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Payment patterns and Iowa's winter shutoff moratorium

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LOW-INCOME PAYMENT PATTERNS DURING IOWA'S WINTER SHUTOFF MORATORIUM

Fisher Sheehan & Colton, Public Finance and General Economics (FSC) released a February 2002 study that examined whether Iowa utility customers protected by a winter shutoff moratorium respond by stopping or substantially reducing the payments which they would otherwise make toward their winter utility bills. The study is based on 38 months (April 1998 through May 2001) of utility payment records from roughly 3,000 recipients of Low-Income Home Energy Assistance Program (LIHEAP) benefits in central and northwest Iowa.

Recognizing the dangers of the lack of home energy during cold weather months, Iowa legislators mandated adoption of a winter utility shutoff moratorium. Section 476.20 of the Iowa Code provides that a household certified to be eligible for benefits from either LIHEAP or the federal Weatherization Assistance Program (WAP) shall not be subject to the disconnection of service between the dates of November 1 and April 1.

From the inception of the Iowa winter shutoff moratorium, arguments have been raised that the blanket prohibition on the termination of service during the winter season would result in customers deciding to stop making payments toward their home utility bills. In the absence of the potential use of service termination as a collection tool, the argument goes, customers will stop paying their bills in order to, in effect, take a "loan" from the utility throughout the moratorium period.

The purpose of the FSC analysis was to empirically examine one group customers protected by the Iowa winter moratorium to

determine whether the concerns over winter bill nonpayment have any empirical support.

THE DATA ANALYSIS

An examination of the monthly arrears of Iowa's LIHEAP recipients might at first blush appear to support the conclusion that these low-income customers substantially curtail their payments during winter months when utilities are constrained by the state's winter shutoff moratorium. FSC compared, in three different years, the arrears of LIHEAP customers in the four month period representing the winter heating seasons with the four month period immediately preceding the heating season. The winter months of January 1999 through April 1999, for example, were compared to the months of September through December 1998. Average arrears were calculated by dividing the sum of all arrears appearing on bills by the total number of bills rendered.

The average arrears for the four-month winter period is higher than the corresponding non-winter months in two of the three years. The average arrears for the four-month winter period January – April 1999 was 33% higher than the corresponding four-month non-winter period (\$65.25 vs. \$88.25). The average arrears for the four-month winter period January – April 2001 was 37% higher than the corresponding four-month non-winter period (\$62.25 vs. \$85.50). In eight of the 12 winter heating months over three years, the arrears appearing on the bill during the month were higher than the average arrears for the four month period immediately preceding the winter period.

A closer examination of the Iowa data, however, reveals that this conclusion as to increased payment trouble during the winter moratorium months is in error.

PAYMENT OUTCOMES

The analysis of the payment impacts of the Iowa winter moratorium considers a range of metrics testing whether utility bill payments are made in a

full and timely fashion. Payment outcomes have been measured using the following metrics:

- **Complete payment:** If the customer is billed \$100, the company wants to collect \$100.
- **Prompt payment:** If the customer receives a bill that is due on the 20th of the month, the company wants its payment no later than the 20th of the month.
- **Regular payment:** If the customer receives 12 bills in a year, the company wants 12 payments in a year, one in response to each bill.

Weighted Arrears

The use of “weighted arrears” as a mechanism to assess payment outcomes is based on a foundation first provided by the Bureau of Consumer Services (BCS) of the Pennsylvania Public Utilities Commission. According to a 1983 BCS analysis, contrary to the argument by that state's utility companies, the Pennsylvania winter shutoff moratorium did not result in an increase in the number of unpaid bills, or the amount of unpaid bills, that would have existed in the absence of a moratorium. The BCS study reported that:

“Average overdue bills are at a low in November and rise to a high point in March or April. The apparent relationship of this pattern to Public Utility Commission regulations is obvious. That is, arrears are greatest at the end of the Commission's winter termination restrictions (December 1 to March 31 of the following year) and have been reduced to their lowest point immediately prior to the introduction of those restrictions for the following year. This pattern is consistent with the assertion put forward by utilities that they would be able to control arrearages if there were no winter termination restraints. However, the seasonal fluctuations are substantial only for heating accounts. Arrearages for non-heating accounts show only minor seasonal fluctuations. A comparison of [the data] suggests a simple

explanation for this difference, that is, that the size of arrearages is related to the size of monthly bills. Heating customers' bills grow radically in the winter and so do their arrearages. Non-heating customers' bills change very little seasonally and their arrearages follow suit. In other words, if the assertion that winter termination restraints invite nonpayment were correct, then non-heating arrearages should show the same seasonal pattern of variations as do heating arrearages. That they do not casts substantial doubt on the assertion that PUC winter termination restraints are responsible for willful non-payment and consequent collection problems."

This Pennsylvania discussion introduces the notion that any assessment of arrears must control for the impact of monthly bills. The BCS report is consistent with the BCS recommendation, often stated, to use a "weighted arrears" or "bills behind" statistic to factor out the impact of increased arrears caused by factors other than nonpayment.

BCS explains that its "bills behind" statistic "permits comparisons to be drawn between companies by eliminating the effects of different customer bills on arrearages." Without such a measure, "the interpretation of average arrearages, either over time or in comparison between companies, presents some difficulties."

A similar analysis performed for the Iowa winter moratorium evaluation shows the number of average "bills behind" by month starting with June of a year and continuing through May of the following year. The time periods studied, therefore, included the following: (1) June 1998 through May 1999; (2) June 1999 through May 2000; and (3) June 2000 through May 2001. These periods were selected to ensure that the winter heating season, the four months immediately preceding the winter heating season, and the two months immediately succeeding the winter heating season were in the same data set.

The Iowa data shows that the number of bills behind that Iowa LIHEAP recipients incur

fluctuates within a very narrow band over the course of the year. While arrears unquestionably go up during the high cost winter months, the increase is not substantial. In the June 1998 – May 1999 period, the "bills behind" in January through March were virtually identical to the "bills behind" in July through October. During the June 1999 - May 2000 and the June 2000 – May 2001 periods, the "bills behind" during the winter months were actually *lower* than the bills behind for the corresponding non-heating/non-moratorium months.

Just as found by the Pennsylvania BCS in 1983, in Iowa, while the dollar level of arrears tends to be higher during the winter moratorium months, this results from the fact that bills are higher, not from the fact that a greater number of bills remain unpaid.

Payments Resulting in \$0 balances to Total Number of Payments

Despite the contribution of LIHEAP benefits to help pay winter home energy bills, a relatively small number of LIHEAP recipients were consistently able to make monthly payments that reduced their account balance to zero dollars, even when monthly payments were made. The Iowa data was analyzed using an index of the number of accounts on which monthly payments were made to the number of accounts on which such payments reduced the account balance to \$0. If the index is 1.0, 100% of the payments reduced the balance to \$0. If the index is 0.5, 50% of the payments reduced the account balance to \$0. Accounts on which no payments were made in a month are not included in this analysis. A \$0 balance includes those accounts having credit balances.

Several important observations march forward from the Iowa data. First, the data indicate that the winter moratorium does not result in a substantial change in winter payment patterns by low-income customers. The numbers of payments in January through April which reduce the account balance to \$0 do not substantively differ from the numbers of such payments reducing account balances to \$0 in

the non-moratorium months.

In fact, it is interesting to see how the LIHEAP benefits flow through this data. The jump in payments resulting in a \$0 balance in December and January might at first seem counter-intuitive. It would not be immediately evident, in other words, why the number of customer payments resulting in a \$0 balance would actually *increase* when the higher-cost cold weather months came around. The explanation lies with LIHEAP. LIHEAP payments made in November and December reduce total balances for recipients to the point where an increased number of those recipients can zero out their account balance in that month or in the ensuing month.

Dollars of Monthly Payments to Dollars of Monthly Bills for Current Usage

If a LIHEAP recipient is not generating a \$0 balance in a particular month, the next logical question is whether the customer is at least “catching up,” or whether that customer is falling further behind. In order to maintain the status quo relative to outstanding arrears, the customer must at least make payments equal to the total bill for current usage. Irrespective of whether a customer makes a payment towards his or her arrears, if the January bill for current usage is paid in January, the customer, at the least, has fallen no further behind.

In the Iowa analysis, customer bills for current usage are indexed to customer payments. If the index is 1.0, the total dollars in payments exactly equaled the total dollars in bills for current usage. If the index is 0.5, the payments equaled 50% of the bills, while if the index is 1.2, the payments equaled 120% of the bills for current usage. A payment of more than 100% of the bill indicates that the customer not only paid the entire current bill, but made some payment towards arrears as well.

The Iowa LIHEAP recipients as a group consistently made their payments throughout both the winter moratorium season and the non-

heating season. While payments did not equal current bills in the winter heating season, the dip in payments in relation to current bills does not support the conclusion that low-income customers protected by the winter moratorium consistently, let alone systematically, substantively reduced the payments being made.

In fact, the apparent dip in the number of payments made during the period January through March can, in part, be attributed to the receipt of LIHEAP assistance in the preceding month. In December 2000, for example, payment of LIHEAP benefits resulted in a ratio of 1.3, to be followed by a ratio of only 0.6 in January. The cause for the January dip is, however, in substantial part, attributable to the fact that part of the January bill had been *prepaid* by the December LIHEAP payment.

That this, in fact, is the case can be seen by comparing the aggregate dollars of payments to the aggregate dollars of bills for current use. In the aggregate, Iowa LIHEAP recipients were billed \$1,718,872 in the four months of the 1999/2000 winter heating season and made \$1,554,780 in payments. Iowa utilities collected 90% of the revenue billed during the winter months through winter month payments.

Even in the high cost 2000/2001 winter heating season, Iowa LIHEAP recipients were billed \$2,739,608 and made \$2,407,071 in payments (87.9% of billed heating season revenue paid through heating season month payments). While a substantial part of those payments clearly represented the LIHEAP benefits provided, nonetheless, this data does not support the conclusion that Iowa’s low-income customers stop making their winter bill payments when protected by the winter shutoff moratorium.

***Total Number of Payments vs.
Total Number of Bills***

The regularity of payments can be measured by indexing the total number payments to the total number of bills rendered each month. If "some" payment is made on an account in any given month, there is an increased likelihood that the customer will be able to make a future payment sufficient to reduce the account balance to \$0.

The July bill is easier to pay in full, in other words, if the customer has made *some* payment toward the June bill, even if the June payment is only a partial payment.

Iowa LIHEAP recipients tend to make almost one payment for each bill they receive for home energy service. These payments may not reduce the total balance to \$0. Neither may the payments cover the entire bill for current usage. The winter moratorium, however, does not result in LIHEAP recipients deciding to *stop* making payments on a widespread, let alone universal, basis.

Taking out the seemingly anomalous number of payments in October and November of 1999 (a time when supplemental LIHEAP payments were made which were small relative to the typical annual benefit and were insufficient to pay entire bills), the index of payments made to bills rendered tends to fluctuate in a narrow band of between 0.8 and 1.1 each month.

SUMMARY AND CONCLUSIONS

It is often argued that adoption of a winter moratorium on the termination of utility service will result in a wholesale increase in winter nonpayment. Under this reasoning, consumers who are not subject to the disconnection of service in response to their nonpayment have no incentive to make their payments.

A review of the payment patterns of Iowa LIHEAP recipients in central and northwest Iowa, as well as a review of payment outcomes for those same LIHEAP recipients, does not

support the conclusion that the existence of a winter utility shutoff moratorium results in a substantive change in payment practices. Iowa's winter shutoff moratorium is an important health and safety protection for Iowa's low-income customers who frequently find that they face high home energy bills that are simply not affordable. The moratorium has been implemented without creating nonpayment problems for Iowa's utilities.

Persons interested in receiving a copy of the full Iowa report, titled "Winter Weather Payments: The Impact of Iowa's Winter Utility Shutoff Moratorium on Utility Bill Payments by Low-Income Customers" (February 2002), can send a request to:

publications@fsconline.com

The full report includes the data tables and figures supporting the text above.

Fisher, Sheehan and Colton, Public Finance and General Economics (FSC) is a research and consulting firm with offices in Belmont (MA), Scappoose (OR), and Iowa City (IA).

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