AN ANALYSIS OF THE ROLE OF PAWNSHOPS IN THE FINANCIAL SYSTEM

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AN ANALYSIS OF THE ROLE OF PAWNSHOPS IN THE FINANCIAL SYSTEM*

Mario B. Lamberte, **

I. INTRODUCTION

Our parents used to tell us: "The moment you start earning, buy some jewelry and other properties. You can pawn them whenever you encounter financial difficulties." This "pawnshop mentality" is still prevalent today. One of the reasons,

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perhaps, is the poor functioning of the banking system. Although bank deposit services have been made accessible to many, only a very few persons are able to borrow from banks.*

These days, pawnshops are popular more than ever. Not only are transaction costs on the part of the borrower very minimal, loans are also easily obtained provided an item of value can be presented as collateral. With their rapid expansion in the provinces, pawnshops have definitely taken a developmental role. Padilla (1985) succinctly describes their role in the following manner:

> "These farmers and small entrepreneurs frequently run out of seed money or working capital fund for their trade. With no acceptable collateral for bank loans, they would seek financial relief from usurious lenders. Now, they get their funds from pawnshops in the city, which accept various types of collaterals, such as jewelry and other items of value. When they need money for weddings, funerals, education, pilgrimage, or business, they go to the nearest pawnshop for funds."

Despite its popularity, pawnshops have not been accorded much attention by researchers. To date, there is hardly any rigorous study about pawnshops. In order to partly fill this lacuna, this paper aims to:

1. Briefly review the regulatory framework that guides the operations of pawnshops;
2. Discuss the role of pawnshops in the financial system;

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*See Lamberte and Bunda (1988).

3. Analyze the performance of pawnshops with special emphasis on the following: a) sources and uses of funds, b) interest rates on loans, c) profitability and operating efficiency of pawnshops, and d) linkages between pawnshops and banks; and
4. Test for the existence of economies of scale in the operation of pawnshops.

Each of these objectives are dealt with in the following four sections while the last section contains the concluding remarks.

II. REGULATORY FRAMEWORK

Pawnshops used to operate like a *sari-sari* store with very little government control. In fact, the only time these units came into contact with government agencies was when they paid business registration fees and income taxes. They were not even covered by the Usury Law enacted in 1916.

With the introduction of a set of financial reforms in 1972, the Central Bank was given the authority and responsibility to oversee the entire financial and credit system. This is reflective of the idea put forward by Gurley and Shaw. With this development, non-bank financial intermediaries, which used to operate beyond the purview of Central Bank regulations, came under Central Bank jurisdiction. In particular, Presidential Decree No. 114, dated 29 January 1973, and Central Bank Circular No. 374, dated 13 July 1973, set out specific regulations covering the operations of pawnshops. Like other non-bank financial intermediaries, pawnshops are authorized to lend but are not allowed to accept deposits. Thus, unlike in other countries, pawnshops in the Philippines belong to the formal financial system in the sense that they are regulated and supervised by the Central Bank.*

*See Lamberte and Balbosa (1988) for a discussion of the institutions/individuals that belong to the formal and informal credit markets.

While the new set of regulations may have improved the ability of the Central Bank to stabilize the economy because of the expanded control over the entire financial system, it had definitely created some microeconomic inefficiencies. In particular, profits of pawnshops were squeezed because the Usury Law was applied to them. Other means of raising effective interest rates likewise become regulated. For instance, pawnshops may impose a service charge of 1 percent of the principal loan, but the maximum amount of service charge has been fixed at ₱5.00. Advanced collection of interest on loans beyond one year is not allowed. Moreover, pawnshops are prohibited from dividing the pawn into two or more fractions because this could raise the effective interest rate.

These regulations, which reduce effective interest rates, have been accompanied by regulations which tend to increase costs. For instance, pawnshops are required to have a fire- and burglar-proof steel safe to keep their pawns and records. In addition, the place of business of a pawnshop, and the pawns pledged to it, must be insured against fire and burglary.

As part of its supervisory powers, the Central Bank requires pawnshops to submit financial reports on a regular basis. It may conduct an examination of the financial condition of any pawnshop, inspect or investigate books and records, and the pawnshop's general business affairs administration at its own discretion. Sanctions may be imposed on pawnshops that have been found violating the provisions of Presidential Decree No. 114.

Although currently regulated by the Central Bank, pawnshops are admittedly the least regulated among the formal financial institutions. Those desiring to open a pawnshop do not have to seek prior clearance from the Central Bank, unlike other financial institutions such as finance companies. Also, branching regulations that are applied to banks are not applied to pawnshops. For the former, the Central Bank discourages the opening of more banks or bank branches in the so-called "overbranched" areas through prohibitive license fees or a high minimum capital requirement. For the latter, there is no limit as to the number of pawnshops to be opened in a certain area.

In addition to this, the 1980 financial reforms have been favorable to pawnshops. In particular, the lifting of the interest rate ceiling tends to improve the profitability of pawnshops.

The financial crisis of 1983 caused the collapse of a significant number of financial institutions, particularly small ones. Consequently, the Central Bank has become more cautious in granting licenses for the opening of new banks, and in fact, has virtually declared a moratorium on this. The Central Bank has instead encouraged more mergers/ consolidations among banks. Potential investors are encouraged to buy closed banks instead of opening new ones.

In contrast, pawnshops have been spared from such restriction. In fact, the minimum capital requirement for pawnshops imposed in 1973 has remained the same till the present, whereas the minimum capital requirement for banks and other non-bank financial institutions has been increased twice since 1973.

III. PAWNSHOPS AND THE FINANCIAL SYSTEM

Financial institutions belonging to the formal financial system may be categorized into two groups; namely, the banking institutions and the non-bank financial intermediaries. Both are authorized to lend funds but the latter are not allowed to accept deposits. Pawnshops are classified under non-bank financial intermediaries.

The Philippine financial system has been dominated by the commercial banking system. In 1985, about 64 percent of the total assets of the financial system belonged to the commercial banking system (see Table 1). The presence of specialized government banks and government non-bank financial intermediaries has been a special feature of the financial system. They ranked second and third, respectively, in terms of financial assets. Of the financial institutions, pawnshops constitute the smallest group. In 1985, their total combined assets stood at ₱808 million, which were less than 1 percent of the total assets of the entire financial system. However, they are by far, the most accessible lending institutions, especially to small firms and households.

Towards the end of 1983, the country experienced its worst balance-of-payments crisis. However, the effect was fully felt only in the following year when the inflation rate soared to more than 50 percent. One of the consequences of the crisis is the collapse of a significant number of banks while those that remained suffered huge runs on their deposits. The resulting instability of the entire financial system lasted for another two years. As a result, the real assets of the banking system shrank for three consecutive years starting in 1984 (see Table 2).

TABLE I
THE PHILIPPINE FINANCIAL SYSTEM, 1985

Institutional Group	Total Assets (in million pesos)	Share (in percent)
A. Banking Institutions		
Commercial Banks	279,310:00	64.44817
Thrift Banks	14,958.00	3.451504
Rural Banks	8,601.30	1.984613
Specialized Government Banks	84,891.00	19.58724
B. Non-Bank Financial Intermediaries		
Investment Houses	6,600.00	1.522845
Financing Companies	6,164.00	1.422245
Securities Dealers/Brokers	463.00	0.106830
Investment Companies	10,971.00	2.531383
Fund Managers	1,649.00	0.380480
Lending Investors	93.00	0.021458
Pawnshops	808.00	0.186433
Government NBFIs	17,894.00	4.128755
Venture Capital Corporations	125.00	0.028842
Mutual BLAs	16.00	0.003692
Non-Stock SLAs	847.3	0.195501
TOTAL	433,399.00	100%

Source: Financial Fact Book, Central Bank of the Philippines, 1986.

TABLE 2
COMPARATIVE PERFORMANCE OF PAWNSHOPS AND BANKING INSTITUTIONS

Year	Pawnshops		Banking System	
	Real Assets (in million pesos)	Growth Rate (in percent)	Real Assets (in million pesos)	Growth Rate (in percent)
1980	101.6	9.7	63206.2	6.0
1981	105.9	4.2	67343.8	6.6
1982	111.1	4.9	75061.5	11.5
1983	114.1	2.7	82801.7	10.3
1984	108.3	-5.0	65587.1	-20.8
1985	119.3	10.1	55810.0	-14.9
1986	146.6	22.9	41160.0	-26.2

Source of Basic Data: Financial Fact Book, Central Bank of the Philippines (various years).

Although pawnshops were not spared from the adverse effects of an abnormally high inflation rate in 1984, they quickly recovered in subsequent years. In fact, the growth rates of their real assets after 1984 were higher than those in previous years. Since the real assets per pawnshop have remained almost the same during the period 1984-86, the significant rise in real assets after 1984 can only be attributed to the increase in the number of pawnshops (see Table 3).

During the financial crisis, banks preferred to hold liquid and/or safe assets, like Treasury and Central Bank bills which yielded very attractive returns. It was a difficult time for all types of firms especially those which were dependent on banks for working capital. A significant number of them closed shop. Others, especially the small ones, tried to survive by looking for alternative sources of credit, such as informal moneylenders and pawnshops. On the other hand, consumers who suffered big cuts in their real incomes dug deeper into their financial savings. Once depleted, they started liquidating their physical assets. The pawnshops provided a convenient way of liquidating those assets.

Indeed, the strong demand for the services of pawnshops made them a very attractive business venture. This has not gone unnoticed by small entrepreneurs. Pawnshops have sprouted in almost every corner of the country. Whenever a new commercial building is completed, chances are there is one or two new pawnshops that are also opened, in it.

TABLE 3
NUMBER AND TOTAL ASSETS OF PAWNSHOPS

Year	No. of Pawnshops	Growth Rate in the Number of Pawnshops	Total Real Assets (in million pesos)	Growth Rate in Real Assets (in percent)	Ave. Real Asset Size (in pesos)
1980	544	9.2	101.6155	9.744	186,793
1981	574	5.5	105.8961	4.213	184,488
1982	622	8.4	111.1142	4.928	178,640
1983	701	12.7	114.0697	2.660	162,724
1984	848	21.0	108.3382	-5.025	127,757
1985	953	12.4	119.3124	10.13	125,197
1986	1143	19.9	146.6091	22.88	128,267

Source of Basic Data: Central Bank.

During the height of the financial crisis, pawnshops were very selective with regard to the kind of assets they accepted as collateral. They preferred less bulky high-valued items like jewelry. Lately, however, with the stiffer competition, pawnshops have broadened the range of items they accept as collateral. Some pawnshops even accept appliances like electric fans and radios. The stiff competition among pawnshops has also brought down the effective lending rates charged. Presently, all pawnshops no longer impose service charges and liquidated damage fees for overdue loans. While most pawnshops still charge 5 percent per month for their loans, others have started giving discounts, especially to highly-favored clients.

IV. ANALYSIS OF THE PERFORMANCE OF SAMPLE PAWNSHOPS, 1981-1986

This section attempts to analyze the performance of pawnshops. Indeed, there is very little information published by the Central Bank about the performance of pawnshops. Perhaps, their size does not merit closer attention by the Central Bank, and the fact that there is hardly any pawnshop that has collapsed. If there were, it has not caused sufficient alarm to the general public, unlike the case of some finance companies that failed.

To be able to do a thorough analysis of the performance of pawnshops, a sample of 100 pawnshops were drawn randomly from a total of 1,143 pawnshops operating as of 1986. Balance sheets and income statements of the sample pawnshops were obtained and analyzed.

1. Basic Characteristics of the Sample Pawnshops

Of the total sample, only 12 percent were operating before 1981. The rest are new entrants into the market. Seventy-two (72) percent are located in the urban centers or cities. With regard to the type of ownership, only 20 percent of the total sample are incorporated. The great majority are single proprietorships and/or partnerships.

Based on the 1986 data, the smallest pawnshop in the sample had assets amounting to ₱100,539, while the biggest pawnshop had assets amounting to ₱18,739,832. The average asset size for the sample is ₱1,319,117.

2. Sources and Uses of Funds

Pawnshops rely to a great extent on their own funds to support their operations. About 70 to 80 percent of their total resources come from equity (see Table 4), while the rest are sourced from borrowings. As mentioned earlier, pawnshops are not authorized to mobilize deposits. Hence, the owner's capital serves as major source of funds.

Loans comprise about 70 percent of the pawnshops' assets. The remaining balance are made up of cash reserves, deposit with banks, investment in financial instruments, and fixed assets. It is worthy to note that during the period of crisis, pawnshops did not switch to liquid assets as the banks did.

Pawnshops cater mainly to small enterprises and households which encounter temporary liquidity problems. About 80 percent of the loans granted are ₱500 and below (see Table 5), while loans over ₱2,000 are negligible.

The average loan size from 1981 to 1986 is presented in Table 6. Although the average *nominal* loan size increased between 1981 and 1983, the average *real* loan size declined. In 1984, both the average *nominal* and *real* loan sizes dropped precipituously. Although they rebounded in the next two years, the 1986 average real loan size is still lower than the 1981 level.

TABLE 4
SOURCES AND USES OF FUNDS
(in percent)

Year	Equity / Capital + Liabilities	Loan / Assets
1981	82.2 (24.6)	80.1 (14.8)
1982	86.9 (22.6)	79.8 (13.7)
1983	78.8 (27.5)	71.4 (18.5)
1984	78.3 (27.7)	76.0 (17.1)
1985	78.2 (28.1)	75.5 (18.0)
1986	81.0 (25.8)	71.8 (18.2)

Note: Figures in parentheses are standard deviations.

Source of Basic Data: Financial Statements of a Sample of Pawnshops.

TABLE 5
DISTRIBUTION OF LOANS GRANTED ACCORDING TO SIZE
(in percent)

Year	₱500 and below	₱501-₱2,000	Over ₱2,000	Total
1981	81.7	18.0	0.3	100
1982	73.5	26.2	0.3	100
1983	89.6	10.1	0.3	100
1984	83.1	13.8	3.1	100
1985	79.8	19.1	1.1	100
1986	73.0	23.2	3.8	100

Source of Basic Data: Financial Statements of a Sample of Pawnshops.

TABLE 6
AVERAGE SIZE OF LOANS GRANTED
(in pesos)

Year	Nominal	Real
1981	212	66.8
1982	214	62.2
1983	173	45.0
1984	252	43.8
1985	305	45.0
1986	418	60.6

Source of Basic Data: Financial Statements of a Sample of Pawnshops.

There is no information regarding the uses of loans provided by pawnshops. This is because pawnshops, in practice, do not ask about the purpose of the loan, nor do they examine the repayment capacity of the borrowers since all loans are secured by chattels. Although there is a prohibition against lending an amount less than 30 percent of the appraised value of the security offered for the loan by the pawner, pawnshops may quote a lower appraised value since they make the appraisal themselves. Hence, pawnshops are not worried about loan defaults since they can sell the chattels at market price.

There is also no information regarding the structure of loan maturities of pawnshops, although it is common knowledge that pawnshops do not lend beyond one year. In some cases, pawnshops may allow rollover of loans. The average ratio of total loans granted to total loans outstanding, which is used here as a rough measure of loan turnover, is about 4 (see Table 7).

3. Interest Rates on Loans

The Central Bank has not been monitoring the interest rates charged by non-bank financial intermediaries. There is a general perception that non-bank financial intermediaries usually charge higher lending rates than banks for the following reasons: (1) Unlike banks, non-bank financial intermediaries mainly use their own funds which have a high opportunity cost; and (2) These intermediaries service small loans and exact high transaction costs per peso lent, whereas banks concentrate on large loans, and thereby are able to achieve economies of scale.

TABLE 7

THE RATIO OF LOANS GRANTED TO TOTAL LOANS OUTSTANDING

Year	Average	Standard Deviation
1981	3.85	9.85
1982	3.78	3.50
1983	4.20	1.79
1984	4.21	2.89
1985	3.87	1.74
1986	4.45	3.17

The interest rate charged by pawnshops from 1981 to 1986 were estimated using data from profit and loss statements, and the balance sheets of sample pawnshops. The interest rate is derived by taking the ratio of interest income to total loans outstanding. The effective interest rate is derived similarly by adding income from service charges to interest income. The results are shown in Table 8.

It can be gathered from the results that service charges contributed 2 to 3 percentage points to the effective interest rate. This is above the prescribed service charge of one percent of the principal loan. The nominal interest rates have been consistently rising since 1982. The real interest rates followed the trend established by nominal interest rates, except in 1984, when the inflation rate went up to 50.3 percent. It can be noted that the real interest rates charged by pawnshops have been very high especially in 1986, even with an inflation rate of only 0.8 percent.

The average bank rates on 91-day secured loans and the average lending rates of three leading finance companies are also presented in Table 8. It can be observed that the real interest rates enjoyed by pawnshops were at least three times higher than those obtained by banks in most years. While the nominal lending rate charged by banks went down in 1986 as a result of excess liquidity experienced by the banking system, and a softening in the demand for credit, the nominal lending rate charged by

TABLE 8

LENDING RATES OF PAWNSHOPS, BANKS AND FINANCE COMPANIES

(in percent)

Year	Pawnshops				Bank Rate on		Finance Companies	
	Interest Rate		Interest Rate + Service Charge		Secured Loans		Nominal	Real
	Nominal	Real	Nominal	Real	Nominal	Real		
1981	23.8 (8.8)	10.7	26.5 (9.6)	13.4	16.5	3.4	28.0	14.9
1982	21.6 (9.8)	11.4	23.4 (11.6)	13.2	16.5	6.3	28.9	18.7
1983	32.1 (12.7)	22.1	35.3 (14.0)	25.3	18.6	8.6	34.3	24.3
1984	40.4 (23.2)	-9.9	43.2 (24.8)	-7.1	26.2	-24.1	58.9	8.6
1985	45.6 (28.8)	22.5	48.2 (29.9)	25.1	26.9	3.8	40.4	17.3
1986	49.5 (32.3)	48.7	52.2 (33.7)	51.4	14.0	13.2	27.5	26.7

Note: Figures in parentheses are standard deviations. Finance companies included : Bank of America Finance Corporation, Manila Bank Finance Company, and Filinvest Credit Corporation.

Source of Basic Data: (1) Financial Statements of a Sample of Pawnshops
(2) Central Bank Review (various years)
(3) Unpublished reports of finance companies.

pawnshops continued to go up. Strong demand for the services of pawnshops by households that suffered a loss in real income and by small firms that encountered financial difficulties, may have contributed to the rise in interest rates charged by pawnshops in 1986.

Pawnshop and finance companies had almost the same lending rates during the period 1981 to 1983. In 1984, only finance companies were able to adjust their rates significantly above the inflation rate. After 1984, the lending rates of finance companies went down as a result of the decrease in the demand for consumer loans. This suggests that acquisition of new consumer durables considerably slowed down during the crisis period, while mortgage transactions covering previously acquired consumer durables started to pick up in pawnshops. More recently, the market for second-hand goods has boomed, and finance companies have begun financing the acquisition of high-valued, second-hand goods, such as cars, refrigerators, etc.

The effective interest rate charged by pawnshops has already gone down in 1987. As mentioned earlier, the stiff competition among pawnshops brought about by the influx of new entrants, have prompted them to do away with service charges and liquidated damage fees.

4. Profitability and Efficiency of Pawnshops

The high interest rates enjoyed by pawnshops have made pawnshop operations very profitable. Table 9 shows the rates of

TABLE 9
RATE OF RETURN ON EQUITY
(in percent)

Year	Pawnshops	Five Biggest Commercial Banks
1981	6.9 (9.9)	14.2 (4.0)
1982	2.6 (6.7)	13.1 (5.0)
1983	6.8 (10.2)	14.6 (6.0)
1984	21.1 (42.3)	17.4 (6.6)
1985	20.2 (23.9)	18.4 (7.6)
1986	18.4 (22.4)	17.5 (4.2)

Note: Figures in parentheses are standard deviations. The five biggest commercial banks are: Bank of the Philippine Islands, Metropolitan Bank, Allied Bank, Far East Bank, and Philippine Commercial International Bank.

Source of Basic Data: (1) <u>Financial Statements of a Sample of Pawnshops</u>.
(2) <u>Business Day 1000 Top Corporations (various years)</u>.

return on equity which pawnshops and the five biggest commercial banks realized during the period 1981 to 1986. From 1981 to 1983, the profit rates obtained by pawnshops were considerably lower than those experienced by the five biggest commercial banks. However, during the crisis, i.e., 1984 to 1986, pawnshops improved considerably their profitability, while the five biggest commercial banks made only a modest improvement in their profitability. It seems that the pawnshops' profitability varies inversely with the state of the economy. In the recent period, the profitability of pawnshops is comparable with that of the five biggest commercial banks. With the expected improvements in the economy in the coming years and stiffer competition, the profitability of pawnshops will likely decline, although they will continue to be a profitable venture.

The profitability of pawnshops may be attributed to their operational efficiency. The ratio of net income to gross operating income is used here as a rough measure of operational efficiency. It indicates the efficiency of management in controlling operational costs. Table 10 presents the indicated ratios from 1981 to 1986. The figures suggest that pawnshops had been efficient in all the years under consideration. At least 25 percent of their gross operating income were retained as net profits. Moreover, the relative efficiency of pawnshops seems to be independent of the state of the economy.

Pawnshops are found to be more efficient than the five commercial banks. The latter's ratios of net income to gross operating income were less than 12 percent in all the years examined.

5. <u>Linkages with Banks</u>

There are two ways by which pawnshops can be linked with the banking system. One is that pawnshops utilize banks as a depository for their reserves. Table 11 shows the average outstanding deposits of pawnshops with banks as a percent of their total assets during the period 1981 to 1986. Such deposits are small, comprising only 4 to 11 percent of the total assets of pawnshops. Pawnshops need not keep a high amount of reserves since all their loans are secured and do not have deposit liabilities.

The other way by which pawnshops can be linked with banks is to treat the latter as a source of additional liquidity. Table 11 shows the average outstanding borrowings of pawnshops from banks as a percent of their total resources during the period 1981 to 1986. About 28 to 34 percent of the resources of pawnshops come from borrowings. This indicates that pawnshops are net borrowers of funds from the banking system. The picture that can be gathered here is that banks provide wholesale credit to pawnshops, which in turn, retail them to small borrowers. This suggests that banks are indirectly lending to households and

TABLE 10
AVERAGE RATIO OF NET INCOME TO GROSS OPERATING INCOME
(in percent)

Year	Pawnshops	Five Biggest Commercial Banks
1981	24.9 (39.6)	9.9 (3.4)
1982	12.2 (19.5)	8.7 (4.2)
1983	29.8 (40.4)	9.2 (4.3)
1984	34.4 (35.6)	8.1 (3.2)
1985	28.6 (37.9)	10.1 (4.7)
1986	33.7 (35.0)	11.4 (4.2)

Note: Figures in parentheses are standard deviations. The five biggest commercial banks are indicated in Table 9.

Source of Basic Data: (1) Financial Statements of a Sample of Pawnshops
(2) Business Day 1000 Top Corporations (various years)

TABLE II
LINKAGES WITH BANKS

Year	Deposits in Banks as a percent of Total Assets	Loans/Notes Payable as a percent of Total Resources
1981	8.4 (13.3)	28.0 (26.9)
1982	4.4 (9.5)	29.0 (28.3)
1983	11.2 (13.8)	33.9 (26.2)
1984	4.3 (5.0)	34.5 (22.1)
1985	9.9 (14.6)	34.2 (23.0)
1986	9.8 (11.6)	34.1 (23.7)

Note: Figures in parentheses are standard deviations.

Source of Basic Data: Financial Statements of a Sample of Pawnshops.

small firms through the pawnshops. The comparative advantage of each group of financial institutions dictate such kind of relationship. This is similar to the bank-trader-small farmer credit relationship now prevalent in the rural areas.

V. ECONOMIES OF SCALE

We have noted that pawnshops are typically small and cater to small borrowers. One thing that immediately comes to mind is whether there are economies of scale that can be exploited. If there are, pawnshops can further improve their competitive advantage by increasing their size. Therefore, financial policies should be geared towards encouraging pawnshops to increase their size through mergers and/or raising the minimum capital requirement. Knowing the existence of scale economies in pawnshops is considered necessary to arrive at proper policies.

To determine the existence of economies of scale, a simple quadratic cost function in logarithmic form is estimated as follows:

$$\ln TC = a + b\,(\ln TA) + c\,1/2\,(\ln TA)^2 \qquad (1)$$

where TC = total cost, and

TA = total assets

This is a convenient form since the asset cost elasticity (ACE) can immediately be derived from equation (1), that is:

$$ACE = \frac{d \ln TC}{d \ln TA} = b + c\,(\ln TA) \qquad (2)$$

The ACE can vary according to the size of the pawnshops. Because of this feature, this model is better suited for the study's purpose than the popular Cobb-Douglas model. In terms of equation (2), the following propositions hold:

(a) ACE < 1 if there are economies of scale;

(b) ACE > 1 if there are diseconomies of scale; and

(c) ACE = 1 if there are constant returns to scale.

Equation (1) was estimated using ordinary least squares (OLS) method, using the data for 1986 in the estimation procedure. Sixteen (16) observations were dropped from the sample because of incomplete information. The estimated equation is as follows:

$$\ln TC = \underset{(-1.47)}{-14.76} + \underset{(2.12)}{3.12} \ln TA - \underset{(-1.57)}{0.17} \; 1/2 \, (\ln TA)^2$$

$$\bar{R}^2 = .53 \quad F = 48$$

The estimated asset cost elasticities are presented in Table 12. The results show that about 70 percent of the sample pawnshops are experiencing economies of scale. This implies that these pawnshops can improve their competitive advantage further by increasing their size. Of the remaining sample, 11 percent are operating in the region of constant returns to scale while 19 percent are already operating in the region of scale diseconomies. However, such scale diseconomies are mild. Among those experiencing scale diseconomies, the highest asset cost elasticity coefficient is only 1.18.

The asset cost elasticity evaluated at the mean is 0.88. This implies that the average size pawnshop is enjoying substantial scale economies.

In general, the results suggest a policy that would encourage pawnshops to increase their size.

TABLE 12
ESTIMATED ASSET COST ELASTICITIES

Observation	Asset Cost Elasticities				
1				0.662696	0.788653
3	1.159673	0.801306	0.861058	1.159589	0.978793
8	0.916703	0.839996	1.093000	1.029124	0.942442
13	0.877689	1.009499	1.123255	1.042068	1.646852
18	0.558658	0.569987	0.600548	1.100779	1.043406
23	1.129880	0.978619	0.831521	0.809590	1.067311
28	0.919465	0.863773	0.868122	0.829624	0.745489
33	1.092034	0.877028	0.961920	0.901271	0.786234
38	1.063315	0.948170	0.927334	0.734496	0.881234
43	1.741294	0.895725	1.036372	1.027883	1.009711
48	0.843445	0.933924	0.809158	0.804428	0.515235
53	0.543289	0.862697	0.592164	1.150442	0.977917
58	0.712833	0.296176	0.815901	0.771178	0.522222
63	0.841497	0.699086	0.870408	0.797259	1.128507
68	0.596127	1.176131	0.967315	1.086868	0.780515
73	1.116721	0.803514	1.012201	0.315772	0.666368
78	0.903843	1.132222	1.123257	1.165963	0.956441
83	0.907937	1.002230			

VI. CONCLUDING REMARKS

One might be tempted to ask at this point whether pawnshops and banks are substitutes or complements. Our results cannot give us an unequivocal answer to this question. What is clear, however, is that pawnshops have carved out their own niche in the financial market, servicing small borrowers who could not be accommodated by the banking system. The rapid expansion of pawnshops and the decline of the banking system in the last few years does not serve as an indicator that pawnshops are indeed substitutes. During the period of crisis starting in 1983, the contraction of the formal financial system mirrored the state of the entire economy. On the other hand, pawnshops, like the informal moneylenders, have provided a safety net to small firms and households who suffered liquidity problems during the same period. Certainly, big firms did not shift to pawnshops during hard times. They either closed shop or reduced the size of their operations.

Pawnshops may have taken away some of the customers of the informal credit markets. Because of their rapid expansion, both in the urban and rural areas, pawnshops have provided small borrowers an alternative source of credit. Being less regulated, pawnshops can compete well with informal moneylenders, especially in cases where borrowers have some collateral to offer. Also, the recent proliferation of pawnshops has stimulated more competition in the credit market. This being the case, there is some merit in maintaining a liberal policy towards pawnshops. Policies regulating the interest rate and entry of pawnshops would just reverse the gains which society, in general, and small borrowers, in particular, realize with the proliferation of pawnshops.

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