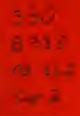


CORE Metadata, citation and similar papers at core.ac.uk Provided by Illinois Digital Environment for Access to Learning and Scholarship Repository

UNIVERSITY OF ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

Digitized by the Internet Archive in 2011 with funding from University of Illinois Urbana-Champaign





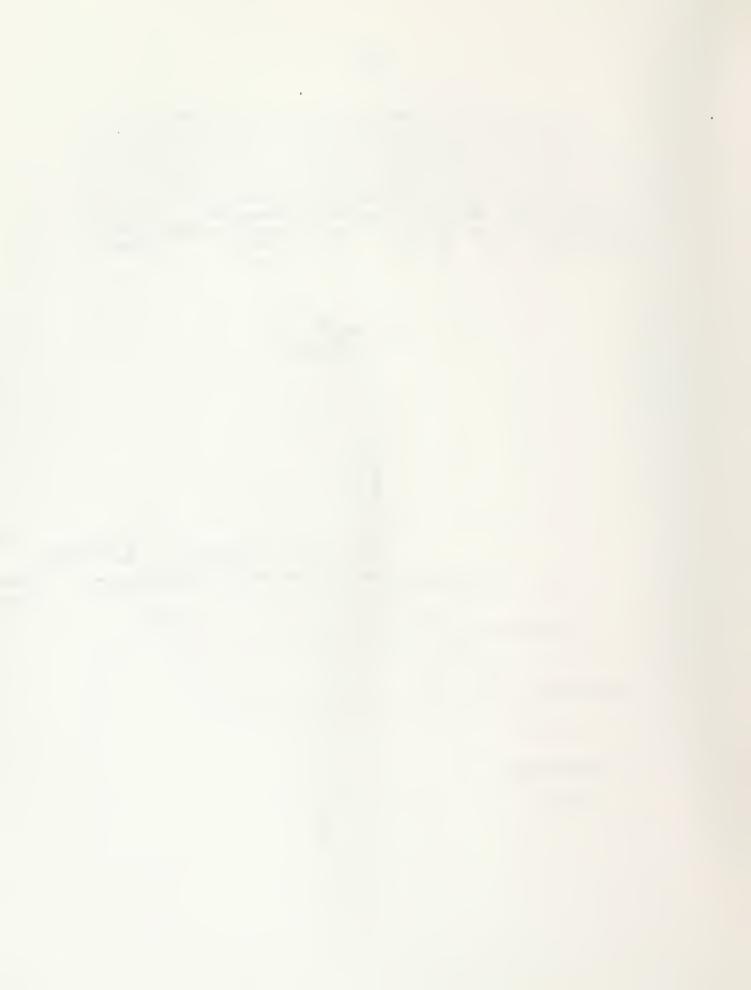
Faculty Working Papers

PRICING OF LIQUIDITY FOR PREFERRED STOCKS ON THE NEW YORK STOCK EXCHANGE

Frank K. Reilly, Professor, Department of Finance

#662

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign



Faculty Working Papers

THE MARKETING OF SERVICES; APPLICATIONS IN THE URBAN REALM

Kenneth P. Uhl, Professor, Department of Business Administration Gregory D. Upah, Virginia Polytechnic Institute and State University

#665

College of Commerce and Business Administration University of Illinois at Urbana-Champaign



FACULTY WORKING PAPERS

College of Commerce and Business Administration

University of Illinois at Urbana-Champaign

April 7, 1980

THE MARKETING OF SERVICES; APPLICATIONS IN THE URBAN REALM

Kenneth P. Uhl, Professor, Department of Business Administration Gregory D. Upah, Virginia Polytechnic Institute and State University

#665

Summary

This paper suggests that services, compared to products, possess four unique characteristics:

services are intangible;

because services are intangible, they cannot be stored;
because services are intangible, they cannot be transported; and
because services are intangible and cannot be stored or tansported,
there are limits on mass producing and mass marketing them.

The marketing implications of each of these characteristics for urban service
system are outlined in the form of propositions. The question for most service organizations is becoming less and less "whether-or-not-to-engage-inmarketing-activities" and more and more "how-to-market-their-services." This
paper attempts to stimulate more effort in this regard.



The Marketing of Services: Applications in the Urban Realm

Services provided by municipal governments are more varied and extensive than the services provided by any single private organization. However, despite the volume of literature regarding the managerial and political aspects involved in providing them, there have been few articles dealing specifically with the marketing of these services. The successful provision of urban services (i.e., the efficient and effective satisfaction of user needs) requires not only effective operations management and political activity, but also effective marketing efforts.

The literature in marketing reveals that attention has been given to the marketing of services. The material has offered some useful insights into particular differences between products and services, and the special marketing considerations resulting from these differences. (Eiglier and Langeard, 1977; Rathmell, 1974; and Uhl and Upah, 1980).

Purpose

The purpose of this paper is to discuss: (1) the major differences between products and services; and (2) apply a set of propositions for service marketing, developed by the authors (Uhl and Upah, 1980), regarding the implications of these differences to the marketing of urban services.

A Definition of Services

To facilitate exposition of these issues, a comprehensive definition of services is offered. This definition emphasizes the unique aspects of services which make them different from products.

A service is any task or work performed for another and/or the provision of any facility, product, or activity for for another's use and not ownership which arises from an exchange transaction. It is intangible and is, therefore, incapable of being stored or transported. It can be

recalled for further use only through enacting an additional exchange transaction. There may be an accompanying sale of a product.

Meaning of Terms

<u>Task or work means physical labor like the repairing of a street or extinguishing a fire.</u> It also includes the mental efforts of a social worker or an educator.

Provision of a facility could be rental of a public building, use of a municipal swimming pool, or the use of a public library or tennis court.

Provision of a product could be the use of a library book or the rental of a golf cart.

<u>Provision of an activity</u> could be the presentation of a sporting event, instructions at a university, or a 4th of July celebration at a community services center.

Use and not ownership means an activity or a tangible object is available, with restricted use rights, to the user or buyer, but only for the duration specified in the exchange transaction. Further use calls for an additional exchange transaction.

<u>Intangible</u> means lacking physical properties. Services cannot be touched or felt. Some services, however, are translated in a tangible form—for example, a physician medical report or a copy of municipal records represent services. The services themselves are intangible. Electricity and natural gas have commonly been misclassified as services. They are tangible. They are products. However, they are sufficiently intertwined with service components that in some situations they are best marketed as services.

Incapable of being stored or transported indicates that the user of a service is a recipient only as it is being produced. While the benefits of such services as educational programs or library use may linger, these services cannot be stored and reused in the same way that products can be reused. A library provides services only while someone has use of the library. Furthermore, the unused capacity of a service producer is lost forever. It cannot be recalled for use at some later time. Empty seats on a bus, at a baseball game or unused hours of a social worker's time cannot be stored and recalled for use in future periods of peak demand. Because services are intangible and cannot be stored, they cannot be transported.

Propositions for the Marketing of Services

The remainder of the paper focuses on the marketing meaning of four major differences between products and services. These differences relate to (1) tangibility; (2) ability to be stored; (3) ability to be transported,

and (4) ability to be mass-marketed. A set of general propositions regarding the implication of these differences will be applied to the special marketing efforts required to effectively market urban services.

Managing Intangibility

Marketers of services and products both attempt through their marketing strategies to: (1) attract the attention of prospective users, (2) suggest the nature and the quality of their offerings, (3) provide support or evidence that benefits will be forthcoming, and (4) make users more satisfied. Product marketing, because of the presence of tangible products and the need to identify products to customers, focuses on the products and their unique superior features. Product features are spotlighted. They provide evidence to prospective customers that benefits will be forthcoming and they help make customers more satisfied.

Organizations offering services have no tangible service features to spotlight. Services are intangible. Therefore, service organizations need to first and foremost establish in prospective clients' minds their tangible capabilities to offer services. This helps to attract and, later, to satisfy clients. With this in place, the intangible services and their benefits can effectively be presented. Shostack (1977) has referred to such efforts as the "management of evidence." Others have alluded to the need for service organizations to establish an image by substituting an emphasis on tangible aspects such as physical setting and contact personnel for the lack of tangible product features (Eiglier and Langeard, 1977). This leads to the first general proposition.

Proposition 1: Service organizations need to provide ample evidence of tangible production capabilities to be able to: attract the attention of prospective clients, suggest the quality and the nature of their services, provide support or evidence that benefits will be forthcoming, and help satisfy clients.

Different services and situations call for an organization to focus their marketing on different capabilities. Organizations offering services such as public transportation, fire protection, street maintenance services and library services are dominated by physical facilities, equipment or products (available for use). The rendering of these services involves people, but the bulk of the service, as viewed by prospective users, is based largely on the organization's facilities, equipment or provision of products (e.g., library books).

Organizations offering professional services such as educational services, community extension services, some types of medical services and general social services are dominated by people. Facilities and equipment are involved, but the services are heavily people-centered. This set of observations leads to a second general proposition.

Proposition 2: Two principal production capabilities that service organizations can use to help attract and satisfy clients are their: (1) facilities and equipment, and (2) people.

Initially, it might seem that facility and equipment intensive service organizations would build their marketing programs around their facility or equipment capabilities. This should be the case; however, only when they can have unique, superior facilities or equipment not possessed by the private sector or other competitors. Mass transit organizations should feature equipment when they secure new vehicles (e.g., buses, trains) or facilities (e.g., new shelters at bus stops). The Bay Area Rapid Transit System (BART) clearly was a uniquely designed form of mass transit. A great deal of the focus of advertising and promotion for BART was on the equipment itself. Libraries take such action by featuring new buildings, renovations and unique facilities, as well as new books and records, in advertising or other promotional efforts to stimulate library use. Cities often focus on their civic centers, convention centers, hotels and restaurants

to groups seeking convention sites.

A pattern is present among service organizations that are heavily based on facilities and equipment. Sequential stages are frequently followed. First, marketing strategies are built around superior facilities or equipment capabilities as these advantages are available. These are used to both help attract and satisfy clients. Second, as facilities or equipment began to age or become more common, the marketing effort evolves to focus more on the ability of people to interact with the facilities and equipment to provide, in combination, a set of unique and desired capabilities and benefits. Finally, when no unique, superior, or newness connotations remain, the focus is on the organizations' people and their capabilities to provide benefits.

The novelty and excitement of sleek vehicles and new buildings can be attention-getting and help clients feel better about the services they receive. However, it wears off, calling for a marketing re-focus to people and organization capabilities. This marketing focus on service substance can have considerable impact. For instance, research regarding public transportation has shown that an effective tangible cue as to the quality and nature of services to be received is a printed schedule or route map (Schneider, 1965). Information about transit services displayed on attractively designed and readable signs at all stops, and, in easy-to-understand, colorful brochures has been shown to be a major factor in increasing ridership (see Robinson, 1979). These observations lead to the third proposition:

Proposition 3: Service organizations engaged in the marketing of facility or equipment intensive services should feature:

- (1) facilities/equipment capabilities when new, uniquely superior facilities or equipment are present;
- (2) person-facilities/equipment interaction capabilities when the major facilities/equipment are starting to age and are less unique:
- (3) people or organization capabilities when facilities/equipment capabilities are common and well known to potential clients.

For organizations offering people intensive urban services—e.g., human services such as social, educational and health care services as well as the services of professional urban planners, the major marketing strategies should be built around the unique capabilities of key people in the organizations. Impressive facilities, equipment and convenient locations also help market people intensive services. Like in the private sector, well appointed, well designed reception areas and offices, conspicuously placed certificates of degrees and awards, and other accounterments help attract and satisfy clients. Well—trained office staffs and efficient office procedures also are very visible and important to clients. Clients utilize these tangible cues to provide them with indications as to the capabilities of the organizations to satisfy their needs. Because services lack tangible features, these factors are very important.

Also, in marketing it is important to realize in the case of such services as public transportation, community health, education, and crime prevention programs that the people <u>using</u> the services become an important part of the service itself. Many potential users of services make decisions as to their use of these services based on their perceptions of the other people already using the services. They ask themselves "Are people like me using the service?" (See Vaughn, Arora and Hansotia, 1977). Therefore, marketing can attract clients by helping make present clients more satisfied and by pointing out select groups of present clientele. The observations suggest a fourth proposition:

Proposition 4: Service organizations engaged in the marketing of people intensive services should focus major attention on their organization, their people, and their capabilities (experience and training), the immediate environment that can convey cues as to their successes and select groups of their clients.

Implications of the Inability to Store Services

A second major difference between products and services is ability to store. Products, being tangible, can be stored with perishability being largely a function of use and age. Services cannot be stored. They are consumed when and where they are produced. Police and fire protection, educational services, mass transit services—none of these, nor any other service, can be produced one year and consumed the next. Only the <u>capacity</u> to produce services can be stored. This total lack of storage creates the need for a more exacting match between supply and demand for services than for products (Sasser, 1976).

Because of lack of storage, unused service capacity is lost forever.

Empty seats on a bus, in a sports arena, or in a classroom cannot be recalled for use in future periods when demand exceeds capacity. In contrast, most products (e.g., automobiles) not sold one day retain their value and can be sold the next day.

How, then, do service organizations attempt to achieve the close coordination of supply (i.e., service capacity) and demand necessitated by the inability to store services? Coordination can involve adjustments to supply, demand or both. This leads to Proposition 5:

Proposition 5: In the marketing of services, close coordination of production capacity with market stimulation and demand is used to offset problems caused by the inability to store services.

Managing Supply

Some service organizations can alter their supply up or down within a short time. Others face more fixed supply situations. The altering of supply to match demand has traditionally been accomplished through altering flow-through rates, facility extensions, service postponements and shared capacity.

Reduction in the time spent servicing individual clients (i.e., increasing flow-through rates) has been common. Clients are often asked to fill out their own forms, four rather than three clients are served per hour, and so forth. These methods all increase the amount of clients a facility can handle.

Facility extension adds capacity through the use of temporary help and rental equipment in peak periods. A street maintenance department, for example, can contract with private firms to aid in snow removal and street repair, neighborhood watch groups can aid police by providing a deterrant to crime, and so forth. Facility extension may involve expanding capacity by extending an organization's hours of operation during periods of peak demand. Athletic facilities can be lighted and supervised, police and fire protection increased temporarily through longer work hours and schools can be operated on two shifts instead of one.

Some service needs, not requiring immediate attention, can be postponed until later periods when demand has slackened. For example, fire departments can perform household checks and fire prevention programs at times when risks of weather-related fires are substantially reduced.

Another means of expanding production is to substitute the use of machines for the labor of an employee. The people mover systems such as BART that currently are used for urban and intra-airport transportation provide examples of a highly automated transportation system. Toll collection machines provide another example. This substitution of machines for people enables the service organization to reduce its labor force or divert it to other activities. It also provides benefits to the clients such as more flexible service times or lower prices.

Service organizations also can overcome over or underutilization of capacity by sharing capacity with other organizations. Cities in contiguous

locations can sometimes share such municipal services as police and fire protection, transportation systems, city maintenance, and human services such as health care. The underutilization of expensive equipment (e.g., fire engines or diagnostic equipment in municipal hospitals) is costly to the service organization and represents a permanent loss of service.

The idea and practice of sharing is certainly not new to municipal governments and other service organizations. The political roadblocks can be difficult to overcome. Nevertheless, there are certainly many examples of the successful sharing to expand overall supply. For a review of the need for, and means of achieving, better integration, coordination and sharing of human services, see Hagebak (1979). The conclusions to the observations about service organizations managing supply are contained in Proposition 6:

Proposition 6: Service organizations can partially manage short run production capabilities for their services through flow-through rates, facility extensions, service postponements, and shared capacities.

Managing Demand

The other means of equating demand and supply is to alter demand.

Many of the demand-adjusting mechanisms available to service organizations are similar to those used by product firms (e.g., pricing and advertising).

However, some methods are somwhat unique in their application.

Peak load pricing is one of the most familiar means of demand management. Low prices at slack periods and high prices at peak periods are used by municipal golf courses, mass transit systems, and by bridge and road authorities. Some authorities reach the ultimate in low price; they allow cars carrying two or more people free access during certain times.

To the extent municipal services are paid through tax revenues and do not require user fees, the price mechanism has limited applicability.

However, price mechanisms work well when there are user fees, clients are price sensitive, have consumption time flexibilities and do not perceive time differences in provision of the service as quality differences. However, such mechanisms are not effective demand adjusters for emergency services such as medical and fire and police protection.

Demand, however, can be adjusted through the use of nonprice promotions and advertising. Mass transit systems have reduced peak loads by encouraging businesses in central cities to stagger their hours of operation.

This strategy spreads demand out to more fully utilize available service capacity. Promotional techniques have been used by libraries to attract new users and increase use by existing users. Such mechanisms as Saturday morning movies, story telling and appearances by television personalities have helped stimulate library use by children. Advertising has been used to promote enrollment in educational programs such as CPR and fire prevention programs.

Some service organizations adjust demand by offering in-house alternatives for the heavily demanded service. Museums and zoos use in-house layouts and promotion to help divert visitors to their less popular attractions to reduce overcrowding at their most popular attractions.

Service organizations also manage demand through individual and block appointment scheduling and reservations. City parks offer individual appointment systems for tennis courts and golf courses. Cities with special transportation systems for the elderly make use of reservations systems. Block scheduling allows only adults or children to use facilities at various times. The Chicago Museum of Natural History used an excellent appointment system to avoid long lines and waiting times for the King Tut exhibit. Upon arrival at the museum, visitors were given a ticket for admittance to the exhibit at a specific time. The system uniformly spread visitor loads throughout museum

hours. Visitors were then free to see other exhibits in the museum (which were being actively promoted by museum officials) or go elsewhere in the city until their appointed time.

Altering the timing of demand for services can both help the service provider—to gain better utilization of capacity and to lose fewer customers due to lack of capacity or crowded facilities—and favorably impact consumers. Consumers receive more and better treatment when the service organizations are in more favorable circumstances to provide it. For example, visitors for the King Tut exhibit in Chicago appreciated not having to spend the majority of their day waiting in line. These observations lead to Proposition 7:

Proposition 7: Service organizations can partially manage short run demand for their services through pricing, promotion, offering inhouse alternative services, and/or using demand deflecting activities.

Implications of the Inability to Transport Services

Products can be produced in one or more places and then transported to middlemen or final consumers for sale. Services, being intangible, cannot be produced in one place and then transported to another. Either the consumer must go to the production facility or the production facility must be taken to the consumer. The latter situation is exemplified by the ability of policemen, firemen, and social workers and even mobile library facilities to be transported to the clients.

This inability of services themselves to be transported has implications for the location of service outlets and the marketing and production functions performed at those outlets. However, the effects of lack of transportability are mediated by the "convenience" or "nonconvenience" nature of the service.

As with convenience products (e.g., snack foods, cigarettes, newspapers),

consumers are not willing to travel long distances or spend a great amount of search or travel time for convenience-type municipal services such as mass transit, paper or metal recycling services, refuse services, park and recreation services and public library services. This suggests that the distribution of such services be intensive--i.e., that the bus stops, refuse-paper pickup, library and other service be provided in numerous locations. As with convenience products, there needs to be a relatively large number of service outlets/offices/stops for providing the convenience services, rather than fewer larger ones.

However, these service outlets—unlike product selling organizations—must produce the service they offer because the services themselves cannot be transported. For example, each elementary school "produces" educational services and each tennis court and golf course provides recreation. This leads to Proposition 8:

Proposition 8: Organizations providing convenience-type services must locate their service facilities conveniently close to the intended clients.

Not all service organizations face the requirement for numerous local service outlets. Nonconvenience-type services--i.e., those that are purchased infrequently and for which consumers are willing to spend considerably more search and/or travel time (as compared to convenience-type services)--can utilize more centralized production facilities. Customers are willing to travel considerable distance to reach such nonconvenience services as specialized medical care, some services provided by welfare departments (e.g., welfare payments) and educational service organizations such as vocational schools and colleges. Furthermore, the capability to provide some nonconvenience services are readily transportable. Firefighters, police officers and municipal power company personnel regularly provide on-site assistance.

Finally, some nonconvenience urban services—specialized assistance from reference librarians, zoning and other public records information—can be produced at locations far from the user and transmitted through phone or mail. This leads to the following proposition concerning nonconvenience services:

Proposition 9: Organizations providing nonconvenience type services can locate their facilities at considerable distances from intended customers because:

- (1) clients will travel considerable distances for the service;
- (2) the service capability can be transported to the customer; and/or
- (3) the services can be provided through the use of the telephone or mail.

Limitations on the Ability to Mass Market Services

Organizations can mass market products because centralized production allows for both production economies and product quality control. However, services, being intangible, cannot be stored or transported. Therefore, opportunities to gain economies of mass production are limited and quality control focuses on the providers rather than the services.

Convenience-type services provide the most striking illustrations.

Their service facilities, as we noted, need to be close to their clients.

Therefore, there must be many small, relatively ineffecient facilities rather than a few large, more efficient facilities. Bus routes must venture into neighborhoods, bus stops must be every few blocks rather than once a mile. Small neighborhood libraries, athletic facilities and social service centers—these are all less efficient to operate than more direct routes, larger centers and so forth.

Uniform service quality by governmental service organizations can be achieved as it is through successful business franchises like McDonald's and Midas Mufflers. Uniform service requires the use of organizational controls such as careful hiring procedures, extensive employee training,

and the development of well designed and easy to understand service procedures. All of these control mechanisms help to achieve quality control by reducing employees' uncertainty as to how to provide the service. Also, some service organizations can utilize equipment and machinery to help provide a more uniform level of quality.

Uniform quality throughout a service network is essential. It (1) ensures that clients get the service that is required for long-term success and (2) allows the services to be centrally described and advertised—achieving the economies of mass advertising and promotion. These observations can be generalized in Proposition 10:

Proposition 10: Organizations can provide convenience-type services, without meaningful economies of mass production, when organizational and control methods can be used to knit the service network together in such ways to:

- (1) install and maintain a uniform quality of services;
- (2) identify individual service outlets as members of the larger group; and
- (3) engage in and gain the economic benefits of large scale advertising and other mass marketing activities.

Many of the economies of both mass production and mass marketing can be attained when services can be provided through centralized production facilities. However, this is typically limited to two types of non-convenience-type services. First, are services for which many people will spend considerable travel time. Second, are services that are not dependent on the physical coming together of customers and the production facilities. Illustrative of the former services are major league and collegiate sports in municipal facilities, amusement or entertainment services such as those offered by city zoos and museums, and specialized medical services. Illustrative of the latter kind of services are educational television and correspondence courses offered by colleges. These observations lead to the last proposition:

Proposition 11: Organizations can mass market nonconvenience type services, with some meaningful economies of mass production, when:

- (1) they can attract large numbers of customers to their production facilities, or
- (2) the services are not dependent on the physical coming together of the service client and the production facility.

Summary

This paper has suggested that services as compared to products possess the following four unique characteristics:

- 1. Services are intangible.
- 2. Because services are intangible, they cannot be stored.
- 3. Because services are intangible, they cannot be transported.
- 4. Because services are intangible and cannot be stored or transported, there are limits on mass producing and mass marketing them.

The marketing implications of each of these characteristics for urban service systems were outlined in the form of propositions.

The purpose of this paper has been to focus on the important produceservice differences that necessitate special efforts to market services.

We have not started to utilize all of the excellent examples that are to
be found in urban service organizations. We hope we have provided a framework for organizing and expanding the thinking and experience in the area.

Clearly, more propositions—and more specific propositions for particular types of urban services—would be useful. More research regarding clients and how they evaluate various services, decide whether or not to use them, and so forth, also would be helpful. The question for most service organizations is becoming less and less "whether—or—not—to—engage—in—marketing—activities" and more and more "how—to—market—their—services". It is hoped that this paper will help to stimulate more effort in this regard.

- Eiglier, Pierre and Eric Langeard (1977), "A New Approach to Service Marketing," in Marketing Consumer Services: New Insights, Pierre Eiglier,
 Eric Langeard, Christopher H. Lovelock, John E. G. Bateson, and Robert
 F. Young. Cambridge, MA: Marketing Science Institute, Report #77-115
 (November), 31-58.
- Hagebak, Beaumont R. (1979), "Local Human Service Delivery: The Integration Imperative," Public Administration Review (November-December), 575-82.
- Rathmell, John M. (1974), Marketing in the Service Sector. Cambridge, MA: Winthrop.
- Robinson, Richard K. (1979), "Implementing the Marketing Concept to Improve

 Transit Information and Promotional Strategy," American Marketing

 Association Educator's Conference Proceedings. Chicago: American

 Marketing Association, 516-19.
- Sasser, Earl W. (1976), "Matching Supply and Demand in Service Industries,"

 Harvard Business Review, 54 (November-December), 133-40.
- Schneider, Lewis M. (1965), Marketing Urban Mass Transit: A Comparative

 Study of Management Strategies. Boston: Divisionary Research, Harvard

 Graduate School of Business.
- Shostock, G. Lynn (1977), "Breaking Free from Product Marketing," <u>Journal</u> of Marketing, 41 (April), 73-80.
- Uhl, Kenneth P. and Gregory D. Upah, "The Marketing of Services: Why and How is it Different," in Research in Marketing, Jagdish N. Sheth (ed.), JAI Press, forthcoming.
- Vaughan, Ronald L., Raj Arora and Behram Hansotia (1979), "Marketing Urban

 Transit Systems: A Look at the Cognitive Structure of Users and Nonusers by Trip Purpose," working paper, College of Business Administration, Bradley University (November).

Faculty Working Papers

THE PRESENT VALUE OF POPULATION GROWTH IN THE WESTERN WORLD

Julian L. Simon, Professor, Departments of Business Administration and Economics

\$666

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign

Notes

We required the firms to be listed during the entire sample period. The Center for Security Price Research (CRSP) monthly tape was used to select NYSE listed firms. A firm was considered listed if it had monthly stock returns available for the entire sample period.

The absolute percentage error is computed as the average of $\left|\frac{\text{Actual EPS} - \text{Predicted EPS}}{\text{Actual EPS}}\right|$. Since this error metric can be explosive when the denominator approaches zero we truncated errors in excess of ten to a value of ten. This operation was done for a very small percentage of the cases.







