AN EMPIRICAL EXAMINATION OF CREDIT CARD SYSTEM ATTRIBUTES AND EVALUATIONS

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ABSTRACT

As a service innovation the credit card has been issued in three forms—the retail store card, the travel and entertainment card, and the bank card. The credit card in all three forms may be conceptualized as a service system for facilitating value exchanges. Each type of card, however, represents a system possessing a different degree of identification with attributes salient to the use of these cards for making purchases. This paper empirically investigates these attributes and the perceptions consumers have regarding the performance of each type of card on a given attribute.

INTRODUCTION

Credit cards appear to serve three general functions in society. First, they may effectively ease purchasing on credit by reducing transaction time. Second, they may permit more immediate gratification of consumer needs and wants. Third, they have been said to serve as an economic stimulus. Credit cards have also been characterized as having some negative social effects. Among these are first, the stimulation of materialistic values and hedonism; and second, the creation of indebtnedness among consumers which may lead to anxiety and bankruptcy.

Despite the normative debate concerning their relative utility, credit cards are an innovation with a long-standing history in the United States. Here credit cards have been introduced consecutively in three major forms, each possessing different combinations of common and unique attributes.

This paper is concerned with two of the three major forms of credit card systems—the retail store issued credit card and the bank issued credit card. At the present time little research has been conducted which directly compares these two types of credit systems. Each has been rather extensively investigated on a descriptive, empirical basis with primary attention being given to constructing profiles of retail store card users and bank card users (Adcock, Hirschman, Goldstucker, 1977; Awh and Waters, 1974; Mathews and Slocum, 1969; Plummer, 1971; Thomas, 1975).

To the author's knowledge, however, no published studies have reported findings concerning the benefits consumers believe are possessed by these two credit card systems. Nor have the possible effects which benefit perceptions may have on the adoption and utilization of these two alternative credit cards been previously explored. The purpose of this paper is to explore the perceptions of benefits and relative evaluations consumers had with respect to retail store credit cards and bank credit cards.

The first large-scale offering of credit cards was that of retail store-issued cards which began approximately fifty years ago. Serving primarily as extensions and expediters of an existing credit system, these cards were issued free of charge by retail stores to their customers. The store-issued credit card helped current cash assets and created and maintained customer loyalty to the issuing store. Though initially resisted by some

retailers, today almost all major retail chains issue their own credit cards (Shay and Dunkelberg, 1975).

The "second wave" of credit cards appeared in the 1950's with the issuance of the Diners Club card, the first of the so-called "Travel and Entertainment" cards. Followed by Carte Blanche and American Express, these cards served the purpose of providing credit to travellers (tourists, conventioners, out-of-town business people, vacationers) and persons purchasing various forms of entertainment, often on expense accounts. They were primarily accepted by airlines, hotels, restaurants and similar retail outlets catering to this group of consumers (Mateer, 1969).

The third major form of credit card appeared in the late 1950's with the issuance of the "bank" cards, Master Charge and Visa. These cards, which were issued through banks, assumed a hybrid role possessing some attributes of both the store-issued credit card and the travel and entertainment card, as well as some attributes common to neither. As is the case with credit cards issued by the major retail chains, the bank card could be used for retail purchasing. While usage of bank cards in this manner was originally limited to smaller specialty stores, it has recently been expanded to include several major store chains (Goldstucker and Hirschman, 1977).

Additionally, like the travel and entertainment cards which preceded them, bank cards can be used to purchase hotel rooms, meals in restaurants, airline tickets and a variety of other related services.

Bank credit cards, however, because of their unique relationship to their issuing institutions, possess several attributes not characteristic of store-issued credit cards or travel and entertainment cards. For example, they can be used to obtain cash advances in distant cities, to obtain around-the-clock currency via an automated teller machine, and to carry out various types of funds transfers if equipped as a debit card.

It would appear that by virtue of coming last the bank card is the most advanced of the credit cards. However, at the present time it shows no signs of eliminating its predecessors. That different consumer need-fulfillments are provided by each of the three forms of credit card is evidenced by the fact that many people carry two and sometimes all three of the different forms of cards, as well as multiple types within a particular form. (Shay and Dunkelberg, 1975).

The credit card in all three forms may be usefully conceptualized as a service system for facilitating value exchanges. That is, the card itself is simply a symbol which permits the carrier to effect monetary transactions. The three basic credit card systems available at the present time, however, are all constrained with respect to the types and value of the transactions which may be conducted. For example, a credit card issued by a department store may generally only be used to conduct transactions at units of that store. A credit card issued by a bank, while usually enjoying a wider geographic and inter-retailer acceptance than a typical retail store credit card, is still not accepted by all retail outlets, particularly those retail chains having their own nationwide credit systems (i.e., J.C.Pennys,

Sears). Further, both of these credit systems are limited in their utility to the user by issuer-imposed 'ceilings" on the absolute monetary value of the exchanges that may be effected with them.

Despite the similarity of their constraints, the retail store credit card system and the bank credit card system would appear to provide the user with a dissimilar set of benefits. For example, the fact that a retail store issues its own credit card may provide the user with a perceived enhanced ability to negotiate with the store in exchanging or returning merchandise and in rectifying incorrect billing (Shay and Dunkelberg, 1975).

Conversely, the bank-issued credit card system placed an intermediary (i.e., the bank) between the purchaser and the retailer, thereby reducing the direct negotiating power of the buyer. However, as mentioned earlier, this potential disadvantage of the bank card may be offset by the fact that the bank card is accepted as a valid means of exchange at a much wider variety of retail outlets, as well as having almost global recognition and acceptance.

It would appear both theoretically and pragmatically useful to determine if this hypothesized benefit structure is so perceived by the consumer. Of perhaps even greater utility would be the determination of whether or not an individual's credit-card-facilitated exchange transactions were influenced by the way in which the benefits attributed to a credit card were evaluated. In other words, the theoretical research question becomes one of ascertaining whether persons who place differential importance on certain credit card attributes also favor and utilize different types of credit card systems for facilitating their exchange processes.

To accomplish this, a set of benefits salient to credit card systems generally had to be derived. This was achieved through the use of focus group interviews. Over the course of four weeks, ten focus group sessions were held with representative subsets of the population in a large U.S. city. From these focus group sessions emerged a set of ten criteria (perceived benefits) on which alternative credit card systems were judged and selected. These are listed in Table 1. In the terminology generally utilized in multi-attribute analyses, DISTRIBUTION OF IMPORTANCE SCORES FOR SALIENT ATTRIBUTES* these ten criteria are designated as the salient attributes for credit card system evaluation.

The next step necessary for conducting a comparison between the two credit card systems of interest here (retail store cards and bank cards) was to obtain importance scores for each of the salient attributes. This was accomplished by personal interviews conducted in Spring 1978 with 4,000 persons shopping in five branches of a department store chain (similar ta ... Marshall Fields) in two U.S. market Only persons who possessed at least one credit card were asked to tell how important each attribute was in using a charge card. This lowered the effective sample of respondents to 3,666. The sample was chosen in this way, because the overall research project, of which this paper reports a small portion, required data on actual purchase situations. The distribution of importance scores for each attribute is given in Table 2. The three most important attributes appear to be the ability to replace a card if it is lost or stolen, the ability to straighten-out incorrect bills, and the ability to easily return merchandise.

The third phase of the research plan consisted of having these same respondents report which credit card system they felt performed best on each attribute. For these evaluations, retail store credit cards were

sub-divided into two categories -- local/regional storeissued cards (e.g., Marshall Field, Burdines) and national store-issued cards (e.g. Sears, J.C.Pennys). This was done because response patterns during the focus group sessions indicated that some consumers were differentiating among credit card system alternatives on the basis of national versus locally-restricted range of usage. On this particular benefit dimension, national store cards such as Sears would likely be more similar to bank cards (i.e., Visa) than to local store cards. Thus to group all retail store cards together for the purpose of comparing them to bank cards seemed inappropriate.

TABLE 1 ATTRIBUTES SALIENT TO CREDIT CARD SYSTEM SELECTION

- 1. Ability to use at a wide variety of stores
- 2. Ability to use all over the country
- 3. Ability to easily return merchandise
- 4. Ability to use as a means of identification
- 5. Ability to obtain easily
- 6. Ability to utilize additional credit plans
- 7. Reputation or prestige of the card
- 8. Interest rates
- 9. Ability to straighten—out incorrect billing
- 10. Ability to replace if lost or stolen

Respondents were asked if each characteristic was of "very much importance", "moderate importance" or "very much importance", "moderate importance" or "little importance" in deciding to use a credit card. Responses were scored 3, 2 or 1, respectively.

TABLE 2

	Very Much Importance	Moderate Importance
Use at wide variety of stores	55.9	22.1
Use all over country	56.6	18.1
Easily return merchandise	66.8	16.6
Means of identification	58.9	23.6
Obtain easily	36.8	27.6
Utilize additional credit plans	28.8	25.1
Reputation or prestige	31.5	22.7
Interest rates	48.4	17.2
Straighten-out bills	71.8	14.0
Replace if lost or stolen	78.4	12.2

* Of the respondents evaluating these attributes 93% possessed a local retail store credit card, 59% possessed a national retail store credit card and 74% possessed a bank credit card.

TABLE 2 Continued	Little Importance
Use at wide variety of stores	22.0
Use all over country	25.3
Easily return merchandise	16.6
Means of Identification	17.5
Obtain easily	35.5
Utilize additional credit plans	46.1
Reputation or prestige	45.8
Interest rates	34.3
Straighten-out bills	14.2
Replace if lost or stolen	9.3

From the focus group sessions it had also been learned that consumers appeared to view credit cards as serving two primary functions, first as an easy-to-implement medium of exchange, and second as a means of providing themselves with some power and negotiating ability with respect to a particular retail store. One hypothesis drawn from this was that bank cards would be more highly evaluated as a medium of exchange due to their widespread acceptance. Similarly, it was hypothesized that the retail store credit card would provide the consumer with more bargaining power, because he/she can withhold payment from the store directly if dissatisfied with a purchase.

These two hypotheses appear to receive support by the pattern of the consumer evaluations found for the three credit card systems tested (local/regional store cards. national store cards, bank cards), which are shown in Table 3. These figures, as those in Table 2, represent the evaluations of all respondents possessing at least one credit card. Differences among cards were significant at the p∠.01 level, x² test. The data in Table 3 indicate that the local retail store cards and the bank cards are fairly evenly matched, with each gaining a plurality of "best" mentions on five out of ten attributes. The bank cards garnered the largest proportion of "best" evaluations on the attributes of "wide variety of stores," "use all over country," "use for identification," "utilize additional credit plans" and "reputation or prestige." The local retail store cards received the largest share of "best" mentions for "easily return merchandise," "obtain easily," "interest rates," "straighten-out billing" and "replace if lost or stolen."

TABLE 3
PROPORTION OF CARD-HOLDING RESPONDENTS
NAMING A CARD BEST ON EACH ATTRIBUTE*

	Local Retail Cards	Bank Cards	National Retail Cards
Use in a wide variety of stores Use all over country Easily return merchandise Use for identification Obtain easily Utilize additional credit plans	8.3 1.6 65.7 21.4 52.8	78.4 81.4 22.3 68.2 36.1	13.2 17.0 12.0 10.4 11.0
Reputation or prestige	19.7	68.6	11.7

TABLE 3 Continued ...

	Local Retail Cards	Bank Cards	National Retail Cards
Interest Rates	47.3	44.7	8.0
Straighten-out billing	70.8	22.7	6.5
Replace if stolen or lost	53.5	39.3	7.1

 $p \le .01$, x^2 test

* Of the respondents naming a card as best 93% possessed a local retail store credit card, 59% possessed a national retail store credit card and 74% possessed a bank credit card.

Interestingly, the national retail store cards did not receive the largest number of "best" mentions on any attribute, and, in fact, were consistently in third place for all ten attributes. One possible explanation for this is that relatively fewer persons responding had national retail store cards. A second explanation would be that these cards were indeed perceived to be inferior on all the attributes under study relative to bank and local store cards.

To accept these distributions as valid, however, one must assume that a person possessing at least one credit card has adequate knowledge for effectively differentiating among all credit systems available to him/her, and chose his/her present card(s) on the basis of rational, utility-maximizing criteria.

To the extent that this assumption is not valid, these distributions may be biased. Further, bias may also be present in the form of a halo effect. That is, a person possessing only one of these three credit cards may tend to rate that card higher on all attributes. To test for the effects of less-than-informed choice and/or evaluative halo which might be present in these distributions a second set of analyses was conducted.

In these analyses respondents were divided into four a priori categories: (1) persons possessing only local retail store card(s); (2) persons possessing only national retail store card(s); (3) persons possessing only bank card(s); and (4) persons possessing all three types of cards. The plan was to compare the attribute importance scores and credit card evaluations for these four groups. It was found, however, that there were no persons in the sample who possessed only national retail store cards. That is, national retail store cards were always possessed in conjunction with some other type of credit card, say a bank card or a local retail store card; thus members of the national-retail-store-card-only subset were nonexistent.

It was decided to proceed with the analysis, however, reasoning that some useful knowledge could still be gained from a three-group comparison (i.e., local store card(s) only; bank card(s) only; local store, national store and bank card(s) concurrently). The distributions resulting from this series of analyses are given in Table 4, attribute importance scores and Table 5, alternative credit card evaluations. The sample sizes for the three groups were as follows: bank card, only -65; local retail store card, only-354; bank card, local retail store card and national retail store card, 2022.

As is indicated by the data given in Table 4, there clearly appear to be significant attribute importance differences among the three groups of card holders. For example, persons possessing only bank cards were significantly more likely to place very much importance on the ability to use a charge card at a wide variety of stores or all over the country (p \angle .001 - x^2), while those having only local retail store cards were more likely to consider these attributes as having little importance.

Persons possessing all three types of credit cards were found to place significantly more importance on the ability to replace a card if it were lost or stolen. than persons possessing only bank cards or local retail store cards $(p < .001 - x^2)$. This is presumably due to the fact that persons who carry multiple cards face a more difficult reporting/replacement task if their cards are lost or stolen, than those persons carrying only one card. This same line of reasoning could also account for the finding that persons carrying all three types of credit cards placed significantly more importance on the ability to straighten-out incorrect billing $(p = .001 - x^2)$. Again, it would appear plausible that the inconvenience caused by an inaccurate credit statement would be intensified (and thus assume greater importance) to persons getting many such statements than to those getting only one.

Persons carrying all three types of credit cards were also found to place significantly more importance on interest rates (p \angle .006 - x^2). This may be due to the fact that such persons are more likely to be overextended on their credit purchases, and hence subject to interest payments on unpaid balances or perhaps because they simply take a greater interest in their debt structure. In any event, the data available for this analysis are inadequate for assigning a cause to this finding.

Finally, those persons possessing only bank cards reported themselves as placing significantly less importance on the ability to easily return merchandise (p \angle .023 - x²). This finding would appear to lend support to one of the hypotheses advanced at the outset. Namely, that perceived negotiating ability with respect to returning merchandise would be enhanced by the possession of a retail store charge card and reduced by using a bank card.

DIFFERENCES IN CREDIT CARD EVALUATIONS

As shown in Table 5 distinct differences were also apparent between the three groups of card holders with respect to their evaluations of bank local retail store and national retail store credit cards. Most importantly, there appeared to be a definite and significant positive "halo" effect present in the evaluation of the various cards for each of the ten attributes. That is, for every attribute studied, persons possessing only one type of card tended to name that card as being best to a significantly greater degree than persons not possessing that card or possessing all three types of cards. For example, when asked which card was "best" as a means of identification, over 93 percent of the persons possessing only bank cards said that card was best, versus a 53 percent figure for persons possessing only local retail store cards, and a 70.6 percent figure for persons possessing all three types of cards.

A second interesting observation that can be drawn from the data contained in Table 5 is that a majority of all three groups named bank cards as being best on the attributes of ability to use at a wide variety of stores, ability to use all overy the country, ability to use as a means of identification, ability to utilize additional credit plans, and prestige or reputation. These are the same attributes for which bank cards were reported best during the earlier analysis (Table 3).

Local retail store credit cards did not fare quite so well, however. These cards were reported <u>best</u> by all three groups of card holders on <u>no</u> attributes. Instead there appeared to be a "split-vote" situation with a majority of the persons possessing only local retail cards or all three types of cards reporting local retail cards best on the attributes of ability to replace if lost or stolen, ability to straighten-out incorrect billing, ability to obtain easily, and ability to easily return merchandise. The majority of persons possessing only bank cards, however, did not view the local retail store cards so favorably, and instead named the bank card as being best on these same attributes.

Additionally, an interesting situation was encountered for the attribute of interest rates. Here, persons possessing only local retail cards or all three types of cards were fairly equally divided between naming the local retail store card or the bank card as having the best interest rates. Persons possessing only bank cards, however, were more loyal to their card with almost 70 percent naming it as having the best interest rates.

Lastly, it is intriguing to note that none of the three groups of card holders--including those persons possessing three types of cards--named the national retail store card as being best on any attribute. In fact, the highest proportion of "best" mentions this type of credit card received was 23 percent, which came from persons possessing only local retail store cards, for the attribute of ability to use all over the country. Thus, it would appear that, at least for the three groups studied, national retail store credit cards do not possess a differential advantage on any salient attribute.

CONCLUSIONS

The purpose of this research was to explore the perceptions of benefits and relative evaluations consumers had concerning two types of credit card systems—retail store issued credit cards and bank issued credit cards. During analysis a further subdivision was made of retail store issued credit cards with this category being dichotomized into local and national store cards.

As hypothesized at the outset, it was found that bank cards were perceived to be most useful as a means of facilitating exchanges at a wide variety of stores and across the country. This credit card system was also highly evaluated as a means of identification for utilizing additional credit plans and for reputation and prestige. Local retail store issued credit cards were, as anticipated, seen as a more useful credit card system for negotiating with the retailer over returning merchandise and straightening-out incorrect billing. These types of credit instruments were also evaluated highly for ease of obtaining, interest rates charged, and replacement if lost or stolen. The third category of national retail store issued credit cards was now evaluated as best by a majority of card holders on any of the attributes investigated.

By classifying respondents according to the types of credit cards they possessed, it was discovered that a positive halo effect appeared generally present for two groups of card holders. This positive halo was evidenced by higher ratings for a credit card when that card was the only one possessed by the respondent. This halo pattern appeared to be strongest for those persons possessing only bank issued credit cards.

Potential limitations to this research include the fact that because the sample was regionally generated, results may be geographically limited in their applicability and not generalizable to other parts of the country. A nationally representative sample would likely possess more external validity. Further, since the research design is cross-sectional in nature, it is inherently static and does not reflect time-related trends in the variables reported on. A longitudinal series of surveys would be required to adequately address issues concerning changes in the patterns of attribute importance and credit card system evaluations. Further, this paper reports stated importances for various attributes related to credit card systems and evaluations of two credit card systems. It falls short of dealing with purchasing behavior using either or both of the credit card systems under investigation.

These potential limitations notwithstanding, it is believed that the reported research does present some useful information necessary for future, more sophisticated investigations. Credit and credit card systems are an increasingly integral part of consumer economic activities. Empirical investigations concerning the impact of consumer credit have perhaps lagged behind its positive and normative importance as a research topic. The findings cited here are hopefully a constructive, if rudimentary step toward developing our understanding of this important economic phenomenon.

TABLE 4

SALIENT ATTRIBUTE

IMPORTANCE SCORE DISTRIBUTIONS FOR PERSONS

POSSESSING VARIOUS COMBINATIONS OF CREDIT CARD TYPES

	Name and	Wadamaa	146-1-
	Very much Importance	Moderate Importance	Little Importance
Bank Local	78.1 .35.0	12.5 .21.8	9.4 43.2
All Three	60.6	23.6	15.8
	****		13.0
		p 4.001	
Use all ove	r the country:	•	
	Very much	Moderate	Little
	Importance	Importance	Importance
Bank	81.3	6.3	12.5
Local	33.7	17.1	49.1
All Three	61.6	18.6	19.8
		p ∠ .001	
Easily retu	rn merchandise:		
	Very much	Moderate	Little
	Importance	Importance	Importance
Bank	57.1	15.9	27.0
Local	65.7	15.3	19.0
All Three	69.8	15.6	14.5
		p ←.023	
Means of id	entification:		
Means of id	Very much	Moderate	Little
Means of id		Moderate Importance	Little Importance
Means of id	Very much		Importance
Bank Local	Very much Importance 67.2 62.2	Importance 15.6 19.9	17.2 17.9
Bank	Very much Importance	Importance	Importance

	Very much Importance	Moderate Importance	Little Importance
Bank Local	75.0 74.0	9.4 9.7	15.6 16.2
All Three	79.9	12.2	7.8
		p 4.0	
Obtain easi	<u>ly:</u>	, — q	W1
	Very much	Moderate	Little
	Importance	Importance	Importance
Bank	39.7	25.4	34.9
Local	34.3	29.4	36.4
All Three	37.2	26.4	36.4
Use addition	nal credit pla	p > 10)
	Very much Importance	Moderate Importance	Little Importance
Bank	20.0	20.0	60.0
Local	29.4	22.8	47.8
All Three	29.1	26.3	44.6
		p >.10	
Reputation	or prestige:		
	Very much Importance	Moderate Importance	Little Importance
Bank	43.5	16.1	40.3
Local	32.6	25.0	42.4
All Three	31.0	22.6	46.4
		p > .10)
Interest ra	tes:		
	Very much	Moderate	Little
	Importance	Importance	
Bank	38.1	9.5	52.4
Local	43.2	18.9	37.9
All Three	50.0	16.5	33.5
		p∠.00	6
Straighten-	out billing:		•
	Very much Importance	Moderate Importance	Little Importance
Bank	71.9	7.8	20.3
Local	64.9	15.5	19.6
All Three	73.2	14.4	12.4
		p ∠.001	
		UBLE 5	
	RTION OF PERSO NATIONS OF CRE A GIVEN O		
Use at wide	variety of st	ores:	
	Local	Benk	National
	mer.	Denk	National
Bank	1.6	90.5	7.9
Bank Local	12.9	71.6	15.5
All Three	7.4	79.5	13.1
		p < .001	
Use all ove	r the country:		
	8 3	B 1	
	Local	Bank	National
Bank	0.0	92.1	7.9
Local	6.2	71.0	22.7

p < .001

Replace if lost or stolen:

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Easily retu	rn merchandis	<u>e</u> :	
	Local	Bank	National
Bank	40.0	53.3	6.7
Local	75.5	15.1	9.4
All Three	65.6	22.3	12.1
		p < .001	
Means of id	entification:		
	Local	Bank	National
Bank Local	1.7	93.3	5.0
Local	35.5	53.4	11.1
All Three	19.2	70.6 $p < .001$	10.2
		99.	
Obtain easi	<u>ı.y.</u> :		
	Local	Bank	National
Bank	40.4	57.7	1.9
Local	64.3	25.6	10.4
All Three	52.5	36.3	11.3
		p < .001	
		•	
Utilize add	iitional credi	it plans:	
	Local	Bank	National
Bank	20.0 34.3 34.5	70.9	9.1
Local	34.3	51.3	14.4
All Three	34.5	53.7	11.8
B-action o	r reputation:	90.08	
LIESCINE O	r reputation:	•	
	Local	Bank	National
Bank	1.6	88.9	9.5
Local	27.1	60.9	12.0
All Three	19.2	69.7	11.0
Interest r		p < .001	
Intelest I	aces.		
	Local	Bank	National
Bank	25.6	69.8	4.7
Local	47.6	43.6	8.8 7.5
All Three	49.3	p = .01	7.3
Straighten	-out billing:		
	Local	Bank	National
Bank	43.6	50.9	5.5 6.0
Local	74.9	19.1 21.8	6.1
All Three	72.2	p < .∞1	V.1
Replace 11	lost or stol	len:	
			National
	Local	Bank	Varioust
	Local	Bank	NACIONAL
Bank			
Bank Local	18.5 60.0	74.1 31.9	7.4 8.0
	18.5	74.1	7.4
Local	18.5 60.0	74.1 31.9	7.4 8.0

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