

An Empirical Analysis of the Use of Money Orders, the Payment System of the Poor

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Although money orders have been available in the United States since the Civil War, until the mid 1970's and the failure of United States Navigation Company and Universal Money Orders, there had been little analysis of the money order market. This study empirically investigates the determinants of money order usage by households. The results of the study, which utilizes two large national samples, indicate that money orders are clearly an inferior good which have a high probability of being purchased by a low income, young, ethnic minority.

I. INTRODUCTION

Money orders have been available in the United States since the Civil War but actually originated in France in the form of postal money orders in 1627. Yet until the mid 1970s, there had been very little analysis of the money order market in the United States. It took the failure of United States Navigation Company and Universal Money Orders in 1977 to focus attention on the money order industry. This failure left 250,000 customers holding over \$15 million in dishonored money orders.

Horvitz and Harper (1980) estimated that in 1977 nearly a billion money orders were sold with a total value of over \$40 billion dollars. Assuming no growth in the number of money order sales since 1977, and adjusting only for price changes, a total value of over \$87 billion were sold in 1991. Despite this long history and the significant size of the market, money orders remain a forgotten part of the payment system for researchers.

The lack of research information on money orders is due to several factors.

1. Most states do not require money order companies to submit data related to volume of money order sales.
2. Information on money orders is difficult to compile because of the fragmented nature of the market. Little, if any, financial data are available on the vast number of small issuers in the market such as liquor stores and small grocery stores. Often, no record exists of even how many such firms there are.
3. Money order information is often combined with travelers' checks or certified checks and is difficult to separate.
4. Many licensed issuers do not file public financial statements because they are privately held and have less than 500 shareholders.

The purpose of this study is to empirically investigate the determinants of usage of money orders by households. In Section II, the background and the nature of the money order industry are presented. Section III contains a review of information on the users of money orders found in a previous study. The data source and the empirical results are discussed in Section IV. Section V is the summary and conclusion.

II. BACKGROUND ON THE MONEY ORDER INDUSTRY

A money order, like a check, is a means of transmitting money from one party to another. More specifically, a money order is an order for the payment, usually to a third party, of a sum of money specified by the purchaser. For example, a person could go to the local post office and for a small fee plus one hundred dollars, purchase a one hundred dollar money order to pay his utility bill. The purchaser receives the money order from the post office, writes the name of the utility on the money order, and sends it to the utility. Thus, the money order serves the same purpose as a check.

Money orders are included in the M1 definition of the money supply. Bank money orders are considered a part of the "demand deposit" component of M1 and thrift money orders are included in the "other checkable deposit" of M1. Money orders issued by commercial issuers such as American Express are included in the "travelers checks" component. Thus, the exact component of M1 depends on the agency issuing the money order and varies among "demand deposit," "other checkable deposit," and "travelers checks" components.

The structure of the money order industry is focused on the money order issuer.¹ The issuer is the one that is ultimately responsible for the financial obligation created by the sale of the money order. The money order industry has three major types of issuers. The three types are as follows:

1. postal money orders
2. depository institution money orders
3. commercial money orders

Postal money orders are obligations of a Federal government agency and are an implicit obligation of the Federal government. Money orders issued by depository institutions (not by a subsidiary of a depository institution holding company) are insured by the Federal Deposit Insurance Corporation because the money order is a direct obligation of the depository institution and considered deposits.

Commercial issuers of money orders are a very diverse group. In addition to the major issuers such as American Express which have a large national presence, there are a number of very small firms with only one or two offices in one geographic area. Most state regulations require commercial issuers to buy a surety bond to provide holders of their money orders with a guarantee that the instrument will be covered if the firm fails. However, the value of the surety bond is a small fraction of the firm's outstanding money orders on any given day.

Money orders are sold through a system of agents. An agent is a party that directly contracts with the issuer to sell money orders. For example, American Express (the issuer) may contract with a convenience store chain (the agent) to sell money orders. The terms of the contract depend on the desirability of the agent and the degree of competition in the market. Based on these two factors, several items in the contract are negotiable. Three of these items are as follows:

1. the remittance time
2. the rate scale
3. the division of revenue fees

The remittance time is the number of days that may pass before the agent must send the funds from money order sales to the issuer. The longer the remittance time the longer the agent has to use the float from money order sales. The rate scale is generally uniform for all agents. However, if an agent feels the rates are too high, the issuer and the agent can negotiate a special rate structure. The third factor that can be negotiated between the issuer and the agent is the division of revenue fees. The more desirable the agent and the better the market, the larger the share of the proceeds the issuer is willing to give to the agent.

The primary regulators of money order sales are the individual states. Most of the regulation is focused on commercial issuers and agents. There are three main types state regulations. These are as follows:

1. licensing requirements
2. net worth requirements
3. posting of surety bond or securities

In general, any person may obtain a license to engage in the money order business provided that certain legislative requirements are met. In most states, the main requirement is for the department charged with administering the law to investigate the financial condition and responsibility of the applicant. Most states

require that an issuer of money orders must maintain a minimum net worth. The net worth requirement ranges from a low of \$5,000 to a high of one million dollars. A number of states require a licensee of money orders to post some kind of security as evidence of good faith and to protect the public if the licensee defaults. The failure of Universal Money Order and United States Navigation, both subsidiaries of International Express, in 1977 was estimated to have left approximately 400,000 individuals with about \$20 million worth of dishonored money orders. The surety bond provisions proved to be much too small in most states.

State regulation of the money order industry has resulted in little uniformity in requirements or regulation of money order firms. Thus, very little attention has been given to the public policy implications of the payments system used mostly by the poor.

III. THE USERS OF MONEY ORDERS

One previous research study that addresses the question of who uses money orders was conducted by Pierce (1977). The data used for that study were the claim forms submitted to the California Banking Department by the holders of dishonored money orders from the failed Universal Money Order Company. Each of the claim forms contained the person's name, address, number of defaulted money orders held, and the amount of the claim.

Pierce found that, relative to the general population, money order users have lower incomes, have less formal education, are older, and are more likely to be in a minority group. The author concluded that the sample group preferred money orders to checking accounts and used money orders as substitutes for checks for two main reasons. First, most of the sample group did not feel they made enough income to justify a checking account. Secondly, a number of those interviewed felt that filling out the check stubs and worrying about insufficient funds was "too much of a hassle". However, Pierce's study was not based upon scientific sampling procedures and did not apply multivariate techniques to the analysis of the data.

IV. DATA SOURCE AND EMPIRICAL RESULTS

In 1984 and 1986, the Board of Governors of the Federal Reserve System contracted with the Survey Research Center of the University of Michigan to conduct in each year a Survey of Currency and Transaction Account Usage. Between May and August of 1984, a total of 1,946 telephone interviews was obtained from a randomly selected sample of 2,500 families residing in the United States. For the 1986 sample, the Survey of Currency and Transaction Account Usage was conducted as part of the monthly Survey of Consumer Attitudes of the Survey Research Center of the University of Michigan. In this case, telephone interviews are conducted by selecting telephone numbers from a cluster sample of residential numbers. In the 1986

survey, there was a response rate of 75% with a total of 658 interviews completed. A discussion of the results of these Surveys, along with more detailed information regarding the sampling methods, is presented in Avery, Elliehausen, Kennickell, and Spindt (1986, 1987). In this study, household usage of money order users is examined. Unfortunately, the 1984 survey didn't ask households about their money order usage. However, the 1984 survey does provide information on the total dollars of money orders purchased by the household in the previous month. For the 1984 sample a dummy variable, *MORDUSE2*, was created that equals one if the household purchased money orders in the previous month and equals zero if otherwise. The 1986 survey does provide information on money order usage with the binary variable, *MORDUSE*, which equals one if the household uses money orders, and equals zero if otherwise. However, to check the validity of the dummy variable, *MORDUSE2*, created in the 1984 sample, the same procedure was applied to the 1986 sample. Using the 1986 sample, the logit regressions revealed the same results with *MORDUSE* or *MORDUSE2* as the dependent variable.

The Basic Model

The model for money order use was developed as the demand for a financial asset. In this case important independent variables are a scale variable and several demographic variables. The natural logarithm of annual household income for the previous year is the scale variable. Demographic variables that are of interest are race, education, and gender.

A logit regression technique is used to estimate the extent to which the independent variables affect the probability that a household is a money order user.

TABLE 1.
Logit Results
Dependent Variable is MORDUSE2

1984 Survey			
Variable	Coefficient	Chi-square	p-value
Constant	4.81*	19.32	0.00
LNAGE	-0.90*	24.33	0.00
RACE	1.14*	50.91	0.00
LNANNLINC	-0.36*	17.84	0.00

Model Chi-square = 128.11*

Note: * indicates that the chi-square statistic is significant at the 5-percent level.
 LNAGE = Natural logarithm of age of respondent in years
 MORDUSE = Use of money orders by household, equal to 1 if money orders are used, 0 for all others.
 MORDUSE2 = Dummy variable created for 1984 sample, equal to 1 if household purchased money orders in the previous month, 0 for all others.
 RACE = Is the respondent a minority, equal to 1 if black, Hispanic, or Asian descent, 0 for all others.
 LNANNLINC = Natural logarithm of household annual income for the previous year.

TABLE 2.
Logit Results
Dependent Variable is MORDUSE

1986 Survey			
<i>Variable</i>	<i>Coefficient</i>	<i>Chi-square</i>	<i>p-value</i>
Constant	4.93*	6.29	0.01
LNAGE	-1.14*	12.29	0.00
RACE	1.31*	19.25	0.00
LNANNLINC	-0.31*	4.07	0.04

*Model Chi-square = 40.54**

Note: * indicates that the chi-square statistic is significant at the 5-percent level.
 LNAGE = Natural logarithm of age of respondent in years
 MORDUSE = Use of money orders by household, equal to 1 if money orders are used, 0 for all others.
 MORDUSE2 = Dummy variable created for 1984 sample, equal to 1 if household purchased money orders in the previous month, 0 for all others.
 RACE = Is the respondent a minority, equal to 1 if black, Hispanic, or Asian descent, 0 for all others.
 LNANNLINC = Natural logarithm of household annual income for the previous year.

MORDUSE was the dependent variable for the 1986 logit regression analysis, and *MORDUSE2* was the dependent variable for the 1984 logit regression analysis.

Empirical Results

The results of the logit regressions are shown in Tables 1 and 2. For both years, the variables that are statistically significant are *LNAGE*, *LNANNLINC*, and *RACE* as indicated by their respective chi-square statistic. A likelihood-ratio test was also performed to test the significance of each coefficient independently, and the results coincided with the chi-square test. The significant variables have the expected sign on their respective coefficients. This indicates that the probability of money order use is less likely with households that are older, have higher incomes, and are white. Money order use exhibits the behavior of an inferior good, as indicated by the significant negative coefficient on the scale variable, confirming the findings of Pierce (1977). Being black or Hispanic increases the probability of money order use. Moreover, the results are remarkably consistent from one sample to the next.

V. SUMMARY AND CONCLUSIONS

Money orders are an important and sizable portion of the United States payments system. The results of this study, utilizing two large national samples, indicate that money orders are clearly an inferior good which have a higher probability of being purchased by a low income, young ethnic minority.

NOTE

1. For additional discussion of the money order industry, see Gonzalez and Caron (1977).

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