

**An Economic Analysis of the Payday Loan Industry
and
Recommendations for Regulation in Manitoba**

A Report to the Manitoba Public Utilities Board

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Executive Summary

I recommend:

1. That Manitoba reduce the cap on payday loan fees to 15% of the initial principal amount, which in this industry is often stated as \$15 per \$100 of loan.
2. That Manitoba change the payday loan regulations to require lenders to offer borrowers the option to convert a payday loan into an installment loan on the first due date. I recommend a period at the borrower's option but not to exceed six months. Sections 13.1(2) and 13.1(3) of the Regulations now specify that a replacement or extended loan may be charged no more than an additional 5% of the principal amount. The fee for the payday loan due at the first due date would be calculated under the rate cap regulation and the total to be repaid on the installment loan would be the principal plus the original fee plus 5% of the original principal. Section 5 of this report shows an example of the details, but many different schedules of repayment could be considered.
3. That Manitoba not change the maximum percentage of pay that may be borrowed. A change will have little effect on the debt trap problem. The option to convert to an installment loan is a more effective method to deal with that problem.

I will present evidence on regulation of payday lending in six sections:

1. Evidence on the number of payday lenders in various jurisdictions and their profitability that supports the conclusion that the fair and just rate cap for Manitoba should be no higher than \$17 per hundred on a loan and probably should be lowered to \$15 per hundred. This evidence shows that the higher rates in other provinces are almost certainly allowing the large payday lending companies to earn excess profits.
2. Evidence based on a regulatory model accepted by the Public Utilities Board in 2007-08. I conclude that a rate of \$15 per hundred will allow efficient payday lenders to continue to offer payday loans in Manitoba and earn a fair and just rate of return. This evidence shows that the higher rates in other provinces are almost certainly allowing the payday lending companies to earn excess profits.
3. A discussion of the oft-repeated image of the payday loan borrower as a person who is employed, has an unexpected emergency and only the payday lender can help this desperate borrower. The evidence shows that the great majority of payday borrowers are frequent repeat customers who face a chronic problem, and the business model of the payday loan industry depends on these repeat borrowers. Payday lenders now offer payday loans against a wide variety of non-employment cash flow sources such as pensions and disability payments, and many of the companies did not do that when Manitoba first regulated the industry in 2010.
4. A discussion of the recent development of longer term installment loans offered by payday lenders. These installment loan products were not offered at the time of the first hearings by the Public Utilities Board. They are generally not governed by the federal

and provincial legislation and regulations of payday loans. They can take a number of forms. While they do not fall under the mandate of the current hearing on payday loans, they are closely-related, the payday lenders are the companies offering them, and the Public Utilities Board and the Manitoba regulator need to consider whether they require separate legislation and regulation, which a recent announcement says they are going to do.

5. A discussion and recommendation regarding the limitations on the maximum size of payday loan to be allowed.
6. A comparison of charges on small loans levied by a Manitoba payday lender and overdraft charges on the same loans levied by TD Canada Trust.

Additional Research that May be Needed

I have not factored the use of an installment loan option into the fee schedule and cost structure that is used to determine a fee cap of 15% in Section 2 of the report. This work requires more thought and time than was available, and could also benefit from comments from the payday loan industry. If the Board wishes to pursue the option of an installment option, this work could be done subsequent to the hearing.

1. Evidence on the Success of Payday Lenders Under Regulation

An extensive examination of the numbers of payday lenders in jurisdictions where they still operate and the profitability of some companies whose shares are publicly listed supports a conclusion that a rate cap of 15% of principal (this is not an interest rate but a flat fee of 15% of the principal loaned, regardless of the length of the loan period), and some limitations on the amount that may be loaned and the frequency of loans, will still permit an active payday loan industry to operate.

Payday lending was unregulated, or operated in violation of regulations but escaped legal sanctions, during its early days in the 1990s. Subsequently, governments in the US and Canada enacted regulations that limited their business in several ways. Manitoba enacted legislation and introduced regulations that took effect in 2010, following extensive hearings in front of the Public Utilities Board (PUB) in 2007-08. In some US states and in Québec and Newfoundland and Labrador, the limitation on the fees was so stringent that payday lenders ceased operation. In the other states and provinces they have continued to operate profitably and in some cases to expand. Manitoba has an active payday lending industry that continued after regulation with little changes in numbers of outlets except for the bankruptcy of Cash Store Financial. Regulation in the UK is quite recent, takes a somewhat different form in its restriction on fees charged, and so far it appears that payday lenders have continued to operate profitably there as well.

The Business of Payday Lending

In my 2007 written evidence submitted to the PUB Dr. Chris Robinson wrote a paper on the essential nature of the business of payday lending. What follows is a concise summary of the most important aspects of the business that are particularly relevant to determining a just and fair rate in 2016. Some aspects of the industry have changed because it has become more mature, but most factors are the same as they were in 2007. Dr. Robinson defined a just and fair rate as a rate that permits an efficient payday lender to earn a fair rate of return without excess profit in testimony in 2007-08 and the same definition applies in this report.

Payday lending stores and companies have the following characteristics:

1. They are small businesses.
2. They charge very high fees compared with other lending institutions.
3. They have high operating leverage, which means profits change a great deal with changes in volume.

4. Most of the costs are the operating costs, and these are largely fixed for the scale of most stores.
5. Bad debts affect profits significantly, but are much less important than the operating costs
6. They require little capital.
7. They have limited economies of scope compared with most financial institutions. Only two business lines make a significant contribution: payday loans and cheque cashing.
8. National Money Mart is the dominant player with more than one-third of all the outlets in Canada and possibly half the loan volume. Cash Money is the second largest chain and growing rapidly. Cash4You, an Ontario chain, appears to be the third largest. There are a number of smaller chains and single stores.
9. The size of the business has grown very rapidly in a decade in three ways:
 - a. Number of stores (total growth has slowed in recent years and is being consolidated in the largest chains)
 - b. Volume per store
 - c. Additional lines of business – the original payday lenders were cheque cashers only. Payday lending is now the largest revenue contributor.
10. The payday lending business depends upon repeat customers rather than one-time users. The majority of loans are to repeat customers.
11. Internet loans were not dealt with in my original report because of lack of information at the time. The most recent evidence shows a very large increase in activity through the internet, though verifiable data is still scarce. It is possible that one-third of payday loans are now contracted via the internet. In Manitoba, a loan can be initiated via the internet, but the customer must still to a physical outlet to complete the transaction, and hence all internet lenders must have a physical outlet in Manitoba. ¹

¹ Money Mart does internet loans this way in Manitoba and 310-Loan also has a single outlet, but does most of its business via the internet. Mr. Nathan Slee was the president and owner of 310-Loan in 2007-08 and he was an intervenor in the hearings at that time. He told the hearing he would open an outlet in Manitoba to comply with the law, but he intended to operate primarily on the internet. He did so, and an American payday lender, QC Holdings, eventually bought the 310-Loan business, which still operates in Manitoba and elsewhere in Canada.

Evidence Supporting This Characterisation of the Business of Payday Lending in Canada

The affidavit of Steven Carlstrom relating to a motion within the CashStore bankruptcy filing (2014, pp 61) claims there were 1,500 payday loan outlets in Canada and they provided \$2.5 billion in loans annually. There is no date assigned to these numbers, but we can reasonably take them as applying to the period 2013-14. The number of outlets is greater than the number in Appendix 3, which is exactly what we would expect given the demise of Cash Store/Instaloans. These two numbers yield an average loan volume per store of \$1.67 million prior to Cash Store Financial's exit from the business. Appendix 1 reports an average loan size of \$449 in 2014 for BC, which is the only province to provide any data on payday lending in Canada. If we assume that this is a reasonable average size for Canada, it implies that the average store makes about 3,700 loans per year, or about 10 per day.² The same calculation for BC yields an average of 9 loans per day per outlet. Appendix 1 shows average revenue of \$307,802 per outlet. Payday loan stores are unquestionably small businesses. When they are aggregated into a single large company like National Money Mart they become somewhat larger – Appendix 2 shows that it had over \$300 million in revenue in 2013 -- but this is still quite small relative to the banks. We cannot imagine a bank branch with only 10 loans per day.

Point 2 is accepted by all parties. Points 3 through 7 are discussed in Ernst & Young (2004) and in Dr. Robinson's written submissions and oral testimony in front of the PUB in 2007-08. Point 10 on the numbered list is discussed in Section 3.

Points 8 and 9 turn to the competitive landscape and the players, and that has changed in some ways in the last few years while remaining the same in other ways. National Money Mart remains the largest player by far. Cardus (2016, pp 28) says it has 574 outlets. In the last published document, the 10K for 2013, Dollar Financial reports 489 outlets for Canada, of which 479 are company-owned and 10 are franchises (see Appendix 2) and its website says it has "over 500 outlets."³ The large increase in number is primarily due to its purchase of a large part of the Cash Store/Instaloans network when Cash Store Financial went bankrupt in 2014. Cash Store Financial had been the largest payday lender in Canada by number of stores but probably second largest in terms of loan volume. National Money Mart (Money Mart, henceforth) rebranded some of the purchased outlets and closed those that were too close to its own existing stores. The second largest chain is Cash Money, which self-reports "over 160 stores;" but a count by Dr. Robinson finds it listing 184 on its website with a note that two more are about to open in Ontario.⁴ Cardus (2016, pp 28) reports Cash Money has 175 stores and on its website Cash Money also says "We're continuously growing and opening new store locations to better serve

² Most payday outlets operate seven days a week for long hours, since a major part of their claimed differentiation from banks is their convenience.

³ www.moneymart.ca/about/ accessed Feb 28, 2016.

⁴ www.cashmoney.ca/find-a-store/ accessed Feb. 28, 2016

you; so check back frequently to find new Cash Money Stores in your neighbourhood.” The third largest chain appears to be Cash4You, which reports 91 outlets, all in Ontario.⁵

There are also smaller chains and single outlets. Cardus (2016, pp 28) lists Cash Canada (56) and Speedy Cash (24). The most reliable total for all Canadian registered operators is drawn from the regulators plus our best estimate for New Brunswick and our adjusted estimate of BC and is shown in Appendix 4 as 1,425. Cardus (2016, pp 16) reports 1,500 outlets. Ernst & Young (2004) reports a 2003 estimate by the Canadian Association of Community Financial Services Providers (CACFSP) of 1,000 outlets. By 2006, the Canadian Payday Loan Association (CPLA) had succeeded the CACFSP, and it estimated there were 1,350 outlets, in conversation with Dr. Robinson. Payday lenders did not have to be registered with anyone nor did they have to belong to the CPLA, which made its estimate by scouring the Yellow Pages in hard copy for all of Canada to find lenders who were not members. The number of outlets may have exceeded 1,500 in the period about 2010 – 12, when Cash Store Financial had expanded quite rapidly and not yet been forced to start closing outlets.

What is certain is the consolidation of the industry. The growth phase is largely over. Appendix 1 shows no growth in the last three years in BC. Appendix 5 for Manitoba shows a reduction from the peak a few years ago because of the closing of some of the Cash Store Financial/Instaloans outlets when Money Mart bought them. We did not include the details for Nova Scotia in a separate appendix, but its regulator reports 43 outlets in 2010, a high of 51 in 2012, and 45 in 2015. The Canada-wide count also seems to have stopped growing; the current breakdown by province is shown in Appendix 4. However, Money Mart, Cash Money and Cash4You have grown substantially in the last three years. These three largest account for about 60% of the outlets in Canada and almost certainly a higher proportion of the total volume of loans. If we add Cash Canada and Speedy Cash, the five largest firms account for about two-thirds of the outlets, which is a fairly high concentration for what is on a store by store basis quite a small retail operation with low capital requirements and hence fairly easy entry.

This process is a normal one for small retail businesses if there are any economies of scale. Barbershops, for example, do not become large chains, because there are virtually no advantages to be had. Payday lenders can benefit from national advertising to drive purchase of the product and establish a brand⁶ and common computer systems for recording loans and accounting. Money Mart has become almost synonymous with payday lending and cheque cashing, which is a considerable advantage. The fact that the number of outlets has stabilised, but grew so quickly, is strong evidence that the business is profitable at current rates. If the business were not profitable, we would have seen more collapses than just Cash Store Financial, and we would not

⁵ www.cash4you.ca/company/find-a-store/ accessed Feb. 28, 2016. Cardus (2016, pp 28) says it has 80 outlets).

⁶ Money Mart uses distinctive primary yellows and reds on its store fronts. Cash Money and Cash4You use combinations of the same yellows and reds, as do many smaller operators, because Money Mart was first and biggest in the business. Cash Store Financial used green to differentiate itself.

see the other chains taking up almost all the slack in total store numbers. If they were not profitable at current rates, the store numbers would be around 1,000 at most.

Manitoba Store Counts and Competition

Appendix 5 uses evidence from the 2007-08 hearings and more recent material from the regulator to provide a continuity schedule store by store, sorted by city and town. It focuses on three dates: 2007-08 when Manitoba held the first hearings into regulations; 2010, the first list of registrants under the regulations; and February 2016, the most recent evidence from the regulator. The total numbers stayed about the same from 2008 to 2010. Sorenson, Cheque Stop and Mogo exited rather than be regulated, but they were small chains. National Cash Advance opened about the time of the hearings, and claimed it would stay. It was a subsidiary of a major US chain. It was gambling on favourable regulations, since it was very late into the game and would have a hard time gaining business from the established stores. It did not reregister after 2011 and no longer has any Canadian presence, though it continues to be a major US firm.

The current list shows a substantial reduction in the number of outlets since 2010, primarily in Winnipeg and primarily due to the departure of Cash Store Financial, which also owned Instalozans. Flin Flon and Winkler now have no payday lender. Brandon, Portage la Prairie, Steinbach, Dauphin, Thompson, Selkirk and Swan River still have a pay lender. The Pas added a payday lender in 2010. Most of these are such small communities that it is hard to understand where they could find sufficient volume of business to justify a full-time payday loan store. Even with the surrounding community, the customer base is quite small. The table at the bottom of Appendix 5 shows how large the store number is relative to population for the communities other than Winnipeg and Brandon.

Although the number of stores has declined in Winnipeg with the closures, there are still a lot of stores and they are located in the same neighbourhoods, as Appendix 6 shows. Money Mart bought Cash Store Financial, reopened a few of its outlets and closed the rest, capturing the CSF customers in its own branded stores. Cash Money and the smaller operators have gained some of the CSF customers also. This is a natural process. A new industry often over-expands because of uncertainty about the total consumption of the product or service. Early returns often look very appealing because there is insufficient competition and regulation. The new entrants take a while to determine collectively, though not collusively, what is the appropriate number of outlets.

A Brief Look at the US and UK

Let us turn to the US in Appendix 3. A number of US states have enacted rate caps that are too low for payday lenders to operate and they have exited those states. A common limit seen in those states is an annual interest rate of 36%. Most of the remaining states have legislated rate caps; a few have not. Missouri has a rate cap of 75% of the initial principal; that is, \$75 per \$100 borrowed. In 2008 there was no rate cap and at that time Missouri had more payday loan outlets than all of Canada. The average rate charged appeared to be \$19 per \$100. We observe in Appendix 3 that most US states that still permit payday loans have rate caps substantially lower than the Canadian rate caps listed in Appendix 4. Thirteen states have caps at \$15 per hundred or lower. Some of them also have a declining scale under which loans larger than \$500 pay less on the amount above \$500. Some of the apparently higher caps are actually \$15 per \$100 plus a flat \$5 fee for registration on a statewide data base, which involves extra work and expense for the lender. Six states have no rate cap and Missouri I have already mentioned.

The number of stores per 100,000 population varies widely across the states, and probably income per capita is also relevant. In general, high rate caps are correlated with higher store numbers. However, even the states with 15% and lower caps have a substantial payday loan industry present. Florida has a rate cap of \$10 per hundred plus a fixed \$5 fee, and it has more stores per capita than any Canadian province, all of which have much higher fees. Florida is more densely populated than any Canadian province and so it would be easier for stores to service a greater population.

The UK has instituted a rate cap of 0.8% of principal per day, or 80 p per £100 loan per day. This cap yields a different pattern from the US and Canadian experience. The typical North American loan matures on the next payday, which for almost all borrowers is on a biweekly or twice monthly schedule, resulting in loans with less than 14 days maturity. Under the UK cap, a typical 10 day Canadian loan would cost only \$8 per hundred, a rate which would be too low for most Canadian stores. If the loan lasts a full 30 days, the fee would be £24 per £100, which is just a bit higher than the highest Canadian fee. Given a 30-day time to maturity, we would not see such frequent borrowing and so the UK limit would also produce lower fees for all the repeat borrowers. In Sections 3, 4 and 5 of this report I focus on the issue of repeat borrowers and demonstrate that it is a serious problem in Canada. Casual net searches and Buckland (2016, forthcoming) provide some evidence the payday lending business thrives in the UK under this regulation and a lot of the business is done via online lenders. If the PUB wishes a more thorough examination of the UK experience, it could authorise further research.

Are They Profitable at Current Rates?

The evidence of the expansion and now stabilization of store numbers in Canada and Manitoba, and the widespread existence of US rates lower than Canada coupled with many

payday stores leads to the inference that all Canadian rate caps may well be too high, and are certainly not too low. The small communities in Manitoba have payday lenders in such low population areas that we would not expect them to continue, and yet they have. Those in Swan River, the Pas and Thompson are paired with title loan companies. On February 14, 2008 when Dr. Robinson interviewed numerous payday lenders by telephone, he discovered that one was operating out of a full-time flower shop. In Ontario he has observed payday lenders operating pawn shops and used goods stores, and in one case, a laundromat, on the same premises. These findings were reported in oral testimony to the PUB. Since the fixed cost of rent is a major cost for a small business, this is a natural outcome. Setting rates so that a payday lender can operate without looking for such economies guarantees that the larger, efficient operators will earn excess profits, those higher rates will be charged to a much larger number of borrowers than would otherwise have to pay them.

If we look again at Appendix 2, we see that the operating profit margin (sometimes called contribution margin)⁷ for the Canadian segment of Dollar Financial is double that of the US and UK/European operations, on a consistent basis. Since Dollar Financial continues to operate in the US and is expanding rapidly in Europe, the inference is that the Canadian operation is earning excess profits. We cannot see the most recent results for Money Mart, but Lone Star's takeover is another piece of evidence that Dollar Financial was a desirable property, and the Canadian operation is clearly the largest single segment and by far the most profitable.

Internet Lending

Point 11, internet lending, seems to be a huge growth area. Lack of data makes it very hard to incorporate it into any consideration of a just and fair rate. On the one hand, it seems obvious that loan losses will be much higher for an internet lender. The Dollar Financial data in Appendix 2 show a phenomenal growth rate in internet lending, even while lending through the physical stores is also growing fast, and that data ends in June 30, 2013.

Buckland (2016, forthcoming) reports some estimates that internet lending could be one-third of total payday lending now, which is consistent with the Dollar Financial numbers. Buckland also reports estimates that the loan loss rate is far higher than it is for loans granted at a store. This evidence too is consistent with the rates shown in the Dollar Financial 10K. Manitoba has only two registered online operators. The Alberta regulator reported to Dr. Robinson in an email exchange that there are 13 registered in Alberta.

However, we would think that the operating costs of an internet lender are far lower – no storefront, fewer staff, less risk of theft. We have no hard data. As Ernst & Young (2004) and Appendix 2 show, operating costs are the major cost of the business. It is quite possible that

⁷ As Money Mart and this report use the term, it means the revenues attributable to a business segment minus all the costs that are directly identified with that segment. A contribution margin excludes costs that are common across the company, such as head office expense and interest expense.

internet lending is either more or less profitable, and should be regulated to either lower or higher rate caps, but nobody knows if regulation of internet lending is even feasible, other than by denying access to the normal legal rights for internet lenders who fail to comply with the law in the jurisdiction of the borrower. Consumers Council of Canada (2015) finds evidence that unregistered online payday lenders are less likely to adhere to Canadian law and regulation of payday lending.

2. A Rate Cap for Manitoba

Recommendation: Reduce the rate cap from the current value of 17% of the initial principal to 15% of the initial principal, which in this industry is often expressed as \$15 per \$100 of loan, to distinguish it from a periodic interest rate.

In my opinion, a rate cap of 15% of initial principal is a just and fair rate that allows efficient payday lenders to continue to operate in Manitoba without earning excess profits. In this section I provide evidence through a financial model to show the effect of the 15% rate cap, and taken together with the evidence from Section 1, I conclude that 15% is the appropriate level.

The financial model estimates a cost structure for an efficient payday lending store, including cost of capital, for a single store that can be either a sole proprietorship or one outlet in a chain of stores. I used a similar model in my expert opinion for the 2007-08 hearings in front of the Manitoba Public Utilities Board. This model is an adaptation of the widely-accepted method for regulation of utilities. I determine an efficient cost structure, allowable capital investment and required rate of return on the capital, and volume of production, where production in this case is payday loans. I then apply different prices to the loans and see what profit the model generates for each case. Since the model allows for a fair return on capital invested, the profit this model generates is excess profit, or in economists' language, an *economic rent*.

Economic rent is an excess payment made to or for a factor of production over and above the amount expected by its owner. In a capitalist system, the owner is a person, partnership or company, and the amount the owner expects is repayment of all cash outflows associated with operating the factor of production plus a fair rate of return on the value invested in the factor of production. David Ricardo, an English economist, conceived of economic rent related to land. If an owner has particularly good land, he could earn economic rent or excess profits by paying labourers to work the land and selling the food harvested for enough to pay all the labourers and other suppliers and leave an excess that is higher than he could earn by investing the value of the land in any other venture of similar risk.

Neo-classical economic theory asserts that economic rents are often destroyed by competition, because others can offer to sell their production for lower prices than someone charging enough to earn economic rents. The competitors are willing to do this as long as they get a fair rate of return on their investment. Competition may fail to reduce prices and end owners' economic rents for a variety of reasons, most notably if the business is a monopoly and hence there is no competition. But many other situations that lead to economic rents exist.

In the case of payday lending, I observe that competition has failed to reduce prices to the level that might reduce economic rents. Prior to the changes to Section 347 of the Criminal Code of Canada, payday lending was flourishing in Canada. Money Mart was the largest payday lending competitor and as I testified in 2007 in front of the PUB, its average loan charge was

approximately 19% of the principal value.⁸ The company that is now the second largest in Canada, Cash Money, charged a flat fee of 20% of the principal value. Dr. Robinson investigated the fee structure of many payday lenders in Manitoba and elsewhere in Canada and the US. In Canada, the commonest rate was a flat 20% of principal, with some lenders charging more and a few charging rates similar to Money Mart.

In the US, the practice was either banned or regulated at rates that are shown in Appendix 3. A few changes have occurred in the state regulations since 2007, but the general picture is unchanged. A number of states (those not shown in the Appendix) set rates so low that payday lenders exited the business. A few states do not limit the rates and Missouri sets a rate so high that it is meaningless. The rest of the states set limits that are usually at or close to 15% of the principal. Colorado has forced the payday lenders to convert to installment loans whose fee structure is so complex that I cannot describe it in terms exactly comparable to regular payday loans, but it clearly generates less revenue for payday lenders. In all of the states that have not effectively banned payday loans, the payday lending industry continues to flourish with many outlets.

When we turn to Canada in Appendix 4, we see that regulation has been far more generous to the payday lenders, with caps ranging from 17% in Manitoba, to 21% in ON and NB, and 23% in NS and the rest of the western provinces. As soon as the various provincial regulations were passed, Money Mart, Cash Money and the other lenders except Cash Store Financial moved to the regulated limit, which had the effect of increasing the cost of payday borrowing substantially in all provinces that allowed it, except for Manitoba. Clearly, competition did not force rates to a level that eliminated economic rents, since the payday lenders were flourishing and expanding rapidly when most of them were charging rates lower than they charge now.

The reasons why competition doesn't work seem to lie in the disadvantaged nature of the majority of borrowers. As evidence from many sources shows:

- The borrowers often do not understand the nature of the charges and how quickly they mount and erode their future income;
- The borrowers are unable to get credit from the mainstream financial institutions, which charge much lower rates;
- The borrowers belong to marginalised groups in society and they feel that financial institutions discriminate against them; and,
- Once they are in the payday borrowing cycle, they get into a debt trap that they have great difficulty escaping.⁹

In my opinion, this evidence is sufficient to warrant the use of a regulatory financial model as a means of determining a fair and just rate. The model inputs that have the most significant impact on the results are: loan volume, the fee charged on the loans (which is the value that is the

⁸ Prior to regulation by the provinces, Money Mart had a complicated fee structure, charging the sum of a fixed dollar fee (regardless of loan size) plus a percentage of the loan plus an interest rate that compounded to an effective annual rate of 59%.

⁹ E.g Grant and Lott (2002); Buckland (2012, 2016 forthcoming); Pew Charitable Trust (2013); Simpson and Islam (2016a,b, forthcoming); St. Aubin (2016, forthcoming).

subject of the regulation), operating cost and bad debts expense. Cost of capital and capital expenditures are much less important.

The Base Model

The reader should look at Table 1 while reading this and following subsections. I will explain how the table works and the source of all the estimates in a minute, but first an overview. The table represents a single store. If it is part of a chain, then the operating cost line and the capital investment include costs that are not directly part of the store, but instead are the administrative or head office costs. The revenue model and revenue total have a line for interest revenues, but I have not modelled them for this report. I have not modelled any fees other than the flat fee charged on every loan, but there is provision in the regulations for an additional fee on past due loans and so this model is somewhat biased to show lower revenue.

Table 1 displays results for the base model at 15% and 17% rates caps. The base model in a financial modelling practice is the best single estimate of the relevant parameters. We know that there is variation in what will happen, but the base model is the best single estimate of current and future results.

This model is a perpetuity, and that distinction is essential to understanding what the dollars represent. They are “real” dollars. That is, they are expressed in today’s purchasing power. If we want to express them in “nominal” dollars, which means the dollar values we will observe in the future, we cannot use a perpetuity, we need a huge spreadsheet in which we estimate inflation factors for every future year and then inflate the values in the model every year. We will also have to discount all the values. And since we cannot have an infinite spreadsheet, we will have to choose a future year in which we convert everything to a perpetuity in any case. If the payday loan industry were just starting now, we could not use a perpetuity because we would have to allow for future growth in number of outlets. However, the evidence is clear that the industry is not growing rapidly any more. Outlets will open and close, particularly as population shifts, but the net effect will be a fairly stable number of outlets.

Table 1 is similar to a common valuation model, Free Cash Flow to the Firm (FCFF). Pinto et al. (2015) is a standard work for Chartered Financial Analysts and provides a detailed explanation of FCFF valuation, but the same model appears in every valuation textbook, since professional valuers, investors and money managers all use it as a fundamental analytical tool. I use the same principles in the payday lending model, but the objective function is the price of the loan, not the value of the company. In very simple terms, the model sets up an equation in which the single unknown variable is the price of the loan, and the cash flows and the value of the firm are given. The valuator takes prices as given, and solves the same equation for the value of the firm.

The model includes only payday loan revenue and costs, but most of the business costs are joint and therefore an allocation of them to one revenue line or another is arbitrary. I have

chosen the reasonable method of allocating joint costs in proportion to the revenue streams. This is the commonest method when no strong evidence exists for any other allocation.¹⁰

The cost section includes lines that leads to cash expenses, and lines that sum up to the capital investment, which I multiply by the cost of capital to get the required return, the just and fair return, to the owner of the business. The “Excess Profit” line, with numbers in boldface, shows the estimate per store of the amount of economic value generated per year in excess of the amount needed to compensate the owner of the business. A minus sign shows an economic loss. The excess profit or loss is not the same as the income or loss on an income statement. A company can generate positive net income, but not return enough to compensate the owner for the capital invested, and hence show negative excess profit, or negative economic rent. The operating cost line includes payment to the owner for time worked in the business. The capital cost pays for the financial investment in the business, not the labour of the owner or manager.

How do you interpret the magnitude of the excess profit? There is no formal yardstick, only reasonable judgement. This model cannot produce precise answers. Even the most carefully prepared and audited financial statement of a business contains many estimates and allocations that reasonable accountants would differ on. The work in this report incorporates all those estimates and allocations, and more. A single payday loan store is a very small business. If the analysis is representative of a chain, then the excess profit is multiplied by the number of stores in the chain. In my opinion, a positive or negative value less than \$5,000 is indistinguishable from 0, which would mean the business earns a fair and just rate of return. A value between \$5,000 and \$10,000 is a strong indication of economic loss or excess profit, and a value greater than \$10,000 is almost certainly materially different from zero. To give you an idea of the size of the numbers in a chain, Money Mart has 574 stores. An excess profit of \$10,000 in the model translates into an excess profit of \$5.7 million for the company each year.

Table 1 shows a 15% rate cap on the left hand side and a 17% rate cap on the right hand side. The other values are my best point estimates. The 15% rate cap generates a material excess profit of \$15,553 per store. For Money Mart, such a value would convert to an excess profit of \$8.9 million p.a. The 17% cap generates a very large excess profit.

The values used for Table 1 are based on 2013-14 numbers, but adjusted for the number of stores, costs and per store loan volumes after the failure of Cash Store Financial (CSF). This table is “as if” Cash Store Financial had failed in 2013 instead of 2014, the other lenders had taken up CSF’s customers and had opened some new stores, but not as many as CSF closed.

Let me explain the workings of the model line by line.

¹⁰ Activity-based costing or its antecedent, distribution cost analysis, might yield better estimates. They would be very expensive to execute and I would have difficulty showing the results are any more accurate, since there is no right answer. In any case, the payday lending industry has not given me any data.

Table 1: Regulatory Model

Base Case 15% Cap		Base Case 17% Cap	
\$ Volume of loans	\$2,340,000	\$ Volume of loans	\$2,340,000
Revenue model:		Revenue model:	
interest rate		interest rate	
average loan term	12	average loan term	12
%age fee	15%	%age fee	17%
Cost Model		Cost Model	
Operating cost/\$100 loan	11	Operating cost/\$100 loan	11
Cost of capital real	8.00%	Cost of capital real	8.00%
Cash on hand	32055	Cash on hand	32055
Loans receivable	76,932	Loans receivable	76,932
Capital investment per store	50,000	Capital investment per store	50,000
Initial store loss	100,000	Initial store loss	100,000
Regulatory deposit	25,000	Regulatory deposit	25,000
Payables and accruals per st	48,430	Payables and accruals per st	48,430
Net investment per store	235,556	Net investment per store	235,556
Bad debt rate/loans	2.20%	Bad debt rate/loans	2.20%
Economic Income Statement		Economic Income Statement	
%age fee revenue	343,278	%age fee revenue	389,048
Interest revenue		Interest revenue	
Total Revenue	\$343,278	Total Revenue	\$389,048
Operating cost	257,400	Operating cost	257,400
Capital cost	18,845	Capital cost	18,845
Bad debt cost	<u>51,480</u>	Bad debt cost	<u>51,480</u>
Total Economic Cost	<u>\$327,725</u>	Total Economic Cost	<u>\$327,725</u>
Excess Profit	<u>\$15,553</u>	Excess Profit	<u>\$61,324</u>
Excess as a % of Total loans	0.7%	Excess as a % of Total loans	2.6%
Excess as a % of Total revenue	4.5%	Excess as a % of Total revenue	15.8%
Excess as a % of good loans	0.7%	Excess as a % of good loans	2.7%

Line by Line Explanation of the Model and Data

Volume of Loans. I use this as the base for both revenue and operating cost. The common industry practice is to express values as \$ per \$100 of loan. This practice has a significant drawback because it is not sensitive to material changes in activity. If store X that has been making 15 loans a day gets additional volume of 10 loans per day when a competitor on the next block closes, store X will increase its revenue by two-thirds, but its costs will not rise by anything close to the same amount. Measuring its costs historically as \$ per \$100 of loan will overstate its expenses and understate profit going forward. Nonetheless, I use this method in the model because I do not have data that will avoid the problem.¹¹ I discuss the implications of this in what follows.

In order to get volume of loans per store, consider two issues. First, no current data exists for Manitoba, nor for Canada as a whole. The best we have comes from 2013-14, and that is just store counts for each province and some additional data from BC and NS. We have several routes to try to estimate the loan volume per store, and there is a major issue that affects the estimates. Cash Store Financial (CSF), which includes Instalozans, went out of business in 2014. It reported 509 outlets at the time (Carlstrom, 2014, pg. 66). Other payday lenders will have taken up that business, because virtually every CSF/Instalozans store had another payday lender close by. The mapping and listing of Winnipeg payday lenders that also shows distances from closed stores in Tab 8 shows this effect clearly for Manitoba. The chart in Appendix 5 shows that almost all other centres in Manitoba where there was a CSF outlet continued to have a payday lender after CSF closed.

BC has provided some data that shows volume of \$1.4 million per store in 2014, though this data will be older than that, since it depends on the reporting cycle of the different lenders. The BC data has a serious flaw, because the store counts include Cash Store Financial. Other lenders will pick up the CSF loan volume, because in virtually every community where there was a CSF or Instalozans store, there was at least one other payday loan store as well. The current store count for BC is 204.¹² Using that number, the average loan volume per store in BC would be \$1.889 million in 2014.

The model is based on an efficient lender, which is most likely to be a large lender also. The only company for which any data is available is Money Mart, the dominant firm in Canada, via the 10K filings of its parent company, Dollar Financial. The Canadian segment of Dollar Financial is Money Mart. In its 10K for the year ended June 30, 2013, loan volume for Canada is \$922,900,000 (pg. 11) and its count of company-operated stores is 479, for a loan volume per store of \$1.927 million.

¹¹ I experimented with another technique, one that I developed in other industries. The results were not helpful because I did not have suitable data. Ideally, I would have store by store volume and costs, but the industry will never provide it.

¹² Consumer Protection British Columbia, Active License Search, online: http://www.consumerprotectionbc.ca/businesses-payday-lenders-home/licencesearch? &task=active_bus, accessed March 22, 2016.

In order to properly evaluate the performance of payday lenders today, the values from 2013-14 must be adjusted to take account of the CSF exit. The revenues of the remaining players and the cost structures as well should be adjusted to account for the effect of the CSF customers moving to other lenders. CSF does not disclose loan volume in the information in Affidavit of Steven Carlstrom (2014), but it does disclose loan revenue for the year ended September 30, 2013 of \$152,430,000 (pg. 121). It discloses loan revenue of \$368,61,000 for the three months ended December 31, 2013 (pg 172). It claims that it had 35% of the payday loan market (pg. 28).

One way to convert a loan revenue figure into a loan volume figure is to divide by the average fee. The average fee for most companies in Canada will be around 21% because the largest market by far is Ontario, with a fee cap of 21%. MB is lower, others higher, but not all loans are collected. However, CSF was not like the other companies. In 2007 it claimed that its fees were 20% of principal in its annual report and all its disclosures to customers. Dr. Robinson testified to the PUB under oath that CSF was misrepresenting its fee, which it claimed was 20%, because it was discounting its loans. That means that a borrower who borrowed \$100, would get only \$80, because the fee was deducted at the start of the loan, and hence the effective fee was actually 25%. In addition, CSF buried other charges in the initial contract. Dr. Robinson was able to determine this from reading an actual CSF contract. In telephone conversation with the Center for Responsible Lending in North Carolina, Dr. Robinson learned that two American states had not written their legislation to prevent discounting, and so lenders in those states, both with 15% caps, were actually charging 17.65% ($=15/85$). Manitoba regulations were written to prevent this practice and other provinces followed suit, but CSF designed other ways to evade the rules. In a private conversation in early 2012, an equity analyst who requested anonymity suggested to Dr. Robinson that CSF was charging other fees in Ontario, and probably other provinces, that violated the regulations. The Ontario regulator withdrew the CSF license in 2013. Dr. Robinson made additional investigations in 2013 and obtained a loan quotation from CSF that made it evident the equity analyst was correct; CSF was charging fees far in excess of the 21% permitted in Ontario. The point of this sidetrack from the main discussion is that the average regulated fee is not the right divisor when trying to estimate CSF volume from its revenue. It is impossible to be very exact, but the number will be higher than the regulations, and when Dr. Robinson investigated in 2013 it seemed it was about 25%. Therefore, 25% is used in Table 2.

Table 2: Estimates of Cash Store Financial Annual Loan Volume in 2013			
	Factor	Base Value	Estimate
Multiply by Percentage of Cardus Total	35%	\$2.5 billion	\$875 million
Divide Sept 30/13 annual sales by rate	25%	\$152,430,000	\$609,720,000
Multiply Dec. 31/13 quarter sales by 4 and divide by rate	25%	\$36,861,000	\$589,776,000

The first estimate seems too high, but the second and third are reasonable. Take \$600 million as a reasonable estimate of one year's loan volume in CSF's last year and now enter that into Table 3 to estimate what Money Mart's loan volume would have been if it had captured a share of CSF's loan volume in its June 30, 2013 year.

Money Mart bought CSF to capture its customer lists and locations. A check of Yellow Pages for New Brunswick and BC on March 16, 2016, reveals numerous listings for Cash Store Financial and Instalozans, even though these locations are closed. Some of the listings give addresses that are actually Money Mart stores. Accordingly, Money Mart would capture a substantial portion, if not all, of the CSF volume. On the other hand, Money Mart has lower loan loss rates and rejects more potential customers than CSF did to achieve lower bad debt expenses. It would not take 100% of the CSF volume. Table 3 shows three possible estimates of the per store loan volume as if Money Mart had already captured in 2013 its share of the CSF volume that would become available the next year.

Table 3: Estimate of Increased Per Store Volume for Money Mart

This increase incorporates how much the added volume released by the Cash Store Financial closure would affect Money Mart's 2013 per store volume on an "as if" basis. Money Mart reported volume of \$922,900,000 for 2013. Since Money Mart has since opened new stores at least partly to capture this volume, this table assumes the 2016 total of 574 stores instead of the 479 corporate stores at June 30, 2013. Money Mart no longer has franchised stores in Canada.

CSF Volume estimate	Money Mart captured this percentage	Money Mart loan volume 000s as if it captured the CSF loan volume in 2013	Money Mart estimate loan volume per store
\$600 MM	60%	\$1,282,900	\$2,235,000
600 MM	70%	\$1,342,900	\$2,340,000
600 MM	80%	\$1,402,900	\$2,444,000

Accepting the middle of these three estimates, the store volume of \$2,340,000 is what is used in the base case in Table 1.

Average loan term. This is part of the calculation of average receivables that must be financed. It is set at 12 arbitrarily. Payday loans are due on the next payday, most Canadians are paid every two weeks or twice a month and 12 is a conservative number that likely overstates the value of receivables financed.

%age fee. This is the objective of the entire analysis. In the base case it is 15% and 17%, generating excess profits in each case.

The next line in Table 1 is operating cost¹³, which is derived from the Canada segment of Dollar Financial Appendix 2. Table 4 summarises the calculations. In essence, this table takes the Canadian segment of Dollar Financial results as representing the efficient payday lender in Canada. It adds to the Canadian costs a proportion of the head office expenses, including head office depreciation. Gold costs are removed because they are not relevant to payday lending. The loan loss provision is removed, because it is modelled separately in Table 1. The adjusted cost figure for Canada is then allocated 59.05% to payday lending, using the percentage that Canadian payday lending revenue is of total Canadian revenue. The loan loss percentage is also calculated. Finally, it is converted to Canadian \$ using the average rate reported in the Dollar Financial 10K, which happened to be almost at par on average during that year. All these calculations yield an operating cost of \$12.01 per hundred dollar loan, and a loan loss rate of 2.2%.

¹³ This line is not defined the same as stated earlier in the definition of contribution margin and operating margin. This value now does allocate head office costs, because the company as a whole has to earn enough money in the different segments to cover common company costs. The appropriateness of this allocation is discussed in a subsequent section of the report.

Table 4: Estimation of Money Mart Operating Costs per \$100 Loan

Values from Dollar Financial 10K for year ended June 30, 2013

All values with \$ sign are in 000s

10K pg/Calculation

Loan volume	\$922,900		11
Payday Revenue	\$190,700		130
Total Revenue	\$322,900		130
Operating Margin	\$159,500		130
Total Operating Cost	\$163,400	Rev - Margin	
Adjustments:			
Gold purchase	-\$7,684	*	
Loan loss provision	-\$20,100		130
Allocate HO costs	\$39,042.62	135700X.2877	
Income tax	\$13,900		130
Adjusted operating cost	\$188,559		
Payday allocation rate	0.59058532	%age of revenue	
Operating Cost payday	\$111,360		
Operating cost per \$100 loan	12.066	op cost/volume	
Convert to \$CD	12.014	.9957X12.066 pg 51	
Loan loss percentage	0.02177917	loss/volume	

Suppose no HO costs at all.

Total operating costs	\$149,516	
Payday allocation rate	0.590585	
Operating cost payday	\$88,302	
Operating cost per \$100 loan	9.568	
Convert to \$CD	9.527	

Allocate DFC HO cost to Money Mart

Corporate Expense	\$109,400	83
Other depreciation	\$26,300	83
Total to allocate	\$135,700	
DFC total revenue	\$1,122,300	83
MM rev/DFC rev	0.28771273	

Payables percentage

DFC Payables	\$52,700	82
DFC tax payable	\$17,700	82
DFC Accruals and other	<u>\$93,200</u>	82
DFC total payables	\$163,600	
MM share of payables	\$47,070	**
MM Payday share of payables	\$27,799	
Payday payables per store in \$	48,430	divide MM by 574

* Allocated as a percentage of total gold sales revenue

** Dollar Financial payables allocated on revenue basis to Money Mart, and then part of it allocated to payday lending.

The value of \$12.01 seen in 2014 is higher than should be used, in my expert opinion. I have two reasons for this strong statement. First, the value is derived from expenses when CSF was still in operation and actual Money Mart volumes were materially lower than they are now. The majority of costs of a small retail operation like a payday loan store, or any retailer of similar size and catering to a local market, are largely fixed. The rent, business taxes, computer, maintenance, phone and data lines are all fixed costs. If the doors are to open every day, staff must be paid. As was already shown, the average store doesn't make many loans in a day. Therefore, when a large increase in volume occurs after the second-largest operator closes, the costs are spread over a much larger base and the cost per \$100 loan will decline substantially. I cannot measure how much it declined because the payday lending operators have submitted no usable data for analysis.

The second reason lies in the nature of the expenses on the Dollar Financial 2013 10K. Each of the business lines -- UK/Europe, US, Canada and Internet -- has substantial expenses recorded against its revenues. These are the operating cash costs and depreciation of assets in those locations. One of the lines is an unidentified "Other" that is much larger than such unidentified lines are in my experience. The value for 2013 is \$108.5 million, which is 10% of total revenue and 14% of operating costs. The separately listed costs include salaries and benefits, loan losses (which are the only line items larger than "other"), occupancy costs, etc. I am unable to think of anything missing from the listed costs that could be this large. It also grew very fast over the three years shown in the 10K. The value for the separate segments is not disclosed.

Then a few lines lower are "Corporate Expenses" of \$109.4 million and "Other depreciation and amortization" of \$24.7 million. No further information is provided on the nature of these very large expenses. Once again, I am unable to provide from my experience any reason for such large head office expenses, particularly since the Canadian company was a self-standing company before Dollar Financial bought it, and it still maintains a Canadian head office in Edmonton. I cannot offer any reason why these expenses provide value to the Canadian operation, but the Canadian operation is paying for them, since it provides 50% of the company's operating income. Following from this, I cannot provide any reason why these expenses should be allowed in a determination of a just and fair rate. In Table 4 the operating cost per \$100 of \$12.01 includes an allocation of the Corporate Expenses and Other Depreciation. Table 4 also shows that if these two items were not allocated to Canada, the operating cost would be \$9.53 per hundred. And this is without any reduction of the unidentified \$108.5 million allocated to the business lines.

Cash America operates entirely in the US, and is almost the same size as Dollar Financial. Its 2014 revenue was \$1.095 billion (Cash America 2014 10K, pg. 80). It divides its expenses up somewhat differently from Dollar Financial. It shows "other" operating expenses of \$66,388 for 2014 (10K pg. 59), which is 6.1% of revenue. Cash America's "other" category includes quite a few expenses that Dollar Financial shows separately: advertising, Maintenance, Bank charges, cash shortages. In contrast, for Dollar Financial the sum of those expenses plus the "other" category assigned to the four business lines plus "Corporate Expenses"¹⁴ is \$331.5 million, and that is 29.5% of Dollar Financial's 2013 revenue.

¹⁴ For anyone who wants to check, the values in millions are: 62.9 + 18.1 + 23.0 + 9.6 + 108.5 + 109.4

Because no information is provided, I cannot quote a source for these very large unidentified Dollar Financial expenses. I can provide my expert opinion as to two likely causes. Dollar Financial is expanding rapidly in the UK and Europe. It seems possible that these excessive unidentified costs are supporting that expansion, which means the consumers of Manitoba and Canada are supporting the expansion, rather than providers of new capital. This is not a justified expense for rate setting purposes.

The other likely possible cause is over-spending by the controlling management team. The Lone Star takeover could well have been premised on capturing these excessive costs. Private investment funds that operate by taking public companies private are usually searching for cost savings.

Taking into account the foregoing discussion, in my opinion the cost per hundred of \$12.01 in Table 4 is too high. The appropriate estimate should not be lower than \$9.53, the result excluding the head office costs. I think a reasonable value is \$11 per hundred, and that is used in the base case.

Interest expense is not included in the expenses in Table 4, because it is included in the cost of capital calculation. The Dollar Financial debt is more than 50% located in Canada, even though the Canadian operation is the one that is self-financing. There is no debt assigned to the US operation. It is wrong to include debt costs in the region or segment that is used to raise the debt – that is a choice based on cost minimization. The method in Table 1, which charges a cost of capital against the net investment in Canadian payday lending, is the correct way.

This has been a long subsection just on operating cost, but if the reader has lost where we are, we are continuing with the next line from Table 1.

Cost of capital real. The model in Table 1 is a perpetuity, which thus requires a real cost of capital. Furthermore, interest expense is not deducted because it takes a total firm view rather than the viewpoint of shareholders only, and consequently a weighted average cost of capital is required. Companies are financed by a combination of debt and equity. Since Table 1 is based primarily on Money Mart Numbers, the Dollar Financial cost of capital is appropriate. To the extent possible, cost of capital should be calculated using market values.¹⁵

Dollar Financial's largest debt issue outstanding was issued at 10.375%, but was evaluated in the 10K as worth a premium, which means the interest rate at June 30, 2013. A rate of 10.375% was and is very high, indicating a significant risk factor. The company had other debt outstanding, but some of it is convertible, and it is a very difficult analysis to separate the effective interest rate from the option value. The average interest expense on the financials is 9.2% after deducting a large hedge expense. An interest rate of 10% is a reasonable estimate. The average value of debt outstanding is about \$1 billion. The high share price for the year was \$12.95 with 43.2 million shares outstanding, for a total equity value of \$559 million. This

¹⁵ Pinto et al. (2015) provides excellent instruction on how to estimate the cost of capital, but the basics can be found in any introductory finance textbook.

provides an equity percentage of less than 40% of total capital, but I will use 40% to be conservative.

There are several ways to estimate cost of equity, but the data for most of them is no longer readily available, has never been available for some of them, and the assumptions for a small company like Dollar Financial make all methods imprecise at best. The compound average real return to Canadian or US equity is 5 – 6% in the long run. Dollar Financial does not seem to be closely related to equity market patterns, given its business, and if the Capital Asset Pricing Model and related models like Fama-French were used, we would likely get lower than 6% cost of equity. I do not think that is reasonable in this situation and I use a much older model, which advocates adding three or four percentage points to the company's bond yield to get an estimate of its required return on equity. That would give a nominal required equity rate of 14% which is very high.

The debt rate must be after tax. The taxes for Dollar Financial are so complicated because of multiple jurisdictions that a marginal rate is impossible to extract; so I use 25%, which is perhaps a bit low, but conservative. The cost of capital must also be converted to real rates, and a 2% long run inflation rate seems reasonable. The estimate of the cost of capital is shown in Table 5. The end result is 7.9%; Table 1 rounds this off to 8%. This is a reasonable estimate for any payday lender.

Component	Estimate	Weight	Weighted Value
Debt	$[(1+.1(1 - .25))/1.02] = 5.4\%$	0.6	3.2%
Equity	$(1.14/1.02) - 1 = 11.8\%$.4	4.7
Weighted average cost of capital			7.9%

Cash on hand, Loans receivable. The cash on hand is a reasonable estimate, based on loan volume and the receivables value uses the 12-day loan period, which is almost certainly more than the average carry.

Capital Investment per store. Stores are leased. This is an estimate of leasehold improvements and original furniture. Maintenance is already in operating cost. Depreciation is also left in operating cost, though it would normally be deducted in a FCFF model and capital expenditures added. In this case, capital expenditures in the Canadian segment are actually lower than depreciation expense and so to be conservative depreciation expense is used.

Initial store loss. This is not an entry usually seen, but it is a relevant investment. Part of creating a viable retail store in any industry, not just payday lending, will be suffering initial losses while the store builds up its clientele. This initial loss would be recaptured eventually by an owner when the store is sold, since the buyer will not have to incur the initial operating losses.

Regulatory deposit. Required by Manitoba, not necessarily seen in other jurisdictions.

Payables and Accruals. Part of the financing of every business arises from trade credit and deferred payment of wages and other services. This value is estimated as the Money Mart payday loan business share of the total payables and accruals of Dollar Financial, using revenue as the allocation basis. The calculation is shown in Table 4.

Net investment per store. The sum of cash, receivables, capital investment, initial loss and deposit, minus payables and accruals. This is the amount of investment the owner has at stake and on which he or she expects a fair return.

Bad debt rate/loans. The base case value is calculated as the 2013 rate, in Table 4. It will be discussed further.

Economic income statement pulls together the pieces.

%age fee revenue is the only revenue line because Manitoba and the other US and Canadian jurisdictions have almost all opted for a single percentage fee cap. A few states have declining caps: e.g. 15% up to \$500, and 10% of any principal greater than \$500. Dr. Robinson suggested such a schedule as one option in his recommendations to the PUB in 2007-08, but the Board, like other Canadian provinces, chose to keep it simple with a single rate cap. Accordingly, this report does not consider alternative formats, though the PUB could request additional work on that possibility, if it chooses.

Operating cost. Operating cost per \$100 loan X loan volume/100

Capital cost. Cost of capital X net investment

Bad debt cost. Bad debt rate X loan volume

Total economic cost. Sum of previous three lines.

Excess Profit. Total revenue minus total economic cost.

Variations on the Base Case

In order to see what different, reasonable values of the most important components of the operating model might reveal, Table 6 shows a set of variations. In my professional opinion, the table provides strong evidence that a rate of 17% is too high, and that conclusion almost certainly applies across Canada. Table 6 provides a consistent picture supporting a recommendation to lower the fee cap to 15%. A rate of 14% generates a significant economic loss at the expected volume and a cost of \$11.

Table 6: Variations on the Base Case*Panel 1: Vary Fee, Operating Cost \$12*

Loan volume	\$2.34MM	\$2.34MM	\$2.34MM	\$2.34MM
Fee	14	15	16	17
Operating cost per \$100	\$12.00	\$12.00	\$12.00	\$12.00
Bad debt rate	2.20%	2.20%	2.20%	2.20%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	-\$30,732	-\$7,847	\$15,039	\$37,924

Panel 2: Vary Fee, Operating Cost \$11

Loan volume	\$2.34MM	\$2.34MM	\$2.34MM	\$2.34MM
Fee	14	15	16	17
Operating cost per \$100	\$11.00	\$11.00	\$11.00	\$11.00
Bad debt rate	2.20%	2.20%	2.20%	2.20%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	-\$7,332	\$15,553	\$38,439	\$61,324

Panel 3: Vary Volume 15% fee

Loan volume	\$1.9MM	\$2.2MM	\$2.5MM	\$2.6MM
Fee	15	15	15	15
Operating cost per \$100	11	11	11	11
Bad debt rate	2.20%	2.20%	2.20%	2.20%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	\$10,725	\$14,017	\$17,039	\$17,835

Panel 4: Vary Operating Cost, 15% fee, 2.34 million loan volume

Loan volume	\$2.34MM	\$2.34MM	\$2.34MM	\$2.34MM
Fee	15	15	15	15
Operating cost per \$100	9.53	10	11	12.5
Bad debt rate	2.20%	2.20%	2.20%	2.20%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	\$49,951	\$38,953	\$15,553	-\$19,547

Panel 5: Vary Operating Cost, 15% fee, 2 million loan volume

Loan volume	\$2MM	\$2MM	\$2MM	\$2MM
Fee	15	15	15	15
Operating cost per \$100	9.53	10	11	12.5
Bad debt rate	2.20%	2.20%	2.20%	2.20%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	\$41,222	\$31,822	\$11,822	-\$18,178

Panel 6: Vary Bad debt expense, 15% fee, 2.34 million loan volume

Loan volume	\$2.34MM	\$2.34MM	\$2.34MM	\$2.34MM
Fee	15	15	15	15
Operating cost per \$100	11	11	11	11
Bad debt rate	1.80%	2.50%	3.00%	4.00%
Cost of capital	8.00%	8.00%	8.00%	8.00%
Excess Profit	\$26,317	\$7,480	-\$5,975	-\$32,885

Panel 7: Some Special Cases:

Stronger underwriting: \$1.8MM volume, loan losses 1.5%, 15% fee, op cost \$12.15: Excess profit = **\$3,418**

Excellent: cost control \$11, loan loss control 1.8%: Volume \$2.5MM,, 15% fee, Excess profit = **\$28,809**

Bad result: Volume \$2.2MM, loan losses 2.5%, fee 15%, op cost 12: Excess profit = **-\$15,573**

Base case with 11.8% cost of capital: Excess profit = **\$6,602**

Base case with 2.778% bad debt rate: Excess profit = **\$0**

Base case with oper cost of \$9.53/100, fee of 13%: Excess profit = **\$4,181**

17% Fee, Op Cost 12.5, Volume 2.34MM, Bad debts 3%: Excess profit = \$4,321

Panel 1 assumes the 2013 operating cost including a head office allocation. A fee of \$17 is definitely too high and 14% too low. A fee of 15% is also likely too low at that cost structure.

Panel 2 assumes the \$11 cost structure and tests the same fees. A 14% fee still generates what is probably a material economic loss while a 15% fee results in a significant excess profit.

Panel 3 assumes the \$11 cost structure and a 15% fee and varies the volumes. Even at an average volume lower than Money Mart enjoyed before gaining any business from SCF, it would generate excess profit.

Panel 4 returns to the base case volume and varies the operating cost. When the cost is \$12.50, which is well above the measured cost and contradicts my previous analysis, there is a significant economic loss. Otherwise, there are significant economic profits.

Panel 5 drops loan volume to \$2 MM and varies the operating cost. The result is the same as in Panel 4.

Panel 6 varies bad debt expense and this panel does produce material economic losses at higher bad debt rates. These higher rates are well beyond what Money Mart has suffered in the past.

Panel 7: Special Cases give some more insight into what the model produces under different assumptions for the values, but do not contradict the recommendation for a 15% fee cap. In my opinion, I have used assumptions and values throughout that tend to bias the results in favour of a higher fee cap, and hence I do not see a justification for leaving it at 17% in Manitoba, nor at the higher rates in other provinces.

Note that in the Special cases with operating cost of \$9.53 per hundred a fee of 13% is justifiable.

There is one more important insight from Table 6 that I will discuss in the next subsection.

Control of Bad Debts: Managerial and Ethical Reasoning

Table 6 shows that the one possible area that challenges a move to a 15% rate cap is higher bad debt rates. Money Mart has always had good control of bad debts, or to use a different term, it has practiced sound underwriting judgement, albeit without credit checks. Ernst & Young (2004) reported a wide variation in bad debt rates. BC shows a higher rate than Money Mart's experience. In Table 6, the base case with 2.778% bad debt rate still generates a fair and just return. While I believe that the costs of the Canadian operation are overstated in Table 1, it is also clear that bad debts are a potentially serious problem for payday lenders if not controlled.

Buckland (2012, 2016 forthcoming) and St. Aubin chronicle very clearly the disadvantaged nature of many borrowers and how they get caught in debt traps. Simpson and Islam (2016, forthcoming), the statistics from NB and BC and the discussion of these issues in other sections of this report make it very clear that repeat borrowing is a serious problem, often because the borrowers are totally unable to repay the loan at the first due date nor for a long time thereafter. Moving to an installment plan may help some of the repayment problems, but it does not overcome the fact that some borrowers should not be granted loans in the first place.

One of the problems that led to CSF's downfall was excessively risky lending. CSF was taking clients that other lenders would not, and its much higher rate of bad debts was not sustainable.

Money Mart has apparently practiced good underwriting for a long time. Dr. Robinson noted in his evidence to the PUB in 2007 that it had a bad debt rate of 1.3% in two of the years used in the analysis. Money Mart executives informed Dr. Robinson in conversation in about 2006 that the company had already ended rollovers and was seeking to simply recover its money rather than dig people further into debts it couldn't collect. Note the first of the special cases in Table 6 shows that a stricter underwriting regime, even one that raises costs, is still profitable. It seems an ethical stance of avoiding forcing the wrong people into debt traps, and profiting from good management, are compatible. If the recommendations of this report are accepted, payday lenders who are not already doing so may be forced to adopt more care in their acceptance of customers, and this will help both profits and society.

3. Who is Borrowing: The story of the one-time emergency borrower

The story that some researchers and the payday industry tell is the one-time borrower who has an unexpected cash crunch and no-one but a payday lender will give her the money right away, or at all. She needs her car repaired, or has some other cash need that will prevent her from paying her utility bill this month. The story explains how she needs the car to get to work or she will lose her job. If the utility bill is the issue, it will cost her far more to reconnect her utilities after they are cut off, than the payday loan will cost. Dollar Financial calls her ALICE, which is an acronym for the payday lender's alleged target customer: Asset Limited Income Constrained Employed. In addition, Alice needs a loan because of a one-time emergency. Cardus (2016) provides the example that her hours of paid work have been cut unexpectedly and thus she cannot make a utility payment.

The payday loan industry offers this story as the reason why regulations should not exist or should be very loose, because this desperate borrower will not get a loan and will suffer greatly as a result if the industry is too restricted.

Let us examine this story in light of the empirical evidence on the borrowers, and also its applicability in Canada. There is so much evidence to support the asset-limited, income-constrained part of the story that we need not discuss it further.¹⁶ What needs closer examination is the claim that the borrower is employed and that the loan is a one-time experience.

The business model of the payday loan industry requires repeat borrowers, not one-time customers. Ernst & Young (2004) provides this evidence both from the numerical survey data and from interviews with payday lenders. The cost of providing a first-time loan is far higher than the cost of servicing a repeat borrower. The operators who responded to the survey had to estimate the different costs of first-time and repeat borrowers and so the actual numbers show wide variation, but first-time borrowers are far more costly. Ernst & Young (2004, pp 33) used a value of operating costs for serving a first-time borrower of 2.68 times the cost of a repeat borrower. The report concluded: "Clearly, the long-run survival of a payday loan operator will depend on achieving a steady repeat customer business." (pp 37).

Analysing Data on Frequency of Borrowing

Statistics Canada surveys and the provinces of BC and NS provide statistical data about the frequency of borrowing. These surveys are not entirely consistent with each other, and the discussion that follows is quite complicated. Several assumptions are made that could be made differently. No matter what view is taken, however, the same result follows: a significant proportion of payday loan borrowers are taking out so many loans a year that we can conclude they are caught in a debt trap and are suffering considerable financial hardship. This is a statement of fact, not a statement blaming any party for this situation.

Simpson and Islam (2016a, forthcoming) find that only 4.2% of households in the Canadian

¹⁶ Simpson and Islam (2016, forthcoming) for current statistical evidence in Canada; Buckland (2016, forthcoming) for a summary of literature and evidence on payday lending and financial exclusion generally; St. Aubin (2016, forthcoming) for qualitative research evidence on payday borrowers in Winnipeg.

Financial Capability Survey (CFCS) of 2014 took out at least one payday loan during the previous year. They also looked at the 2009 CFCS survey for frequency. Table 7 displays the loan frequency:

Table 7: Frequency of Payday Borrowing		
This table shows the frequency of payday borrowing of Canadian households who took out at least one payday loan during the previous 12 months. The survey data comes from the CFCS, with calculations reported in Simpson and Islam (2016, pp 10)		
	CFCS 2014	CFCS 2009
Only one payday loan	23.4%	27.6%
Two payday loans	57.0	26.8
Three or more payday loans	19.6	45.6

While the number of households taking out two or more loans has increased, the number of households taking out three or more has decreased. However, these numbers are rather deceptive, and indeed may hide a bias on the part of the respondents to under-report their payday borrowing activity. Since the survey had a large sample and was carefully conducted across Canada, we can reasonably try to generalize the results to the Canadian population. Canada's population is approximately 36 million, and the average Canadian household has 2.5 members, which yields a household count of 14.4 million. If 4.2% of these households took out at least one payday loan, that yields a count of 604,800 households. Using the frequency of borrowing in Table 7 and rounding, we estimate that 142,000 took out one payday loan, 345,000 took out two payday loans and 118,000 took out three or more loans.

These statistics seem to show that the problem of repeat borrowing is not too serious. What they hide is the large volume that the category of three or more loans in a year involves, and when we look at that more closely we also see the likelihood that respondents are under-reporting their borrowing.

In Section 1 I provisionally accepted the Cardus estimate of annual loan volume of \$2.5 billion. Dollar Financial's 2013 10K reports loan volume of \$922.9 million for Canada. Internet lending for the entire company is 1,021.6 billion. The verbal discussion in various parts of the 10K suggests that although Canada is the largest of the three segments (the others being US and Europe including UK), internet lending is relatively more important in the other segments, particularly in the UK where it is claimed that Dollar Financial is the dominant on-line lender. A conservative estimate might be that Money Mart had \$200 million in internet loans in 2013. Add that to the \$922.9 through stores to get \$1,122.9 million loan volume in the year ended June 30, 2013. The Dollar Financial figures show about 3% annual growth in loan volume, but that is without purchase of Cash Store Financial outlets. The BC figures in Appendix 1 show 9.7% growth 2014 over 2013. Let us assume that Money Mart's total volume will have increased at least 15% since 2013, to \$1.3 billion. By store count, Money Mart has around 40% of the total stores in Canada, which would project to a total Canada loan volume of \$3.3 billion. Other

comments in the Dollar Financial 10K and comments in private conversation with industry participants suggest that Money Mart has more business per store than any other lender, and hence a market share of 50% is more likely than a share based on store count alone. In that case, the total Canada loan volume would be \$2.6 billion, which is close to the Cardus (2016) number. Let us assume the Cardus value of \$2.5 billion is as correct as we can get.

The BC data in Appendix 1 show an average loan size of \$449. This seems a reasonable value of an average loan in Canada, and it is the only datum we have. Divide that into the estimate of \$2.5 billion in loan volume and the results is 5.568 million loans per year. Using the extension of the CFCS survey to the population, as explained earlier in the section, 142,000 households took out only one loan and 345,000 households took out two loans, for a total of 832,000 loans in the lower frequency categories. That leaves 4.736 million loans taken out by the three plus category. Since that category is estimated to be 118,000 borrowing households, it must mean each household took out 40 payday loans per year, a result which is clearly incorrect.

Let us turn to the BC statistics in Appendix 1, the only ones we have. Part of Appendix 1 displays the number of borrowers in categories by number of loans taken out in a year. The five categories start at one loan per year and reach “more than 15 loans per year.” Table 7 shows a set of calculations that multiplies the number of borrowers in each category by an estimated number of loans each borrower would have taken out to get the number of loans the people in that category took out in one year. I prepared this table by trial and error to get multipliers whose overall total loan result would be close to the actual number reported for BC. For example, in the category “2 – 5 loans” I used a multiplier of 2.4 to get 185,798 loans to people in that category (i.e. 77,416 X 2.4 = 185,798). This table shows that almost half of the borrowers were taking out six or more loans per year. Table 9 in Section 5 shows the total cost in a year to borrowers with different loan sizes and fee structures, but the statistics in Table 8 show that Table 9 is actually conservative. There is no reason that the BC statistics will be materially different from Manitoba, aside from the lower rate cap in Manitoba. Those 8,865 borrowers taking out 16 loans a year would in Manitoba have paid \$816 each in total fees in one year, assuming no NSF cheques, late fees or optional insurance. That is a huge bite out of income for the asset-limited income-challenged clientele the CFCS survey, St. Aubin (2016, forthcoming) and the payday lenders’ own statements acknowledge.

The BC data in Appendix 1 also permit an estimate of what percentage of the population is taking payday loans. The BC population in Appendix 4 is 4,683,100 and the number of borrowers in Appendix 1 is 198,003. This yields a figure of 4.23% of the BC population taking a payday loan in the previous year.¹⁷ This is not the same as the CFCS figure, which is 4.2% of households. If we extended the BC value to households and assumed that only one person per

¹⁷ This is the previous year of the lender, which means these statistics do not line up perfectly with any 12 calendar months; however, they include only 12 calendar months for each lender and are therefore a very good representation of the number in 2014.

household were borrowing, it would be more than 10% of households taking out at least one payday loan, which is very inconsistent.

Loan Frequency Per Borrower	# of people in the category	Multiplier	# of loans to this frequency category	Average Number of loans	% of total borrowers in this category
1	49,628	1	49,628		25.1%
2 to 5	77,416	2.4	185,798		39.1%
6 to 10	40,509	6	243,054		20.5%
11 to 15	21,585	11.5	248,228		10.9%
over 15	<u>8,865</u>	16	<u>141,840</u>		4.5%
	198,003		868,548	4.39	
As reported	198,003		857,830	4.33	

The CFCS survey data underestimates both the frequency of borrowing and the number of repeat borrowers, as the BC data show. There are three possible causes, and almost certainly all three are at work:

1. The survey has a non-response bias. Fewer low income Canadians are responding, as is often the case with surveys, and that is the part of the population much more likely to be using payday loans;
2. The respondents are understating the frequency of payday loan borrowing; and,
3. The CFCS survey is by household, but more than one member of the household is borrowing one or more payday loans per year.

If the BC statistics are completely representative of Manitoba and Canada, then the incidence of payday borrowing will be somewhere between 4.2% and 10%. The general experience of survey research on income and wealth questions is that there will be both a non-response bias that leads to lower response frequency from low income groups and an underreporting bias in expenses and debts/borrowing. Simpson and Islam (2016, forthcoming), St. Aubin (2016, forthcoming) and the payday loan industry's own public statements make it clear that the payday loan industry lends primarily to low income families. St. Aubin makes it clear that in Manitoba the Aboriginal population is very likely borrowing much more often than other groups. We cannot be more precise than that, and we cannot disentangle the statistics to estimate more accurately how many loans the frequent borrowers are taking out. The BC statistics are clear evidence that a significant number of people/households are taking out many loans per year. Across the entire borrower base the average is over four loans per year. Table 9 extends this analysis to Canada.

Table 9: Possible Loan Frequencies for Canada

Total household number is 14,400,000. Assume 8% of households took out one or more payday loans, which is 1,152,000 households. They took out 5.568 million in total at an average amount of \$449. Divide the households who borrowed into the three CFCS groups: 1 loan, 2 loans, 3 or more. How many loans on average did the high frequency cohort take out in a year? Try two different distributions of borrowing frequency among the 8%.

Loan Frequency Per Borrower	% of households in the category	Number of households in the category 000s	Number of loans to this category 000s	Average number of loans to high frequency category in a year
1	3%	432	432	
2	4	576	1,152	
3 or more	1	<u>144</u> 1,152	<u>3,984</u> 5,568	3984/144 = 27.7
1	1	144	144	
2	2	288	576	
3 or more	5	<u>720</u> 1,152	<u>4,848</u> 5,568	4848/720 = 6.7

Table 9 shows two examples of how we could allow for the apparent difficulties with the statistical data. I assumed that the correct number of borrowers is 8% of all households. Table 9 shows two possible divisions of that 8% of households among the three CFCS categories of one, two and more than two loans per year. While many possible combinations of numbers are possible, the same answer keeps appearing. A significant number of households are borrowing a lot of loans per year. In Table 9, even assigning 5% of households to the high frequency category still leaves the average loan count in that category above the BC and Canadian averages, at 6.7 per year per household. Manitoba's population is 3.6% of Canada, and thus we could estimate that almost 26,000 Manitoba households could be in this high frequency category. As Section 5 of my report shows, the cost is getting pretty high relative to income, and these households are clearly in a debt trap.

Nova Scotia shows the same pattern of a large number of repeat borrowers. The Nova Scotia statistics are reported in a different format from the BC and CFCS statistics, and the regulators report is shown in Appendix 7. The Nova Scotia data supports the focus group evidence that St. Aubin (2016) reports. A large number of borrowers are unable to repay the loan on the first due date and need to get repeats/extensions.

4. Installment Loans from Payday Lenders

Since the 2013 PUB review, payday lenders have started to offer installment loans with much longer terms in various jurisdictions and various types. Let me first define ‘installment loan.’ In finance circles we usually speak of blended principal and interest. A standard consumer loan, car loan and mortgage loan are repaid in equal periodic amounts that combine interest and repayment of principal. This contrasts with most corporate loans, which are interest only until maturity, and payday loans, which are a single repayment of principal and interest. With the use of powerful computers and readily available software we can create any form of repayment schedule we want, and the payments need not be the same size each time, nor do the periods have to be the same length. However, both the lenders and the borrowers in the payday loan universe need to keep these schedules simple so that everyone understands what the obligations are.

Installment loans with equal periodic payments have entered the payday world in two different forms. One is a longer-term, very high interest rate loan, offered as a product by a lender. The other form is an option to convert a payday loan to an installment loan if the borrower is unable to repay it on the due date.

Money Mart is now advertising installment loans for \$500 to \$3,000, 12 to 24 months to repay, in Manitoba, Ontario and Newfoundland and Labrador. The APR is 59.9%.¹⁸ Take the example of a loan of \$500 for 12 months. This is a bit larger than the average payday loan, but in the same order of magnitude. If the APR is 59.5% compounded monthly, the monthly repayment is \$56.39. A Manitoba payday loan for one month (assuming the person is paid monthly) of the same amount would require a repayment of \$585 in one month. As has been pointed out in virtually all of the literature and in my own report, a family that cannot make ends meet one month, will be hard-pressed to find an extra \$585 next month. The total amount paid on the installment loan is \$676.68. Let me ignore the time value of the money that the lender gives up by getting repayments over 12 months instead of one month for now. The borrower pays a fee of \$85 for the money for one month, or \$176.88 to have use of a declining portion of it for 12 months. For the one or two times a year borrower, this is a much more manageable repayment schedule and we could certainly argue that it is worth the cost. The interest rate implicit in the one month payday loan is an APR of 204%, versus 59.5% for the installment loan.

The interesting issue with this new installment loan is what it does to the normal payday lending pattern and the lender’s revenue stream. If many payday borrowers who have been getting into a debt trap and borrowing repeatedly to pay off the first loan switch to this loan and are able to cope with the repayment schedule, the total revenue of the payday lender will decline considerably. Two ordinary payday loans a year in Manitoba for \$500 would generate \$170 in

¹⁸ The source is a pamphlet from a Manitoba Money Mart outlet. There are large signs on some of the stores making the same offer in Ontario and Manitoba.

fees, vs the \$176.88 from the one year installment loan. Since the average borrower borrows more than four times a year at the least, the lender could lose a lot of revenue if the reason they are borrowing so often is the inability to repay the initial loan, as one of the respondents in St. Aubin (2016, forthcoming) said. For example, someone who borrows \$500 six times in one year in Manitoba and repays each loan on time will pay \$510 in fees. On the other hand, one and two time borrowers who switch to installment loans will be more profitable for the payday lender if they choose long enough repayment periods.

Colorado has banned traditional payday loans in favour of installment loans of a minimum of six months, and high fees. The fee schedule is complicated – a fixed origination fee that the lender earns over six months + maintenance fee per month + 45% interest per annum, APR. Appendix 6 reproduces a table from the Pew Charitable Trusts (2013, with permission) that shows the costs of a \$500 loan for six months. Previously, Colorado had a 15% fixed fee per payday loan. The new scheme is quite a bit cheaper, but still high cost. What it does is avoid the unmanageable balloon repayment on the next payday. The volume of payday loans in 2009, the year before the change from the traditional scheme, was \$576 million. The volume in 2014 was \$193 million.¹⁹

The other way to introduce installment loans is to allow a borrower to take out a traditional payday loan with the customer fixed fee and repayment due on the next payday, but also give the customer the option to convert the loan to an installment loan on or before the due date. The state of Washington has such a program. The regular payday fee is 15% on the first \$500 and 10% on any additional amount, with a maximum of the lower of \$700 and 30% of income. A borrower may not take out more than eight loans in a 12 month period. The borrower also has this right to an installment:

BORROWERS' RIGHTS TO INSTALLMENT PLANS Borrowers are entitled to an installment loan at any time prior to default. Borrowers do not have to pay a fee for the installment plan and have from 90 to 180 days (depending on the original loan amount) to repay the loan in a series of installments. (Washington, 2014, pp 7)

There is still an active payday loan industry in Washington state, even though it has these several regulations that reduce fees substantially below those in Manitoba. The option to convert to an installment does not entail any further cost to the borrower. In Manitoba, Regulation 13 allows no more than 5% cost of credit if a loan is an extension or replacement of an existing loan. A reasonable compromise would be to allow an additional charge of 5% of the original principal to convert to an installment loan that would then be repaid over a number of subsequent pay periods, without further charges. Take an example of a \$500 loan and the borrower income is every two weeks. At repayment date the borrower cannot meet the balloon repayment of \$585. The borrower and the lender need to agree to an installment schedule. The new amount to

¹⁹ <http://coag.gov/uccc/info>, Comparison Table of Deferred/Payday Lenders, 2005 – 14, accessed March 6, 2016.

be repaid will be \$500 principal + \$85 original fee + \$25 fee for deferral = \$610. If the repayment is over the next 12 pay periods, or approximately six months, every two weeks the borrower will repay \$50.83. As in all the previous examples, we can see that this amount is much more likely to be manageable, avoid the debt trap and get the lender repaid. It would be necessary to ban the payday lender from extending additional loans until the installment loan is repaid, though this will not stop the borrower from seeking another company to extend a loan.

5. Maximum Size Permitted for Payday Loans

The PUB has requested evidence on whether the maximum permitted loan should be less than 30% of gross income. The purpose of a limit on the size of the loan relative to income is to prevent borrowers from digging themselves into too deep a debt hole and spending too much of their income on loan fees. Table 10 shows the effects of three different sets of limits and fee caps on a single client as an illustration, but the same understanding would arise from any reasonable client situation. The client has take home pay of \$1,500 every two weeks or \$39,000 per year. This client earns well above minimum wage, but still below the average industrial wage in Canada. This client is somewhere in the middle of the income levels of payday loan clients, according to the statistics reported in Simpson and Islam (2016a, b, forthcoming). The great majority of payday loans are made to repeat borrowers as shown in Section 3 of this report. Therefore, most loans will be to customers on the right side of the table, with several loans per year, rather than be one time borrowers.

Table 10: Effect of Payday Loan Limits and Fees								
A client has take home pay (after taxes, CPP, EI premiums, etc.) of \$1,500 every two weeks (\$39,000 per year). What are the total fees per year and fees as a percentage of take home pay if the client borrows the maximum amount one to eight times in a single year?								
Panel A: Fee is 15% of loan, loan limit is 20% of income and thus the maximum loan is \$300.								
# of loans/yr	1	2	3	4	5	6	7	8
Loan fees	\$45	\$90	\$135	\$180	\$225	\$270	\$315	\$360
Fees as % of take home pay	0.12%	0.23%	0.35%	0.46%	0.58%	0.69%	0.81%	0.92%
Panel B: Fee is 21% of loan, loan limit is 30% of income and thus the maximum loan is \$450.								
# of loans/yr	1	2	3	4	5	6	7	8
Loan fees	\$94.50	\$189	\$283.50	\$378	\$472.50	\$567	\$661.50	\$756
Fees as % of take home pay	0.24%	0.48%	0.73%	0.97%	1.21%	1.45%	1.70%	1.94%
Panel C: Fee is 21% of loan, loan limit is 20% of income and thus the maximum loan is \$300.								
# of loans/yr	1	2	3	4	5	6	7	8
Loan fees	\$63	\$126	\$189	\$252	\$315	\$378	\$441	\$504
Fees as % of take home pay	0.16%	0.32%	0.48%	0.65%	0.81%	0.97%	1.13%	1.29%

We can see that the effect of taking out several payday loans in a year is material to someone with this level of income, though not crushing. For example, if this client took out the maximum number of loans under a regime of 30% of income as a limit and a fee of 21%, the annual cost would be 1.94% of take home pay. A single loan could be reasonably regarded as having an immaterial effect. The effect on the dollar cost of a higher permitted limit is more significant than the higher fee schedule. The current range of fees in Canada is 17% to 23% and

the current permitted maximum percentage of income for a single loan is 30% in Manitoba. Therefore, this table does represent a reasonable picture of the effects of a change in permitted loan limits. Of course, a consumer who ignored the limit and borrowed only the absolute minimum that he or she needed would not be affected by a limit unless it were too low to permit borrowing the required amount.

A more significant effect is seen by considering what happens at repayment date. For example, consider a person who borrows \$300 at 15%, which is the situation in Panel A, the low cost and low fee panel, and must repay \$345 in two weeks. Take home pay before repaying the loan is \$1,500. That means for the two weeks after repayment, until next payday, the person will have $(\$1,500 - \$345)$ \$1,155 or 77% of disposable income. The person had not been able to meet the unexpected expense out of surplus cash flow because there isn't any, and does not have a liquid emergency fund to use. Why is there no emergency fund? The person has been living paycheque to paycheque because current consumption and repayment of existing debts consumes the entire income. How is this person to live on \$1,155 when \$1,500 has been required every two weeks? If we move to Panel B, the person borrowed \$450 and must repay \$544.50, leaving \$955.50 for consumption during the next pay period, or only 64% of the regular consumption. We see that the lower fee cap and lower loan limits of Panel A mitigate this problem, but it is still significant. The combination of a 15% fee and 20% limit on borrowing is close to the lowest limits in any US state, and still in this example a person would have to manage for two weeks on 77% of disposable income. The result is often that the client is forced to borrow again, after all possible spending economies, and gets trapped in a cycle of high cost debt. This is the reason for concern over the percentage of pay borrowed. The cost of the fee makes it even worse, but the principal payment alone will be a serious challenge for many borrowers.

A reduction to a permitted borrowing level of 5% - 10% of take home pay would reduce the challenge of repayment to a more manageable level. At that rate, however, the loan size would be so small that most customers would find payday loans would not meet their needs. In our example in the table, the maximum loan allowed at 10% would be only \$150. We saw in Section 1 the range of US average loan sizes by state is \$263 - \$522, and the average in 2014 in BC was \$449. Borrowers would be forced to go to different payday lenders to get the money they need. Furthermore, given the high operating costs, dividing the loans into many smaller loans would render the business model unsustainable. Accordingly, I do not believe that changing the maximum permitted loan will improve the experience of borrowers significantly. Reducing the maximum fee will of course reduce the total share of the budget going to loan fees, but it will not help with the difficult challenge of the large balloon repayment due on the next payday.

Allowing the borrower to convert the loan to an installment schedule on the due date is a reasonable alternative that might work for both lender and borrower. Although we do not seem

to have any written evidence, it would be astonishing if that is not already happening informally at the individual outlet level. If the alternative is no repayment, the lender will accept some sort of installment. Rollover fees have been banned in Canada and the US for some time, and there are also rules against borrowing again too soon in some US states, sometimes enforced by use of a statewide registry of borrowers and their loans (e.g. Florida).

Take the example in Panel A of a loan for \$300 with \$345 due in two weeks. Let us suppose that the borrower could convert to a 12 week, six payment installment schedule on the due date, with the first payment due immediately. Let us further suppose the interest rate is 60% per annum APR for two week repayment periods. An annuity due on those terms would require a payment every two weeks of \$60.82, which is much more manageable than \$345 at once. Furthermore, even with the high interest rate of 60% per annum, the borrower is a lot better off with the conversion instead of the common practice of going to another lender. If the borrower goes to another lender to pay off the first loan, the fee will be 17% of \$345, or \$51.75. The interest paid on the installment loan is \$19.97. The lender has already charged the high flat fee that is meant to recover the fixed operating costs of maintaining the business and extension of the loan into an installment would be much less time-consuming. As one of the participants in the focus groups explained, if a lender won't defer repayment, the client goes to another payday lender and pays another large fee in order to have money to pay off the first lender, and is now even deeper in the debt trap (St. Aubin, 2016).

Now suppose we create an example in which the mathematics is a little simpler, and which also matches Regulation 13 in Manitoba, which limited total fee after initial default to 5% of the original principal. Consider this schedule:

A borrower who cannot repay a payday loan on the first due date has the option to convert it to an installment loan for a period not to exceed six months, with the first payment due on the next regular payday. The lender may charge an additional fee not to exceed the following:

- a) 1% of the original principal spread equally over the payments, if the next payday is 16 days or less following the due date and the loan is to be repaid in full on that date;
- b) 2% of the original principal spread equally over the payments, if the next payday is 31 days or less following the due date or the loan is to be repaid in two equal instalments within 31 days;
- c) 3% of the original principal spread equally over the payments, if the next payday is 46 days or less following the due date and the loan is to be repaid in three equal instalments within 46 days;
- d) 4% of the original principal spread equally over the payments, if the loan is to be repaid in more than 46 days and less than 63 days;

- e) 5% of the original principal spread equally over the payments, if the loan is to be repaid in more than 63 days; but in any case must be repaid within six months.

To make this example concrete, imagine a loan of \$400 to someone who is paid every two weeks, under the recommended new cap of 15%, which means that in two weeks the person will owe the lender \$460. The person cannot pay on the due date. What will be the payments if the person chooses various longer dates for the installments?

- Two weeks: $\$400 + \$60 + \$4 = \mathbf{\$464}$
- Four weeks: $\$400 + \$60 + \$8 = \468 . Each payday $468/2 = \mathbf{\$234}$
- Six weeks: $\$400 + \$60 + \$12 = \472 . Each payday $472/3 = \mathbf{\$157.33}$
- Eight weeks: $476/4 = \mathbf{\$119}$
- 10 weeks: $480/8 = \mathbf{\$60}$
- 12 weeks: $480/12 = \mathbf{\$40}$ and so on.

6. Comparing Overdraft Protection with Payday Loans

An alternative to a payday loan is overdraft protection. Payday loan customers are not always able to qualify for overdraft protection, but suppose they can. Table 10 displays some examples comparing Manitoba's maximum payday fee with TD Canada Trust overdraft protection (all banks have very similar fees). The fee schedule with a monthly standby fee is suitable only for someone who goes into overdraft several times a month. A single payday loan is actually cheaper than a single overdraft on the monthly standby fee. The standby fee plan is suitable only for a customer who goes into overdraft more than once a month. The "\$5 per use plus interest" plan is vastly cheaper than a payday loan – it costs only 1/6 as much in this example.

Table 10: Comparing Overdraft Protection with Payday Loan

The person is paid monthly and repays each loan 20 days after borrowing.

	Payday MB	TD Canada Trust overdraft Plans	
		\$4/mo. + interest	\$5 per use + interest
Annual interest rate (APR)		21%	21%
Monthly interest rate		1.75%	1.75%
Fee	17.00%	\$4.00	\$5.00
<i>Panel 1: A single loan during the year</i>			
Loan size	\$300.00	\$300.00	\$300.00
Loan period (days) per loan	20	20	20
Total interest payable		\$3.49	\$3.49
Fee	\$51.00	\$48.00	\$5.00
Total cost	\$51.00	\$51.49	\$8.49
<i>Panel 2: Six loans during the year</i>			
Loan size	\$300.00	\$300.00	\$300.00
Total loan amount	\$1,800.00	\$1,800.00	\$1,800.00
Loan period (days) per loan	20	20	20
Total interest payable		\$20.94	\$20.94
Fee	\$306.00	\$48.00	\$30.00
Total cost	\$306.00	\$68.94	\$50.94

Conclusion

Only a relatively small proportion of Canadians and Manitobans rely on payday loans. A lot of evidence shows that payday borrowers are on average disadvantaged relative to the general population. Some are significantly disadvantaged.

A significant proportion of payday borrowers take out many loans a year. These borrowers are caught in a debt trap. They are borrowing just to repay the previous loan, the total fees are a significant cost relative to their limited income and the repayment of principal alone on the next payday is likely to be a significant hardship.

Allowing borrowers caught in a debt trap to convert a payday loan to an installment loan at the first repayment date may mitigate the repayment problem, but it will do nothing to deal with underlying conditions that led to the financial shortfall in the first place.

An analysis of the economic performance of payday lenders and the location and extent of the networks of stores provides evidence that the rate cap of 17% allows an efficient payday lender to earn excess profits. A reduction to 15% should allow efficient operators to earn a fair and just rate of return, and remain operating in Manitoba. This conclusion is consistent with the performance of the payday loan industry in the US.

The conclusion to reduce the rate cap to 15% rests to a considerable degree on an analysis of Money Mart results, as reported in the 10K of its parent, Dollar Financial. Since Money Mart operates the majority of the outlets in Manitoba and 40% of all Canadian payday loans stores, and since it commands more than 50% of the payday loan volume in Canada, any rate cap that allows it to earn excess profits unfairly penalizes more than half the payday loan borrowers in Canada. There are other payday loan operators with branch networks large enough to enjoy economies of scale and it is reasonable to assume they would also be earning excess profits. Furthermore, Dollar Financial appears to be relying on a contribution margin from Canada that is double what its other segments earn, and is using the excessive rates in Canada to subsidise the rest of its operations.

Finally, reducing the maximum loan size permitted will not provide substantial relief to payday borrowers. The problem for those caught in a debt trap is the requirement to repay the loan in a single lump sum on the next payday, more so that the size of loan permitted. An installment plan, as already suggested, is a more suitable way to respond to this problem.

References

- Affidavit of Steven Carlstrom (Sworn April 14, 2014), Application Record for Ontario Superior Court of Justice (Commercial List) Court File No. CV-14-10518-00CL, online: <http://cfcanada.fticonsulting.com/cashstorefinancial/docs/Application%20Record.pdf>.
- Buckland, Jerry. 2016 (forthcoming). *Payday Lending: A Mature Industry with Chronic Challenges*. Winnipeg.
- Buckland, Jerry. 2012. *Hard Choices: Financial Exclusion, Fringe Banks, and Poverty in Urban Canada*. Toronto: University of Toronto Press.
- Cash America International, Inc. *2014 Annual Report*.
- Dijkema, Brian, and McKendry, Rhys. 2016. *Banking on the Margins: Finding Ways to Build and Enabling Small-Dollar Credit Market*. Hamilton: Cardus.
- DFC Global Corp. 2014. *Form 10-K*. Berwyn, US: DFC Global Corp.
- Ernst & Young. 2004. *The Cost of Providing Payday Loans in Canada*. Ernst & Young, Tax Policy Services Group.
- Lott, Susan and Grant, Michael. 2002. *Fringe Lending and "Alternative" Banking: The Consumer Experience*. Public Interest Advocacy Centre, at <https://www.piac.ca/wp-content/uploads/2014/11/fringelendingrpt1.pdf>.
- Pew Charitable Trusts. 2013. *Payday Lending in America: Policy Solutions*. Pew Charitable Trusts.
- Pinto, Jerald; Henry, Elaine; Robinson, Thomas, & Stowe, John Stowe. 2015. *Equity Asset Valuation 3e*. CFA Institute and John Wiley and Sons.
- Simpson, Wayne and Islam, Khan. 2016A (forthcoming). *A Profile of Payday Loans Consumers Based on the 2014 Canadian Financial Capability Survey*. Winnipeg.
- Simpson, Wayne and Islam, Khan. 2016B (forthcoming). *Payday Loans Consumer Profile in Canada based on the Survey of Financial Security*. Winnipeg.
- St. Aubin, Zoe. 2016 (forthcoming). *Manitoba Consumers Experience's with Payday Loans Research Study*. Winnipeg.
- The Washington State Department of Financial Institutions, 2014, *2014 Payday Lending Report* at <http://dfi.wa.gov/sites/default/files/reports/2014-payday-lending-report.pdf>.