

"JUST LIKE THEM":

THE "BENEFIT" TO
THE SMALL AND DISADVANTAGED USER
ARISING FROM COMPETITION

Presented to:

Annual Meeting
National Association of Regulatory Utility Commissioners
(NARUC)
Orlando, Florida

Prepared By:

Roger D. Colton
Fisher, Sheehan & Colton
Public Finance and General Economics
34 Warwick Road, Belmont, MA 02478-2841
617-484-0597 *** 617-484-0594 (FAX)
roger@fsconline.com (E-MAIL)

November 1998

INTRODUCTION

Proponents of competition generally argue that competition will have a positive impact on consumers. Usually seen is language asserting that "on average" or "in the aggregate" competition will make consumers better off. Advocates of a competitive telecommunications industry put much stock in the process of competition delivering benefits to consumers. A competitive market, these advocates say, will result in lower prices, higher quality service, and an explosion in innovation that would never occur under regulation. In addition, they say, any potential consumer abuses should be controlled through a competitive market.

The theory is simple. If a competitive service supplier offers poor quality service, offers service at high rates, or engages in consumer abuses, consumers will simply switch to another company. As a result, providers of abusive, high cost, or poor quality service will not survive in the competitive marketplace.

If, however, competition does not exist, the whole theory falls apart and consumers will be left unprotected. That is precisely the case for low-income consumers. Utility consumers such as low-income households are not well-positioned to take advantage of competition in the telecommunications industry. The impacts on low-income consumers are thus less likely to be positive, and more likely to be negative.

1 THE NEED TO CONSIDER LOW-INCOME CONSUMERS SEPARATELY

Most analysts today tend to assess the impacts of competitive markets almost exclusively from the perspective of the firm. In reality, however, a determination of whether or not competition exists in a particular market, as well as whether it generates benefits or harms to consumers, is driven as much by customer characteristics as by characteristics of the firm. A consideration of the impacts of competition, therefore, should take into account the impacts of customer characteristics, particularly as to residual markets.

Residual markets are those markets for which little or no effective competition exists. In the telecommunications industry, the residual market is the residential market generally and the low-income residential market in particular. This market needs public protection. Even if competition exists, in other words, the members of the public may have neither the resources nor the ability to make competition work for them. Even more often, however, the markets are such that no sellers are engaged in active rivalry for the business of these customers. Accordingly, the abuses which such power portends is controlled in large part by public regulation.

The low-income telecommunications market is a different market from the commercial and industrial markets. Whether or not beneficial impacts arise for the commercial and industrial market from competition, or to the residential market generally, does not detract from any conclusion about whether or not unique adverse impacts arise for the low-income market in particular.

The boundaries of a market can be determined by any of several attributes. A separate market can be delineated by characteristics of the consumers in that market. A separate market can be delineated by the distinct goods and services provided within that market. A separate market can be delineated by the special treatment which the industry provides to that market. Based on these attributes, any number of factors quickly distinguish low-income customers specifically as a separate telecommunications market.

1.1 Characteristics of Low-Income Consumers

Characteristics of the low-income consumers, as low-income consumers, distinguish those customers as a separate market. Three characteristics in particular are relevant: (1) Low-income consumers have substantially lower penetration rates for telephones in the home. Penetration rates for low-income consumers can range down to 55%, contrasted to 95% and above for the population as a whole. (2) Low-income consumers have substantially higher churn rates.¹¹ Churn rates for low-income customers are often as high as 30% and more, contrasted to roughly 15% for the population as a whole. (3) Low-income consumers have higher hurdle rates.¹² Universally, the empirical research examining the effects of income on consumer hurdle rates shows that hurdle rates fall as income increases. Hurdle rates for low-income consumer purchases are often as high as 90% to 100%. These high hurdle rates mean that low-income expenditures must generate one year (or less) paybacks for the value of investments. High hurdle rates for low-income customers simply reflect the fact that, given the scarcity of financial resources for those customers, they require a faster return of any "investment" so that the scarce resources can again be devoted to other household uses.

1.2 Characteristics of Service Offered to Low-Income Consumers.

Characteristics of the service provided to low-income consumers distinguish these consumers as a separate market. Many of services provided by telecommunication

¹¹ A churn rate is the rate at which customers move on and off the system for whatever reason.

¹² The rate of return necessary to prompt consumer investment in a measure designed to save money is generally referred to as the "hurdle rate." The difference between the current telecommunications service provider and the least-cost provider of service, in other words, must be sufficient (*i.e.*, must have a substantial enough spread) to meet the customer's hurdle rate. Unless this exists, no consumer action will occur.

companies are disproportionately, if not uniquely, used by low-income consumers. An illustrative, though by no means comprehensive, list includes:

1. Low-income consumers disproportionately rely on company services allowing them to establish creditworthiness, particularly in light of characteristics that telephone companies consider to be adverse credit indicators. Low-income consumers more frequently tend to have bad credit reports for non-utility transactions, are less frequently homeowners, are less frequently financial service customers (checking and banking accounts), and are more frequently recipients of collection treatment. All of these push customers into a process to establish creditworthiness or to secure bill payment.
2. Low-income customers disproportionately rely on personal contact with company customer service representatives. Low-income customers are less likely to have checking accounts and are thus more likely to make cash payments; more likely to require the need to negotiate deferred payment arrangements for unpaid arrears; more likely to experience involuntary disconnections of service; and more likely to experience account collection treatment.
3. Low-income customers are more frequently mobile than the population as a whole. As a result, they disproportionately use services relating to account transfers and service disconnections.
4. Low-income customers, by definition, uniquely use customer services directed toward receiving information about universal service assistance programs such as lifeline and link-up and enrolling in such programs.

As can be seen, it becomes evident that the service produced for and delivered to low-income consumers differs from that produced for and delivered to the general population. As a result, low-income consumers represent a distinct market.

1.3 Characteristics of the Treatment of Low-Income Consumers.

Low-income customers represent a distinct market because the industry treats them as a separate market. At the federal level, the Federal Communications Commission (FCC) explicitly considered the "affordability" of telecommunications service to low-income consumers in its May 1997 universal service order. In addition, state utility regulatory commissions have widely considered the need for affordability assistance. For example, the Public Utilities Commission of Ohio (PUCO) has had specific proceedings both on the

adequate provision of information on the universal service assistance (USA) program and on the marketing of services through "phone sharks." Moreover, low-income customers are often treated as undesirable customers. Ohio customers who receive USA assistance, for example, may not also subscribe to enhanced services such as call-waiting and caller identification. In sum, a market can be delineated by the industry's treatment of the market as separate and distinct. That is the case for low-income consumers.

Having established that low-income consumers are not only a separate "market," but a residual market as well, the discussion below will consider the impacts of competition on this residual market, specifically as related to: (1) price; (2) service; and (3) quality.

2 SMALL USERS HAVE BEEN GIVEN THE OPPORTUNITY TO BEAR A HIGHER PROPORTION OF SYSTEM FIXED COSTS, AND RECEIVE LITTLE OF THE BENEFITS OF COMPETITIVE EFFICIENCIES.

A consideration of the price impacts on low-income customers should consider not only base rates, but other components of the consumer's bill as well.

2.1 Impacts on Base Rates.

The "promise" of competition has been that consumers will realize decreased rates and innovations in services. As a matter of theory and empirical inquiry, however, even if small consumers do not experience dramatically higher rates, they will tend *not* to receive the *benefits* of competition either.

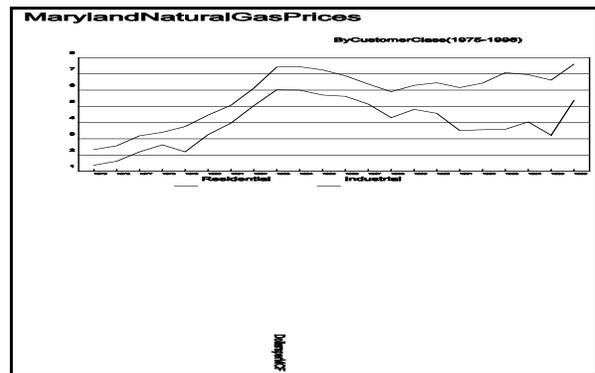
One impact of a competitive telecommunications industry is the likely impact that low-income customers will pay increased base rates for telephone service. Under cost-of-service ratemaking, which is the regulatory norm, state regulators seek to match the rates charged to consumers with the costs incurred in providing those consumers with service. There is, in other words, some element of causation. If a customer class causes the utility to incur certain costs, that class pays those costs. In contrast, under value-of-service ratemaking, which is the competitive norm, prices are set equal to what the market will bear rather than being based on cost causation. Value of service ratemaking takes into explicit consideration the alternatives available to customers. If fewer alternatives are available, the customers will be "willing" to spend more to retain service and prices are thus set higher. Given the lack of alternatives for most low-income consumers, the "value" of telephone service is higher and prices are set accordingly. If the move to value-of-service ratemaking means that captive customers will pay more, which it does, then low-income consumers are likely in line for a series of price increases.

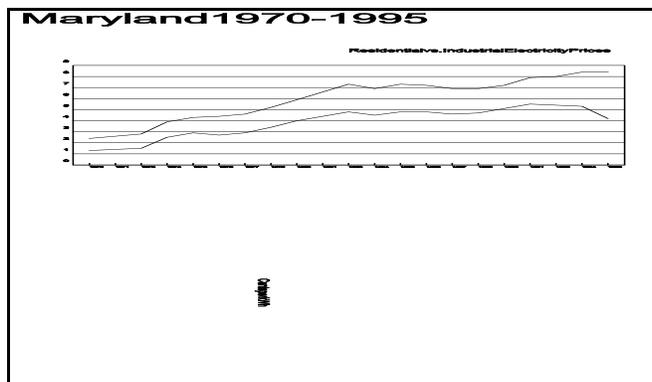
A more subtle form of passing higher costs on to captive users (including low-income consumers) is through a reallocation of fixed and variable costs. The "fixed" costs of a utility system are those costs that do not vary based on the amount of service sold. They include headquarters buildings, infrastructure, executive salaries, and the like. In contrast, the "variable" costs of a utility are those that increase or decrease directly with the amount of service used.

Under principles of cost causation, variable costs are charged to the consumers who cause the utility to incur the costs. In contrast, however, there are no accepted means of allocating fixed costs. Accordingly, as the telecommunications industry becomes more competitive, it is likely that the telephone companies will charge their larger customers close to their variable costs as a means to keep prices down and retain those customers as customers. The result, however, is to allocate the fixed costs of the system to captive customers. As a result, customers with fewer alternatives (such as low-income customers) will bear the largest share of fixed costs while those classes with more alternatives will be assigned a smaller share. They can thus expect to see increases in price even when the total costs of the utility remain stable or decrease.

This issue is not one of mere theory. A review of prices for small and large users in states where competition has come to the natural gas and electric industries shows the impacts on prices. Data from Maryland is presented in particular, but the Maryland results are representative of national results in this respect.

Illustration 1 presents the information on Maryland's competitive natural gas markets. As you can see in this figure, while the ratio of residential-to-industrial rates was 1.27:1 in 1985, by 1996, that ratio had increased to 1.42:1. The increase was not caused by the fact that there was a fly-up in residential rates. In fact, there was not. Nonetheless, the small user market did not receive the benefits of competition that the large industrial users did.





We can now see the same process beginning to work in the electric industry. Illustration 2 presents the price gap between industrial and residential electric rates for the years 1970 through 1996 (the most recent year available). The exhibit shows how the gap between the industrial and residential customer classes has begun to widen in recent years.

Similar impacts can be expected in the telecommunications industry. Consider the SBC/Ameritech position with respect to the consumer "benefits" of their proposed merger in Ohio. The merger applicants (SBC and Ameritech) made no bones of the fact that the merger was, first and foremost, designed to generate benefits to its largest customers. Applicant witness James Kahan explicitly and repeatedly testified that:

- ◆ "We will implement this strategy by first following our large corporation customers. This is a direct benefit of this merger as neither company on its own could undertake such an aggressive entry."
- ◆ "We believe a strong, financially viable Ameritech Ohio is essential to the State of Ohio and essential to providing high quality, reasonably priced telecommunications services to its retail and wholesale customers. . .this is particularly true to the extent Ameritech Ohio is better able to compete for large business customers in Ohio."
- ◆ ". . .we can either continue to focus on our current regions and run the risk of losing our large and mid-sized customers who provide a disproportionate share of the revenues that are needed to grow our business or we can expand and compete through the opportunity to follow and serve those customers anywhere they operate around the globe."
- ◆ "As SBC successfully competes for these large corporate customers, as we will be able to do as a result of our strategy. . ."

Competition has not been kind to low-income consumers in other industries. No evidence exists to expect anything different in the telecommunications industry.

2.2 *Impacts on Ancillary Fees.*

Aside from increases in their base rates, one additional way in which low-income consumers will likely face increased prices is through the "unbundling" of rates and services. Debundled service fees can represent a significant increase in "rates" to customers even if base rates remain the same or decrease. Customers who are facing payment troubles, for example, can nonetheless still face significant increases in the monies which they owe to a utility if either the utility debundles existing elements of service and institutes new fees for those individual elements, or, if the utility institutes increases in existing fees for certain elements of service other than those paid for through base rates.

Unbundling is not new to consumers. Banks are the masters of "unbundled" fees. Most consumers have experienced fees for ATM machines that were not previously imposed. Fees are charged to use credit cards. With some banks, fees are charged to have a consumer's checks returned to them in their statement each month (rather than photocopies of the checks).

In a competitive industry, these fees need not be cost-based. Since bank deregulation in the 1980s, fees charged by banks have been skyrocketing. Recent newspaper headlines proclaim: "Banks Begin to See Gold in Bounced Checks." Reports state that non-sufficient funds (NSF) fees have risen from an average of \$15.11 in 1990 to an average fee of \$19.35 per check by 1993. The large banks are charging fees averaging 971% more than the processing costs. Researchers have estimated that banks earned in excess of \$1 billion in 1994 from NSF fees alone.

Of course, banks charge other fees as well. An April 1998 GAO report, for example, found that the percentage of banks imposing surcharges on the use of ATMs by non-account-holders increased from 39 percent to 64 percent in the one year from February 1, 1997 to February 1, 1998. The average surcharge fee assessed by banks, including in the calculation all ATMs without surcharges, increased from \$0.69 to \$1.00 during that time period. For ATMs with surcharges, the most typical fee as of February 1, 1998, was \$1.50, GAO found, compared to \$1.00 the prior year. In addition to these surcharge fees, banks impose separate "switching" and "interchange" fees on ATM use. An April 1998 study found that four of five big banks impose such additional fees.

The utility industry is already beginning to adopt these banking practices. One Vermont utility has proposed to charge consumers a fee every time they are sent a shutoff notice. A Pennsylvania utility proposed charging a fee for "field collection calls," where a company representative personally visits your home and collects money while there.

Other fees that can be expected include fees to pay for the negotiation of a deferred payment plan, fees to cash third party checks at company offices, and fees to have a utility check your bill if you dispute the amount that you have been billed.

3 SMALL AND DISADVANTAGED USERS HAVE BEEN GIVEN THE OPPORTUNITY TO BE EXCLUDED FROM NEW SERVICE OPPORTUNITIES OFFERED BY COMPETITIVE PROVIDERS.

The issue of redlining in a competitive telecommunications industry has been raised by consumer advocates who fear an industry disinterest in residential customers generally, and in hard-to-serve or payment-troubled residential customers in particular.

The primary emphasis of redlining concerns involves the definition of geographic areas based primarily on racial/ethnic and/or socio-economic factors. A group of advisory committees to the United States Committee on Civil Rights has defined *insurance* redlining as "canceling, refusing to insure or to renew, or varying the terms under which insurance is available to individuals because of the geographic location of a risk."

Similarly, redlining within the home mortgage industry has been defined as "the process of drawing or outlining a geographic area within which lending will be denied due to the composition or characteristics of the area."

3.1 Irrational vs. Unlawful

Redlining is objectionable whether or not it is economically irrational. A decision to redline may well be an economically rational decision. One example may involve the decisions of the automobile insurance industry to engage in the practice of "territorial rating." Under such a system, auto insurers set policy premiums based in large part on the geographic location of the insured. Locations in large urban areas and inner cities are deemed to be more risky, and therefore more expensive to serve, than suburban areas. Accordingly, the rates charged to the predominantly low-income and minority auto owners in these areas are consistently higher than non-urban, non-poor, non-minority locations. The thing is, the conclusion that urban customers are more risky, and thus more expensive to serve than non-urban customers, may be true. Thus, while the geographic-based decisionmaking may be "redlining," it is nonetheless economically rational.

Similarly, just because bank lending patterns are racially discriminatory does not *ipso facto* mean that they are economically irrational. It may well be that households in certain geographic areas of the city, as a class, do not have the financial resources to support home mortgages. Even more possible, households in certain geographic areas of a city may not,

without further inquiry, satisfy the indices of "creditworthiness" which historically have supported a decision to grant a mortgage. No question exists but that if a bank or other financial institution would pursue a further inquiry, it may ultimately discover the creditworthiness of the individual households in this area. Nonetheless, to pursue such an inquiry may be expensive and considered unmerited by the profit potential from that area.

In the alternative, a bank may simply decide that it can generate the same number of loans for an equal dollar value in a different geographic area of the city *without* engaging in the additional inquiry. In the absence of the additional expense of the further inquiry, the profit margin per loan may be higher and a profit-maximizing enterprise may rationally be drawn to the second geographic area. In sum, ultimately, while the creditworthiness of the households in both areas of town may be equal, the transaction costs in making the creditworthiness decision may be vastly different, thus affecting the profit margin and the decision to serve. In this instance, even if unlawful, the decision of the financial institutional to redline is not economically irrational.

3.2 *Defining Refusal to Deal*

A second aspect of defining redlining involves a consideration of the consequences which the anti-redlining remedy is seeking to prevent. The first consequence, of course, is a refusal to deal entirely. Perhaps the best example of this refusal to deal involves the denial of a home mortgage. In this instance, there is no commercial relationship which develops between the victim of the redlining practice and the institution engaging in the practice.

Defining and identifying a "refusal to serve," however, may not be as easy as finding an individual person to whom an institution "just said no." A refusal to deal may involve a myriad of gradations. A refusal to deal, for example, may involve a refusal to provide facilities in a particular geographic market. Within the banking industry, one study in Los Angeles found nineteen branch banks in South Central Los Angeles, a predominantly poor Black community having a population of 587,000 people. In contrast, the study found 21 branch banks in nearby Gardena, a middle class white community of only 49,800 persons.¹³¹

This situation is certainly not unique. A study in Washington D.C. found that:

residents in predominantly white neighborhoods have three times as many branches available, per person, as do residents of predominantly African American neighborhoods. In the mostly African American community of Anacostia, only two banks served the 69,000 residents. Customers of these

¹³¹ Brian Porter Zidek, "Discrimination in Lending: Community Adaptations and Government Responses," 1 *Georgetown Journal on Fighting Poverty* 460, 463 (1994).

banks had to wait, on average, thirty minutes to cash a check, and far longer if they hoped to speak with a loan officer. By contrast, in the largely white suburb of Chevy Chase, Maryland, the [Washington] Post found eight bank branches along a one-mile stretch of Connecticut Avenue. The Washington Post also found that institutions which served minority neighborhoods were generally staffed with fewer tellers and loan officers.^{14\}

The conclusion was that "the degree to which financial institutions choose to invest in their branches, and where they decide to locate them, helps to determine the flow of resources into a given community."^{15\} Given the observation that the offer of financial services arises out of proximity to and awareness of the needs of the community, it comes as no surprise, then, that fewer loans for consumer and home credit transactions were made in the Black communities than in the white communities. There is no reason to believe that the provision of telecommunications services is any different from the provision of banking services in this regard. Such providers could "refuse to serve" a community or neighborhood simply by choosing to have no presence in that geographic location.

Indeed, this refusal to provide facilities through the refusal to provide the infrastructure necessary to serve a community is precisely what is occurring in the competitive telecommunications industry. A study of the investment practices by the Regional Bell Operating Companies (RBOCs) found a distinct pattern of geographic redlining in this regard. According to the United Church of Christ Office of Communications:

Over the years, the RBOCs have come to believe that households with the greatest disposable income are the most receptive and reliable customers for advanced communication services. Even when confronted with evidence to the contrary, this rule of thumb significantly influences marketing strategy. . . . Despite facts that confirm the existence of market demand for advanced communication services among minority and low-income customers, RBOC test marketing and deployment plans are designed to capitalize on the high-income customer.^{16\}

^{14\} *Id.*

^{15\} *Id.*

^{16\} ***In Re.: A Notice of Inquiry Concerning Universal Service and Open Access***, Comments of the Office of the Office of Communications, United Church of Christ, at 4, 6, in National Telecommunications and Information Administration Docket No. 940955-4255 (December 14, 1994).

The offer of new high technology services by the RBOCs depends in large part on the installation of appropriate infrastructure. The provision of video dialtone (VDT), for example, requires the installation of new cable. In its study of the deployment of VDT, the United Church of Christ found that:

- o Bell Atlantic's Maryland VDT test trial focused on consumers with a median household income of \$54,809. The percent of minorities in Montgomery County (where VDT was test marketed) is 11.6 percent compared to 25.9 percent throughout all of Maryland.
- o Consumers test trialed in Falls Church, Virginia have a median income of \$51,011 and are 7.5 percent minority compared to \$33,328 and 19.8 percent for statewide data.
- o Richardson, Texas in Southwestern Bell's region has a median income of \$50,240 compared to \$27,016 statewide. The percentage of minorities in Richardson is 10.7 versus 20.6 percent for the state of Texas.

In this situation, in other words, the RBOCs did not refuse to provide service altogether, but instead refused to provide the same *level* of service to low-income and historically Black communities.¹⁷¹

In sum, from a service perspective, just as redlining has been an issue in banking, insurance, and other industries, it should be expected in a competitive telecommunications industry as well. The fact that redlining decisions have been made does not necessarily mean the industry is acting irrationally. Indeed, the redlining may be motivated by economic considerations. If universal telecommunications service is to be maintained, however, vigilance against redlining (economically rational or not) must be maintained.

¹⁷¹ The significance goes beyond the mere illustrations cited here. The redlining found by the United Church of Christ did not involve isolated incidents. Indeed, the United Church of Christ investigation found that in only two of the ten market trials of video dialtone did the characteristics of the communities resemble the household income and racial composition of consumers statewide. *Id.*, at 6. The investigation also looked, for example, at the Ameritech deployment of video dialtone in 28 Illinois communities. ". . .of the 28 municipalities that Ameritech proposes to serve in Illinois. . .over 90 percent of them significantly exceed the median household income of the state. . .Racial minorities account for less than the state average in 22 of the 28 municipalities. . .In many instances, the proposed deployment area exactly borders communities with high concentrations of low-income and/or minority people." *Id.*, at 9.

4 SMALL AND DISADVANTAGED USERS HAVE BEEN GIVEN THE OPPORTUNITY TO RECEIVE FEWER AND LESS QUALITY SERVICE.

One impact of a competitive telecommunications industry involves the reduction in service offered to low-income and payment-troubled customers. Low-income customers are likely to receive lower quality service than they have received in the past.

4.1 "Services" Used by Low-Income Consumers

In this respect, however, the "service" provided by a telecommunications company is more than simply the service of providing communications through the wire. It instead includes both the wires service and the bundle of related or supporting services as well. To the extent that this bundle is reduced, the level of services provided by a company to those customers who use (and rely upon) that bundle is reduced as well.

There are a host of service components that low-income consumers use that are above and beyond the mere receipt of communications. The services provided involving the treatment of payment-troubles are most likely to be used by low-income consumers. The services provided involving the need to make personal contact with a utility, whether to deal with payment-troubles or to make monthly payments, distinguish low-income customers from the residential class generally. The services involving the provision of information about public bill-paying assistance distinguish low-income consumers from residential customers generally. The services used by a low-income or payment-troubled customer can be identified through the flow chart attached as Figure 3.

4.2 Where Will Service Reductions Occur?

It is reasonable to expect that the level of service provided by competitive telecommunication companies will be reduced in the following areas:

- ◆ The reduction of staff devoted to responding to "telephone customer contacts," including situations where a customer initiates a telephone call to the company involving bill inquiries (including inquiries relating to deposits); requests for deferred payment plans; and responses to shutoff notices.
- ◆ The reduction of staff devoted to responding to "walk-in customer contacts," including situations where a customer personally visits a company office regarding bill inquiries; requests for deferred payment plans; and responses to shutoff notices.
- ◆ The reduction of staff devoted to handling company-initiated collection contacts, which involve, in addition, the negotiation of payment plans, the provision of

information regarding universal service assistance, the provision of information regarding other sources of bill payment assistance, and the like.

- ◆ The reduction of immediate telephonic access to customer service personnel, without need for call-backs or without obtaining busy signals;
- ◆ A lengthening of the time taken to answer telephone calls and to respond to customer inquiries.

4.3 *One Illustration*

Again, the potential impacts identified above are not theoretical. Evidence shows that customer service suffers under competition. For example, U.S. West cut its work force by a total of 60,000 employees. From 1989 to 1994, the number of customer service centers decreased from 560 to 26, slowing repairs and raising other customer concerns.

In addition, the wait for new service orders has increased, customer service calls have an average wait of up to 22 minutes and customer complaints over the same period increased from 54 per month to 752 per month.

SUMMARY

The impact of telecommunications competition on low-income households cannot be determined based on the "average" consumer. The fallacy of this approach is two-fold: (1) not all consumers are "average"; and (2) service reductions tend to disproportionately adversely affect low-income consumers. When viewed from this perspective, it is possible to determine that telecommunications competition has resulted in adverse impacts with respect to rates, quality and service.

FIGURE 3

FLOW OF A CUSTOMER THROUGH A UTILITY SYSTEM

