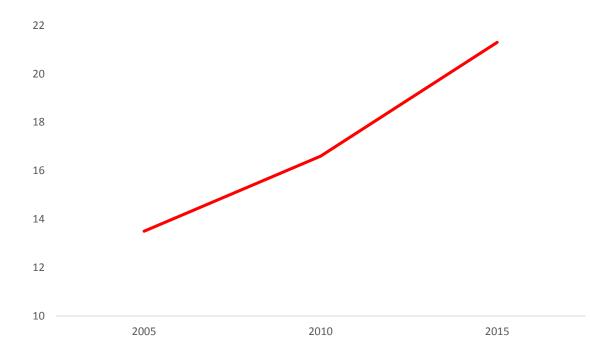


Table 3: Financially distressed households				
	2005	2010	2015	
Number of households in Australia	8,056,000	8,335,000	8,470,000	
Number of households in Australia that are financially stressed	1,894,379	2,195,145	2,697,192	
Number of households in Australia that are financially distressed (subset of financially stressed)	1,091,322	1,382,685	1,800,070	
% of households in Australia that are financially distressed	13.5%	16.6%	21.3%	

There are important differences in the relative distribution of households in financial distress and others. The 2015 data indicates that a disproportionate number of households in financial distress are either one parent families with children or other non-standard household types, including older lone person households. Conversely, younger couples and couples with families are less likely to be financially distressed.

Across the households identified as being in financial distress in June 2015, 40 per cent were family groups with more than one adult. Of the remaining 60 per cent, there were more lone female households and one-parent families than lone males in financial distress.



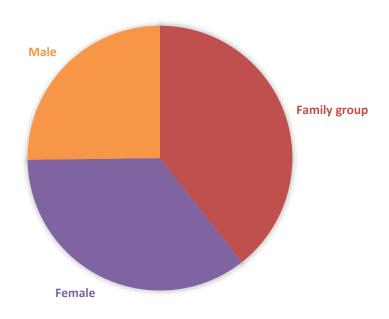


Table 4: Households in Financial Distress (%)		
Family group	39.40%	
Female	35.40%	
Male	25.20%	

2.3 Underlying Cause of Household Financial Stress

There are many complex elements, which may arise as single events or as a combined set of factors that create a challenging environment and lead to households becoming financially stressed and or distressed.

Those households who register as financially stressed are asked to identify the reasons for their difficulty. They are able to give multiple answers, and the results are summarised and weighted on a percentage basis, as shown below.

Table 5: Underlying cause of financial stress (self-assessed)				
	2005	2010	2015	
Overspending	35.6%	27.7%	28.9%	
Poor budget management	21.6%	23.6%	15.8%	
Loss of employment	11.2%	13.5%	15.6%	
Health issues	17.5%	16.8%	15.4%	
Reduced government benefits	3.5%	8.7%	9.8%	
Relationship breakdown	5.6%	6.5%	7.3%	
Drop in income	5.0%	3.2%	7.2%	

Sometimes these factors are created by an external event, such as a relationship breakdown, health issues, or loss of employment. Our data shows that unemployment has become a more significant factor over the last decade, with fifteen per cent of households indicating that this caused their financial problems.

Other households identify loss of income as the main factor, whether from less overtime, lower pay rates, reduced government benefits or failure to received agreed child support. The reasons for loss of income were sourced from the qualitative part of the surveys. Notably, the households surveyed that ascribed their financial problems to their own behaviour such as overspending and poor budgeting has reduced from 57.2% in 2005 to 44.7% in 2015.

The longer households are financially stressed, the greater the probability they will fall into a position of financial distress, with a critical transition point at 18-24 months.

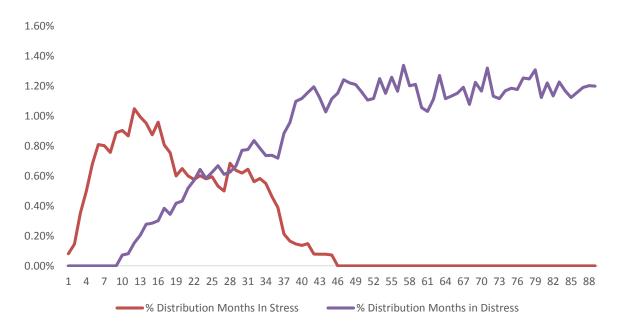


Figure 5: Months in financial stress and distress – relative distribution by type and month

3 Profile Of Payday Borrowers

Some households who use payday lending fall into the financially stressed group, but not the subset of financially distressed households. Those that fall within the financially distressed category generally have no savings or assets to draw upon. Please note that we have deducted the numbers of financially distressed from the total number of stressed households in the analysis to ensure that there is no double counting.

3.1 PAYDAY ACCESS CHANNELS

The DFA survey includes data on channel and device interaction. In the survey, within the payday questions we ask specifically about where they found out about short term loans. We allow multiple answers, and the data is weighted on a percentage basis.

There have been significant changes to the channels through which households became aware of payday lending services. In 2005, local payday lending providers advertised through print media such as local fliers and local outlets. The rise of the internet has facilitated major changes in promotion practices. By 2015 more than 40 per cent of the households surveyed used the internet, search engines or social media to find out about payday lenders.

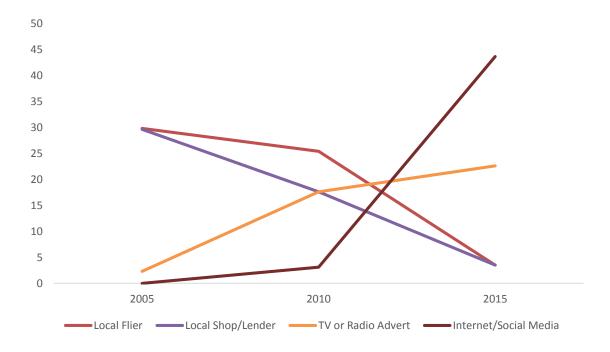


Figure 6: Key payday lending information sources (% of all payday borrowers)

Table 6: Where did you find out about payday lending?				
	2005	2010	2015	
Internet/social media	0.0%	3.1%	43.6%	
TV or radio advert	2.3%	17.6%	22.6%	
Print media/advertisement	23.7%	21.7%	11.3%	
Friends	7.8%	5.7%	8.5%	
Other	0.1%	2.8%	3.7%	
Local flier	29.8%	25.4%	3.5%	
Local shop/lender	29.6%	17.6%	3.5%	
Family	1.2%	1.5%	2.1%	
Yellow Pages	5.5%	4.6%	1.2%	

We see a corresponding shift in channel preferences between 2005 and 2015. In 2005, the telephone and local shops or lenders were the most common interface to payday lenders. Most payday lending was done face to face and with local branches of lenders or agents calling on potential customers. By 2015, more than 68 per cent of households used the internet to access payday lending. Hence, online lending is now the primary access channel for payday lending.

Figure 7: Payday lending access channels (% of borrowers)

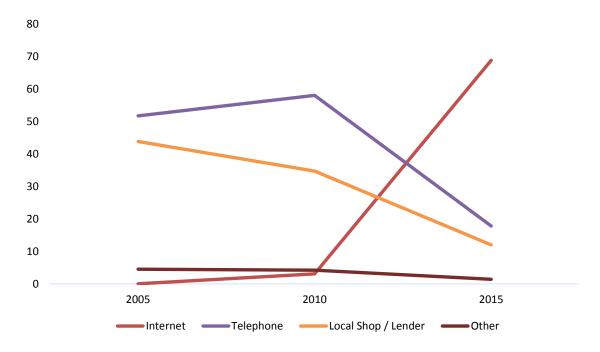


Table 7: Which channel did you use to access payday loans?				
	2005	2010	2015	
Internet	0%	3.1%	68.8%	
Telephone	51.7%	58%	17.8%	
Local shop/lender	43.8%	34.7%	12%	
Other	4.5%	4.2%	1.4%	

For those using online access, we also ask about the devices they use, and again weight the answers in percentage terms. Of those accessing payday lending online in 2015, there was a variety of devices in use, with personal mobile phones and public personal computers being the most commonly used.

Table 8: Which device did you use for online access?		
Own mobile phone	21.7%	
Public personal computer (web café, library etc)	21.3%	
Own mobile personal computer	13.8%	
Own tablet/iPad	12.3%	
Own fixed personal computer	9.8%	
Friends/family personal computer	6.8%	
Friends/family mobile phone	6.7%	
Friends/family tablet/iPad	4.8%	
Other	2.8%	

Table 9: Which operating system do you use to access payday loans?		
Windows	46.5%	
Apple/iOS	27.8%	
Android	14.5%	
Other	11.2%	

Table 10: Which application do you use to access payday loans?			
Use dedicated app on smart phone or tablet	29.8%		
Use web site on smart phone or tablet	31.9%		
Use internet web site on other device	38.3%		

3.2 PAYDAY MARKET SIZE, LOAN SIZE AND NUMBER

As described above, we identify all forms of lending households have, and those stressed and distressed. We are able to extract via SQL the average amount, and the average number of loans.

During the five years from 2010 to 2015, the total number of households using payday lending services increased significantly. However, there has been a shift in the mix of household segments using these services. Financially stressed households emerge strongly in the 2015 data, with 41 per cent of households using payday loans in the last three years being financially stressed. Over the same period, the number of financially distressed households using these services fell by five per cent (but still make up 59% of payday borrowers). All users of payday lending were either stressed or distressed according to the criteria described above. For this analysis we ask respondents whether they have used a short term (payday) loan in the past three years.

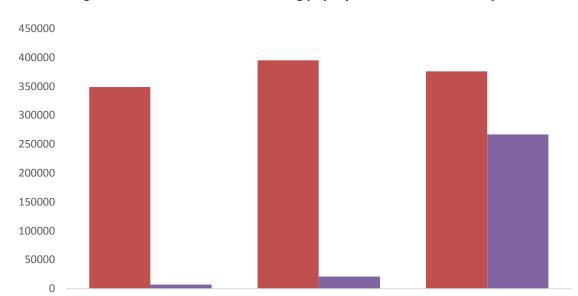


Figure 8: Number of households using payday loans in the last three years

Table 11: Number of households using payday loans in the last three years

■ Financially distressed

2010

■ Financially Stressed

2015

2005

	2005	2010	2015
Number of financially distressed households	348,976	395,297	376,206
Number of financially stressed households	7,121	20,805	266,881
TOTAL	356,097	416,102	643,087

During the 12 month period to 20 July 2015, the average payday loan outstanding per borrower was \$2,223 whilst the average number of loans was 3.64. The average amount outstanding is lower than in 2005 but higher than in 2010. The average number of loans in 2015 was greater than in either 2005 or 2010.

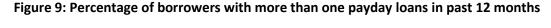
Table 12: Average amount outstanding and average number of payday loans			
	2005	2010	2015
Average amount outstanding to payday lenders per household	\$2,353	\$1,930	\$2,223
Average number of payday loans in the last 12 months	3.03	2.50	3.64

The number of borrowers taking out more than one payday loan the preceding 12 months has grown from 17.2% in 2005 to 38.0% in 2015.

For this analysis we ask about the types of loans households have. For those with payday (short term loans) we ask about the number of loans they held in the past 12 months. The question only asks "have you had" a payday loan in the past 12 months. Then how many altogether and how many at one time. It is not possible to discern whether people have included loans taken out the year before but still outstanding. We isolate them in the database, and can assess those with more than one loan. We can also look at these in the context of the DFA segmentation.

The average number of payday loans per borrower has also increased in 2015 compared to 2005 after falling in 2010.

Using SQL data we calculated the average number of loans, and their relative distribution, on a count and percentage basis. The distribution of payday loans reveals an increase in both the number and percentage of payday borrowers with more than 1 loan in every category from 2 per year to more than 10.



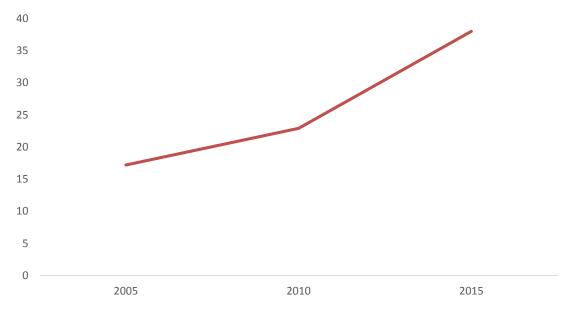


Table 13: Number of households with more than one payday loan in last 12 months			
	2005	2010	2015
Number of households with a payday loan in past 12	279,181	336,003	357,396
months			
Number of households with more than one payday	47,894	76,783	135,763
loan in past 12 months			
% of payday borrowers with more than one payday	17.2%	22.9%	38.0%
loan in past 12 months			
% of financially stressed households	2.5%	3.5%	5.0%
% of financially distressed households	14.7%	19.4%	33.0%

There has been a similar but smaller shift upwards in the number of borrowers with concurrent payday loans. Note again, this is based on respondents' answers - we do not independently validate their responses.

35
30
25
20
15
10
5
2005
2010
2015

Figure 10: Percentage of borrowers with concurrent payday loans

Table 14: Borrowers with concurrent payday loans				
	2005	2010	2015	
Percentage of payday borrowers	9.8%	12.6%	29.4%	

The average duration of payday loans outstanding has fallen significantly over the last decade. In 2005 the average duration was 77 weeks, in 2010 this fell to 56 weeks, and in 2015 the comparative figure was 23 weeks.⁴ In the payday branch of questions, we ask how long the loan is open (i.e. the duration of the loan). This is a household estimate and not validated independently.

Table 15: Average duration of payday loans (weeks)				
	2005	2010	2015	
Average duration in weeks	77	56	23	

⁴ From 2013 onwards payday loans (also known as small amount credit contracts) have been limited to 12 months or less by legislation.

3.3 PAYDAY LOAN PURPOSES

The responses indicated that emergency cash for household expenses, such as food and clothing, are the most common reason for taking out a payday loan. From 2005 to 2015, this response rose from 30 per cent to 35 per cent of respondents. Utility bills appear quite often (10 per cent), as do car related expenses (12 per cent) and specific household purchases (e.g. a new fridge) (8 per cent). In the payday question branch we ask about the reason or reasons for borrowing. The answers are clustered in the analysis and distributed on a percentage basis. Multiple answers are allowable.

Table 16: Purpose of payday loan			
	2005	2010	2015
Emergency cash for household expenses	31.4%	33.8%	35.6%
Specific event ⁵	12.8%	9.5%	15.6%
Car registration or expenses	15.7%	13.2%	11.2%
Repay existing loan	17.6%	15.4%	9.8%
Water, gas or electricity bills	9.6%	11.2%	8.9%
Phone, internet or TV bills	1.2%	3.1%	7.8%
Household purchase	8.7%	8.9%	6.5%
Other	2.8%	4.5%	4.6%

Two striking observations emerge. First, more payday loans are now being used to cover the costs of internet services, TV subscriptions and phone bills (these are now regarded as essentials, not luxuries). Secondly, the level of borrowing for the purpose of repaying existing loans fell from 18 per cent in 2005 to 10 per cent in 2015. The largest category, emergency cash for household expenses can be further broken down as follows:

Table 17: Breakdown of 'emergency cash for household expenses'			
	2005	2010	2015
Children's needs	19.6%	21.1%	22.7%
Clothing	17.8%	19.1%	21.6%
Medical bills	13.6%	14.2%	15.1%
Food	15.3%	13.2%	11.4%
Healthcare needs	12.8%	11.4%	10.8%
School trips	5.6%	7.9%	9.1%
Fares/travel costs	5.6%	7.2%	8.3%
Other	9.7%	5.9%	1.0%

18

⁵ Within this category, funding of a wedding was the most common answer, followed by a holiday, funeral expenses, school fees and parties.

We also asked about overall satisfaction with the payday lending experience. The specific questions as outlined below and the answers were weighted on a percentage basis. Those who expressed a level of dissatisfaction are able to comment on the cause. We used these answers to produce summary categories, and weighted them on a percentage basis.

The responses to these questions reflect common themes between financially stressed and distressed households. About half of these households were satisfied with the experience, but financially distressed households were less happy than the other segments. The majority of borrowers gave an authority for direct debits from their bank accounts.

Potential compliance issues were highlighted by some respondents. 38.7% of distressed households surveyed were refinancing another debt when they took out a payday loan, and 36.8% already had another payday loan. The majority of both stressed and distressed households surveyed were not provided details of alternatives when they took out their payday loan. Others had linked services – like insurance – added into the loan. Only a small number of borrowers were aware of the APR of the loan.

Table 18: Circumstances when borr	ower took out their	payday	loan
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When you got your payday loan:	Stressed	Distressed
	Households	Households
Did you give authority for a direct payment?	78.6%	56.9%
Were you provided with details of alternatives?	61.8%	56.9%
Were you satisfied with the lender experience	61.2%	39.8%
Would you take another payday loan?	51.2%	58.9%
Had you been declined elsewhere?	31.6%	43.2%
Were you refinancing another debt?	23.4%	38.7%
Did you have to take another service? (e.g. Insurance)	23.3%	41.5%
Did you already have a payday loan?	17.6%	36.8%
Did you know the effective APR of the Loan?	11.4%	4.5%

Around half of the households that had used payday lending services indicated they would be willing to take another payday loan. Distressed households were more likely to be both dissatisfied with the experience and willing to take another loan. Of those who were not satisfied with the experience, there were a range of issues.

Table 19: Reasons for not being satisfied with payday loan

I was not satisfied because:	Stressed Households	Distressed Households
The terms were not clear to me	31.7%	32.5%
There was too much paperwork	21.3%	7.8%
I had more money taken from me than I expected	18.0%	24.7%
I paid more fees than I expected	17.8%	12.7%
I did not get the amount I wanted	11.2%	22.3%

We use data from two questions to derive the percentage of borrowers who have a payday loan who were behind in their payments in 2015. First, we ask if households are behind with their payments on any of their loans. Second if they are, we ask a specific follow-up question to determine their current default status. Note this is based on their responses, we do not independently test their answers. Arrears under 30 days are not counted as a default.

Table 20: Percentage of payday borrowers in arrears or default on a payday loan		
Total number of payday borrowers	357,396	
Number of payday borrowers more than 30 days in arrears but less than	9.80%	35,025
90 days		
Number of payday borrowers more than 90 days in arrears	4.90%	17,512
Number of payday borrowers formally in default	3.70%	13,224
Number of payday borrowers who have had their loan frozen or entered	1.20%	4,289
a payment arrangement		
Total in arrears or default	19.60%	70,050

3.4 Payday Borrower Demographics

We now turn to the demographic characteristics of payday borrowers. In 2015, sole male households are significantly more likely to use payday loans than sole female or multiple adult family groups.

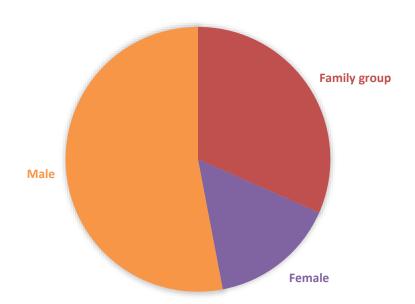


Figure 11: Types of borrowers using payday loans

Table 21: Types of borrowers using payday loans		
Type of borrower % of all households using payday loans		
Family group	31.6%	
Female	15.4%	
Male	53%	

In 2005 the average age of the main payday borrower was 45 years, but this has since dropped to 41 years. Trend analysis shows that in 2005, most payday borrowers were over 40 years old, with peak demand from borrowers in their late forties. Today we see a significant rise in younger borrowers, with households in their thirties now active. Older households are generally much less likely to borrow⁶. As described above, our basic survey methodology captures a number of demographic questions, the results of which we used in the data analysis via SQL. The data only related here to those households who use payday loans.

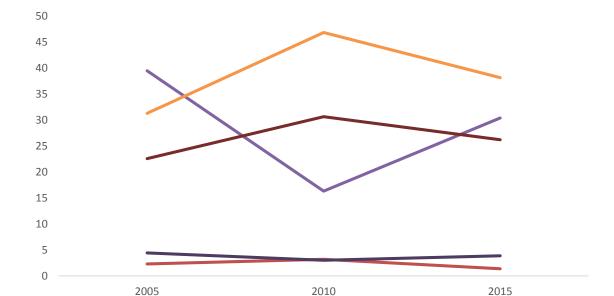


Figure 12: Percentage of payday borrowers by age group

Table 22: Percentage of payday borrowers by age group			
Age	2005	2010	2015
19-28 years old	2.28%	3.18%	1.37%
29-38 years old	39.44%	16.30%	30.35%
39-48 years old	31.26%	46.78%	38.12%
49-58 years old	22.53%	30.61%	26.17%
59-68 years old	4.4%	2.98%	3.86%

2010

39-48

29-38

⁶ The DFA survey is with main householder, so it is possible the representation of the older and younger are understated, where they live as part of a wider household.

2015

Education levels are a significant factor associated with payday loan usage. Households with adults that have been to university are significantly less likely to borrow than those with school-level education.

Table 23: Percentage of payday borrowers by education level			
School	94.74%		
University	5.26%		

Most payday borrowers are employees (over 70 per cent) rather than managers or executives. However, approximately 15 per cent of payday lending households describe themselves as expert professionals.

Table 24: Percentage of payday borrowers by type of employment				
Employed worker	70.9%			
Expert professional	15.4%			
Other	11.3%			
Manager	2.2%			
Executive	0.2%			

The industry footprint is interesting, with those in the agribusiness (15 per cent) or construction (13 per cent) industries most likely to borrow. Those who have retired (11 per cent) or are not currently working are also significant groups (9 per cent), followed by administrative staff (8 per cent) and sales (6 per cent).

Table 25: Top 6 industry sector employers of payday borrowers in 2015			
Occupation	Percentage of payday borrowers		
arming, fishing, and forestry	14.7%		
Construction and maintenance	12.6%		
letired	11.3%		
lot currently employed	8.6%		
Office and administrative support	8.1%		
Sales	5.9%		

3.5 Payday Household Income Profiles

While there are significant variations in the income levels of households using payday lenders, these households have consistently lower average annual incomes than the overall Australian population.

The average income of payday borrowers has changed very little over the past ten years; in 2005, the average annual income was \$34,549 and in 2015 it was \$35,702. Allowing for inflation over this period, the average real income of borrowers has dropped.

Table 26: Average annual income of payday borrowers					
2005	2010	2015			
\$34,550	\$35,202	\$35,702			

Today 28 per cent of payday users have annual incomes below \$30,000 and only 9 per cent have incomes over \$50,000. When we compare the income distribution of those who use payday lenders to the distribution of all households surveyed, the more limited income of these borrowers is striking.

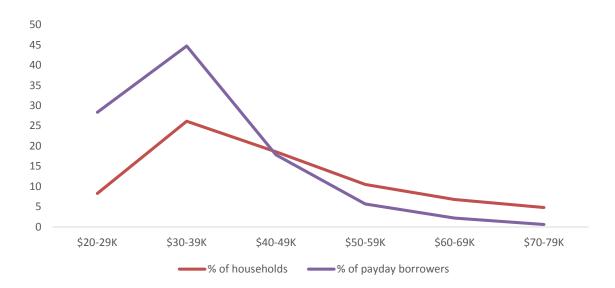


Figure 13: Income distribution of payday borrowers

Table 27: Income distribution of payday borrowers ⁷					
Annual income	% of all households	% of payday borrowers			
\$20-29,000	8.28%	28.34%			
\$30-39,000	26.11%	44.75%			
\$40-49,000	18.57%	17.81%			
\$50-59,000	10.50%	5.66%			
\$60-69,000	6.79%	2.20%			
\$70-79,000	4.78%	0.60%			

3.6 DISTRESSED AND STRESSED PAYDAY BORROWERS

There are interesting contrasts between financially distressed and financially stressed households. In the payday branch of the survey we ask specifically why they went with the payday option. The responses were summarised by response and segment on a relative percentage basis.

Financially distressed households generally use payday loans either from desperation or because it is seen as the only option, whereas the financially stressed households are attracted by the convenience of the service.

⁷ Note: Data on income distribution above \$79,000 has not been included as the percentage of payday borrowers with income above this amount was nominal. There were, however, a number of survey participants who did not use pay day lending who had income significantly higher than \$79,000.

Table 28: Reasons for taking out a payday loan					
	Distressed Households	Stressed Households			
Only option	78.0%	31.5%			
Desperation	17.0%	8.0%			
Convenience	5.0%	60.5%			

The overall lending patterns reveal clear differences across these households groups. Financially distressed households rarely have a property with a mortgage, while 17 per cent of financially stressed households have a mortgaged property. The penetration of credit cards and store cards is low amongst distressed households. In contrast, 69 per cent of financially stressed households have credit cards and borrow heavily on them. Around 36 per cent of the households within this segment also have store cards. Both types of households have other loans and both groups have multiple payday loans running concurrently.

Table 29: Overall borrowing patterns of payday borrowers				
	Distressed households	Stressed households		
Has mortgage on property	1.2%	17.6%		
as credit card	3.6%	68.9%		
s credit card debt	90.0%	98.0%		
as store card	1.1%	35.8%		
as other loans	78.6%	81.5%		
as multiple concurrent payday loans	35.8%	27.2%		

3.7 PAYDAY AND HOUSEHOLD SEGMENTATION

We use a multifactorial model to determine which segment a particular household is aligned to. Our segment definitions are listed in **Appendix 1**. Applying this segmentation to the payday sector, we see some important trends.

The most significant observation is the spreading penetration of payday lending from the traditional "battler" groups to a wider range of segments including young growing families, stressed seniors, and rural sectors. A growing proportion of "multicultural" groups are also using payday loans. This segment includes first or second generation migrants to Australia with English as a second language.

-

⁸ The majority have residual credit card debt, while no longer having access to a credit card.

Table 30: Types of payday borrowers by DFA segments						
	2005	2010	2015			
Disadvantaged fringe	43.8%	34.3%	35.0%			
Multicultural establishment	24.4%	25.8%	28.9%			
Battling urban	25.2%	29.0%	16.6%			
Young growing families	3.5%	6.7%	11.3%			
Stressed seniors	1.6%	2.0%	5.3%			
Rural family	1.6%	2.2%	2.8%			
Suburban mainstream	0.0%	0.0%	0.3%			
Exclusive professionals	0.0%	0.0%	0.0%			
Mature stable families	0.0%	0.0%	0.0%			
Wealthy seniors	0.0%	0.0%	0.0%			
Young affluent	0.0%	0.0%	0.0%			

3.8 FUTURE GROWTH OF PAYDAY LENDING

We used our industry model, household segmentation, demand modelling and DFA survey data to estimate the future growth of payday lending. The figures below reflect the value of loans written each year, but does not include loan carry forward, refinances and defaults, so is therefore a conservative estimate. The size of the market is estimated by grossing up the data from our survey to a national level, using the ABS census as a guide.

We predict continued growth in all of the following:

- the use of payday loans by financially stressed households;
- the penetration of payday lending to a broader spectrum of the population; and
- the relative and absolute levels of online originated loans.

There are a large number of online lenders operating in Australia. Some of these are locally owned, and others operate as Australian arms of international businesses. We expect the overall value of the payday lending sector in Australia to exceed \$1 billion by 2018. As a comparison, the credit card market is currently worth \$40 billion⁹. Note this is an indicative model only, and underlying assumptions, and therefore outputs may change.

We model future volumetrics based on our baseline household survey data. We gross up the 26,000 per annum reference data to national level, on a statistical representative basis. We assume there will be similar utilisation and debt patterns, at a segment and state level, and overlay expected population and employment growth. We assume population and household growth will maintain current trend levels.

We assume the current mix and duration of loans, including multiple loans, continues at current rates. We assume no change in the current payday legislation, and we assume the current levels of

 $^{{}^9\,} See \, \underline{\text{http://www.digitalfinanceanalytics.com/blog/how-big-is-the-payday-lending-market-in-australia/}}$

availability of other forms of credit, and current lending rules. We make the following specific assumptions:

- 1. Unemployment at the national level will remain at 6.3% out to 2018 (and current state differentials continue, with rising rates in WA and SA.
- 2. Cash interest rates will rise from 2.0% from mid-2016, to reach 3.5% by 2018
- 3. GDP will remain at 2.5% to 2018
- 4. Core inflation will remain at 2.5% to 2018
- 5. Income growth, after inflation will be zero out to 2018

Estimates are rounded up. Based on past performance, we have a confidence level of \pm 1.5% out to December 2016, and \pm 2.3% beyond to 2018.

1000
800
600
400
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015*
2016*
2017*
2018*

Figure 14: Estimated value of payday loans written per year (\$'000,000s)

Table 31: Estimated value of payday loans written per year (\$'000s)													
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*	2017*	2018*
315698	312246	398239	307971	349321	441343	448468	398140	390994	600847	670000	840000	950000	1010000

^{*} Projection figures

As part of the channel data, we identify those using online services for the origination of payday lending. We counted the number of loans, versus those originated online for payday households. This gives a relative value and count by segment via our SQLs.

The increased penetration of payday lending amongst financially stressed households appears to be linked to the rise of mobile technologies and the ease and convenience of online originated loans.

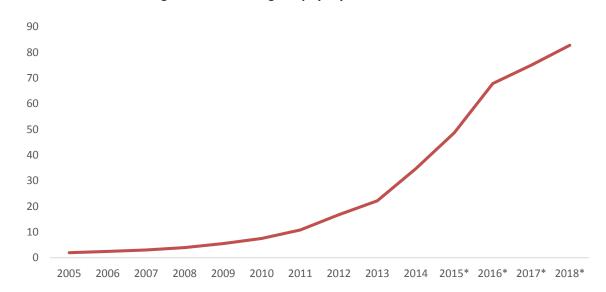


Figure 15: Percentage of payday loans written online

Table 32: Percentage of payday loans originated online													
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*	2017*	2018*
1.99	2.51	3.02	3.96	5.56	7.56	10.87	16.77	22.16	34.74	48.67	67.86	75.06	82.79

^{*} Projection figures

3.9 SURVEY ANALYSIS

Our analysis has highlighted the diverse nature of financially stressed households. One can legitimately argue that most users of payday loans are disadvantaged and or vulnerable in some way. Our survey analysis confirms the following:

- Most payday loan households have a relatively low income;
- Most have a low educational level:
- Many have minimal or no assets and savings;
- Many use these loans out of desperation or a lack of other funding options;
- Some have English as a second language;
- Many appear to have limited understanding of financial matters;
- Many appear to measure the success of payday lending services based on minimising external pressure (rather than on the long term financial outcomes).

Hence many households that use payday loans are in financial distress and use short term payday loans from desperation. Others choose payday loans as a convenient service to assist with short term cash flow needs.

The survey analysis indicates that Australian households are increasingly likely to apply for a payday loan online. Moreover, the clientele of payday lenders is expanding from financially distressed to financially stressed households, and this trend is likely to continue. Online services are now mainstream, and this presents significant new challenges for customers, policy makers and regulators.

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APPENDIX 1: DFA SEGMENTS

Details of the segments are set out below:	Sample Post Codes	Number In Segment
1. Young Affluent: These are predominantly young and affluent individuals, commonly renting apartments in fashionable high density inner-city suburbs near public transport hubs. Many are transient tenants who regularly change their residence. They have high incomes, most have no children and a high proportion of de facto households. 40% have recently moved and home sharing is common. Building activity is high with considerable invested in building and alterations, and property values and rental costs are also high. Most are white collar workers with professional or executive careers across a variety of industries, especially finance and property, and a significant proportion have or are undertaking tertiary education. Technologically savvy they are early adopters of technology and are the segment most likely to purchase goods or services online or by phone. They opt for premium credit cards but are attracted by interest free offers. Car ownership is below average with public transport preferred.	Sample Post Codes include: 2039, 3054, 4064, 5006, 6004, and 6008.	432,873
2. Young Growing Family: These are young families who are new home buyers purchasing separate homes in affordable new estates on urban fringes with low density housing and average to below average property values. Building activity is high but average building spend is below average. These neighbourhoods are young and have the highest building approval and population growth. The segment is typically made up of blue collar workers and tradespeople, people in clerical, sales and service occupations, and a significant proportion of transient workers in remote mining locations who are suitably compensated for adverse working conditions. Despite being relatively affluent, mortgage commitments lead to tight family budgets. Most have no post-school qualifications but an above average number of technical diplomas and certification. Due to work commitments from both partners they have a preference for non-branch based banking. Computer and internet use is above average.	Sample Post Codes include: 2759, 3159, 4125, 5125, 6122, and 7017.	664,423
3. Rural Family: These are individuals in rural areas. There has been a marked population decline in this segment. Most housing is separate with low property values. Significant numbers of homes are owned or being purchased, but rental properties are also common catering to the transient section of the population. Predominant industries are agriculture; forestry and fishing with blue-collar employees, but local enterprises require a significant proportion on white-collar administrative and managerial staff. Employees cater to local needs in townships in a variety of manual labour, trade and service oriented professions. Early school leavers with few post-school qualifications are common. Computer ownership and internet use is low. Vehicle ownership is average. Affluence and incomes are generally low but	Sample Post Codes include: 2671, 3300, 4470, 5690, 6312, and 7301.	822,177

sometimes supplemented by rental income. Most individuals are Australian born with a significant proportion indigenous.		
4. Battling Urban: These are individuals with strong financial constraints and limited incomes, living in urban and suburban areas. High density apartment blocks are common in these areas, and State and privately rented housing availability leads to a highly transient and mobile population. Suburban semi-detached and separate houses also make up a significant proportion of these neighbourhoods catering to mobile couples and families. Building activity and property values are average to low and housing density is high. With average incomes and education levels, the jobs in this segment are across a variety of industries and are mainly mid to lower white-collar and clerical roles. They have above average ownership of computers and internet use. Vehicle ownership is below average. Unemployment levels are high in many areas and qualifications are low. There are significant areas with post 1980s migrant populations, and tertiary education is valued in these areas.	Sample Post Codes include: 2167, 2565, 3194, 4018, 5068, and 6060.	534,369
5. Disadvantaged Fringe: These are disadvantaged peripheral urban and country areas with low income levels. State rental accommodation is common, but there is also a significant proportion of young families purchasing homes in newer peripheral suburbs with low-mid density housing and low property values. The majority of homes are owned or being purchased. Most of the population have a European or Oceanic ancestry. Education levels are low but tertiary institution attendance is average, suggesting academic and professional aspirations. They are not technologically savvy; hence computer and internet use is low. Credit card usage is uncommon and multiple car ownership (older models) common. Individuals mainly have manual blue-collar or clerical white-collar jobs in a variety of industries, especially retail, wholesale trade, health, community services and hospitality. Unemployment is high.	Sample Post Codes include: 2286, 3338, 3658, 4132, 5098, and 6058.	1,564,098
6. Suburban Mainstream: These are a mix of white and blue collar workers in a variety of industries predominantly not as decision makers. Significant numbers of households have children. Many individuals are Australian born, but there are significant numbers of Europeans and Asians. Incomes and affluence are above average, and are supplemented by some rental income. Neighbourhoods are stable and well established with a high rate of home ownership and a combination of housing types in mid-high density areas within metropolitan districts and fringes, with relatively high property values. There is little population growth and average building approvals but many properties have or are being renovated. They are frequent users of the internet, direct debit and remote banking. Credit card and mobile phone usage is high, and multiple car ownership per household is the norm. There are significant numbers of mid-size separate homes either being purchased or fully owned.	Sample Post Codes include: 2203, 3056, 4059, 5031, 6160, and 7000.	2,556,745

7. Mature Stable Family: These are affluent and established individuals in mid-outer suburbs with above average household size and mortgages. They have separate homes on large blocks of land in established communities, with multiple vehicles and significant personal possessions with requisite insurance cover. Housing density is low but building rates are high with above average expenditure on new residences and extensions. Tertiary education is valued and parents are still supporting their dependent children. The segment is technology savvy with 60% home computer ownership, and uses the internet for banking and invests in financial planning. Corporate managers and business owners across a variety of industries are common in this segment. There is not a large investment in property or shares despite the segment having above average incomes.	Sample Post Codes include: 2153, 3133, 4061, 4069, 5066, and 6070.	587,294
8. Exclusive Professional: These are some of the wealthiest individuals living in the most exclusive suburbs. These professionals and business owners are financially astute and obtain advice from their personal planners or on-line. They enjoy fast access internet services, and are high-end technology savvy. Although they are heavy users of premium credit cards, they prefer to pay off the balance each month. They are generally the type to feel financially stable, and have the highest household incomes, highest rate of home ownership, and also have the highest commitment to mortgage/rent payments. They are predominantly upper white-collar professionals, primarily employed in the property, business, finance and insurance sectors, and usually married couples with older dependent children aged 18 to 24. They earn substantial incomes, investing through numerous methods including property and share portfolios that in turn provide considerable additional income.	Sample Post Codes include 2071, 2075, 3126, 4007, 5062, and 6009.	636,426
9. Multicultural Establishment: This segment contains individuals from a variety of different cultures (predominantly Southern and Eastern Europe and Southeast Asia) living in established multi-cultural communities with individuals migrated to Australia or first generation born here. Affluence levels are moderate and incomes are below average but some additional income is gained from rent. English is often a second language. There are significant numbers of early school leavers in blue-collar roles, many in the manufacturing, utilities and construction industries. There are also individuals in lower white-collar roles, but unemployment in this segment is high. Many own their medium-value homes but others take advantage of State (above average proportion) and private rental accommodation. Separate housing is prevalent and located in high-density areas. Building activity is low and the population is non-transient with moderate growth. They are not technology savvy; hence computer and internet use is low. Car ownership levels are also low.	Sample Post Codes include: 2166, 3061, 4076, 5110, and 6061.	527,307

10. Stressed Seniors: These are senior individuals across provincial and metropolitan areas, generally living in lower value homes in low-density suburbs. The segment also includes residents in nursing homes and retirement villages. Most are home owners and many are no longer working and are retired, living on pensions and other incomes. Most are early school leavers and those still working are in a variety of occupations and industries in predominantly white-collar roles. Affluence is relatively low with limited income from government pension and supplementary assistance. They are not technologically savvy, have low computer and internet use and prefer to use branch banking. Car ownership is low, and unemployment is above average. The oldest citizens are in this segment and are predominantly in retirement villages and nursing homes.	Sample Post Codes include: 2219, 3194, 4163, 5021, and 6157.	206,769
11. Wealthy Seniors: These are senior individuals across provincial and metropolitan areas, generally living in lower value homes in low-density suburbs. The segment also includes residents in nursing homes and retirement villages. Most are home owners or purchasing new homes, and many are no longer working and are retired, living on personal pensions supplemented by other incomes. Many are early school leavers and those still working are in a variety of occupations and industries in predominantly white-collar roles. Affluence is relatively high and many individuals gain significant income from rent and investments. There are significant numbers of recent retirees. They are quite technologically savvy, have relatively high computer and internet use but still prefer to use branch banking. Car ownership is average, and unemployment is above average.	Sample Post Codes include 2539, 3230, 4183, 5204 and 6044.	309,919