TURKISH EXPECTATION SURVEYS OF THE MANUFACTURING INDUSTRY: AN INVESTIGATION ON PREDICTION ACCURACY OF PRODUCTION AND SALES DATA

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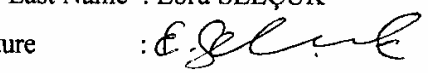
Signature : 
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ABSTRACT

TURKISH EXPECTATION SURVEYS
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In Turkey, the so-called "Expectation Surveys" includes the CEO's subjective views of manufacturing industry firms on quarterly basis. In terms of "increase", "remaining the same" and "decrease" categories, evaluations of the present situation and predictions for the next period were asked by means of a survey, which was formerly conducted by State Planning Organization and later on by State Institute of Statistics.

The primary aim of the study is to investigate the statistical accuracy of predictions with respect to the present situation evaluations for "production" and "sales" data of "Expectation Surveys".

Although the survey attempt started back in the early 1960's, comparable data could be gained for 47 quarters of 1992 – 2003 periods. Accuracy evaluations were

made on different grounds for different purposes, and each time by approaching to the hypothesized problem through using an appropriate statistical approach.

Long term correlations among “expectation” and “realization” data of the “manufacturing industries” aggregate had proven to be very significant. By ISIC-Rev. 3 subdivision of data for 23 quarters among 1998 – 2003, 22 2-digit manufacturing series were also examined. Through applying a meta-correlation ratio upon ordinal scale correlations, a method had been devised to perform the evaluation. The outcome indicated significant prediction accuracy at 95% level and more for all of the sub-sectors. On the other hand, as a contribution to some popular argument, to observe whether “state” and “private” sector respondents had the chances to predict significantly better, data were transformed into chi-squared equivalents, in order to apply a sign test upon relative accuracies. Conclusively, no group seemed to be in a position of forwarding more accurate estimates of future.

At 35 quarterly time points of 1992-2000, expectation aggregates could also be compared with quarterly GDP data both at current and constant prices, in order to inspect, whether the survey data could be an aid for a very short-run prediction of GDP. The answer was not very promising; however, sales data seemed to be a more suitable attribute for such a task.

Those evaluations from different aspects leaded to the general conclusion that the “Expectation Surveys” data might be an important indicator to refer for economic policy implications and short-run forecasts.

Keywords: expectation surveys, production, sales, short-run prediction, correlation analysis, sign test.

ÖZ

TÜRKİYE İMALAT SANAYİİ EĞİLİM ANKETLERİ: "ÜRETİM" VE "SATIŞ" VERİLERİNE ÖZGÜ TAHMİN DOĞRULUĞU ÜZERİNE BİR İNCELEME

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Türkiye'de "Eğilim Anketleri", imalat sanayii şirketleri yöneticilerinin seçilmiş makroekonomik değişkenler hakkındaki sübjektif görüşlerini, "artış", "aynı kalma", azalış" kategorilerine göre ifade ettikleri, üç ayda bir gerçekleştirilen veri toplama çalışmalarıdır. Bu anketlerle, içinde bulunulan üç ayın önceki üç aya göre ve gelecek üç ayın bugüne göre tahminî değerlendirmeleri yöneticilerden istenir. Çalışmalar, önceleri Devlet Planlama Teşkilatı'nca, sonraları ise Devlet İstatistik Enstitüsü'nce yürütülmüştür.

Bu araştırmanın amacı, eğilim anketlerinde toplanan verilerden elde edilen "üretim" ve "satış" üç aylık serileri kapsamında, bir sonraki döneme ait yönetici tahminlerinin, ilgili döneme ilişkin yönetici görüşleriyle ne kadar doğrulandığını ortaya koymaktır.

Anketlere 1960'ların ilk yarısında başlanmış olmakla birlikte, zaman boşluğu bulunmayan bir zaman serisi ancak 1992 – 2003 dönemindeki 47 üç ay için elde edilebilmiştir. Bu verilerden kullanılabilir olanlarla çeşitli amaçlara yönelik doğruluk incelemeleri, her seferinde sorgulanan hipoteze uygun istatistiksel yöntemler kullanılarak yapılmıştır.

İmalat sanayii bütüncül serisine uygulanan korelasyon analizi çok güvenilir sonuçlar vermiştir. ISIC-Rev. 3'e göre 22 adet 2-haneli imalat sanayii sektörleri de bu bakımdan incelenmiştir. Sıra ölçeği korelasyon katsayılarına uygulanan meta korelasyon oranlarına bağlı bir yöntemle gereken karşılaştırmalı değerlendirme yapılmıştır. Sonuçta, bütün alt sektörlerin tahmin doğruluğu % 95 güvenirlik derecesinin üstünde bulunmuştur. Veri tabanının olanakları çerçevesinde "devlet" ve "özel" anket yanıtlayıcılarının yanıt başarıları arasında da bir inceleme yapılabilmiştir. Bu amaçla veri tabanından ki-kare eşdeğerleri türetilmiş ve işaret testi yoluyla karşılaştırılmıştır. Sonuçta, yanıtlayıcıların yanıt başarıları arasında herhangi bir farklılaşma bulunamamıştır.

Ayrıca, 1992 – 2000 dönemine ait 35 üç aylık bir seri bağlamında, önceki döneme göre üretim ve satış beklentilerinin, cari ve sabit fiyatlarla gayrisafi yurtiçi hasıla değişimini ne derecede başarıyla yansıtabildiğinin de testi yapılmıştır. Sınama, satış rakamlarının bir gösterge olarak daha uygun olduğunu belirlemesine karşın, bu açıdan anlamlılık düzeyi yüksek bir bulgu ortaya koymamıştır.

Bütün bu değerlendirme sonuçları, genelde, söz konusu anket bulgularının, kısa döneme özgü ve önemli ekonomik politika göstergeleri oluşturabildiğini ortaya koymaktadır.

Anahtar Kelimeler: Eğilim anketleri, üretim, satış, kısa dönem tahmini, korelasyon analizi, işaret testi.

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CHAPTER 1

1. INTRODUCTION

1.1. The Core Question

Every entrepreneur or every CEO should know with high reliability but with a very crude generalization in terms of the contrasts of “good” or “bad”, how the present situation of their company is- with respect to the previous period. Especially when the comparison of today and previous time point depends upon measurable economic variables, for which the data are continuously collected (up to some extent by the firm, and the rest somehow by others and statistical organizations), to decide upon “good” or “bad” will be easier. If such a follow-up comparison can be devised for short-run time differences, those types of answers would especially be useful for the firms by their immediate decision-making.

The expected answer might only be put into the form of a 3-item judgmental reply, including no quantitative predictions, but only the choices among the questionnaire-type of items: “increasing”, “remaining the same”, and “decreasing”.

Table 1 illustrates an example of certain measurable economic variables, and how the above stated 3-item judgmental reply might be tried to be obtained for each of them. It must be evident that an entrepreneur or CEO could easily and correctly answer such questions, since one instance is at the near past, and the judgment day is just today.

Table 1: An Example of 3-item Judgmental Reply Between Past and Present for Different Economic Variables of the Firm

SECTOR OF ACTIVITY	How is the situation with respect to the previous period?		
	INCREASED	REMAINED SAME	DECREASED
Production			
Sales			
Etc.			

A similar attempt might be devised for the comparison of today's factual situation and the future situation of the next time-point. Surely, this won't be as much reliable as in the previous case, because the future is unknown. However, again the entrepreneur or CEO would most likely feel "liable" or "authoritative" to make such a prediction, and would the best of knowledge forward an answer. Figure 2 is the adaptation of Figure 1 example, to that predictive situation.

It must be pointed out that in this second case the reliability does not depend on "full information", the estimate for the future (even if it is for the next month or the next quarter) might depend upon some forecast, but is rather speculative in nature. Hence, the mentioned prediction might be exact, strongly or weakly approximate, or completely farfetched. .

Table 2: An Example of 3-Item Judgmental Reply between Present and Future for Different Economic Variables of the Firm

SECTOR OF ACTIVITY	How will be the situation of future period with respect to the present?		
	WILL INCREASE	WILL REMAINE SAME	WILL DECREASE
Production			
Sales			
Etc.			

1.2. On the Collected Data

By most of today's highly and moderately developed countries, central statistical offices to gather countrywide economic data were established one after the other –including Turkey in 1926- over a time range of about 200 years, until early 20th century (Studenski, 1958). It might be imagined, that the sort of realization and expectation data, (as being conceptually described by the above tables) could be among the initial attempts of those institutions to collect data, because at those times to gather quantitatively measurable data reliably was harder to achieve without much preparatory experience.

Quite contrarily, this was not the case. Only statistical offices of certain highly developed countries started such attempts, and they were hardly followed by others. Today, the situation is somewhat different. Statistical organizations of countries are supported and guided -mainly on technical grounds- by the Statistical Office of the United Nations. In this respect, Statistical Office of the United Nations advices the central statistical agencies also to collect such data as of Tables 1 and 2 above.

Turkey started to collect the mentioned type of data since 1964.

The "address list" of establishments were revised and made current by the State Institute of Statistics, in order to start with the 1964 Census of Manufacturing Industries and Business Establishments. On the other hand, planned era had started, and the First Five-Year Plan had to base upon whatever the data that the planners could at all find, and therefore it was strongly advisable that the era of the Second Five-Year Plan had to start with more data support.

State Planning Organization, (by using the address list of the State Institute of Statistics) asked "large manufacturing establishments" the few questions leading to the formation of Tables like 1 and 2 above, and published the results according to the subdivision of industrial activities of manufacturing. Later on, State Institute of Statistics continued with the task until today.

How important it is to have the described data of realizations and expectations in economic decision-making, policy formulation and planning should be clear enough. Turkish data had also been used for similar purposes.

However, no matter how important it is to have a relatively reliable subjective evaluation and expectations, of the investigated literature about Turkey no author seems to have paid a serious effort for the long- or short-run statistical comparison among short-run data of the type of Tables 1 and 2.

If expectations stated in Table 2 belong to the time-point "t-1", the question on "up to which extent they were true and realized" will be investigated by comparing those data with those of Table 1 for the time point "t". The question would then be to find "the extent of prediction accuracy (or short-run forecast accuracy) or goodness of fit" among expectations at "t-1" (or ex-ante expectations) and corresponding realizations at "t" (or ex-post realizations).

1.3. On the Aim of the Study

The initial aim of this study is to detect the extent of the mentioned short-run prediction accuracies by using the Turkish data for selected economic variables. All the economic variables, for which the exemplified type of data were once be collected by the State Planning Organization and the State Institute of Statistics, are enlisted in Chapter 2. Here, not all of them will be taken into account, but only the variables concerning "Production" and "Sales". The choice is not arbitrary and has certainly a reason. It is related to the examination of the searched accuracy by not only being urged to depend upon the validation through using the same sources of data but also referring to other data sources. It will be explained in detail when setting the hypotheses in Chapter 3.

As a result of the present investigation, if the prediction accuracy of "expectations" will be found out to be high or satisfactory enough, the goal to collect that type of data can also be fulfilled for the Turkish case –e.g. in yielding conclusions for short-run economic policy decisions.

Note that the ultimate goal is to have highly reliable estimates of the entrepreneurs or directors or other head officers, who answer the relevant questions to compile the sort of qualitative data that were exemplified in Tables 1 and 2. "Best reliability" here, means to have a "best fit" among expectations and realizations. Moreover, if it was worse in the past, and better now in "goodness of fit" or vice-

versa, we must better be aware of the trend situation. On the other hand, if prediction accuracy becomes itself unpredictably better or worse, or intermittently or in some cyclic manner better or worse, we must also be aware of the situation. In other words, it should be known how far might the expectations be reliable, so that (by depending upon them, as if they are facts of the future), successful policy formulations, realistic planning goals etc. can more safely (i.e. with higher probability of holding true) be set.

Turkey has a mature economy, of which its development level is at the margin to let it enter to European Union. Alone the advancing integration talks increase the need for accurate expectations, of which about the probable success of judgmental data predictions some research should be devised and applied.

1.4. Contents of the Text

The thesis work will be presented in 6 chapters and an Appendix. Within the Appendix, the rest of the fundamental data upon which the empirical analysis was made, will be given -as long as they were not stated within the chapters for purposes of immediate illustrations.

Chapter 2 will include a review of the so-called "expectation surveys" of formerly State Planning Organization and later on of State Institute of Statistics.

In Chapter 3 the hypotheses to measure the mentioned accuracies will be stated, both among "expectation" and "realization" data intrinsically, and with the external data of Gross Domestic Product quarterly estimates at current and constant prices. Lengths of quarterly time series that can be subjected under empirical examination had also been stated for each case.

Chapters 4 and 5 are devoted to empirical methods to be applied and the obtained findings by means of appropriate calculations based on the presented methods. Out of them, Chapter 4 will deal with the manufacturing industry single aggregate of the quarterly data.

Chapter 5 considers the data, through which the manufacturing industry variable-values are subdivided. In this sense, the aggregate data are presented as being subdivided according to two different types of classification. One of them

segregates the manufacturing industry aggregate into “state owned establishments” and “privately owned establishments”. The other classification is on “type of economic activity” basis, and subdivides the aggregate into activity classes according to the “International Standard Industry Classification of all Economic Activities” or in short ISIC. For the detection of the mentioned prediction reliability (or expectation accuracy) at those disintegrated levels, some further empirical investigations have been performed. They will be presented in the realm of Chapter 5.

Chapter 6, being the last chapter, gathers the results and interpretations together. Those results let a few conclusive remarks to forward about the future prospects, when more reliable “Expectation Surveys” data is an inevitable desire.

CHAPTER 2

2. ON THE UTILISED DATABASE OF EXPECTATION SURVEYS

2.1. So-Called "Expectation Surveys" of the State Institute of Statistics

Today with its commonly used naming, the "Expectation Surveys" or more correctly "expectation and realization surveys" in Turkey are being collected, edited, tabulated and published on quarterly basis by the State Institute of Statistics. Note that the official name of the State Institute of Statistics had quite recently been changed into "Türkiye İstatistik Kurumu" with an official English equivalent "Turkish Statistical Institute", which evidently is not a direct translation.

The data of those "Expectation Surveys" belong only to manufacturing industries, being subdivided according to ISIC. They are gathered from the questionnaires and collected as frequency counts, and then converted into percentage distributions of becoming "will increase" for expectations, "increased" by realizations, "will remain the same" for expectations "remained the same" for realizations, and "will decrease" by expectations, "decreased" by realizations -with regard to the situations of each of the establishments being subjected under investigation.

Therefore, the final content of the State Institute of Statistics quarterly "Expectation Surveys" data are composed of percentage distributions among the "increase", "same", "decrease" triad. It includes economic variables of capacity utilization, employment size, production, domestic sales, foreign sales, stocks of

finished goods, stocks of raw materials, new orders, unfilled orders, sales prices, prices of raw materials, import of raw materials, labor prices, labor needs, fixed capital investments. (State Institute of Statistics, 2002-B)

Hereby a possible misunderstanding should be avoided. The State Institute of Statistics' publication dates of these survey results –either as hardcopies or as computer-based outputs- do not necessarily follow each other on the basis of approximately 3 months' time. There might be irregular and substantial delays. Practice indicates that the irregular periodicity had let sometimes several consecutive survey results be published together. Moreover, -as was more frequently met by older documents-, there might be lacking quarterly data, which were never published, –for some reason or another.

2.2. Turkey's Brief History on the Application of Manufacturing Industry "Expectation Surveys"

2.2.1. State Planning Organization Era

In Turkey, collection of statistics for the so-called expectation surveys, (including "expectation" and "realization" estimates in nominal terms of "increase", "same", "decrease" tripartite labeling), was started in 1964 by the State Planning Organization. The expectations and realizations of manufacturing industries were gathered and evaluated semi-annually. The subdivision of data was separating the expectations and realizations of public and private sector firms. Another and more important sub-classification of the sectors was rather following the manufacturing activity breakdown of the major plan documents, (like 5-year plans, yearly programs and yearly implementation plans). They were slightly different than those of ISIC of today and ISIC of those years, (since ISIC itself was from time to time subjected to revisions). However, take note that any "slight difference" in activity classification might result in a direct incomparability of data, as it will be illustrated in the below stated tables.

Through the application of State Planning Organization surveys, data of a (throughout the time enlarging) pool of variables were obtained. Before leaving the data compilation of the so-called "Expectation Surveys" to the authority of the State Institute of Statistics the mentioned variables comprised profit per unit, production, sales, raw material purchases, sales prices, raw material prices, unit cost, wages per worker and stocks of finished goods, and a general evaluation on "how good the firm's situation is".

In 1970, the expectation surveys became to be compiled by the State Planning Organization on quarterly basis.

2.2.2. State Institute of Statistics Era

2.2.2.1. Introduction

Law No. 53 concerning the foundation of the State Institute of Statistics, and Law No. 91 concerning the foundation of the State Planning Organization included controversial issues that had to be resolved only in longer term. (Devlet Planlama Teşkilatı, 1967) Finally, the conclusion had been reached, that the State Institute of Statistics should conduct the so-called "expectation surveys" from the first quarter of the year 1977 onwards.

2.2.2.2. Extent of Incomparability of Data

The manufacturing activity breakdown of State Institute of Statistics was developed according to ISIC, thus it was differing somehow from that of the State Planning Organization. (Devlet Planlama Teşkilatı, 1970) This made the databases of State Planning Organization and the State Institute of Statistics incomparable at manufacturing activity breakdown basis.

The State Institute of Statistics had published the results from 1977 onwards according to ISIC Rev. 2. Moreover, ISIC was subjected to a profound change, and

from 1998 onwards the Institute's classification of the manufacturing sub-sectors had been substantially altered according to ISIC-Rev. 3.

Table 3 and Table 4 make possible to compare the manufacturing activity breakdown of ISIC until 1997; and from 1998 onwards at 2-digit classification level. At the first sight, classifications seem not to differ from each other too much. However, the data of the State Institute of Statistics is not sufficient to prolong the old classification within the new era starting at 1998, nor we can cast back the new classification to time points before 1998. Coming down to the 3- and 4-digit activities, the reasons why we cannot manage the coupling of the classifications will be clear enough. Surely, the two classifications have a comparative cross-table, but it is on the basis of definitional aspects. Therefore, the mentioned data transformation from one classification to the other can only be utilized, when the existing data set is available at the questionnaire detail.

The variables that the expectation surveys of the State Institute of Statistics comprise were enlisted in the previous section. However, note that the given list was the most recent one. It developed somewhat throughout the time. Previously, the domestic and foreign sales items were not separated from each other, and imports of raw materials, labor needs, employment size were not included. In 1977 the measured economic variables consisted only of capacity utilization, production, sales, and stocks of finished goods, stocks of raw materials, new orders, unfilled orders, sales prices, raw material prices, labor prices and investments. (State Institute of Statistics, 1980)

Table 3: The ISIC Classification at 2-digit Level: Manufacturing Activity Codes (under single digit code 3) Before 1998

3	manufacturing industry
31	manufacture of food, beverage and tobacco
32	textile, wearing apparel and leather industries
33	manufacture of wood, wood products including furniture
34	manufacture of paper and paper products
34	manufacture of chemicals, and petroleum, coal, rubber and plastic products
36	manufacture of non-metallic mineral products
37	basic metal industries
38	manufacture of fabricated metal products, machinery and equipment, transportation vehicles, scientific and professional measuring and controlling equipment

Table 4: The ISIC New Classification at 2-digit Level Manufacturing Activity Codes (under single digit code D) After and Including 1998

15	manufacture of food products and beverages
16	manufacture of tobacco products
17	manufacture of textiles
18	manufacture of wearing apparel; dressing and dyeing of fur
19	tanning and dressing of leather; manufacture of luggage, handbags, saddler, harness and foot
20	manufacture of wood and of product n.e.c. of woods and cork, except furniture; manufacture of similar articles
21	manufacture of paper and paper products
22	publishing, printing and reproduction of recorded media
23	manufacture of coke, refined petroleum products and nuclear fuel
24	manufacture of chemicals and chemical products
25	manufacture of rubber and plastic products
26	manufacture of other non-metallic mineral products
27	manufacture of basic metal
28	manufacture of fabricated metal products, except machinery and equipment
29	manufacture of machinery and equipment n.e.c.
30	manufacture of office, accounting and computing machinery
31	manufacture of electrical machinery and apparatus n.e.c.
32	manufacture of radio, television and communication equipment and apparatus
33	manufacture of medical, precision and optical instruments, watches and clocks
34	manufacture of motor vehicles, trailers and semi-trailers
35	manufacture of other transport equipment
36	manufacture of furniture

2.3. On the Applications

2.3.1. On the State Institute of Statistics' "Expectation Surveys" Conduct

State Institute of Statistics administers expectation surveys every three months. The intention is to cover about 80 – 90 % of the yearly value added; hence "purposive sampling according to the principle of concentration" was applied to firms according to employment sizes. (Dener, Acar, 1977) In order to attain the ultimate goal of inclusion for each sector of activity, either firms having "25 and over" number of workers (because only that much establishments altogether would satisfy the goal of value added in certain sectors), or having "50 or more" number of workers in certain other sectors, or "100 or more" number of workers instill other sectors for the same reason were included.

Data are collected by means of special questionnaires. The owners of firms, managers, general directors or general coordinators, who are responsible for the production activities of the establishments, are required to answer questionnaires.

The questionnaire was subjected to minor changes throughout the large time-span of about 40 years.

There are three sections in the standardized questionnaire of recent times. Section 1 is about the production capacity, Section 2 is about general situation in the establishment. In Section 2 of the questionnaire, firms' responsible persons are asked to answer the questions of expectations about production, sales, stocks of finished goods, stocks of raw materials, orders received, unfilled orders, sales price, prices of raw materials and labour prices. Section 3 interrogates about fixed capital investments (State Institute of Statistics, 1980).

2.3.2. On the Limitations Imposed Upon the Coverage of Applications of the Present Study

In the following chapters it will be seen that the "manufacturing activity level" of coverage of the present study is 2-digit ISIC. What they are, were given in Tables 3 and 4.

However, State Institute of Statistics presents the mentioned "expectations" and "realizations" at 3-digit ISIC level. The reason, why the increased the aggregation level had to be preferred in this study, is due to the insufficiency of some sample sizes at 3-digit level.

Purposive sample according to the principle of concentration, whereby the goal is to cover 80 – 90 % of the yearly value added require by quite a number of 3-digit manufacturing activities the survey of only 1 or 2 establishments. Thus an investigation at 3-digit level would not be very meaningful, especially by the interpretation of statistical inferences. On the other hand, the numbers of smaller establishments in those manufacturing activities seem to be too much, as can e.g. easily be inferred from the manufacturing industry size data of any statistical yearbook (State Institute of Statistics, 2002-A). Therefore, statistical sample size inadequacy would occur in a number of sub-sectors if we went down to 3-digit classes.

CHAPTER 3

3. MAIN QUESTIONS OF INVESTIGATION TO BE FORMED UNDER DATA LIMITATIONS

3.1. Introductory Arguments

3.1.1. On the Primary Aims of Analytical Investigation

In Turkey, entry prospects to the European Union on one hand and the existing databases of government agencies that might be needed to implement strategies by the ongoing deliberations and official talks on the other, (apart from the mentioned needs for the development planning) require not only detailed statistics to be compiled on objective basis, but also expert opinion polls and other related data of subjective evaluation more than ever.

Such bulk of reasons necessitate, therefore, that the results of the "expectations survey" should be dependable in the short run, so that they might form adequately reliable predictions. Decisions, like e.g. decisions upon economic policy goals and targets or intensity of policy applications, would thus be made by relying upon such expectations. Especially when quantitative forecasts of certain economic variables seem not to be solely adequate in reaching to conclusions for short-run decisions, or when quantitative forecasts cannot be made on short-run basis at all or in cases of a direct need for qualitative judgments, reliable expectations of the presented type might be of crucial importance.

Hence, the primary aim of the study will be focused on examining how reliable the short-run qualitative predictions of the involved economic variables seem to be.

3.1.2. Reasons for the Specification of Variable Selection for the Intended Analysis

3.1.2.1. Need for a Further Comparative Evaluation

The variables, for which "expectation" and "realization" data were collected, had been enlisted in the previous chapter at three places anew, in order to represent the different coverage of variables by the surveys conducted at different times. In Chapter 1, it was told that only "production" and "sales" would be of our concern, but not in order to delimit the contents of the application, but for the following definite reason!

It is possible to discover the extent of variation between expectations and actual values of the same quarter for all of the mentioned variables. However, as long as the actual values are also of judgmental nature (e.g. in form of "increased", "remained the same", and "decreased"), the attempt would not be much meaningful. For accuracy detection, it would be better that some other economic variables, which are not judgmentally measurable could also be taken into consideration. However, this would only have some sense, if those other economic variables were strongly related (as correlates or by definition) to the variables of the survey under our concern. Moreover, since our data is measured quarterly, those other data should also be measured quarterly basis.

Looking at the evaluation problem of the so-called "expectation surveys" in the way of also including some "related" exogenous variable, which should be obtained otherwise, only 2 quarterly series could be met. They both belong to the database of State Institute of Statistics.

3.1.2.2. On Comparative Aggregate of Capacity Utilization

One of them is the “capacity utilization” data. (Dener, 1986) Unfortunately, it cannot be employed for our purposes of prediction accuracy evaluation for a very simple reason that, the results there are gathered for the survey of specifying the capacity utilization is not independent of the “Expectation Surveys” almost to the same establishments, and perhaps to the same people, and at the same time, capacity utilization percentages are asked. It is so as if, to the survey of our interest, an easier answer about the capacity utilization in terms of “will increase” versus “increased”, “will remain the same” versus “remained the same” and “will decrease” versus “decreased” will be given, whereby for the other survey, a percentage estimate of the capacity use will be forwarded.

3.1.2.3. On Comparative Aggregate of Gross Domestic Product

The other source belongs to quarterly Gross Domestic Product estimates at both constant and current prices. (State Institute of Statistics, 1992) For a partial time-span of “expectation surveys” data we acquired, it was only published at 1-digit level, i.e. only the data of the aggregate “manufacturing industries” was to find with the compound aggregate of value added, we have the chance to compare two of the variables of quarterly surveys for “realization” and “expectation” judgments. They are “production” and “sales”.

Therefore, for a supporting comparison, apart from a mere comparison of expected and actual data, we might also investigate the quarterly changes of Gross Domestic Product both at constant and current prices, in conjunction with the quarterly tripartite judgmental results of “production” and “sales” variables of the so-called “Expectation Surveys”.

3.2. Limitations Being Imposed Upon Time-Series Length for the Analysis of Survey Data

3.2.1. Introduction

The quarterly data that can –in the present sense- be used, does not unfortunately cover the whole range of time that this type of data had started to be collected quarterly (which was late 1960's) until the present time. The relevant time-series is quite shorter with respect to the whole time-span for a number of reasons, which will be discussed in the coming sub-sections.

Above, mention was made about a possible statistical comparison of the "expectation surveys" data with those of quarterly Gross Domestic Product estimates. Since the available time range of the quarterly Gross Domestic Product figures is different than those of the "expectation surveys" quarterly results, another time limitation of the series will be imposed, in order to timely mutualize data from different sources. This case will also be pointed out below.

3.2.2. Interruptions in Quarterly Series of the Manufacturing Industry Aggregate

Firstly, let us dwell upon the situation, where the continuity within the published quarterly data failed to exist.

Factually, there was a timely gap of "about" 5 years, firstly between the termination of survey task by the State Planning Organization and the start of the surveys by the State Institute of Statistics in 1977. The hesitation in the exact specification of the actual time difference depends upon a publication, which presumably had existed but could not be found in the libraries including that of the State Planning Organization.

Upon the start of the related publications being issued by the State Institute of Statistics, we observe from time to time gaps in the quarter-wise presentation. Conclusively, it was only possible to gather a continuous series of the so-called

"Expectation Surveys" from 1992 up till 2003. The almost 3-years gap at the end of the series seems just to be the time interval between the collection and publication of data.

The lateness of publication being exercised would remove the importance of the evaluations of this study altogether, if it is imperative to do so, and if the results cannot even be documented earlier for the government agencies, and private sector agencies like e.g. Chambers of Commerce. However, free talks with some experts of the State Institute of Statistics evoked the impression, that there are no serious hindrances, and immediate evaluation is possible, if the data gained is thought to be of primary importance, and hence the priority will be given for the sake of inevitably soon publication.

Nevertheless, the quarterly consecutive data for the period 1992 – 2003 with its 47 quarters (one quarter being lost due to the single period time-lag among "expectation" and "realization" results) would be adequate enough for our analyses. Unfortunate is the fact that it can only be obtained for the "manufacturing industry" on the whole.

3.2.3. Continuity Loss of Manufacturing Activity Breakdown Brought by the Recent ISIC Revision

In dealing with manufacturing industries at 2-digit ISIC breakdown we confront with a further severe loss by the length of the time-series. ISIC-Rev. 3-activity classification will directly be applied to the data from 1998 onwards. (State Institute of Statistics, 2002-B) The published data in terms of the earlier classification, with which the manufacturing activity breakdown details were presented for 1992 – 1997, cannot be recomputed in terms of ISIC Rev.-3, unless the calculations will be made on questionnaire basis.

Therefore, throughout the analysis by manufacturing activity subdivision, the number of quarters, which will be available, will reduce to 23, -one less than the number of quarters within 6 years -due to the time lag between expected and actual data.

However, it is here noteworthy that, the other subdivision of the "manufacturing total" survey data, namely the breakdown into the "predominantly state owned establishments" and "predominantly privately owned establishments" components (the word "predominant" being used for an owner's capital ratio of more than 50%), would not bear such a shortening of the period of investigation. The related analysis with them will therefore be realized for the time span over the whole range of 1992 – 2003.

3.2.4. Timely Losses by Data Due to Comparisons with the Gross Domestic Product

The above-mentioned comparisons with Gross Domestic Product data will also cause some shortening of the available time-series.

From 1987 onwards, until and including 2000, quarterly estimates of the Gross Domestic Product at current and as well at constant prices of 1987 had been published by the State Institute of Statistics. The very last related publication includes only 1999 – 2000 quarterly data, and had been published recently. (State Institute of Statistics, 2006) There is no indication that the big delay would mean a termination of the "quarterly publication" of the Gross Domestic Product. However, it is noteworthy that the delay by yearly estimates is short, and extends about a year only.

Under these conditions, the above-mentioned comparisons can be made for the period of 1992 – 2000. It is still a period, which contains 35 quarterly estimates.

3.3. The Survey Data That Could Be Subjected to Analysis

3.3.1. Introduction

Following the above stated explanations, the database that was extracted from the so-called "Expectation Surveys", upon which the statistical analysis that will be presented in the coming chapters will depend, can be exemplified by the forthcoming

tables 5, 6, 7 and 8. More than an exemplification of how the data would seem to be will here be of no use. Therefore, the remainder of the data had been placed within the realm of the Appendix.

3.3.2. Presentation of Manufacturing Industry Aggregate

In Table 5, a sample of 1992 “manufacturing industry” aggregate data with its subdivision among “state” and “private” for the variable “Production” will be presented. The given data are in form of percentage distributions, as they were originally published by the State Institute of Statistics. The continuation of the time series from 1993 up till 2003 takes place in the Appendix.

Table 6 includes the same sample information for the variable “Sales” and again for the year 1992. The remaining percentage distributions for further years that will also be subjected under investigation are placed in the data tables of the Appendix.

Table 5: "Production" Percentage Distribution of Expectation Surveys, Representing Aggregates of "Total", "State" and Private": 1992 (1993-2003 Data Being Stated in the Appendix)

Manufacturing industry	Expected Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1992									
I. Quarter	59,3	25,6	15,1	75,6	14,2	10,2	51,4	31,2	17,5
II. Quarter	56,1	26,9	17,0	69,3	21,2	9,6	49,8	29,6	20,6
III. Quarter	44,5	36,1	19,5	43,9	31,6	24,5	44,8	38,6	16,6
IV. Quarter	35,9	26,1	38,0	24,3	15,8	59,9	42,2	31,7	26,1
Manufacturing industry	Actual Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1992									
I. Quarter	53,2	15,4	31,5	67,7	9,7	22,6	46,0	18,2	35,8
II. Quarter	55,6	18,6	25,9	66,0	15,9	18,2	49,7	20,1	30,2
III. Quarter	49,3	17,5	33,2	42,3	11,5	46,2	53,2	20,8	25,9
IV. Quarter	40,4	16,1	43,5	33,0	10,0	56,9	43,7	18,8	37,5

Table 6: "Sales" Percentage Distribution of Expectation Surveys, Representing Aggregates of "Total", "State" and "Private": 1992 (1993-2003 Data Being Stated in the Appendix)

Manufacturing Industry	Expected Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1992									
I. Quarter	64,4	23,9	11,6	78,9	15,1	6,1	57,5	28,2	14,3
II. Quarter	51,7	28,9	19,5	50,6	19,9	29,5	52,2	33,2	14,6
III. Quarter	43,9	30,6	25,6	39,3	19,9	40,8	46,4	36,5	17,1
IV. Quarter	36,4	30,7	32,9	23,8	28,2	47,9	43,0	31,9	25,1
Manufacturing Industry	Actual Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1992									
I. Quarter	60,5	15,8	23,7	73,6	14,4	12,0	54,0	16,5	29,5
II. Quarter	64,0	17,2	18,8	69,2	15,7	15,1	61,1	18,0	20,9
III. Quarter	55,1	17,2	27,7	63,4	14,2	22,4	50,6	18,9	30,5
IV. Quarter	39,2	21,8	39,0	40,1	15,3	44,6	38,8	24,8	36,5

3.3.3. Presentation of 2-Digit Manufacturing Activity Breakdown

Table 7 and 8 will comprise the 2-digit activity subdivision of the manufacturing industry "Expectation Surveys" data of the variables "Production" and "Sales". The tables reflect the sample of the initial year 1998 of the starting new classification ISIC Rev. 3. The data of the remaining years until and including 2003 are kept in the Appendix.

As can readily be seen, 2-digit industries are given with their ISIC codes. The corresponding economic sector names are stated in Table 4.

Table 7: Quarterly Expectations and Realizations of "Production" In Form of Percentage Distributions: 1998 (1999-2003 Data Being Stated in the Appendix)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	47,6	29,7	22,7	43,1	24,4	32,5
16	50,0	46,9	3,1	64,7	29,4	5,9
17	52,4	36,1	11,5	28,8	31,1	30,2
18	52,3	31,4	16,3	45,6	29,4	25,0
19	64,9	27,0	8,1	37,0	23,9	39,1
20	45,3	35,8	18,9	43,5	30,6	25,8
21	57,1	28,6	14,3	43,3	31,3	25,4
22	40,0	53,3	6,7	35,3	47,1	17,6
23	52,6	26,3	21,1	57,1	19,0	23,8
24	62,5	20,8	16,7	54,9	20,1	25,0
25	82,0	16,9	1,1	56,4	23,1	20,5
26	79,5	15,2	5,4	67,9	17,9	14,2
27	64,4	27,8	7,8	48,2	26,8	25,0
28	63,0	30,6	5,6	48,6	27,9	23,4
29	68,0	22,3	9,7	55,1	17,7	27,2
30	100,0	0,0	0,0	0,0	0,0	100,0
31	56,5	37,0	6,5	51,7	22,4	25,9
32	50,0	20,0	30,0	45,5	18,2	36,4
33	58,8	23,5	17,6	42,1	42,1	15,8
34	72,5	22,5	5,0	50,0	26,8	23,2
35	50,0	50,0	0,0	38,5	23,1	38,5
36	64,9	29,7	5,4	50,0	19,0	31,0

Table 7 (continued)

Second quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	51,3	33,8	15,0	55,6	23,5	20,9
16	40,0	28,6	31,4	30,3	33,3	36,4
17	41,3	42,0	16,7	31,6	27,8	40,6
18	46,5	37,2	16,3	44,0	20,0	36,0
19	45,4	38,6	15,9	52,1	18,8	29,1
20	40,0	40,0	20,0	54,4	19,3	26,3
21	53,7	37,3	9,0	51,4	12,5	36,1
22	40,4	46,8	12,8	51,1	26,7	22,2
23	71,4	23,8	4,8	40,9	27,3	31,8
24	50,3	36,4	13,3	45,2	23,9	30,9
25	58,1	24,3	17,6	45,8	17,8	36,4
26	64,6	28,4	7,1	48,4	27,8	23,8
27	44,4	42,6	13,0	45,4	24,4	30,2
28	39,1	46,4	14,5	37,4	33,0	29,6
29	56,9	26,4	16,7	37,9	26,2	35,9
30	100,0	0,0	0,0	0,0	0,0	100,0
31	51,8	28,6	19,6	37,7	26,2	36,1
32	54,5	18,2	27,3	44,4	22,2	33,4
33	52,6	26,3	21,1	52,6	26,3	21,1
34	52,8	34,0	13,2	27,8	35,7	36,5
35	15,4	61,5	23,1	15,4	53,8	30,8
36	46,6	37,9	15,5	42,1	24,6	33,3

Table 7 (continued)

Third quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,6	25,1	24,3	48,1	19,6	32,3
16	30,0	43,3	26,7	28,6	42,9	28,5
17	39,1	41,7	19,2	25,8	27,1	47,1
18	51,3	25,6	23,1	46,8	16,7	36,5
19	38,3	36,2	25,5	41,2	20,6	38,2
20	41,8	43,6	14,6	46,8	19,1	34,1
21	53,5	58,2	-11,7	32,8	20,7	46,5
22	50,0	39,5	10,5	37,8	18,9	43,3
23	54,5	27,3	18,2	38,9	11,1	50,0
24	47,4	36,2	16,4	40,3	17,3	42,4
25	55,9	26,5	17,6	26,7	22,1	51,2
26	22,2	28,5	49,3	21,8	18,2	60,0
27	40,9	38,3	20,8	31,7	24,8	43,5
28	33,6	38,9	27,5	27,2	18,4	54,4
29	38,0	37,3	24,7	29,8	22,3	47,9
30	100,0	0,0	0,0	100,0	0,0	0,0
31	47,5	32,8	19,7	28,1	22,8	49,1
32	77,8	11,1	11,1	63,6	27,3	9,1
33	36,8	36,8	26,4	37,5	12,5	50,0
34	57,7	28,8	13,5	37,5	14,6	47,9
35	53,8	38,5	7,7	27,3	18,2	54,5
36	56,9	21,6	21,5	34,8	23,9	41,3

Table 7 (continued)

Fourth quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	34,5	34,5	31,0	29,2	28,6	42,2
16	14,8	51,9	33,3	23,5	47,1	29,4
17	27,4	48,9	23,7	28,7	24,7	46,6
18	35,2	36,1	28,7	32,7	20,9	46,4
19	42,4	27,3	30,3	30,0	26,0	44,0
20	39,6	43,8	16,6	25,0	31,3	43,7
21	32,1	37,5	30,4	33,3	27,3	39,4
22	30,3	45,5	24,2	40,4	28,8	30,8
23	26,3	63,2	10,5	33,3	8,3	58,4
24	42,5	34,3	23,2	39,7	19,2	41,1
25	39,1	26,4	34,5	27,6	21,4	51,0
26	21,1	33,5	45,4	19,8	24,4	55,8
27	30,3	42,4	27,3	23,4	16,8	59,8
28	20,6	38,2	41,2	19,8	24,6	55,6
29	33,1	33,9	33,0	24,1	24,1	51,8
30	0,0	0,0	100,0	50,0	50,0	0,0
31	26,3	35,1	38,6	11,8	25,0	63,2
32	36,4	18,2	45,4	8,3	16,7	75,0
33	26,7	46,7	26,6	26,3	31,6	42,1
34	31,8	29,5	38,7	17,9	23,2	58,9
35	27,3	54,5	18,2	20,0	46,7	33,3
36	38,6	40,9	20,5	29,3	31,0	39,7

Table 8: Quarterly Expectations and Realizations of "Sales"
In Form of Percentage Distributions: 1998
(1999-2003 Data Being Stated in the Appendix)

First quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	46,3	32,7	21,0	38,9	29,4	31,8
16	15,0	40,0	45,0	34,6	34,6	30,8
17	52,2	38,2	9,6	34,1	34,1	31,9
18	40,0	41,3	18,8	33,9	36,2	29,9
19	64,9	24,3	10,8	31,1	20,0	48,9
20	55,6	22,2	22,2	43,3	28,3	28,3
21	66,7	22,2	11,1	48,4	28,1	23,4
22	36,7	50,0	13,3	35,3	43,1	21,6
23	61,1	16,7	22,2	45,0	20,0	35,0
24	63,0	20,6	15,5	52,1	18,8	29,2
35	84,3	13,5	2,2	61,0	18,2	20,8
26	82,3	15,9	1,8	68,9	15,4	15,8
27	69,7	27,0	3,4	52,7	23,6	23,6
28	63,9	26,4	9,7	52,3	23,9	23,9
29	71,6	20,6	7,8	52,7	22,6	24,7
30	100,0	0,0	0,0	0,0	0,0	100,0
31	57,8	31,1	11,1	51,8	25,0	23,2
32	60,0	10,0	30,0	45,5	18,2	36,4
33	41,2	41,2	17,6	36,8	47,4	15,8
34	78,9	18,4	2,6	57,4	22,2	20,4
35	33,3	66,7	0,0	38,5	38,5	23,1
36	62,2	29,7	8,1	50,8	23,7	25,4

Table 8 (continued)

Second quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	49,5	36,5	14,0	47,6	30,1	22,3
16	29,2	62,5	8,3	19,0	52,4	28,6
17	41,2	41,8	17,0	29,0	26,1	44,8
18	41,3	41,3	17,4	39,3	28,2	32,5
19	48,8	37,2	14,0	47,9	20,8	31,3
20	49,2	35,6	15,3	44,6	33,9	21,4
21	55,6	30,2	14,3	44,9	14,5	40,6
22	44,7	42,6	12,8	51,1	31,1	17,8
23	70,0	30,0	0,0	38,1	28,6	33,3
24	53,8	29,4	16,8	51,0	22,3	26,8
35	63,5	23,0	13,5	43,9	16,8	39,3
26	63,9	27,9	8,2	47,1	24,3	28,6
27	45,3	42,5	12,3	47,5	20,3	32,2
28	40,0	42,7	17,3	35,1	28,9	36,0
29	61,5	25,9	12,6	37,7	21,9	40,4
30	100,0	0,0	0,0	0,0	0,0	100,0
31	51,9	29,6	18,5	36,7	23,3	40,0
32	63,6	9,1	27,3	33,3	33,3	33,3
33	52,6	31,6	15,8	47,4	26,3	26,3
34	46,9	38,8	14,3	35,8	30,2	34,0
35	15,4	61,5	23,1	7,7	61,5	30,8
36	50,0	34,5	15,5	43,9	35,1	21,1

Table 8 (continued)

Third quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,4	35,4	14,3	43,8	27,7	28,5
16	43,5	43,5	13,0	38,1	47,6	14,3
17	36,8	41,7	21,5	18,0	27,9	54,1
18	38,2	35,5	26,4	27,7	36,1	36,1
19	31,9	40,4	27,7	32,4	26,5	41,2
20	41,8	41,8	16,4	38,3	23,4	38,3
21	52,9	30,9	16,2	30,9	10,9	58,2
22	52,6	39,5	7,9	41,7	22,2	36,1
23	42,9	28,6	28,6	52,6	10,5	36,8
24	45,8	36,6	17,6	30,2	18,0	51,8
25	53,9	29,4	16,7	23,0	20,7	56,3
26	29,6	24,4	45,9	21,2	20,4	58,4
27	42,5	31,6	26,3	15,0	23,0	62,0
28	37,2	31,9	31,0	25,2	16,5	58,3
29	36,4	37,1	26,6	28,1	22,3	49,6
30	100,0	0,0	0,0	100,0	0,0	0,0
31	52,5	30,5	16,9	32,1	19,6	48,2
32	77,8	11,1	11,1	50,0	20,0	30,0
33	42,1	26,3	31,6	25,0	12,5	62,2
34	50,0	34,0	16,0	20,8	16,7	62,5
35	50,0	41,7	8,3	18,2	36,4	45,5
36	55,8	25,0	19,2	37,0	23,9	39,1

Table 8 (continued)

Fourth quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	36,5	42,8	20,7	33,0	32,2	34,8
16	19,0	66,7	14,3	41,7	45,8	12,5
17	26,5	47,0	26,5	29,6	23,7	46,7
18	29,5	42,9	27,6	20,4	33,1	46,5
19	39,4	30,3	30,3	32,0	24,0	44,0
20	29,2	50,0	20,8	25,0	35,9	39,1
21	32,7	38,2	29,1	34,9	20,6	44,5
22	31,3	46,9	21,8	45,1	29,4	25,5
23	36,8	57,9	5,3	18,2	0,0	81,8
24	42,9	38,3	18,8	44,2	20,1	35,7
25	37,2	25,6	37,2	26,3	19,2	54,5
26	22,0	32,3	45,7	22,1	22,1	55,8
27	36,4	37,4	26,2	21,2	16,3	62,5
28	19,6	37,3	43,1	16,7	23,0	60,3
29	33,1	26,3	40,6	20,7	26,4	52,9
30	0,0	0,0	100,0	50,0	50,0	0,0
31	29,6	24,1	46,3	13,6	18,2	68,2
32	40,0	20,0	40,0	8,3	16,7	75,0
33	20,0	46,7	33,3	27,8	22,2	50,0
34	27,3	38,6	34,1	18,2	23,6	58,2
35	18,2	54,5	27,3	20,0	53,3	26,7
36	47,7	29,5	22,8	30,5	30,5	39,0

CHAPTER 4

4. STATISTICAL EVALUATİON CONCERNINIG THE MANUFACTURING INDUSTRY AGGREGATE

4.1. Some Preliminary Considerations

Before starting with the statistical analyses, attention must be paid to the fact that the mentioned survey data is given in 'ordinal' scales. Relative frequencies are attributed to 'increase'; 'same', 'decrease' classes and these are nothing but ordinal categories. There is namely an order of magnitude among those groupings. (Blalock, 1960)

Surely we can ignore the ordinality among 'increase', 'same' and 'decrease' and accept them as separate and independent groups. In that case, the data set can be accepted to be given in 'nominal scales'. Of course, the nominal scale of measurement has an inferior qualification with respect to the ordinal scale of measurement, but if we wish, we might conceive ordinal data as if they are given in nominal scales. On the contrary, never should the ordinal-scaled data be evaluated as if they are given in terms of a superior quality scale of measurement, like those of interval or ratio scales (Dener, 2000). Only for specific purposes a conversion might be thought of. For example, marks like A, B, C etc. which form an ordinal distribution might be converted into a ratio scale by assigning 4 to A, 3 to B, 2 to C etc... However, this transformation is only valid for a specific purpose, e.g. in this example, probably in order to calculate the 'grade-point average'.

In the empirical evaluations being explained below, attention will be paid to the mentioned ordinality in choosing the techniques of evaluation.

4.2. Long Term Correlation among Expectations and Realizations

To start with, we might try to observe whether there exists a significant correlation between the relative frequencies of expectations $P_{E,\ t-1}$ and the relative frequencies of realizations $P_{A,\ t}$. The problem we confront with is namely that, we have not a single but a set of relative frequencies for each of the 'expectation' and 'realization' data. Being symbolized, they might be signified by categories $PE_{,\ Inc.,\ t-1}$, $P_{E,Sa.,t-1}$, $P_{E,\ Dec.,\ t-1}$ for expectations 'will increase', 'will remain the same' and 'will decrease' respectively, and $P_{A,\ Inc.,\ t}$, $P_{A,\ Sa,\ t}$, $P_{A,\ Dec.,\ t}$ for realized situations of 'increased', 'remained same' and 'decreased' categories.

To get a 'correlation coefficient' type of measure with data of Table 5 and Table 6, we might use dummy variables (Gujarati, 1988). Hence, the data set of frequencies will be transformed to an interval scaled frequency distribution for this specific purpose.

The dummy variables that might be attributed to the data set might be +1 for 'increase', 0 for the 'same' and -1 for 'decrease' type of frequencies. However note that, performing this transformation is nothing but to subtract 'increase' type of relative frequencies from 'decrease' type of relative frequencies, since

$$1.P_{E,\ Inc.,\ t-1} + 0.P_{E,Sa.,t-1} - 1.P_{E,\ Dec.,\ t-1} = P_{E,\ Inc.,\ t} - P_{E,\ Dec.,\ t-1} \qquad (1)$$

$$1.P_{A,\ Inc.,\ t} + 0.P_{A,\ Sa,\ t} - 1.P_{A,\ Dec.,\ t} = P_{A,\ Inc.,\ t} - P_{A,\ Dec.,\ t}$$

The correlation coefficient among expectations and corresponding actual data after (1) for the period 1992-2003 came out to be 0.856 for the 'production' and 0.805 for the 'sales'. Since the length of the time-series utilized comprise 47 quarterly values, the corresponding F-ratios will be 122.91 for the 'production' variable and 83.08 for the 'sales' variable. Both of them point out to a significance level, which is even higher than 99.9 %.(Abramowitz, Stegun, 1964)

Conclusively we can assert that the 'expectation survey' data seems, at the first glance, in order to dependable enough for short-run predictions of the future.

Surely, by today's factual situation, such short-run forecasts cannot be achieved. 2003 data had recently been published. The described benefit can only be obtained, when the results of this survey, even in tentative form, should be made

public or at least left for the information of government agencies at once, i.e. within a few weeks after the conduct of the survey.

4.3. Long-Term Correlation of Expectations with GDP Estimates

In the previous chapters, mention was made about a comparison between the Gross Domestic Product (GDP) quarterly data of the manufacturing industries and the expectations data of the survey under examination.

'Production' and 'Sales' data were chosen out of the 'expectation survey' variables, since their definitions were the nearest to the 'GDP' concept. (State Institute of Statistics, 2003-E)

The comparison might either affirm the hypothesis that "for manufacturing industry total 'the qualitative expectation of 'production' or the 'sales' of a quarter ahead would be give a reliable estimate on the 'rise', 'remaining at the same magnitude' or 'fall' of the GDP at the quarter, for which the estimate is made. It might as well be rejected! However, if the above stated hypothesis is accepted, an aid against a difficulty might be gained.

For economists it seems to be an extremely severe job to make a reliable prediction of GDP of the very near future time-point. The fact that our case is related to the 'manufacturing industry estimates of GDP' would not matter much.

Forecasting models and quantitative forecasts of single variables for a remote day might be better estimated. This is partially due to the fact that for very near future time points, the effects of seasonal fluctuations and other business cycles are not easy to successfully isolate. Quantitative forecasting techniques yield more reliable estimates for the medium-run and short-run, but not for the 'very short-run'. Therefore, any help from qualitative forecasts are welcome; especially when 'very short-run' policy decisions should be based upon them. (Makridakis, Wheelwright, McGee, 1983)

Therefore, the comparison of the quarterly expectations data of 'production' and 'sales' and the quarterly GDP figures seems to be rather a useful attempt. It is also well-known, that the 'production' and 'sales' trends should be in some

conformity with the 'GDP' trend, if we look at the runs of macroeconomic variable changes. (Baumohl, 2005)

Table 9: Quarterly Gross Domestic Product Estimates
At Current and 1987 Constant Prices: 1992-2000

	GDP CONSTANT (Million T.L.)				GDP CURRENT (Million T.L.)			
	Quarters				Quarters			
YEARS	I	II	III	IV	I	II	III	IV
1992	4694743	4785775	5366518	5434113	44895304	50469308	61419284	79789090
1993	4845733	5461760	5879254	5979712	75107968	91538646	106025092	139736683
1994	5159301	4619742	5259986	5433546	135831014	187751059	222077220	307828838
1995	5088372	5728662	6356280	6147803	329608027	400718655	453426051	567928112
1996	5526190	6154280	6680630	6618665	555162021	704066495	792571893	1071233807
1997	6080175	6909238	7538133	7311273	1068110462	1328912353	1628884681	2192719181
1998	6676946	7067468	7607897	6813311	2069239287	2358995911	2643085483	3056934846
1999	5956746	7087208	6914494	6610214	2608263350	3484347596	3782686976	4964153134
2000	6111812	7461174	7693101	7011664	4653719230	5956079284	6179641379	7098695762

Table 9 indicates the quarterly data of GDP at current and at constant prices of 1987. Although such comparisons are usually made with variables given at constant prices, we wouldn't be very sure of the reasoning behind. The reason was that a person is usually inclined to make a forecast of tomorrow by taking today's conditions into consideration. (Hutchison, 1962). However, the period of investigation, being 1992-2000, is a time of chronic high inflation. The behavior of CEO's, who answered the survey questions, might have been under situational subjective patterns of Turkey's specific conditions of those times.

Therefore, the below stated analysis is performed with both of the definitions of GDP, i.e. at current and as well at constant prices.

The 'expectation' relative frequencies cannot be utilized here. In terms of units of measurement there is no comparability between those of gross domestic product and the survey data. Moreover, the above stated hypothesis claims in essence no more than a conformity by 'increase', 'remaining the same' and 'decrease' categories. For example, it wouldn't be 'going too far' to say: "if GDP increase is

high, the relative frequency of ‘increase’ with respect to ‘decrease’ will also be somewhat more distant.”

Therefore the following approach would be appropriate. To quarterly changes of the manufacturing industry GDP, we might assign

$$+1 \text{ if } g_t > g_{t-1} \; ; \; -1 \text{ if } g_t < g_{t-1} \qquad (2)$$

These dummies might be matched with the dummy values obtained out of the expectation frequencies, of which the signs of +1, -1 will be taken from expectation frequencies defined by (1).

Among those dummy variables, correlation coefficient estimates for ‘production’ and ‘sales’ variables on one hand, and for ‘GDP’ at current and constant prices on other were obtained.

The results are not very promising. Since the length of quarterly data comprises 35 time-points, the correlation coefficients needed not to be so high in order to be significant. Still only one case, between ‘GDP’ and ‘sales expectations’ revealing a correlation coefficient value of 0.251, attained a 90% level of significance.

Therefore, the quarterly expectation results of the so-called “expectation surveys” can only (up to some extent) help to predict the quarterly manufacturing industry GDP changes, in the sense on whether it would increase or decrease with respect to the previous quarter’s result.

CHAPTER 5

5. STATISTICAL EVALUATION CONCERNING THE DISAGGREGATED DATA OF MANUFACTURING INDUSTRIES

5.1. Introduction

The present chapter is devoted to the empirical investigations of the disaggregated 'expectation survey' results. In Chapter 3, two sorts of breakdown were mentioned; one was the percentage distributions of expectation and realization of manufacturing establishments being subdivided into the public and private sector classes. The other one was an activity breakdown of two digit manufacturing industries according to ISIC-Rev.3 classification modus.

Of those, the initial year's data were illustrated in Tables 5, 6, 7 and 8. Since that was enough for purposes of illustrative demonstration, the remaining years of the time series were said to be left to the Appendix table.

5.2. Question on Whether "State" and "Private" Sector Respondents Are Better In Predictions

To argue whether the public sector CEO's make more dependable expectations or private CEO's, was an old discussion, to which in this realm an answer might be find out.

The data of expectations and actual data of 'increase', 'same', 'decrease' categories are given also on the grounds, that the firm respondents belong to a 'state company' or a 'private establishment'. The sectoral subdivision lasted throughout the whole length of the quarterly series in between 1992 and 2003.

That the ‘state establishment CEO’s’ would have chances to find more reliable estimates about the future of their companies was somewhat a heavier argument. It was said that they usually were managers of companies of greater size, they had more access to governmental data sources, they directed research departments out of which short-run objectivity gain about the stand of their companies could be achieved, they had also to pay more effort for planned action etc. Arguments on the side of private CEO’s usually defended the view, that ‘an entrepreneur has a better feeling nose’ about the business climate, threats, bottlenecks and situation of the firm under his possession.

An answer to such arguments, which are contrary to each other, can be provided by using the state-private subdivision of ownership of manufacturing industries. However, here ‘the closeness among expectations and realizations’ should be inspected.

For the ordinal data sets of the survey a plausible possibility seems to apply a closeness test by using comparative χ^2 (chi-squared) results. The χ^2 will be composed of relative frequencies, according to the definitional expression

$$\chi^2 = \sum_{Q} \sum_{I,S,D} \frac{(p_{Act,t} - p_{Exp.t-1})^2}{p_{Act,t}} \qquad (3)$$

being summed up for ‘increase’, ‘same’, ‘decrease’ within a quarter, and thereafter over 4 quarters to prevent the probable effect of cyclic regularities. The additive property of the χ^2 enables such an application. (Dodge, 2003)

The method to be applied will be as follows: For the 12 years under concern (3) will be computed for both of the ‘state’ and ‘private’ categories. Whichever χ^2 is smaller, will point out that in the year under question the respondents of the group made closer expectation estimates with respect to actual outcomes.

Table 10: The Chi-Squared Values among Expectations and Realizations of Production and Sales Variables for State and Private Sectors: 1992-2003

	PRODUCTION		SALES	
	CHI SQUARES		CHI SQUARES	
	STATE	PRIVATE	STATE	PRIVATE
YEARS				
1992	67,01	59,08	67,48	61,06
1993	29,57	58,79	44,07	67,35
1994	37,97	42,39	50,40	48,08
1995	48,63	29,03	32,54	25,64
1996	36,03	23,85	15,06	26,19
1997	26,05	31,99	26,98	36,24
1998	22,99	57,74	41,16	65,99
1999	35,18	38,19	39,81	42,00
2000	39,62	71,53	45,26	95,80
2001	33,38	41,78	64,10	40,00
2002	52,04	35,64	40,52	38,99
2003	30,30	19,09	29,17	23,92

The results are shown in Table 10 side by side, and for both of the variables 'production' and 'sales'. Inspection with the aim to answer "which of the χ^2's of 'state' or 'private' is smaller" might let certain interpretations to come about readily. However, if a significance question will be asked, in order to be sure whether a group of respondents are able to make better estimations, we might as well apply the sign test as follows.

Taking the χ^2's of a group as the standard, its greatness or smallness with respect to the corresponding χ^2's of the other group might be specified with '+' or '-' Then we might e.g. refer to MacKinnon tables. (MacKinnon, 1964)

Those tables give the result about "how much should be of one sign" (+ or -) and "how much should be of another", if the dominance of a category of data (here, the χ^2 results) would be significant at some desired level of confidence.

Choosing 95% level of significance, we observe that out of series of 12 '+' or '-' signs, 10 should be the minimum number of one sign, and 2 the maximum number of the other.

Returning to Table 10, we observe the following. By the variable 'production', the 'state' component's χ^2 is 7 times smaller and 5 times greater than that of the 'private' sector component. Thus, the result is insignificant. By the variable 'sales', the 'state' and 'private' componential χ^2's are 6 times smaller and alternatively bigger than the other. Hence, the result is again insignificant.

It should be clear, that no claim can be forwarded about the possibility that survey respondents of overwhelmingly 'state owned establishments' and 'private sector owned establishments' could be said to be able to make more successful expectations -about the direction of change in the future values of the variables involved.

5.3. Question on the Relative Success in Expectations by Respondents of Firms According to the ISIC Breakdown of Manufacturing Activities

5.3.1. The Statistical Method

5.3.1.1. The Design of a Method

At the start of Chapter 4 it was stated that the "expectations" and "realizations" distributions involved in this study are actually in ordinal scales among each of the "increase", "same" and "decrease" categories. Since the 2-digit activity breakdown of manufacturing industries after ISIC-Rev. 3 comprises activities between codes 15 to 36, thus making 22 sectors altogether, a method had to be applied to this bulk of data, which would enable us to segregate among the relative successes of "expectations". Hence, a two-stage application method had to be employed, whereby in the initial stage the coefficients of the ordinal distribution among "increase", "same", "decrease" categories will be computed for each quarter. Upon getting these, a suitable technique should subsume them all over the range of

23 quarters, in order to get a comparable indicator value, with which interactivity comparisons could be made.

To solve for each ordinal sub-distribution within a quarter, Spearman's rank order correlation coefficient provided a suitable use. Below, explanation will be given on how it might be employed. Afterwards, the 23 Spearman's coefficients for 23 quarters will be subjected into the realm of the "correlation ratio". Hence, the 22 2-digit manufacturing activities can be enlisted for the relative success of "expectation" responses according to the magnitudes of the so obtained correlation ratios. They can furthermore be subjected into F-test in order to detect how significant those results are.

5.3.2. On the Techniques of the Method

5.3.2.1. Spearman's Rank Order Correlation Coefficient

In the previous section mention was made to two different techniques. They were about the computations according to the Spearman's rank order correlation coefficient and the correlation ratio.

The Spearman's correlation coefficient is based on a simple idea. Comparing the rankings on the two sets of scores by taking the differences of ranks, squaring the differences would yield the measure. (Blalock, 1960) To standardize it for upper and lower limits among –1 and +1, the following formula will be devised.

$$\rho = 1 - \left(\frac{6.\sum_{k=1}^{n} (X_k - Y_k)^2}{n^3 - n} \right) \qquad (4)$$

In our case, X and Y might be the ranks of "expectations" and "realizations" respectively. The X and Y having the highest relative frequencies (of the frequency distributions belonging to the categories "increase", "same", "decrease") would receive the rank 1, the X and Y having the smallest relative frequencies would receive 3, and it will go on like that. Here, n is the number of data pairs in the distribution.

Hence in our case, the outcome of quarterly distributions will be one of the 6 ordinal data sets of 1, 2, 3; 2, 1, 3; 1, 3, 2; 2, 3, 1; 3, 2, 1; 2, 1, 3.

If the relative frequencies are the same for 2 or more categories, then it is said that there exists a "tie". To tied ranks will of course be given the same number, but the above formula (4) should be adjusted, so that the rank sums of the distribution with "tied ranks" should be the same as the untied ordinal distribution with the same number of data (Dener, 2000).

For example the untied ordinal distributions with 1, 2 and 3 have a rank sum 6. Thus if the first 2 data are tied, the distribution will have 1.5, 1.5, 3 as "adjusted data", and if the last 2 data are tied its data will be 1, 2.5, 2.5. If 3 data are the same, the distribution will have ranks 2, 2, 2. Adjusting the data set like that, they should then be inserted into the modified formula:

$$\rho = 1 - \left(\frac{6.\sum_{k=1}^{n} (X_{k,adj} - Y_{k,adj})^2}{n^3 - n - \frac{\sum \left({t_X}^3 - t_X \right) + \sum \left({t_Y}^3 - t_Y \right)}{2}} \right) \qquad (5)$$

In (5), the *t* values in the denominator stand for the number of ties. t_X represents those in the X distribution and t_Y in the Y-distribution.

For example, in our case, by 1.5, 1.5, 3 or 1, 2.5, 2.5 t_X or t_Y is 2 and by 2, 2, 2 t_X or t_Y is 3.

The interpretation of the calculated spearman's correlation coefficient is simple. It would range among +1 and –1 -these boundary values denoting perfect correlation cases. A "0" outcome would correspond to no correlation. The rest of the outcomes indicate strong correlation when they are near to +1 and –1, and weak correlation when they are near to "0".

5.3.2.2. The Correlation Ratio

Once the Spearman correlation coefficients are obtained in the way stated above, they might be used as attribute data for the computation of the "correlation ratio"

Correlation ratio E^2 is a much-generalized parameter. It can even be defined for the components of variance (Dener, 1983). Its adapted definition for our task will be

$$E^2 = \frac{\text{Sum of coefficients of determination}}{\text{Sum of 'would-be' coefficients of determination by perfect correlation}} \qquad (6)$$

It is well known that the "coefficient of determination" is the square of the correlation coefficient. "'Would-be' coefficients of determination by perfect correlation" will thus all be equal to 1. Significance of E^2 can be taken under consideration by means of an F-test. (Blalock, 1960)

5.3.3. The Resulting Outcomes

The above-explained method had been applied to 22 ISIC 2-digit manufacturing industries for 23 quarters. With respect to the relative frequency data, out of 1012 Spearman rank order correlation coefficients for production and sales, 109 were made upon tied ranks, and hence obtained through the utilization of formula (6).

The E^2 value parameters that should be calculated had in this case a denominator value of 23. Their sums are given in Table 11 for "production" and in Table 12 for "sales". The tables are organized according to the descending order values of E^2. They therefore reflect the success order of sectoral data in expecting the quarterly true direction of "increasing", "remaining the same" and "decreasing" situations with respect to the actual situation.

Table 11: Production: ISIC 2-Digit Manufacturing Industries In Descending Order According to the Values of E^2

(Out of Spearman's ρ's among "Expectation" and "Realization" Ranks)

	Activity Codes	E^2
manufacture of tobacco products	**16**	0,68
manufacture of other non-metallic mineral products	**26**	0,61
manufacture of office, accounting and computing machinery	**30**	0,6
manufacture of electrical machinery and apparatus n.e.c	**31**	0,57
manufacture of motor vehicles, trailers and semi-trailers	**34**	0,57
manufacture of coke refined petroleum products and nuclear fuel	**23**	0,55
manufacture of medical, precision and optical instruments, watches and clocks	**33**	0,55
publishing, printing and reproduction of recorded media	**22**	0,54
manufacture of wood and of products of wood and cork, except furniture; manufacture of similar articles n.e.c.	**20**	0,53
manufacture of fabricated metal products, except machinery and equipment	**28**	0,53
manufacture of food products and beverages	**15**	0,51
manufacture of furniture	**36**	0,5
manufacture of textiles	**17**	0,5
manufacture of rubber and plastic products	**25**	0,5
manufacture of radio, television and communication equipment and apparatus	**32**	0,49
manufacture of paper and paper products	**21**	0,47
manufacture of other transport equipment	**35**	0,44
manufacture of basic metal	**27**	0,43
tanning and dressing of leather; manufacture of luggage, handbags, saddler, harness and foot	**19**	0,41
manufacture of machinery and equipment n.e.c.	**29**	0,41
manufacture of wearing apparel; dressing and dyeing of fur	**18**	0,38
manufacture of chemicals and chemical products	**24**	0,3

Table 12: Sales: ISIC 2-Digit Manufacturing Industries In Descending Order According to the Values of E^2

(Out of Spearman's ρ's among "Expectation" and "Realization" Ranks)

	Activity Codes	E^2
manufacture of wood and of products of wood and cork, except furniture; manufacture of similar articles n.e.c.	**20**	0,67
manufacture of fabricated metal products, except machinery and equipment	**28**	0,63
manufacture of motor vehicles, trailers and semi-trailers	**34**	0,62
manufacture of office, accounting and computing machinery	**30**	0,60
manufacture of coke, refined petroleum products and nuclear fuel	**23**	0,59
manufacture of food products and beverages	**15**	0,58
manufacture of textiles	**17**	0,54
publishing, printing and reproduction of recorded media	**22**	0,54
manufacture of electrical machinery and apparatus n.e.c	**31**	0,54
manufacture of basic metal	**27**	0,53
manufacture of tobacco products	**16**	0,52
manufacture of other non-metallic mineral products	**26**	0,52
manufacture of furniture	**36**	0,52
manufacture of other transport equipment	**35**	0,51
manufacture of medical, precision and optical instruments, watches and clocks	**33**	0,51
manufacture of machinery and equipment n.e.c.	**29**	0,48
manufacture of wearing apparel; dressing and dyeing of fur	**18**	0,47
manufacture of paper and paper products	**21**	0,45
manufacture of radio, television and communication equipment and apparatus	**32**	0,42
tanning and dressing of leather; manufacture of luggage, handbags, saddler, harness and foot	**19**	0,38
manufacture of chemicals and chemical products	**24**	0,38
manufacture of rubber and plastic products	**25**	0,36

It is noteworthy that all the E^2 values in both tables are significant at 95% level, considering the degrees of freedom as 21. On the other hand, between highest and smallest values of E^2 for different manufacturing activities, the difference is quite remarkable. Therefore, the investigated survey seems to be quite useful in yielding information of future prospects. However, the survey method should better be reconsidered, with the aim of finding any troubled implementation, which might have promoted to enlarge the magnitude of the difference between maximum and minimum E^2's.

CHAPTER 6

6. CONCLUSIONS

6.1. Generalizations

The so-called “Expectation Surveys” is an opinion survey directed towards a higher positioned respondent of an establishment. The aim is to get the qualitative predictions of the person in form of “will increase”, “will remain the same” or “will decrease” for “expectations” and “had increased”, “remained the same”, and “had decreased” for “realizations” up to around 20 characteristics of the firm. In this study, the “production” and “sales” were the characteristics to be focused upon.

The main idea behind organizing such a survey was to get a panorama of a “very short-run forecast” of economic activities by subjective evaluations of responsible CEO’s of firms. It was thought as a national planning aid, as supplementary information for short-run decisions, and perhaps as a self-assertion check for policy makers. The survey had been implemented ever since about half a century and even more in many, and usually developed countries.

Since 1964 intermittently, from 1992 continuously the same type of survey was also conducted in Turkey, nowadays occupying a fixed place in the survey program of the Turkish Statistical Institute, to which the State Institute Statistics is the forerunner.

The present study is devoted to examine whether the data gains of such a survey are reliable enough, since the need for such an information tool had increased during the recent years.

With the aid of suitable statistical methods, whatever else had been searched for were explicated and elaborated in Chapters 4 and 5. As for a generalization, it can safely be asserted that the surveys provide adequately reliable “expectations”. The manufacturing industry as an aggregate, and ISIC 2-digit breakdown of manufacturing activities had indicated through the application of two different methods, the same conclusion. The cases of estimates for “production” or for “sales” did not bring any particular interpretations, which seemed to point out different conclusions.

At the same time, the question on whether the particular way of qualitative investigation of the “expectation surveys” could be a guide for the quantitative “expectations” of similar variables had been brought to a specific clarification. The expected answer is usually not very affirmative according to quite many experiences that were gathered all over the world. (Baumohl, 2005) In Turkish case, the task of such an empirical examination was only possible with quarterly GDP data. Both “production” and “sales” data from the surveys indicated that they can give “supportive information” for a “very short-run forecast” of manufacturing GDP, only with reservations. In this respect, “sales” seemed to be a better statistical attribute.

The subdivision of survey data into categories of “predominantly state owned” or “predominantly private sector owned” was also subjected to some evaluation, in order to bring some contribution to the arguments in favor of one of the groups as being able to make better estimates of future. It was clarified that the expectations emanating from the respondents of both sectors were not significantly better than each other.

By all attempts, important was to use the appropriate statistical technique. Thus, by each investigation different techniques had to be employed, and in one case of Spearman’s coefficient and the correlation ratio in combination,-a method comprising a chainwise application of two techniques was employed.

Conclusively, the “expectation surveys” of the State Institute of Statistics injects largely beneficial economic data to the Turkish economic database, and the task of performing the survey should be carried onwards uninterruptedly.

6.2. Some Comments on the Human Factor When Conducting Such a Survey

Beyond the scope of the present study is to improve the implementation of the "expectation surveys". However, as a final word, it would be better to make certain remarks for an improvement of the application.

It should be taken into account that sector people respond the survey upon request, and as far as human expectations are concerned, bias would exist unavoidably. It shouldn't be forgotten that, in this case of judgment demand, momentaneous optimism or pessimism of the person might affect the predictions.

There are also other affecting factors. Flores and Wichern (2005) enlisted two important situations. In one a study on estimation of yen/dollar exchange rate in Japan by 44 Japanese companies. It was observed that the majority of the companies are biased towards scenarios that would be best for them. The authors call the optimism of the forecasters as "wishful expectations".

By some other study, it was observed that elderly participants, in answering such questionnaires generally make remarkably different estimations than the others. This factor should also be kept under consideration.

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APPENDIX (REMAINING DATA BASE)

Table A.1: Continuation of table 5 data

Manufacturing industry	Expected Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1993									
I. Quarter	59,7	22,3	18,0	54,3	13,5	32,2	62,1	26,1	11,8
II. Quarter	59,1	26,3	14,7	81,9	11,7	6,4	48,3	33,2	18,5
III. Quarter	46,9	27,4	25,7	38,6	11,8	49,6	50,8	34,6	14,6
IV. Quarter	38,7	37,5	23,8	38,6	33,5	27,8	38,8	38,3	23,0
1994									
I. Quarter	38,1	34,3	27,6	49,1	35,3	15,6	36,1	34,1	29,9
II. Quarter	38,2	38,4	23,4	43,4	33,6	23,0	37,3	39,3	23,5
III. Quarter	45,5	32,5	21,9	44,6	27,1	28,3	45,7	33,5	20,8
IV. Quarter	36,9	38,5	24,6	28,4	37,4	34,2	38,4	38,7	22,9
1995									
I. Quarter	55,7	32,0	12,2	50,8	35,0	14,1	56,5	31,5	11,9
II. Quarter	51,6	36,6	11,8	42,1	38,8	19,1	53,3	36,2	10,5
III. Quarter	46,3	33,2	20,5	43,6	25,8	30,6	46,7	34,3	19,0
IV. Quarter	38,6	37,4	24,0	32,7	33,8	33,5	39,5	37,9	22,6
1996									
I. Quarter	58,5	30,3	11,2	51,2	31,9	16,9	59,4	30,1	10,4
II. Quarter	52,0	34,7	13,4	46,8	36,6	16,6	52,7	34,4	12,9
III. Quarter	49,2	30,3	20,5	46,6	27,7	25,8	49,6	30,7	19,8
IV. Quarter	41,8	34,5	23,7	30,6	31,9	37,5	43,2	34,8	21,9
1997									
I. Quarter	60,8	28,9	10,3	56,3	32,4	11,3	61,4	28,4	10,7
II. Quarter	55,8	32,5	11,8	52,7	32,1	15,2	56,2	32,5	11,3
III. Quarter	50,5	30,9	18,7	49,4	25,7	24,9	50,6	31,5	17,9
IV. Quarter	41,8	34,3	24,0	30,5	31,3	38,2	43,2	34,6	22,1

Table A.1 (continued)

Manufacturing industry	Expected Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1998									
I. Quarter	59,5	28,0	12,5	51,1	33,0	15,8	60,7	27,3	12,0
II. Quarter	50,0	35,3	14,7	45,0	37,8	17,3	50,6	35,0	14,3
III. Quarter	43,2	32,3	24,5	43,9	26,2	29,9	43,1	33,1	23,8
IV. Quarter	31,3	37,5	31,2	29,9	36,3	33,8	31,5	37,6	30,9
1999									
I. Quarter	56,5	30,3	13,3	56,6	29,9	13,5	56,5	30,3	13,2
II. Quarter	47,9	35,3	16,8	50,6	34,3	15,1	47,5	35,4	17,1
III. Quarter	46,4	31,9	21,7	45,2	26,7	28,1	46,5	32,6	20,9
IV. Quarter	39,6	34,7	25,7	27,6	35,6	36,9	41,0	34,6	24,3
2000									
I. Quarter	62,0	27,7	10,3	58,7	31,3	10,0	62,3	27,3	10,3
II. Quarter	54,4	32,6	13,0	53,4	33,6	13,0	54,5	32,5	13,0
III. Quarter	46,1	31,1	22,7	45,7	24,3	30,0	46,2	31,8	22,0
IV. Quarter	33,0	34,7	32,3	29,7	36,1	34,2	33,3	34,6	32,1
2001									
I. Quarter	39,9	32,3	27,8	53,3	31,6	15,1	38,7	32,4	29,0
II. Quarter	41,0	38,2	20,8	50,0	32,6	17,4	40,3	38,6	21,1
III. Quarter	34,2	33,5	32,2	47,6	21,8	30,6	33,0	34,6	32,4
IV. Quarter	37,6	38,1	24,4	24,5	40,7	34,8	38,8	37,8	23,3
2002									
I. Quarter	54,6	33,8	11,6	52,9	35,2	11,9	54,8	33,7	11,6
II. Quarter	47,5	37,8	14,7	46,3	39,0	14,6	47,5	37,7	14,7
III. Quarter	42,2	33,3	24,6	41,1	25,2	33,6	42,2	34,0	23,8
IV. Quarter	39,8	35,9	24,3	28,4	38,8	32,8	40,8	35,7	23,5
2003									
I. Quarter	56,9	30,2	12,9	50,5	35,6	13,9	57,4	29,7	12,9
II. Quarter	50,8	34,5	14,8	49,7	31,7	18,6	50,9	34,7	14,4
III. Quarter	42,8	32,3	24,8	42,3	24,3	33,3	42,9	33,1	24,0

Table A.1 (continued)

Manufacturing industry	Actual Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1993									
I. Quarter	54,2	20,2	25,6	50,4	15,9	33,7	56,0	22,2	21,8
II. Quarter	60,9	15,9	23,2	80,0	8,1	12,0	51,6	19,7	28,6
III. Quarter	47,5	25,7	26,8	47,0	22,0	31,0	47,6	26,4	26,0
IV. Quarter	24,3	26,3	49,4	29,7	29,7	40,6	23,3	25,6	51,1
1994									
I. Quarter	31,4	21,9	46,7	44,5	21,9	33,6	29,1	21,9	48,9
II. Quarter	49,1	23,4	27,5	44,0	20,1	35,9	50,1	24,0	26,0
III. Quarter	50,7	23,5	25,8	42,9	22,0	35,1	52,1	23,8	24,2
IV. Quarter	36,4	28,2	35,3	25,4	31,4	43,2	38,2	27,7	34,1
1995									
I. Quarter	55,0	23,2	21,8	53,3	19,3	27,5	55,3	23,9	20,8
II. Quarter	53,9	24,7	21,3	46,8	21,4	31,8	55,0	25,3	19,7
III. Quarter	48,3	25,8	25,8	39,6	21,9	38,5	49,7	26,4	23,9
IV. Quarter	35,7	26,7	37,6	28,1	25,7	46,2	36,6	26,8	36,6
1996									
I. Quarter	53,7	24,9	21,5	54,7	23,2	22,0	53,5	25,1	21,4
II. Quarter	51,7	24,8	23,5	51,9	19,3	28,9	51,7	25,6	22,8
III. Quarter	49,2	23,7	27,1	51,2	19,0	29,8	48,9	24,3	26,8
IV. Quarter	39,4	26,6	34,0	27,2	24,4	48,4	41,0	26,9	32,1
1997									
I. Quarter	57,2	21,9	20,9	55,1	21,0	23,8	57,5	22,1	20,5
II. Quarter	55,7	23,6	20,7	50,2	22,8	27,0	56,4	23,6	19,9
III. Quarter	46,1	24,7	29,2	48,8	19,6	31,6	45,7	25,4	28,9
IV. Quarter	34,2	26,5	39,3	27,0	30,6	42,3	35,2	25,9	38,9

Table A.1 (continued)

Manufacturing industry	Actual Situation (percentage distribution)								
YEARS	Total			State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease	Increase	Same	Decrease
1998									
I. Quarter	48,7	25,3	26,0	53,3	27,3	19,4	48,2	25,0	26,8
II. Quarter	44,7	25,1	30,2	49,8	23,3	26,9	44,1	25,3	30,6
III. Quarter	35,3	20,8	43,9	42,0	19,3	38,7	34,5	20,9	44,5
IV. Quarter	27,1	25,2	47,7	25,0	31,9	43,1	27,3	24,5	48,2
1999									
I. Quarter	53,5	22,0	24,6	56,4	23,1	20,5	53,1	21,9	25,0
II. Quarter	42,1	24,3	33,6	45,7	20,2	34,1	41,7	24,8	33,5
III. Quarter	44,1	23,9	32,0	41,1	21,6	37,2	44,5	24,1	31,4
IV. Quarter	33,9	26,6	39,6	19,1	34,0	46,9	35,5	25,8	38,7
2000									
I. Quarter	61,0	20,2	18,8	56,8	26,1	17,1	61,4	19,6	19,0
II. Quarter	49,3	24,7	26,0	49,8	20,1	30,1	49,3	25,1	25,6
III. Quarter	36,1	23,0	40,9	41,5	19,8	38,7	35,6	23,3	41,1
IV. Quarter	18,0	20,2	61,8	18,0	32,0	50,0	18,0	19,2	62,9
2001									
I. Quarter	41,6	22,2	36,2	51,2	25,0	23,8	40,9	22,0	37,1
II. Quarter	40,5	22,7	36,8	43,6	21,8	34,7	40,2	22,8	37,0
III. Quarter	36,5	23,7	39,8	43,9	17,9	38,2	35,8	24,2	40,0
IV. Quarter	38,4	25,1	36,5	18,7	30,1	51,2	40,0	24,7	35,3
2002									
I. Quarter	57,2	22,7	20,1	56,9	21,1	22,1	57,2	22,9	19,9
II. Quarter	52,2	23,2	24,6	54,7	20,3	25,0	52,0	23,4	24,6
III. Quarter	42,4	24,5	33,1	42,0	21,7	36,2	42,5	24,7	32,8
IV. Quarter	36,1	26,7	37,2	19,2	29,5	51,3	37,4	26,5	36,1
2003									
I. Quarter	56,4	22,4	21,2	51,9	22,5	25,7	56,8	22,4	20,8
II. Quarter	51,1	23,6	25,3	52,4	19,0	28,6	51,0	24,0	25,0
III. Quarter	44,2	24,1	31,7	36,8	18,9	44,3	44,8	24,6	30,6

Table A.2 Continuation of table 6

Manufacturing industry	Expected Situation (percentage distribution)					
YEARS	State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease
1993						
I. Quarter	32,2	15,9	51,9	66,1	24,7	9,2
II. Quarter	73,1	16,8	10,0	46,6	31,1	22,3
III. Quarter	36,4	19,1	44,6	53,8	34,4	11,8
IV. Quarter	39,2	41,9	18,9	37,7	38,9	23,4
1994						
I. Quarter	42,0	44,7	13,3	35,3	31,6	33,1
II. Quarter	40,0	43,5	16,5	35,4	38,0	26,6
III. Quarter	39,4	41,9	18,7	43,3	36,1	20,6
IV. Quarter	30,3	44,4	25,3	35,2	39,7	25,1
1995						
I. Quarter	47,7	42,8	9,5	55,6	31,9	12,5
II. Quarter	38,4	43,0	18,6	52,4	36,0	11,5
III. Quarter	40,6	39,3	20,1	45,4	35,3	19,3
IV. Quarter	33,8	40,6	25,6	38,4	36,2	25,4
1996						
I. Quarter	44,7	40,1	15,2	57,5	30,6	11,9
II. Quarter	39,7	42,1	18,2	51,8	35,5	12,7
III. Quarter	41,5	39,6	18,9	47,9	32,6	19,5
IV. Quarter	36,9	39,3	23,8	42,3	35,2	22,5
1997						
I. Quarter	52,3	37,5	10,2	59,5	30,1	10,5
II. Quarter	42,5	44,6	12,9	54,2	33,7	12,1
III. Quarter	43,7	41,6	14,7	48,2	33,4	18,4
IV. Quarter	33,5	41,4	25,1	42,7	33,9	23,3

Table A.2 (continued)

Manufacturing industry	Expected Situation (percentage distribution)					
YEARS	State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease
1998						
I. Quarter	44,1	43,0	12,9	61,9	26,1	11,9
II. Quarter	43,8	45,3	10,9	51,1	34,4	14,5
III. Quarter	38,9	46,6	14,5	43,1	32,9	24,0
IV. Quarter	33,3	47,4	19,3	31,3	37,6	31,1
1999						
I. Quarter	52,9	38,6	8,6	55,7	31,0	13,3
II. Quarter	40,3	48,2	11,5	44,4	37,0	18,6
III. Quarter	40,1	45,9	14,0	45,9	33,0	21,1
IV. Quarter	32,6	42,0	25,4	39,2	35,1	25,7
2000						
I. Quarter	52,1	41,5	6,4	61,2	27,8	11,0
II. Quarter	44,2	41,9	14,0	54,1	33,2	12,7
III. Quarter	46,9	40,1	13,0	44,5	32,8	22,6
IV. Quarter	29,3	50,3	20,4	32,2	34,3	33,5
2001						
I. Quarter	42,8	46,2	11,0	36,6	32,4	31,0
II. Quarter	43,4	40,7	15,9	38,5	39,5	22,0
III. Quarter	46,9	37,0	16,0	31,3	34,6	34,1
IV. Quarter	32,7	47,0	20,2	35,6	39,8	24,6
2002						
I. Quarter	41,2	45,3	13,5	51,2	35,6	13,1
II. Quarter	34,8	46,2	19,0	43,9	40,4	15,7
III. Quarter	39,4	39,4	21,2	39,9	36,3	23,8
IV. Quarter	36,9	46,9	16,3	37,6	38,3	24,1
2003						
I. Quarter	39,8	44,0	16,3	53,7	33,1	13,2
II. Quarter	36,4	43,4	20,3	48,3	37,6	14,1
III. Quarter	38,7	45,8	15,5	41,9	33,9	24,2

Table A.2 (continued)

Manufacturing industry	Actual Situation (percentage distribution)					
YEARS	State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease
1992						
I. Quarter	73,6	14,4	12,0	54,0	16,5	29,5
II. Quarter	69,2	15,7	15,1	61,1	18,0	20,9
III. Quarter	63,4	14,2	22,4	50,6	18,9	30,5
IV. Quarter	40,1	15,3	44,6	38,8	24,8	36,5
1993						
I. Quarter	31,6	14,1	54,4	65,4	16,0	18,6
II. Quarter	57,6	16,1	26,3	53,3	18,4	28,3
III. Quarter	42,7	31,3	26,1	46,3	27,0	26,7
IV. Quarter	32,3	33,3	34,3	22,9	24,0	53,1
1994						
I. Quarter	34,4	30,4	35,2	24,7	19,2	56,1
II. Quarter	41,5	30,6	27,9	48,8	24,3	26,9
III. Quarter	42,5	27,9	29,6	47,4	26,9	25,7
IV. Quarter	30,4	33,4	36,3	36,6	26,6	36,7
1995						
I. Quarter	46,5	31,2	22,3	53,3	24,6	22,1
II. Quarter	42,1	31,0	27,0	54,9	25,2	19,9
III. Quarter	41,2	31,3	27,6	46,4	28,2	25,3
IV. Quarter	31,6	29,3	39,1	35,5	26,7	37,8
1996						
I. Quarter	42,7	32,7	24,5	51,7	25,0	23,3
II. Quarter	43,7	33,8	22,5	51,1	26,1	22,8
III. Quarter	39,5	37,3	23,2	45,5	26,1	28,3
IV. Quarter	29,5	35,9	34,5	38,2	27,7	34,0
1997						
I. Quarter	44,4	34,4	21,2	56,8	21,9	21,3
II. Quarter	41,3	34,3	24,4	54,3	24,9	20,8
III. Quarter	39,9	34,1	26,0	42,1	26,5	31,4
IV. Quarter	30,0	35,3	34,7	33,1	26,0	40,9

Table A.2 (continued)

Manufacturing industry	Actual Situation (percentage distribution)					
YEARS	State			Private		
	Increase	Same	Decrease	Increase	Same	Decrease
1998						
I. Quarter	46,1	36,4	17,5	46,7	25,4	27,9
II. Quarter	33,5	37,6	28,9	42,7	25,1	32,2
III. Quarter	32,2	36,2	31,6	29,2	22,4	48,4
IV. Quarter	30,1	36,8	33,0	27,4	24,7	47,9
1999						
I. Quarter	50,3	37,4	12,3	51,4	22,0	26,6
II. Quarter	35,2	35,2	29,6	39,6	25,4	34,9
III. Quarter	44,6	31,0	24,5	40,5	25,4	34,1
IV. Quarter	21,1	42,1	36,8	33,7	25,7	40,7
2000						
I. Quarter	49,7	33,3	16,9	57,5	21,3	21,2
II. Quarter	37,0	35,2	27,9	47,2	25,2	27,7
III. Quarter	33,1	37,2	29,7	31,7	22,9	45,4
IV. Quarter	28,3	36,4	35,3	14,8	16,9	68,3
2001						
I. Quarter	47,3	30,4	22,3	35,2	22,5	42,4
II. Quarter	36,6	29,2	34,2	36,2	26,0	37,8
III. Quarter	44,0	28,6	27,4	30,5	25,7	43,8
IV. Quarter	22,7	31,3	46,0	37,5	24,9	37,6
2002						
I. Quarter	40,0	33,3	26,7	52,9	25,2	21,8
II. Quarter	36,3	37,5	26,2	47,5	26,8	25,7
III. Quarter	37,0	35,2	27,9	38,3	26,0	35,7
IV. Quarter	26,2	33,9	39,9	33,6	26,5	39,9
2003						
I. Quarter	41,9	33,1	25,0	53,1	24,4	22,6
II. Quarter	37,5	33,3	29,2	48,4	24,6	27,0
III. Quarter	35,5	31,2	33,3	41,6	26,6	31,9

Table A.3: Quarterly Expectations and Realizations of "Production"

In Form of Percentage Distributions: 1999-2003

First Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	46,2	28,7	25,1	48,2	21,1	30,7
16	42,4	42,4	15,2	48,6	40,5	10,9
17	52,2	38,1	9,7	44,9	26,8	28,3
18	44,1	35,9	20,0	40,0	24,0	36,0
19	55,3	31,9	12,8	50,0	21,4	28,6
20	53,3	36,7	10,0	47,4	24,6	28,0
21	65,6	20,3	14,1	69,8	15,9	14,3
22	48,9	44,4	6,7	33,3	33,3	33,4
23	75,0	16,7	8,3	60,0	20,0	20,0
24	64,4	26,8	8,8	54,5	20,0	25,5
25	67,3	25,5	7,2	67,0	16,5	16,5
26	77,2	16,9	5,9	71,4	17,0	11,6
27	65,0	29,1	5,9	57,7	18,3	24,0
28	53,2	32,3	14,5	56,3	22,7	21,0
29	58,5	32,6	8,9	49,6	23,7	26,7
30	50,0	0,0	50,0	0,0	50,0	50,0
31	46,9	42,2	10,9	47,6	22,2	30,2
32	66,7	25,0	8,3	61,1	22,2	16,7
33	47,1	41,2	11,7	50,0	30,0	20,0
34	55,4	39,3	5,3	65,5	18,2	16,3
35	61,5	38,5	0,0	57,1	21,4	21,5
36	60,7	23,2	16,1	54,5	25,5	20,0

Table A.3 (continued)

Second Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,8	32,7	16,5	49,9	21,6	28,5
16	32,4	44,1	23,5	29,0	22,6	48,4
17	35,6	42,1	22,3	39,5	32,7	27,8
18	46,2	34,3	19,5	43,0	29,7	27,3
19	41,5	29,3	29,2	42,1	13,2	44,7
20	52,8	37,7	9,5	42,9	26,8	30,3
21	50,8	32,2	17,0	34,5	23,6	41,9
22	37,5	45,0	17,5	52,8	22,2	25,0
23	80,0	10,0	10,0	53,8	15,4	30,8
24	55,7	32,1	12,2	47,5	18,0	34,5
25	47,0	39,0	14,0	33,7	19,1	47,2
26	58,7	29,3	12,0	45,3	24,3	30,4
27	43,6	39,6	16,8	32,7	26,5	40,8
28	44,7	39,5	15,8	32,7	25,7	41,6
29	47,8	35,8	16,4	37,6	24,8	37,6
30	0,0	100,0	0,0	100,0	0,0	0,0
31	49,2	30,5	20,3	43,3	25,0	31,7
32	33,3	38,9	27,8	14,3	21,4	64,3
33	35,0	55,0	10,0	38,9	38,9	22,2
34	49,1	35,8	15,1	37,3	25,5	37,2
35	35,7	28,6	35,7	27,3	27,3	45,4
36	48,1	33,3	18,6	41,7	12,5	45,8

Table A.3 (continued)

Third Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	49,8	25,2	25,0	48,5	20,1	31,4
16	32,3	38,7	29,0	34,3	45,7	20,0
17	49,8	41,1	9,1	49,1	31,6	19,3
18	54,9	34,4	10,7	57,5	19,9	22,6
19	40,5	27,0	32,5	40,0	25,0	35,0
20	46,3	42,6	11,1	37,9	32,8	29,3
21	50,0	40,7	9,3	50,7	25,4	23,9
22	53,1	34,4	12,5	45,7	30,7	23,6
23	58,3	16,7	25,0	45,5	0,0	54,5
24	51,3	29,9	18,8	44,8	20,7	34,5
25	50,6	33,3	16,1	53,1	20,4	26,5
26	24,6	25,4	50,0	21,2	16,7	62,1
27	45,9	38,8	15,3	36,8	26,4	36,8
28	44,6	34,8	20,6	43,4	25,7	30,9
29	42,3	33,3	24,4	38,8	27,3	33,9
30	100,0	0,0	0,0	100,0	0,0	0,0
31	55,9	33,9	10,2	60,7	17,9	21,4
32	84,6	15,4	0,0	68,8	6,3	24,9
33	44,4	44,4	11,2	42,1	31,6	26,3
34	62,0	28,0	10,0	54,5	29,1	16,4
35	36,4	36,4	27,2	30,8	46,2	23,0
36	51,1	29,8	19,1	43,9	29,8	26,3

Table A.3 (continued)

Fourth Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	30,4	36,0	33,6	29,4	29,4	41,2
16	18,2	63,6	18,2	17,6	61,8	20,6
17	44,6	39,3	16,1	37,0	31,0	32,0
18	46,8	36,9	16,3	48,6	22,0	29,4
19	41,0	30,8	28,2	26,2	19,0	54,8
20	43,9	42,1	14,0	30,6	24,2	45,2
21	47,0	36,4	16,6	38,2	27,9	33,9
22	45,5	29,5	25,0	25,9	33,3	40,8
23	27,3	18,2	54,5	33,3	16,7	50,0
24	51,4	35,7	12,9	43,8	22,5	33,7
25	50,0	26,0	24,0	38,0	22,2	39,8
26	25,9	29,7	44,4	22,5	20,7	56,8
27	40,2	40,2	19,6	35,0	21,4	43,6
28	37,6	37,6	24,8	36,4	25,6	38,0
29	48,9	29,9	21,2	34,2	27,1	38,7
30	100,0	0,0	0,0	100,0	0,0	0,0
31	40,7	31,5	27,8	35,4	32,3	32,3
32	43,8	31,3	24,9	38,9	11,1	50,0
33	36,8	31,6	31,6	27,3	45,5	27,2
34	45,1	23,5	31,4	47,5	19,7	32,8
35	53,8	38,5	7,7	22,2	66,7	11,1
36	51,9	27,8	20,3	41,5	26,2	32,3

Table A.3 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	49,5	27,9	22,6	47,8	22,8	29,4
16	47,1	44,1	8,8	55,9	35,3	8,8
17	54,4	35,8	9,8	55,5	26,5	18,0
18	50,9	39,2	9,9	54,8	22,9	22,3
19	46,5	34,9	18,6	67,4	6,5	26,1
20	64,4	30,5	5,1	54,4	22,8	22,8
21	76,1	22,4	1,5	61,4	21,4	17,2
22	39,6	56,6	3,8	47,1	31,4	21,5
23	83,3	8,3	8,4	66,7	8,3	25,0
24	61,3	27,7	11,0	63,1	11,5	25,4
25	77,4	18,9	3,7	65,7	21,0	13,3
26	82,8	13,1	4,1	75,3	13,0	11,7
27	73,3	20,7	6,0	70,6	14,3	15,1
28	66,0	27,0	7,0	66,4	21,6	12,0
29	68,2	23,2	8,6	66,2	20,4	13,4
30	100,0	0,0	0,0	100,0	0,0	0,0
31	60,3	31,7	8,0	68,9	24,6	6,5
32	64,7	23,5	11,8	73,3	6,7	20,0
33	54,5	45,5	0,0	52,4	23,8	23,8
34	84,7	13,6	1,7	78,9	12,3	8,8
35	33,3	66,7	0,0	80,0	20,0	0,0
36	61,7	31,7	6,6	66,2	22,1	11,7

Table A.3 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	55,5	28,9	15,6	54,9	21,6	23,5
16	33,3	42,4	24,3	30,3	36,4	33,3
17	46,5	39,5	14,0	43,0	29,3	27,7
18	54,1	31,4	14,5	51,9	20,5	27,6
19	55,6	24,4	20,0	48,9	17,0	34,1
20	48,1	50,0	1,9	44,9	38,9	16,2
21	55,9	36,8	7,3	44,3	25,7	30,0
22	44,0	46,0	10,0	39,2	33,3	27,5
23	66,7	25,0	8,3	66,7	8,3	25,0
24	57,3	29,3	13,4	45,4	24,3	30,3
25	59,2	30,1	10,7	53,6	20,9	25,5
26	57,8	32,3	9,9	55,4	25,7	18,9
27	51,6	33,9	14,5	36,1	30,3	33,6
28	60,0	26,4	13,6	51,1	22,1	26,8
29	57,9	28,3	13,8	46,9	22,4	30,7
30	100,0	0,0	0,0	100,0	0,0	0,0
31	55,2	34,5	10,3	45,9	31,1	23,0
32	50,0	28,6	21,4	47,1	17,6	35,3
33	33,3	57,1	9,6	58,3	16,7	25,0
34	64,8	27,8	7,4	50,8	23,0	26,2
35	40,0	20,0	40,0	40,0	30,0	30,0
36	61,9	31,7	6,4	54,3	22,9	22,8

Table A.3 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity code	Increase	Same	Decrease	Increase	Same	Decrease
15	49,7	24,7	25,6	39,2	23,8	37,0
16	19,4	51,6	29,0	18,5	44,4	37,1
17	49,7	39,5	10,8	38,5	28,5	33,0
18	54,0	31,3	14,7	40,8	27,2	32,0
19	54,3	28,3	17,4	58,1	16,3	25,6
20	53,3	44,4	2,3	29,4	33,3	37,3
21	48,5	33,3	18,2	32,4	18,3	49,3
22	57,1	32,7	10,2	48,1	25,0	26,9
23	50,0	16,7	33,3	38,5	0,0	61,5
24	47,6	27,2	25,2	34,6	16,3	49,1
25	44,5	31,8	23,7	34,0	23,3	42,7
26	24,7	28,2	47,1	23,3	19,2	57,5
27	43,7	35,3	21,0	29,7	22,9	47,4
28	42,3	32,5	25,2	35,6	20,3	44,1
29	49,3	28,2	22,5	37,2	23,4	39,4
30	100,0	0,0	0,0	0,0	0,0	100,0
31	64,3	30,4	5,3	41,7	26,7	31,6
32	53,3	26,7	20,0	47,1	17,6	35,3
33	41,7	45,8	12,5	28,6	23,8	47,6
34	51,7	29,3	19,0	38,6	17,5	43,9
35	60,0	20,0	20,0	50,0	12,5	37,5
36	48,8	35,9	15,3	47,1	17,6	35,3

Table A.3 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	30,2	38,9	30,9	20,6	24,4	55,0
16	34,6	46,2	19,2	16,1	51,6	32,3
17	31,0	42,2	26,8	18,6	24,8	56,6
18	39,4	38,8	21,8	34,8	21,4	43,8
19	36,6	24,4	39,0	18,6	9,3	72,1
20	40,4	40,4	19,2	20,8	30,2	49,0
21	35,7	30,0	34,3	4,9	13,6	81,5
22	38,8	34,7	26,5	19,6	27,5	52,9
23	33,3	25,0	41,7	7,1	7,1	85,8
24	54,4	27,0	18,6	23,5	13,6	62,9
25	35,0	32,0	33,0	9,8	17,2	73,0
26	20,4	30,7	48,9	11,7	20,1	68,2
27	33,3	30,8	35,9	20,5	17,1	62,4
28	28,7	37,4	33,9	10,7	18,3	71,0
29	36,4	25,9	37,7	10,3	15,4	74,3
30	50,0	50,0	0,0	0,0	0,0	100,0
31	16,4	43,6	40,0	14,5	11,3	74,2
32	35,3	23,5	41,2	14,3	14,3	71,4
33	23,8	52,4	23,8	4,2	25,0	70,8
34	35,7	23,2	41,1	16,9	9,2	73,9
35	75,0	0,0	25,0	50,0	21,4	28,6
36	39,3	27,9	32,8	17,1	15,7	67,2

Table A.3 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	38,5	30,4	31,1	38,9	20,9	40,2
16	60,0	36,7	3,3	68,4	26,3	5,3
17	34,2	41,7	24,1	38,4	29,4	32,2
18	39,3	34,7	26,0	47,9	21,1	31,0
19	23,3	32,6	44,1	27,1	20,8	52,1
20	22,4	55,1	22,5	23,6	43,6	32,8
21	54,5	27,3	18,2	52,6	23,1	24,3
22	27,7	38,3	34,0	33,3	29,2	37,5
23	71,4	21,4	7,2	57,1	14,3	28,6
24	49,4	24,4	26,2	47,9	18,9	33,2
25	35,8	32,5	31,7	41,7	22,0	36,3
26	52,8	26,0	21,2	51,7	19,3	29,0
27	37,9	32,8	29,3	45,0	10,1	44,9
28	35,2	32,0	32,8	36,8	24,8	38,4
29	44,8	26,0	29,2	39,7	21,8	38,5
30	100,0	0,0	0,0	0,0	50,0	50,0
31	25,9	43,1	31,0	27,4	21,0	51,6
32	21,4	28,6	50,0	26,7	6,7	66,6
33	25,0	37,5	37,5	17,9	21,4	60,7
34	41,3	30,2	28,5	33,8	20,6	45,6
35	53,8	30,8	15,4	72,7	18,2	9,1
36	31,1	26,2	42,7	39,2	19,0	41,8

Table A.3 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	51,0	30,7	18,3	50,2	20,5	29,3
16	38,9	44,4	16,7	37,9	27,6	34,5
17	36,1	46,4	17,5	40,5	25,5	34,0
18	37,4	43,3	19,3	39,3	21,8	38,9
19	38,3	34,0	27,7	38,0	20,0	42,0
20	32,7	49,1	18,2	29,8	33,3	36,9
21	45,5	36,4	18,1	45,0	18,8	36,2
22	28,9	53,3	17,8	18,5	33,3	48,2
23	64,3	28,6	7,1	64,3	14,3	21,4
24	46,6	32,9	20,5	38,4	19,5	42,1
25	50,4	33,3	16,3	40,5	28,6	30,9
26	39,5	36,4	24,1	37,1	22,3	40,6
27	38,5	37,5	24,0	38,5	13,8	47,7
28	37,5	40,0	22,5	35,4	24,4	40,2
29	37,1	31,1	31,8	40,5	21,6	37,9
30	100,0	0,0	0,0	0,0	100,0	0,0
31	37,9	48,3	13,8	39,7	19,0	41,3
32	23,1	61,5	15,4	42,9	28,6	28,5
33	23,1	57,7	19,2	25,9	37,0	37,1
34	35,8	35,8	28,4	43,3	20,9	35,8
35	36,4	27,3	36,3	25,0	25,0	50,0
36	41,7	37,5	20,8	35,1	17,6	47,3

Table A.3 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	38,7	27,4	33,9	39,7	22,4	37,9
16	39,3	28,6	32,1	27,6	37,9	34,5
17	34,8	45,9	19,3	39,7	30,8	29,5
18	40,1	32,5	27,4	47,3	22,3	30,4
19	38,8	22,4	38,8	40,5	23,8	35,7
20	32,5	50,9	16,6	28,0	36,0	36,0
21	48,7	28,2	23,1	37,2	29,5	33,3
22	33,3	49,0	17,7	36,4	22,7	40,9
23	28,6	35,7	35,7	38,5	15,4	46,1
24	37,6	36,3	26,1	45,3	18,0	36,7
25	29,3	29,3	41,4	29,6	27,2	43,2
26	19,8	21,9	58,3	19,7	14,0	66,3
27	40,6	33,0	26,4	33,3	18,4	48,3
28	26,4	40,5	33,1	30,0	28,3	41,7
29	36,3	30,8	32,9	43,3	20,6	36,1
30	0,0	100,0	0,0	50,0	50,0	0,0
31	32,8	32,7	34,5	37,7	27,9	34,4
32	35,7	42,9	21,4	58,3	25,0	16,7
33	33,3	55,6	11,1	34,6	38,5	26,9
34	25,8	33,3	40,9	30,0	26,7	43,3
35	50,0	50,0	0,0	58,3	16,7	25,0
36	32,8	35,8	31,4	36,1	22,2	41,7

Table A.3 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	27,3	40,1	32,6	23,3	29,0	47,7
16	33,3	48,1	18,6	25,9	40,7	33,4
17	38,1	44,8	17,1	43,0	29,2	27,8
18	50,9	30,6	18,5	44,1	24,8	31,1
19	31,0	23,8	45,2	37,9	12,1	50,0
20	36,7	53,1	10,2	31,0	25,9	43,1
21	41,9	41,9	16,2	45,5	17,0	37,5
22	34,1	46,3	19,6	32,0	30,0	38,0
23	23,1	30,8	46,1	26,7	13,3	60,0
24	51,0	37,8	11,2	53,9	18,5	27,6
25	46,3	30,9	22,8	43,8	27,5	28,7
26	28,3	30,3	41,4	31,1	21,9	47,0
27	40,2	42,1	17,7	47,5	17,5	35,0
28	36,4	47,5	16,1	41,6	21,2	37,2
29	43,2	30,9	25,9	39,1	24,2	36,7
30	100,0	0,0	0,0	33,3	33,3	33,4
31	35,6	45,8	18,6	44,7	27,6	27,7
32	50,0	25,0	25,0	46,7	33,3	20,0
33	36,0	52,0	12,0	40,0	43,3	16,7
34	50,0	36,2	13,8	57,4	21,3	21,3
35	46,2	30,8	23,0	45,5	27,3	27,2
36	38,5	29,2	32,3	36,5	27,0	36,5

Table A.3 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	44,7	32,3	23,0	46,7	21,7	31,6
16	61,5	30,8	7,7	55,2	24,1	20,7
17	41,8	48,1	10,1	50,3	31,0	18,7
18	49,3	33,8	16,9	49,8	22,4	27,8
19	39,3	37,5	23,2	43,1	17,6	39,3
20	58,2	38,2	3,6	64,2	28,3	7,5
21	63,5	27,1	9,4	60,5	18,5	21,0
22	48,9	44,7	6,4	51,0	28,6	20,4
23	73,3	6,7	20,0	69,2	7,7	23,1
24	57,8	31,2	11,0	55,0	22,5	22,5
25	68,2	23,8	8,0	64,5	19,9	15,6
26	70,2	24,5	5,3	74,8	16,4	8,8
27	59,5	37,1	3,4	63,5	19,1	17,4
28	60,0	31,9	8,1	60,4	23,7	15,9
29	61,3	28,4	10,3	64,8	16,4	18,8
30	66,7	33,3	0,0	100,0	0,0	0,0
31	54,2	44,4	1,4	44,9	39,1	16,0
32	46,7	46,7	6,6	50,0	43,8	6,2
33	43,3	53,3	3,4	70,4	14,8	14,8
34	71,7	25,0	3,3	78,5	15,4	6,1
35	45,5	54,5	0,0	70,0	20,0	10,0
36	62,9	28,6	8,5	60,3	30,8	8,9

Table A.3 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	51,3	34,5	14,2	58,4	20,0	21,6
16	24,1	51,7	24,2	29,6	37,0	33,4
17	41,9	43,6	14,5	46,4	30,3	23,3
18	48,1	39,6	12,3	51,0	19,5	29,5
19	36,7	38,8	24,5	46,3	18,5	35,2
20	40,0	42,3	17,7	46,8	30,6	22,6
21	57,0	34,2	8,8	57,0	17,4	25,6
22	51,1	34,0	14,9	52,6	19,3	28,1
23	75,0	16,7	8,3	66,7	8,3	25,0
24	46,0	36,2	17,8	43,4	26,0	30,6
25	48,2	36,7	15,1	62,8	20,5	16,7
26	49,0	38,2	12,8	55,3	23,2	21,5
27	48,2	34,8	17,0	47,9	26,4	25,7
28	55,2	33,6	11,2	57,8	15,6	26,6
29	45,4	38,2	16,4	43,7	25,7	30,6
30	100,0	0,0	0,0	50,0	50,0	0,0
31	37,7	44,9	17,4	50,7	31,0	18,3
32	31,3	43,8	24,9	60,0	13,3	26,7
33	48,1	37,0	14,9	53,8	26,9	19,3
34	50,0	31,3	18,7	48,5	22,7	28,8
35	36,4	45,5	18,1	16,7	41,7	41,6
36	41,1	41,1	17,8	60,0	18,8	21,2

Table A.3 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	44,3	25,4	30,3	41,3	22,0	36,7
16	28,6	35,7	35,7	40,0	40,0	20,0
17	44,1	42,1	13,8	44,1	30,5	25,4
18	46,4	33,6	20,0	40,2	25,4	34,4
19	37,3	37,3	25,4	37,7	26,4	35,9
20	42,6	41,0	16,4	28,6	37,5	33,9
21	56,1	28,0	15,9	44,3	15,2	40,5
22	42,3	40,4	17,3	41,5	34,0	24,5
23	16,7	8,3	75,0	50,0	8,3	41,7
24	42,2	33,7	24,1	50,3	19,7	30,0
25	42,5	32,7	24,8	46,6	24,3	29,1
26	21,4	31,3	47,3	24,5	22,5	53,0
27	46,6	35,6	17,8	47,5	19,5	33,0
28	46,9	32,3	20,8	50,7	17,2	32,1
29	45,6	30,4	24,0	47,5	27,2	25,3
30	100,0	0,0	0,0	66,7	0,0	33,3
31	44,6	40,0	15,4	54,0	25,4	20,6
32	53,8	30,8	15,4	57,1	35,7	7,2
33	38,5	53,8	7,7	25,0	29,2	45,8
34	54,7	34,4	10,9	61,7	28,3	10,0
35	46,2	53,8	0,0	71,4	28,6	0,0
36	48,0	32,0	20,0	47,2	23,6	29,2

Table A.3 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	30,7	40,1	29,2	29,6	28,0	42,4
16	20,8	58,3	20,9	28,0	52,0	20,0
17	43,3	35,7	21,0	38,1	29,1	32,8
18	40,2	38,8	21,0	41,0	27,2	31,8
19	43,1	27,5	29,4	37,5	25,0	37,5
20	44,2	42,3	13,5	30,9	43,6	25,5
21	41,8	38,0	20,2	36,1	16,9	47,0
22	44,0	46,0	10,0	34,5	21,8	43,7
23	27,3	9,1	63,6	16,7	8,3	75,0
24	58,9	28,5	12,6	42,7	26,2	31,1
25	44,1	36,4	19,5	49,4	22,4	28,2
26	25,1	32,0	42,9	21,8	26,4	51,8
27	53,1	30,1	16,8	45,8	21,2	33,0
28	41,5	32,3	26,2	42,7	24,5	32,8
29	47,1	33,5	19,4	38,4	27,7	33,9
30	100,0	0,0	0,0	50,0	0,0	50,0
31	39,7	41,4	18,9	30,1	28,8	41,1
32	30,8	46,2	23,0	23,5	35,3	41,2
33	39,1	43,5	17,4	44,8	31,0	24,2
34	42,4	40,7	16,9	45,9	24,6	29,5
35	50,0	35,7	14,3	35,7	28,6	35,7
36	45,6	29,4	25,0	38,4	23,3	38,3

Table A.3 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	47,9	30,5	21,6	48,4	23,1	28,5
16	62,5	29,2	8,3	57,7	19,2	23,1
17	49,4	39,9	10,7	49,8	26,4	23,8
18	49,1	36,8	14,1	46,9	24,5	28,6
19	34,9	32,6	32,5	35,0	27,5	37,5
20	50,0	42,6	7,4	39,5	47,4	13,1
21	56,0	29,3	14,7	58,8	19,1	22,1
22	48,9	34,0	17,1	0,0	100,0	0,0
23	83,3	0,0	16,7	57,1	19,0	23,9
24	61,3	24,4	14,3	83,3	0,0	16,7
25	70,4	22,4	7,2	0,0	50,0	50,0
26	74,2	20,1	5,7	67,1	12,9	20,0
27	61,3	31,5	7,2	75,9	1,5	22,6
28	63,2	20,6	16,2	58,8	35,3	5,9
29	62,8	30,3	6,9	55,6	27,8	16,6
30	50,0	0,0	50,0	69,7	21,2	9,1
31	57,4	32,4	10,2	100,0	0,0	0,0
32	40,0	40,0	20,0	62.5	25,0	12,5
33	41,4	44,8	13,8	100,0	0,0	0,0
34	65,5	32,8	1,7	100,0	0,0	0,0
35	64,3	28,6	7,1	70,6	23,5	5,9
36	59,2	31,0	9,8	100,0	0,0	0,0

Table A.3 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,5	33,1	16,4	56,3	22,0	21,7
16	57,7	23,1	19,2	56,0	20,0	24,0
17	41,1	41,1	17,8	42,6	23,0	34,4
18	44,3	39,3	16,4	38,3	25,0	36,7
19	57,1	29,7	13,2	47,1	27,5	25,4
20	60,0	37,1	2,9	45,7	34,8	19,5
21	52,3	33,8	13,9	53,8	24,4	21,8
22	0,0	100,0	0,0	50,0	26,0	24,0
23	42,1	31,6	26,3	100,0	0,0	0,0
24	91,7	8,3	0,0	48,5	18,7	32,8
25	100,0	0,0	0,0	57,0	18,3	24,7
26	61,7	33,3	5,0	58,7	27,7	13,6
27	56,8	34,4	8,8	50,5	19,8	29,7
28	41,2	52,9	5,9	58,5	23,7	17,8
29	60,3	29,4	10,3	49,6	24,1	26,3
30	51,5	24,2	24,3	100,0	0,0	0,0
31	100,0	0,0	0,0	50,9	30,9	18,2
32	42,9	57,1	0,0	61,5	30,8	7,7
33	50,0	50,0	0,0	34,6	38,5	26,9
34	0,0	100,0	0,0	53,7	20,4	25,9
35	47,1	38,2	14,7	30,0	20,0	50,0
36	25,0	50,0	25,0	44,3	23,0	32,7

Table A.3 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	42,8	28,1	29,1	43,4	21,0	35,6
16	20,0	32,0	48,0	20,0	16,0	64,0
17	48,3	38,6	13,1	38,7	36,4	24,9
18	43,3	41,7	15,0	46,4	22,2	31,4
19	44,7	27,7	27,6	39,5	20,9	39,6
20	42,2	44,4	13,4	32,7	36,7	30,6
21	50,7	39,1	10,2	44,4	20,6	35,0
22	52,2	30,4	17,4	56,9	19,6	23,5
23	42,9	0,0	57,1	35,7	14,3	50,0
24	48,4	28,9	22,7	46,7	19,7	33,6
25	43,8	30,7	25,5	44,7	30,5	24,8
26	20,6	29,0	50,4	26,4	22,4	51,2
27	45,2	31,7	23,1	46,6	23,6	29,8
28	48,6	27,5	23,9	58,7	15,6	25,7
29	45,9	30,4	23,7	53,3	22,2	24,5
30	100,0	0,0	0,0	100,0	0,0	0,0
31	55,1	36,7	8,2	61,7	28,3	10,0
32	58,3	41,7	0,0	73,3	6,7	20,0
33	36,0	52,0	12,0	42,3	38,5	19,2
34	64,7	29,4	5,9	70,9	12,7	16,4
35	60,0	10,0	30,0	63,6	18,2	18,2
36	39,0	32,2	28,8	47,5	27,1	25,4

Table A.4: Quarterly Expectations and Realizations of "Sales"

In Form of Percentage Distributions: 1999-2003

First Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	45,1	33,8	21,1	43,7	26,1	30,2
16	25,0	45,8	29,2	23,1	38,5	38,4
17	45,8	45,8	8,4	45,0	25,2	29,8
18	33,8	39,7	26,5	28,1	29,5	42,4
19	57,1	26,5	16,4	50,0	23,8	26,2
20	59,0	32,8	8,2	49,1	29,8	21,1
21	65,6	23,0	11,4	73,8	16,4	9,8
22	44,4	46,7	8,9	32,6	37,2	30,2
23	63,6	27,3	9,1	65,5	0,0	34,5
24	63,3	25,3	11,4	55,2	17,9	26,9
25	69,4	24,5	6,1	62,1	22,4	15,5
26	78,9	14,0	7,1	73,4	14,4	12,2
27	66,0	28,2	5,8	56,9	19,6	23,5
28	53,2	32,4	14,4	52,1	24,8	23,1
29	59,3	30,4	10,3	48,9	23,7	27,4
30	50,0	0,0	50,0	0,0	0,0	100,0
31	53,2	37,1	9,7	54,8	16,1	29,1
32	66,7	25,0	8,3	66,7	16,7	16,6
33	47,1	41,2	11,7	45,0	45,0	10,0
34	55,6	42,6	1,8	53,7	22,2	24,1
35	38,5	61,5	0,0	35,7	57,1	7,2
36	69,1	18,2	12,7	51,8	26,8	21,4

Table A.4 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	42,0	40,3	17,7	42,8	29,4	27,8
16	24,0	60,0	16,0	17,4	39,1	43,5
17	35,2	43,8	21,0	40,6	27,6	31,8
18	25,4	50,7	23,9	27,5	45,8	26,7
19	39,0	36,6	24,4	34,2	13,2	52,6
20	50,9	39,6	9,5	54,4	21,1	24,5
21	55,4	28,6	16,0	37,3	17,6	45,1
22	46,2	35,9	17,9	55,9	17,6	26,5
23	77,8	11,1	11,1	58,3	16,7	25,0
24	55,0	32,1	12,9	46,7	25,4	27,9
25	50,0	33,0	17,0	37,8	17,8	44,4
26	54,0	31,6	14,4	41,5	20,7	37,8
27	39,0	45,0	16,0	30,6	23,5	45,9
28	41,6	38,1	20,3	30,4	25,2	44,4
29	50,7	31,3	18,0	40,0	27,2	32,8
30	0,0	100,0	0,0	100,0	0,0	0,0
31	49,2	28,8	22,0	41,7	26,7	31,6
32	38,9	33,3	27,8	28,6	21,4	50,0
33	36,8	42,1	21,1	33,3	50,0	16,7
34	39,2	39,2	21,6	30,0	26,0	44,0
35	35,7	35,7	28,6	9,1	45,5	45,4
36	48,1	35,2	16,7	35,4	16,7	47,9

Table A.4 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,4	35,5	14,1	46,8	28,5	24,7
16	31,8	45,5	22,7	37,5	37,5	25,0
17	48,7	42,7	8,6	47,6	30,3	22,1
18	31,3	53,0	15,7	33,6	41,8	24,6
19	51,4	32,4	16,2	42,5	27,5	30,0
20	46,2	38,5	15,3	42,1	38,6	19,3
21	54,2	33,3	12,5	56,3	15,6	28,1
22	58,1	32,3	9,6	52,3	31,8	15,9
23	45,5	18,2	36,3	40,0	0,0	60,0
24	52,5	28,8	18,7	40,8	20,4	38,8
25	50,0	30,2	19,8	51,5	14,4	34,1
26	28,0	21,4	50,6	19,8	14,1	66,1
27	43,3	36,1	20,6	31,4	26,7	41,9
28	43,4	32,7	23,9	41,6	25,7	32,7
29	45,8	29,2	25,0	38,8	25,2	36,0
30	100,0	0,0	0,0	100,0	0,0	0,0
31	53,4	32,8	13,8	58,9	19,6	21,5
32	76,9	23,1	0,0	62,5	12,5	25,0
33	38,9	50,0	11,1	42,1	42,1	15,8
34	55,1	34,7	10,2	40,7	33,3	26,0
35	27,3	45,5	27,2	15,4	46,2	38,4
36	53,2	27,7	19,1	38,6	24,6	36,8

Table A.4 (continued)

Fourth Quarter	Expected Situation			Actual Situation		
	(percentage distribution)			(percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	35,7	41,1	23,2	32,2	30,3	37,5
16	37,5	41,7	20,8	45,8	29,2	25,0
17	40,7	43,0	16,3	35,3	31,1	33,6
18	28,5	49,2	22,3	26,3	42,9	30,8
19	41,0	25,6	33,4	22,0	29,3	48,7
20	39,3	44,6	16,1	32,8	31,1	36,1
21	51,6	25,8	22,6	40,9	22,7	36,4
22	47,5	35,0	17,5	19,2	32,7	48,1
23	20,0	30,0	50,0	27,3	18,2	54,5
24	55,3	29,8	14,9	44,1	18,0	37,9
25	46,4	30,9	22,7	37,0	24,1	38,9
26	24,9	26,1	49,0	19,6	18,9	61,5
27	38,2	39,2	22,6	33,3	17,1	49,6
28	36,7	37,6	25,7	36,7	25,8	37,5
29	41,8	31,3	26,9	34,8	27,7	37,5
30	100,0	0,0	0,0	100,0	0,0	0,0
31	37,7	32,1	30,2	34,4	21,9	43,7
32	43,8	31,3	24,9	33,3	22,2	44,5
33	36,8	26,3	36,9	18,2	45,5	36,3
34	39,2	27,5	33,3	49,2	13,6	37,2
35	53,8	38,5	7,7	22,2	55,6	22,2
36	52,8	24,5	22,7	38,5	29,2	32,3

Table A.4 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	48,1	30,3	21,6	43,5	26,4	30,1
16	26,9	42,3	30,8	39,1	34,8	26,1
17	51,1	39,5	9,4	46,1	28,9	25,0
18	37,1	51,7	11,2	40,3	38,2	21,5
19	50,0	33,3	16,7	56,5	6,5	37,0
20	60,0	33,3	6,7	54,4	29,8	15,8
21	80,0	18,5	1,5	55,9	23,5	20,6
22	43,1	49,0	7,9	48,0	28,0	24,0
23	90,9	9,1	0,0	72,7	0,0	27,3
24	57,4	28,4	14,2	59,7	13,8	26,5
25	77,4	19,8	2,8	63,8	17,1	19,1
26	79,2	16,7	4,1	73,5	13,4	13,1
27	73,0	19,1	7,9	72,0	12,8	15,2
28	69,6	24,3	6,1	63,8	22,4	13,8
29	71,1	21,1	7,8	63,1	21,0	15,9
30	100,0	0,0	0,0	0,0	0,0	100,0
31	63,5	25,4	11,1	67,2	19,7	13,1
32	52,9	35,3	11,8	73,3	6,7	20,0
33	59,1	36,4	4,5	66,7	19,0	14,3
34	86,2	10,3	3,5	80,4	14,3	5,3
35	37,5	62,5	0,0	60,0	40,0	0,0
36	63,3	28,3	8,4	61,8	26,5	11,7

Table A.4 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,7	33,8	15,5	47,3	26,9	25,8
16	33,3	52,4	14,3	21,7	47,8	30,5
17	46,4	39,3	14,3	42,0	27,1	30,9
18	47,4	44,5	8,1	37,9	42,0	20,1
19	51,1	31,1	17,8	44,7	17,0	38,3
20	57,4	40,7	1,9	46,9	36,7	16,4
21	60,6	30,3	9,1	50,0	23,5	26,5
22	46,9	40,8	12,3	40,8	24,5	34,7
23	54,5	27,3	18,2	63,6	18,2	18,2
24	60,1	24,2	15,7	48,4	23,6	28,0
25	58,3	32,0	9,7	49,1	21,8	29,1
26	58,6	30,8	10,6	52,9	20,8	26,3
27	50,0	36,1	13,9	32,5	30,0	37,5
28	59,5	27,9	12,6	48,8	20,9	30,3
29	56,2	29,4	14,4	47,3	25,3	27,4
30	100,0	0,0	0,0	100,0	0,0	0,0
31	55,4	32,1	12,5	49,2	23,7	27,1
32	35,7	35,7	28,6	52,9	17,6	29,5
33	36,4	50,0	13,6	54,2	25,0	20,8
34	64,2	26,4	9,4	56,7	15,0	28,3
35	30,0	40,0	30,0	11,1	22,2	66,7
36	58,7	33,3	8,0	58,6	21,4	20,0

Table A.4 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	50,7	33,0	16,3	33,3	30,1	36,6
16	27,3	54,5	18,2	19,0	61,9	19,1
17	47,7	40,3	12,0	32,5	28,2	39,3
18	37,9	46,6	15,5	35,9	32,7	31,4
19	51,1	28,9	20,0	53,5	16,3	30,2
20	46,7	46,7	6,6	29,4	25,5	45,1
21	47,6	31,7	20,7	26,1	14,5	59,4
22	57,4	25,5	17,1	44,0	24,0	32,0
23	45,5	18,2	36,3	33,3	0,0	66,7
24	48,0	28,7	23,3	28,8	19,9	51,3
25	41,8	32,7	25,5	30,8	19,2	50,0
26	26,1	27,8	46,1	23,5	17,0	59,5
27	42,4	28,0	29,6	24,6	20,3	55,1
28	45,5	30,1	24,4	34,2	23,9	41,9
29	46,9	31,5	21,6	33,3	23,6	43,1
30	100,0	0,0	0,0	50,0	0,0	50,0
31	53,6	33,9	12,5	39,7	15,5	44,8
32	46,7	40,0	13,3	58,8	17,6	23,6
33	50,0	41,7	8,3	23,8	23,8	52,4
34	52,6	28,1	19,3	30,4	17,9	51,7
35	44,4	33,3	22,3	62,5	12,5	25,0
36	56,3	23,4	20,3	35,8	19,4	44,8

Table A.4 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	34,0	43,1	22,9	25,4	25,2	49,4
16	45,0	50,0	5,0	30,4	65,2	4,4
17	31,0	40,6	28,4	15,3	21,3	63,4
18	25,2	51,7	23,1	20,0	26,7	53,3
19	26,2	28,6	45,2	23,3	7,0	69,7
20	37,5	39,6	22,9	9,8	25,5	64,7
21	35,3	32,4	32,3	5,1	10,1	84,8
22	37,5	33,3	29,2	14,6	27,1	58,3
23	18,2	27,3	54,5	14,3	7,1	78,6
24	52,7	27,3	20,0	25,9	14,2	59,9
25	35,0	30,0	35,0	8,9	9,8	81,3
26	21,3	26,7	52,0	9,7	15,7	74,6
27	31,6	35,0	33,4	13,8	10,3	75,9
28	29,8	30,7	39,5	6,2	16,2	77,6
29	33,8	26,1	40,1	11,0	11,7	77,3
30	50,0	50,0	0,0	0,0	0,0	100,0
31	14,8	38,9	46,3	6,7	8,3	85,0
32	29,4	35,3	35,3	14,3	7,1	78,6
33	19,0	57,1	23,9	4,2	16,7	79,1
34	34,5	20,0	45,5	7,8	7,8	84,4
35	57,1	14,3	28,6	23,1	38,5	38,4
36	35,5	29,0	35,5	13,0	14,5	72,5

Table A.4 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	34,6	36,2	29,2	35,9	22,0	42,1
16	13,0	69,6	17,4	26,7	53,3	20,0
17	31,2	40,9	27,9	33,9	23,8	42,3
18	23,6	46,6	29,8	30,3	29,7	40,0
19	18,6	37,2	44,2	22,9	20,8	56,3
20	30,0	50,0	20,0	23,6	38,2	38,2
21	60,0	22,7	17,3	50,0	21,1	28,9
22	26,1	34,8	39,1	31,1	26,7	42,2
23	71,4	21,4	7,2	71,4	7,1	21,5
24	52,3	20,0	27,7	42,9	22,6	34,5
25	41,0	25,4	33,6	39,4	22,8	37,8
26	51,7	27,3	21,0	45,8	19,4	34,8
27	32,7	38,9	28,4	40,7	11,1	48,2
28	36,9	28,7	34,4	36,0	23,2	40,8
29	44,2	24,0	31,8	31,0	23,9	45,1
30	100,0	0,0	0,0	0,0	50,0	50,0
31	21,1	42,1	36,8	26,2	21,3	52,5
32	21,4	28,6	50,0	20,0	13,3	66,7
33	20,8	37,5	41,7	21,4	17,9	60,7
34	32,3	32,3	35,4	25,0	29,4	45,6
35	46,2	30,8	23,0	54,5	27,3	18,2
36	31,1	14,8	54,1	28,6	22,1	49,3

Table A.4 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	43,3	36,2	20,5	40,6	27,2	32,2
16	37,5	50,0	12,5	42,9	47,6	9,5
17	35,7	45,2	19,1	38,6	28,2	33,2
18	28,4	50,3	21,3	25,8	39,8	34,4
19	34,8	30,4	34,8	32,0	20,0	48,0
20	32,7	49,1	18,2	30,4	35,7	33,9
21	50,0	32,4	17,6	47,4	17,9	34,7
22	30,2	51,2	18,6	18,9	34,0	47,1
23	71,4	21,4	7,2	71,4	14,3	14,3
24	47,2	32,7	20,1	41,2	24,2	34,6
25	48,0	37,4	14,6	38,9	23,0	38,1
26	38,7	35,6	25,7	33,9	22,6	43,5
27	33,3	42,2	24,5	36,4	22,4	41,2
28	36,1	42,9	21,0	33,3	20,6	46,1
29	40,9	29,5	29,6	36,7	23,8	39,5
30	100,0	0,0	0,0	0,0	100,0	0,0
31	29,8	52,6	17,6	35,9	20,3	43,8
32	15,4	69,2	15,4	28,6	42,9	28,5
33	23,1	50,0	26,9	33,3	33,3	33,4
34	38,8	34,3	26,9	29,9	25,4	44,7
35	27,3	45,5	27,2	16,7	16,7	66,6
36	43,7	36,6	19,7	36,5	17,6	45,9

Table A.4 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	40,6	34,2	25,2	40,0	25,7	34,3
16	28,6	57,1	14,3	42,9	42,9	14,2
17	29,7	47,4	22,9	35,3	28,5	36,2
18	30,5	44,3	25,2	27,4	39,6	33,0
19	34,7	20,4	44,9	33,3	26,2	40,5
20	29,6	48,1	22,3	24,0	40,0	36,0
21	47,4	28,9	23,7	39,0	27,3	33,7
22	37,3	47,1	15,6	37,2	25,6	37,2
23	35,7	35,7	28,6	7,7	30,8	61,5
24	39,2	32,9	27,9	38,7	15,3	46,0
25	30,6	23,4	46,0	25,8	26,6	47,6
26	18,6	21,5	59,9	15,8	15,5	68,7
27	33,7	29,7	36,6	25,7	19,5	54,8
28	23,0	41,8	35,2	27,3	28,1	44,6
29	39,0	27,4	33,6	34,0	28,4	37,6
30	0,0	100,0	0,0	100,0	0,0	0,0
31	33,3	30,0	36,7	35,0	23,3	41,7
32	28,6	42,9	28,5	58,3	25,0	16,7
33	37,0	48,1	14,9	36,0	32,0	32,0
34	25,4	35,8	38,8	25,4	30,5	44,1
35	50,0	33,3	16,7	41,7	33,3	25,0
36	25,8	33,3	40,9	25,0	23,6	51,4

Table A.4 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	33,3	40,0	26,7	28,4	28,6	43,0
16	35,0	55,0	10,0	47,6	38,1	14,3
17	35,6	44,4	20,0	42,3	25,9	31,8
18	26,3	54,6	19,1	30,0	33,6	36,4
19	31,0	26,2	42,8	29,3	15,5	55,2
20	34,7	53,1	12,2	31,0	31,0	38,0
21	47,9	34,2	17,9	42,5	19,5	38,0
22	33,3	51,3	15,4	34,6	34,6	30,8
23	23,1	30,8	46,1	33,3	6,7	60,0
24	51,4	33,1	15,5	52,0	20,1	27,9
25	48,8	26,8	24,4	41,9	25,8	32,3
26	24,7	32,2	43,1	34,1	15,9	50,0
27	34,3	46,7	19,0	43,3	19,2	37,5
28	32,2	48,3	19,5	32,4	26,5	41,1
29	41,7	27,3	31,0	33,5	24,7	41,8
30	100,0	0,0	0,0	33,3	33,3	33,4
31	31,7	43,3	25,0	43,2	24,3	32,5
32	41,7	33,3	25,0	46,7	26,7	26,6
33	36,0	48,0	16,0	40,0	33,3	26,7
34	35,6	45,8	18,6	41,0	31,1	27,9
35	50,0	33,3	16,7	45,5	18,2	36,3
36	33,8	33,8	32,4	27,0	32,4	40,6

Table A.4 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	39,6	37,4	23,0	36,7	29,2	34,1
16	14,3	61,9	23,8	29,2	41,7	29,1
17	14,3	61,9	23,8	46,3	28,8	24,9
18	35,1	47,8	17,1	36,4	34,4	29,2
19	39,3	33,9	26,8	33,3	17,6	49,1
20	54,5	40,0	5,5	60,4	30,2	9,4
21	66,7	26,2	7,1	56,8	21,0	22,2
22	46,8	44,7	8,5	49,0	28,6	22,4
23	80,0	13,3	6,7	69,2	7,7	23,1
24	55,0	30,4	14,6	53,3	26,6	20,1
25	66,4	26,3	7,3	64,8	17,6	17,6
26	70,4	20,4	9,2	72,5	16,4	11,1
27	55,4	37,5	7,1	61,7	18,3	20,0
28	56,7	37,3	6,0	61,9	23,0	15,1
29	53,9	31,2	14,9	61,6	20,1	18,3
30	66,7	33,3	0,0	0,0	100,0	0,0
31	49,3	46,4	4,3	36,1	44,4	19,5
32	53,3	40,0	6,7	56,3	43,8	-0,1
33	40,0	50,0	10,0	59,3	25,9	14,8
34	67,8	30,5	1,7	67,2	26,6	6,2
35	54,5	45,5	0,0	63,6	18,2	18,2
36	59,2	31,0	9,8	57,1	29,9	13,0

Table A.4 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	44,8	41,3	13,9	46,6	28,9	24,5
16	26,1	65,2	8,7	17,4	69,6	13,0
17	39,8	45,3	14,9	41,8	32,1	26,1
18	30,6	51,1	18,3	36,2	36,2	27,6
19	28,6	42,9	28,5	46,3	24,1	29,6
20	53,8	40,4	5,8	48,4	30,6	21,0
21	52,6	35,9	11,5	58,1	16,3	25,6
22	51,1	31,9	17,0	50,9	20,0	29,1
23	75,0	16,7	8,3	66,7	16,7	16,6
24	45,7	37,7	16,6	43,4	26,3	30,3
25	43,6	38,6	17,8	54,1	22,9	23,0
26	49,3	37,4	13,3	53,9	22,6	23,5
27	41,8	40,0	18,2	41,0	27,9	31,1
28	48,1	36,8	15,1	54,4	18,4	27,2
29	42,8	38,2	19,0	46,4	24,7	28,9
30	100,0	0,0	0,0	50,0	50,0	0,0
31	42,0	37,7	20,3	48,5	30,9	20,6
32	31,3	43,8	24,9	46,7	26,7	26,6
33	44,4	33,3	22,3	50,0	30,8	19,2
34	45,2	35,5	19,3	40,9	30,3	28,8
35	27,3	45,5	27,2	23,1	30,8	46,1
36	40,3	44,4	15,3	58,2	24,1	17,7

Table A.4 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	45,5	33,9	20,6	37,5	28,6	33,9
16	60,9	30,4	8,7	54,5	27,3	18,2
17	43,7	40,3	16,0	39,9	31,6	28,5
18	32,4	50,2	17,4	32,1	37,1	30,8
19	36,0	38,0	26,0	38,9	31,5	29,6
20	39,3	45,9	14,8	30,4	41,1	28,5
21	52,4	26,8	20,8	38,0	17,7	44,3
22	48,0	38,0	14,0	37,3	37,3	25,4
23	16,7	8,3	75,0	50,0	0,0	50,0
24	42,7	33,5	23,8	45,9	19,5	34,6
25	38,3	33,8	27,9	41,9	18,9	39,2
26	21,8	29,0	49,2	25,3	16,4	58,3
27	41,9	36,8	21,3	34,5	26,7	38,8
28	43,5	36,6	19,9	35,8	23,1	41,1
29	43,6	32,1	24,3	46,9	29,0	24,1
30	100,0	0,0	0,0	66,7	0,0	33,3
31	39,7	44,4	15,9	50,0	24,2	25,8
32	46,2	38,5	15,3	57,1	35,7	7,2
33	34,6	57,7	7,7	25,0	20,8	54,2
34	45,3	37,5	17,2	55,0	31,7	13,3
35	46,2	46,2	7,6	35,7	50,0	14,3
36	37,8	37,8	24,4	50,0	18,1	31,9

Table A.4 (continued)

Fourth Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	35,3	45,7	19,0	33,7	30,0	36,3
16	33,3	52,4	14,3	50,0	36,4	13,6
17	38,3	42,9	18,8	33,6	28,3	38,1
18	19,8	56,9	23,3	24,3	42,1	33,6
19	40,0	30,0	30,0	31,9	23,4	44,7
20	50,0	34,6	15,4	27,3	47,3	25,4
21	43,6	34,6	21,8	37,8	20,7	41,5
22	44,7	42,6	12,7	30,2	30,2	39,6
23	18,2	9,1	72,7	25,0	0,0	75,0
24	61,6	25,8	12,6	41,2	22,4	36,4
25	42,4	37,5	20,1	44,8	22,7	32,5
26	24,0	30,0	46,0	19,3	19,3	61,4
27	50,5	30,6	18,9	38,8	17,2	44,0
28	40,8	32,3	26,9	38,5	25,2	36,3
29	41,0	34,6	24,4	37,3	22,2	40,5
30	100,0	0,0	0,0	0,0	50,0	50,0
31	37,9	43,1	19,0	25,4	25,4	49,2
32	30,8	38,5	30,7	23,5	29,4	47,1
33	52,2	26,1	21,7	35,7	35,7	28,6
34	30,5	47,5	22,0	39,3	26,2	34,5
35	42,9	35,7	21,4	35,7	35,7	28,6
36	38,8	35,8	25,4	37,5	25,0	37,5

Table A.4 (continued)

First Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	43,1	35,8	21,1	41,2	26,5	32,3
16	38,1	28,6	33,3	28,6	42,9	28,5
17	46,6	41,9	11,5	43,6	27,3	29,1
18	34,2	51,5	14,3	34,5	38,5	27,0
19	36,4	31,8	31,8	32,5	32,5	35,0
20	48,1	42,6	9,3	47,4	42,1	10,5
21	56,0	30,7	13,3	56,7	20,9	22,4
22	50,0	32,6	17,4	0,0	100,0	0,0
23	83,3	8,3	8,4	47,6	33,3	19,1
24	57,5	26,3	16,2	83,3	0,0	16,7
25	68,2	25,2	6,6	50,0	0,0	50,0
26	75,0	18,0	7,0	61,2	18,8	20,0
27	55,0	34,9	10,1	74,2	14,4	11,4
28	56,6	30,1	13,3	52,9	29,4	17,7
29	60,5	29,9	9,6	56,9	25,0	18,1
30	0,0	0,0	100,0	69,7	15,2	15,1
31	50,0	36,4	13,6	100,0	0,0	0,0
32	46,7	40,0	13,3	62,5	12,5	25,0
33	42,9	46,4	10,7	100,0	0,0	0,0
34	58,6	36,2	5,2	100,0	0,0	0,0
35	57,1	42,9	0,0	70,6	29,4	0,0
36	50,7	36,6	12,7	100,0	0,0	0,0

Table A.4 (continued)

Second Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	46,4	39,0	14,6	47,8	27,8	24,4
16	33,3	47,6	19,1	30,0	35,0	35,0
17	39,3	42,0	18,7	45,4	24,2	30,4
18	30,2	52,1	17,7	27,2	38,2	34,6
19	52,6	34,2	13,2	41,2	31,4	27,4
20	54,3	42,9	2,8	41,3	32,6	26,1
21	63,1	24,6	12,3	51,9	26,0	22,1
22	0,0	100,0	0,0	44,9	39,6	15,5
23	38,9	33,3	27,8	100,0	0,0	0,0
24	83,3	8,3	8,4	51,1	21,1	27,8
25	50,0	50,0	0,0	52,1	19,0	28,9
26	57,5	35,0	7,5	58,0	19,2	22,8
27	55,6	34,2	10,2	53,6	19,1	27,3
28	23,5	70,6	5,9	49,2	22,0	28,8
29	55,9	33,8	10,3	43,8	29,2	27,0
30	51,5	21,2	27,3	100,0	0,0	0,0
31	100,0	0,0	0,0	52,7	23,6	23,7
32	42,9	57,1	0,0	69,2	15,4	15,4
33	0,0	75,0	25,0	42,3	34,6	23,1
34	0,0	0,0	100,0	53,7	18,5	27,8
35	44,1	41,2	14,7	30,0	20,0	50,0
36	25,0	50,0	25,0	41,0	24,6	34,4

Table A.4 (continued)

Third Quarter	Expected Situation (percentage distribution)			Actual Situation (percentage distribution)		
Activity Code	Increase	Same	Decrease	Increase	Same	Decrease
15	43,8	38,7	17,5	40,6	27,5	31,9
16	40,0	45,0	15,0	61,9	19,0	19,1
17	46,7	39,7	13,6	40,2	31,2	28,6
18	32,9	50,9	16,2	27,7	43,5	28,8
19	45,8	31,3	22,9	40,5	23,8	35,7
20	44,4	44,4	11,2	40,8	38,8	20,4
21	58,0	27,5	14,5	43,5	19,4	37,1
22	48,9	35,6	15,5	52,9	23,5	23,6
23	28,6	0,0	71,4	35,7	14,3	50,0
24	44,1	27,6	28,3	43,1	19,3	37,6
25	41,2	33,1	25,7	44,4	23,2	32,4
26	22,3	26,5	51,2	24,7	21,6	53,7
27	44,1	33,3	22,6	36,4	29,9	33,7
28	48,6	24,8	26,6	57,3	17,3	25,4
29	43,1	30,7	26,2	50,4	26,3	23,3
30	50,0	50,0	0,0	50,0	50,0	0,0
31	55,1	34,7	10,2	64,9	22,8	12,3
32	50,0	50,0	0,0	66,7	6,7	26,6
33	38,5	42,3	19,2	34,6	46,2	19,2
34	60,8	29,4	9,8	66,7	18,5	14,8
35	50,0	20,0	30,0	36,4	36,4	27,2
36	33,9	32,2	33,9	39,7	25,9	34,4