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## AN ECONOMIC INVESTIGATION OF RENT-TO-OWN AGREEMENTS

MICHAEL H. ANDERSON\*

### INTRODUCTION

The rent-to-own (RTO) industry from its beginnings in the 1960s has grown into an important sector of the retailing industry. The industry has grown to over 8,600 stores in the U.S., annually serving over four million customers and generating over \$7.6 billion in revenue.<sup>1</sup> The heart of the RTO arrangement is that consumers gain immediate access to new or used merchandise—most commonly appliances, electronics or furniture—with neither a credit check or down payment in exchange for a series of fixed rental payments due either weekly, biweekly, or monthly. The agreement has a predetermined time period, commonly between twelve and twenty-four months; however, the consumer may terminate the contract at any point by returning the merchandise or by exercising an early purchase option. If the customer makes all the payments, or uses the lump sum payment option, they take ownership of the merchandise. However, no adverse credit action occurs if the consumer decides to terminate after only one payment or after just a few.

By offering immediate access to household goods for a small periodic fee, this type of arrangement has strong appeal to low income and financially distressed consumers. Another reason for the appeal is the embedded options in the agreement. In addition to the right to cancel without adverse financial impact and the right to early purchase, many stores give customers the option to pick how often they will need to make payments—weekly, bi-weekly, or monthly.<sup>2</sup> Another common option is reinstatement, which allows a customer to resume progress toward ownership following some

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1. See *APRO Industry Data Survey*, RTOHQ (Sept. 20, 2013), <http://www.rtohq.org/about-rent-to-own/>.

2. Of the two major RTO chains, Aaron's offers a monthly schedule but allows you to choose how many months, 6, 12, 18 or 24 while Rent-A-Center allows weekly, semi-monthly or monthly, although they prefer weekly schedules. See *Aaron's LeasePlus*, AARON'S, <http://www.aarons.com/t-lease-plus.aspx> (last visited Nov. 15, 2013); *How Rent-A-Center Works: The RAC Flex Plan*, RENT-A-CENTER, <http://www6.rentacenter.com/how-rac-works/how-rent-a-center-works> (last visited Nov. 15, 2013).

customer-instigated break, possibly due to financial hardship, with credit given for the payments already made, possibly full credit.<sup>3</sup>

The merchandise mix offered in rent-to-own stores can be broken down into appliances, electronics, furniture, and other. The first three are roughly equal and comprise over ninety percent of the items on rent.<sup>4</sup> Breaking the categories down further in rough order of popularity yields the following product listing.<sup>5</sup> Appliances include washers and dryers, refrigerators, stoves, and air conditioners. Electronics include televisions, stereos, and computers. Furniture includes bedrooms—including cribs and bunk beds, as well as living and dining room furniture and groupings. In the other category is jewelry, miscellaneous<sup>6</sup> and services.

As an industry serving mostly low-income consumers<sup>7</sup>, commentators often group RTO transactions with other alternative financial services such as check-cashing stores, payday lenders, and pawnshops.<sup>8</sup> Consumer advocates have criticized the industry by arguing that RTO exploits low-income individuals who have no other option to acquire necessary household goods.<sup>9</sup> The nature of the transaction is a key policy question. The industry is pursuing national legislation classifying it as a lease while some states have classified it as an installment credit agreement.<sup>10</sup>

3. Of the forty-seven states with RTO legislation all but Massachusetts give consumers some statutory reinstatement rights. See ED WINN III, *RENT-TO-OWN AT THE FEDERAL LEVEL*, 12 (2011), available at [www.rtohq.org/pdfs/LegUpdate\\_APRO\\_2011.pdf](http://www.rtohq.org/pdfs/LegUpdate_APRO_2011.pdf).

4. This is based on the examination of transactional data by the author. See Michael H. Anderson & Sanjiv Jaggia, *An Empirical Look at Low Income Consumers and the Rent-to-Own Industry*, in *LOW INCOMES: SOCIAL, HEALTH AND EDUCATIONAL IMPACTS* 245, 245 (Jacob K. Levine ed., 2009) [hereinafter Anderson & Jaggia, *Empirical Look*]; see also JAMES M. LACKO, SIGNE-MARY MCKERNAN & MANOJ HASTAK, BUREAU OF ECONOMICS STAFF REPORT, 51 tbl.4.2, tbl.4.3 (April 2000) [hereinafter FTC SURVEY]; Michael H. Anderson & Sanjiv Jaggia, *Rent-to-Own Agreements: Customer Characteristics and Contract Outcomes*, 61 J. ECON. AND BUS. 51 (2009) [hereinafter Anderson & Jaggia, *Customer Characteristics*].

5. RTO inventory management is an interesting question. See, e.g., Michael H. Anderson & Soheil Sibdari, *Investment Decisions in the Rent-to-Own Industry in the Absence of Inventory*, 63 J. OPERATIONAL RES. SOC'Y 89, 89-106 (2012).

6. For example, some RTO stores are willing to do a transaction on a customer-selected item. An example of a company doing this is Baber's Home Leasing, a fifty-store independent chain in Alabama, Florida, Louisiana, and Mississippi. BABERS, <http://www.babers.com> (last visited Oct. 10, 2013).

7. See, e.g., Robert M. Swagler, J. Burton & J. K. Lewis, *The Alternative Financial Sector: An Overview*, 7 ADVANCING THE CONSUMER INT. 7, 7-12, (1995).

8. See, e.g., *id.*; M. A. Stegman & R. Faris, *Payday Lending: A Business Model That Encourages Chronic Borrowing*, 17 ECON. DEV. Q. 8, 8-32 (2003).

9. See, e.g., Ronald Paul Hill, David L. Ramp & Linda Silver, *The Rent-to-Own Industry and Pricing Disclosure Tactics*, 17 J. PUB. POL'Y MARKETING 3, 3-10 (Spring 1998); Alix M. Freedman, *Peddling Dreams: A Marketing Giant Uses Its Sales Prowess to Profit on Poverty*, WALL ST. J., Sept. 22, 1993, at A1, A6.

10. A bill classifying RTO as a lease transaction has been put forth in every Session of Congress since the 103rd Congress in 1993-94. The New Jersey Supreme Court in 2006 ruled RTO subject to its thirty percent usury ceiling, the Minnesota Supreme Court likewise ruled RTO subject to its eight percent ceiling, while Wisconsin required in 2002 that RTO disclose the transactions APR—all three

This essay evaluates research conducted by the author and other commentators on the rent-to-own industry. This assessment has two main benefits: First, it provides a convenient introduction to material that has appeared in a variety of sources and can be quite technical. Second, by considering this body of work that has been produced over a number of years in its entirety, additional insights are possible. While this essay is self-contained, much more information is available in the source studies and the references included therein. The next five sections will review major research pieces by the author on RTO. Section 7 states some conclusions gleaned from this research on the rent-to-own industry.

### I. A NEW FRAMEWORK FOR RENT-TO-OWN

When considering the RTO arrangement, one is often struck by the cost to the consumer. Expressed as an annual percentage rate (APR), the cost can be 200 percent or more.<sup>11</sup> For example, Zikmund-Fisher and Parker calculate the RTO APR on a 31-inch television at 229.7<sup>12</sup> percent compared to a credit card rate of 19.8 percent.<sup>13</sup> Industry critics have traditionally seen RTO arrangements as disguised installment contracts imposed on uninformed consumers at usurious interest rates.<sup>14</sup> By contrast, Anderson and Jackson (2001) (“*Reconsideration of RTO*”) start with the premise that economic actors are basically rational and are not explicitly forced into contracts.<sup>15</sup> Consequently, given the industry’s existence for nearly fifty years, it logically follows that the industry delivers some economic value.

When considering the source of that value the authors propose two complimentary economic interpretations for the potential benefits to a consumer.<sup>16</sup> One approach is to consider the RTO contract as a series of payments that purchase a bundle of services and financial instruments that include (1) the service of the product for the time period; (2) a put option

decisions effectively eliminating RTO in those states. See Alejo Czerwonko, *Essays in Alternative Financial Services*, 17 (April 5, 2013) (unpublished Ph.D. dissertation, Columbia University).

11. See Brian J. Zikmund-Fisher & Andrew M. Parker, *Demand for Rent-to-Own Contracts: A Behavioral Explanation*, 38 J. ECON. BEHAV. ORG. 199, 199-216 (1999).

12. *Id.*

13. While much attention has been placed on APRs, especially by industry critics, an argument can be made that such a metric is not meaningful with this arrangement. This is discussed further in a later section.

14. See, e.g., *Rent to Own Campaign*, CONSUMERS LEAGUE OF NEW JERSEY, [www.clnj.org/rentown.htm](http://www.clnj.org/rentown.htm) (last visited Nov. 15, 2013).

15. See Michael H. Anderson & Raymond Jackson, *A Reconsideration of Rent-to-Own*, 35 J. CONSUMER AFF. 295, 300 (2001).

16. *Id.* at 295.

with a zero strike price that expires at the end of the period; and (3) an option to acquire a call with a zero strike price when the final rent-to-own payment is made.<sup>17</sup>

At any point, a decision not to make the next payment means that the consumer has lost the use of the item, exercised the put option to sell the item back for no value, and foregone the call option to potentially acquire the item. Additionally, over time, as the contract maturity approaches, the value of the put declines while that of the call increases. It is interesting to note that “[u]nlike conventional put and call options whose value to the investor increase with the volatility in the market price of the underlying asset, the value of the imbedded options to an RTO customer increase with the possible future volatility in her . . . financial or personal profile.”<sup>18</sup> These RTO options can have significant value in dealing with uncertainty—be that over the length of time that the merchandise will be needed, whether the product will be appropriate to meet a particular need, if the payments will be affordable, or, more fundamentally, over the continuation and stability of one’s income stream.

The second, but complimentary, alternative formulation of the contract is as a combination of a multi-period rental agreement and an installment purchase. Support for this comes from a survey conducted in 2000 by the Federal Trade Commission (FTC), which found that over eighty percent of those customers who returned the rented merchandise did so within the first six months.<sup>19</sup> In the initial phase, the RTO agreement, as before, corresponds to a multi-period rental, which includes delivery, service, and a put option with a zero strike price. In the second phase, cancellation would be relatively rare with the consumer making payments and moving toward ownership in a manner closely resembling an installment purchase. Of course, unlike a traditional installment agreement, even in the latter phase the customer retains the imbedded put option and any available insurance coverage, such as contractually bundled service and repair, on the merchandise. This construction also fits the hypothesis that RTO is particularly well suited to individuals in volatile financial or personal situations. Whereby the initial rental phase provides a window within which the customer can resolve her personal or financial situation and, once settled, the contract naturally provides a path to ownership via a regular installment loan.

17. *Id.* at 301.

18. *Id.*

19. *See* FTC SURVEY, *supra* note 4, at 70.

To illustrate this notion of the contract as a combination of features, the study uses a washing machine as an illustration.<sup>20</sup> In particular, it considers a fifteen-month RTO agreement requiring a \$55 monthly payment on a washer, which would cost \$489, including delivery and a two-year service contract.<sup>21</sup> Taking twenty-four percent as a benchmark interest rate, a conventional installment contract would require approximately ten payments. Thus, the RTO contract can be thought to have a five-month rental phase followed by a competitively priced installment agreement, though one with other options including cancellation.

The key to the above formulation is the consumer value derived in the initial rental phase. In this rental phase the customer gains immediate access to a needed or desired item, a valuable put option to terminate the contract without negative financial repercussions, and an option to secure a competitively priced installment agreement at the end of the rental phase. The authors conceptualize the RTO customer base as dividing into three basic types.<sup>22</sup> The first type includes consumers in personal, financial, or employment situations perceived to be temporary or unpredictable.<sup>23</sup> For this group of *renters*, the embedded put option is highly valued, while the option to secure an installment agreement at a later date increases in value through time.

The second group of consumers are those who may wish to acquire some item, possibly essential for household formation, but are uncertain whether they will be able to assume the obligations involved with an installment agreement—especially knowing the downside can include a damaged credit history, loss of credit access, or even garnishment of wages. For this group of *tentative buyers*, the rental phase tests their ability to make regularly scheduled payments. If successful, they can continue the agreement to ownership; if it is determined that the payments are unmanageable, they can cancel the contract without any financial downside.

Third and finally, there are those consumers who would be *buyers* but for various reasons do not have bank or store credit.<sup>24</sup> For such “denied” buyers, the rental phase provides immediate product access with an opportunity to bootstrap their way into the desired installment agreement. Indeed, successfully completing a RTO transaction may help one improve her cred-

20. Anderson & Jackson, *supra* note 15, at 302.

21. *Id.*

22. *Id.* at 302-303.

23. *Id.*

24. *Id.*

it score or get credit in the future.<sup>25</sup> Zikmund-Fisher and Parker (1999) (“*Demand for RTO Contracts*”) also supports this position. In their study, the authors use statistical techniques to analyze the results of 153 paid interviews with people in several low-income neighborhoods in Pittsburgh, Pennsylvania.<sup>26</sup> Their major conclusion was that “[h]ouseholds are more likely to rent-to-own when they face uncertain or unstable levels of disposable income and if they face particular difficulty managing their finances over the longer term.”<sup>27</sup>

## II. PURCHASE OR RENTAL?

Understanding the true nature of the RTO transaction is essential from a policy standpoint. In particular, is the character of an RTO transaction: (a) basically an installment agreement which some are unwilling or unable to complete; (b) more provocatively, an agreement rigged to extract maximum rent while keeping customers from ownership;<sup>28</sup> or (c) simply a lease containing an explicit mechanism for ownership? Under the former two interpretations, the agreement is exploitative and/or usurious. Consequently, the agreement should therefore be heavily regulated or outright banned. By contrast, under the latter interpretation, the contract is serving a more mundane role and may increase consumer welfare by providing a method for obtaining merchandise. If so, regulation might still be appropriate but the nature of that regulation would be entirely different. To a large extent, this is an empirical question, i.e., to determine how RTO functions in reality, one should consider the experiences of past customers. Much of the evidence presented in the literature is anecdotal or based on small samples.<sup>29</sup> By contrast, Anderson and Jackson (2004) (“*RTO Agreements*”) consider a large data set of completed RTO transactions.<sup>30</sup>

25. CoreLogic has formalized this by introducing an “enhanced credit score” that includes several non-traditional credit mechanisms like rent-to-own and payday lending. This is in association with FICO®—originally known as Fair, Isaac and Company—the producer of the best known and most widely used credit-scoring model in the U.S. For more information on the product called CoreScore™ visit <http://www.corelogic.com/downloadable-docs/corescore-lender-brochure.pdf>.

26. See Zikmund-Fisher & Parker, *supra* note 11, at 202.

27. *Id.* at 214.

28. See, e.g., Freedman, *supra* note 9, at A-1.

29. In possibly the largest survey, the FTC Survey found 524 RTO customers in a survey of 12,000 households. As already noted, Zikmund-Fisher and Parker (1999) interviewed 153 people. In another study, 61 individuals in West Palm Beach, FL were sampled. See Roger M. Swagler & Paula Wheeler, *Rental-Purchase Agreements: A Preliminary Investigation of Consumer Attitudes and Behaviors*, 23 J. CONSUMER AFF. 145, 149 (1989).

30. See Michael H. Anderson & Raymond Jackson, *Rent-to-Own Agreements: Purchases or Rentals?*, 20 J. APPLIED BUS. RES. 13, 13-22 (2004).

In *RTO Agreements*, the authors gathered their data with the cooperation of the industry trade group APRO, but without prior conditions or constraints. The data represented transactions from the 1991-2001 time-period, collected from 100 stores in forty-six states, including fifty-seven Rent-A-Center stores.<sup>31</sup> At the individual store level, the study gathered all available transactional data, removing only personal information to ensure consumer privacy.<sup>32</sup> Due to systematic purging of older data to make room for new transactions, ninety-five percent of the transactions were from 1998-2001.<sup>33</sup>

Classifying the agreements by outcome, the authors found that the merchandise underlying the agreement was returned 51.6 percent of the time and the remaining 48.4 percent of the time it was charged off (i.e., the item did not re-enter inventory).<sup>34</sup> Of those items charged off, fifty-six percent were early purchases and twenty-five percent were purchased by paying to term.<sup>35</sup> In sixteen percent of the transactions, the customer absconded or “skipped” with the merchandise;<sup>36</sup> the item was reported stolen, damaged or other, three percent of the time.<sup>37</sup> Of those contracts concluding in return, forty-eight percent cited a short-term need, sixteen percent cited affordability concerns or loss of income, and an additional twenty-four percent were terminated due to a “collection problem.”<sup>38</sup> Interestingly, nine percent of returns were classified as exchanges<sup>39</sup>—this speaks to the ability of RTO to handle uncertainty over merchandise suitability.<sup>40</sup> For example, a customer can exchange a previously selected television for one with a different screen size or exchange a furniture group for one in another color or piece composition.<sup>41</sup>

The study also looked at the length of time an agreement ran before concluding. In general, contracts ending with merchandise return had a

31. *Id.* at 15.

32. *Id.*

33. *Id.*

34. *See id.* at 18 tbl.2.

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.*

39. *Id.*

40. As a rental transaction, RTO offers the ability to return the merchandise unlike a conventional retail purchase; thus, it can address concerns about affordability or suitability of a given item better than an outright purchase.

41. Although not directly reported in the study, looking at the transactions, there are numerous incidents of a customer returning, say, a television and near simultaneously renting a different TV, with some repeating this several times. *See Anderson & Jaggia, Customer Characteristics, supra* note 4, at 56.



median duration of 5.9 weeks<sup>42</sup> while charge-offs' median duration of 49.6 weeks was over eight times as long.<sup>43</sup> Further, early purchases had a median duration of 54.0 weeks or 81.8 percent of the contractual period.<sup>44</sup> Additionally, customers who skipped had a median time of 25.9 weeks or about one-third of the way to term.<sup>45</sup> Together, this suggests that renters are behaving differently from purchasers and that those who end up skipping did not originally intend to do so.

The comparable data reported in the FTC SURVEY is the reverse of the finding in *RTO Agreements*. Specifically, the former found thirty-five percent of the items were returned, while sixty-two percent were purchased.<sup>46</sup> The latter found those proportions to be fifty-six and eighteen percent, respectively.<sup>47</sup> There are some basic differences in transactional versus survey data. The former is inclusive of all agreements whether the result was favorable or unfavorable to either the customer or dealer; although if the transaction occurred prior to the sample period there is no record of it. Survey data arguably has a bias to over-reporting of acquisition, as this is likely perceived as favorable to the customer.<sup>48</sup> Likewise, returns, particularly if involuntary, may be perceived negatively and be under-reported.<sup>49</sup> Additionally, customers who rented an item multiple times before successfully purchasing it would also bias toward ownership.<sup>50</sup> Survey data also relies on the accurate reporting of the outcome. For instance, the FTC SURVEY asked about transactions done as long as five years prior.<sup>51</sup> Another key difference is the skip, stolen, and damaged item classification. The FTC SURVEY, understandably, did not have any respondents report skipping with an item,<sup>52</sup> while *RTO Agreements* found a six percent skipping rate.<sup>53</sup>

42. Anderson & Jackson, *supra* note 30, at 20 tbl.3.

43. *Id.*

44. *Id.*

45. *Id.*

46. FTC SURVEY, *supra* note 4, at 67 tbl.5.2.

47. Anderson & Jackson, *supra* note 30, at 16 tbl.1.

48. *Id.*

49. *Id.*

50. In other words, merchandise exchange is fairly common and that introduces a bias. To illustrate, consider a customer who, for whatever reason, exchanges multiple times before ultimately purchasing. A survey would probably characterize it as one purchase, while looking at transactions one would record multiple returns and a purchase—hence, the former approach would yield a higher purchase percentage than the latter. See Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 56.

51. FTC SURVEY, *supra* note 4, at 19.

52. The disposition of merchandise, given in Table 5.2, is listed as purchased, returned, still active and, 2.1 percent of items, as other, don't know or refused. *Id.* at 67 tbl.5.2.

53. This is over-reported in this study as information on skips is kept longer than that on other concluded agreements. Later studies correct for this, finding an adjusted rate about half as high. See Anderson & Jackson, *supra* note 30.

## III. AN EMPIRICAL GUIDE TO RISK MANAGEMENT

One of the major selling points of rent-to-own is the immediate access to merchandise without a credit check. Indeed, RTO stores collect very little personal or financial information and, if the item is in stock, it can be delivered to the customer within a day. RTO is attractive to financially constrained consumers—many of their core customers may well be unbanked and/or have no or bad credit—also there is little or no credit checking. Consequently, problems collecting payments and outright default are big concerns to store operators. Without changing this business model, one might wonder if there would be some way to control this risk. One interesting aspect of this question is that such controls have to be *ex post* of the contract initiation, as opposed to “conventional financing,” which exerts all or most of its checking *ex ante*.<sup>54</sup> Anderson and Jackson (2006) (“*Managing High Risk*”) considers this problem and whether a metric exists to identify contracts likely to fail.<sup>55</sup> They examine a data set of over 180,000 completed transactions from fifty-seven Rent-A-Center retail outlets in twenty-eight states and the District of Columbia spanning a forty-month period from March 1999 to July 2002.<sup>56</sup>

The authors separate the transactions into two groups: those ending positively and those ending negatively.<sup>57</sup> A positive outcome is one that ends with ownership—either paying to term or exercising the early purchase option—or with the voluntary return of the item—either expressing a rental motive, citing affordability concerns or in order to exchange the item.<sup>58</sup> A negative outcome is one that ends with the store having to either reclaim the item due to some collection problem, the customer “skipping” with the item, or the item being stolen, damaged, or destroyed.<sup>59</sup> Overall, the transactions divided into 56.4% voluntary returns, 22.8% in purchase, 16.9% reclaimed due to a collection problem, and 4.0% representing the skip, stolen and damaged classifications.<sup>60</sup> Thus, about four in five transac-

54. A conventional bank loan typically revolves around the loan application process wherein information on employment, income and credit history is collected and evaluated; this is not done with RTO. For an overview of the conventional financing process, see chapter six of Garman and Forgue’s book “Personal Finance.” See E. THOMAS GARMAN & RAYMOND E. FORGUE, PERSONAL FINANCE, 171-95 (11th ed. 2012).

55. See generally Michael H. Anderson & Raymond Jackson, *Managing High Risk in a Retail Operation: The Rent-to-Own Business*, 29 S. BUS. & ECON. J. 87-106 (2006).

56. *Id.* at 89.

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.* at 91.

tions or 79.2% concluded positively.<sup>61</sup> Also, note that the vast majority, 80.9%, of negative outcomes required the store to cancel the agreement and take action to reclaim the merchandise.<sup>62</sup> While expensive, that is very different than suffering the outright loss of an item.<sup>63</sup> Encouragingly, this suggests that most of the customers use RTO responsibly and that opportunistic behavior is very limited; it also reveals the financial strain that many are under.

Considering various subgroups suggests some interesting behavioral aspects of the transactions. First, among the broad merchandise groups, appliances and furniture were more likely to have a positive outcome than electronics.<sup>64</sup> The skip rate for electronics was also dramatically higher.<sup>65</sup> This is consistent with the notion that consumers are using RTO for essential household items, and so are more invested in gaining ownership of a washer and dryer or a bunk bed for their children than they are for a big screen television. Second, the authors compared single-transaction customers to multi-transaction customers.<sup>66</sup> Not surprisingly, those customers who had multiple transactions were more likely to have a positive outcome than did the single-transaction customers.<sup>67</sup> Interestingly though, among those multi-transaction customers, their first transaction had a much greater chance of having a positive outcome than did their average transaction.<sup>68</sup> This could simply reflect that those having a good first experience are more likely to consider another transaction. In addition, a returning customer has already gone through screening to some extent.

Alternatively, if RTO use is frequently associated with financial hardship, then those doing multiple transactions are more likely to feel trapped in adverse circumstances and be more reliant on RTO.<sup>69</sup> Thus, they are more invested in achieving a positive outcome. Additionally, the authors contrasted those paying on a weekly payment schedule with those on monthly payments.<sup>70</sup> One interesting aspect of RTO is that the customer often has a choice regarding payment frequency. Thus, one can pick a

61. *Id.*

62. *Id.*

63. A re-claimed item can be re-rented and generate additional revenue; an unrecovered item cannot. Further, Anderson and Jaggia found customers who skip only paid, on average, 20.1 percent of the amount due on their contracts. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 55.

64. Anderson & Jackson, *supra* note 15, at 95.

65. *Id.* at 95. For convenience, the raw numbers are included in Table 1 *infra*.

66. *Id.* at 99. For convenience, the raw numbers are included in Table 1 *infra*.

67. See Table 1, *infra*.

68. *Id.*

69. Anderson & Jackson, *supra* note 15, at 98.

70. *Id.* at 96-97.

schedule consistent with their expected need or to match one's income stream. The authors found that those with a weekly payment schedule, where each weekly payment is one fourth of a monthly payment, were slightly more likely to have a positive outcome.<sup>71</sup> A reasonable interpretation is that this reflects those expecting to rent would be likely to choose a weekly schedule as that would be more flexible and affordable (each weekly payment is one fourth of a monthly payment) while those hoping to buy may be inclined toward a monthly schedule for convenience. Given the financial condition of customers, it is easier to conclude a shorter-term arrangement than one with a longer term.

To further put this discussion of contract outcome into context, Table 1 reproduces information drawn from *Managing High Risk*. The table decomposes the transactions into the various outcomes—both positive and negative—considering what is the underlying merchandise and whether it involves a single- or multiple-transaction customer. Further, the information is presented in both raw counts and relative percentages.

71. *Id.* at 97.

Table 1: Number (Percentage) of Contracts Yielding Positive and Negative Outcomes.

|                          | Appl.          | Comp.          | Elec.          | Furn.          | Total          | Single         | Multiple Contracts |                |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|----------------|
|                          |                |                |                |                |                |                | First              | Subsq.         |
| <b>POSITIVE OUTCOMES</b> |                |                |                |                |                |                |                    |                |
| <b>Return:</b>           |                |                |                |                |                |                |                    |                |
| Rental                   | 11,250         | 7,945          | 27,359         | 17,049         | 63,603         | 15,036         | 14,590             | 38,587         |
| Motive                   | (36.1)         | (42.3)         | (37.7)         | (35.4)         | (37.2)         | (39.9)         | (36.6)             | (36.7)         |
| Affordability            | 2,884          | 2,630          | 8,760          | 4,715          | 18,989         | 3,907          | 3,606              | 12,477         |
|                          | (9.2)          | (14.0)         | (12.1)         | (9.8)          | (11.1)         | (10.4)         | (9.0)              | (12.1)         |
| Exchanged                | 2,242          | 2,035          | 5,730          | 3,434          | 13,441         | 421            | 5,592              | 8,379          |
|                          | (7.2)          | (10.8)         | (7.9)          | (7.1)          | (7.9)          | (1.1)          | (14.0)             | (8.0)          |
| <b>Purchase:</b>         |                |                |                |                |                |                |                    |                |
| Single                   | 6,763          | 2,086          | 10,890         | 10,771         | 30,510         | 6,520          | 6,844              | 18,649         |
| Payment                  | (21.7)         | (11.1)         | (15.0)         | (22.4)         | (17.9)         | (17.3)         | (17.2)             | (17.7)         |
| Payment to Term          | 1,409          | 480            | 2,474          | 2,285          | 6,648          | 988            | 1,749              | 4,834          |
|                          | (4.5)          | (2.6)          | (3.4)          | (4.8)          | (3.9)          | (2.6)          | (4.4)              | (4.6)          |
| Other                    | 504            | 306            | 787            | 390            | 1,987          | 197            | 670                | 1,212          |
|                          | (1.6)          | (1.6)          | (1.1)          | (0.8)          | (1.2)          | (0.5)          | (1.7)              | (1.2)          |
| Total                    | 25,052         | 15,482         | 56,000         | 38,644         | 135,178        | 27,069         | 33,051             | 84,405         |
| Positive                 | (80.3)         | (82.4)         | (77.1)         | (80.4)         | (79.2)         | (71.9)         | (82.9)             | (80.3)         |
| <b>NEGATIVE OUTCOMES</b> |                |                |                |                |                |                |                    |                |
| Return-Collection        | 5,371          | 2,872          | 12,709         | 7,735          | 28,687         | 8,572          | 5,718              | 16,540         |
|                          | (17.2)         | (15.3)         | (17.5)         | (16.1)         | (16.8)         | (22.8)         | (14.3)             | (15.7)         |
| Customer Skipped         | 753            | 384            | 3,494          | 1,596          | 6,227          | 1,890          | 1,012              | 3,746          |
|                          | (2.4)          | (2.0)          | (4.8)          | (3.3)          | (3.7)          | (5.0)          | (2.5)              | (3.6)          |
| Stolen or Damaged        | 34             | 46             | 444            | 93             | 617            | 137            | 90                 | 413            |
|                          | (0.1)          | (0.2)          | (0.6)          | (0.2)          | (0.4)          | (0.4)          | (0.2)              | (0.4)          |
| Total                    | 6,158          | 3,302          | 16,647         | 9,424          | 35,531         | 10,599         | 6,820              | 20,699         |
| Negative                 | (19.7)         | (17.6)         | (22.9)         | (19.6)         | (20.8)         | (28.1)         | (17.1)             | (19.7)         |
| <b>Total</b>             | <b>31,210</b>  | <b>18,784</b>  | <b>72,647</b>  | <b>48,068</b>  | <b>170,709</b> | <b>37,668</b>  | <b>39,871</b>      | <b>105,104</b> |
| <b>Contracts</b>         | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b>     | <b>(100.0)</b> |

Agreements in the four sub-categories—Appliances, Computers, Electronics, and Furniture—represent 93% of the total. The remaining 11,934 contracts are for jewelry, services, and miscellaneous items or represent a combination of categories. The last three columns provide information on single and multiple contract customers.<sup>72</sup>

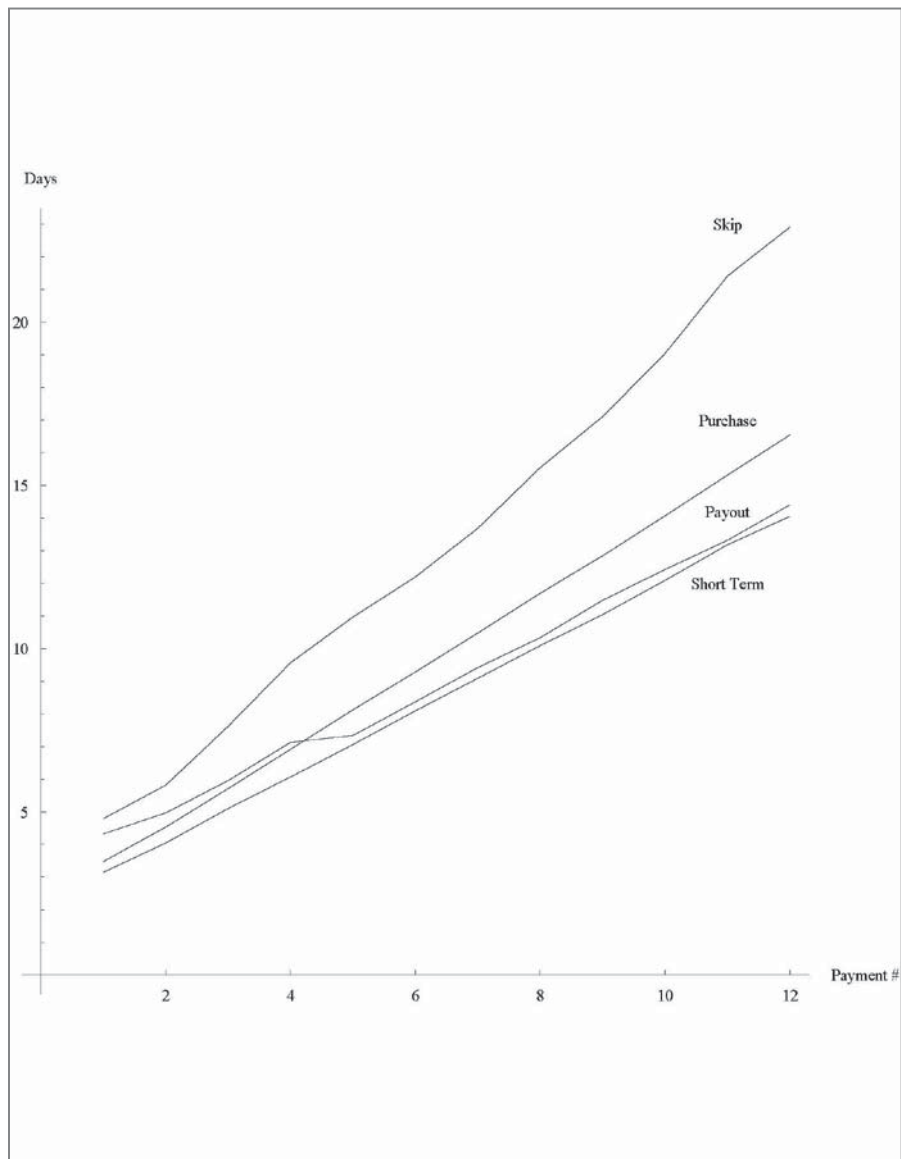
Another aspect of business risk is late payments. As a practical matter, a surprising number of payments are late. For instance, Anderson and Jaggia (2009) (“*An Empirical Look*”) found that 36.8% of payments were made late in their data set.<sup>73</sup> *Managing High Risk* considered whether late payment behavior could be informative for risk management. The metric

72. See Anderson & Jackson, *supra* note 55, at 95 tbl.3, 99 tbl.5.

73. See Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 59.

*Managing High Risk* develops for monitoring the payment pattern is “cumulative days late.”<sup>74</sup> That is, the cumulative number of days that each payment is late as of a specific payment. So, for example, if the first, second, and third payments are zero, three, and two days late, respectively, then the cumulative days late is five days as of the third payment. The following figure, adopted from *Managing High Risk*, illustrates how skip behavior is foreshadowed by excessive late payment behavior.<sup>75</sup>

Figure 1: Cumulative Number of Days that Payments are Late for Various Outcomes



To illustrate the evolution of the degree payments are late, Figure 1 plots the running total of days late for the first twelve payments following the initial time zero payment. For uniformity, only contracts with weekly payments are considered—and so about the first three months of payment behavior is shown.<sup>76</sup>

Considering the possible outcomes from the standpoint of the store and in terms of profitability, the most preferred is the customer who pays to term, ultimately buying the item having made all the payments. Second best is the early purchaser who buys the item but pays the contract off early at a discount. Third, is a customer who returns the item after a rental period, allowing potential re-rental. Finally, and by far the least desirable, is the customer who skips with the merchandise. The figure shows an interesting identification problem, as the worst and the best customers are close in outcome.<sup>77</sup> One might think that customers who positively terminate their contracts early are in some transitory state with uncertainty over their need or ability to pay or over the utility of the item and ultimately ended up not continuing to ownership. By contrast, those who purchase, especially those who did so by paying to term, may have the fewest alternatives and are most in need of the RTO model. At the same time, their lack of financial slack means they are likely to have an issue paying on time.

*Managing High Risk* also ran a statistical model to analyze the explanatory ability of the various observable contract features.<sup>78</sup> In particular, they ran a logic model to “explain” the probability of a contract concluding with a positive outcome.<sup>79</sup> The potential explanatory variables considered included merchandise category, payment frequency, and the cumulative days late metric discussed above—all those were very significant in a statistical sense.<sup>80</sup> That is, certain types of contracts and types of consumer payment behavior were positively correlated to good or bad contractual outcomes. Consequently, it does seem possible to create a credit monitoring system built on merchandise type, history, payment frequency and late payment behavior to help distinguish those contracts likely to end with a negative outcome.

76. Anderson and Jackson, *supra* note 55, at 93 (adopting the figure employed in the study).

77. An analogous problem is present in the credit card market. There, those who always pay in full are best in a credit-worthiness sense but they are being subsidized by those who pay interest. Thus, from the card company’s standpoint, the most desirable customers are those who spend up to their credit limit and then just make the minimum monthly payment thereafter. Unfortunately, the behavior of this latter type looks similar to the absolutely worst type—one who runs the bill as high as possible only to then default.

78. Anderson & Jackson, *supra* note 55, at 102.

79. *Id.* at 100-103.

80. *Id.* at 100-102.

Finally, *Managing High Risk* considered a potentially interesting seasonality effect.<sup>81</sup> Specifically, it examined contracts that originated during the holiday season<sup>82</sup>; positing that the underlying merchandise was more likely to be a gift or associated with holiday celebrations. Therefore, one may wonder if those contracts are more likely to end positively. The authors created a dummy variable that equaled one for contracts originating in the holiday quarter, October, November or December, and zero for all other months.<sup>83</sup> If consumers are rational and using RTO due to temporary circumstances or lack of other “conventional” financial options, then a reasonable hypothesis is that such contracts would be more likely to have a good outcome than at other times of the year. Encouragingly, this was the statistically significant result found.<sup>84</sup>

#### IV. CONSUMER CHARACTERISTICS AND CONTRACT OUTCOMES

To better understand how the RTO industry works, an important starting point is describing the actual use of the RTO contract by consumers as well as developing a picture of these customers. Additionally, it is valuable to study how differences in the contract and customer attributes influence the ultimate outcome. This is exactly the intent of *An Empirical Look*.<sup>85</sup> This study considers a data set drawn from four stores of a private rent-to-own chain in the Southeast U.S., representing 7,517 transactions from the two-year period June 1, 2000 through May 31, 2002.<sup>86</sup> From a scholarly standpoint, this data set is appealing as it contains demographic information on the underlying customers, which allows a fuller look at the users of RTO. The survey gathered the information in the same way as the transactional data discussed in the previous two sections.<sup>87</sup> Namely, the survey obtained the data with the cooperation of the industry trade group APRO without any restrictions or preconditions on its use for academic purposes and filtered it only to remove personal information to ensure consumer confidentiality.<sup>88</sup>

81. *Id.* at 100-103.

82. *Id.* at 100.

83. *Id.*

84. Future research would be to check if this effect is stronger if the holiday season is defined more narrowly as the interval from Thanksgiving to New Year's Day.

85. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 52.

86. *Id.* at 53.

87. *Id.*; *see also* Anderson & Jackson, *supra* note 30, at 15; Anderson & Jackson, *supra* note 15, at 102.

88. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 53.



The demographic picture that emerges clearly suggested a customer base made up of the “working poor”:<sup>89</sup>

Age: 40.1 percent of the sample was 18–25 years old, 61.0 percent was 30 or under, 83.0 percent was under 40 and 94.5 percent was 55 or less. Gender: females are greatly over-represented in the sample at 74.7 percent.<sup>90</sup> Marital status: 25.2 percent reported being married, while divorced, single, and widowed were 27.1, 46.6, and 1.1 percent, respectively. Employment: 47.1 percent reported employment for more than six months. Income: the mean income level was slightly over \$10,000 and for 97.4 percent of the group it was below \$25,000. Government aid: 34.9 percent reported receiving aid in the form of either temporary assistance for needy families (TANF), seventy-one percent of aid recipients, Social Security (twenty-six percent), or welfare (three percent). We note that the authors gathered these demographics at the store level when the contract was written, and they are generally consistent with existing literature, e.g., the FTC Survey.<sup>91</sup>

Looking at the contract characteristics, on average, the contract was just over fifteen months in duration with a maximum due, if the customer made all payments, of \$1,268.<sup>92</sup> Further, the average customer had 2.29 transactions in the sample and fifty-six percent were on weekly payment schedules.<sup>93</sup>

In analyzing the RTO agreements, the study focused on the metric “proportion of rent paid.” Proportion of rent paid is defined as the ratio of rent paid relative to the maximum possible rent due, that sum due if the contract goes full term and all payments are made. Thus, the less rent paid and the shorter the contract, the closer this variable is to zero; the other extreme occurs when the customer ends up owning the merchandise after making all the payments, then the variable has a value of one. This variable speaks to consumer motivation. The idea is that the larger the value, the greater the consumer’s desire to gain ownership and the closer is that ownership. A small value could represent a planned short-term rental or some quickly determined desire to conclude the contract. Conditional on an agreement ending in ownership, a lower value of rent paid would reflect a relatively quicker and/or more pervasive use of the embedded early purchase option. It would also mean the realized cost of the purchase would be lower than otherwise expected. By contrast, a higher rent paid value for an

89. *Id.* at 61.

90. For a discussion of the gender bias in fringe economy lending, see Amy J. Schmitz, *Females on the Fringe: Considering Gender in Payday Lending Policy*, 89 CHI-KENT L. REV. 65 (2013).

91. See LACKO, MCKERNAN & HASTAK, *supra* note 4, at 70. The demographic snapshots are not directly comparable as this study is transaction-based while the FTC Survey is customer-based.

92. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 59.

93. *Id.* at 59.

acquisition means a greater expense but, more importantly, it probably translates into a more financially constrained consumer. This follows as the earlier the customer exercises the option, the larger the required final dollar payoff and hence the harder it is to fund that payment.<sup>94</sup> Finally, this metric also speaks to whether there is merit to the notion that this contract is able to extract a lot of rent without ending in ownership.<sup>95</sup>

Turning to the descriptive findings, we can make several observations. The study defines contracts concluding in a return, a purchase, or a skip.<sup>96</sup> That is, with the agreement ending as a rental with the return, perhaps involuntarily, of the item; with the purchase of the underlying item, either by paying to term or using the early purchase option; or with the payments prematurely stopping but the item not being recovered for some reason. Overall, for the return, purchase, and skip outcomes, the median proportion of rent paid was 6.90, 80.20 and 20.10 percent, respectively<sup>97</sup>; the respective mean proportions of rent paid were 13.05, 66.06 and 26.55 percent.<sup>98</sup> In the case of returns, on average, the term is a relatively short-term rental and not, as some argue,<sup>99</sup> an exploitive attempt to collect rent without yielding ownership.<sup>100</sup> For purchases, because those who pay to term would, by definition, pay one hundred percent, those who exercise their early purchase option are paying much less. The relatively small amount collected in the event of a customer skip dramatizes the credit risk issue even ignoring the costs in time and effort of attempting collection. Even if, due to their mark-up, the loss to the store is relatively small, those customers who are honoring the contract terms are subsidizing other customers' skips. At the same time, the amount paid is large enough to suggest that such customers are not behaving opportunistically, but rather, circumstances force them into defaulting.

Another interesting difference is regarding the frequency of payments. Contrasting those customers with weekly payment schedules to those with monthly schedules, the overall median and mean proportion of rent paid is 6.00 and 19.77 for the former and 30.80 and 41.16 for the latter.<sup>101</sup> Clearly, on average, the outcome of contracts under these different payment fre-

94. *See also id.* at 54.

95. *Id.* at 54 n.6.

96. *Id.*

97. *Id.* at 55.

98. *Id.*

99. *See, e.g.,* Freedman, *supra* note 9, at A6.

100. Of course, this cannot speak to whether a customer was forced by financial circumstance to only rent an item that they wanted to purchase; however, it does not support the notion that RTO stores are collecting a large portion of the payments while somehow preventing purchase.

101. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 55.

quencies is very different. This might suggest that those seeking to rent are self-selecting weekly payments for affordability while those looking to purchase desire monthly payments for convenience. Alternatively, it might suggest a behavioral component, with weekly payments requiring more effort and attention to maintain, leading consumers to terminate such agreements quicker.<sup>102</sup> There is also variation across merchandise categories with the highest proportion of rent paid involving appliances, closely followed by furniture with electronics having the lowest proportion.<sup>103</sup> Again, this speaks to consumer rationality—with appliances such as washers and dryers viewed as vital for quality of life, followed closely by furniture such as beds, while electronics like televisions are much more optional. Thus, the variation in rent paid suggests a greater effort to achieve ownership of more essential household items.

To formally analyze the data, the authors of *An Empirical Look* ran a statistical model to see the effect on the proportion of rent paid of a number of independent variables representing various customer and contract attributes.<sup>104</sup> Among the findings, it appears the “working poor” are paying more rent.<sup>105</sup> This is supported by employment length being directly associated with rent paid while income level was inversely associated. Further, both variables were very statistically significant.<sup>106</sup> Thus, the longer one works at relatively low-paying employment, the more important access to something like RTO is, because one would have fewer financial options. Interestingly, receiving government aid was statistically significant and led to the customer paying less rent.<sup>107</sup> This is somewhat suggestive that the aid variable is picking up transitional periods in a consumer’s life. Another variable considered was whether someone else referred the customers to RTO. This was also significant and led to more rent being paid.<sup>108</sup> This suggests some kind of reference group effect, with a consumer whose circle of contacts contains other RTO customers being more likely to use this arrangement as a means to acquire merchandise.

The authors considered three contract structure variables and all three were statistically significant.<sup>109</sup> The first two dealt with how long and how

102. This is an interesting question. Imagine a conventional credit card user, one wonders if she would be more likely to carry a lower balance, pay less interest and ultimately be less likely to get into financial trouble if payments were required weekly instead of monthly.

103. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 55.

104. Technically, the study used a log-normal censored regression model. *See also id.* at 60.

105. *Id.* at 61.

106. *Id.*

107. *Id.* at 61-63.

108. *Id.* at 63.

109. *Id.* at 64.

much, that is the contractual length and the maximum amount due, namely the total of all scheduled payments over the contract life. The results demonstrated that an increase in either, contract length or maximum amount due, would reduce rent paid.<sup>110</sup> Possibly this is capturing that such contracts are a greater financial burden and so less likely to end in ownership; alternatively, such items may be viewed as luxury items only intended for short-term rental. The third and final variable was the frequency of payments.<sup>111</sup> This was highly significant<sup>112</sup> and, as has been discussed elsewhere, those with monthly payment schedules pay much more rent on average than do those under weekly schedules.<sup>113</sup>

One unique aspect of this study was a careful look at payment patterns which provided insight on both the customer base and the business risk faced by the RTO industry.<sup>114</sup> Table 2 below reproduces information from *An Empirical Look*.<sup>115</sup> The first statistic, “proportion late,” is the raw percentage of payments made late relative to the total payments made.<sup>116</sup> It is striking that over 36.8 percent of payments—nearly two out of five—are made late.<sup>117</sup> Arguably, appliances and furniture are of greatest important to consumers—think of a washer/dryer or bunk bed—and yet, as one can see, the proportion late is above average for those two categories.<sup>118</sup> The second measure, “median days late”, tries to quantify the degree of the problem.<sup>119</sup> Note that, for a given transaction, this variable is zero, unless at least half the payments are late.<sup>120</sup> Thus, it is a measure of lateness for the forty-four percent of transactions of which the majority of payments are not on time, capturing extreme delays in making payments.<sup>121</sup> This is especially significant when one remembers that some fifty-six percent of the payments are on a weekly schedule.<sup>122</sup> Again, there is an above average degree of lateness for appliances and furniture. The third and final measure,

110. *Id.* at 63-64.

111. *Id.*

112. *Id.*

113. *Id.* at 64.

114. *Id.* at 63.

115. *Id.* at 58.

116. *Id.* at 58-60.

117. *Id.* at 58-59.

118. *Id.* at 58-60.

119. *Id.* at 58.

120. Recall, by definition, that the median means half of the payments were made quicker and half slower than the median value. To construct this variable we considered, transaction-by-transaction, each individual payment made, noting when it was made relative to its due date (with on-time and early payments assessed as zero days late).

121. Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 58-60.

122. *Id.* at 59.

“standard deviation of days late”, captures the variability in a customer’s payment pattern.<sup>123</sup> If one were always on time or always the same number of days late then the standard deviation would be zero;<sup>124</sup> while the standard deviation would increase as one’s payments became less predictable, i.e., more variable.<sup>125</sup>

Table 2: Payment History Variables—Mean (Standard Deviation).

| Variable                | All              | Appliances       | Electronics      | Furniture        | Other            |
|-------------------------|------------------|------------------|------------------|------------------|------------------|
| Proportion Late         | 0.368<br>(0.312) | 0.392<br>(0.312) | 0.333<br>(0.314) | 0.383<br>(0.310) | 0.347<br>(0.301) |
| Median Days Late        | 1.741<br>(3.361) | 1.824<br>(2.633) | 1.538<br>(2.498) | 1.849<br>(3.726) | 1.730<br>(5.937) |
| Standard Deviation Late | 2.393<br>(3.952) | 2.350<br>(2.874) | 2.225<br>(4.705) | 2.484<br>(3.243) | 2.783<br>(6.403) |

The mean appears first, with standard deviation below in parentheses.<sup>126</sup>

In the formal model, all three of the Table 2 variables were statistically significant at the ninety-nine percent level in explaining rent paid for the entire sample and for all the merchandise subgroups.<sup>127</sup> Somewhat counter-intuitive, late payments positively influenced rent paid. This is very revealing as a reasonable explanation is that this is a proxy for financial uncertainty in a customer’s life, the more difficulty that one has in paying his or her bills the less likely he or she is to have access to other methods of acquisition.<sup>128</sup> As a practical matter, given the general lateness of RTO customers, the longer a contract runs, the greater the proportion of late payments on average, resulting in a positive relation between rent paid and proportion late. By contrast, median days late, in line with intuition, negatively affects rent paid—being extremely late is not a recipe for ownership. Finally, the standard deviation variable positively affects rent paid, consistent with the notion that this proxies income shocks to the consumer,

123. *Id.* 58-60.

124. *Id.* at 60.

125. *Id.* at 60.

126. *See id.* at 58 tbl.3.

127. *See id.* at 62.

128. *Id.* at 64.

with greater variability associated with less certain finances and so a greater need to use rent-to-own as a means to acquire merchandise. In sum, this analysis exposes the business risk faced by the industry but, more importantly, it also highlights the financial strain faced by rent-to-own customers as they struggle to obtain needed household items.

#### V. OUTCOME, DURATION AND CONSUMER BEHAVIOR

While the proportion of rent paid is revealing about both the nature of the contract and consumer behavior, it is only an indirect way of looking at the ultimate outcome of the contract, which is important for classifying the transaction. In that spirit, Anderson and Jaggia (2012) (“*Return, Purchase, or Skip?*”), using basically the same data, revisit the investigation of RTO begun in the study described in *An Empirical Look*.<sup>129</sup> The current study considers a number of variables hypothesized to explain how long an agreement will last and how it will conclude.<sup>130</sup> That is, the probability of the contract concluding via each of the possible outcomes or exits—namely return, purchase, or skip—is calculated through time as a function of a variety of consumer and contract specific variables. This allows one, for instance, to find the probability that a particular agreement will conclude in  $x$  months, or how much more likely is one agreement to end in return than is another. It can also answer the question of how long a particular agreement should run before ending in a purchase or in a return. Further, it can predict whether the chance of the consumer purchasing the item is higher for furniture than for electronics, or the payment schedule is weekly rather than monthly, or the consumer is relatively older.

While we omit the technical details of the basic methodology employed in this discussion, we note that this analysis technique has a number of interesting applications.<sup>131</sup> For instance, the analysis technique has been used to study unemployment insurance; in particular, how long a person is likely to be between jobs given their skill base, the level of benefits offered, the specific industry involved and so on.<sup>132</sup> This technique is also widely employed in the medical field to produce the odds of survival for various

129. See Michael H. Anderson & Sanjiv Jaggia, *Return, Purchase, or Skip? Outcome, Duration, and Consumer Behavior in the Rent-to-own Market*, 43 *EMPIRICAL ECONOMICS* 1, 313-334 (2012) [hereinafter *Return, Purchase, or Skip?*].

130. *Id.*

131. Formally, the study used a multiple destination, also known as competing risk, model that explicitly accounts for both observed and unobserved heterogeneity—diversity of character or content, both apparent and hidden.

132. See, e.g., Brian P. McCall, *Unemployment Insurance Rules, Joblessness, and Part-time Work*, 64 *ECONOMETRICA* 647 (1996).

periods of time, and the overall expected life spans given an incidence of some type of cancer, a heart attack, or an organ transplant, all conditional on various behavior patterns.<sup>133</sup> Another application, and the one closest to the present study, tries to explain prepayment and default behavior in the mortgage market under the hypothesis that the population of mortgage holders can be split into groups who have differing expectations and motivations with the study letting the data identify who falls within what group and even the number of groups that exist.<sup>134</sup>

An important result from the model is that a customer who is older, been employed longer, and at lower wages has a higher probability of purchasing the underlying merchandise together with a longer expected duration in the contractual relationship.<sup>135</sup> The higher purchase probability speaks to the few financial options such an individual would have to acquire goods while the longer time required to get ownership speaks to the degree that such a consumer is financially constrained. Together, these observations show how important the existence of mechanisms, such as rent-to-own, are to the “working poor.” Another observation is that, intriguingly, the probability of a skip is notably higher for young males.<sup>136</sup> Furthermore, as one might expect, repeat customers have longer expected durations, regardless of contract conclusion.<sup>137</sup> For repeat customers, the probability of purchase is higher, while the chance of return or skip is smaller.<sup>138</sup> That is, they are more likely to purchase merchandise via rent-to-own, but regardless, on average, they make payments longer than do single transaction customers. While this may simply reflect satisfaction with their earlier transactions, it may also represent that those who have a continuing need to use RTO are more reliant on this method of acquisition.

The longer the length of the contract, the lower is the probability of purchase while the probability of merchandise return and the chance of loss both increase.<sup>139</sup> This is very reasonable as, if all else is equal, more expensive merchandise would require a longer-term contract and so the lower purchase probability could reflect the strain of making all those payments or it may simply be the difficulty faced in keeping current with the pay-

133. See, e.g., Stratford Douglas & Govind Hariharan, *The Hazard of Starting Smoking: Estimates From a Split Population Duration Model*, 13 JOURNAL OF HEALTH ECONOMICS 213 (1994).

134. See Yongheng Deng, John M. Quigley & Robert Van Order, *Mortgage Terminations, Heterogeneity and the Exercise of Mortgage Options*, 68 ECONOMETRICA 275 (2000).

135. See *Return, Purchase, or Skip?*, *supra* note 129, at 325.

136. *Id.* at 327.

137. *Id.*

138. *Id.*

139. *Id.*



ments over an extended period. Additionally, behavioral changes based on contract length, suggests interesting evidence of consumer rationality. In particular, as the contractual term varies,<sup>140</sup> the expected actual duration changes proportionately, and this is true for all exits.<sup>141</sup> For instance, for returns, the model implies that the ratio of expected duration to contract length would be twenty-one percent for both very short contracts and very long contracts.<sup>142</sup> That is, regardless of the contract length, consumers who return the underlying merchandise do so about one fifth of the way in, and there are analogous points for purchase and skips as well, about seventy-five and five percent, respectively.<sup>143</sup> It is as if consumers are evaluating the embedded options in the agreements and arriving at a natural exercise point. As an additional statement on contract characteristics, we find that electronics as a merchandise category have a greater probability of return or skip and a lower probability of purchase.<sup>144</sup> This is consistent with the view that electronics items are luxury goods as well as the notion that consumers are using RTO to acquire more essential household items such as appliances and furniture.<sup>145</sup>

One interesting observation, shared by *Purchase, Return, or Skip?* and *An Empirical Look*, is that, as interesting as *who* these customers are, more important is *how* customers use the contracts.<sup>146</sup> Qualitatively, the transaction-specific variables have greater explanatory power over a given contractual outcome than do those that are customer-specific—regardless of whether outcome is defined as percentage rent paid, expected duration, or specific contract exit.<sup>147</sup> A reasonable conclusion is that RTO customers, despite the demographic variation observed, are actually fairly homogeneous. That is, the defining factor is membership in the group of consumers attracted to RTO, which is determined primarily by economic factors. Given this, the variation observed could be traced to the duration of stay in such an economic situation, which is better explained by contract usage.

The study bases all of the above results on the entire sample; however, the statistical model used also allows for unobserved heterogeneity. That is, it can test the possibility that the sample divides into two or more sub-

140. That is, considering contracts for a maximum of twelve months versus those for fifteen months versus eighteen months, etc.

141. *Id.* at 329.

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.*

146. See Anderson & Jaggia, *Customer Characteristics*, *supra* note 4, at 64.

147. *Id.*



groups wherein each group is using the contract in some fundamentally different manner.<sup>148</sup> The analysis does find strong statistical evidence of two such consumer sub-groups. While the model is mute on what makes the groups different, it does speak to the resultant differences in behavior.<sup>149</sup> The groups are close in size, breaking into fifty-six and forty-four percent of the sample, respectively.<sup>150</sup> The expected durations of any exit is shorter in the first group than to the second, being especially true with respect to rentals, i.e., the length of time before customers return an item.<sup>151</sup> Within each group, there are significant variations in terms of customer characteristics and contract features as well as the ultimate contract outcome; hence, to characterize the groups, we evaluated each of them using their mean values for all the various independent variables.<sup>152</sup> We found that the first group had a probability of return, purchase, and skip of 94.7, 2.7, and 2.6 percent, respectively; in the second group the corresponding probabilities were 41.2, 53.8, and 5.0 percent.<sup>153</sup> Thus, the first group seems to be pure renters with a short-term need for the merchandise,<sup>154</sup> but even when they purchase they are doing so relatively quickly.<sup>155</sup> The second group is more interesting. As the study notes:

[O]ne possible interpretation is that they are financially constrained with an income stream that is low mean/high variance . . . Such an income distribution could serve as a catalyst for a change in circumstance either positive—leading to a purchase or return, depending on the value of the early purchase option—or negative—necessitating an involuntary return or even a skip, thereby accounting for their relatively higher purchase and skip rates.<sup>156</sup>

The relative exit probabilities show that the second group is much more likely to purchase the underlying merchandise but they also are almost twice as likely to skip.<sup>157</sup> In other words, they are financially constrained consumers who also are facing significant uncertainty. Also note that this division of the consumer base matches up well with *A Reconsideration of RTO*, with the two groups corresponding to their taxonomy of

148. See Deng, *supra* note 135, at 276-277.

149. *Return, Purchase, or Skip?*, *supra* note 129, at 329-330.

150. *Id.* at 323.

151. *Id.* at 331.

152. *Id.* at 328.

153. *Id.*

154. *Id.* at 329.

155. *Id.* at 330.

156. See *id.* at 329-330.

157. *Id.*

renters on one hand and buyers—both tentative and “denied”—on the other.<sup>158</sup>

As a final point, this study contributes to the discussion of the transaction’s APR.<sup>159</sup> While APR is important in the policy debate, it is deficient as a cost metric. Among other shortcomings, APR is calculated assuming the customer pays to term; under any other circumstance APR overstates the cost.<sup>160</sup> Another way of stating the problem with APR is that there is substantial cross-subsidization between customers having different outcomes. In a simple illustration, the paper begins by assuming an APR of 200 percent, in line with many estimates, and then calculates the actual cost for the average user using the sample proportions in the data set.<sup>161</sup> They find that the 200 percent APR translates into an overall effective rate of ninety-one percent, and conditional on the various outcomes, it is 192%, 66%, and -69% for purchase, return and skip, respectively.<sup>162</sup> One can conclude that APR is accurate only for the relatively small proportion of customers who pay to term, and arguably, even those customers would be better served by other forms of disclosure attached to the merchandise, like cash prices, maximum total due, etc.

#### CONCLUSION

This essay surveyed work analyzing actual transactional data drawn from rent-to-own stores around the country, including the industry leader Rent-A-Center.<sup>163</sup> Several observations are clear: First, the primary customer base is the “working poor.” A consistent result out of these studies was that those relatively old, employed relatively long and at low wages paid more rent, stayed in the contract longer and were more likely to purchase the underlying merchandise. Also, consistent with other work, we found women and the young to be over-represented. One implication is that RTO is serving as a financing mechanism for those who have few financial alternatives.

158. Anderson & Jackson, *supra* note 15, at 302-303.

159. The cost of RTO, expressed as an APR, is frequently raised by investigators and critics. See, e.g., Freedman, *supra* note 9; Hill, *supra* note 9; Zikmund-Fisher, *supra* note 11, at 201.

160. To calculate an APR, treat the rental fees as installment payments and assume that all payments will be made. See Roger M. Swagler & Paula Wheeler, *Rental-purchase Agreements: A Preliminary Investigation of Consumer Attitudes and Behaviors*, 23 JOURNAL OF CONSUMER AFFAIRS 145, 147 (1989).

161. *Return, Purchase, or Skip?*, *supra* note 129, at 321.

162. *Id.* at 322.

163. The publicly traded Rent-A-Center Inc. self-reports a market share of thirty-two percent, based on store count as of June 30, 2013. *Rent-A-Center: Investor Relations*, RENT-A-CENTER, <http://investor.rentacenter.com/phoenix.zhtml?c=90764&p=irol-irhome> (last visited Nov. 22, 2013).

Second, rent-to-own is an expensive way to obtain merchandise. However, one could also say that being poor is expensive. When one does not have financial resources or access to conventional credit, the alternatives are bleak. One reason RTO is used for so many washers and dryers is that the alternative is an expensive weekly trip to the laundry mat that one will have to make indefinitely. As another alternative, one could use lay-away or simply defer consumption until one has sufficient savings. However, neither provides immediate product access and the consumer might well find saving to be difficult.

Third, there is significant business risk catering to this clientele. The data shows a substantial number of customers skipping at a rate roughly double the conventional retail loss rate.<sup>164</sup> Also, a large number of payments are made late and there is much unpredictability on when those payments can be expected. Much of this variability speaks to the financial situation of the customer base and, indirectly, to their need for financial mechanisms like RTO.

Finally, the typical RTO contract contains several embedded options and the evidence suggests that consumers are deriving value from them. Further, evidence suggests consumers utilize these options rationally. The studies seemed to detect a subset of customers who are more akin to renters and another more akin to purchasers. Also, given a particular outcome, purchase, return, or skip, the expected duration as a percentage of the total contract time was constant—as if customers were trying to optimally exercise their options.

A unifying theme of the research assessed in this essay is an attempt to discover the true nature of the RTO agreement by objectively analyzing actual transactions. Such an understanding is important for the public policy debate over the rent-to-own industry. At the same time, it also offers insights into consumer financial behavior. While some of those insights are specific to financially constrained individuals, some may generalize to other consumer loan markets both subprime and conventional. For instance, results concerning how various contractual terms impact the ultimate outcome could suggest ways to improve other consumer debt instruments. Further, the consumer behavior observed with these RTO transactions is surprisingly rich and nuanced. The results, in part, illustrate trade-offs and cross-subsidization implicit in the contractual arrangement. Future research

164. For instance, the National Retail Federation, the largest retail trade organization, reported a 2011 loss (also known as “shrinkage”) rate of 1.41 percent. Kathy Grannis, *National Retail Security Survey*, NATIONAL RETAIL FEDERATION (June 22, 2012), <http://blog.nrf.com/2012/06/22/national-retail-security-survey-retail-shrinkage-totaled-34-5-billion-in-2011/>.

will likely move in several different directions and will, hopefully, provide additional insights into the industry and consumer behavior.

