Research Paper

**CUSTOMER SATISFACTION
WHAT HAPPENED?**

WORKING PAPER #98011

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CUSTOMER SATISFACTION
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1994-1997

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What Happened to Customer Satisfaction?

What happened in the period 1994 to 1997 is that, despite increasing corporate concern with customer satisfaction, customer satisfaction went down. It went down across most sectors of the economy and in most of the 34 industries measured in the American Customer Satisfaction Index (ACSI).[1]

Since 1994, customer satisfaction (ACSI) has been on a steady decline, from 74.5 to 71.1 on a 0-100 scale, a drop of 4.6%. These years have been marked by generally rising corporate earnings from cost savings. Relatively few companies have seen earnings increase as a result of revenue growth. Future earnings growth will probably depend more on revenue increases relative to cost reductions. Growth will be difficult to achieve, however, unless the downward trend in customer satisfaction is broken, particularly in the service sector where customer satisfaction has dropped the most. A good omen is that—while customer satisfaction declined over the 4-year period—the national ACSI, which is produced quarterly on a rolling basis, flattened across the quarters of 1997.

One major source of increased company profits and shareholder returns has been downsizing of employment, with fewer people to provide service to customers. While manufacturing industries can substitute automation for employees—and the difference is largely invisible to customers—for service industries, fewer employees means fewer people to answer customer calls, wait on customers in stores, and provide the level of attention customers want. Customers perceive a telephone inquiry answered by a multi-menu voice mail

[1] The American Customer Satisfaction Index is produced by a partnership of the University of Michigan Business School, American Society for Quality (ASQ), and Arthur Andersen.

system as less responsive than explaining a need to company personnel. Downsizing may have been good for individuals as shareholders, but not for them as customers.

The American Customer Satisfaction Index (ACSI)

ACSI produces a set of indices for customer satisfaction, its drivers, its outcomes, and the importance of each. ACSI output comes from econometric modeling of data collected through telephone surveys of random samples of the customers of approximately 200 major companies in 34 industries, plus satisfaction questions asked of buyers in each industry who have used the products and services of smaller companies than the ones measured. These are aggregated into an "all other companies" measure in each industry. The measured companies, industries, and sectors are broadly representative of the U.S. economy serving household consumers. Sales of the measured companies constitute 35-40% of the Gross Domestic Product (GDP). Non-U.S. companies with major market shares in several of the industries are also included in ACSI.

ACSI reports indices (on 0-100 scales) at four levels: National, economic sector, industry, and company. Each year 50,000 customer interviews are collected to provide the database for modeling (250 per company)[2]. By the end of its fourth year, 1997, ACSI had a database of 200,000 customer interviews, four annual sets of indices at the company, sector, and industry level, and 16 quarterly national indices. The national customer satisfaction index (ACSI) is updated quarterly on a rolling basis, with new data for 1-2 of seven measured economic sectors replacing data collected the prior year.

Measurement is at the individual customer level, although not used at the individual level for analyses. Indices of customers of a company are averaged to produce the company indices. Industry indices consist of company indices, weighted by the sales of each company. Sector indices consist of industry indices, weighted by industry sales. The national ACSI is comprised of the sector indices, weighted by each sector's contribution to GDP.

The model is a set of causal equations that link customer expectations, perceived quality, and perceived value to customer satisfaction (ACSI). ACSI is linked, in turn, to its consequences: customer complaints, and customer loyalty, as measured by price tolerance and customer retention.[3] [4] For most companies,

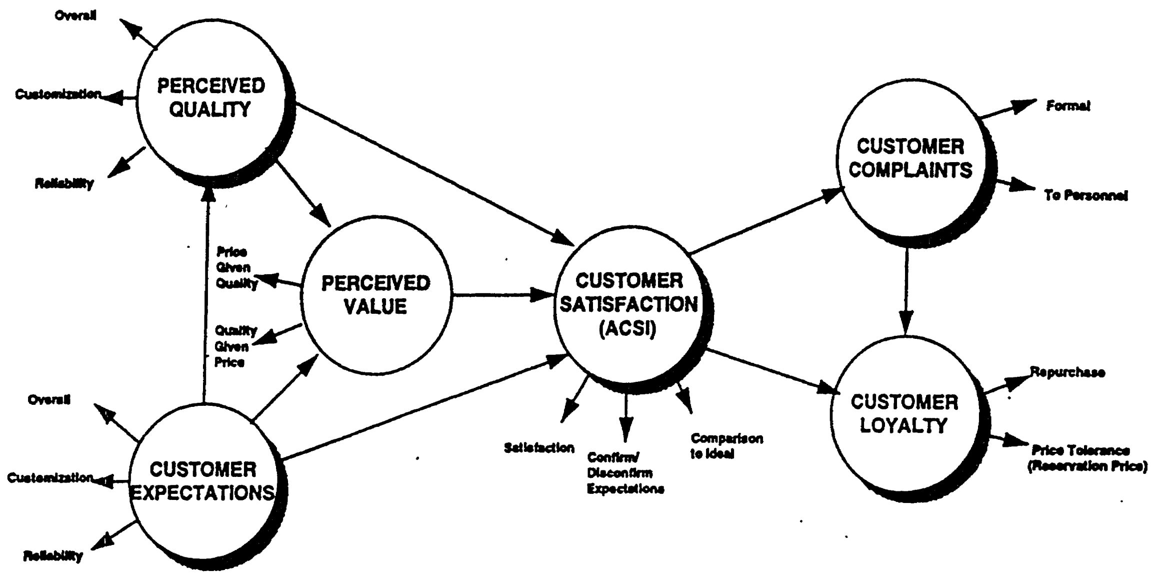
[2] Because 2-3 questions are used in modeling each reported variable, confidence intervals for these variables are smaller than for a single question. The 90% confidence interval for the national ACSI is plus or minus 0.2 points on a 0-100 scale.

[3] National Quality Research Center, University of Michigan Business School (March 1998) *American Customer Satisfaction Index: Methodology Report* (Milwaukee: American Society for Quality)

[4] Fornell, Claes, Michael D. Johnson, Eugene W. Anderson, Jaesung Cha and Barbara Everitt Bryant (1996), "The American Customer Satisfaction Index: Nature, Purpose, and Findings," *Journal of Marketing*, Vol. 60, October, 7-18

repeat customers are an important economic asset, Thus, customer retention (measured as repurchase probability) is a major indicator of financial performance. The ACSI model explains the effect customer satisfaction has on economic returns.[5]

The ACSI Model



The National Trend in Customer Satisfaction

The national trend in customer satisfaction (ACSI) has been down. As Figure 1 shows, while the perceived quality index is higher than ACSI, ranging from 80.5 in 1994 to 77.6 in 1997, the perception of the quality of the goods and services the customer purchases has slid comparably to satisfaction—and taken satisfaction down with it.

The drop in satisfaction is not explained by the idea that today's customers expect more. Customer expectations have been relatively stable from a 1994 start at 77.5 to a 1997 index of 75.6, with a slight upturn in 1996.

Customer perceptions of value—quality for the price paid and price for the quality received—do not appear to be the cause of declining satisfaction.

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[5] Ittner, Christopher D. and David F. Larker (1996) "Measuring the Impact of Quality Initiatives on Firm Financial Performance," *Advances in the Management of Organizational Quality*, Soumen Ghosh and Donald Fedor (eds.), JAI Press, Inc. Vol 1, 1-37

Perceived value is up marginally since 1994 but rose in 1995 and 1996 before dropping slightly. Perceived value has been aided by low inflation that has kept prices from rising. The decline in satisfaction is more of a quality problem than a price problem.

Despite the drop in ACSI, estimated customer retention across all 200 industries has actually risen from 68.9% to 72.2% and been stable in the 72% range for the past three years. This is a disturbing trend from the national economic perspective as well as a warning signal for business. If customers remain loyal to their suppliers despite declining satisfaction, the implication is either increased monopoly power (e.g. airlines at certain hubs) or that customer loyalty is simply a consequence of price and incentives (e.g. frequent flier miles).

Economic Sector Indices

The same graphics shown for the national ACSI, illustrating the trends in five of the indices produced by modeling, are shown in Figures 2-8 for the seven measured sectors of the U.S. economy serving household consumers.

Several facts and trends are notable:

- In every year, ACSI for manufactured products is higher than that for services.
- Satisfaction with private sector services is greater than with government services.
- Satisfaction with manufactured products has declined slightly, but is relatively stable compared with satisfaction with services, which is in decline.
- While customer expectations vary by sector and year, the gap within each sector between expectations and satisfaction (ACSI) is fairly constant. Any hypothesis that there is a widening gap between what customers expect and what companies deliver is not supported.
- Perceived quality and ACSI have fallen together. Declines in satisfaction reflect, or parallel, declines in the perception of quality.
- Aided by low inflation, perceived value rose from 1994 to 1996 in most economic sectors. It then declined in 1997, but not to its 1994 level.
- Public Administration/Government is the only sector in which customer satisfaction improved in 1997, possibly the result of increased focus by government on treating taxpayers as customers.

Indices for Key Industries

In Figures 9-12, satisfaction (ACSI) and the other indices are illustrated for four representative industries: (1) a Manufacturing/Durables industry, automobiles/vans/light trucks; (2) a monopoly industry which will soon be deregulated, electric service; (3) a service industry which has monopolies in a number of geographic areas and open competition in others, scheduled airlines; and (4) an industry which is highly competitive and in which customers have many choices, department and discount stores.

Automobiles/Vans/Light Trucks

The perception of quality and customer expectations are very high for automobiles/vans/light trucks. Customer satisfaction in this industry is very stable (Figure 9). Customer expectations rose between 1994 and 1995, then settled, but in 1997 expectations remain marginally above 1994. For the Manufacturing/Durables sector, ACSI models perceived quality as a composite of two separate indices: Perceived product quality and perceived service quality. The index for product quality consistently registers 4-5 points higher than the index for service quality. Thus, if the automobile/van/light truck industry could improve its service component, its ACSI should rise. The industry leaders for satisfaction are no longer solely foreign car manufacturers—as they might have been if there had been an ACSI 15-20 years ago—but a mix of U.S. and foreign name plates. The automobile industry gets generally high marks for delivering value. Customer retention in the industry, however, is relatively weak. Because of the variety of makes and models available, customer switching is easy. Customers may not intend to repurchase the same brand of vehicle about which they were interviewed in the ACSI survey for reasons other than dissatisfaction. There are other reasons for changing vehicle brand: moving up in quality and features, buying multiple vehicles for a household, changing life styles, and changing life cycle needs. For any manufacturer, the retention of even a few more percent of customers could have enormous impact on bottom line results.

Electric Service

Customers evaluate the electric service industry--made up of monopoly providers in nearly all areas--as delivering high quality but a poor cost value (Figure 10). This will make a number of electric utilities very vulnerable once deregulation opens up competition. Within the industry, the range in satisfaction scores has a 19-point spread around the stable average score of 78. Customer retention, as measured in ACSI, is based on asking hypothetical questions premised on "if you had a choice of electric companies." Virtually no customers have such a choice now, but may have one in the near term future. When deregulation becomes fully effective, the electric companies that deliver low satisfaction will be at risk. Any utility that can compete on perceived value while maintaining one of the industry's higher satisfaction scores will stand to win out in the coming competitive environment.

Scheduled Airlines

Scheduled airlines have one of the lowest satisfaction scores of private sector industries. The industry's ACSI has been going down (Figure 11). ACSI was 72 in 1994 and has slid to 67. Perceived quality has dropped from 77 to 71, a drop of 7.8%. Every passenger has his or her own anecdote about being "treated like cattle," "fed nothing but pretzels," "sitting on the runway," etc. While airlines are focusing on on-time-departures and more efficiently filling seat capacity, attention to passenger comfort has declined. Satisfaction has dropped as there are more passengers per flight attendant. Customer retention is less sensitive to satisfaction than in fully competitive industries. Many airlines virtually control the market at hub airports.

Department and Discount Stores

Considering the wide variety of products they offer for every price range and taste, department and discount stores get only mid-70s range ACSI scores (Figure 12). The gap between the store chains that provide the most satisfaction and those that provide the least is, however, a substantial 12-points. Perceived quality, perceived value, and ACSI have all been relatively stable the past three years, after a drop from higher values in 1994. Value took a big plunge between 1994 and 1995 which, coupled with a lesser drop in perceived quality, brought ACSI down. Customer retention stays in a 77-78% range showing that three-fourths of customers stick with their favorite stores, at least for some proportion of their purchases.

Differences in Customer Satisfaction by Demographic Groups

Sex

Women customers experience satisfaction at a level 4-points higher than men. This has been true throughout four years of ACSI measurement, and within every economic sector and for nearly all industries. While actual satisfaction varies between sectors and industries and across time, the 4-point average difference between the ACSIs for women and the lower ones for men has persisted. A possible explanation is that women are better shoppers than men, as evidenced by their higher satisfaction with their purchases.

Age

An age difference in satisfaction has also persisted across the years of ACSI measurement. Because of the difference between men and women, age differences are graphed in Figure 13 separately for the sexes.

Satisfaction rises with age for both sexes, from ages 18-54, but is markedly higher among those 55 and over. Figure 13 shows three age groups: 18-34, 35-54, 55+.

One explanation could be that older shoppers are more experienced. They return to brands or establishments which have delivered satisfaction to them. They are better able to make choices they like. Another explanation is that their early shopping experiences were in the years after World War II when pent up demand for consumer goods was so great that manufacturers could sell whatever they could produce, regardless of quality. Older shoppers may be benchmarking what they buy today against what was available to them in earlier times, and finding the quality better.

For all ages and both sexes, satisfaction has declined in recent years.

Socioeconomic Level

Another difference that remains constant, is the difference in satisfaction between socioeconomic groups divided into levels by a combination of education and income (Figure 14). Those who can afford to pay more for what they buy are less satisfied than those with more limited means. Customers are rational. They evaluate the goods and services they purchase by quality/value relationships within the range of what is affordable to them. A Mercedes-Benz may have superior quality, but that quality is not relevant to the customer for whom it is out of reach because of price.

Both Figures 13 and 14 show ACSIs averaged for individuals. Unlike the national, sector, and industry graphs in Figures 1-12, and 15, these are not weighted by company sales. Individual averages are higher than national, sector, and industry ACSIs. ACSIs at the national, sector, and industry level are pulled down by the large weights for the Public Administration /Government sector and weights for some large companies with lower than average ACSIs.

What Makes the Most Difference in Customers: Sex, Age, or Socioeconomic Status?

The answer is age. A statistical test shows that age has the largest demographic effect on the scores customers give for satisfaction (ACSI). Socioeconomic level is next in importance, and sex makes the least difference.[6]

Geographic Area

In 1997, Northeastern customers are less satisfied than those in the South and Midwest, areas which have friendlier reputations for service personnel (Figure 15). The findings make those reputations appear to be substantive differences. Western customers have lower ACSIs than those in the South and Midwest, but higher than those in the Northeast.

[6] Bryant, Barbara Everitt and Jaesung Cha, (1996) "Crossing the Threshold: Some Customers Are Harder to Please Than Others," *Marketing Research*, Vol. 8, No. 4, Winter.

Summary

The American Customer Satisfaction Index (ACSI) is the only uniform, national, cross-industry indicator of U.S. household consumers satisfaction with the quality of goods and services available to them. ACSI results for 1994-1995 are disturbing for the economy. Customer satisfaction, measured as a 0-100 index, has declined by 4.6% from 74.5 to 71.1. The causal model used for the ACSI shows this drop is due largely to the downward slide in customers' perception of quality, the major driver of satisfaction. Two other drivers show different patterns. In a period of low inflation, the perception of value shows a slight upward trend. Customer expectations have remained relatively flat.

The decline in satisfaction can be attributed more to service industries than to manufacturing. In a period of downsizing, staff reductions have impacted customer service negatively. While satisfaction remains relatively constant for manufactured products, this satisfaction is lower than it could be because products that require continued servicing are evaluated lower for service quality than for product quality.

Key

PQ	Perceived Quality
CE	Customer Expectations
ACSI	Customer Satisfaction
PV	Perceived Value
CR	Customer Retention (%)

Figure 1

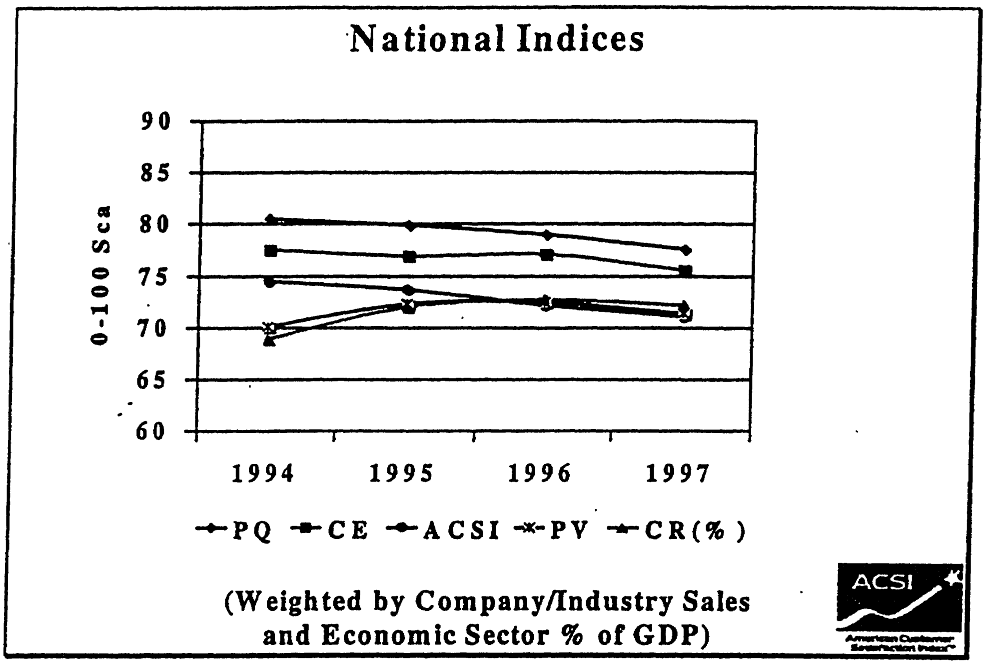


Figure 2

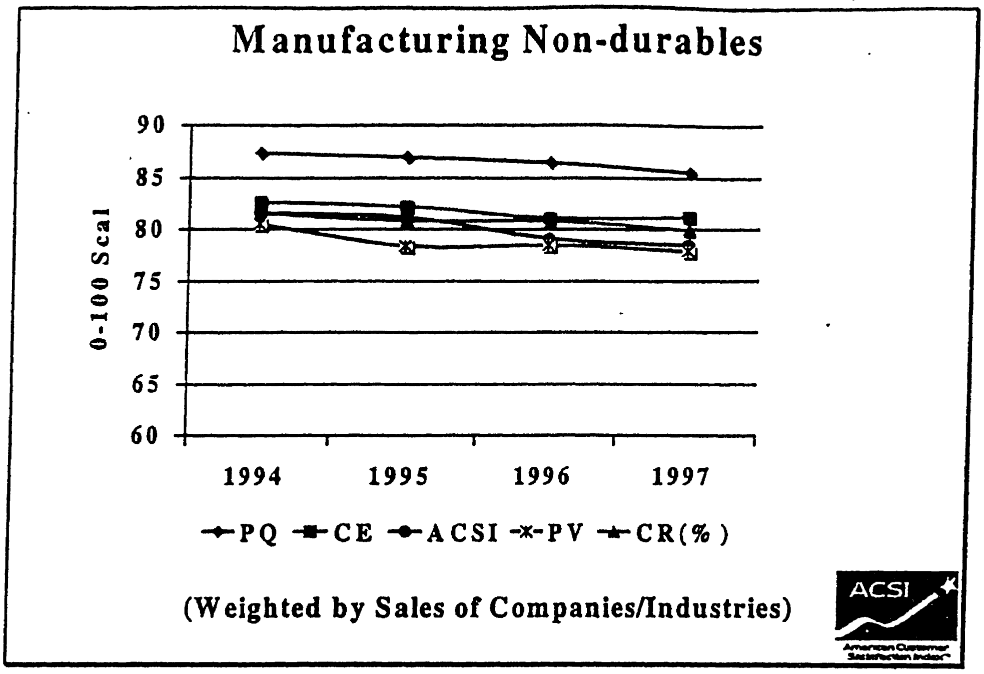


Figure 3

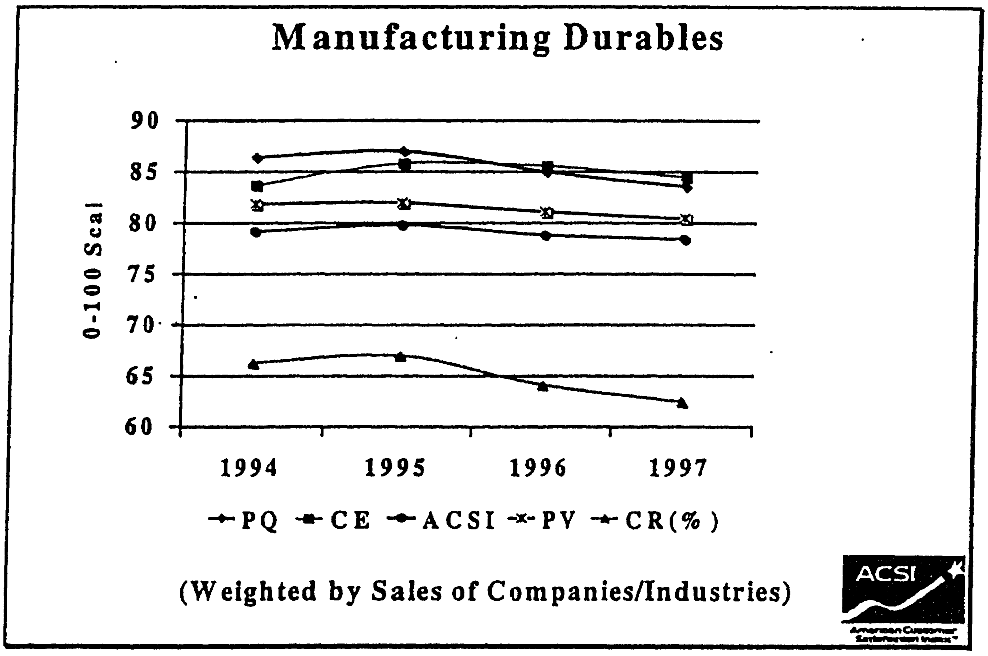


Figure 4

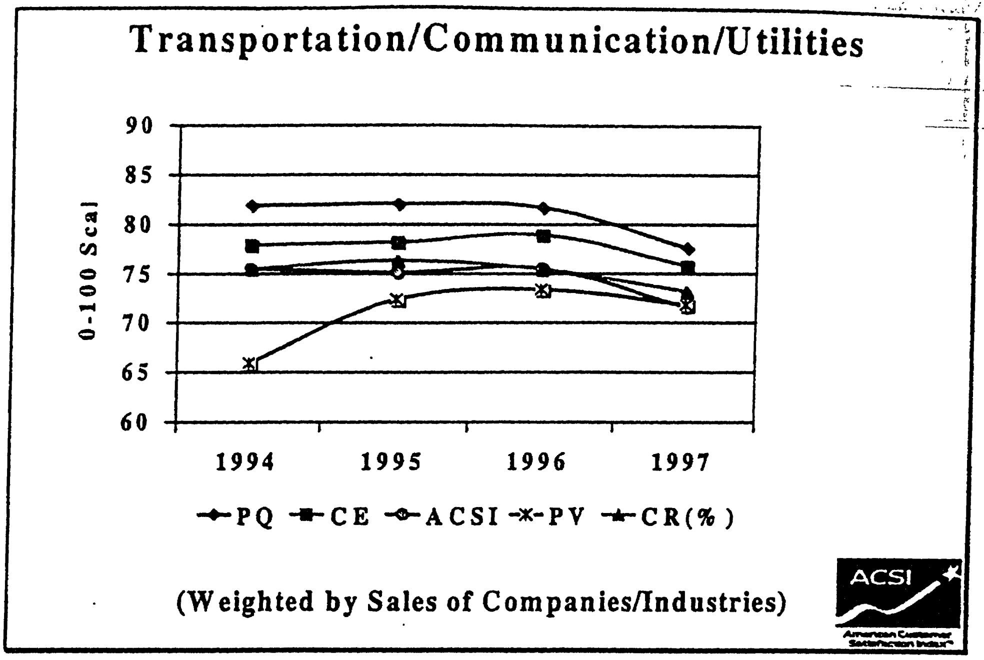


Figure 5

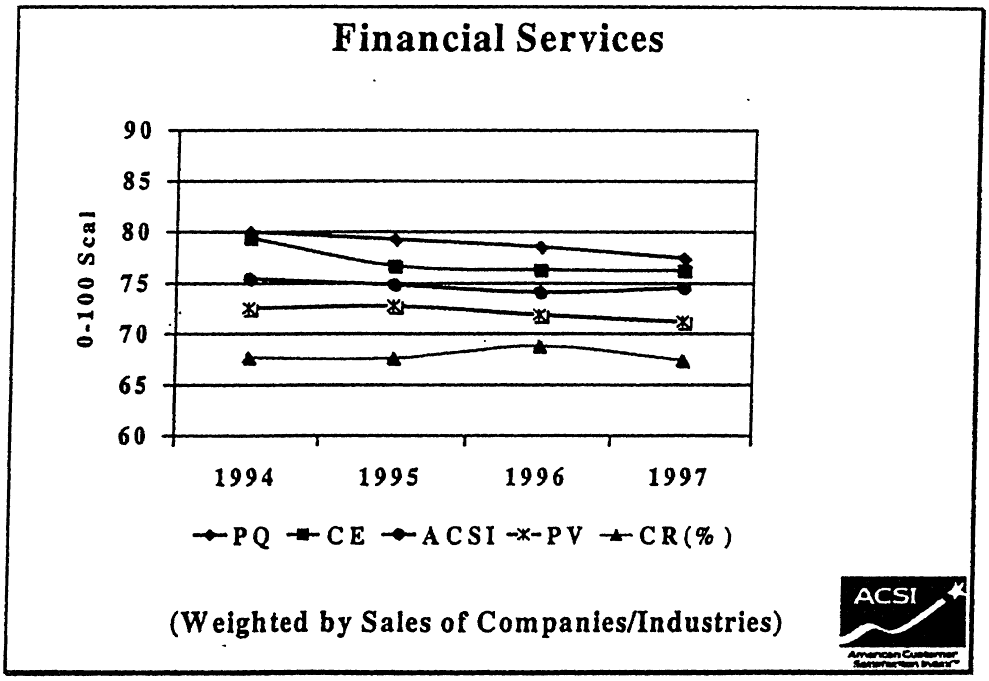


Figure 6

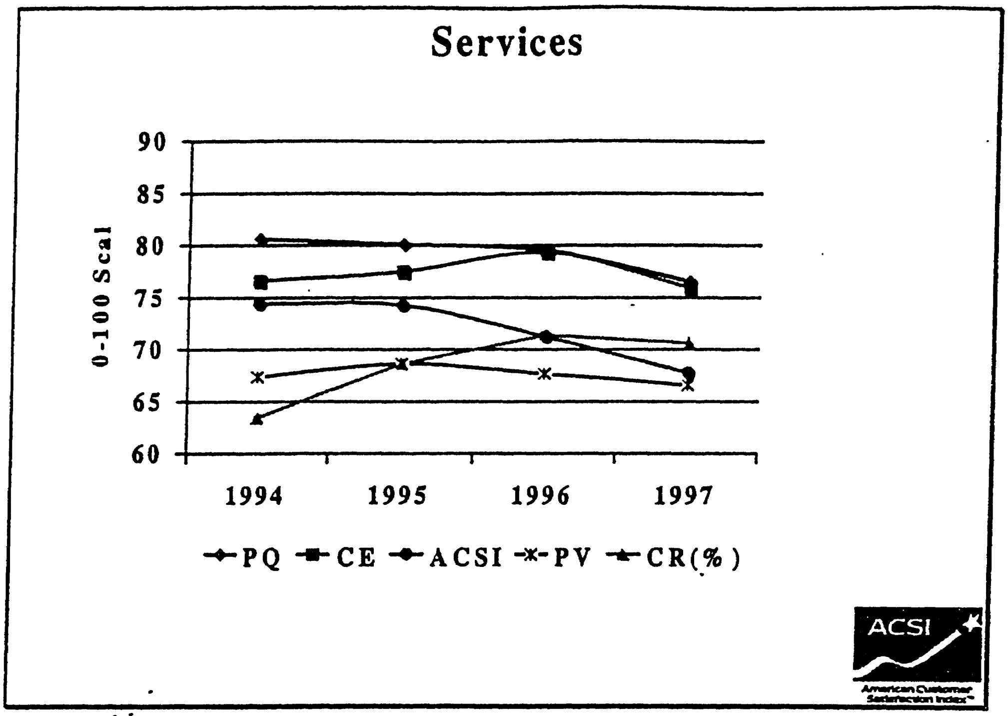


Figure 7

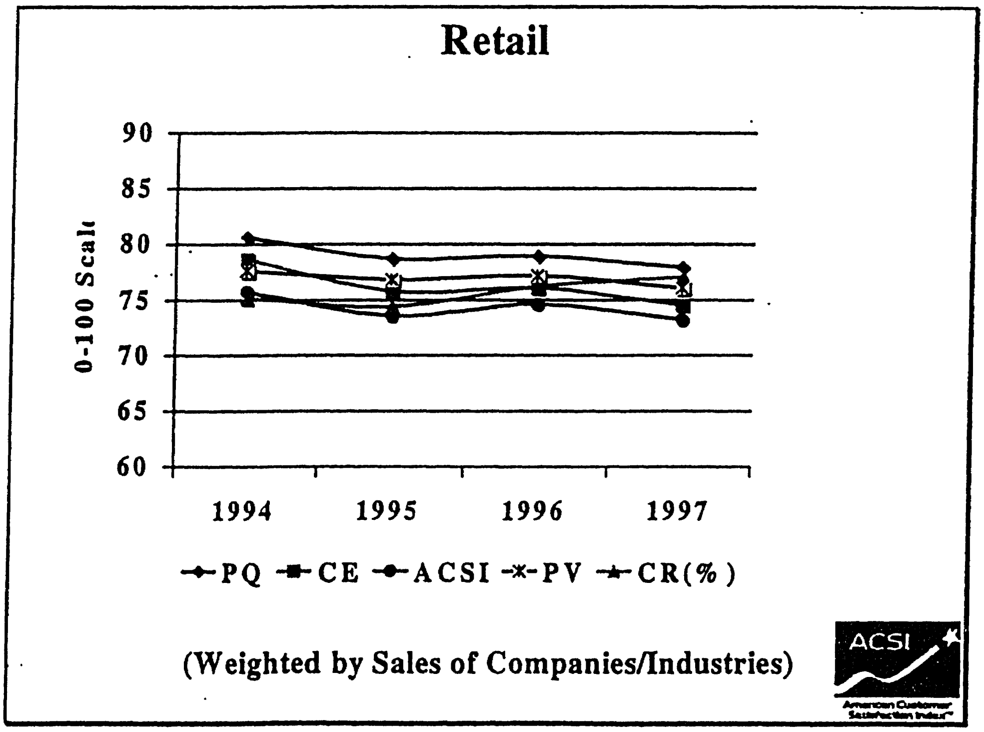


Figure 8

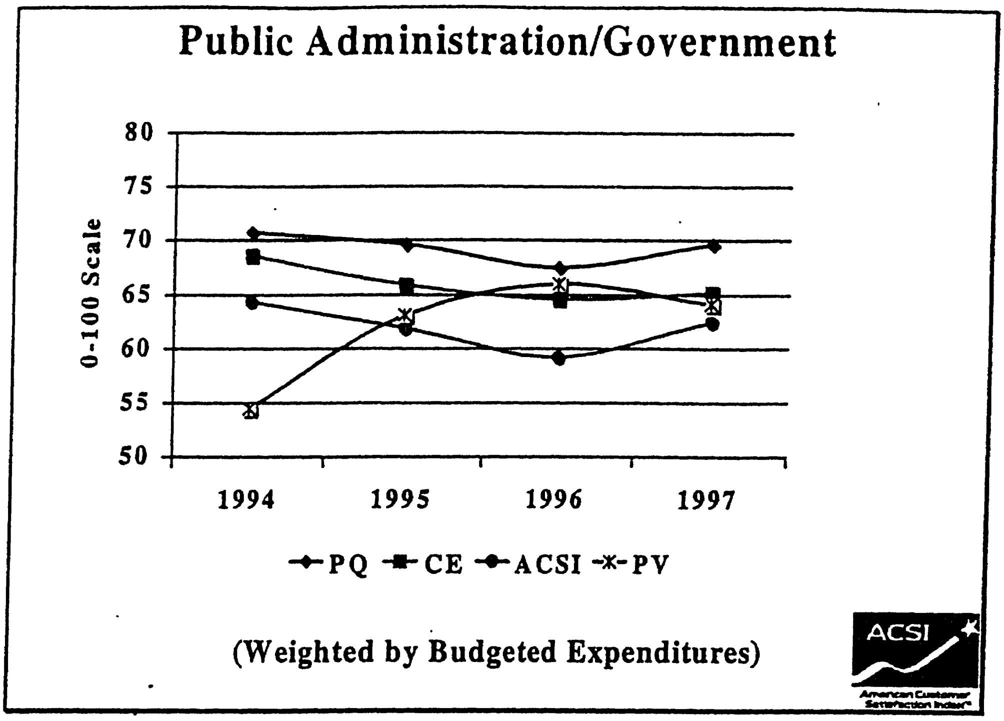


Figure 9

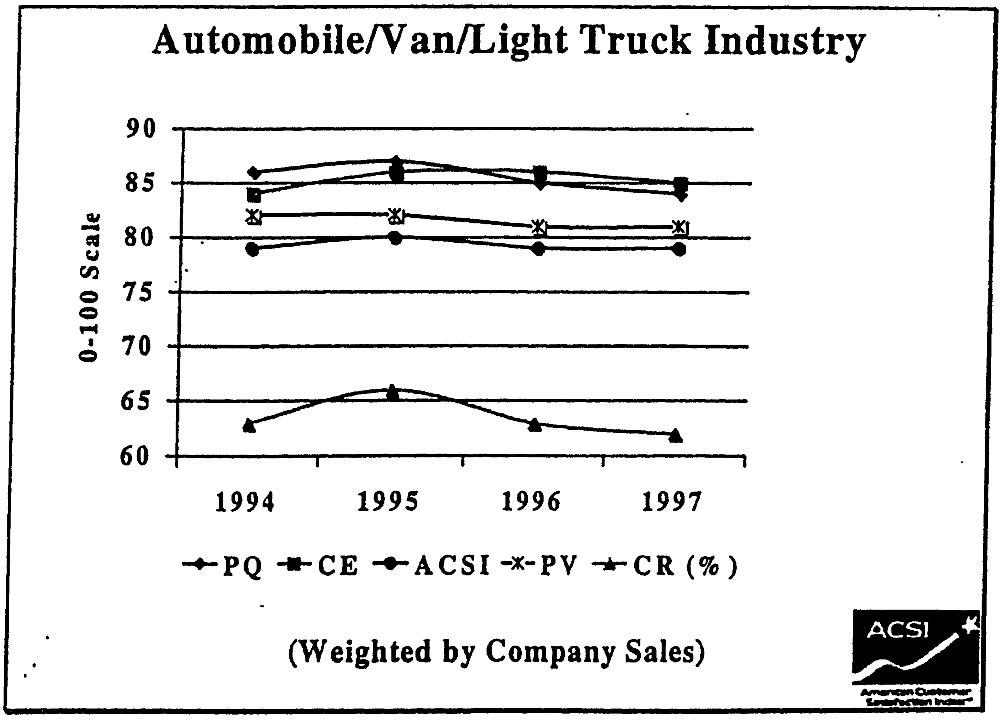


Figure 10

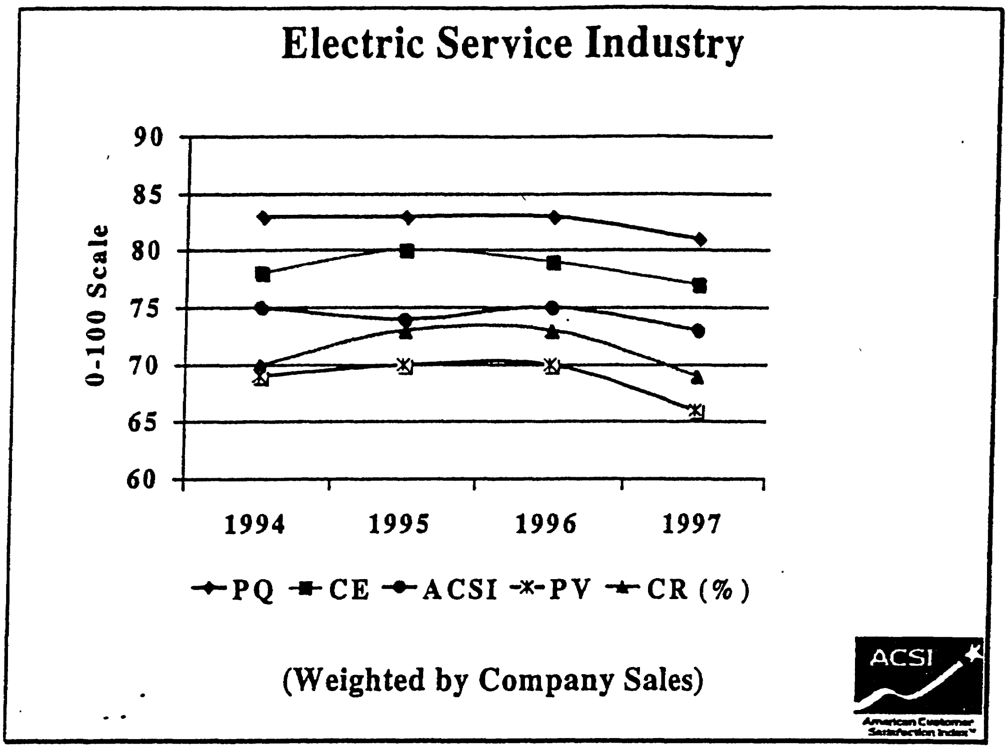


Figure 11

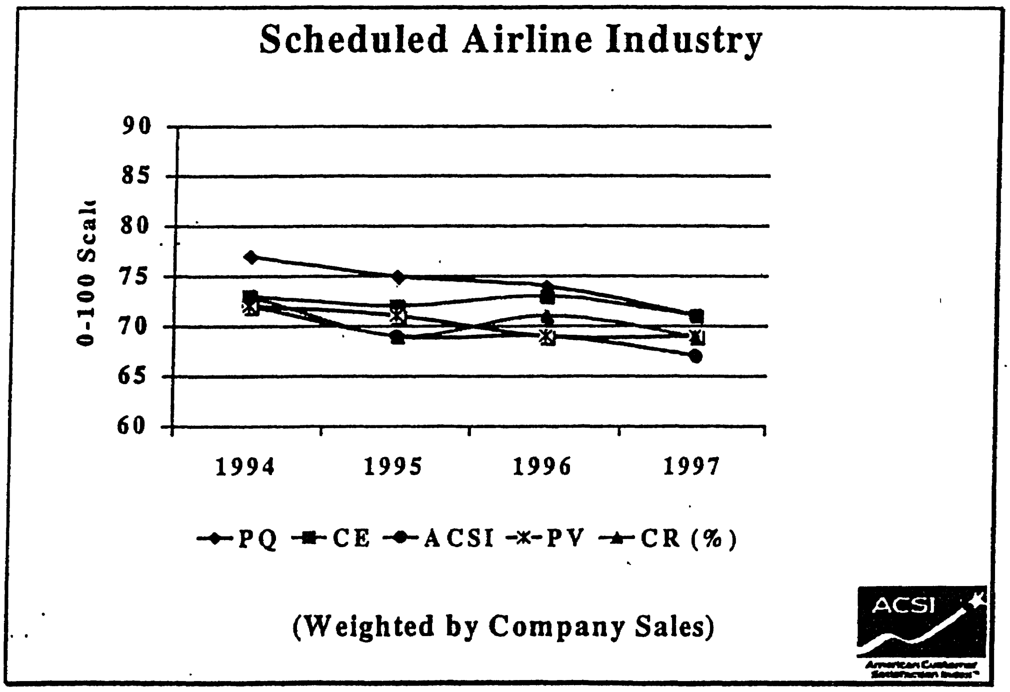


Figure 12

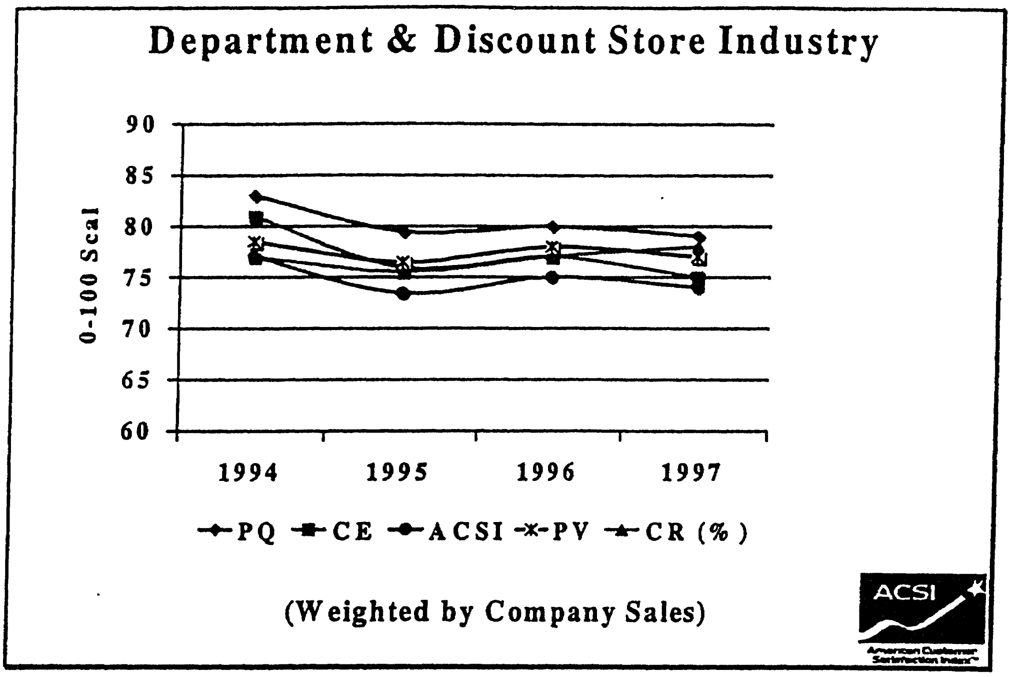


Figure 13

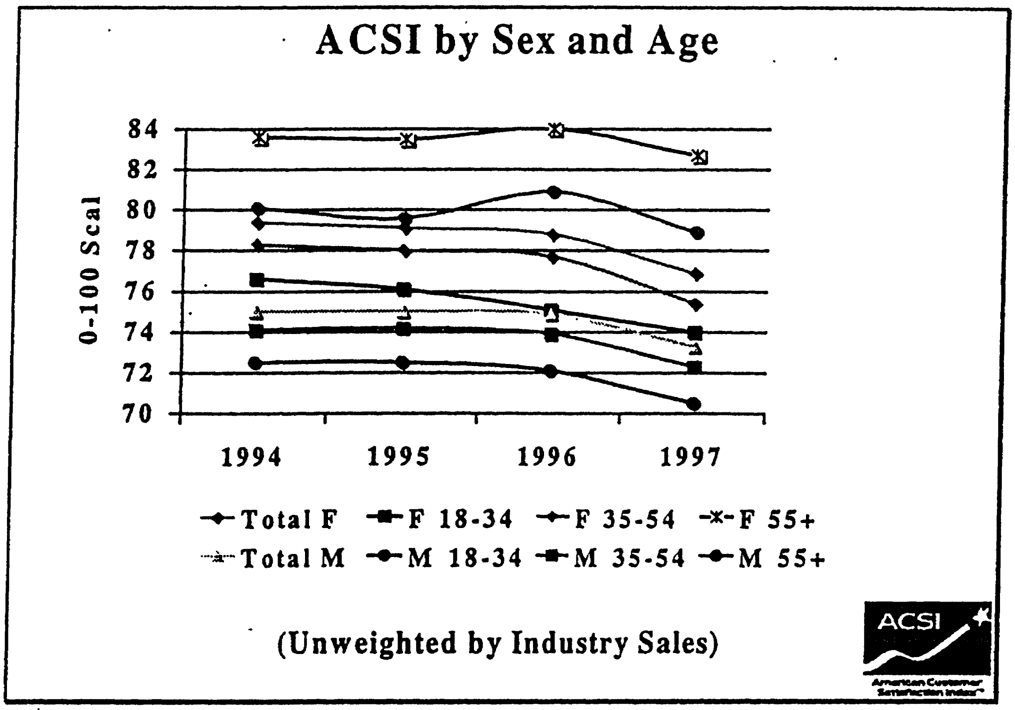


Figure 14

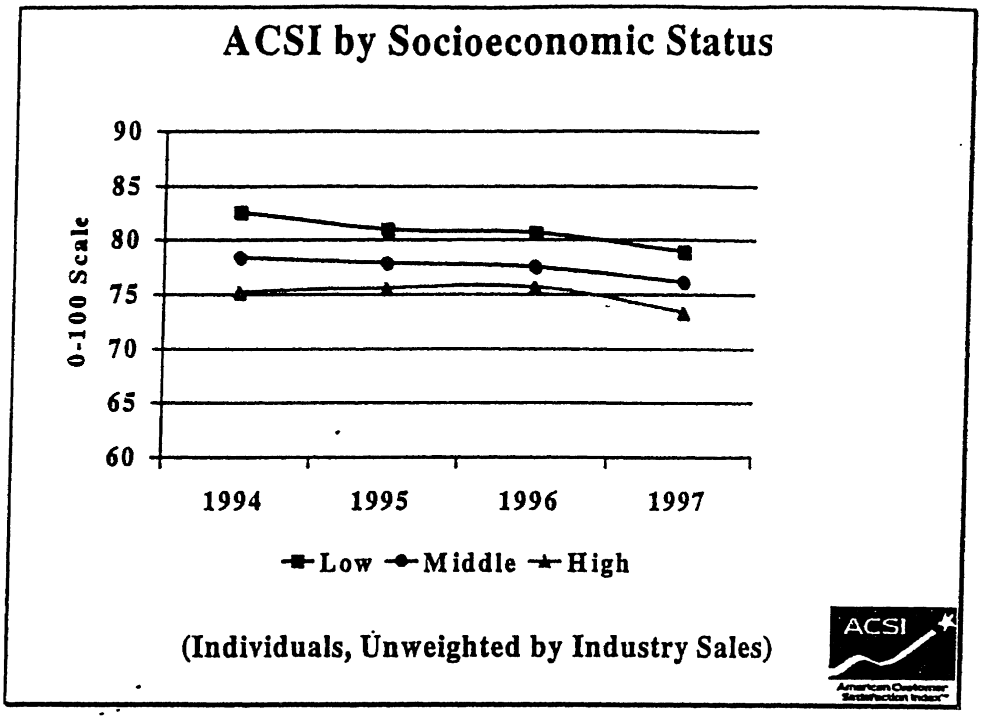
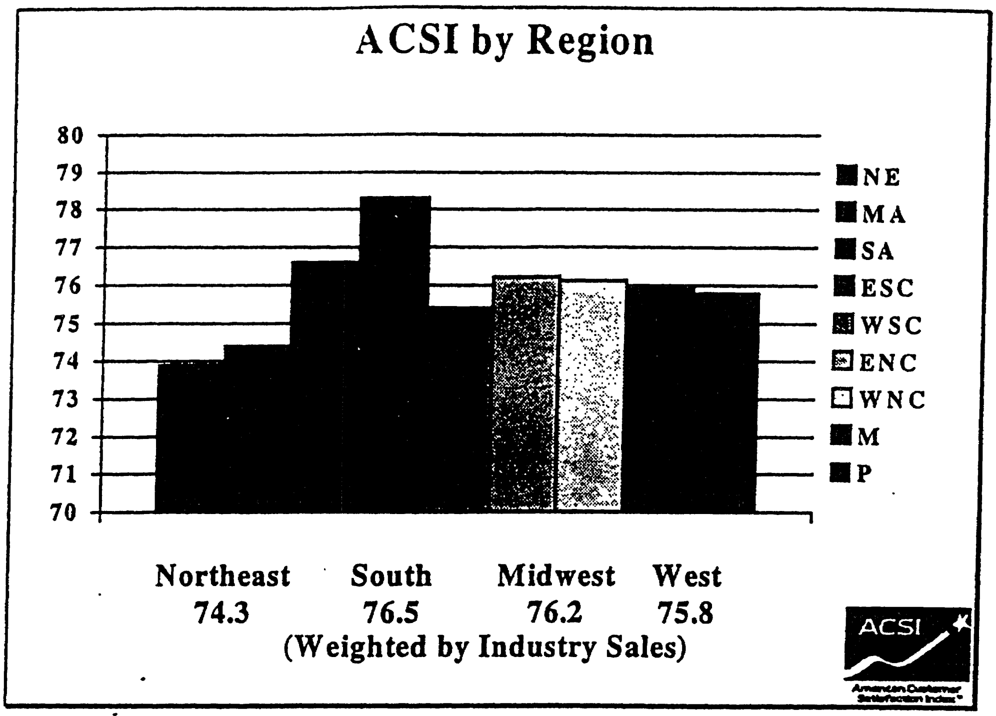

ACSI by Socioeconomic Status
90
85
80
75
70
65
60
0-100 Scale
1994
1995
1996
1997
Low
Middle
High
(Individuals, Unweighted by Industry Sales)
ACSI
American Customer Satisfaction Index

Figure 15



Key

NE	New England	ENC	East North Central
MA	Middle Atlantic	WNC	West North Central
SA	South Atlantic	M	Mountain
ESC	East South Central	P	Pacific
WSC	West South Central		