VARIABLE COSTING AS A MANAGERIAL TOOL

by

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I dedicate my thesis

to my father, Prof.M.Kemal ÖZTUNÇ.

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VARIABLE COSTING AS A MANAGERIAL TOOL

In this study, the relationships between the method of cost accounting, the pattern of classification of costs, the preparation of financial reports, the managerial decision making, and the performance of companies are examined. With the general fact that effective managerial decision making leads to managerial and company success, the variables that will enforce effectiveness are explored in this work.

Textile industry of Turkey is choosen as the sample and the data collection method consisted of the questionnaires and interviews by the sampled companies' top managers, and financial data gathered by the Chamber of Industry of Istanbul. The statistical methods employed in the research are one-way frequency distribution, joint-frequency distribution, Pearson correlations and Discriminant analysis.

The results have showed that the employment of computer in the operations of the company has direct relationship with the classification of costs as variable and fixed costs, the application of variable costing in internal reporting, the usefulness of balance sheet and income statement in long-term planning, short-term planning, in pricing and purchasing decisions and the usage of ratio analysis for the evaluation of the company performance. Direct relation-

ships have also been observed between the application of variable costing, the usage of breakeven analysis in managerial decision making, the classification of costs, the usefulness of balance sheet and income statement in long-term planning, investment decisions, and the usage of ratio analysis in evaluations.

YÖNETİCİLİK TEKNİĞİ OLARAK DEĞİŞKEN MALİYET SİSTEMİ

Bu çalışmada, maliyet sistemleri, maliyetlerin tasnifi, mali raporların hazırlanması, karar verme modelleri ve şirketlerin icraatları arasındaki ilişkiler araştırılmıştır. Yöneticinin etkin karar vermesinin şirketin başarısına yardımcı olduğu düşüncesiyle, yöneticinin karar vermesine etken değişkenler incelenmiştir.

Bu amaçla, Türkiye Tekstil Endüstrisi araştırmanın örneği olarak seçilmiş ve bilgi toplama tekniği olarak anket, yöneticilerle görüşme ve Istanbul Sanayi Odası'nın hazırladığı bilgiler kullanılmıştır. Sonuçların değerlendirilmesi için Ki-Kare İlgi analizi, Pearson Korelasyon analizi ve Discriminant analizi istatistik tekniklerinden yararlanılmıştır.

Sonuçta, şirketlerin bilgisayar kullanmalarının maliyetlerin sabit ve değişken olarak tasnifi, şirket içi raporlamada değişken maliyet sisteminin uygulanması, bilanço ve kâr-zarar tablolarının uzun ve kısa vadeli planlamada, fiyat tesbiti ve satın alma kararlarına yardımcı olması, oran analizinin şirketin faaliyetlerinin sonuçlarının değerlendirilmesinde kullanılması ile doğrusal ilişki olduğu görülmüştür. Ayrıca, değişken maliyet sistemi uygulaması, başabaş analizinin karar verme modelinde kullanılması, maliyetlerin tasnifi, bilanço ve kâr-zarar tablolarının uzun va-

deli planlama ve yatırım kararlarına yardımcı olması ve oran analizinin uygulanması arasında ilişkiler bulunmuştur.

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I. INTRODUCTION

A. Costing Systems

Cost accounting is considered as the key managerial partner in the planning and control activities, furnishing management with the necessary accounting tools to plan, control and evaluate operations. The objectives of modern cost accounting are to aid and participate in the creation and execution of plans and budgets, to provide information to management related with problems that involve choice from among twc or more alternative courses, to establish methods and procedures that permit control and reduction or improvement of costs, to create inventory values for costing and pricing purposes, and to determine costs and profit for an accounting period.

Cost data are accumulated under either periodic cost accumulation or perpetual cost accumulation systems. Periodic cost accumulation systems provide only limited cost information during a period and require quarterly or year end adjustments to arrive at the cost of goods produced. Periodic physical inventories are taken to adjust inventory accounts to arrive at the cost of goods produced. This system of cost accumulation is not considered a complete and efficient cost accumulation since the costs of work-in-process and finished goods can only be determined after physical inventories are taken into account. Periodic cost accumulation systems are generally used by small manufacturing firms where control of physical inventories is not that much difficult. Perpetual cost accumulation systems accumulate cost data through work-

in-process account in such a way that provides continuous information about work-in-process, finished goods, and cost of goods produced.

All cost accumulation systems accumulate actual cost data, some also record standard costs. Cost determination may be on a historical or a predetermined basis. Under historical systems, costs are accumulated as they occur. On a predetermined, budgeted, or standard system, costs are determined in advance and variations from the standard costs are accumulated in separate accounts so that management is able to make plans and take corrective actions.

Job order costing and Process costing are types of perpetual cost accumulation systems. Costs under job order costing system are accumulated by jobs. This method is suitable when each job or order is unique. Costs under process costing system are accumulated by departments, where production is on a more a less continuous basis.

Depending on the charge of factory overhead to products, costing systems are classified as full costing or absorption costing and direct costing or variable costing. Under absorption costing all factory overhead costs, both variable and fixed, are charged to product costs. Under variable costing, only the variable portion of overhead costs are charged to product costs.

B. Variable Costing and Absorption Costing

Absorption costing assigns direct materials and direct labor costs and a share of both fixed and variable factory

overhead to units of production. Variable costing, assumes that for proper managerial control, only those costs which vary directly with the volume of production should be considered as part of the cost of goods manufactured, because only variable cost elements are related to the product. That is only direct materials, direct labor, and variable factory overhead are included in inventory and hence are considered as product costs. Fixed factory overhead, under variable costing method is not included in inventory and thereby, is considered as period cost.

In matching cost and revenue to determine income of the period, conventional costing methods distinguish between manufacturing and nonmanufacturing costs. In these systems, the product absorbs manufacturing overhead costs. In variable costing, the distinction is made between variable and fixed costs.

Financial reports under two costing systems differ in some ways. Since fixed manufacturing costs are not included in the product cost in variable costing, cost of production, cost of goods sold and cost of inventory are higher in absorption costing.

Gross profit of absorption costing varies considerably from the gross contribution margin of variable costing. The gross contribution margin, difference of sales revenue and variable manufacturing costs, is greater than the gross profit. The margin varies directly with the sales volume if fixed and variable costs are stable within the relevant range. Hence, an increase in sales volume, without a change in sales price, will result in a proportional increase in gross

contribution margin. However, the gross profit of absorption costing does not respond in the same proportion to the changes in sales volume, leading to the criticism of absorption costing that this result appears most unrealistic and confuses management in its attempt to understand and analize the financial statements, and does not enable management to make use of sensitivity analysis.

The difference between the amount of net income of any accounting period computed by absorption costing and variable costing will be equal to the change in the amount of period costs deferred in inventory. Both methods, actually, will result in identical amounts of total net income over a complete cycle of inventory build-up and liquidation.

If inventory of manufactured goods does not fluctuate from period to period, net income under two costing systems will be identical. When production exceeds sales causing inventories to increase, net income will be higher under absorption costing because inventory includes a portion of the period costs, whereas under variable costing all period costs are written off.

When sales exceed production causing inventories to decrease, net income will be lower in absorption costing. The entire difference of income under two costing methods can be explained by the amount of fixed overhead that is charged to the beginning and ending inventories.

C. Application and General Acceptance of Costing Systems

The National Association of Accountants in U.S.A. has long favored the use of variable costing and as far back

as 1936 issued research reports and publications pointing out the advantages of the costing method. The Financial Executives Institute through its Financial Executives Foundation reports that a growing number of companies in U.S.A. are using variable costing method. The rapid expansion of work of many CPA and consultant firms' management services divisions is due in significant part to the installation of variable costing systems. In fact, for many years, companies employing conventional costing systems, have made analysis of variable and fixed costs and have made break-even, contribution margin analysis. However, this data required special studies since the information was not readily available in the accounts as it is in variable costing. The principal disadvantage of variable costing is its lack of acceptance for external reporting. In U.S.A., the system is not accepted by the predecessor of the Financial Accounting Standards Board, the American Institute of Certified Public Accountants, The Internal Revenue Service, and the Securities and Exchange Commission. They have not recognized variable costing as generally acceptable for inventory valuation purposes, for external reports, or for tax purposes.

The Internal Revenue Service in its regulations defines inventory cost to include "raw materials and supplies entering into or consumed in connection with the product, expenditures for direct labor, and indirect expenses incident to and necessary for the production of the particular item." The inclusion of indirect expenses means that period costs are included in inventory valuation which are excluded in variable costing method.

Section 471 of the Internal Revenue Code provides two facts to which "each inventory must conform: (1) it must conform as nearly as possible to the best accounting practice in the trade or business and (2) it must clearly reflect income." The regulations also provide that consistency in inventory practice be given greater weight than is given to any particular method of inventory costing so long as the method used is in accord with the regulations. A 1973 Amendment to Section 471 specifically identifies the variable costing method as "not in accord with the regulations."

The position of the American Institute of Certified Public Accountants toward variable costing for external reporting is unfavorable. The basis for this position is Accounting Research Bulletin No.43, issued by AICPA. Its "Inventory Pricing" chapter starts with the emphasis on "a major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs and revenues." The Bulletin continues by stating that "the primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset". As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location. It should also be recognized that the exclusion of all overheads from inventory costs does not constitute an accepted accounting procedure. Bulletin also states that "under some circumstances, items such as idle facility expense, excessive spoilage, double freight and rehandling costs may be so abnormal

as to require special treatment as current period changes rather than as a portion of inventory cost."

The Securities and Exchange Commission in U.S.A. refuses to accept variable costing method as a result of its policy to favor consistency among reporting companies as far as possible and its attitude that variable costing is not a generally accepted accounting procedure(1).

The section 275 of Vergi Usul Code in Turkey, defines cost of production as "to include the cost of raw material that go into production, direct labor costs, and factory overhead that will be allocated to the product cost. General administrative and financial expenses, if preferred can be included in costs of production. And, if the product is to be sold in a package, packaging and package expenses are to be included in production costs." The same code specifics factory overhead as "indirect materials, energy and fuel oil, depreciation expenses of plant, equipment, rent, maintenance and repair expenses, laboratory expenses, scrap and spoilage expenses." So, the Code clearly points out that the variable costing method is not accepted for external reporting. However, the last section of the code specifies that as long as the company is in accord with the code, it can employ any kind of technique to find out production costs. That means, companies can classify the costs and assign cost centers as they prefer, and can use any allocation technique to assign costs to cost centers and products.

Capital Marketing Commission in Turkey has revealed the standard financial reports in the Official journal no. 17958, Feb. 2, 1983. The Commission defines cost of goods

sold as the sum of raw material usage, direct labor, general production expenses, work-in-process usage, difference in finished goods, packaging expenses, a portion from general administration expenses, and financial expenses related to production activities. General production expenses cover rent, depreciation, energy, heat, insurance, repair expenses related to production and indirect material. Gross profit or loss is found by deduction of cost of goods sold and selling expenses and taxes from the sales figure.

General administration expenses, financial expenses, other income or loss are deducted from the gross profit figure to come up to net profit before taxes.

This type of standard presentation of reports groups income and expenses according to their functions(2). Those costs which are related to production whether variable or fixed are charged to cost of goods sold. Period costs such as packaging and selling expenses and taxes are considered in analyzing gross profit.

The view is to charge all costs that contribute to production and sales activities which prohibits the user of the report to make analysis that could be done in variable costing reporting system.

The fact that variable costing is not accepted by the code and commission, does not mean that statements and reports prepared under variable costing are not useful. A company may prepare both variable costing and absorption costing income statements according to the user of the reports. The preparation of numerous types of reports is possible at rapid speed and at low cost with computers of today.

The application of variable costing for internal reporting purposes has gained great emphasis in last few years since it is more suitable for management needs for planning, control, and decision making. It is useful in evaluating performance and provides ready information for the important cost, volume, and profit relations.

II. THE CLASSIFICATION OF COSTS

A. General Classification

Costs may be classified in many ways. There is no single best classification scheme. Some classifications useful for recording costs as well as for decision making are:

(a) Responsibily (division, plant, department).

(b) Job, Process, and Product.

(c) Direct and Indirect Costs.

(d) Fixed and Variable Costs.

(e) Natural and Functional Classification.

The recording of costs by division or by plant is necessary with multidivisional or multiplant organizations. The objective of classification of costs in this manner is to establish the responsibility for the cost, so that costs are to be controlled.

Manufacturing costs may be accumulated by job, manufacturing process, or by type of product. These are usually referred to as systems namely Job order costing or Process costing systems.

Certain costs are incurred for specific purposes and can be identified with specific departments, products, or processes. These are direct costs. Costs that cannot be easily identified with a product or proces are called indirect costs.

Costs can also be classified as to their variation with changes in activity level, as variable and fixed.

The classification not usually used for recording purposes but commonly used for decision making are:

(a) Out-of-pocket Costs and Sunk Costs.

(b) Relevant Costs.

(c) Opportunity Costs.

(d) Marginal Costs.

Out-of-pocket costs require the utilization of current resources. Sunk costs are those costs for which the expenditure of cash or the incurring of a liability has already taken place. A relevant cost is a cost whose magnitude will be affected by a decision being made. Sunk costs are never relevant costs. Out-of-pocket costs may be relevant costs depending on the nature of decision. Opportunity costs are always relevant to decisions.

B. Direct and Indirect Costs

Direct Costs which are incurred for specific purposes and can be identified with specific departments, products, or processes are broken down into direct labor and direct material. Costs that cannot be easily identified with a product or process such as heating the factory building are indirect costs.

The borderline between direct costs and indirect costs often depends on the frame of reference. The salary of a foreman may be a direct cost since it can be directly and easily identified with a specific department. But if that department produces several products, the salary will be an indirect cost when determining the cost of each product is of interest. Also, a physical component of the product being made may have a small unit value, negligible amount,

and the cost of treating the item as a direct cost may be excessive when compared with the benefit gained. For decision making purposes, the classification of costs as direct and indirect is not very useful. An indirect cost may be just as relevant as a direct cost in making a decision. The indirect cost may be variable and out-of-pocket, or it may be a fixed cost and sunk such as factory building depreciation. Thus, to describe a cost as being indirect cost enables the information that it cannot be directly and easily identified with the end product. Above all, it is up to management to classify most of the costs as direct or indirect since the borderline is not that much clear cut.

C. Fixed and Variable Costs

Within a relevant range, costs are broadly categorized as fixed costs and variable costs. Not every cost is either completely variable or completely fixed. Certain costs behave as mixed costs. These mixed costs increase with increases in the activity level, but do not increase in a strictly proportional manner. Some mixed costs increase only when certain activity levels are attained, otherwise it is a fixed cost.

In order for management to evaluate changes in costs in light of changes in activity levels, it becomes necessary for management to determine which costs are variable and which are fixed. Mixed costs and step costs are generally categorized into fixed and variable cost components. Such a division of these mixed and semifixed costs results in an

oversimplication of the behavior of some of these costs. Such cost procedure can entirely obscure such cost behavior patterns that can result from quantity usage discounts or other nonlinear cost behaviors.

The problems involved in incorporating all of the possible cost behavior types into a cost analysis are usually greater than the benefits to be obtained from such a fine distinction and that use of many different cost behavior classifications can be disadvantageous for analysis and control purposes.

Several methods such as the high-low method, the scattergraph or visual inspection, the Least squares regression method are widely used for determining the behavior patterns of various costs. The management must take into account the assumptions of these methods and use these costs as reasonably accurate estimates of cost behavior patterns in cost analysis.

Regardless of the method used to estimate fixed and variable costs, the results provide only estimates of each component. Changes that take place overtime and from one product to another can affect the relationships between fixed and variable cost components. However, to the extent that better management decisions can result from a better estimate of cost behavior patterns, then efforts should be directed towards providing the best estimates possible consistent with the need to obtain such estimates at a reasonable price.

III. COSTING SYSTEMS AND MANAGEMENT DECISION MAKING

A. Management Decision Making Process

One of the management's functions is to determine the present position of the firm and plan its future needs. Financial statements provide data of the company's performance. Financial analysis indicates the firm's strengths and weaknesses. From the present position of the firm, plans can be determined for the future.

Financial statements provide information needed for analysis. They summarize company translations over a period of time and serve as a report on management's effectiveness. They may reveal shortcomings in control or indicate major areas for changes in corporate policy.

Management must make effective use of the capital at its command. The essence of effective management is good forecasting because decisions depend upon the expectation of the future. The effectiveness of the decision depends upon the accuracy of the prediction. Planning interprets the objectives of the company and describes the means of achieving them. It is advanced decision making. Planning is based upon an appraisal of the external environment and any opportunities or constraints imposed by present corporate strengths or weaknesses.

Without profits, the company could not sustain operation, consequently, it would be unable to meet other goals such as maximum market share or the support of various community efforts, and would ease to exist. Return on investment, ROI, is the prime index of profitability. Initially,

planning revolves around maximizing ROI, since this is the means to improve profitability. Once on ROI has been established, consistent with sound continued growth and competitive conditions, the company chooses the products that will best maximize profits with the help of break even analysis. Demand considerations, competitive factors, and social and government constraints must be considered. Once the products have been chosen, the resources needed to obtain these products are determined. Certain levels and varieties of inventory are required to support sales.

A major task of the management is to plan capital expenditures and determine whether to increase his investment in, or to replace, existing fixed assets. Capital budgeting is the decision making process involved in formally planning the investment of capital. Many opportunities for profitable investments are constantly uncovered and recommended to management. These suggestions must fit within the formulation of long-range goals and in turn there must be a suitable framework within which relevant information can be assembled to achieve these goals. This requires a set of evaluation tools to select from among those alternatives that will meet the firm's objectives and financial strength.

B. The Role of Costing Systems in the Process

Management decisions are generally divided into two general groups, short-term and long-term. The great majority of day-to-day decisions are short-term. It is in this area that conventional cost accounting methods have been most

inadequate. This is largely because of including fixed costs which are usually committed for a relatively long time span, in product costs which are used for short-term decisions.

Variable costing separates the long-term costs from the short-term and maintains this separation throughout all accounting records and management reports. It is this very clear cut separation for management reporting that is important. Whether or not the official reporting records are converted to variable costing system for tax or other external reporting is of secondary importance.

Absorption costing obscures the true relationship between prices, costs, and volume. Thus, the variable costing profit and loss statement provides routinely all the data that a break even analysis requires and forever keeps before management the basic interrelationship of prices, costs and volume.

The best or optimum price is that which yields the maximum excess of total revenues over total variable costs, contribution margin. The volume at which the increase in total cost because of the addition of one more unit is just equal to the increase in total revenue is the optimum value. The price at which this volume can be obtained is the optimum price. The contribution margin analysis is readily available for pricing purposes in variable costing systems. Naturally, other facts such as competitor's selling prices, the characteristics of demand and consuming patterns, economic and governmental conditions affect the product pricing decisions.

The evaluation and interpretation of profit is crucial for planning future activities. Profit or loss figures under

different costing methods differ to some extent depending on the sales and production volume of the period. If sales exceed production, variable costing profit is higher than in absorption costing and if production exceeds sales, absorption costing shows higher profit. Under inflationary environment and in contracting or buyers market, sales generally do not exceed production especially in Turkey, in which case the evaluation of profit becomes a crucial factor. The overstated profit figure of absorption costing may mislead management. Moreover, the cost of inventory shows up higher figure in absorption costing leading management to contract production further.

Variable costing provide the key to profit planning in dept, and the profit plan integrates the planning and control for all levels of management. With management accounting data in this form, various sales estimates can be readily converted into projected operating profit. It is therefore practicable for the entire top management group to evaluate alternate plans and proposals in conference and to select the one that is generally agreed to be the best. This participation is in marked contrast with conventional absorption costing profit planning. A material change in the sales estimate under absorption costing usually results in time consuming cumbersome work and the result is that management often accepts an inferior plan rather than incur the delay inherent in testing alternate forecasts of volume and sales mix with the cumbersome technique of absorption costing.

Not only does variable costing facilitate profit planning and pricing decisions, but it provides basic finan-

cial and cost data in the form needed for almost all types of management decisions involving profitability. With routine accounting records maintained in this form, special analysis can be prepared for management with a minimum clerical work and delay. Since expenses are routinely separated into those that vary with volume of production or sales and those that do not, answers to questions where volume is a factor are quickly calculated. The effect of additional units produced or sold on operating profit, the effect of a price increase that resulted in a reduction in volume on operating income, the amount of additional sales needed to offset a price cut of certain amount, and the amount of price increase required to make up for an amount increase in wages can readily be analyzed from the financial statements of variable costing.

There are many long-range and short-term effects of decisions to make-or-buy, including facilities utilization, management and technical skills, and vendors' relations. These decisions must therefore be made in terms of management's basic objectives. In most firms such objectives can be stated simply as maximizing ROI and providing a sound rate of growth. To achieve this basic objective, management cannot base make-or-buy decisions on either out-of-pocket costs or total costs but must weigh the cash savings against the additional capital employed and compare the return with alternate uses of available capital. Variable costing system provides primary tools which facilitate sound make-or-buy decisions. These are separation between fixed and variable expenses, sound method for determing additional specific period costs that would be required to make versus buy a given

item, and logical bases for measuring the additional capital that would be required to make a given item as compared to buying it from outside vendors.

A sound program for expanding capacity is one of the most important ingredients for long-range planning and growth. The first step is to determine whether or not a proposed plant expansion program will improve the return on capital employed. This is relatively simple for a company using variable costing. The present situation is set up in variable cost from along with the incremental change, and than the return is figured including the expanded facilities and sales.

Evaluation of new products and processes, decisions on dropping old products, and advertising and promotion programs are other decision processes which can be handled under variable costing systems with less time and more accurate data.

IV. EMPIRICAL APPROACH AND DESIGN

A. The Aim of the Empirical Analysis

The idea behind the empirical analysis is that there is a relationship expected between method of cost accounting employed and the performance of the companies. More specifically, the pattern of classification of cost components, the financial reports prepared with these costing data, the presentation of the reports and the interpretation of the reports and the cost data by the management level affect the decision making process. Effective managerial decision making then in turn generates high probabilities of managerial and company success.

The performance of the companies are affected by many variables which are highly dependent on the type of the country and industry the company is operating, the quality and quantity of the management level, the sources of the company and general economic conditions. There are variables which the management has control over them and affect the performance of the company. The management itself can modify the decision making process by controlling and modifing the variables that are in the process.

The costing system employed in the company and the way the system is implemented and interpreted are assumed to affect the decision making process of the management and thereby the performance of the company.

B. The Methodology of the Empirical Analysis

1. The General Method

Textile industry in Turkey is chosen as the sample for the hypothesis testing of the research as a representitive of the population, companies in Turkey. The data collection method consists of two groups:

(1) The questionnaire and the interview.

(2) Financial data gathered by the Chamber of Industry of Istanbul.

The techniques employed in the statistical analysis of data are one-way frequencies, two-way frequencies, the Pearson correlations and the Discriminant analysis.

2. The Sampling

The Chamber of Industry of Istanbul publishes the first biggest 500 industrial companies every year. The chamber segregates the Turkish industry into several groups of industries in its studies(3). For the year 1982, the Chamber has grouped the companies under 11 industries, and for the year 1983, it has grouped under 12 industries. The industrial companies analized by the Chamber consists of both private and public sector. Table 1 shows the number of companies out of 500 largest companies according to their industry group and sector, for the year 1982, Table 2 shows the same data for the year 1983.

TABLE 1

INDUSTRY GROUPS IN 1982

INDUSTRY GROUPS	TOTAL	%	PUBLIC	PRIVATE	%
Mining	16	3.2	12	4	0.9
Food, Beverage, and Tobacco	82	16.4	5	77	17.9
Textile and Ready-Wear	107	21.4	23	84	19.5
Forestery and Furniture	8	1.6	1	7	1.6
Paper and publication	15	3.0	2	13	3.0
Chemistry, Petroleum, Plastics	78	15.6	7	71	16.5
Land and Stone dependenc	42	8.4	10	32	7.4
Metal	36	7.2	5	31	7.2
Metallic, electrical, mechanical Products	88	17.5	4	84	19.5
Automative	26	5.2	-	26	6.0
Other	2	0.4	-	2	0.5
TOTAL	500	100.0	69	431	100.0

Source: Türkiye'nin 500 BÜYÜK KURULUŞU
Istanbul Sanayi Odası Journal, Aug. 15, 1983,
Year 18, No.1210, pp.45-51.

TABLE 2

INDUSTRY GROUPS IN 1983

INDUSTRY GROUPS	TOTAL	%	PUBLIC	PRIVATE	%
Mining	12	2.4	8	4	0.9
Food, Beverage, and Tobacco	77	15.4	6	71	16.7
Textile and Ready-Wear	109	21.8	23	86	20.2
Forestery and Furniture	5	1.0	-	5	1.2
Chemistry, Petroleum, Plastics	83	16.6	6	77	18.1
Land and Stone dependent	45	9.0	12	33	7.7
Metal	35	7.0	5	30	7.0
Metallic, electrical, mechanical Products	88	17.6	7	81	19.0
Automative	27	5.4	-	27	6.3
Paper and publication	17	3.4	7	10	2.3
Electricity	1	0.2	-	1	0.2
Other	1	0.2	-	1	0.2
TOTAL	500	100.0	74	426	100.0

Source: Türkiye'nin 500 BÜYÜK KURULUŞU
Istanbul Sanayi Odası Journal, Oct. 15, 1984, Special Issue, Year 19, pp.52-59.

Textile and Ready-wear industry has the highest number of companies in both years. The 19.5 per cent of the 500 largest companies belong to textile industry in the year 1982, and 20.2 per cent in the year 1983. This is the criterion for choosing the textile industry as the sample industry. The companies registered in the Chamber of Industry of Istanbul, that is located near Istanbul is 38 in the year 1982, and 37 in the year 1983. Almost half of the private textile companies are located near Istanbul and this can constitute a represative sample for the Turkish textile companies. One of the data collection methods employed in the research is questionnaires and interviews, which requires direct relationship with the management and face-to-face interviews. This method would be impractical and inefficient if the companies located outside of the Istanbul could have been included. The criterion for selecting Istanbul located textile companies is the degree of reaching the management. The criterion for selecting private sector is that the application of managerial tools and excluding governmental and political influences as much as possible.

Thirty-seven companies are chosen as the sample size for the research, and 30 of them could be reached and 26 of the reached companies have presented valid data for the purpose of the research. In other respect, 30 of the sample accepted to have an interview and fill out the questionnaire, but four of them have revealed invalid questionnaire forms.

TABLE 3

THE SAMPLE

	Number of Companies (1983)
Largest companies of Turkey	500
Textile and ready-wear Industry	109
Textile and ready-wear Industry-Private	86[1]
Textile and ready-wear Industry-Istanbul and Private	37
Accepted to interview	30
Valid data	26[2]

[1] Population

[2] Sample

3. The Sample and the Population

The financial data of the sample companies are gathered from the studies of the Chamber. The data cover 1982 and 1983 figures, so that comparisons within the company could be made. The sample, the population and Turkish industry are analyzed for the two year financial data to have general point of view about the position of the sample in the population and in the Turkish industry. As could be seen from the Table 4 that the private sector of textile industry, the population, generates the 16 per cent of the sales of the private sector largest 431 industrial companies in Turkey in 1982, and the 17 per cent of the sales of 426 companies in 1983. Private sector textile industry created 9 per cent of the profit of total private sector in 1982 and 20 per cent in 1983. Textile industry has shown an increase in profit of 33.000 million Turkish Liras, more than 100 per cent, and private sector of the textile industry has increased its profits at the same amount. This points out that population of the research has gained a progress in 1983 more than 100 per cent though the total private industry has increased its profit about 72.000 millions of Turkish Liras, at 60 per cent. Almost half of the increase in profits is generated by the textile industry. The year 1983 has been a successful year for the population. The sample, as seen from Table 4, consists of successful group of the population. The profit of the sample has increased about 8.000 million Turkish Liras, the 24 per cent of total increase in profit in private

textile industry results from the performance of the sample companies.

The financial figures and ratios show that Turkish private sector and the textile private industry have succeeded in the year 1983. The reason why the sales/capital stock ratio decreased is that capital stock figures in 1983 has increased more than five times, whereas the sales has increased about 65-70 per cent. The increase of capital stock is due to the revaluation of fixed assets and including the revalued figure in the capital stock account in 1983.

The sampled companies have generated 37 per cent of the population sales in 1982 and in 1983. The sample has created a profit of 9.000 million in 1982, which is 48 per cent of profit made companies of private textile industry, and 44 per cent in 1983. All the financial ratios of the sample exceed the ratios of the population ratios. The sample is the representitive of the successful companies of population.

In 1982, the profit of private sector in Turkey is nine per cent of total assets, 38 per cent of capital stock, and six per cent of sales figure. In the same year the profit of the population is two per cent of its total assets, 13 per cent of its capital stock, and two per cent of its sales figure. In the following year, the profit of private sector in Turkey is again nine per cent of total assets, 31 per cent of capital stock; because of high increases in capital stock, seven per cent of sales figure. In the same year, the profit of the population is eight per cent of its total assets, 28 per cent of its capital stock, and eight per cent

of its sales figure. The population has shown more increase than the Turkish private sector as a whole.

TABLE 4

FINANCIAL FIGURES OF POPULATION AND THE SAMPLE

	1 9 8 2 (000.000 Turkish Liras)								
	SALES	CAPITAL STOCK	ASSETS	PROFİT	PROFIT / ASSETS	PROFIT / C.STOCK	PROFIT / SALES	SALES / ASSETS	SALES / C.STOCK
SAMPLE	110.385	34.002	103.419	8.964	0.0867	0.2636	0.0812	1.0674	3.2464
POPULATION	298.227	46.368	286.907	5.941*	0.0207	0.1281	0.0199	1.0395	6.4317
TURKEY-private	1.863.194	321.029	1.285.469	120.558	0.0934	0.3755	0.0647	1.4494	5.8038
[illegible]tal	3.494.891	675.245	3.154.521	210.108	0.0666	0.3112	0.0601	1.1079	5.1757

	1 9 8 3 (000.000 Turkish Liras)								
	SALES	CAPITAL STOCK	ASSETS	PROFIT	PROFIT / ASSETS	PROFIT / C.STOCK	PROFIT / SALES	SALES / ASSETS	SALES / C.STOCK
SAMPLE	183.065	47.185	152.483	17.220	0.1129	0.3649	0.0941	1.2006	3.8797
[illegible]ULATION	494.240	138.874	453.143	38.971	0.0860	0.2806	0.0789	1.0907	3.5589
TURKEY-private	2.801.049	621.980	2.070.456	192.819	0.0931	0.3100	0.0688	1.3529	4.5034
TURKEY-total	5.582.769	1.306.486	5.170.332	315.850	0.0611	0.2418	0.0566	1.0798	4.2731

* TOTAL PROFIT : 18.708

TOTAL LOSS : (12.767)

NET PROFIT : 5.941

Source: Türkiye'nin 500 Büyük Kuruluşu, İstanbul Sanayi Odası Journal, Oct. 15, 1984 and Aug. 15, 1983.

4. The Questionnaire

The financial data of every company in the sample are available from the studies of the chamber. In order to gather data about the costing systems employed, financial reports prepared, the way they are interpreted, the questionnaire method is used in the research. Along with the questionnaire, personal interview method, naturally, improved the validity of the data collection method. The general manager or the finance manager of the sample companies have been interviewed in their offices and they have filled out the questionnaires.

The questionnaire consists of 21 questions (Appendix E). The first five questions are asked to relate the questionnaire with their financial figures gathered from the chamber. Only four out of 21 questions are open ended, the other questions are multiple choise questions. Five out of 16 multiple choise questions are double choice questions.

The questionnaire is intended to find out the management's pattern of giving decisions. The type of financial reports prepared and the frequency of their preparation are assumed to base a managerial decision making model. Then, to analize the content of this base, questions are forwarded to how these financial reports are prepared; whether variable costing method has used or not is the main intention of the questionnaire.

5. The Performance Rating

The financial ratios are used to quantify and rate the performance of the companies. These financial ratios are profit over assets, profit over capital stock, profit over sales, sales over assets, and sales over capital stock. The ratios are calculated for 1982 and 1983, to be able to compare the performance of the company.

V. EMPIRICAL FINDINGS

A. Definition of Variables

The variables that are defined out of the data for the empirical analysis constitute the main part of the research. There are 36 variable that donate the research, 31 of them being gathered through questionnaires, five of them through the studies of chamber of Industry.

(1) Sales grouping.

The sales of the companies are grouped in five headings:

(a) Above 15 billion Turkish Liras.

(b) Between 14.9 and 10 billion Turkish Liras.

(c) Between 9.9 and five billion Turkish Liras.

(d) Between 4.9 and two billion Turkish Liras.

(e) Below two billion Turkish Liras.

(2) Income level grouping.

The income level of the companies are grouped in five headings:

(a) Above one billion Turkish Liras.

(b) Between 999 and 500 million Turkish Liras.

(c) Between 499 and 250 million Turkish Liras.

(d) Between 249 and 100 million Turkish Liras.

(e) Below 100 million Turkish Liras.

(3) Investment expenditure grouping.

The investment expenditure of the companies are grouped in six headings:

(a) Above 10 billion Turkish Liras.

(b) Between 9.9 and five billion Turkish Liras.

(c) Between 4.9 and one billion Turkish Liras.

(d) Between 999 and 500 million Turkish Liras.

(e) Between 499 and 100 million Turkish Liras.

(f) Below 100 million Turkish Liras.

(4) Export level grouping

The export sales of the companies are grouped in five headings:

(a) Above 20 million dollars.

(b) Between 19.9 and 10 million dollars.

(c) Between 9.9 and five million dollars.

(d) Between 4.9 and one million dollars.

(e) Below one million dollars.

(5) The usage of computer in the operations of the company.

The companies are grouped in two headings:

(a) Use computer in the operations of the company.

(b) Do not use computer in the operations of the company.

(6) The usage of computer in the general manager level.

The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the general manager level.

(b) Do not use computer in the general manager level.

(7) The usage of computer in the finance and accounting department.

The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the finance and accounting department:

(b) Do not use computer in the finance and accounting department.

(8) The usage of computer in the production department. The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the production department.

(b) Do not use computer in the production department.

(9) The usage of computer in the planning department. The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the planning department.

(b) Do not use computer in the planning department.

(10) The usage of computer in the sales department. The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the sales department.

(b) Do not use computer in the sales department.

(11) The usage of computer in the purchasing department. The companies that use computer in their operations are grouped in two headings:

(a) Use computer in the purchasing department.

(b) Do not use computer in the purchasing department.

A company which uses computer in its operations may be grouped in cases if using the computer in the departments mentioned above.

(12) The point of view in the usage of computer. The point of views of the companies that use computer in their operations about the usage of computer are grouped in four headings:

(a) The computer application is totally helpful in all cases.

(b) The computer application is totally helpful in some cases.

(c) The computer application is partly helpful in some cases.

(d) The computer application is not helpful in all cases.

(13) The usefulness of balance sheet and income statement in managerial decision making.

The companies are grouped in two heading:

(a) Balance sheet and income statement are used in managerial decision making.

(b) Balance sheet and income statement are not used in managerial decision making.

(14) The frequency of the preparation of balance sheet and income statement.

The companies which use balance sheet and income statement in managerial decision making are grouped in four headings:

(a) The reports are prepared weekly.

(b) The reports are prepared monthly.

(c) The reports are prepared quarterly.

(d) The reports are prepared in every 4 months.

(15) The usage of sources and uses statement in managerial decision making.

The companies are grouped in two headings:

(a) Use sources and uses statement in managerial decision making.

(b) Do not use sources and uses statement in managerial decision making.

(16) The usage of breakeven analysis in managerial decision making.

The companies are grouped in two headings:

(a) Use breakeven analysis in managerial decision making.

(b) Do not use breakeven analysis in managerial decision making.

(17) The usage of ratio analysis in managerial decision making.

The companies are grouped in two headings:

(a) Use ratio analsis in managerial decision making.

(b) Do not use ratio analysis in managerial decision making.

(18) The components that are included in the product cost.

The components are grouped in 18 headings:

(a) Direct labor.

(b) Raw material.

(c) Supplies.

(d) Heating and illumination.

(e) Energy and water.

(f) Repair and maintenance.

(g) Plant depreciation.

(h) Machine depreciation.

(i) Plant rent.

(j) Administrative personnel expenses.

(k) Office supplies.

(l) Office building depreciation.

(m) Office building rent.

(n) Sales personnel expenses.

(o) Advertising and promotion expenses.

(p) Financial expenditures.

(r) Labor rented.

(s) Portion from the general expenses.

(19) The classification of costs as variable and fixed costs in the cost accounting systems.

The companies are grouped in two headings:

(a) The costs are classified as variable and fixed.

(b) The costs are not classified as variable and fixed.

(20) The type of classification of costs as fixed and variable.

The companies which classify costs as fixed and variable are grouped in three headings:

(a) All costs are classified as fixed and variable.

(b) Labor cost is assumed as fixed and all other costs are classified as fixed and variable.

(c) Raw material cost is assumed as variable and all other costs are not classified.

(21) The application of variable cost accounting method in financial internal reporting.

The companies are grouped in two headings:

(a) Employ variable costing system in financial reporting.

(b) Do not employ variable costing system in financial reporting.

(22) The usefulness of balance sheet and income statement in long term planning.

The companies are grouped in two headings:

(a) Use balance sheet and income statement in long-term planning.

(b) Do not use balance sheet and income statement in long-term planning.

(23) The usefulness of balance sheet and income statement in short-term planning.

The companies are grouped in two headings:

(a) Use balance sheet and income statement in short-term planning.

(b) Do not use balance sheet and income statement in short-term planning.

(24) The usefulness of balance sheet and income statement in pricing decisions.

The companies are grouped in two headings:

(a) Use balance sheet and income statement in pricing.

(b) Do not use balance sheet and income statement in pricing.

(25) The usefulness of balance sheet and income statement in purchasing decisions.

The companies are grouped in two headings:

(a) Use balance sheet and income statement in purchasing decisions.

(b) Do not use balance sheet and income statement in purchasing decisions.

(26) The usefulness of balance sheet and income statement in investment decisions.

The companies are grouped in two headings:

(a) Use balance sheet and income statement in investment decisions.

(b) Do not use balance sheet and income statement in investment decisions.

(27) The usage of balance sheet in evaluating the operations of the company.

The companies are grouped in two headings:

(a) Use balance sheet in evaluating the operations of the company.

(b) Do not use balance sheet in evaluating the operations of the company.

(28) The usage of income statement in evaluating the operations of the company.

The companies are grouped in two headings:

(a) Use income statement in evaluating the operations of the company.

(b) Do not use income statement in evaluating the operations of the company.

(29) The usage of sources and uses statement in evaluating the operations of the company.

The companies are grouped in two headings:

(a) Use sources and uses statement in evaluating the operations of the company.

(b) Do not use sources and uses statement in evaluating the operations of the company.

(30) The usage of ratio analysis in evaluating the operations of the company.

The companies are grouped in two headings:

(a) Use ratio analysis in evaluating the operations of the company.

(b) Do not use ratio analysis in evaluating the operations of the company.

(31) The usage of monthly budget compared reports in evaluating the operations of the company.

The companies are grouped in two headings:

(a) Use monthly reports in evaluating the operations of the company.

(b) Do not use monthly reports in evaluating the operations of the company.

Naturally, any company can use more than one of the above mentioned reports in evaluation of the company.

(32) The performance in profit over assets ratio.

The companies are grouped in two headings:

(a) Increase in profit over assets ratio.

(b) Decrease in profit over assets ratio.

(33) The performance in profit over capital stock ratio.

The companies are grouped in two headings:

(a) Increase in profit over capital stock ratio.

(b) Decrease in profit over capital stock ratio.

(34) The performance in profit over sales ratio.

The companies are grouped in two headings:

(a) Increase in profit over sales ratio.

(b) Decrease in profit over sales ratio.

(35) The performance in sales over assets ratio.

The companies are grouped in two headings:

(a) Increase in sales over assets ratio.

(b) Decrease in sales over assets ratio.

(36) The performance in sales over capital stock ratio.

The companies are grouped in two headings:

(a) Increase in sales over capital stock ratio.

(b) Decrease in sales over capital stock ratio.

TABLE 5

THE VARIABLE LIST

VARIABLES DEFINED	RELATED QUESTIONS IN QUESTIONNAIRE	VARIABLE CODE IN THE ANALYSIS
1	1	V1
2	2	V2
3	3	V3
4	5	V4
5	6	V5
6	8	V6
7	8	V7
8	8	V8
9	8	V9
10	8	V10
11	8	V11
12	11	V12
13	12	-
14	13	V13
15	14	V14
16	14	V15
17	14	V16
18	15	-
19	16	V17
20	17	V18
21	19	V19
22	20	V20
23	20	V21
24	20	V22
25	20	V23
26	20	V24
27	21	V25
28	21	V26
29	21	V27
30	21	V28
31	21	V29
32	-	V41
33	-	V61
34	-	V71
35	-	V81
36	-	V91

B. Statistical Methods Used

Statistical methods employed in the research are one-way frequency distributions, joint frequency distributions, Pearson correlations and Discriminant analysis.

Normally, the first task of data analysis is to determine the basic distributional characteristics of each of the variables to be used in the subsequent statistical analysis. The distributional characteristics available with this statistical method are mean, median, mode, range, minimum, maximum, standard deviation, standard error, variance, skewness, and kurtosis.

The minimum and maximum devote the smallest and largest value of a variable encountered among the cases, while the range is the minimum subtracted from the maximum. The mode is the value of the variable which occurs most often. The median is the numerical value of the middle case or the case lying exactly on the 50th percentile, once all the cases have been rank ordered from highest to lowest. The mean is the most common measure of central tendency for variables measured at the interval level. Often referred to as the average, it is merely the sum of the individual values for each case divided by the number of cases. The variance is a measure of the dispersion of the data about the mean. The standard deviation, very simply, is the square root of the variance.

If an infinite number of equal-sized samples were drawn from a given population, the mean of each sample would be an estimate of the true population mean, but not all of

them would be identical. The pattern of these means would actually constitute a normal distribution and would have a standard deviation. The standard deviation of this distribution is the standard error. Thus, the standard error enables to determine the potential degree of discrepancy between the sample mean and the unknown population mean.

The skewness is a statistic needed to determine the degree to which a distribution of cases approximates a normal curve, since it measures deviations from symmetry. The measure of skewness sometimes called the third moment, takes on a value of zero when the distribution is a completely symmetric bell-shaped curve. A positive value indicates that the cases are clustered more to the left of the mean with most of the extreme values to the right. A negative value indicates the clustering to the right.

The kurtosis is a measure of the relative peakedness or flatness of the curve defined by the distribution of cases. A normal distribution will have a kurtosis of zero. If the kurtosis is positive, the distribution is more peaked than would be true for a normal distribution, while a negative value means that it is flatter. Kurtosis is sometimes called the fourth moment.

After examining the distribution of each of the variables, the research begins to investigate sets of relationships among two or more of these variables. Since the sample size is relatively small, joint frequency distribution analysis is suitable for the research, enabling the analysis of pairs of variables.

A cross tabulation is a joint frequency distribution of cases according to two or more classificatory variables. The joint frequency distributions can be statistically analyzed by the chi-square statistic, to determine whether or not the variables are statistically independent. Chi-square is a test of statistical significance. It enables to determine whether a systematic relationship exists between two variables. Tests of statistical significance only indicate the likelihood that an observed relationship actually exists in the universe, they do not tell how strong the relationship is. A relationship may be statistically significant without being substantively important.

Since, the actual relationship in the universe is not known, small values of chi-square are interpreted to indicate the absence of a relationship, often referred to as statistical independence. Conversely, a large chi-square implies that a systematic relationship of some sort exists between the variables.

In order to determine whether a systematic relationship does exist, it is necessary to ascertain the probability of obtaining a value of chi-square as large or larger than the one calculated from the sample, when in fact the variables are actually independent. This depends, in part, upon the degrees of freedom. The degrees of freedom vary with the number of rows and columns in the table, and they are important because the probability of obtaining a specific chi-square value depends on the number of cells in the table.

By itself, chi-square enables only to decide whether variables are independent or related. It does not tell how

strongly they are related. Part of the reason is that the sample size and table size have such an influence upon chi-square. Other statistics which adjust for these factors are available.

Pearson's correlation serves a dual purpose. Besides its role as an indicator of the goodness of fit of the linear regression, it is a measure of association indicating the strength of the linear relationship between the two variables. If the value of the correlation is close to zero, it is assumed that there is little or no linear relationship. If the value of the correlation approaches to +1.0 or -1.0, it is assumed that there is a strong linear relationship. Since the correlation coefficient is a measure of association, it does not reveal which variable is considered to be predicting the other. Significance tests are reported for each coefficient and used for two-tailed test of significance. When correlation coefficient cannot be calculated, as will happen if the variable is either missing for all cases or takes the same value for all cases, a value of 99.00 is assigned, which is a sign that the coefficient was not calculable.

In the metodology of the research, Pearson's correlation coefficients of the pair of variables which showed up high values of chi-square are considered.

In discriminant analysis, canonical correlation is used to judge the importance of the discriminant function. It is a measure of association between the function and the variable. In other words, it measures the ability of the function to discriminate among the groups. The higher and closer to one the correlation, the more the function is

reliable and variables are correlated with the function. Wilks' Lambda is another significance statistics in discriminant analysis. Lambda can be transformed into a chi-square statistic for an easy test of statistical significance.

The standardized discriminant function coefficients are of great analytic importance in and of themselves. When the sign is ignored, each coefficient represents the relative contribution of its associated variable to that function. The sign merely denotes whether the variable is making a negative or positive contribution.

C. General Findings

The results of the one-way frequency distribution are presented in Appendix A and of the joint frequency distribution are presented in Appendix B. And the results of Pearson's correlation and Discriminant analysis are presented in Appendix C and D, respectively.

The striking point in the general analysis of the findings is that there is a strong relation between the application of computer in the operations of the company and the classification of costs as variable and fixed and also the application of variable costing in internal reporting. Almost the 54 per cent of the sampled companies use computer and the 71 per cent of them do classify the costs, the 57 per cent of them apply variable costing. The companies which apply variable costing and the companies which classify costs as variable and fixed, fall in the higher levels of sales and income. Their volume and complexity of operations and

activities may have forced these companies to implement computer and the application of computer might have caused available data for the use of variable costing and classification of costs. The management not being able to control and analyze every operation of the company might have decided to use technical methods for rational decision making and evaluating the company. Finding out the problem areas and searching for the solution might have caused management to employ variable costing and/or computer in their companies. Another fact is that application of computer is a sign of modernization for the present time and the application of it in Turkey is increasing. Naturally, financially strong companies are the first ones to adopt themselves to this modernization process. The 93 per cent of the computer using companies have increased their performance in sales over assets. While modernizing these companies might have also been searching for more rational managerial decision making alternatives. By coincidence, there seems a strong relation between the application of computer and the decision making using variable costing as a tool.

There is also an association between the usage of computer and the usage of balance sheet, and income statement in long-term and short-term planning, in pricing decision, and in investment decisions. The employment of computer might have facilitated the preparation of these reports and enabled them to be prepared as detailed as the management required for the purpose of managerial decision making. Inversely, the desire of the management for using the reports in decision making might have ended with a solution of using

computer. Since the computer using firms can be generalized as well-performing companies, they are faced with long-term and short-term planning and pricing and investing decisions and try to be rational and optimal in their decisions to succeed. The balance sheet and the income statement are the primary tools for such managerial decisions. Their financial strength have probably challenged them for the application of the computer and by coincidence the companies might have taken the advantage of it as a managerial tool in their operations.

Another striking relation is analized between the usage of computer and the ratio analysis. The 78 per cent of the companies that use ratio analysis also employ computer in their operations. Implementation of computer in their operation enables them to use the analysis in their managerial decisions. Inversely, the demand of the management to take advantage of the ratio analysis leads using computer to facilitate the process of the analysis. Interestingly enough, most of the companies using ratio analysis also use variable costing and classify the costs as variable and fixed. And generally these companies are the succeeding companies. It can be stated as there is a strong relation between using computer, using variable costing, classifying the costs, and using ratio analysis. Modern management tools which help managers to control and evaluate the operations and give decisions are mainly ratio analysis and cost analysis. And modern management also uses computer for these analysis or with the computer available in their companies prefer to employ these analysis.

The companies using breakeven analysis also use variable costing in internal reporting. In fact, to be able to perform a breakeven analysis, the company should have classified its costs as variable and fixed beforehand. It is practical to make a breakeven analysis when the company is already employing variable costing in its reporting system. Once the company implements the variable cost accounting it is very natural to perform breakeven analysis, especially if the application of computer is present.

The companies classifing costs do employ variable costing in internal reporting. Classification of costs enables to employ the variable costing method or to employ variable costing, costs must be classified already.

There seems to be a significant relationship between the classification of costs and the usage of balance sheet and income statement in long-term planning. Also there is an association between the usage of these reports in long term planning and the application of variable costing. The presentation of the reports prepared and analyzed by the variable costing method enlightenes management for the strengths and weaknesses of the company and builds up the base for long-term planning. Alternatively, the management team which desires to have deterministic long-term planning in the company prefer to employ variable costing to analyze and plan more rational and realistic. In fact, the companies which use variable costing are generally from the high income and sales group and the companies which find balance sheet and income statement helpful in long-term planning also are from the high level group. High volumes of sales

and income may have been the result of rational long-term planning or may have enforced the management to attain long-term planning, to set long-term goals and objectives to maintain the level of sales and income.

The companies which apply variable costing also find balance sheet and income statement helpful in investment decisions. Investment decision making requires the evaluation of the strengths and weaknesses of the company, the alternatives and the choice of the best alternative suitable to the financial and cost structure of the company. Hence, variable costing method is one of the primary tools to analyze and evaluate the company's structure.

Finally, the use of the computer, the application of the variable costing method, the classification of costs, the use of balance sheet and income statement, and the sales and income level of the company are all related with each other, and affecting one another.

The application of sources and uses statement and breakeven analysis in managerial decision making have a relation with the performance of the companies in profit over capital stock ratios. The breakeven analysis is an analytical technique for studying the relations among fixed costs, variable costs, and profits. It is a profit-planning approach based on established relations between costs and revenues. It is a device for determining the sales level for desired levels of profit. The sources and uses of fund statement indicates where cash came from and how it was used. The information it provides points out that the company is making progress or that problems are arising. The sources and uses

data may also be analyzed on a proforma basis to show how a firm plans to acquire and employ funds during some future period.

In order to perform in profit over capital stock ratio, the percentage increase in profits must exceed the percentage increase in capital stock. An increase in profit is attained through profit planning. The size and structure of capital stock is decided through the analysis of sources and uses of the funds of the company.

The companies which have increased their sales over assets ratio also use income statement in evaluating the operations of the company. An income statement may be used by management to judge the effectiveness of its past policies and decisions, to detect unfavorable trends and developments, and to provide data upon which to base decisions regarding a wide variety of matters, such as whether to expand production, whether to change advertising policy, whether to introduce a new product, whether to alter selling prices, and whether to merge with another corporation. Such an analysis of income statement may lead to such decisions which may generate an increase in sales more than an increase in assets.

It is observed that 11.5 per cent of the companies which decreased their profit over sales ratio managed and succeeded to increase profit over assets ratio. The inclusion of export sales in the sales figure and the application of low margins on these sales naturally generates a decrease in profit over sales figure especially when exports are increasing in time.

There has not been striking relations found with the performance measurement of the sampled companies and the classification of costs and application of the variable costing method in internal reporting.

The results of discriminant analysis revealed that the most contributing variables to the usage of computer in the operations of the company are the application of variable cost accounting method in financial internal reporting, the classification of costs as variable and fixed costs in the cost accounting systems, the usefulness of balance sheet and income statement in long term planning, the usage of ratio analysis in evaluating the operations of the company, and the performance of sales over capital stock.

The most contributing variables to the classification of costs as variable and fixed costs in the cost accounting systems are the performance of sales over capital stock, the usage of balance sheet and ratio analysis in evaluating the operations of the company.

Finally, the most contributing variables to the application of variable cost accounting method in financial internal reporting are the classification of costs as variable and fixed costs in the cost accounting systems, the usage of balance sheet, sources and uses statement, and ratio analysis in evaluating the operations of the company, and the performance in sales over capital stock.

VI. CONCLUSION

The research aimed to explore the relationship of application of variable costing, usage of financial reports, employment of computer, and performance of the companies. For this purpose 36 variables have been defined to test the relationships by statistical methods. The results have showed that the employment of computer has direct relationship with the classification of costs as variable and fixed costs, application of variable costing in internal reporting, the usefulness of balance sheet and income statement in long-term planning, short-term planning, in pricing and purchasing decisions and the usage of ratio analysis evaluating the operations of the company. Direct relationships have also been observed between the application of variable costing in internal reporting and sales group, the usage of breakeven analysis in managerial decision making, the classification of costs, the usefulness of balance sheet and income statement in long-term planning, investment decisions and the usage of ratio analysis in evaluation of the company.

The research covers 26 of the companies out of 86 private textile industrial companies that have taken places in the first 500 largest companies of Turkey in 1983. The sample size is quite representative of the textile industry but not enough to make sophisticated statistical analysis. If the sample size had been larger, regression models and factor analysis methods could have been applied to further analyze the strength and cause of the relationship between variables. The research sample size is limited to only Istan-

bul region companies in textile industry totalling up to about 40 in size in the 500 largest companies list of the Chamber of Industry of Istanbul. The environmental factors due to specific Istanbul region might have affected the companies in the sample and these unmeasured affects could not been analyzed in the research, which is a rather important fact. This will most probably discriminate the sampled companies from the textile industrial companies in Turkey-wide. So, for further and stronger analysis the research could be extended to cover up the companies of all regions so that Turkish textile industry could be represented and by this way the sample size would be increased enabling the researcher to analyze and test the hypothesis by more explicit technical methods.

By chance, the income level and sales level of the companies in the sample are relatively in the higher level of the industrial group. In fact, this very same industry has performed quite well in the year 1983. These two facts should not be overestimated in evaluating and implementing the results of the research.

The relationships of the performance rating variables with other variables are found to be vaque and so unsystematic that no clear cut propositions could be stated. In further analysis of the subject, new and different variables that best describe the performance measurement of the company should be searched and more meaningful relationships could be assembled. In fact, the research can be improved with introducing more variables into the scene and tested statistically. These new and different variables can be included

to the analysis with the improvement of the questionnaire or adding more questions to it and mainly arranging a panel between the top management of the sampled companies. A discussion among them related to the subject matter would give some highlights about the unmeasured behaviors and trends of the management and enable to analyze and evaluate the answers of the questionnaires.

The research has aimed to search the subject in the textile industry in 1985. The analysis could be extended to other industrial groups of the Turkey so that comparative studies regarding industrial differences can be accomplished. By the very same objective, a comparative research could be employed in the same industry with the same variables and techniques after a certain period of time to analyze the time factor and the changing relationships over time. More advanced studies would be comparing the textile industry of Turkey with United States, world countries, or European Economic Community countries from the same point of view covering the same period of time.

The research is succeeded to analyze and find-out some related variable pairs so that further analysis and studies could be based upon them and improve and develop the implementations as to the purpose of the researches.

APPENDIX A

ONE WAY FREQUENCY DISTRIBUTIONS

One-way frequency distributions are analyzed for all the variables of the research.

(1) Sales grouping.

The 42.3 per cent of the companies examined generated sales of between two and five billion Turkish Liras in 1983. The 42.3 per cent of the sample size have a sales figure above five billion Turkish Liras.

(2) Income level grouping.

The 42.3 per cent of the companies have created an income of between 250 and 500 million Turkish Liras in 1983. The 61.5 per cent of the sample have ended in 1983 with a profit of above 250 million Turkish Liras.

(3) Investment expenditure grouping.

The 46.2 per cent of the companies have made an investment expenditure below 100 million Turkish Liras in 1983. It is clear to interpret that the funds created from the profits are not used as investments in general.

(4) Export level grouping.

The 53.8 per cent of the companies have made an export sales below five million dollars in 1983. The 80.8 per cent have been able to export above one million dollars.

(5) The usage of computer in the operations of the company.

The 53.8 per cent of the companies sampled are using computer in their operations. The 14.3 per cent of them are employing the computer in the general manager level, 92.9

per cent of them in the finance and accounting department, 35.7 per cent of them in the production department, 28.6 per cent of them in the planning department, 21.4 per cent of them in the sales department, and 7.1 per cent of them in the purchasing department.

(6) The point of view of in the usage of computer.

The 28.6 per cent of the companies which use computer in their operations find the application of it as totally helpful in all cases. The 57.1 per cent find it as partly helpful in some cases and 14.3 per cent of them imply that the application of computer is not helpful in all cases.

(7) The usefulness of balance sheet and income statement. in managerial decision making.

The 96.2 per cent of or 25 out of 26 companies have been using the mentioned financial reports in their managerial decision making.

(8) The frequency of the preparation of balance sheet and income statement.

The 69.2 per cent of the sample prepares the reports monthly, and 19.2 per cent prepares quarterly. Only one company prepares every week and the other prepares every four months.

(9) The usage of sources and uses statement, breakeven analysis, and ratio analysis in managerial decision making.

The 46.2 per cent of the companies use sources and uses statement, 26.9 per cent of them use breakeven analysis, and 57.7 per cent of them use ratio analysis in their managerial decision making. It is interesting to note that even all the companies in the sample are production oriented com-

panies, they give very little emphasis on the breakeven analysis.

(10) The components that are included in the product costs.

All the companies include direct labor, raw material, supplies, heating and illumination, energy and water, repair and maintenance, and machine depreciation in the product cost. The 84.6 per cent include plant depreciation, 15.4 per cent include plant rent, 42.3 per cent include administrative personnel expenses, 38.5 per cent include office supplies, 34.6 per cent include office building depreciation, 23.1 per cent include office building rent, 23.1 per cent include sales personnel expenses, 19.2 per cent include advertizing and promotion expenses, 30.8 per cent include financial expenses, 7.7 per cent include a portion from the general expenses.

(11) The classification of costs as variable and fixed costs in the cost accounting systems.

The 50 per cent of the companies do classify the costs as variable and fixed. The 61.5 per cent of them classify all the costs, 23.1 per cent of them assume labor as a fixed cost and classify all the others, and 15.4 per cent of them assume raw material cost as the only variable cost.

(12) The application of variable costing method in internal reporting.

The 42.3 per cent of the companies employ variable costing method in their internal reporting of which 72.8 per cent classify all the costs as fixed and variable and 27.2

per cent assume labor cost as a fixed cost and classify all other costs.

(13) The usefulness of balance sheet and income statements in long-term planning, in short-term planning, in pricing, in purchasing, and in investing.

The 38.5 per cent of the companies find the mentioned financial reports useful in long-term planning, the 76.9 per cent in short-term planning, the 84.6 per cent in pricing, the 30.8 per cent in purchasing, and the 30.8 per cent in investing decisions. The financial reports are mostly used in pricing decisions and leastly in investing and purchasing decisions.

(14) The evaluation of the operations of the company.

The 96.2 per cent of the companies use balance sheet for the evaluation of operations, the 96.2 per cent use income statement, the 38.5 per cent use sources and uses statement, the 34.6 per cent use ratio analysis, and the 15.4 per cent use monthly budget compared reports.

(15) Performance evaluation.

The 57.7 per cent of the companies have shown an increase in profit over assets, the 69.2 per cent have shown an increase in profit over capital stock, the 50 per cent have shown an increase in profit over sales, the 76.9 per cent have shown on increase in sales over assets, and the 69.2 per cent have shown an increase in sales over capital stock. The 46.2 per cent have shown an increase in profit over assets, profit over capital stock, and profit over sales simultaneously. The 23.1 per cent have shown an increase in all ratios.

DITY

VI SETIS BRUPLARI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FRE (PC
15M-	1	3	11.5	11.5	11.
15-19Y	2	4	15.4	15.4	23.
6-12Y	3	4	15.4	15.4	42.
2-5M	4	11	42.3	42.3	77.
2Y-	5	4	15.4	15.4	100.
	TOTAL	26	100.0	100.0	

MEAN	3.346	STD ERR	0.240	MEDIAN	3.100
SUM	87.000	STD DEV	1.225	VARIANCE	1.500
KURTOSIS	1.945	SKEWNESS	-1.535	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES 26 MISSING CASES 1

LOGOV

V8 KAR GRUPLARI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CU FR (PC
[illegible]	1	3	11.5	11.5	11.
[illegible]	2	2	7.7	7.7	19.
250-500MN	3	11	42.3	42.3	61.
120-250YN	4	4	15.4	15.4	76.
[illegible]	5	6	23.1	23.1	100.
	TOTAL	26	100.0	100.0	

[illegible]	3.308	STD ERR	.247	MEDIAN	3.767
[illegible]	3.232	STD DEV	1.258	VARIANCE	1.582
[illegible]	-2.229	SKEWNESS	-.218	RANGE	4.333
[illegible]	1.200	MAXIMUM	5.000		

VALID CASES 26 MISSING CASES 0

HAPPY

V8 VOTING PREFERENCE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
LOW	1	1	3.0	3.0	3.
1-3	3	1	3.0	3.0	7.
4-7	4	4	15.4	15.4	23.
8-9	5	7	26.9	26.9	50.
HIGH	6	12	46.2	46.2	96.
NA	7	1	3.8	3.8	100.
	TOTAL	26	100.0	100.0	

MEAN	5.154	STD ERR	0.246	MEDIAN	5.000
MODE	6.000	STD DEV	1.255	VARIANCE	1.575
KURTOSIS	2.303	SKEWNESS	-1.448	RANGE	6.000
SUM OF	1.000	MAXIMUM	7.000		

VALID CASES 26 MISSING CASES 0

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

VA          IHRACAT GRUPLARI

                                                        RELATIVE  ADJUSTED   CU
                                           ABSOLUTE       FREQ      FREQ     FRE
CATEGORY LABEL                      CODE     FREQ        (PCT)     (PCT)     (PC

20MN+                                  1        6         23.1      23.1     23.

10 20MN                                2        2          7.7       7.7     30.

5-10MN                                 3        4         15.4      15.4     46.

1-5MN                                  4        9         34.6      34.6     80.

1MN-                                   5        5         19.2      19.2    100.
                                           -------      -------   -------
                                   TOTAL       26        100.0     100.0

MEAN            3.192   STD ERR          0.288   MEDIAN                     3.444
MODE            4.000   STD DEV          1.470   VARIANCE                   2.162
KURTOSIS       -1.[illegible]   SKEWNESS        -0.[illegible]   RANGE                      4.000
MINIMUM         1.000   MAXIMUM          5.000

VALID CASES      26     MISSING CASES      0
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[illegible]

[illegible] BILGISAYAR KULLANIYOR

[illegible]	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FRE (PC
[illegible]	2	18	46.2	46.2	46.
[illegible]	1	14	53.8	53.8	100.
	TOTAL	26	100.0	100.0	

[illegible]	0.538	STD ERR	0.103	MEDIAN	0.571
[illegible]	1.333	STD DEV	2.503	VARIANCE	6.253
[illegible]	-2.153	SKEWNESS	-0.145	RANGE	1.923
[illegible]	2.772	[illegible]	1.250		

[illegible] 26 MISSING OBSER 0

[illegible]

V8 [illegible] RELIGIOUS AFFILIATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CU FR (P
[illegible]	0	18	46.2	85.7	85
[illegible]	1	3	7.7	14.3	100
	9	18	46.2	MISSING	
	TOTAL	39	100.0	100.0	

MEAN	0.143	STD ERR	0.087	MEDIAN	0.000
MODE	0.000	STD DEV	0.350	VARIANCE	0.123
KURTOSIS	1.486	SKEWNESS	1.826	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 21 MISSING CASES 18

COPY

V7 [illegible] FILTRATION KULLANIYI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FRE (PC
KULLANILMAMIŞTA	0	1	3.8	7.1	7.
KULLANILMIŞTA	1	13	50.0	92.9	100.
	9	12	46.2	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.929	STD ERR	0.071	MEDIAN	1.000
MODE	1.000	STD DEV	0.267	VARIANCE	0.071
KURTOSIS	7.412	SKEWNESS	-3.979	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 14 MISSING CASES 12

[illegible]

[illegible] FOR [illegible] BY [illegible] KULL

[illegible] LEVEL	CODE	ABSOLUTE FREQ.	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT
[illegible]	0	9	34.6	34.6	34.6
[illegible]	1	5	19.2	19.2	53.8
	9	12	46.2	MISSING	
	TOTAL	26	100.0	100.0	

[illegible]	0.357	STD ERR	0.133	MEDIAN	-0.423
[illegible]	0.363	STD DEV	2.457	VARIANCE	0.847
[illegible]	-1.821	SKEWNESS	0.834	RANGE	1.000
[illegible]	0.040	KURTOSIS	1.208		

[illegible] [illegible] 14 [illegible] [illegible] 12

[illegible]

[illegible]

[illegible]	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
[illegible]LLANILYAKTA	3	10	38.5	71.4	71.4
[illegible]LLANILYAKTA	1	4	15.4	28.6	100.0
	9	12	46.2	MISSING	
	TOTAL	26	100.0	100.0	

[illegible]	3.857	STD ERR	0.165	MODE	3.750
[illegible]	0.355	STD DEV	0.469	VARIANCE	0.220
[illegible]	1.000	SKEWNESS	0.043	SUM	11.000
[illegible]	3.000	KURTOSIS	-1.333		

[illegible] DATA 4 [illegible] 1 SPEC 9

DY

EGITIS BOLUMDE BILGISAYAR KULL

...TRY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
...AYILMAMAKTA	0	11	42.3	78.6	78.6
...AYILMAKTA	1	3	11.5	21.4	100.0
	9	12	46.2	MISSING	
	TOTAL	26	100.0	100.0	

...N	0.214	STD ERR	0.114	MEDIAN	-1.333
...E	0.000	STD DEV	0.426	VARIANCE	0.181
...TOSIS	-0.466	SKEWNESS	1.246	RANGE	1.000
...IMUM	0.000	MAXIMUM	1.000		

...ID CASES 14 MISSING CASES 12

E-DAY

SATISFIED HOLLYROSE BILSERVAR NULLANIMA

ATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT
ULLANILMAYAKTA	2	13	52.0	92.9	92.9
ULLANILMAKTA	1	1	3.8	7.1	100.0
"	9	12	46.2	MISSING	
	TOTAL	25	100.0	100.0	

IAN	2.771	STD ERR	0.071	MEDIAN	2.000
DE	2.000	STD DEV	0.267	VARIANCE	0.071
URTOSIS	7.433	SKEWNESS	2.978	RANGE	1.000
INIMUM	2.000	MAXIMUM	3.000		

ALID CASES 14 MISSING CASES 12

FAMILY

V10 BOLUŞDAYKƏDƏN YARARLANIR SORUSU

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
HƏR YARAR	1	4	15.4	28.6	28.6
BƏZI ZAM	2	8	30.8	57.1	85.7
BƏZI KƏSİR	3	2	7.7	14.3	100.0
	9	12	46.2	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	1.857	STD ERR	0.177	MEDIAN	1.375
MODE	2.222	STD DEV	0.663	VARIANCE	0.440
KURTOSIS	-0.333	SKEWNESS	0.120	RANGE	2.000
VALID CASES	14	MAXIMUM	3.000		

MISSING CASES 12 VALID CASES 14

V14 KOSAR VER. FON OKIY TAB. KULLANIMI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
KULLANILMAKTA	0	12	46.2	50.0	50.0
KULLANILMAKTO	1	12	46.2	50.0	100.0
	9	2	7.7	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.500	STD ERR	0.104	MEDIAN	0.000
MODE	0.000	STD DEV	0.511	VARIANCE	0.261
KURTOSIS	-2.182	SKEWNESS	0.000	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 24 MISSING CASES 2

[illegible]

[illegible] VÄRLD VER. ERBERG ANG. KULLANIKI

[illegible]TEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
[illegible]ULLANILMÄNSKTA	3	17	85.4	70.8	70.8
[illegible]ULLANILYSKTA	1	7	35.0	29.2	100.0
	9	2	7.7	MISSING	
	TOTAL	30	100.0	100.0	

[illegible]EAN	2.292	STD ERR	0.085	MEDIAN	3.000
[illegible]ODE	3.000	STD DEV	0.464	VARIANCE	0.215
[illegible]URTOSIS	-1.313	SKEWNESS	1.650	RANGE	1.000
[illegible]INIMUM	2.000	MAXIMUM	3.000		

[illegible]ALID CASES 24 [illegible]SSING CASES 6

COPY

V16 KARAA VEN. ORAN PKR. KULLANTYI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
KULLANILMAMAKTA"	2	9	34.6	37.5	37.5
KULLANILMAKTA	1	15	57.7	62.5	100.0
	9	2	7.7	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.625	STD ERR	0.104	MEDIAN	0.833
MODE	1.000	STD DEV	0.455	VARIANCE	0.345
KURTOSIS	-1.527	SKEWNESS	-0.484	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 24 MISSING CASES 2

HAPPY

V17 SOSYAL VE DEGISKEN YASAM AYIRIMI

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YAPILMAMAKTA	0	13	50.0	50.0	50.0
YAPILMAKTA	1	13	50.0	50.0	100.0
	TOTAL	26	100.0	100.0	

MEAN	1.500	STD ERR	0.100	MEDIAN	0.000
MODE	0.000	STD DEV	0.512	VARIANCE	0.260
KURTOSIS	-2.070	SKEWNESS	0.000	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 26 MISSING CASES 0

RRAY

18 ORBIT VE DEBIBKEN MAGRAF AYARIN SEKLI

ATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
UKU	1	8	30.8	61.5	61.5
SOLUK SABIT	2	3	11.5	23.1	84.6
AY. DEBIBKEN	3	2	7.7	15.4	100.0
	9	13	50.0	MISSING	
	TOTAL	26	100.0	100.0	

AN	1.833	STD ERR	0.618	MEDIAN	2.000
DE	1.000	STD DEV	2.770	VARIANCE	2.538
OSIS	-2.000	SKEWNESS	1.173	RANGE	2.000
SIS	1.000	MAXIMUM	3.000		

ALID CASES 13 MISSING CASES 13

LASSY

[illegible] NPR. DISTRIBUTIONS OF VARIABLES

CATEGORY LABEL	CODE	FREQUENCY	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
[illegible]	0	15	57.7	57.7	57.7
[illegible]	1	11	42.3	42.3	100.0
	TOTAL	26	100.0	100.0	

MEAN	0.423	STD ERR	0.095	MEDIAN	-0.162
MODE	0.000	STD DEV	0.504	VARIANCE	0.254
KURTOSIS	-1.585	SKEWNESS	0.294	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 26 MISSING CASES 0

COPY

V82 MALI RSP. UZUN DONEM PLANLARA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
DEGIL	0	15	57.7	60.0	60.0
YARDIMCI	1	10	38.5	40.0	100.0
	9	1	3.8	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	2.400	STD ERR	0.100	MEDIAN	-0.000
MODE	0.000	STD DEV	0.500	VARIANCE	0.250
KURTOSIS	-1.925	SKEWNESS	0.334	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 25 MISSING CASES 1

HAPPY

V31 VALI REP. KISP DONER PLANLAYA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FRE (PC
DEGIL	0	5	19.2	20.0	20.
YERDIMCI	1	20	76.9	80.0	100.
	9	1	3.8	MISSING	
	TOTAL	25	100.0	100.0	

MEAN	0.800	STD ERR	0.082	MEDIAN	1.000
MODE	1.000	STD DEV	0.408	VARIANCE	0.167
KURTOSIS	-2.250	SKEWNESS	-1.414	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 25 MISSING CASES 1

HARPY

V22 YALI KOP. FIYATLANDIRMA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
DEBIL	0	3	11.5	12.0	12.0
YARDIMCI	1	22	84.6	88.0	100.0
	9	1	3.8	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.880	STD ERR	0.206	MEDIAN	0.400
MODE	1.000	STD DEV	2.032	VARIANCE	3.113
KURTOSIS	8.962	SKEWNESS	-2.822	RANGE	1.200
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 25 MISSING CASES 1

HOBBY

V82 VALID RSP. BETIN ALMA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
DEBIL	0	17	65.4	68.0	68.0
VARDIMDI	1	8	30.8	32.0	100.0
	9	1	3.8	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.320	STD ERR	0.305	MEDIAN	-2.513
MODE	0.320	STD DEV	2.476	VARIANCE	6.127
KURTOSIS	-1.532	SKEWNESS	3.725	RANGE	1.760
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 25 MISSING CASES 1

FAPPY

VGA KALI RAPOR YATIRIM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
EVET	0	17	65.4	68.0	68.0
HAYIR	1	8	30.8	32.0	100.0
	9	1	3.8	MISSING	
	TOTAL	26	100.0	100.0	

MEAN	0.320	STD ERR	0.095	MEDIAN	0.000
MODE	0.000	STD DEV	0.476	VARIANCE	0.227
KURTOSIS	-1.530	SKEWNESS	0.726	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 25 MISSING CASES 1

VARIABLE SIR. FOGL. OSSERVAZIONI CODE 845

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
MULLANILYAKTA	0	1	3.8	3.8	3.8
MULLANILYAKTA	1	25	96.2	96.2	100.0
	TOTAL	26	100.0	100.0	

MEAN	0.962	STD ERR	0.038	MEDIAN	0.450
MODE	1.000	STD DEV	0.196	VARIANCE	0.038
KURTOSIS	19.226	SKEWNESS	-4.526	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 26 MISSING CASES 0

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ANZDY

V26 SIR. FRÆL. DISERLENDIRYEDE K+Z

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
[illegible]	0	1	3.8	3.8	3.8
[illegible]	1	25	96.2	96.2	100.0
	TOTAL	26	100.0	100.0	

MEAN	0.962	STD ERR	0.038	MEDIAN	1.000
MODE	1.000	STD DEV	0.196	VARIANCE	0.038
KURTOSIS	19.385	SKEWNESS	-4.526	RANGE	1.000
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 26 MISSING CASES 0

COPY

VET SIR, FALL, DEBRISWINDSPEED FOR AKIY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
MILLIMETAMORPHIC	2	16	61.5	61.5	61.5
[illegible]	1	12	38.5	38.5	100.0
	TOTAL	28	100.0	100.0	

MEAN	0.385	STD ERR	0.187	MEDIAN	-0.500
VAR	2.923	STD DEV	1.709	VARIANCE	2.919
SKEWNESS	-1.887	KURTOSIS	2.447	RANGE	4.000
SUM WGTS	26.000	MISSING	1.032		

VALID CASES 26 MISSING CASES 0

HOBBY

V86 BIR. TABL. DESSERLEKOEKJES DRA

VALUE LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NOOIT/NIET/NOOIT	2	17	65.4	65.4	65.4
NOOIT/NIET	1	9	34.6	34.6	100.0
	TOTAL	26	100.0	100.0	

MEAN	1.346	STD ERR	0.265	MEDIAN	1.444
MODE	1.000	STD DEV	0.485	VARIANCE	0.235
KURTOSIS	-1.885	SKEWNESS	0.610	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID CASES 26 MISSING CASES 0

LEEPY

V22 BAR. FAAL. DEELSLENDIRMEDE BUTDE=SYLIK

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NULLENILMAKYTA	0	22	84.6	84.6	84.6
KULLENILMAKYTA	1	4	15.4	15.4	100.0
	TOTAL	26	100.0	100.0	

MEAN	0.154	STD ERR	0.272	MEDIAN	-0.051
MODE	0.000	STD DEV	0.388	VARIANCE	0.150
KURTOSIS	1.329	SKEWNESS	1.805	RANGE	1.272
MINIMUM	0.000	MAXIMUM	1.000		

VALID CASES 26 MISSING CASES 0

17547 BYTES OF MEMORY FREE

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-$RUN

  46  OPTION          STATISTICS
  47  ENTRY

RUN COMPLETED

NUMBER OF CONTROL CARDS READ   47
NUMBER OF ERRORS DETECTED  0

-$)
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APPENDIX B

JOINT FREQUENCY DISTRIBUTION

Joint frequency distribution is performed for the following pairs of variables.

(1) Sales groups by income level (V1-V2).

(2) Sales groups by investment expenditure (V1-V3).

(3) Sales groups by the usage of sources and uses statement in managerial decision making (V1-V14).

(4) Sales groups by the usage of breakeven analysis in managerial decision making (V1-V15).

(5) Sales groups by the usage of ratio analysis in managerial decision making (V1-V16).

(6) Sales groups by the classification of costs as variable and fixed costs in the cost accounting systems (V1-V17).

(7) Sales groups by the type of classification of costs as fixed and variable (V1-V18).

(8) Sales groups by the application of variable cost accounting in financial internal reporting (V1-V19).

(9) Sales groups by the usefulness of balance sheet and income statement in long-term planning (V1-V20).

(10) Sales groups by the usefulness of balance sheet and income statement in short-term planning (V1-V21).

(11) Sales groups by the usefulness of balance sheet and income statement in pricing decisions (V1-V22).

(12) Sales groups by the usefulness of balance sheet and income statement in purchasing decisions (V2-V23).

(13) Sales groups by the usefulness of balance sheet and income statement in investment decisions (V1-V24).

(14) Sales groups by the usage of balance sheet in evaluating the operations of the company (V1-V25).

(15) Sales groups by the usage of income statement in evaluating the operations of the company (V1-V26).

(16) Sales groups by the usage of sources and uses statement in evaluating the operations of the company (V1-V27).

(17) Sales groups by the usage of ratio analysis in evaluating the operations of the company (V1-V28).

(18) Sales groups by the usage of monthly budget compared reports in evaluating the operations of the company (V1-V29).

(19) Income level by investment expenditure (V2-V3).

(20) Income level by the usage of sources and uses statement in managerial decision making (V2-V14).

(21) Income level by the usage of breakeven analysis in managerial decision making (V2-V15).

(22) Income level by the usage of ratio analysis in managerial decision making (V2-V16).

(23) Income level by the classification of costs as variable and fixed costs in the cost accounting systems (V2-V17).

(24) Income level by the type of classification of costs as fixed and variable (V2-V17).

(25) Income level by the application of variable cost accounting in financial internal reporting (V2-V19).

(26) Income level by the usefulness of balance sheet and income statement in long-term planning (V2-V20).

(27) Income level by the usefulness of balance sheet and income statement in short-term planning (V2-V21).

(28) Income level by the usefulness of balance sheet and income statement in pricing decisions (V2-V22).

(29) Income level by the usefulness of balance sheet and income statement in purchasing decisions (V2-V23).

(30) Income level by the usefulness of balance sheet and income statement in investment decisions (V2-V24).

(31) Income level by the usage of balance sheet in evaluating the operations of the company (V2-V25).

(32) Income level by the usage of income statement in evaluating the operations of the company (V2-V26).

(33) Income level by the usage of sources and uses statement in evaluating the operations of the company (V2-V27).

(34) Income level by the usage of ratio analysis in evaluating the operations of the company (V2-V28).

(35) Income level by the usage of monthly budget compared reports in evaluating the operations of the company (V2-V29).

(36) The usage of computer in the operations of the company by the classification of costs as variable and fixed costs in the cost accounting system (V5-V17).

(37) The usage of computer in the operations of the company by the application of variable cost accounting in financial internal reporting (V5-V19).

(38) The usage of computer in the operations of the company by the usefulness of balance sheet and income statement in long-term planning (V5-V20).

(39) The usage of computer in the operations of the company by the usefulness of balance sheet and income statement in short-term planning (V5-V21).

(40) The usage of computer in the operations of the company by the usefulness of balance sheet and income statement in pricing decisions (V5-V22).

(41) The usage of computer in the operations of the company by the usefulness of balance sheet and income statement in purchasing decisions (V5-V23).

(42) The usage of computer in the operations of the company by the usefulness of balance sheet and income statement in investment decisions (V5-V24).

(43) The usage of computer in the operations of the company by the usage of balance sheet in evaluating the operations of the company (V5-V25).

(44) The usage of computer in the operations of the company by the usage of income statement in evaluating the operations of the company (V5-V26).

(45) The usage of computer in the operations of the company by the usage of sources and uses statement in evaluating the operations of the company (V5-V27).

(46) The usage of computer in the operations of the company by the usage of ratio analysis in evaluating the operations of the company (V5-V28).

(47) The usage of computer in the operations of the company by the usage of monthly budget compared reports in evaluating the operations of the company (V5-V29).

(48) The frequency of the preparation of balance sheet and income statement by the classification of costs as variable and fixed costs in the cost accounting systems (V13-V17).

(49) The frequency of the preparation of balance sheet and income statement by the application of variable cost accounting in financial internal reporting (V13-V19).

(50) The frequency of the preparation of balance sheet and income statement by the usefulness of balance sheet and

income statement in long-term planning (V13-V20).

(51) The frequency of the preparation of balance sheet and income statement by the usefulness of balance sheet and income statement in short-term planning (V13-V21).

(52) The frequency of the preparation of balance sheet and income statement by the usefulness of balance sheet and income statement in pricing decisions (V13-V22).

(53) The frequency of the preparation of balance sheet and income statement by the usefulness of balance sheet and income statement in purchasing decisions (V13-V23).

(54) The frequency of the preparation of balance sheet and income statement by the usefulness of balance sheet and income statement in investment decisions (V13-V24).

(55) The frequency of the preparation of balance sheet and income statement by the usage of balance sheet in evaluating the operations of the company (V13-V25).

(56) The frequency of the preparation of balance sheet and income statement by the usage of income statement in evaluating the operations of the company (V13-V26).

(57) The frequency of the preparation of balance sheet and income statement by the usage of sources and uses statement in evaluating the operations of the company (V13-V27).

(58) The frequency of the preparation of balance sheet and income statement by the usage of ratio analysis in evaluating the operations of the company (V13-V28).

(59) The frequency of the preparation of balance sheet and income statement by the usage of monthly budget compared reports in evaluating the operations of the company (V13-V29).

(60) The usage of sources and uses statement in managerial decision making by the application of variable cost accounting in financial internal reporting (V14-V19).

(61) The usage of breakeven analysis in managerial decision making by the application of variable cost accounting in financial internal reporting (V15-V19).

(62) The usage of ratio analysis in managerial decision making by the application of variable cost accounting in financial internal reporting (V16-V19).

(63) The classification of costs as variable and fixed costs in the cost accounting systems by the application of variable cost accounting in financial internal reporting (V17-V19).

(64) The classification of costs as variable and fixed costs in the cost accounting systems by the usefulness of balance sheet and income statement in long-term planning (V17-V20).

(65) The classification of costs as variable and fixed costs in the cost accounting systems by the usefulness of balance sheet and income statement in short-term planning (V17-V21).

(66) The classification of costs as variable and fixed costs in the cost accounting systems by the usefulness of balance sheet and income statement in pricing decisions (V17-V22).

(67) The classification of costs as variable and fixed costs in the cost accounting systems by the usefulness of balance sheet and income statement in purchasing decisions (V17-V23).

(68) The classification of costs as variable and fixed costs in the cost accounting systems by the usefulness of balance sheet and income statement in investment decisions (V17-V24).

(69) The classification of costs as variable and fixed costs in the cost accounting systems by the usage of balance sheet in evaluating the operations of the company (V17-V25).

(70) The classification of costs as variable and fixed costs in the cost accounting systems by the usage of income statement in evaluating the operations of the company (V17-V26).

(71) The classification of costs as variable and fixed costs in the cost accounting systems by the usage of sources and uses statement in evaluating the operations of the company (V17-V27).

(72) The classification of costs as variable and fixed costs in the cost accounting systems by the usage of ratio analysis in evaluating the operations of the company (V17-V28).

(73) The classification of costs as variable and fixed costs in the cost accounting systems by the usage of monthly budget compared reports in evaluating the operations of the company (V17-V29).

(74) The type of classification of costs as fixed and variable by the application of variable cost accounting in financial internal reporting (V18-V19).

(75) The application of variable cost accounting in financial internal reporting by the usefulness of balance sheet and income statement in long-term planning (V19-V20).

(76) The application of variable cost accounting in financial internal reporting by the usefulness of balance sheet and income statement in short-term planning (V19-V21).

(77) The application of variable cost accounting in financial internal reporting by the usefulness of balance sheet and income statement in pricing decisions (V19-V22).

(78) The application of variable cost accounting in financial internal reporting by the usefulness of balance sheet and income statement in purchasing decisions (V19-V23).

(79) The application of variable cost accounting in financial internal reporting by the usefulness of balance sheet and income statement in investment decisions (V19-V24).

(80) The application of variable cost accounting in financial internal reporting by the usage of balance sheet in evaluating the operations of the company (V19-V25).

(81) The application of variable cost accounting in financial internal reporting by the usage of income statement in evaluating the operations of the company (V19-V26).

(82) The application of variable cost accounting in financial internal reporting by the usage of sources and uses statement in evaluating the operations of the company (V19-V27).

(83) The application of variable cost accounting in financial internal reporting by the usage of ratio analysis in evaluating the operations of the company (V19-V28).

(84) The application of variable cost accounting in financial internal reporting by the usage of monthly budget compared reports in evaluating the operations of the company (V19-V29).

(85) The performance in profit over assets ratio by the usage of computer in the operations of the company (V41-V5).

(86) The performance in profit over assets ratio by the frequency of the preparation of balance sheet and income statement (V41-V13).

(87) The performance in profit over assets ratio by the usage of sources and uses statement in managerial decision making (V41-V14).

(88) The performance in profit over assets ratio by the usage of breakeven analysis in managerial decision making (V41-V15).

(89) The performance in profit over assets ratio by the usage of ratio analysis in managerial decision making (V41-V16).

(90) The performance in profit over assets ratio by the classification of costs as variable and fixed costs in the cost accounting systems (V41-V17).

(91) The performance in profit over assets ratio by the type of classification of costs as fixed and variable (V41-V18).

(92) The performance in profit over assets ratio by the application of variable cost accounting in financial internal reporting (V41-V19).

(93) The performance in profit over assets ratio by the usefulness of balance sheet and income statement in long-term planning (V41-V20).

(94) The performance in profit over assets ratio by the usefulness of balance sheet and income statement in short term planning (V41-V21).

(95) The performance in profit over assets ratio by the usefulness of balance sheet and income statement in pricing decisions (V41-V22).

(96) The performance in profit over assets ratio by the usefulness of balance sheet and income statement in purchasing decisions (V41-V23).

(97) The performance in profit over assets ratio by the usefulness of balance sheet and income statement in investment decisions (V41-V24).

(98) The performance in profit over assets ratio by the usage of balance sheet in evaluating the operations of the company (V41-V25).

(99) The performance in profit over assets ratio by the usage of income statement in evaluating the operations of the company (V41-V26).

(100) The performance in profit over assets ratio by the usage of sources and uses statement in evaluating the operations of the company (V41-V27).

(101) The performance in profit over assets ratio by the usage of ratio analysis in evaluating the operations of the company (V41-V28).

(102) The performance in profit over assets ratio by the usage of monthly budget compared reports in evaluating the operations of the company (V41-V29).

(103) The performance in profit over capital stock ratio by the usage of computer in the operations of the company (V61-V5).

(104) The performance in profit over capital stock ratio by the frequency of the preparation of balance sheet and in-

come statement (V61-V13).

(105) The performance in profit over capital stock ratio by the usage of sources and uses statement in managerial decision making (V61-V14).

(106) The performance in profit over capital stock ratio by the usage of breakeven analysis in managerial decision making (V61-V15).

(107) The performance in profit over capital stock ratio by the usage of ratio analysis in managerial decision making (V61-V16).

(108) The performance in profit over capital stock ratio by the classification of costs as variable and fixed costs in the cost accounting systems (V61-V17).

(109) The performance in profit over capital stock ratio by the type of classification of costs as fixed and variable (V61-V18).

(110) The performance in profit over capital stock ratio by the application of variable cost accounting in financial internal reporting (V61-V19).

(111) The performance in profit over capital stock ratio by the usefulness of balance sheet and income statement in long-term planning (V61-V20).

(112) The performance in profit over capital stock ratio by the usefulness of balance sheet and income statement in short-term planning (V61-V21).

(113) The performance in profit over capital stock ratio by the usefulness of balance sheet and income statement in pricing decisions (V61-V22).

(114) The performance in profit over capital stock ratio by the usefulness of balance sheet and income statement in purchasing decisions (V61-V23).

(115) The performance in profit over capital stock ratio by the usefulness of balance sheet and income statement in investment decisions (V61-V24).

(116) The performance in profit over capital stock ratio by the usage of balance sheet in evaluating the operations of the company (V61-V25).

(117) The performance in profit over capital stock ratio by the usage of income statement in evaluating the operations of the company (V61-V26).

(118) The performance in profit over capital stock ratio by the usage of sources and uses statement in evaluating the operations of the company (V61-V27).

(119) The performance in profit over capital stock ratio by the usage of ratio analysis in evaluating the operations of the company (V61-V28).

(120) The performance in profit over capital stock ratio by the usage of monthly budget compared reports in evaluating the operations of the company (V61-V29).

(121) The performance in profit over sales ratio by the usage of computer in the operations of the company (V71-V5).

(122) The performance in profit over sales ratio by the frequency of the preparation of balance sheet and income statement (V71-V13).

(123) The performance in profit over sales ratio by the usage of sources and uses statement in managerial decision making (V71-V14).

(124) The performance in profit over sales ratio by the usage of breakeven analysis in managerial decision making (V71-V15).

(125) The performance in profit over sales ratio by the usage of ratio analysis in managerial decision making (V71-V16).

(126) The performance in profit over sales ratio by the classification of costs as variable and fixed costs in the cost accounting systems (V71-V17).

(127) The performance in profit over sales ratio by the type of classification of costs as fixed and variable (V71-V18).

(128) The performance in profit over sales ratio by the application of variable cost accounting in financial internal reporting (V71-V19).

(129) The performance in profit over sales ratio by the usefulness of balance sheet and income statement in long-term planning (V71-V20).

(130) The performance in profit over sales ratio by the usefulness of balance sheet and income statement in short-term planning (V71-V21).

(131) The performance in profit over sales ratio by the usefulness of balance sheet and income statement in pricing decisions (V71-V22).

(132) The performance in profit over sales ratio by the usefulness of balance sheet and income statement in purchasing decisions (V71-V23).

(133) The performance in profit over sales ratio by the usefulness of balance sheet and income statement in invest-

ment decisions (V71-V24).

(134) The performance in profit over sales ratio by the usage of balance sheet in evaluating the operations of the company (V71-V25).

(135) The performance in profit over sales ratio by the usage of income statement in evaluating the operations of the company (V71-V26).

(136) The performance in profit over sales ratio by the usage of sources and uses statement in evaluating the operations of the company (V71-V27).

(137) The performance in profit over sales ratio by the usage of ratio analysis in evaluating the operations of the company (V71-V28).

(138) The performance in profit over sales ratio by the usage of monthly budget compared reports in evaluating the operations of the company (V71-V29).

(139) The performance in sales over assets ratio by the usage of computer in the operations of the company (V81-V5).

(140) The performance in sales over assets ratio by the frequency of the preparation of balance sheet and income statement (V81-V13).

(141) The performance in sales over assets ratio by the usage of sources and uses statement in managerial decision making (V81-V14).

(142) The performance in sales over assets ratio by the usage of breakeven analysis in managerial decision making (V81-V15).

(143) The performance in sales over assets ratio by the usage of ratio analysis in managerial decision making (V81-V16).

(144) The performance in sales over assets ratio by the classification of costs as variable and fixed costs in the cost accounting systems (V81-V17).

(145) The performance in sales over assets ratio by the type of classification of costs as fixed and variable (V81-V18).

(146) The performance in sales over assets ratio by the application of variable cost accounting in financial internal reporting (V81-V19).

(147) The performance in sales over assets ratio by the usefulness of balance sheet and income statement in long-term planning (V81-V20).

(148) The performance in sales over assets ratio by the usefulness of balance sheet and income statement in short-term planning (V81-V21).

(149) The performance in sales over assets ratio by the usefulness of balance sheet and income statement in pricing decisions (V81-V22).

(150) The performance in sales over assets ratio by the usefulness of balance sheet and income statement in purchasing decisions (V81-V23).

(151) The performance in sales over assets ratio by the usefulness of balance sheet and income statement in investment decisions (V81-V24).

(152) The performance in sales over assets ratio by the usage of balance sheet in evaluating the operations of the company (V81-V25).

(153) The performance in sales over assets ratio by the usage of income statement in evaluating the operations of

the company (V81-V26).

(154) The performance in sales over assets ratio by the usage of sources and uses statement in evaluating the operations of the company (V81-V27).

(155) The performance in sales over assets ratio by the usage of ratio analysis in evaluating the operations of the company (V81-V28).

(156) The performance in sales over assets ratio by the usage of monthly budget compared reports in evaluating the operations of the company (V81-V29).

(157) The performance in sales over capital stock ratio by the usage of computer in the operations of the company (V91-V5).

(158) The performance in sales over capital stock ratio by the frequency of the preparation of balance sheet and income statement (V91-V13).

(159) The perfomance in sales over capital stock ratio by the usage of sources and uses statement in managerial decision making (V91-V14).

(160) The performance in sales over capital stock ratio by the usage of breakeven analysis in managerial decision making (V91-V15).

(161) The performance in sales over capital stock ratio by the usage of ratio analysis in managerial decision making (V91-V16).

(162) The performance in sales over capital stock ratio by the classification of costs as variable and fixed costs in the cost accounting systems (V91-V17).

(163) The performance in sales over capital stock ratio by the type of classification of costs as fixed and variable (V91-V18).

(164) The performance in sales over capital stock ratio by the application of variable cost accounting in financial internal reporting (V91-V19).

(165) The performance in sales over capital stock ratio by the usefulness of balance sheet and income statement in long-term planning (V91-V20).

(166) The performance in sales over capital stock ratio by the usefulness of balance sheet and income statement in short-term planning (V91-V21).

(167) The performance in sales over capital stock ratio by the usefulness of balance sheet and income statement in pricing decisions (V91-V22).

(168) The performance in sales over capital stock ratio by the usefulness of balance sheet and income statement in purchasing decisions (V91-V23).

(169) The performance in sales over capital stock ratio by the usefulness of balance sheet and income statement in investment decisions (V91-V24).

(170) The performance in sales over capital stock ratio by the usage of balance sheet in evaluating the operations of the company (V91-V25).

(170) The performance in sales over capital stock ratio by the usage of income statement in evaluating the operations of the company (V91-V26).

(172) The performance in sales over capital stock ratio by the usage of sources and uses statement in evaluating the

operations of the company (V91-V27).

(173) The performance in sales over capital stock ratio by the usage of ratio analysis in evaluating the operations of the company (V91-V28).

(174) The performance in sales over capital stock ratio by the usage of monthly budget compared reports in evaluating the operations of the company (V91-V29).

TABLE 6

JOINT FREQUENCY DISTRIBUTIONS

PAIR OF VARIABLES	CHI-SQUARE	DEGREES OF FREEDOM	LEVEL OF CONFIDENCE (%)
V1-V2	39.7789	16	100
V1-V3	32.7321	20	96
V1-V14	2.6667	4	39
V1-V15	5.5261	4	76
V1-V16	4.8711	4	69
V1-V17	8.0909	4	91
V1-V18	3.0153	6	20
V1-V19	5.6703	4	77
V1-V20	7.7083	4	90
V1-V21	3.0208	4	44
V1-V22	5.1136	4	72
V1-V23	4.0135	4	58
V1-V24	3.0944	4	45
V1-V25	1.4182	4	16
V1-V26	1.4182	4	16
V1-V27	5.3231	4	74
V1-V28	4.7788	4	67
V1-V29	2.5472	4	36
V2-V3	25.1230	20	79
V2-V14	3.3333	4	50
V2-V15	5.1765	4	72
V2-V16	0.6519	4	4
V2-V17	5.7576	4	77
V2-V18	4.3333	8	23
V2-V19	4.5840	4	65
V2-V20	10.3030	4	96
V2-V21	2.5095	4	35
V2-V22	2.4019	4	33
V2-V23	5.4548	4	75
V2-V24	0.8175	4	7
V2-V25	12.4800	4	98
V2-V26	1.4182	4	16
V2-V27	4.1068	4	59
V2-V28	1.2642	4	13
V2-V29	3.6529	1	65
V5-V17	5.5714	1	98
V5-V19	2.7351	1	90
V5-V20	1.3258	1	75
V5-V21	3.2873	1	93
V5-V22	4.3388	1	96
V5-V23	1.7236	1	79
V5-V24	0.2017	1	32
V5-V25	0.8914	1	65
V5-V26	1.2133	1	72
V5-V27	0.2476	1	35

(con'd)

PAIR OF VARIABLES	CHI-SQUARE	DEGREES OF FREEDOM	LEVEL OF CONFIDENCE (%)
V5-V28	3.1721	1	92
V5-V29	0.8512	1	61
V13-V17	3.7660	3	70
V13-V19	3.7157	3	69
V13-V20	3.0180	3	59
V13-V21	4.1699	3	75
V13-V22	4.4235	3	77
V13-V23	1.1081	3	22
V13-V24	4.9412	3	81
V13-V25	0.4051	3	6
V13-V26	0.4051	3	6
V13-V27	2.1759	3	27
V13-V28	2.9610	3	68
V13-V29	1.8519	3	39
V14-V19	0.1678	1	30
V15-V19	2.6077	1	89
V16-V19	0.9063	1	63
V17-V19	19.0667	1	100
V17-V20	2.1635	1	84
V17-V21	0.1603	1	29
V17-V22	0.4759	1	51
V17-V23	0.9910	1	65
V17-V24	0.5197	1	52
V17-V25	1.0400	1	67
V17-V26	1.0400	1	67
V17-V27	0.6500	1	56
V17-V28	1.5294	1	77
V17-V29	0.0000	1	0
V18-V19	1.4773	2	52
V19-V20	1.7316	1	79
V19-V21	0.6494	1	56
V19-V22	0.1574	1	29
V19-V23	1.7238	1	79
V19-V24	1.6341	1	78
V19-V25	0.7627	1	59
V19-V26	1.4182	1	76
V19-V27	0.3939	1	46
V19-V28	3.3462	1	93
V19-V29	0.1146	1	26
V41-V5	0.0038	1	6
V41-V13	3.7157	3	69
V41-V14	0.1778	1	30
V41-V15	1.6269	1	78
V41-V16	0.1067	1	25
V41-V17	0.1576	1	29
V41-V18	0.7609	2	31
V41-V19	1.1699	1	71
V41-V20	0.2435	1	35
V41-V21	0.0406	1	14

(con'd)

PAIR OF VARIABLES	CHI-SQUARE	DEGREES OF FREEDOM	LEVEL OF CONFIDENCE (%)
V41-V22	0.1574	1	29
V41-V23	1.6341	1	78
V41-V24	1.6341	1	78
V41-V25	0.7627	1	59
V41-V26	0.7627	1	59
V41-V27	1.0085	1	66
V41-V28	0.0257	1	12
V41-V29	2.0700	1	83
V61-V5	0.3482	1	42
V61-V13	2.9412	3	58
V61-V14	1.8151	1	80
V61-V15	3.7438	1	95
V61-V16	1.6269	1	78
V61-V17	0.0000	1	0
V61-V18	0.4815	2	51
V61-V19	0.2801	1	38
V61-V20	0.4902	1	52
V61-V21	0.4136	1	47
V61-V22	0.0028	1	6
V61-V23	1.7517	1	80
V61-V24	0.2649	1	37
V61-V25	0.4622	1	51
V61-V26	0.4622	1	51
V61-V27	0.8847	1	62
V61-V28	0.4720	1	51
V61-V29	0.8207	1	61
V71-V5	0.6190	1	55
V71-V13	2.3860	3	50
V71-V14	0.0000	1	0
V71-V15	1.8151	1	80
V71-V16	0.1778	1	30
V71-V17	0.1538	1	29
V71-V18	0.2579	2	12
V71-V19	0.4182	1	47
V71-V20	0.4274	1	47
V71-V21	0.1603	1	29
V71-V22	0.2938	1	39
V71-V23	0.5197	1	77
V71-V24	2.4934	1	88
V71-V25	1.0400	1	67
V71-V26	1.0400	1	67
V71-V27	0.0000	1	0
V71-V28	0.1699	1	30
V71-V29	1.1818	1	71
V81-V5	4.3385	1	96
V81-V13	3.0702	3	60
V81-V14	0.0000	1	0
V81-V15	0.6050	1	54
V81-V16	0.0593	1	18

(con'd)

PAIR OF VARIABLES	CHI-SQUARE	DEGREES OF FREEDOM	LEVEL OF CONFIDENCE (%)
V81-V17	0.8667	1	62
V81-V18	0.4815	2	51
V81-V19	1.8962	1	81
V81-V20	0.3289	1	41
V81-V21	0.8772	1	62
V81-V22	0.1628	1	30
V81-V23	0.8530	1	61
V81-V24	4.3602	1	96
V81-V25	0.3120	1	40
V81-V26	3.4667	1	93
V81-V27	0.4388	1	49
V81-V28	0.8157	1	60
V81-V29	0.0098	1	8
V91-V5	1.2424	1	73
V91-V13	3.6155	3	68
V91-V14	0.2017	1	32
V91-V15	0.0017	1	6
V91-V16	2.2723	1	85
V91-V17	0.0000	1	0
V91-V18	2.8287	2	75
V91-V19	0.1094	1	26
V91-V20	0.0306	1	13
V91-V21	2.9412	1	91
V91-V22	0.0028	1	6
V91-V23	0.1635	1	29
V91-V24	0.2649	1	37
V91-V25	0.4622	1	51
V91-V26	0.4622	1	51
V91-V27	0.6500	1	56
V91-V28	1.2084	1	72
V91-V29	0.8207	1	61

The values for the joint distribution of 174 pair of variables are shown in Table 6. The confidence level for each pair of variable is calculated with given the chi-square and degrees of freedom. The chance of having a higher chi-square for the related pair of variable is 100 per cent minus the corresponding level of confidence.

The null hypothesis in this analysis is that there is no relation between the variables in the pair. The confidence level of the pair indicates the level at which the hypothesis be rejected and accept that the variables are dependent. The general accepted level of confidence for statistical analysis purposes is 90 per cent or above.

Depending on the values and results of joint frequency distribution analysis and considering the objective of the research pearson correlation for selected pairs of variables is calculated and shown in Table 7.

The pairs of variables with a confidence level equal or more than 75 per cent are assumed to be systematically related with each other. These pairs are as follows:

(1) Sales groups and income level (V1-V2).

Companies in the highest sales level also belong to the highest income level. As the sales level decreases, the corresponding income level naturally decreases.

(2) Sales groups and investment expenditures (V1-V3).

Companies in high sales groups tend to spent more investment expenditures or companies with high investment expenditures tend to have more sales figure.

(3) Sales groups and the usage of breakeven analysis in managerial decision making (V1-V15).

The 66.6 per cent of the highest sales group companies use breakeven analysis in managerial decision making. As the level of sales decreases, the percentage of using the analysis decreases.

(4) Sales groups and the classification of costs as variable and fixed costs in the cost accounting systems (V1-V17).

All of the companies in the highest sales group and the 75 per cent of the companies in the next highest group classify the costs as fixed and variable. The 66.6 per cent of these companies classify all the costs in the cost accounting system.

(5) Sales groups and the application of variable cost accounting in financial internal reporting (V1-V19).

The 66.6 per cent of the companies in the highest sales group, the 75 per cent of the companies in the next sales group, and the 50 per cent of the companies in the middle sales group apply variable costing in internal reporting system. The 63.6 per cent of the companies in the low sales group and all of the companies in the lowest sales group do not apply the variable costing method.

(6) Sales group and the usefulness of balance sheet and income statement in long-term planning (V1-V20).

All of the companies in the highest sales group find balance sheet and income statement useful in long-term planning. But all of the next highest level companies find the reports unuseful in long-term planning.

(7) Income level and investment expenditures (V2-V3).

As the income level of the companies increase, the investment expenditures spent increase too.

(8) Income level and the classification of costs as variable and fixed costs in the cost accounting systems (V2-V17).

All of the companies in the highest income level, the 50 per cent of the companies in the next highest level, and the 54.5 per cent of middle income level classify costs as variable and fixed. The 83.3 per cent of the lowest income level do not classify costs as such.

(9) Income level and the usefulness of balance sheet and income statement in long-term planning (V2-V20).

All of the companies in the highest income level find these financial reports useful in long-term planning though all of them in the next highest level find unuseful.

(10) Income level and the usefulness of balance sheet and income statement in purchasing decisions (V2-V23).

The 71 per cent of the companies which do not use balance sheet and income statement in purchasing decisions have an income level of more than 500 million Turkish Liras. Seventy five per cent of the companies using the reports have an income less than 500 million Turkish Liras.

(11) Income level and the usage of balance sheet in evaluating the operations of the company (V2-V25).

All the sampled companies except one use balance sheet in evaluation of the company.

(12) The usage of computer in the operations of the company and the classification of costs as variable and fixed

costs in the cost accounting systems (V5-V17).

The 38.4 per cent of the companies use computer and classify costs as variable and fixed, the 34.6 per cent of the companies do not use computer and do not classify costs as variable and fixed. The 71.4 per cent of the computer using companies classify costs as such.

(13) The usage of computer in the operations of the company and the application of variable cost accounting in financial internal reporting (V5-V19).

The 57.1 per cent of the computer using companies apply variable costing and the 75 per cent of the companies that do not use computer do not apply variable costing in internal reporting either. The 72.7 per cent of the companies applying variable costing use computer in their operations.

(14) The usage of the computer in the operations of the company and the usefulness of balance sheet and income statement in long-term planning, in short-term planning, in pricing decisions, and in purchasing decisions (V5-V20/V21/V22/V23).

The 50 per cent of computer using companies find balance sheet and income statement useful in long-term planning, the 92.8 per cent find them useful in short-term planning, the 42.8 per cent find them useful in pricing decisions and the 35.7 per cent find them useful in purchasing decisions. The 70 per cent of the companies finding the reports useful in long-term planning, the 65 per cent of them finding the reports useful in short-term planning, the 63.6 per cent of them finding the reports useful in pricing decisions, and the 75 per cent of them finding the reports useful in purchasing decisions use computer in their operations.

With the usage of computer, the reports prepared become more useful in managerial decision making.

(15) The usage of computer in the operations of the company and the usage of ratio analysis in evaluating the operations of the company (V5-V28).

The 50 per cent of the companies using computer use ratio analysis in their analysis and the 83.3 per cent of the companies not using computer do not use the ratio analysis in the evaluation of the activities of the company. The 77.7 per cent of the companies using the ratio analysis also use computer in their operations.

(16) The frequency of the preparation of balance sheet and income statement and the usefulness of them in short-term and long-term planning (V13-V21/V22).

The 82.3 per cent of the companies preparing the reports monthly use the reports in short-term planning and the 94.1 per cent of the companies preparing the reports monthly use them in long-term planning. The 73.6 per cent of the companies finding the reports useful in short-term planning and the 76.1 per cent of the companies finding the reports useful in long-term planning prepare the reports monthly.

(17) The frequency of the preparation of balance sheet and income statement and the usefulness of them in investment decisions (V13-V24).

The companies using the reports in investment decision prepare them monthly. More than half of the companies which do not use balance sheet and income statement in investment decisions also prepare them monthly.

(18) The usage of breakeven analysis in managerial decision making and the application of variable cost accounting in financial internal reporting (V15-V19).

The 71.4 per cent of the companies which use breakeven technique in the decision making process apply variable costing in internal reporting. The 45.4 per cent of the companies applying variable costing method use breakeven analysis in their managerial decisions. The 64.7 per cent of the companies not applying variable costing do not use breakeven analysis either.

(19) The classification of costs as variable and fixed costs in the cost accounting systems and the application of variable costing method in internal reporting (V17-V19).

The 84.6 per cent of the companies that classify costs as variable and fixed apply variable cost accounting system in internal reporting.

(20) The classification of costs as variable and fixed costs in the cost accounting systems and the usefulness of balance sheet and income statement in long-term planning (V17-V20).

The 70 per cent of the companies finding the financial reports useful in long-term planning classify the costs as variable and fixed. The 53.8 per cent of the companies classifying costs as such find the reports useful in long-term planning. The 36 per cent of the sample size do not classify costs and do not find the reports useful in long-term planning.

(21) The classification of costs as variable and fixed costs and the usage of ratio analysis in evaluating the opera-

tions of the company (V17-V28).

The 66.6 per cent of the companies using ratio analysis in evaluation classify costs as variable and fixed. The 76.9 per cent of the companies that do not classify costs do not use ratio analysis in the evaluation of the activities of the company either.

(22) The application of variable cost accounting in financial internal reporting and the usefulness of balance sheet and income statement in long-term planning and investment decisions (V19-V20/V24).

The 54.5 per cent of the companies applying variable cost accounting find the reports useful in long-term planning. The 60 per cent of the companies finding the reports useful in long-term planning apply variable costing in internal reporting. The 71.4 per cent of the companies not applying variable costing do not find the reports useful in long-term planning. The 62.5 per cent of the companies finding the reports useful in investment decisions apply variable costing and the 78.5 per cent of the companies finding the reports unuseful in investment decisions do not apply variable costing.

(23) The application of variable cost accounting in financial internal reporting and the usefulness of balance sheet and income statement in purchasing decisions (V19-V23).

The 75 per cent of the companies finding the reports useful in purchasing decisions do not employ variable costing in internal reporting. On the contrary, the 52.9 per cent of companies which do not use the reports in purchasing decisions apply variable cost accounting.

(24) The application of variable cost accounting in internal reporting and the usage of income statement in evaluating the operations of the company (V19-V26).

All the companies which do not apply variable costing, use income statement in evaluation process. Almost all the sampled companies, except one, use income statement as an evaluation technique.

(25) The application of variable cost accounting in financial internal reporting and the usage of ratio analysis in evaluating the operations of the company (V19-V28).

The 66.6 per cent of the companies using ratio analysis apply variable costing and the 54.5 per cent of them applying variable costing use ratio analysis in evaluating the operations of the company.

(26) The performance in profit over assets ratio and the usage of breakeven analysis in managerial decision making (V41-V15).

The 80 per cent of the companies that increased their profit over assets ratio do not take advantage of the breakeven analysis. Moreover, the 70.5 per cent of the companies which do not use breakeven analysis have been able to increase their ratios in 1983.

(27) The performance in profit over assets ratio and the usefulness of balance sheet and income statement in purchasing and investing decisions (V41-V23/V24).

Balance sheet and income statement are not found useful by the 78.5 per cent of the companies which increased their profit over assets ratio in purchasing and investing decisions. Above all, the 62.5 per cent of the companies

finding the reports useful in purchasing and investing decisions decreased their ratios.

(28) The performance in profit over assets ratio and the usage of monthly budget compared reports in evaluating the operations of the company (V41-V29).

Only one out of the 26 sample companies use monthly budget compared report in evaluation and increased its profit over asset ratio. The companies which increased their ratios and do not use the monthly report in evaluation total up to the 53.8 per cent.

(29) The performance in profit over capital stock ratio and the usage of sources and uses statement and breakeven analysis in managerial decision making (V61-V14/V16).

The 83.3 per cent of the companies which use sources and uses statement and the 80 per cent of the companies which use breakeven analysis have increased their profit over capital stock ratios in 1983.

The 58.8 per cent of the companies that have increased their ratios use sources and uses statement in managerial decision making and the 70.5 per cent of them use breakeven analysis.

(30) The performance in profit over capital stock ratio and the usage of breakeven analysis in managerial decision making (V61-V15).

Nearly, the 80 per cent of the companies which increased their ratios do not use breakeven analysis. The companies which prefer to use breakeven analysis and increased their ratio total up to the 12.5 per cent of the sample size.

(31) The performance in profit over capital stock ratio and the usefulness of balance sheet and income statement in purchasing decisions (V61-V23).

Balance sheet and income statement are found useful in purchasing decisions from the 23.5 per cent of companies which increased their ratios. Half of the companies which decreased their ratios do not find the reports useful in purchasing decisions.

(32) The performance in profit over sales ratio and the usage of breakeven analysis in managerial decision making (V71-V15).

Breakeven analysis is used by the 41.6 per cent of the companies which decreased their ratios and on the contrary, the 16.6 per cent of the companies which increased their ratios use breakeven analysis in managerial decisions.

(33) The performance in profit over sales ratio and the usefulness of balance sheet and income statement in purchasing and investment decisions (V71-V23/V24).

Balance sheet and income statement are found useful by the 25 per cent of the companies which increased their ratios and the 38.4 per cent of the companies which decreased their ratios, in purchasing decisions. The reports are also found useful by the 16.6 per cent of the companies which increased their ratios and the 46.1 per cent of the companies which decreased their ratios, in investing decisions.

(34) The performance in sales over assets ratio and the usage of computer in the operations of the company (V81-V5).

The 92.8 per cent of computer using companies have performed in sales over assets ratio and the 50 per cent of

the sample have both increased the ratio and use computer in their operations.

(35) The performance in sales over assets ratio and the application of variable cost accounting in financial internal reporting (V81-V19).

Variable costing method is applied by the 35.0 per cent of the companies that increased their ratios and by the 66.6 per cent of them which decreased their ratios in 1983.

(36) The performance in sales over assets ratio and the usefulness of balance sheet and income statement in investment decisions (V81-V24).

The reports are found useful in investment decisions by the 21.0 per cent of the companies that increased their ratios and by the 66.6 per cent of them that decreased their ratios.

(37) The performance in sales over assets ratio and the usage of income statement in evaluating the operations of the company (V81-V26).

The 76.9 per cent of the sample have increased their performance ratio and use income statement in evaluation of the company's performance. All of the companies which have performed well in sales over assets ratio use income statement in evaluation process.

(38) The performance in sales over capital stock ratio and the usage of ratio analysis in managerial decision making (V91-V16).

Ratio analysis is used by the 52.9 per cent of the companies which increased their ratios and by the 85.7 per cent of them that decreased their ratio.

(39) The performance in sales over capital stock ratio and the type of classification of costs as fixed and variable (V91-V18).

The 75 per cent of the companies which classify all the costs as variable and fixed have increased their sales over capital stock ratios. The 66.6 per cent of the increased companies classify all the costs as such.

(40) The performance in sales over capital stock ratio and the usefulness of balance sheet and income statement in short-term planning (V91-V21).

All the companies which decreased their ratios use balance sheet and income statement in short-term planning. All the companies which do not find the reports useful in short-term planning have increased their ratios.

VI	CATTLE SUBLATE	BY	VS	ARE SUBLATE

ROW PCT COL PCT	1	2	3	4	5	ROW TOTAL
1	0	0	0	0	0	0
	1102.0	0.7	0.0	0.0	7.0	11.5
	1102.2	0.0	0.0	0.0	0.4	
	11.8	0.7	0.0	0.0	0.0	
2	0	1	4	0	0	4
	0.0	25.0	85.0	50.0	0.0	15.3
	0.0	50.0	5.3	50.0	0.0	
	0.0	3.0	3.0	7.0	0.0	
3	2	2	4	2	2	12
	7.7	0.2	30.0	2.0	0.0	15.3
	2.0	2.0	36.3	2.0	2.0	
	3.0	3.0	15.3	7.0	0.0	
4	3	1	4	2	4	11
	0.0	9.0	36.2	18.1	36.3	14.1
	0.0	50.0	36.3	50.0	66.0	
	0.0	3.0	15.3	7.5	15.3	
5	0	0	3	0	2	4
	1.0	1.2	50.0	0.1	50.7	15.3
	0.0	0.0	12.1	0.0	33.3	
	0.0	0.0	7.1	0.0	7.5	
COLUMN TOTAL	3	2	12	4	8	26
	11.5	7.1	42.3	15.3	23.2	100.0

[illegible] TABULATED UNITS. [illegible] OMITTED OR MISSED.
NUMBER OF MISSING OBSERVATIONS = 1

[illegible] TABLE LIMITED TO [illegible] OUT OF 45 CELLS FOR THIS RUN.
[illegible] BY SET BY [illegible]

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
V1          [illegible] GRUPLAMA                 BY  V14              [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                    V14
           COUNT   I
           ROW PCT IKULLAN  KULLAN       ROW
           COL PCT IILMAYA  ILMAKT      TOTAL
           TOT PCT I    0  I     1  I
V1         --------I--------I--------I
                 1 I     1  I     2  I     3
1M-                I  33.3  I  66.6  I   12.5
                   I   8.3  I  16.6  I
                   I   4.1  I   8.3  I
                   -I--------I--------I
                 2 I     1  I     3  I     4
1-2M               I  25.0  I  75.0  I   16.6
                   I   8.3  I  25.0  I
                   I   4.1  I  12.5  I
                   -I--------I--------I
                 3 I     3  I     1  I     4
5-10M              I  75.0  I  25.0  I   16.6
                   I  25.0  I   8.3  I
                   I  12.5  I   4.1  I
                   -I--------I--------I
                 4 I     5  I     5  I    10
2-5M               I  50.0  I  50.0  I   41.6
                   I  41.6  I  41.6  I
                   I  20.8  I  20.8  I
                   -I--------I--------I
                 5 I     2  I     1  I     3
20+                I  66.6  I  33.3  I   12.5
                   I  16.6  I   8.3  I
                   I   8.3  I   4.1  I
                   -I--------I--------I
            COLUMN      12       12       24
             TOTAL     50.0     50.0    100.0

RAW CHI SQUARE =     2.6667 WITH    4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS =      0

[illegible] OF [illegible] CELLS [illegible] ROW.
[illegible]
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V3 SPICE BAUTLAGE BY V3 VERTRIM BAUPLAN

V3

	COLMT ROW PCT / COL PCT / TOT PCT	10MN	1-5Y	1K-5ZO MN	12Z-5O ZMN	1ZZMN- YK		ROW TOTAL
		1	2	3	4	5	6	7
	1	1	1	2	1	0	0	3
		33.3	33.3	0.0	33.3	0.0	0.0	11.5
		100.0	100.0	0.0	14.2	0.0	0.0	
		3.8	3.8	7.7	3.8	0.0	0.0	
15-10Y	2	0	0	2	1	1	0	4
		0.0	0.0	50.0	25.0	25.0	0.0	15.3
		0.0	0.0	50.0	14.2	8.3	0.0	
		0.0	0.0	7.6	3.8	3.8	0.0	
5-10Y	3	0	0	1	2	3	1	6
		0.0	0.0	25.0	50.0	0.0	25.0	15.3
		0.0	0.0	25.0	28.5	0.0	100.0	
		0.0	0.0	3.8	7.6	3.8	3.8	
2-5Y	4	0	0	1	5	9	0	11
		0.0	0.0	9.0	18.1	72.7	0.0	42.3
		0.0	0.0	25.0	71.5	90.0	0.0	
		0.0	0.0	3.8	19.2	34.7	0.0	
2Y-	5	0	0	0	1	3	0	4
		0.0	0.0	0.0	25.0	75.0	0.0	15.3
		0.0	0.0	0.0	14.2	25.0	0.0	
		0.0	0.0	0.0	3.8	11.5	0.0	
	SPALTEN SUMME	1	1	4	7	12	1	26
	TOTAL	3.8	3.8	15.3	26.9	46.1	3.8	100.0

STAT STATISTIK = 21.7811 MIT 20 FREIHEITSGRADEN SIGNIFIKANZ =
NUMBER OF MISSING OBSERVATIONS = 2

.A ZELLE USED OF A MAXIMUM OF 45 ZELLS FÜR THIS RUN.
ZEILEN BYTES OF MEMORY FREE.

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 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
          SATIS GRUPLARI                    BY  V15          KARAR VER. SAATINE
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                    V15
          COUNT
          ROW PCT  KULLAN  KULLAN    ROW
          COL PCT  ILMAYA  ILMAKT   TOTAL
          TOT PCT      0       1
                  --------+--------+
                1 |     1 |     2 |     3
5-                |  33.3 |  66.7 |  12.5
                  |   5.9 |  28.6 |
                  |   4.2 |   8.3 |
                  +-------+-------+
                2 |     3 |     1 |     4
5-10Y             |  75.0 |  25.0 |  16.7
                  |  17.6 |  14.3 |
                  |  12.5 |   4.2 |
                  +-------+-------+
                3 |     4 |     0 |     4
-12Y              | 100.0 |   0.0 |  16.7
                  |  23.5 |   0.0 |
                  |  16.7 |   0.0 |
                  +-------+-------+
                4 |     6 |     4 |    10
-5Y               |  60.0 |  40.0 |  41.7
                  |  35.3 |  57.1 |
                  |  25.0 |  16.7 |
                  +-------+-------+
                5 |     3 |     0 |     3
                  | 100.0 |   0.0 |  12.5
                  |  17.6 |   0.0 |
                  |  12.5 |   0.0 |
                  +-------+-------+
          COLUMN      17       7      24
          TOTAL     70.8    29.2   100.0

 CHI SQUARE =     5.5261 WITH    4 DEGREES OF FREEDOM.
 R OF MISSING OBSERVATIONS =      0


 CELLS USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
 BYTES OF MEMORY FREE.
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[illegible]

V1 [illegible] BY V16 [illegible]

	V16		
	COLUMN		
ROW PCT	KULLAN	KULLAN	ROW
CELL PCT	ILNSKT	ILNSKT	TOTAL
TOT PCT	0	1	
V1 [illegible]			
	1	2	3
[illegible]	33.3	66.6	12.5
	11.1	13.3	
	4.1	8.3	
	2	4	6
[illegible]	0.0	100.0	15.6
	0.0	66.6	
	0.0	15.6	
	1	3	4
[illegible]	25.0	75.0	16.6
	11.1	20.0	
	4.1	12.5	
	6	4	10
[illegible]	58.3	40.0	41.6
	66.6	26.6	
	25.0	16.6	
	0	2	2
	33.3	66.6	16.6
	11.1	13.3	
	4.1	8.3	
COLUMN	9	15	24
TOTAL	37.5	62.5	100.0

[illegible] = [illegible] WITH [illegible] DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

9 CELLS USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY USED.

SPSS CROSSTABS BY V17 BABIT VS DESIGNER LABEL

V17

COUNT / ROW PCT / COL PCT / TOT PCT	YABIL 0	YABIL 1	ROW TOTAL
1	0	3	3
	0.0	100.0	11.5
	0.0	23.1	
	0.0	11.5	
2	1	3	4
	25.0	75.0	15.4
	7.7	23.1	
	3.8	11.5	
3	2	2	4
	57.1	50.0	15.4
	15.4	15.4	
	7.7	7.7	
4	6	5	11
	54.5	45.4	42.3
	46.1	38.4	
	23.1	19.2	
5	4	0	4
	100.0	0.0	15.4
	30.7	0.0	
	15.4	0.0	
COLUMN TOTAL	13	13	26
	50.0	50.0	100.0

CHI-SQUARE = 8.07692 WITH 4 DEGREES OF FREEDOM.
SIGNIFICANCE = 0.0890

WARNING: 1 OF 8 (12.5%) CELLS HAVE EXPECTED VALUES LESS THAN 5.
CHI-SQUARE MAY BE INVALID.

0 CASES (0.0 PCT) WERE MISSING FROM THE ANALYSIS.

1 OF 8 (12.5%) CELLS HAVE EXPECTED VALUES LESS THAN 5
MINIMUM EXPECTED CELL FREQUENCY = 1.923

USED OF 8 MAXIMUM OF 45 CELLS FOR THIS RUN.
BYTES OF MEMORY FREE.

```
[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
          ORTIS GRUPLARI              BY  V16          SABIT VE DEGISK
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                   V16
          COUNT
          ROW PCT  [illegible]   [illegible]  [illegible]    ROW
          COL PCT                 [illegible] [illegible]   TOTAL
          TOT PCT      1        2       3
V1        --------+--------+--------+--------+
                1 :      2 :      1 :      0 :      3
15%+              :   66.6 :   33.3 :    0.0 :   23.0
                  :   25.0 :   33.3 :    0.0 :
                  :   15.3 :    7.6 :    0.0 :
                 -+--------+--------+--------+
                2 :      2 :      0 :      1 :      3
15-10%            :   66.6 :    0.0 :   33.3 :   23.0
                  :   25.0 :    0.0 :   50.0 :
                  :   15.3 :    0.0 :    7.6 :
                 -+--------+--------+--------+
                3 :      1 :      1 :      0 :      2
5-10%             :   50.0 :   50.0 :    0.0 :   15.3
                  :   12.5 :   33.3 :    0.0 :
                  :    7.6 :    7.6 :    0.0 :
                 -+--------+--------+--------+
                4 :      3 :      1 :      1 :      5
0-5%              :   60.0 :   20.0 :   20.0 :   38.4
                  :   37.5 :   33.3 :   50.0 :
                  :   23.0 :    7.6 :    7.6 :
                 -+--------+--------+--------+
          COLUMN         8        3        2       13
          TOTAL       61.5     23.0     15.3    100.0

RAW CHI SQUARE =    2.2153 WITH    6 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS =     12

9 CELLS [illegible] OF 12 CELLS FOR THIS RUN.
[illegible]


[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
          ORTIS GRUPLARI              BY  V15          SAP. SISTEMINDE
```

V.S

COUNT / ROW PCT / COL PCT / TOT PCT	LYSELP	LYSALA	ROW TOTAL
1	1	3	4
	33.3	66.6	11.5
	5.6	16.7	
	2.9	7.6	
2	1	3	4
	25.7	75.0	15.3
	5.6	27.2	
	2.9	11.5	
3	2	2	4
	50.0	50.0	15.3
	11.1	16.7	
	7.6	7.6	
4	7	4	11
	63.6	36.3	42.3
	38.8	33.3	
	26.9	15.3	
5	7	4	11
	100.0	0.0	15.3
	38.8	0.0	
	15.3	0.0	
COLUMN TOTAL	18	16	26
	57.1	42.3	100.0

1 1 STUDENT = 5.9732 WITH 4 DEGREES OF FREEDOM.
LEVEL OF SIGNIFICANCE (TWO-TAIL) = 2

1 CELLS USED IN A MAXIMUM OF 45 CELLS FOR THIS RUN.
LEAST EXPECTED FREQUENCY

V2 BY V20 PAGE 007, ONLY 00

		V20		
	COUNT ROW PCT COL PCT TOT PCT	DEBIL 2	YARDIM 1	ROW TOTAL
V1				
15M+	1	0 0.0 0.0 0.0	3 100.0 30.0 12.0	3 12.0
10-15M	2	4 100.0 66.6 16.0	0 0.0 0.0 0.0	4 16.0
5-10M	3	2 50.0 13.3 8.0	2 50.0 20.0 8.0	4 16.0
0-5M	4	5 83.3 45.5 20.0	1 16.7 10.0 4.0	6 24.0
5M-	5	3 75.0 27.3 12.0	1 25.0 10.0 4.0	4 16.0
COLUMN TOTAL		15 60.0	10 40.0	25 100.0

D.F. = 4 CHI-SQUARE = 7.7083 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

8 CELLS HAVE EXPECTED FREQUENCY < 5.
MINIMUM EXPECTED FREQUENCY = 2.000

HAPPY

VE BATIS BRUPLARY BY VE KALI RAP. KISS DEN

	VE		
COUNT / COL PCT / TOT PCT	DEGIL	VARDIM	ROW TOTAL
	0	1	
1	1	2	3
	33.3	66.6	12.0
	20.0	10.0	
	4.0	8.0	
2	0	4	4
	0.0	100.0	16.0
	0.0	40.0	
	0.0	16.0	
3	0	4	4
	0.0	100.0	16.0
	0.0	40.0	
	0.0	16.0	
4	3	7	10
	30.0	70.0	40.0
	60.0	35.0	
	12.0	28.0	
5	1	3	4
	25.0	75.0	16.0
	20.0	15.0	
	4.0	12.0	
COLUMN TOTAL	5	20	25
	20.0	80.0	100.0

CHI-SQUARE = 7.1666 WITH 4 DEGREES OF FREEDOM.
MINIMUM EXPECTED FREQUENCY = 1

5 CELLS (OUT OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

SAMPLE BREAKDOWN BY VAR VAR1 SEX, FIVEYEA

VAR2

VAR	COLUMN ROW PCT COL PCT TOT PCT	DEGREE 2	YARDIN 2	ROW TOTAL
	1	1	3	
15Y+		0.0	100.0	10.0
		0.0	12.5	
		0.0	10.0	
	2	2	4	4
10-15Y		0.0	100.0	10.0
		0.0	10.1	
		0.0	10.0	
	3	2	4	4
5-10Y		0.0	100.0	10.0
		0.0	10.1	
		0.0	10.0	
	4	3	7	10
2-5Y		30.0	70.0	40.0
		37.5	31.8	
		10.0	20.0	
	5	2	4	4
2Y-		0.0	100.0	10.0
		0.0	10.1	
		0.0	10.0	
	COLUMN TOTAL	8 20.0	22 55.0	25 100.0

CHI SQUARE = 5.1122 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

5 CELLS USED UP A MINIMUM OF 40 CELLS FOR THIS RUN.
2224 BYTES OF MEMORY FREE.

V1 CATTLE BREEDING BY V83 WELL REPL

V1	V83 COUNT / ROW PCT / COL PCT / TOT PCT	DRILL	YARDIN CI	ROW TOTAL
		0	1	
1		1	2	3
15Y+		33.3	66.6	12.0
		5.9	25.0	
		4.0	8.0	
2		0	4	4
10-14Y		0.0	100.0	16.0
		0.0	33.3	
		0.0	16.0	
3		3	1	4
5-9Y		75.0	25.0	16.0
		17.6	25.0	
		12.0	4.0	
4		6	4	10
3-4Y		60.0	40.0	40.0
		35.3	33.3	
		24.0	16.0	
5		3	1	4
2Y-		75.0	25.0	16.0
		17.6	25.0	
		12.0	4.0	
COLUMN TOTAL		17	8	25
		68.0	32.0	100.0

CHI-SQUARE = 3.88238 WITH 4 DEGREES OF FREEDOM.
SIGNIFICANCE = 0.42274 CUTOFF = 0.05

TABLE USED UP A MAXIMUM OF 45 CELLS FOR THIS RUN.
LARGEST ONE WOULD BE 4 BY 4.

-RUBY

V4 ENTER RACE(1-9) BY V24 MULTIPLE VARIABLE

V24

V4	1	2	3	ROW TOTAL
18/-	8 50.0 11.7 4.3	4 33.3 12.5 4.3	3 18.8	
18-24	9 56.3 13.0 6.5	8 50.0 25.0 5.8	1 6.3	18 13.0
25-34	12 52.2 17.4 8.7	8 34.8 25.0 5.8	3 13.0	23 16.7
35-44	7 77.8 10.1 5.1	3 33.3 9.4 2.2	0 0.0	10 7.2
45-	23 69.7 33.3 16.7	8 24.2 25.0 5.8	2 6.1 12.5 1.4	33 23.9
COLUMN TOTAL	69 50.0	32 23.2	16 11.6	138 100.0

CHI-SQUARE = 7.2874 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

9 CELLS USED IN A TABLE OF 45 CELLS FOR THIS RUN.
STOP BY V5

HAPPY

V1 BATIS GRUPLARI BY VAR BIR FAAL DEGERLI

		VAR	
COUNT ROW PCT COL PCT TOT PCT	KULLAN ELMAYA 0	KULLAN ELMAKT 1	ROW TOTAL
V1			
1	0	2	2
	0.0	100.0	11.8
	0.0	12.5	
	0.0	11.8	
2	7	4	11
	63.6	36.4	64.7
	87.5	25.0	
	41.2	23.5	
3	0	4	4
	0.0	100.0	23.5
	0.0	25.0	
	0.0	23.5	
4	1	0	1
	100.0	0.0	5.9
	12.5	0.0	
	5.9	0.0	
5	0	6	6
	0.0	100.0	35.3
	0.0	37.5	
	0.0	35.3	
KOLONU TOPLAMI	8 47.1	16 94.1	24 141.2

CHI SQUARED = 17.41811 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

8 CELLS USED UP A MAXIMUM OF 48 CELLS FOR THIS RUN.
15788 BYTES OF MEMORY FREE.

V1 RATIO BRUPLANT BY V88 BTP. SPACL. DIGEN

V88

V1	CELL CT / ROW PCT / COL PCT / TOT PCT	1	2	ROW TOTAL
1		2	7	9
		2.0	100.0	11.8
		2.0	18.9	
		0.0	11.5	
2		0	4	4
		0.0	100.0	15.3
		0.0	15.0	
		0.0	15.3	
3		0	4	4
		0.0	100.0	15.3
		0.0	15.2	
		0.0	15.3	
4		1	10	11
		9.1	90.9	42.3
		100.0	62.5	
		3.8	38.4	
5		0	1	1
		0.0	100.0	15.3
		0.0	15.2	
		0.0	15.3	
COLUMN TOTAL		1	25	26
		3.8	96.1	100.0

CHI SQUARE = 1.4102 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

5 CELLS USED UP TO MAXIMUM OF 45 CELLS FOR THIS RUN.
1572 BYTES OF MEMORY FREE.

V: BATIS BRITANNI BY V27 SIR. FOOL. DEBT.

	V27		
COUNT ROW PCT COL PCT TOT PCT	1 KILLAN ILLNESS	2 KILLED ILLNESS	ROW TOTAL
V2			
15Y+	60.8 12.8 7.8	39.2 10.8 2.8	11.6
15-19Y	25.2 2.8 2.8	74.8 33.3 11.5	5.4
5-14Y	74.3 16.7 11.5	25.8 11.1 3.8	15.4
1-5Y	54.8 37.5 23.9	45.2 55.6 19.2	43.3
6M-	100.0 25.0 15.4	0.0 11.1 3.8	15.4
COLUMN TOTAL	61.5	38.5	100.0

COLUMN 1 : KILLED LESS OR EQUAL TO 1 : OBSERVED OR PRESENT.
COLUMN 2 : KILLED MORE THAN 1 : NOT

: KILLED LESS OR EQUAL TO 1 : NOT KILLED OR MORE THAN 1.
STAT BYTES OF WINDOW =

COPY

V1 SOCIOECONOMIC STATUS BY V28 SIR, FOLL, DEGREE

V1	V28	0	1	ROW TOTAL
	COUNT / ROW PCT / COL PCT / TOT PCT	YELLOW BLANKS	YELLOW BLANKET	
V1				
	1	2	1	3
		66.6	33.3	11.5
		11.7	11.1	
		7.6	3.8	
	2	3	1	4
		75.0	25.0	15.3
		17.6	11.1	
		11.5	3.8	
	3	2	2	4
		50.0	50.0	15.3
		11.7	22.2	
		7.6	7.6	
	4	9	2	11
		81.8	18.1	42.3
		52.9	22.2	
		34.6	7.6	
	5	3	0	3
		100.0	0.0	11.5
		17.6	0.0	
		11.5	0.0	
	COLUMN TOTAL	17	9	26
		65.3	34.6	100.0

CHI SQUARE = 4.7783 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 3

18 CELLS USED OF A CAPACITY OF 48 CELLS FOR THIS RUN.
12692 BYTES OF MEMORY FREE.

SPRING SEMINAR — BY V89 — SIM. FROM DESERLEN

V89

COUNT / ROW PCT / COL PCT / TOT PCT	KILLER 0	KILLER 1	ROW TOTAL
1	2	1	3
	66.6	33.3	11.5
	9.5	25.0	
	7.6	3.8	
2	4	0	4
	100.0	0.0	15.3
	19.1	0.0	
	15.3	0.0	
3	17	5	22
	77.2	22.7	84.6
	80.9	100.0	
	65.3	19.2	
TOTAL	23	6	29
	88.4	23.0	100.0

CHI-SQUARE = 2.8478 WITH 2 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

CELLS USED OF 6 POSSIBLE OF 45 CELLS FOR THIS RUN.
501 BYTES OF MEMORY USED.

[illegible]

[illegible] VAR PROBABX BY V2 YRTIRLY GRUPLORI

	V2						
COUNT ROW PCT COL PCT TOT PCT	12YR-	13-BY	18Y-522 YR	123-52 BRN	180YR-	YX	ROW TOTAL
	1	2	4	5	6	7	
V2							
1	1	1	4	1	2	0	9
[illegible]M-	33.3	33.3	8.2	33.3	8.2	8.2	11.5
	100.0	100.0	2.0	14.2	8.0	0.0	
	3.8	3.8	2.2	2.2	2.3	0.0	
2	0	0	1	0	1	0	2
[illegible]Y-520MN	0.0	0.0	50.0	0.0	50.0	0.0	7.6
	0.0	0.0	25.0	0.0	8.3	0.0	
	0.0	0.0	3.8	0.0	3.8	0.0	
3	0	0	2	3	5	1	11
522-520MN	0.0	0.0	18.1	27.2	45.4	9.2	42.3
	0.0	0.0	50.0	42.8	41.6	100.0	
	0.0	0.0	7.6	11.5	19.2	3.8	
4	2	0	1	2	1	0	6
[illegible]-552MN	33.3	0.0	16.6	33.3	16.6	0.0	23.0
	66.6	0.0	25.0	28.5	8.3	0.0	
	7.6	0.0	3.8	7.6	3.8	0.0	
5	0	0	0	1	3	1	5
[illegible]MN+	0.0	0.0	0.0	20.0	60.0	20.0	19.2
	0.0	0.0	0.0	14.2	25.0	100.0	
	0.0	0.0	0.0	3.8	11.5	3.8	
COLUMN TOTAL	3 11.5	1 3.8	8 30.7	7 26.9	12 46.1	1 3.8	26 100.0

[illegible] SQUARE = [illegible] WITH [illegible] DEGREES OF FREEDOM.
[illegible]BER OF MISSING OBSERVATIONS = [illegible]

[illegible] CELLS USED OF A MAXIMUM OF [illegible] CELLS FOR THIS RUN.
[illegible] BYTES OF [illegible] STY PAGE.

KARRY

V3 KAR BRUBLARI BY V14 KARAR VER. TON 6X1

V14

	COUNT ROW PCT COL PCT TOT PCT	KULLAN	KULLAN	ROW TOTAL
V3				
	1			
LKW		33.3	66.7	10.5
		8.3	15.8	
		4.1	6.2	
	2			
Y-500MN		2.4	100.	8.3
		91.7	15.	
		8.3	8.	
	3			
251-500KA		66.7	33.3	57.9
		58.3	85.	
		25.3	10.5	
	4			
101-250KA		33.3	66.7	19.3
		16.7	15.	
		6.3	8.	
	5			
100MN-		57.9	42.1	15.
		25.	15.	
		10.5	6.	
	COLUMN TOTAL	38 59.5	41 40.5	84 100.0

HI SQUARE = 2.2833 WITH 3 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 0

CELLS USED OF A MAXIMUM OF 48 CELLS FOR THIS RUN.
5618 BYTES OF MEMORY USED.

COPY

V8 KAR (WILLIAM) BY V18 KARAR VER. BASAS

	V18		
COUNT / ROW PCT / COL PCT / TOT PCT	2	1	ROW TOTAL
V8			
1	1	3	4
1M+	25.0	75.0	12.5
	5.6	20.0	
	3.1	9.4	
2	1	1	2
1M-250YN	50.0	50.0	6.3
	5.6	14.3	
	3.1	3.1	
3	5	1	6
250-500YN	83.3	16.7	37.5
	27.8	14.3	
	15.6	3.1	
4	2	6	8
100-250YN	25.0	75.0	25.0
	11.1	85.7	
	6.3	18.8	
5	5	1	6
100YN-	83.3	16.7	25.0
	27.8	14.3	
	15.6	3.1	
COLUMN TOTAL	18	7	32
	56.3	21.9	100.0

CHI SQUARE = 8.17333 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

18 CELLS USED.OF A MAXIMUM OF 48 CELLS FOR THIS RUN.
18560 BYTES OF MEMORY FREE.

COPY

V2 AGE EMPLOYED BY V16 CROSS VER. CROSS P

V16

COUNT / ROW PCT / COL PCT / TOT PCT	1	2	ROW TOTAL
V2			
1	3	8	11
	32.3	66.8	45.8
	14.1	13.3	
	4.1	8.3	
2	1	4	5
	50.0	80.0	4.2
	14.1	6.6	
	4.1	4.1	
3	4	5	9
	44.4	55.5	37.5
	44.4	33.3	
	16.6	20.8	
4	1	3	4
	25.0	75.0	16.6
	11.1	20.0	
	4.1	12.5	
5	2	1	3
	66.6	33.3	12.5
	22.2	6.6	
	8.3	4.1	
COLUMN TOTAL	9	15	24
	37.5	62.5	100.0

CHI SQUARE = 6.6515 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 8

20 CELLS USED OF A MAXIMUM OF 40 CELLS FOR THIS RUN.
7688 BYTES OF MEMORY FREE.

:COPY

V2 KSR BRLPLART BY V13 RABIT VS DESIRE/

V2	COUNT / ROW PCT / COL PCT / TOT PCT	V13 1	2	3	ROW TOTAL
1		2	1	0	3
		66.6	33.3	0.0	23.0
		25.0	33.3	0.0	
		15.3	7.6	0.0	
2		1	0	0	1
		100.0	0.0	0.0	7.6
		12.5	0.0	0.0	
		7.6	0.0	0.0	
3		3	2	1	6
		50.0	33.3	16.6	46.1
		37.5	66.6	33.3	
		23.0	15.3	7.6	
4		1	0	1	2
		50.0	0.0	50.0	15.3
		12.5	0.0	33.3	
		7.6	0.0	7.6	
5		1	0	0	1
		100.0	0.0	0.0	7.6
		12.5	0.0	0.0	
		7.6	0.0	0.0	
COLUMN TOTAL		8	3	2	13
		61.5	23.0	15.3	100.0

CHI SQUARE = 4.2500 WITH 8 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 15

3 CELLS USED OF A MAXIMUM OF 40 CELLS FOR THIS RUN.
USER SUPPLIED NUMBER OF VERTICAL FREQ.

ABBOTT

V2 AGE GROUP BY V19 , RACE, SIGNIFICANCE

V2	V19		
	COUNT / ROW PCT / COL PCT / TOT PCT	LYBELLA NYARAK	LYBELLA NYAKTA	ROW TOTAL
		3	1	
V2				
	.	1	2	
		33.3	66.6	11.8
		8.3	18.1	
		3.8	7.6	
	2	2	9	2
1Y-5G2 YR		100.0	0.0	7.5
		16.8	0.0	
		7.5	0.2	
	3	5	6	11
25Y-35Y YR		45.4	54.5	42.2
		33.3	54.5	
		19.2	23.0	
	4	2	2	4
12Y-25Y YR		50.0	50.0	15.3
		13.3	18.1	
		7.6	7.6	
	5	5	1	6
1GY YR+		83.3	16.7	12.1
		33.3	9.1	
		19.2	3.8	
	COLUMN TOTAL	15	11	26
		57.6	42.3	100.0

CHI SQUARE = 7.5842 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

5 CELLS USED OF A MAXIMUM OF 12 CELLS FOR THIS RUN.
TABLE BYTES OF MEMORY USED.

COPY

VS [illegible] VAR GROUPING BY VAR [illegible] VALI RAP. UZUN DOI

VS	COUNT ROW PCT COL PCT TOT PCT	VS2 0	1	ROW TOTAL
VS	1	0	3	3
[illegible]		0.0	100.0	18.8
		0.0	23.1	
		0.0	18.8	
	2	2	0	2
[illegible]-502[illegible]		100.0	0.0	0.2
		13.3	0.0	
		6.2	0.0	
	3	8	6	11
251-500[illegible]		45.4	54.5	44.0
		23.5	50.0	
		20.0	24.0	
	4	4	0	4
130-250[illegible]		100.0	0.0	15.2
		26.6	0.0	
		15.4	0.0	
	5	1	1	2
502[illegible]-		67.2	92.1	25.0
		26.6	13.3	
		15.5	4.7	
COLUMN TOTAL		15	10	26
		57.7	42.3	100.0

[illegible] STATISTIC = [illegible] DEGREES OF FREEDOM =
[illegible] OBSERVED CHI-SQUARE PROBABILITY =

TABLES USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

[illegible]

V2 [illegible] BY V21 [illegible]

V2	V21			
	COLUMN PCT / COL PCT / TOT PCT	0	1	ROW TOTAL
1		3	6	9
[illegible]		33.3	66.6	13.2
		20.0	13.6	
		4.4	8.8	
2		0	2	2
[illegible]		0.0	100.0	2.9
		0.0	10.0	
		0.0	2.9	
3		2	8	11
250-500[illegible]		27.3	72.7	44.9
		57.1	42.0	
		12.7	32.2	
4		1	3	4
125-250[illegible]		25.0	75.0	5.9
		7.1	13.6	
		1.5	4.4	
5		0	5	5
100[illegible]		0.0	100.0	32.3
		0.0	22.7	
		0.0	7.4	
COLUMN TOTAL		6	22	28
		22.7	87.5	41.2

CHI SQUARE = 2.57755 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = [illegible]

8 CELLS USED OF 2 [illegible] IN AS CELLS FOR THIS RUN.
12463 BYTES OF MEMORY REQD.

[illegible]

V2 KMS BY V22 PAGE 1 OF 1

V2	V22			
	COUNT PCT OF TOT COL PCT TOT PCT	1	2	TOTAL
1		2	1	3
		66.7	33.3	12.5
		9.5	4.3	
		8.3	4.2	
2		2	1	3
		66.7	33.3	12.5
		9.5	4.3	
		8.3	4.2	
3		8	3	11
		72.7	27.3	45.8
		38.1	13.0	
		33.3	12.5	
4		7	3	10
		70.0	30.0	41.7
		33.3	13.0	
		29.2	12.5	
COLUMN TOTAL		21	8	29
		72.4	27.6	100.0

[illegible]

[illegible]

COPY

E	ROW PERCENT	BY V83	V83(1 YES, 2 NO)

E	V82		
	COUNT ROW PCT COL PCT TOT PCT	2	TOTAL
	1	3	3
0+		33.3	16.7
		5.3	
		4.2	
	2	2	2
Y-500YN		100.0	2.8
		11.7	
		2.8	
	3	9	11
50-500YN		81.8	44.4
		52.9	
		38.0	
	4	3	4
00-350YN		75.0	16.7
		17.6	
		10.1	
	5	2	5
00YN+		40.0	23.7
		11.7	
		3.5	
	COLUMN TOTAL	17 56.1	25 70.9

-2 SQUARE = 5.45845 WITH 4 DEGREES OF FREEDOM.
UPPER TAIL MEDIAN CHI-SQUARE = 1

CELLS USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
HEAP BYTES OF MEMORY NOT USED.

```
-ARY

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
V2           (AS GROUP[illegible])                        BY  V24          [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                        V24
             COUNT    I
             ROW PCT  I[illegible]  [illegible]    ROW
             COL PCT  I             [illegible]    TOTAL
             TOT PCT  I      0      I      1
V2           --------I--------I--------I
                  1  I      2  I      1  I      3
10M                  I   66.7  I   33.3  I   12.0
                     I   11.7  I   12.5  I
                     I    8.0  I    4.0  I
                     -I--------I--------I
                  2  I      1  I      1  I      2
[illegible]-500MN    I   50.0  I   50.0  I    8.0
                     I    5.6  I   12.5  I
                     I    4.0  I    4.0  I
                     -I--------I--------I
                  3  I      7  I      4  I     11
250-500MN            I   63.5  I   36.2  I   44.0
                     I   41.1  I   50.0  I
                     I   28.0  I   16.0  I
                     -I--------I--------I
                  4  I      3  I      1  I      4
100-250MN            I   75.0  I   25.0  I   16.0
                     I   17.6  I   12.5  I
                     I   12.0  I    4.0  I
                     -I--------I--------I
                  5  I      4  I      1  I      5
1000+                I   80.0  I   20.0  I   20.0
                     I   23.5  I   12.5  I
                     I   16.0  I    4.0  I
                     -I--------I--------I
             COLUMN         17         8        25
             TOTAL        68.0      32.0     100.0

RAW CHI SQUARE =      0.8175 WITH     4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS =      0

[illegible] CELLS USED OF [illegible] AVAILABLE [illegible] FOR [illegible] RUN.
[illegible] BYTES [illegible]
```

BODY

E AGE (PAIRED) BY VAR SIR. PROB. DIFFERENCE

VAR

COUNT ROW PCT COL PCT TOT PCT	1	2	ROW TOTAL
1	0 0.0 0.0 0.0	2 100.0 18.2 11.8	2 11.8
2	1 50.0 100.0 5.9	1 50.0 9.1 5.9	2 11.8
3	0 0.0 0.0 0.0	11 100.0 44.8 64.7	11 64.7
4	0 0.0 0.0 0.0	4 100.0 16.0 23.5	4 23.5
5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0
COLUMN TOTAL	1 5.9	25 94.1	26 100.0

ST SQUARE = 12.4320 WITH 4 / DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 2

** 1

CELLS USED OF N MAXIMUM OF AB CELLS FOR THIS RUN.
SIAL BYTES OF MEMORY USED.

ARDY

E AOR STUDENT BY VEE BIR. PARL. DEBERLEY

VBC

	ROW PCT / COL PCT / TOT PCT	KILLAM ILANAA	KILLAM ILYAKT	ROW TOTAL
2		0	1	
	1	0	3	3
		0.0	100.0	11.5
		0.0	18.7	
		0.0	11.5	
	2	0	2	2
M-SSBKN		0.0	100.0	7.5
		0.0	9.0	
		0.0	7.5	
	3	1	12	13
33-SSBKN		7.7	92.3	42.3
		100.0	42.9	
		3.8	38.4	
	4	2	4	6
22-SSBKN		2.1	100.0	15.3
		2.0	18.7	
		0.0	15.3	
	5	0	3	3
SSBKN-		0.0	100.0	11.5
		0.0	21.0	
		0.0	11.5	
	COLUMN TOTAL	1 3.8	25 96.2	26 100.0

HI SQUARE = 1.4102 WITH 4 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 0

CELLS USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
5287 BYTES OF MEMORY FREE

V2 KAR ORLPLOT BY V27 SIR. FAKL. DEGERLE

V27

	SEVK			
	REK YÜZ	KULLAN	KULLAN	SÜR
	SÜTL YÜZ	ILKBAHR	ILMAÇ	TOPLA
	YÜZ YÜZ	0	1	
V2				
	1	2	11	2
1M--		66.6	33.3	11.5
		12.5	10.0	
		7.7	3.4	
	2	5	2	7
1M-2A3-N		8.2	22.2	7.8
		2.6	22.2	
		2.0	7.6	
	3	8	3	11
2A3-3A2-N		72.7	27.2	42.3
		50.0	30.0	
		30.7	11.5	
	4	8	5	13
1A2-2A3-N		53.3	31.3	15.3
		12.5	22.2	
		7.6	7.6	
	5	4	2	6
1A2-N-		66.6	33.3	23.0
		25.0	22.2	
		15.3	7.6	
	SÜTUN	16	9	25
	TOPLA	61.5	34.6	100.0

TOPLAM DEĞERİ = 4.1666 VEYA % DEĞERİN DÜŞÜRÜLMESİ
KAYBEDİLEN GÖZLEM DEĞERİ SAYISI = 2

8 HÜCRE (32.0 %) BEKLENEN DEĞERİ 5 DEN KÜÇÜK
(MİNİMUM BEKLENEN DEĞER 1.038)

HAPPY

V2 KAR GRUPLAST BY V28 SIG. FARL. DEBERLEY

	V28		
	RESULT		
	REV PCT	NULLA\	NULL\	ROW
	COL PCT	ILLEGYG	ILMAR\	TOTAL
	TOT PCT	2	1	
V2				
.	0	1	3	
1M+	66.6	33.3	11.5	
	11.7	11.1		
	7.6	3.8		
2	1	1	2	
1M-52DYN	50.0	50.0	7.6	
	5.2	11.1		
	3.8	3.8		
3	8	3	11	
252-502YN	72.7	27.2	42.3	
	47.0	33.3		
	30.7	11.5		
4	3	1	4	
102-252YN	75.0	25.0	15.3	
	17.6	11.1		
	11.5	3.8		
5	5	1	6	
102YN-	83.3	16.7	23.0	
	29.4	11.1		
	19.2	3.8		
COLUMN	17	9	26	
TOTAL	65.3	34.6	100.0	

CHI SQUARE = 1.1646 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

12 CELLS USED OF A MAXIMUM OF 45 CELLS FOR THIS RUN.
15288 BYTES OF MEMORY FREE.

...OPPY

V2 KRR GRUPLORS BY V25 SIR. FARL. DESERLS

	V25		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLBN ELYPNE 0	KULLBN ELYPNT 1	ROW TOTAL
V2			
1	8	1	9
	88.9	11.1	11.8
	9.2	25.0	
	7.5	1.3	
2	8	0	8
	100.0	0.0	7.5
	9.2	0.0	
	7.5	0.0	
3	10	1	11
	90.9	9.1	14.3
	11.5	25.0	
	9.4	0.9	
4	4	0	4
	100.0	0.0	5.3
	4.6	0.0	
	3.8	0.0	
5	4	2	6
	66.7	33.3	23.7
	4.6	50.0	
	3.8	1.9	
COLUMN TOTAL	86	4	76
	81.9	18.1	100.0

CHI SQUARE = 3.13839 WITH 4 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

9 CELLS USED OF A MAXIMUM OF 40 CELLS FOR THIS RUN.
15296 BYTES OF MEMORY FREE.

ASDY

BILGISAYAR KULLANIMI BY V17 SABIT VE DEGISKEN A

	V17		
COUNT / ROW PCT / COL PCT / TOT PCT	YAPILM AMAKTA 2	YAPILM OKTA 1	ROW TOTAL
0	9	3	12
	75.0	25.0	46.1
	69.2	23.0	
	34.6	11.5	
1	4	10	14
	28.5	71.4	53.8
	30.7	76.9	
	15.3	38.4	
COLUMN TOTAL	13 50.0	13 50.0	26 100.0

HI SQUARE = 5.5714 WITH 1 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 0

CELLS USED OF A MAXIMUM OF 60 CELLS PER TATB RUN.
9567 BYTES OF MEMORY FREE.

AGRAY

V8 BİLGİSAYAR KULLANIYI BY V15 RAP. BİRİNDE DI

	V15		
COUNT / ROW PCT / COL PCT / TOT PCT	UYGULA YAPMAK	UYGULA YAPMA	ROW TOTAL
	0	1	
V8			
0	9	8	17
	75.0	25.0	46.1
	60.0	27.3	
	24.3	11.5	
1	6	8	14
	42.8	57.1	53.8
	40.0	72.7	
	22.0	30.7	
COLUMN TOTAL	15 57.6	11 42.3	26 100.2

CHI SQUARE = 2.7251 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RUN.
16053 BYTES OF MEMORY FREE.

APPY

V5 BILGISAYAR KULLANIMI BY V82 KAC1 KAR. UZUN DON

	V82		
COUNT / ROW PCT / COL PCT / TOT PCT	DEGIL 2	VARDIM 1	ROW TOTAL
V5			
2	8	3	11
VARARLANMAYAN	72.7	27.3	44.0
	53.3	30.0	
	32.0	12.0	
1	7	7	14
VARARLANAN	50.0	50.0	56.0
	46.6	70.0	
	28.0	28.0	
COLUMN TOTAL	15 60.0	10 40.0	25 100.0

CHI SQUARE = 1.3255 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF 8 MAXIMUM OF 50 CELLS FOR THIS RUN.
15945 BYTES OF MEMORY FREE.

...BOY.

... BILSTEMER KULLANICI BY VE... MALI RAP. KISA DON...

COUNT / ROW PCT / COL PCT / TOT PCT	VE1 1	VE1 2	TOTAL
5			
2	4	7	11
...SARLANYAYIN	36.3	63.6	44.0
	50.0	35.0	
	16.0	28.0	
1	4	10	14
...RARLANIN	28.5	71.4	56.0
	50.0	65.0	
	16.0	40.0	
COLUMN TOTAL	8	17	25
	32.0	68.0	100.0

...I SQUARE = 0.8928 WITH 1 DEGREES OF FREEDOM.
...UMBER OF MISSING OBSERVATIONS = 1

... CELLS USED OF A MAXIMUM OF 50 CELLS FOR THIS RUN.
...SSIA BYTES OF MEMORY FREE.

...BOY

V8 BALDTARVER KULLAN(EM) BY V88 MALI RAT. FIYATL

	V88		
COUNT / ROW PCT / COL PCT / TOT PCT	DEBIL	YARDIM CI	ROW TOTAL
V8	0	1	
0	3	0	3
	27.3	72.7	44.0
	100.0	30.8	
	12.0	32.0	
1	0	14	14
	2.2	100.0	56.0
	0.0	69.2	
	0.0	56.0	
COLUMN TOTAL	3	22	25
	12.0	88.0	100.0

CHI SQUARE = 4.3288 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

3 CELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RUN.
10536 BYTES OF MEMORY FREE.

JOBDY

V5 SYLSTROYOT KILLOYIYC BY V22 KOLL RAP. COTTIY 4

	V22		
COUNT / ROW PCT / COL PCT / TOT PCT	0	1	ROW TOTAL
V5			
0	9	2	11
	81.8	18.2	44.0
	52.9	25.0	
	36.0	8.0	
1	8	6	14
	57.1	42.9	56.0
	47.0	75.0	
	32.0	24.0	
COLUMN TOTAL	17	8	25
	68.0	32.0	100.0

CHI SQUARE = 1.7836 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF A MAXIMUM OF 64 CELLS FOR THIS RUN.
15616 BYTES OF MEMORY FREE.

VARDEV

VB STUDENTS ALLOWANCE BY V84 MALE PAPER YATIR

	V84		
COUNT / ROW PCT / COL PCT / TOT PCT	FEBRU	YARDIM	ROW TOTAL
	0	1	
VB			
0	8	3	11
	72.7	27.3	44.0
	47.1	37.5	
	32.0	12.0	
1	9	5	14
	64.3	35.7	56.0
	52.9	62.5	
	36.0	20.0	
COLUMN TOTAL	17	8	25
	68.0	32.0	100.0

CHI SQUARE = 0.6017 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 50 CELLS FOR THIS RUN.
16517 BYTES OF MEMORY FREE.

V5 BILGISAYAR KULLANIMI BY V25 EIR. FAAL. DERSI

	V25		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN. ILMAYA 0	KULLAN. ILMAK 1	ROW TOTAL
V5 0	0	12	12
YARARLANMAYAN	0.0	100.0	46.1
	0.0	48.2	
	0.0	46.1	
1	1	13	14
YARARLANAN	7.1	92.8	53.8
	100.0	52.2	
	3.8	50.0	
COLUMN TOTAL	1 3.8	25 96.1	26 100.0

CHI SQUARE = 0.8914 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

3 CELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RUN.
15900 BYTES OF MEMORY FREE.

HAPPY

V8 BILGISAYAR KULLANIMI BY V25 SIK. FAAL. DERSL

	V25		
COUNT ROW PCT COL PCT TOT PCT	KULLAN ILMAYA 2	KULLAN LUMSUZ 1	ROW TOTAL
V8			
2	1 8.3 100.0 3.6	11 91.6 44.0 39.3	12 42.1
1	0 0.0 0.0 0.0	14 100.0 56.0 50.0	14 57.9
COLUMN TOTAL	1 3.6	25 89.3	28 100.0

CHI SQUARE = 1.2133 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 3

3 CELLS USED UP A MAXIMUM OF 62 CELLS FOR THIS RUN.
16336 BYTES OF MEMORY FREE.

FERRY

V5 BILDISCYAR KULLANIM? BY V37 SIR, FARL. DEGER

	V37		
V5			
0	8	4	12
YARARLANMAYAN	66.7	33.3	48.0
	53.3	40.0	
	32.0	16.0	
1	7	6	13
YARARLANAN	53.8	46.2	52.0
	46.7	60.0	
	28.0	24.0	
COLUMN TOTAL	15	10	25
	60.0	40.0	100.0

CHI SQUARE = 0.8478 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS HAD AN EXPECTED OF LESS THAN 5.
16658 BYTES OF MEMORY FREE.

COPY

V5 BİLGİSAYAR KULLANIMI BY V28 BİR. FARL. DEĞER

	V28		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN MIYOR 0	KULLAN IYORUM 1	ROW TOTAL
V5			
0	12	6	18
	66.7	33.3	46.1
	50.0	22.2	
	30.8	15.4	
1	7	14	21
	33.3	66.7	53.8
	41.2	77.7	
	17.9	35.9	
COLUMN TOTAL	17	9	39
	43.6	56.4	100.0

CHI SQUARE = 3.1724 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 50 CELLS FOR THIS RUN.
16656 BYTES OF MEMORY FREE.

HAPPY

V8 BILBIGAYER VILLAGE1 BY V85 SIR. FACIL. DEB

	V83		
COUNT ROW PCT COL PCT TOT PCT	KILLEN CLYDE 2	KILLEN CLYDE 1	ROW TOTAL
V5			
2	11 91.6 92.3 42.3	1 8.3 25.0 3.8	12 46.1
1	11 78.5 50.0 42.3	3 21.4 75.0 11.5	14 53.8
COLUMN TOTAL	22 84.6	4 15.3	26 100.0

CHI SQUARE = 2.2618 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

A CELL USED BY A MAXIMUM OF 22 CELLS FOR THIS RUN.
USES SYNTAX OF MAYDAY APIL

VARIABLE

V18 SAS VS K-Z MAXIMUM SIZE BY V17 SPLIT VS DESIGN

	V17		
	0	1	ROW TOTAL
V18			
1	0	1	1
VARIABLE	0.0	100.0	4.2
	0.0	3.3	
	0.0	4.2	
2	5	9	18
AXIS	50.0	50.0	75.0
	83.3	75.0	
	20.8	37.5	
3	4	1	5
D AXIS	80.0	20.0	20.8
	66.7	8.3	
	16.7	4.2	
4	2	1	3
EST AXIS	66.7	33.3	12.5
	33.3	8.3	
	8.3	4.2	
COLUMN TOTAL	16	12	28
	66.7	50.0	116.7

CHI-SQUARE = 3.7513 WITH 3 DEGREE OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

WARNING: CELLS WITH EXPECTED VALUES OF 5 OR LESS FOR TWO-WAY TABLES.
75% OF CELLS OF MISSING TABLE.

COPY

V13 B+B VE K+Z KAZILAMA SIKL BY V10 REP. SISTEMINDE DE

V13

COUNT / ROW PCT / COL PCT / TOT PCT	UYELIK ANKARA 0	UYELIK MAKTA 1	ROW TOTAL
V13 1 HAFTALIK	0 0.0 0.0 0.0	1 100.0 9.0 4.2	1 4.2
2 AYLIK	10 55.5 71.4 42.0	8 44.4 72.7 33.0	18 72.0
3 UC AYLIK	4 80.0 28.5 16.0	1 20.0 9.0 4.0	5 20.0
4 DORT AYLIK	0 0.0 0.0 0.0	1 100.0 9.0 4.0	1 4.0
COLUMN TOTAL	14 58.3	11 41.0	25 100.0

CHI SQUARE = 3.7157 WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

8 CELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RUN.
16760 BYTES OF MEMORY FREE.

YORDY

V13 B-S VE V-Z YAZILARAK SIKL BY V20 YAŞLI BAŞ. UZUN DO

	V23		
BELİRT FİK DOT ÖĞL YOT PÜT	DEĞİL 2	YORDUN 1	ROW TOTAL
V13			
1	0	1	1
	0.0	100.0	4.1
	0.0	11.1	
	0.0	4.1	
2	10	7	17
	58.8	41.1	70.8
	83.3	77.7	
	41.6	29.1	
3	1	1	2
	50.0	50.0	8.3
	8.3	11.1	
	4.1	4.1	
4	1	1	2
	100.0	0.0	8.3
	8.3	0.0	
	4.1	0.0	
SÜTUN TOPLAM	12	9	24
	50.0	37.5	100.0

KİK SQUARE = 2.1.23 WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

1 CELLS USED UP 0.1 OF 32 CELLS FOR THIS RUN.
LAST BYTES OF YOUR DATA READ

[illegible]

[illegible] B+S VE K-S [illegible] SIKL BY VE1 [illegible]

	VE1		
COUNT ROW PCT COL PCT TOT PCT	1 DEGIL	2 YROBY	TOTAL
VE1			
1	1	3	4
[illegible]	133.3	6.4	4.1
	25.0	2.0	
	1.0	3.0	
2	7	14	17
CYLIK	17.6	82.3	73.8
	58.3	73.6	
	10.1	53.8	
3	4	4	8
US CYLIK	23.3	22.2	21.6
	33.3	21.2	
	4.1	15.4	
4	0	1	1
IENT CYLIK	0.0	100.0	2.7
	0.0	5.3	
	0.0	3.8	
COLUMN TOTAL	12	19	37
	32.4	51.4	100.0

[illegible] EQUATE = [illegible] 3 OBSERVED BY PAIRS.
NUMBER OF MISSING OBSERVATIONS = 2

[illegible] CELLS USED BY [illegible] IN 83 CELLS FOR THIS RUN.
[illegible] PRINT OF VE1 BY VE1 [illegible]

ASPY

V13 B+B VE,K+Z HAZTRLAYR SIHL BY V22 YOLI RAD. FIYRTLAN

V13	V22	0	1	ROW TOTAL
	1	0	1	1
HAFTALIK		0.0	100.0	4.1
		0.0	4.7	
		0.0	4.1	
	2	1	16	17
AYLIK		5.6	94.1	70.8
		25.0	76.1	
		4.1	66.6	
	3	3	2	5
OK AYLIK		60.0	40.0	20.8
		66.6	14.3	
		12.5	8.3	
	4	0	1	1
DERT AYLIK		0.0	100.0	4.1
		0.0	4.7	
		0.0	4.1	
COLUM TOTAL		3	21	24
		12.5	87.5	100.0

HI SQUARE = 4.4286 WITH 3 DEGREES OF FREEDOM.
WOOD OF CLASS 2 SIGNIFICANCE = 0

CELLS USED OF A MAXIMUM OF 63 CELLS PER TWIE RUN.
OTES BYTES OF MEMORY FREE.

HAPPY

V13 B+S VE K+I HOLLAND DIKL BY V23 [illegible]

	V23		
COUNT ROW PCT COL PCT TOT PCT	VERSCH	VERDIV 01	REL TOTAL
	2	1	
V13			
1	1	2	3
HEFTIG	100.0	3.6	4.1
	5.6	8.0	
	4.1	2.3	
2	13	5	17
MATIG	76.5	29.4	70.8
	72.2	71.4	
	54.2	20.8	
3	3	2	5
ZO MATIG	60.0	40.0	20.8
	16.7	28.6	
	12.5	8.3	
4	1	0	1
ZEER MATIG	100.0	0.0	4.2
	5.6	0.0	
	4.2	0.0	
KOLOM TOTAAL	18 75.0	7 25.0	24 100.0

CHI KWADRAAT = 3.1861 MET 3 VRIJHEIDSGRADEN.
ONDER DE MISSING OBSERVATIONS = 2

5 CELLS USED OF A MAXIMUM OF 61 CELLS FOR THIS RUN.
45716 BYTES OF MEMORY FREE.

...ODEV

...3 F+B VE K+Z FAZILALARA GÖRE BY V24 ...KOLI RAPOR YAZDIRIM

	V24		
SAYI SATIR TOP SÜT PCT	DİŞİL	YAŞADIK DI	SATIR TOPLAM
V13	0	1	
1	1	0	1
...ATILIK	100.0	0.0	4.1
	6.2	0.0	
	4.1	0.0	
0	5	0	17
...YLIK	52.9	47.0	70.8
	55.2	100.0	
	37.5	33.3	
3	5	0	5
...AYLIK	100.0	0.0	20.8
	31.2	0.0	
	20.8	0.0	
4	1	0	1
...ÜKÜ AYLIK	100.0	0.0	4.1
	6.2	0.0	
	4.1	0.0	
SÜTUN TOPLAM	16	6	24
	66.6	33.3	100.0

...I SQUARE = 4.9411 WITH 3 DEGREES OF FREEDOM.
...ERR OF STATISTICAL SIGNIFICANCE = 0

...CELLS USED OF A MAXIMUM OF 63 CELLS FOR T-OF 3.
...ATED BYTES OF MEMORY NEED.

COPY

V13 BY V8 A-Z HORIZONTAL VIEW BY V25 STR. SMALL LIBERAL

	V25		
V13	CELT ROW PCT COL PCT TOT PCT	KILLION 1	KILLER 2	ROW TOTAL
	1	1 .2 50.0 .1	1 .1 50.0 .1	2 .3
JEFFLICK		52 8.2 92.9 8.0	101.0 4 7.1 4.0	56 4.2
	2	1 .2 5.9 .1	17 2.7 94.4 17.0	18 2.8
PYLIK		52 8.2 121.0 4.2	70.0 70 55.6 56.2	72.2
	3	2 .3 9.1 .2	20 3.2 90.9 20.0	22 3.5
ED PYLIK		2 .3 9.1 .2	100.0 20 90.9 20.0	22.2
	4	3 .5 2.9 .2	100 .2 97.1 .1	103 .3
DERT PYLIK		3 .5 2.9 .2	102.0 4 3.9 4.0	4.3
	COLUMN TOTAL	1 .2 .7	24 3.8 55.3	25 4.0 122.2

CHI SQUARE = 5.4551 WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

5 CELLS USED IN 1 MATRIX OF 32 CELLS FOR THIS RUN.
USED BYTES OF MEMORY FREE.

COPY

[illegible] 2-8 V6 [illegible] BY V26 SIR, PCAL, DEPRESSIV

	V66		
	FREQUENCY		
	ROW PCT	YELLOW	TOTAL
	COL PCT	YELLOW	
	TOT PCT	0	1
[illegible]			
	1	8	1
[illegible]		8.3	100.0
		2.8	4.1
		0.4	4.2
	3	1	17
[illegible]		5.9	94.4
		100.0	73.9
		4.0	68.8
	2	0	5
[illegible]		0.0	100.0
		0.0	20.8
		0.0	20.0
	4	0	1
[illegible]		0.0	100.0
		0.0	4.2
		0.0	4.0
	COLUMN TOTAL	1	24
		4.2	95.8

[illegible] SQUARE = [illegible] WITH [illegible] DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

[illegible] CELLS USED BY A MAXIMUM OF 64 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY USED.

ARAY

13 B+S VE K+Z HAZIRLAMA SIKL BY V27 SIR. FAAL. DEGERLE

V27

COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN ILMAMA 2	KULLAN ILMAKT 1	ROW TOTAL
13 1	0	1	1
AFTALIK	0.0	100.0	4.0
	0.0	10.0	
	0.0	4.0	
2	11	7	18
YLIK	61.1	38.8	72.0
	73.3	70.0	
	44.0	28.0	
3	3	2	5
C AYLIK	60.0	40.0	20.0
	20.0	20.0	
	12.0	8.0	
4	1	0	1
ORT AYLIK	100.0	0.0	4.0
	6.6	0.0	
	4.0	0.0	
COLUMN TOTAL	15 60.0	10 40.0	25 100.0

HI SQUARE = 2.1759 WITH 3 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 1

CELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RUN.
8654 BYTES OF MEMORY FREE.

13pV

V13 B+S VE K+Z HAZIRLAYA BIKL. ZY. V28 SIR. FREL. DEGER.

	V28		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN ILMAMI	KULLAN ILMIŞ	ROW TOTAL
	2	1	
V13			
1	1	0	1
HAFTALIK	100.0	0.0	4.0
	6.2	0.0	
	4.0	0.0	
2	11	7	18
AYLIK	61.1	38.9	72.0
	68.7	77.7	
	44.0	28.0	
3	4	1	5
3 AYLIK	80.0	20.0	20.0
	25.0	11.1	
	16.0	4.0	
4	0	1	1
DORT AYLIK	0.0	100.0	4.0
	0.0	11.1	
	0.0	4.0	
COLUMN TOTAL	16	9	25
	64.0	36.0	100.0

CHI SQUARE = 6.9610 WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

1 CELLS HAVE AN EXPECTED VALUE LESS THAN 5.0 CELLS FOR THIS RUN.
MINIMUM EXPECTED VALUE = 0.64

ERY

13 B*S VE V*2 SPECIALTY STYLE BY V29 SIR. FORD, DEGERLES

	V29		
V2	1	2	
SPECIALTY	1	0	1
	100.0	0.0	4.0
	4.7	0.0	
	4.0	0.0	
	14	4	18
STYLIST	77.7	22.2	72.0
	66.6	100.0	
	56.0	16.0	
	5	0	5
STYLIST	100.0	0.0	20.0
	23.8	0.0	
	20.0	0.0	
	1	0	1
SPECIALTY	100.0	0.0	4.0
	4.7	0.0	
	4.0	0.0	
COLUMN TOTAL	21	4	25
	84.0	16.0	100.0

STATISTICS = 1.6813 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

CELLS WHERE EXPECTED FREQUENCY IS LESS THAN FIVE.
LESS BYTES OF MEMORY FREE.

[illegible]

[illegible]

		V18		
	EDUC			
	V2A FET	LIVELLO	LIVELLO	ROW
	ZEL PET	MASCHIO	FEMMINA	TOTAL
	VET PET	1	2	
V3				
1		7	5	12
		58.3	41.7	50.0
		50.0	45.4	
		29.2	20.8	
2		6	6	12
		50.0	50.0	50.0
		42.9	54.5	
		25.0	25.0	
	COLUMN	13	11	24
	TOTAL	54.2	45.8	100.0

CHI-SQUARE = 0.1875 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 5

1 CELLS HAVE EF < MINIMUM OF 5X CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

V15 KRUSKAL-WALLIS ONE-WAY ANOVA BY V19 REP. SISTEMANDE DI

	V19		
	GRUNT		
	NEW PET	LYCKLIG	LYCKLIG	NEW
	ECL PET	KNAPSEN	KNAPSEN	TOTAL
	TOT PET	.2	1	
V15				
2	1	6	17
KULLENSKAPSTO	64.7	35.3	70.8
	84.6	54.5	
	45.8	25.0	
1	3	5	7
KULLENSKAPSTO	25.5	71.4	29.1
	15.3	45.4	
	8.3	20.8	
COLUMN	13	11	24
TOTAL	54.1	45.8	100.0

KI SQUARE = 8.6277 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 3

DELLS USED OF A MAXIMUM OF 60 CELLS FOR THIS RU...
6616 BYTES OF MEMORY FREE.

KØRDY

V16 KØRER VER. STOL FOR. KULL BY V19 RØR. SISTEMINDE D

COUNT / ROW PCT / COL PCT / TOT PCT	V19 UVELLA KVARAK 0	UYELLA KVARTO 1	RØW TOTAL
V16			
0 KULLANILMAYACAK	6	3	9
	66.6	33.3	37.5
	46.1	27.2	
	25.0	12.5	
1 KULLANILMAKTA	7	8	15
	46.6	53.3	62.5
	53.8	72.7	
	29.1	33.3	
COLUMN TOTAL	13	11	24
	54.1	45.8	100.0

CHI SQUARE = 0.9231 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 54 CELLS FOR THIS RUN.
16604 BYTES OF MEMORY FREE.

/SORT

VAR: SEX BY VS CHI-SQUARE TEST BY V10 RAP. SIGTEX INDEX

V10

SEX	1	2	ROW TOTAL
1	12	1	13
	123.9	0.3	50.4
	85.5	5.2	
	24.1	2.3	
2	3	11	13
	18.3	81.6	52.0
	12.5	197.0	
	7.6	42.2	
COLUMN TOTAL	15	11	26
	57.6	42.3	100.0

CHI SQUARE = 19.8057 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

3 CELLS USED OF 6 MAXIMUM OF 27 CELLS PER THIS RUN.
18668 BYTES OF MEMORY FREE.

FREQ

V17 SPLIT V2 DIVISION MEANS BY V20 YALE REP. LIBN DE

	V20		
COUNT / ROW PCT / COL PCT / TOT PCT	DEMOC	YPSIDN	ROW TOTAL
	0	1	
V17			
0	5	3	12
	71.0	25.0	40.0
	62.0	38.0	
	25.0	15.0	
1	8	7	15
	45.1	53.0	60.0
	42.0	72.0	
	34.0	35.0	
COLUMN TOTAL	13	10	25
	52.0	40.0	100.0

CHI SQUARE = 0.1638 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

(CELLS USED AT A MAXIMUM AT ANY CELLS FOR THIS RUN.
(5555 BYTES OF MEMORY FREE.

...STY

V17 DEBIT VS DEBIKEN OPERAT BY V21 KALI RAD. KIDA DI

	V21		
BRJN'			
REN YOT	USEBIL	VARD'Y	KOL
BIL POT		ST	TOTAL
TOT PEV	0	1	
V17			
0	5	13	18
	16.6	83.3	46.2
	45.5	59.0	
	6.2	43.3	
1	3	18	21
	33.3	72.2	53.8
	62.5	58.0	
	12.3	46.2	
BRJNN	5	35	39
TOTAL	21.6	63.6	100.0

...BIL BRJNPE = 2.1513 WITH 1 DEGREES OF FREEDOM.
...MBER OF MISSING OBSERVATIONS = 1

...BELLO LEDD BY A MAXIMUM OF 27 BELLE FOR THIS RUN.
...EBAL BYTTE OF MJMÖRY REQU...

KOPPY

V17 SOSYAL VE DEGERLER KONUSUNDA BY V22 MALI RAH. FIYATLA

	V22		
COUNT / ROW PCT / COL PCT / TOT PCT	DEGIL 0	KARDIN DI 1	ROW TOTAL
V17			
0	2	16	18
KARILYAKIN	10.5	83.3	46.0
	50.0	45.7	
	5.0	41.0	
1	1	19	13
KARILYAKTA	7.5	92.3	53.8
	25.0	54.5	
	2.5	46.2	
COLUMN TOTAL	3	22	25
	10.0	88.2	100.0

CHI SQUARE = 0.4759 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF A MAXIMUM OF 37 CELLS FOR THIS RUN.
15535 BYTES OF MEMORY FREE.

SETY

17 SASIT VE DESIGNEN YAGNAF BY VE3 VALI RAP. SATIN AL

	V23		
BCUNT ROW PCT COL PCT TOT PCT	DESIL	YKSEN	ROW TOTAL
17	. 0	1	
0	7	5	12
	58.3	41.6	48.0
	41.2	62.5	
	28.0	20.0	
1	10	3	13
	76.9	23.1	52.0
	58.8	37.5	
	40.0	12.0	
BELUKN	17	8	25
TOTAL	68.0	32.0	100.0

[illegible] DELETE = 3.9510 WITH 1 DEGREES OF FREEDOM.
[illegible]BER OF MISSING OBSERVATIONS = 1

CELLS USED OF A MAXIMUM OF 87 CELLS FOR THIS RUN.
5592 BYTES OF MEMORY FREE.

SDV

EXHIBIT VI DESIGNER PROOF BY VEA MALI RAPOR YAYIRIM

	VEA		
DEVAT NON PET DIL PET TEY PET	DESIL	YORUM	SEN TOTAL
	0	1	
7			
0	9	3	12
DIL+SYBKTA	75.0	25.0	48.0
	52.9	37.5	
	36.0	12.0	
1	8	5	13
DILYSKTA	61.5	38.4	52.0
	47.0	62.5	
	32.0	20.0	
SILUMN TOTAL	17	8	25
	68.0	32.0	100.0

SQUARE = 0.5107 WITH 1 DEGREE OF FREEDOM.
BER OF MISSING OBSERVATIONS =

CELLS HAD EN E MINIMUM OF 37 CELLS FOR THIS RUN.
ME BYTES OF MEMORY FREE.

...DAY

...7 SAMPLE VS RESIDENCE PRIOR BY VAR SIR. FARL. DESERTS

	VAR	
EDUC		
ROW PCT	YELLOW	ROW
COL PCT	BLACK	TOTAL
TOT PCT	2	
7		
0	0	13
	0.0	50.0
	0.0	52.0
	0.0	52.0
1	1	12
	7.7	92.3
	100.0	48.0
	4.0	48.0
COLUMN	1	25
TOTAL	4.0	96.0

SQUARE = 1.0400 WITH DEGREES OF FREEDOM.
...BER OF MISSING OBSERVATIONS = 0

...CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
...827 BYTES OF VARIABLE FREE.

...RDIV

...V57 ... ORBIT VS DECISION VERIF BY V26 SIR. FARL. DEBERLE

V26

COUNT / ROW PCT / COL PCT / TOT PCT	KULLAV	KULLAB	SEA TOTAL
V57			
0	0	13	13
	0.0	100.0	56.7
	0.0	59.1	
	0.0	56.7	
1	10	9	19
	52.6	47.4	43.3
	100.0	40.9	
	43.5	39.1	
DELIVERY TOTAL	10	22	32
	43.5	95.7	100.0

...AL ERRORS ... 1.2426 ACTUAL ... PREDICTED ... PREDICTED
...UMBER OF MISSING OBSERVATIONS = 2

...7 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
...ESS BYTES OF MEMORY USED.

```
[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
V17        SPORT VE [illegible] YORGUN   BY  V27          SIR. SOOL. DEGERL.
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                    V27
          COUNT
          ROW PCT  [illegible] [illegible]   ROW
          COL PCT  [illegible] [illegible]   TOTAL
          TOT PCT  I      0       1
V17       --------I--------I--------I
                0 I      9 I      4 I     13
YORULMAYANLAR     I   69.2 I   30.8 I   50.0
                  I   56.3 I   40.0 I
                  I   34.6 I   15.4 I
                  -I--------I--------I
                1 I      7 I      6 I     13
YORULANLAR        I   53.8 I   46.2 I   50.0
                  I   43.8 I   60.0 I
                  I   26.9 I   23.1 I
                  -I--------I--------I
          COLUMN        16       10       26
          TOTAL       61.5     38.5    100.0

RAW CHI SQUARE =     0.65000 WITH     1 DEGREE OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS =      0

4 CELLS USED OF A MAXIMUM OF [illegible] CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.
```

pov

7 SAMT VE DEBTRKEN MAGRAF BY V28 SIR. FARL. DEBEFLEN

	V28		
COUNT ROW PCT COL PCT TOT PCT	MULLEN ILHAMI 2	MULLAH ILHAMI 1	ROW TOTAL
7			
0	10 76.9 58.8 38.4	3 23.0 33.3 11.5	13 50.0
ADILYRHRKTO			
1	7 53.8 41.1 26.9	6 46.1 66.6 23.0	13 50.0
ADILYRKTO			
COLLEN TOTAL	17 65.3	9 34.6	26 100.0

I SCHUPFE.= 1.5654 WITH 1 DEGREES OF FREEDOM.
MBER OF MISSING OBSERVATIONS = 0

DELLS USED AT A MAXIMUM OF 67 CELLS FOR THIS RUN.
.75 BYTES OF MEMORY FREE.

V17 CROSS VE DEPENDENT VARIABLE BY V29 BIA. FAMIL. DISEAS

		V29		
	COUNT			
	ROW PCT	KILLIAN	KILLIAN	ROW
	COL PCT	ELEMENT	ELEMENT	TOTAL
	TOT PCT	0	1	
V17				
0		11	2	13
		84.6	15.3	52.0
		52.2	50.0	
		48.0	7.6	
1		11	2	13
		84.6	15.3	52.0
		52.0	50.0	
		48.0	7.6	
COLUMN		22	4	26
TOTAL		84.6	15.3	100.0

CHI SQUARE = 0.0000 WITH 0 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

* CELLS USED IN A CHI-SQ. OF 27 CELLS FOR THIS RUN.
LEAST EXPECTED VALUE =

SDAY

SAILT VE DEBICKEY ANSARF BY V19 RAR. BISTEMINDE DM

	V19		
COUNT / ROW PCT / COL PCT / TOT PCT	0	1	ROW TOTAL
19 1	2	6	8
UNU	25.0	75.0	61.5
	100.0	54.5	
	15.2	46.1	
0	0	5	5
EDILYN SABIT	0.0	121.2	38.5
	0.0	27.2	
	0.0	38.5	
1	3	5	8
PM. DEDICKEY	0.0	182.2	15.3
	0.0	10.1	
	0.0	15.3	
COLUMN TOTAL	5	11	13
	15.3	84.6	100.0

HI SQUARE = 1.4773 WITH 2 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 10

CELLS USED OF A MAXIMUM OF 97 CELLS FOR THIS RUN.
PACE BYTES OF MEMORY USED.

[illegible]

[illegible] RAP. SYSTEMANDE DE [illegible] AV VEC [illegible] MALL RAP. UZLN DD

	VEC		
COUNT / ROW PCT / COL PCT / TOT PCT	DRELL	VERTIK	RAK TOTAL
	0	1	
[illegible]			
0	10	4	14
[illegible]	71.4	28.5	58.3
	66.6	40.0	
	41.6	16.6	
1	5	5	10
[illegible]	45.4	54.5	41.6
	33.3	50.0	
	20.8	20.8	
KOLUMN TOTAL	15	10	24
	62.5	37.5	100.0

[illegible] SKLAPP = 1.736.6 MIKR[illegible] 1 [illegible] AV FREDDY.
[illegible]UMBER OF MISSING OBSERVATIONS = 1

[illegible] CELLS LOAD AT A MAXIMUM OF 27 TELLS ALR THIS RAK.
[illegible]6426 BYTES OF MEMORY FREE.

HÄDUV

V18 RAD, SYSTEMKINDE BY UTBILD BY V21 MELL RAD, KIGG DO

	V21		
COUNT / ROW PCT / COL PCT / TOT PCT	DEBIL	YRKESK	ROW TOTAL
	0	1	
V18			
0	8	12	14
UTBILDNINGSKATE	14.3	85.7	58.3
	42.0	63.0	
	8.0	48.0	
1	3	8	11
UTBILDNINGSKATE	27.3	72.7	44.0
	58.0	37.0	
	12.0	32.0	
COLUMN TOTAL	5	20	25
	20.0	80.0	100.0

CHI SQUARE = 0.6494 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
15418 BYTES OF MEMORY FREE.

V19 ROW SUBTRACTIONS DA UYBLLA BY V22 MALI RAP. FIYATLA

	V22		
COUNT / ROW PCT / COL PCT / TOT PCT	DEGIL	YARDIY	ROW TOTAL
V19			
2	2	12	14
UYBLLAYYAMXKTA	14.2	85.7	56.0
	33.3	54.5	
	8.0	48.0	
1	1	10	11
UYBLLAMXKTA	9.1	90.9	44.0
	33.3	45.4	
	4.0	40.0	
COLUMN TOTAL	3	22	25
	12.0	88.0	100.0

CHI SQUARE = 0.1674 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF A MAXIMUM OF 87 CELLS FOR THIS RUN.
5472 BYTES OF MEMORY FREE.

COPY

V19 APT. DISTRIBUTION OF UVELLA BY V23 MULTIPLE RAPID RATIO R

V19	V23		
	COLONY ROW PCT COL PCT TOT PCT	DENSE 2	VARIOUS 1	ROW TOTAL
2	6	6	12
UVELLA KAMPTO	57.1	42.9	56.2
	47.2	75.0	
	32.0	24.0	
1	5	2	11
UVELLA MINUTO	81.8	18.1	44.0
	52.8	25.0	
	36.0	8.0	
COLUMN TOTAL	17	8	25
	68.0	32.0	100.0

CHI SQUARE = 1.7236 WITH DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS HAVE AN EXPECTED OF LESS THAN 5.
MINIMUM EXPECTED FREQUENCY = 3.520.

...ABLE

V19 RAD: BESTÄMNING AV LYSBLA: ZV V24 VALU RAPOR YATTRID

V24

CELLVI			
RAD PCT	DEBIL	YRKES	TOTAL
COL PCT		DI	
TOT PCT	.2	1	
V19			
2	1	3	4
LYSBLÅNNGRKTR	78.5	81.4	80.8
	64.7	37.5	
	24.0	12.0	
1	6	5	11
LYSBLÅNNGRKTR	54.5	45.4	44.4
	35.2	62.5	
	14.4	20.2	
COLLVI	17	8	25
TOTAL	68.2	32.0	100.0

CHI SQUARE = 1.6241 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

DELLS USED BY PROCEDURE OF 17 DELLS TOT TWIS RUN
53952 BYTES OF MEMORY FREE.

[illegible]

[illegible] FREQ. DISTRIBUTION OF [illegible] BY VES [illegible] STR. FAIL DEBERT

	VES	
COUNT ROW PCT COL PCT TOT PCT	0	1
VIS		
0	1 6.6 100.0 2.8	.0 33.3 50.0 2.8	1.8
[illegible]	6 3.6 0.2 0.2	11 [illegible] [illegible] [illegible]	17 [illegible]
[illegible]	1 [illegible]	28 [illegible]	29 [illegible]
TOTAL	3.8	53.7	100.2

[illegible] = 0.7167 with 1 DEGREES OF FREEDOM.
[illegible] OF [illegible] = 0

[illegible] OF [illegible] BY [illegible] FOR [illegible]
[illegible] BYTES OF MEMORY FREE

[illegible]

[illegible] ROW PERCENTAGE BY CHELLA BY V25 SIR. FABL. DEWERLE

	V25		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN ILMAYA 2	KULLAN ILMAZ 1	ROW TOTAL
V19 2	2	13	15
	6.9	131.8	57.5
	1.5	42.2	
	6.9	57.6	
1	1	10	11
	5.3	63.9	42.3
	156.2	42.8	
	3.5	38.4	
COLUMN TOTAL	3.5	23	26
		88.1	100.0

[illegible] SQUARE = [illegible] WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

[illegible] CELLS USED BY [illegible] MAXIMUM OF 87 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

COPY

V18 RAT. DISTEMPER BY UVELLA BY V27 SIR. FARL. DIBERLE

	V27		
COUNT ROW PCT COL PCT TOT PCT	VULLAN ELMONT 0	VULLAN ELMONT 1	ROW TOTAL
V18			
0	16	9	25
UVELLANIKAMITE	64.0	36.0	57.6
	82.5	52.9	
	36.4	20.7	
1	3	8	11
UVELLAVIRITE	27.3	72.7	42.3
	17.5	47.1	
	6.9	18.4	
COLUMN TOTAL	19	17	36
	53.5	46.5	100.0

CHI SQUARE = 6.3939 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 37 CELLS FOR THIS RUN.
18247 BYTES OF MEMORY FREE.

AEPY

VAR [illegible] BYTE FREQUENCY BY [illegible] BY VAR [illegible] SAS FAMIL DIDERI

VAR	[illegible]	[illegible]	[illegible]
?	12	3	15
[illegible]	80.0	20.0	57.5
	70.6	33.3	
	46.2	11.5	
	5	6	11
[illegible]	45.4	54.5	42.5
	29.4	66.6	
	19.2	23.0	
[illegible]	17	9	26
TOTAL	65.2	34.6	100.0

CHI-SQUARE = 3.3468 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

A BELLS USED IN A WINDOW OF 27 BELLS FOR THIS RUN.
USED BYTES OF VARIABLE TABLE

...ORRV

...15 RAD. SISTSYSSNDE DV UVGLLA BY V29 SIR. FRAL. DEBERLE...

	V29		
CELLKT ROW PCT COL PCT TOT PCT	KULLAN ILMARO 1	KULLAN ILMAKT 2	ROW TOTAL
...15 2	13 86.5 59.1 52.0	2 13.3 50.2 7.6	15 57.6
...VGLLANKMAKTA 1	9 81.8 40.9 34.6	2 18.2 50.0 7.6	11 42.3
COLUMN TOTAL	22 84.6	4 15.3	26 100.0

...2 SQUARE = 0.1146 WITH 1 DEGREES OF FREEDOM.
...UMBER OF MISSING OBSERVATIONS = 0

...CELLS USED OF A MAXIMUM OF 87 CELLS FOR THIS RUN.
...5323 BYTES OF MEMORY FREE.

.COPY

V41 B.KARLEN.PAT;FLER BY V5 BILGISSAYAR KULLANIM

	V5		
COUNT / ROW PCT / COL PCT / TOT PCT	YARARL ANMAYA	YARARL BNG	ROW TOTAL
	0	1	
V41			
0	5	6	11
	45.5	54.5	44.0
	41.6	42.9	
	18.0	24.0	
1	7	8	15
	46.6	53.3	57.9
	58.3	57.1	
	28.0	32.0	
COLUMN TOTAL	12	14	25
	48.0	52.0	100.0

CHI SQUARE = 0.0433 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF 8 MAXIMUM OF 87 CELLS FOR THIS RUN.
15241 BYTES OF MEMORY FREE.

V41 B.KARIN.ARTIFLER FY V12 B-S VE K-Z HOZIRLA

V41	V13				
	SELVET HOV PET SEL PET TOT PCT	KAPITAL AYLIK 1K 1	2	UD AYL DERY & YLEK 3K 3	4	SOK TOTAL
2	0	12	1	0	11
AZALIS	0.0	92.3	5.9	3.0	44.2
	0.0	55.5	20.0	0.0	
	0.0	40.2	4.0	0.0	
3	1	8	4	1	14
ARTIB	7.1	57.1	28.5	7.1	55.0
	100.0	44.4	50.0	100.0	
	4.0	32.0	16.0	4.0	
SELLEN TOTAL	1 4.0	18 72.0	5 20.0	1 4.0	25 100.0

KI KARE = 8.7167 WITH 3 DERECE OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

8 CELLS USED OF A MAXIMUM OF 27 CELLS PER TABLE RUN.
TABLE SPACE OF MEMORY FREE.

ABBY

V41 B.KATEGORIAKTIEFLEX BY V14 (FOR VER. FEN OKT

V14

COUNT / ROW PCT / COL PCT / TOT PCT	0	1	TOTAL
V41			
0	3	4	7
	55.5	44.4	37.0
	41.6	33.3	
	20.8	16.6	
1	7	5	12
	41.5	58.3	63.0
	58.3	66.6	
	29.1	33.3	
COLUMN TOTAL	12	12	24
	50.0	50.0	100.0

CHI SQUARE = 0.1778 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED UP A MAXIMUM OF 27 CELLS FOR THIS RUN.
ISSUED BYTES OF MINIMUM FREE

APPBY

V41 B.KARIN.AKTIFLER BY V15 KÖRER VER. BASABP

	V15		
V41	KULLAN ILMAYA	KULLAN ILMAKT	ROW TOTAL
	0	1	
0	5	4	9
	55.5	44.4	37.5
	29.4	57.1	
	20.8	16.7	
1	12	3	15
	80.0	20.0	62.5
	70.6	42.9	
	50.0	12.5	
COLUMN TOTAL	17	7	24
	70.8	29.2	100.0

CHI SQUARE = 1.6269 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
18688 BYTES OF MEMORY FREE.

		V.S		
	ROW PCT COL PCT TOT PCT	YELLOW 1	YELLOW 2	ROW TOTAL
1	0	0 0.0 0.0	0 0.0 0.0	0 0.0
	1	33 33.3 33.3 16.5	66 66.7 42.3 33.0	99 49.5
	2	6 46.2 66.7 3.0	7 53.8 4.5 3.5	13 6.5
	3	3 42.9 33.3 1.5	4 57.1 2.6 2.0	7 3.5
	4	0 0.0 0.0 0.0	79 100.0 50.6 39.5	79 39.5
	COLUMN TOTAL	9 37.5	156 58.0	200 100.0

CHI SQUARE = 7.1267 WITH 3 DEGREES OF FREEDOM.
LAMBDA OF V1 BY V2 = 0.0000 WITH V1 DEPENDENT = 0.0000

CELLS WITH EXPECTED FREQUENCY < 5: 4 OF 8 CELLS FOR THIS RUN.
MISSING OBSERVATIONS BY TABLE: 0

V41 BY V17

	V17		
COUNT / ROW PCT / COL PCT / TOT PCT	0	1	ROW TOTAL
V41			
0	5	6	11
	45.4	54.6	42.3
	38.4	46.1	
	19.2	23.0	
1	8	7	15
	53.3	46.6	57.6
	61.5	53.8	
	30.7	26.9	
COLUMN TOTAL	13	13	26
	50.0	50.0	100.0

CHI-SQUARE = 0.1576 WITH 1 DEGREE OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

-BAY

V41 BAHADUR/FISHER BY V18 STEIT VS DESTROYER

	V18			
COUNT / ROW PCT / COL PCT / TOT PCT	1	2	3	ROW TOTAL
V41				
0	3	1	1	5
BIRDS	60.0	20.0	20.0	45.5
	37.5	50.0	50.0	
	27.3	9.1	9.1	
1	5	1	1	7
BATS	71.4	14.3	14.3	63.6
	62.5	50.0	50.0	
	45.4	9.1	9.1	
COLUMN TOTAL	8	2	2	11
	72.7	18.2	18.2	100.0

D-R SELECTION = 0.7625 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 11

5 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
TOTAL PAGES OF MEMORY USED.

COPY

V41 BASKETBALL PLAYERS BY V19 REP. SIENKIEWICZ D

	V18		
	COUNT		
	ROW PCT	LIKELY	ROW
	COL PCT	UNLIKELY	TOTAL
	TOT PCT	2	
V41			
2	5	6	11
	45.4	54.6	42.3
	33.3	54.5	
	19.2	23.1	
1	10	5	15
	66.6	33.3	57.6
	66.6	45.4	
	38.4	19.2	
COLUMN	15	11	26
TOTAL	57.6	42.3	100.0

CHI SQUARE = 1.1666 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

4 CELLS USED UP A MAXIMUM OF 27 CELLS FOR THIS RUN.
1283 BYTES OF MEMORY USED.

LOGBY

V41 BARRIN.SKTSFLCR BY V82 MOLI MAP. UZUN DON

	V82		
COUNT / ROW PCT / COL PCT / TOT PCT	DEST.	YARDIM	ROW TOTAL
	0	1	
V41			
2	6	5	11
AZALIS	54.5	45.4	44.0
	40.0	33.3	
	24.0	20.0	
1	9	5	14
ARTIS	64.3	35.7	56.0
	60.0	50.0	
	36.0	20.0	
COLUMN TOTAL	15	10	25
	60.0	40.0	100.0

CHI SQUARE = 0.8435 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED OF A MAXIMUM OF 37 CELLS FOR THIS RUN.
15.9K BYTES OF MEMORY FREE.

COPY

V41 BARIUM ENEMA BY V21 MALL RAD. KIDD DON

	V21		
COUNT / ROW PCT / COL PCT / TOT PCT	BENIGN	MALIGNANCY OR SUSPICION	ROW TOTAL
	0	1	
V41			
0	12	9	21
NORMALS	16.1	81.8	44.7
	42.9	45.0	
	8.5	36.7	
1	3	11	14
PATIENTS	21.4	78.6	55.3
	57.1	55.0	
	12.8	44.0	
COLUMN TOTAL	25	20	25
	53.2	42.6	100.0

CHI SQUARE = 2.0435 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

4 CELLS USED OF A MAXIMUM OF 57 CELLS FOR THIS RUN.
15177 BYTES OF MEMORY FREE.

RFPY

A1 B:KRSKAL.SKTTLER BY V88 ARLI RRP. FIVATLANDIS

	V88		
	COUNT		
	ROW PCT	SEDTL	YPTDIV	ROW
	COL PCT		DI	TOTAL
	TBL PCT	2.	1	
A L	2	1	10	11
ZPLIB		5.2	52.5	44.2
		33.3	45.4	
		4.3	40.7	
	1	2	12	14
RTID		14.8	85.7	55.2
		66.6	54.5	
		8.0	48.0	
	COLUMN	3	22	25
	TOTAL	12.0	88.0	100.0

AI SQUARE = 2.1874 WITH 1 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS =

DELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
TAL BYTES OF VARIABLE

"1

HAPPY

V41 B.KARIN.RITTLER BY V23 MAR. PSY. BATCH 6L

	V23		
COUNT / ROW PCT / COL PCT / TOT PCT	DIBIL.	YARBIA.	ROW TOTAL
	0	1	
V41			
0	6	5	11
AZALIB	54.5	45.4	44.0
	35.3	50.0	
	24.0	20.0	
1	11	9	14
ARTIB	78.5	61.4	56.0
	64.7	37.5	
	44.0	12.0	
COLUMN TOTAL	17	8	25
	68.0	32.0	100.0

CHI SQUARE = 1.6341 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF 6 MAXIMUM OF 37 CELLS FOR THIS RUN.
15.71 BYTES OF MEMORY USED.

COPY

1	B.KPRI.A.EXTIFLER	BY V24	MALI REPOR VETIRIM	

V24

	COUNT ROW PCT COL PCT TOT PCT	DEDIL 0	VERDIN 1	ROW TOTAL
4	7	6 54.5 35.2 24.0	5 45.4 62.5 20.0	11 44.0
ZALIS	1	11 78.5 64.7 44.0	3 21.4 37.5 12.0	14 56.0
TIS	COLUMN TOTAL	17 68.0	8 32.0	25 100.0

HI SQUARE = 1.0324 WITH 1 DEGREES OF FREEDOM.
UMBER OF MISSING OBSERVATIONS = 0

DELLS USED IT A MAXIMUM OF 57 CELLS FOR THIS RUN.
IGGS BYTES OF MEMORY FREE.

MEANY

V41 B.KARTKN.ARTTELER BY V25 SIR. FARL. DIST

	V25		
V41	COUNT ROW PCT COL PCT TBL PCT	KELLOG 0	KELLOG 1	ROW TOTAL
	0	0 0.0 0.0 0.0	11 100.0 44.7 42.3	11 42.3
	1	1 5.6 100.0 3.8	14 93.3 55.3 53.8	15 57.6
	COLUMN TOTAL	1 3.8	25 96.1	26 100.0

CHI SQUARE = 1.7027 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

0 CELLS HAD EXPECTED FREQUENCIES LESS THAN FIVE.

USED BYTES OF MEMORY FREE.

EFFY

1 B.KARTOFFELER AV VEG GEN. FAKT. DEGERLEND

	VES		
COUNT ROW PCT COL PCT TOT PCT	KJØLLAN ELVEKYS 0	KJØLLAN ELVEKYS 1	RAD TOTAL
0	2 2.8 0.6 0.6	21 123.6 44.0 43.0	23 46.3
1	2 6.5 120.2 3.6	24 93.3 56.0 53.2	26 53.8
KOLONNE TOTAL	4 8.1	45 90.9	49 100.0

1. KJI-KVADRAT = 1.7837 MED 1 FRIHETSGRAD(ER).
NIVÅER AV VEGETATIVT OMRÅDE = 2

CELLE MED FORVENTET FREKVENS MINDRE ENN 5 KAN UGYLDIGGJØRE KJI-KVADRAT TESTEN.
CELLER MED MANGLENDE VERDIER TELLES IKKE.

OPY

V41 B.VARIATE FILE BY V27 BIR. FRAL. DEBERLEY

V27

	COUNT ROW PCT COL PCT TOT PCT	KULLAN KULLAK 1	KULLAN KULLAK 2	ROW TOTAL
V41	0	6	3	11
		72.7	27.3	42.3
		50.0	30.0	
		23.1	11.5	
	1	6	7	15
		50.0	70.0	57.6
		50.0	70.0	
		23.1	26.9	
	COLUMN TOTAL	12	10	26
		61.5	38.4	100.0

CHI SQUARE = 1.2626 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

CELLS USED BY 2 VARIABLES OF 27 CELLS FOR THIS TABL
1511 BYTES OF MEMORY FREE.

COPY

V44 BARRON BUTLER BY V22 SIR, FROM DESIRE

	COUNT / ROW PCT / COL PCT / TOT PCT	V22		TOTAL
V44				
AZALIE		53.3	35.3	44.7
		41.1	64.7	
		23.9	15.8	
ARTIS		46.7	64.7	55.3
		50.0	85.5	
		33.7	43.2	
COLUMN TOTAL		57.3	42.7	100.0

CHI SQUARE = 3.1387 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

A CELL USED AT A MINIMUM OF 27 CELLS FOR THIS RUN.
16385 BYTES OF MEMORY USED.

PEPY

V41 B.KORIN/MIFFLER BY V29 SIR. FRAU. DEGERLE

V29

	BELOW FOX POT COL POT TOT POT	KULLEN KULLEN SLOOPS SLOOPS 0	1	ROW TOTAL
V41				
	3	8	3	11
BASLER		72.7	27.3	42.3
		38.1	75.0	
		30.7	11.5	
	5	14	1	15
STTIB		93.3	6.7	57.7
		61.9	25.0	
		53.8	3.8	
	COLUMN TOTAL	22	4	26
		84.6	15.3	100.0

CHI SQUARE = 2.2721 WITH 1 DEGREES OF FREEDOM.
SIGNIF OF NULL HYPOTHESIS = 0

CELLS USED AT A MAXIMUM OF 97 CELLS FOR THIS RUN.
SOME LATTICE OF DEGENERACY FREED.

LIBRARY

V61 BLANKENBERGHE BY V8 BILBISPYAR KULLANI

	V8		
V61	0	1	TOTAL
ZWARTE	32.5	50.5	29.7
	80.0	38.7	
	11.5	19.2	
	9	5	14
ARTIS	52.9	50.0	50.2
	75.0	64.3	
	34.6	24.0	
GELIJKEN	17	14	31
TOTAL	40.1	59.9	100.0

CHI SQUARE = 3.8462 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

A CELL USED BY A MARKER AT 87 CELLS PER TWIP RAW.
ZEROS BYTES OF MEMORY USED.

puppy

V61 B.KARRIDZBERMAVE BY V13 S-S VE K-S KRZIK

V13

V61		1	2	3	4	ROW TOTAL
	1	1	5	1	2	9
AZALIB		11.1	55.6	11.1	22.2	9.9
		100.0	33.3	20.0	40.0	
		1.1	5.5	1.1	2.2	
	2	2	10	4	1	17
ORVIS		11.8	58.8	23.5	5.9	18.7
		200.0	66.7	80.0	20.0	
		2.2	11.0	4.4	1.1	
	COLUMN TOTAL	3	15	5	3	26
		3.3	16.5	5.5	3.3	28.6

CHI SQUARE = 6.9412 WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

6 CELLS USED OF A MAXIMUM OF 27 CELLS FOR THIS RUN.
1824 BYTES OF MEMORY FREE.

HAPPY

V61 BIVARIATE DISTRIBUTION BY V14 KARAR VER. FON. SIK

	V14		
COUNT / ROW PCT / COL PCT / TOT PCT	KELLEN	KULLEN	TOTAL
	1	2	
V61			
0	5	2	7
AZALIS	71.4	28.5	29.1
	41.6	16.6	
	20.8	8.3	
1	7	10	17
ARTIS	41.1	58.8	70.8
	58.3	83.3	
	29.1	41.6	
COLUMN TOTAL	12	12	24
	50.0	50.0	100.0

CHI SQUARE = 1.8181 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

1 CELLS HAVE E.V. LESS THAN 5 OUT OF 37 CELLS FOR THIS RUN.
16000 BYTES OF MEMORY FREE.

[illegible]

V61 [illegible] BY V15 [illegible]

	V15		
COUNT / ROW PCT / COL PCT / TOT PCT	KULLAN ILMAYA 0	KULLAN ILYAK 1	ROW TOTAL
V61			
0	2	4	7
PERLIS	28.6	57.1	29.1
	17.6	57.1	
	12.5	16.6	
1	14	3	17
ARTIS	82.3	17.6	70.8
	82.3	42.8	
	58.3	12.5	
COLUMN	17	7	24
TOTAL	71.0	29.1	100.0

CHI-SQUARE = 6.7428 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 2

4 CELLS HAVE E.V. < 5. MAY WISH TO COMBINE WITH CELLS FOR THIS RA.
MINIMAL EXPECTED FREQ.

-BODY

VS1 B.KARLCZGERMAYE BY V18 KRRER VER. ERR

V18			
BODY RED PET COL PET *OT PET	YELLOW YELLOW	KILLER KILLER	ROW TOTAL
V81	3	4	7
	57.1 44.4 16.5	42.9 25.0 12.5	28.1
	6	12	18
	85.7 66.7 50.0	75.0 75.0 50.0	72.0
BODY TOTAL	9 36.0	16 64.0	25 100.0

CHI SQUARE = 1.6806 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

1 CELLS USED UP THE MAXIMUM OF 27 CELLS FOR THIS RUN.
1307 BYTES OF MEMORY USED.

ARRY

VSM B.KARI:OZSERMOVE BY V17 ZORIT VE DEETOMEN Y

	V17		
DESCVT ROW PCT / DEL PCT / TOT PCT	YORILY 0	YORILY 1	ROW TOTAL
VSM 0	4	4	8
	50.0	50.0	21.7
	30.7	30.7	
	15.3	15.3	
1	9	9	18
	50.0	50.0	69.3
	69.2	69.2	
	34.6	34.6	
COLUMN TOTAL	13	13	26
	50.0	50.0	100.0

CHI SQUARE = 0.0000 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 3

CELLS USED OF 2 MAXIMUM OF 27 CELLS FOR THIS RUN.
USING ENTER OF MEMORY FREE.

ORRY

ES] P.ASRI.DZSERVDYE BY V18 SORIT VE DESIKEN

	V18			
DCLNT ROW PCT COL PCT TOT PCT	1.UMU 1	2.SCOT 2	3.OTH 3	ROW TOTAL
V81				
0	8 57.0 88.9 18.3	3 25.2 60.0 7.1	3 25.2 50.0 7.1	14 32.7
1	6 66.6 75.0 14.3	2 22.2 40.0 4.8	1 11.1 50.0 2.4	9 67.3
COLUMN TOTAL	24 57.1	9 21.4	9 21.4	42 100.0

CHI SQUARE = 0.4018 WITH 2 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 12

E CELLS USED OF 6 MAXIMUM OF 81 CELLS FOR THIS RUN.
14501 BYTES OF MEMORY FREE.

DERV

E1 B.XPRI:DEBEPYNE BY V15 FOR SIETEXIADE DA U

	V15		
E1	0	1	
	4	4	8
	50.0	50.0	30.7
	66.6	33.3	
	15.3	15.3	
	11	7	18
	61.1	38.9	69.2
	73.3	63.6	
	42.3	26.9	
COLUMN	15	11	26
TOTAL	57.6	42.3	100.0

SQUARE = 1.983 WITH 1 DEGREE OF FREEDOM.
LEVEL OF MISSING OBSERVATIONS = 2

CELLS USED IN TABULATION OF 27 CELLS FOR THIS RUN.
USE BYTES OF WORKING STORAGE.

[illegible]

V61 [illegible] BY V62 [illegible]

	V62		
COUNT ROW PCT COL PCT TOT PCT	0	1	ROW TOTAL
V61			
2	4	4	8
AZALIA	50.0 80.0 10.0	50.0 40.0 10.0	20.0
	1 50.0 20.0 2.5	1 50.0 20.0 2.5	2 5.0
ORTIS	21 56.8 84.0 52.5	16 43.2 80.0 40.0	37 92.5
COLUMN TOTAL	25 62.5	20 37.5	40 100.0

CHI SQUARE = 0.4533 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

4 CELLS USED UP 8 ANYWAY IF 27 CELLS FOR THIS RUN.
[illegible] BYTES OF [illegible] FREE.

WORDY

V61 B.KARELOZBERRYVE BY V31 MAIL ORD. MISC DON

	V31		
COUNT / ROW PCT / COL PCT / TOT PCT	DEBIL	YARDLY	ROW TOTAL
	1	2	
V61			
0	1	7	8
	12.5	87.5	28.0
	20.0	35.0	
	4.0	28.0	
1	4	13	17
	23.5	76.5	68.0
	80.0	65.0	
	16.0	52.0	
COLUMN TOTAL	5	20	25
	20.0	80.0	100.0

CHI SQUARE = 2.4125 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 1

4 CELLS USED OF A MAXIMUM OF 87 CELLS FOR THIS RUN.
4096 BYTES OF MEMORY USED.

[illegible]

[illegible] BY [illegible] [illegible]

	V82		
	1	2	
V81			
0	1	7	8
	12.5	87.5	32.7
	33.3	31.8	
	4.2	29.2	
1	2	15	17
	11.7	88.2	67.3
	66.7	68.2	
	8.2	62.5	
COLUMN TOTAL	3	22	25
	12.0	88.0	100.0

CHI-SQUARE = 0.2625 WITH 1 DEGREES OF FREEDOM.
NUMBER OF EXPECTED FREQUENCIES < 5 = 2

4 CELLS USED IF 5 MAXIMUM OF 47 CELLS FOR THIS RUN.
14892 BYTES OF MEMORY FREE.

...MARY

V61 BY MARITOZSERAYE BY V22 FULL REP. SATIV ALS

V61

	V22		
COUNT ROW PCT COL PCT TOT PCT	0	1	ROW TOTAL
0	2	4	6
	33.3	66.7	35.3
	22.2	57.1	
	11.8	23.5	
1	13	3	17
	76.4	23.5	64.7
	77.8	42.9	
	58.8	17.6	
COLUMN TOTAL	17	7	23
	73.9	26.1	100.0

...SQUARE = 1.7317 WITH 1 DEGREES OF FREEDOM.
...NUMBER OF MISSING OBSERVATIONS =

... CELLS HAVE AN E VALUE OF 27 CELLS FOR THIS ROW.
...SQ BYTES OF MEMORY FREE

[illegible]

VS1 - - - - - B.KRITKIZSEPKOVIC- - - - - - -BY -VS4- - - - -VAR. RADCR VARIETY

	VS4		
COUNT ROW PCT COL PCT TOT PCT	2	1	ROW TOTAL
VS1			
2	5 75.0 35.7 26.3	2 25.0 28.6 5.3	7 36.8
1	11 84.7 64.7 44.8	5 35.3 71.4 26.3	17 63.2
COLUMN TOTAL	17 89.5	7 36.8	24 126.3

CHI SQUARE = 0.1264 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

A CELL LEVEL OF 5 EXPECTED IN 25 CELLS FOR THIS RUN.
LARGEST SYMBOL OF 2 FOUND HERE.

LOOP

V61 B.KARLIZBER:PYE BY V65 SIR. FAUL. DEBERL

V65

	BELAT REA PCT ROW PCT TOT PCT	X/ULP: COLUMN %	ALLAN: COLUMN %	ROW TOTAL
V61	0	0	F	0
ASYLUM		1.1	170.8	31.7
		3.2	33.3	
		0.6	33.7	
	1	1	17	18
PITTS		5.5	94.4	55.8
		22.2	66.6	
		2.1	66.3	
	SELUMN TOTAL	5	36	36
		2.3	69.7	100.0

CHI SQUARE = 6.4104 WITH 1 DEGREES OF FREEDOM.
NUMBER OF VISELD EXCLUDED = 2

3 CELLS USED BY 3 MONTHS OF 87 CELLS FOR THIS RUN.
LAST BYTE OF MEMORY FILL

ENTRY

V64 B.KARI:OZSERVAVI BY V26 BIR. FAAL. OSSERVA

	V26		
COUNT / ROW PCT / COL PCT / TOT PCT	KELLAN ILMAKO 0	KELLAN ILMAKI 1	REA TOTAL
V64			
0	0	8	8
PZALIS	0.0	100.0	30.7
	0.0	32.0	
	0.0	30.7	
1	1	17	18
ARTIS	5.5	94.4	69.2
	100.0	68.0	
	3.8	65.3	
COLUMN TOTAL	1 3.8	25 96.1	26 100.0

CHI SQUARE = 0.4622 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

2 CELLS USED OF A MAXIMUM OF 37 CELLS FOR THIS RUN.
14950 BYTES OF MEMORY FREE.

ARFY

S1 E.KARSLOZBERGSYE BY V57 SIR. FRAL. DEBERLE

V57

COUNT / ROW PCT / COL PCT / TOT PCT	KULLEN	KELLEN	ROW TOTAL
2	6	2	8
	75.0	25.0	30.7
	37.5	22.2	
	23.1	7.7	
1	10	8	18
	55.6	44.4	69.3
	62.5	88.2	
	38.4	30.7	
COLUMN TOTAL	16	10	26
	61.5	38.4	100.0

[illegible] 1.3347 WITH 1 DEGREE OF FREEDOM.
[illegible] OF MISSING OBSERVATIONS = 0

[illegible] USED OF 3 VARIABLE OF 57 CELLS FOR THIS RUN.
[illegible] OF FREEDOM FREE.

[illegible]

VS1 [illegible] BY VS2 [illegible]

	VS2		
	1	2	
VS1			
1	1	2	3
	75.0	25.0	33.7
	35.9	13.5	
	23.0	7.0	
2	11	7	15
	61.1	38.9	66.3
	64.7	77.7	
	22.3	22.9	
COLUMN	17	9	26
TOTAL	55.3	34.5	100.0

CHI SQUARE = 2.47511 WITH 1 DEGREES OF FREEDOM
NUMBER OF MISSING OBSERVATIONS = 1

A CELLS LISTED BY F EXPECTED IF BY CELLS FOR TABLE MIN.
14 PAGE BYTES OF MEMORY USED

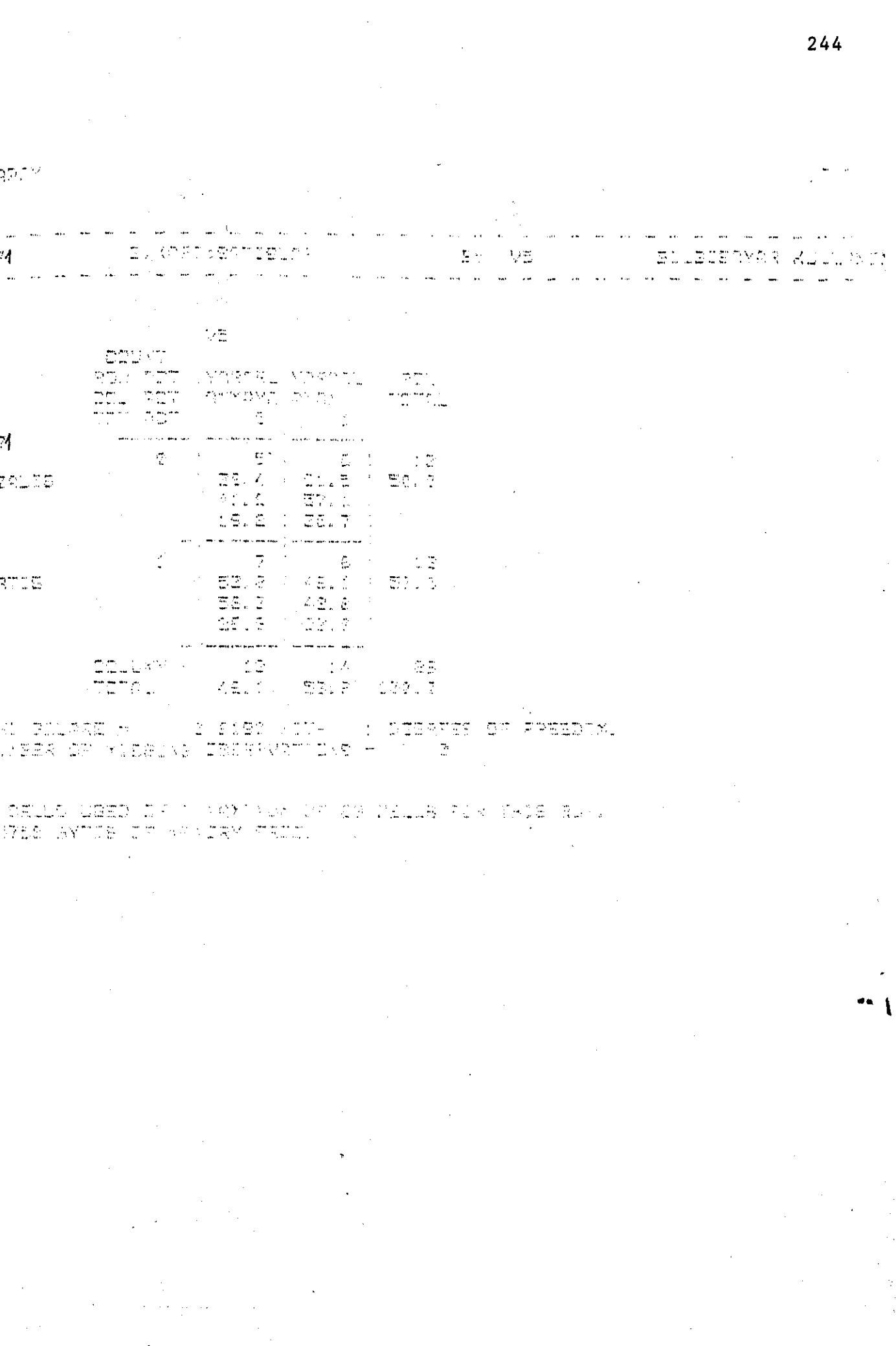
[illegible]

[illegible] BY V89 BIK. FAEL. DESIRLE

	V89		
	COLUM		
	TEN PCT	KELLER	KELLER	ROW
	COL PCT	ELMARE	ILPARK	TOTAL
	TOT PCT	0	1	
[illegible]				
	0	6	0	6
[illegible]		75.0	25.0	32.7
		37.5	38.2	
		22.2	7.0	
	1	10	2	12
[illegible]		83.3	16.7	65.2
		62.5	61.5	
		54.5	10.9	
	COLUMN	16	5	22
	TOTAL	84.2	15.8	100.0

[illegible] SQUARED = 0.8127 WITH 1 DEGREES OF FREEDOM.
[illegible] OF MISSING OBSERVATIONS = 2

[illegible] LEVEL BY [illegible] FOR V89 FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.



[illegible]

VTI [illegible] BY V13 B+C VS A+Z HOZI

V13

COUNT / ROW PCT / COL PCT / TOT PCT	1	2	3	4	RSA TOTAL
V7M					
0	1	12	2	0	13
	7.6	75.5	15.3	0.0	52.0
	33.3	50.0	40.0	0.0	
	4.0	48.0	8.0	0.0	
1	2	8	3	1	12
	16.7	66.6	25.1	8.3	48.0
	66.6	44.4	60.0	100.0	
	8.0	32.0	12.0	4.0	
COLUMN TOTAL	3	18	5	1	25
	12.0	72.0	20.0	4.0	100.0

CHI SQUARE = [illegible] WITH 3 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = [illegible]

0 CELLS HAVE E < 5. MIN E = [illegible] THE MINIMUM EXPECTED CELL FREQUENCY WAS [illegible]

```
[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
V71          [illegible]                    BY V14              [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                      V14
            COUNT   I
            ROW PCT I[illegible] [illegible]    ROW
            COL PCT I[illegible] [illegible]   TOTAL
            TOT PCT I     2        3
V71         --------I--------I--------I
                  2 I     6  I     6  I    12
[illegible]         I  50.0  I  50.0  I  50.0
                    I  50.0  I  50.0  I
                    I  25.0  I  25.0  I
                    -I--------I--------I
                  3 I     6  I     6  I    12
[illegible]         I  50.0  I  50.0  I  50.0
                    I  50.0  I  50.0  I
                    I  25.0  I  25.0  I
                    -I--------I--------I
             COLUMN      12       12       24
             TOTAL     50.0     50.0    100.0

CHI SQUARE =      0.[illegible] WITH   1 DEGREES OF FREEDOM
NUMBER OF MISSING OBSERVATIONS =       0

[illegible] CELLS USED OF A MAXIMUM OF [illegible] CELLS FOR THIS RUN
[illegible] BYTES OF MEMORY FREE.
```

[illegible]

[illegible] BY V.E [illegible] VER. [illegible]

V.E

[illegible]			
[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		
[illegible]			
[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	61.6	56.5	53.3
	56.5	76.6	
	39.1	23.1	
[illegible]			
[illegible]			
[illegible]	23.3	15.6	53.3
	44.4	61.3	
	16.6	38.1	
[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	37.8	32.8	133.3

[illegible] 0.1778 [illegible] [illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible]

[illegible] B. [illegible] BY V1E [illegible] VER. DRCV BN.

	V1E		
COUNT ROW PCT COL PCT TOT PCT	KELLOY ELMSMP 2	KELLOY ELMSMT 1	ROW TOTAL
[illegible]			
1	5	7	12
[illegible]	41.7	58.3	50.0
	55.6	70.0	
	20.8	29.2	
	4	3	7
[illegible]	57.1	42.9	29.2
	44.4	30.0	
	16.7	12.5	
COLUMN TOTAL	9 37.5	10 41.7	24 100.0

[illegible] SQUARE = 0.1770 WITH [illegible] DEGREES OF FREEDOM
[illegible] OF MISSING OBSERVATIONS = 0

[illegible] CELLS HAVE EXPECTED V. LESS THAN 5. [illegible]
[illegible] EXPECTED V. [illegible]

...OGRY

V71 DIAGNOSTICIAN BY V18 GREAT VE DEBICKEN

V71	V18			
	ROW PCT COL PCT TOT PCT	TUXU 1	ISEILI KOM. D K BASI BBIBYE 2	ROW TOTAL 3
	0	4 57.1 50.0 33.3	2 28.6 66.7 16.7	1 14.3 50.0 8.3	7 58.3
PZGLIS	1	4 66.7 50.0 33.3	1 16.7 33.3 8.3	1 16.7 50.0 8.3	6 41.7
	COLUMN TOTAL	8 66.7	3 25.0	2 16.7	12 100.0

CHI-SQUARE = 0.25714 WITH 2 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 12

1 CELLS HAVE E.V. LESS THAN 5. MAY WANT TO COLLAPSE ROWS OR COLUMNS
TO INCREASE EXPECTED FREQUENCY.

[illegible]

[illegible] BY V18 [illegible]

V18

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1	2	3	
[illegible]	0	4	2	1	7
[illegible]		57.1	28.6	14.3	53.8
		53.3	22.2	50.0	
		30.7	15.4	7.7	
	1	4	1	1	6
[illegible]		66.7	16.7	16.7	46.2
		50.0	33.3	50.0	
		30.7	7.7	7.7	
	[illegible]	8	3	2	13
	[illegible]	61.5	23.1	15.4	100.0

[illegible] = 0.8679 WITH 2 DEGREES OF FREEDOM.
[illegible] OF ASSOCIATION = .13

[illegible] OF 1 ROWS OR 29 CELLS HAS [illegible]
BASED ON TABLE OF EXPECTED

[illegible]

[illegible] D.[illegible]ESTISLPR BY V82 VALID REQ. UZL : DBV

	V82		
	GEGNT		
	NEW REF	DEGIL	VARDIV	ROW
	SEL REF		DI	TOTAL
	TAP TEP	2	1	
[illegible]				
2	7	6	13
[illegible]ZALID	53.8	46.2	52.0
	46.9	60.0	
	28.0	24.0	
1	8	4	12
[illegible]TIS	66.7	33.3	48.0
	53.3	40.0	
	32.0	16.0	
COLUMN	15	10	25
TOTAL	60.0	40.0	100.0

[illegible] FOLLOWING [illegible] MISS. : DESIRED BY FREEDY.
NUMBER OF MISSING OBSERVATIONS = 7

[illegible] USED ON 2 VARIABLES BY 25 CELLS PER TABLE MAX.
COLL TYPES OF VARIABLES.

DAY

1 B.AVAILABILITY BY VEG VEL RED, FLYATLAND

	VEG		
COUNT ROW PCT COL PCT TOT PCT	DIRT	YARD	REAL ESTATE
	2	3	
2	0 55.6 28.1 5.6	11 20.8 73.3	12 52.1
1	4 6.3 33.3 7.1	41 64.5 26.7	45 78.9
COLUMN TOTAL	4 12.3	52 91.2	56 103.7

. BOARD = 3.8553 KM (DEGREES OF FREEDOM)
OWER OF CHISQUARE DISTRIBUTION =

VELS USED OF 5 POSSIBLE. (OF VELS TO FLYB PLY
AL DATED BY VEGETATION AREA.

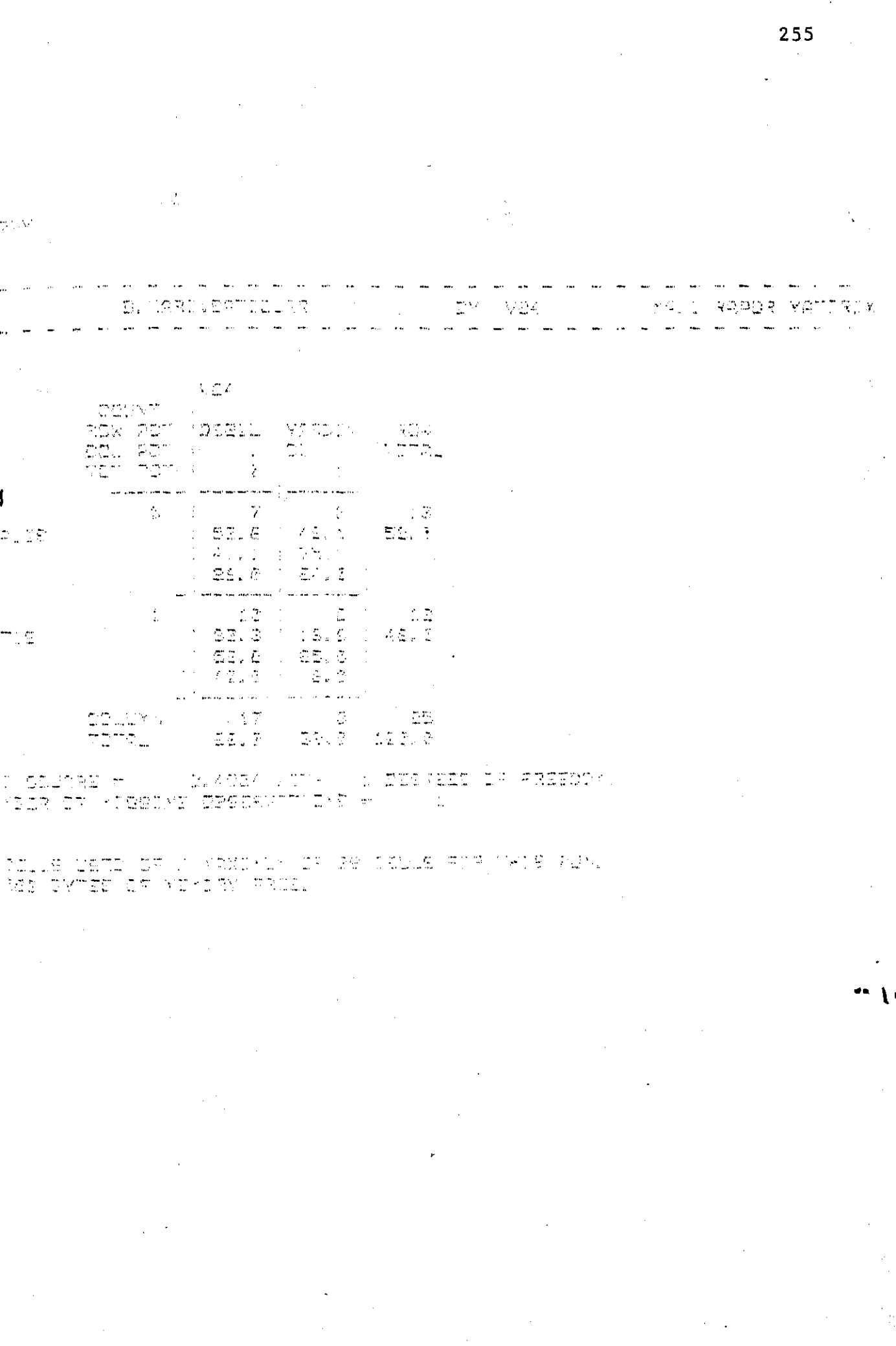
BY V23

71 BIVARIATE STATISTICS BY V23 V8,1 AGE, SETS A

	V23	
COUNT ROW PCT COL PCT TOT PCT	DEBIL	VOLDIV	TOTAL
	0	1	
71			
0	3	2	5
	60.0	40.0	62.5
	42.9	66.7	
	37.5	25.0	
1	4	1	3
	75.0	25.0	37.5
	57.1	33.3	
	50.0	12.5	
TOTAL	7	3	10
	87.5	37.5	100.0

* SQUARE = 0.5357 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

CELLS WERE OF A MAXIMUM OF 25 CELLS PER TABLE ALL.
1532 BYTES OF MEMORY FREE.



V71 BY V35

V35

V71	1	2	3	Row Total
1	7	3	2	
	2.2	18.2	33.3	
	5.3	50.0		
	3.8	27.3		
2	1	8	3	
	7.7	72.7	75.0	
	100.0	72.7		
	3.8	30.8		
Column Total	8	11	5	26
	30.8	42.3	19.2	

Chi-Square = 6.1818 with 2 degrees of freedom.
Cramer's V (Phi) Coefficient = .4880

SERY

VAR

V74 BIVARIATE SURVEY BY V66 STA. TRAIL TIMBER

V66

V74	COUNT / ROW PCT / COL PCT / TOT PCT	KELLEY ELMORE 2	KELLEY ELMORE 1	ROW TOTAL
3		2	16	18
		6.8	133.6	52.9
		2.2	50.0	
		2.9	61.5	
4		1	15	16
		7.6	92.5	81.1
		100.0	46.9	
		3.5	46.9	
COLUMN TOTAL		3	32	34
		8.8	94.1	100.0

CHI SQUARE = 11.9421 WITH 1 DEGREES OF FREEDOM.
NUMBER OF MISSING OBSERVATIONS = 0

3 CELLS USED UP A MAXIMUM OF 20 CELLS FOR THIS RUN.
1888 BYTES OF MEMORY USED.

```
[illegible]                          BY VET              [illegible]

                  VET
[illegible]

         [illegible]       61.5      [illegible]     [illegible]

[illegible]
```

[illegible]

[illegible] BY [illegible] BY VAR [illegible]

[illegible]	V20		
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0	1	
0	8	5	13
[illegible]	5.5	38.4	24.1
	47.2	58.2	
	38.7	15.8	
1	9	4	13
[illegible]	69.2	31.7	50.0
	52.8	41.4	
	34.6	15.3	
COLUMN	17	9	26
TOTAL	65.3	34.6	100.0

[illegible] = [illegible] [illegible] [illegible] [illegible]
[illegible] OF MISSING OBSERVATIONS = [illegible]

[illegible] USED BY A PROC [illegible] OF 26 [illegible]
[illegible] BYTES OF MEMORY FREE.

[illegible]

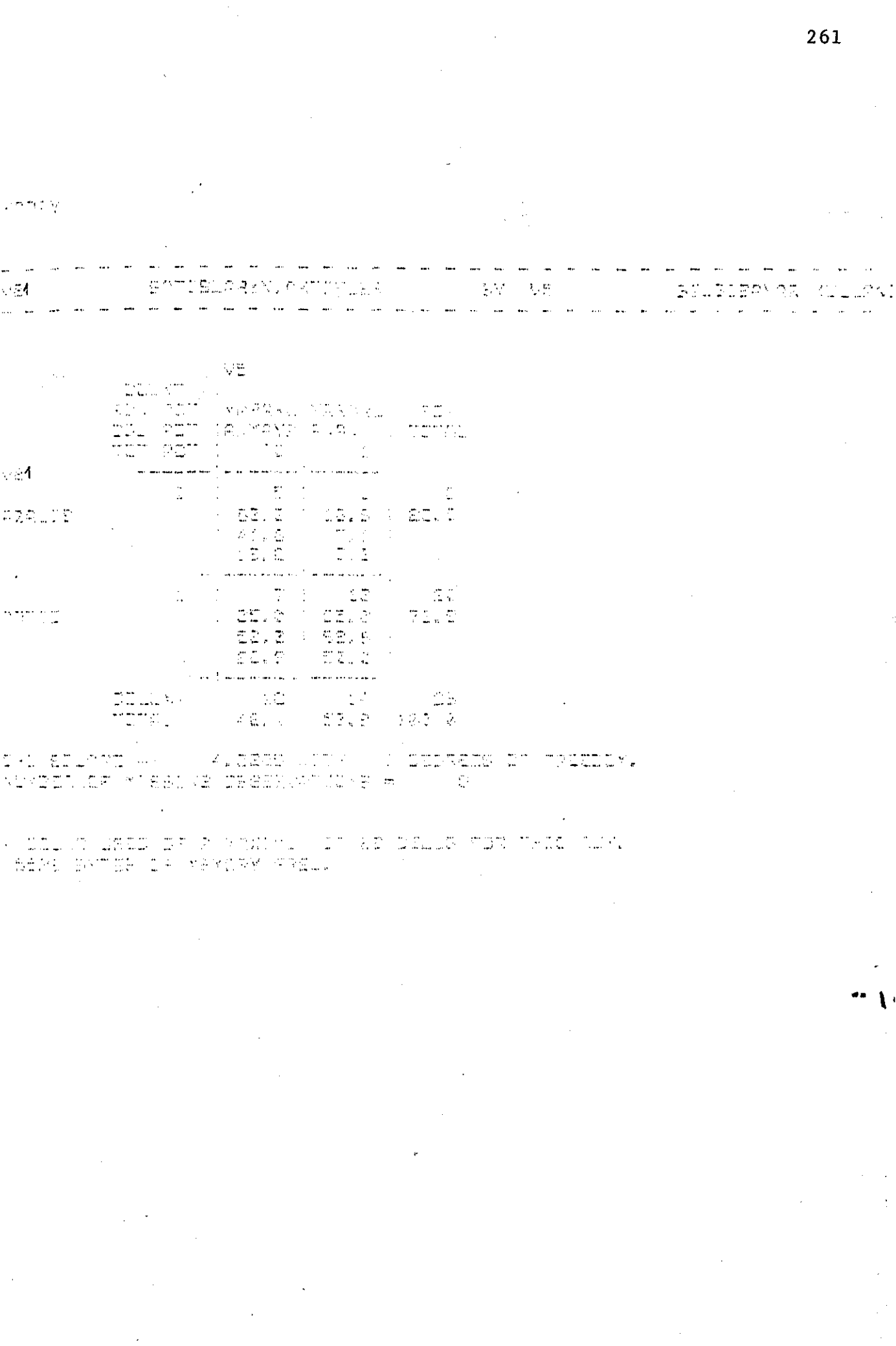
[illegible] BLOCKING FACTOR BY VEG STR. FAGL. DISEASE

VEG

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0	1	[illegible]
[illegible]	13	2	15
[illegible]	73.5	27.0	50.3
[illegible]	40.4	70.2	
[illegible]	32.4	11.2	
[illegible]	18	1	19
[illegible]	92.3	7.5	52.2
[illegible]	54.5	25.3	
[illegible]	45.1	3.6	
[illegible]	28	4	32
[illegible]	87.5	15.2	100.0

[illegible] BOLDFACE = [illegible] ; DEVIATE OF PARTS
[illegible] NUMBER OF MISSING OBSERVATIONS = 2

[illegible] USED AT A MINIMUM OF 25 CELLS PER [illegible]
[illegible] NUMBER OF [illegible] USED.



[illegible]

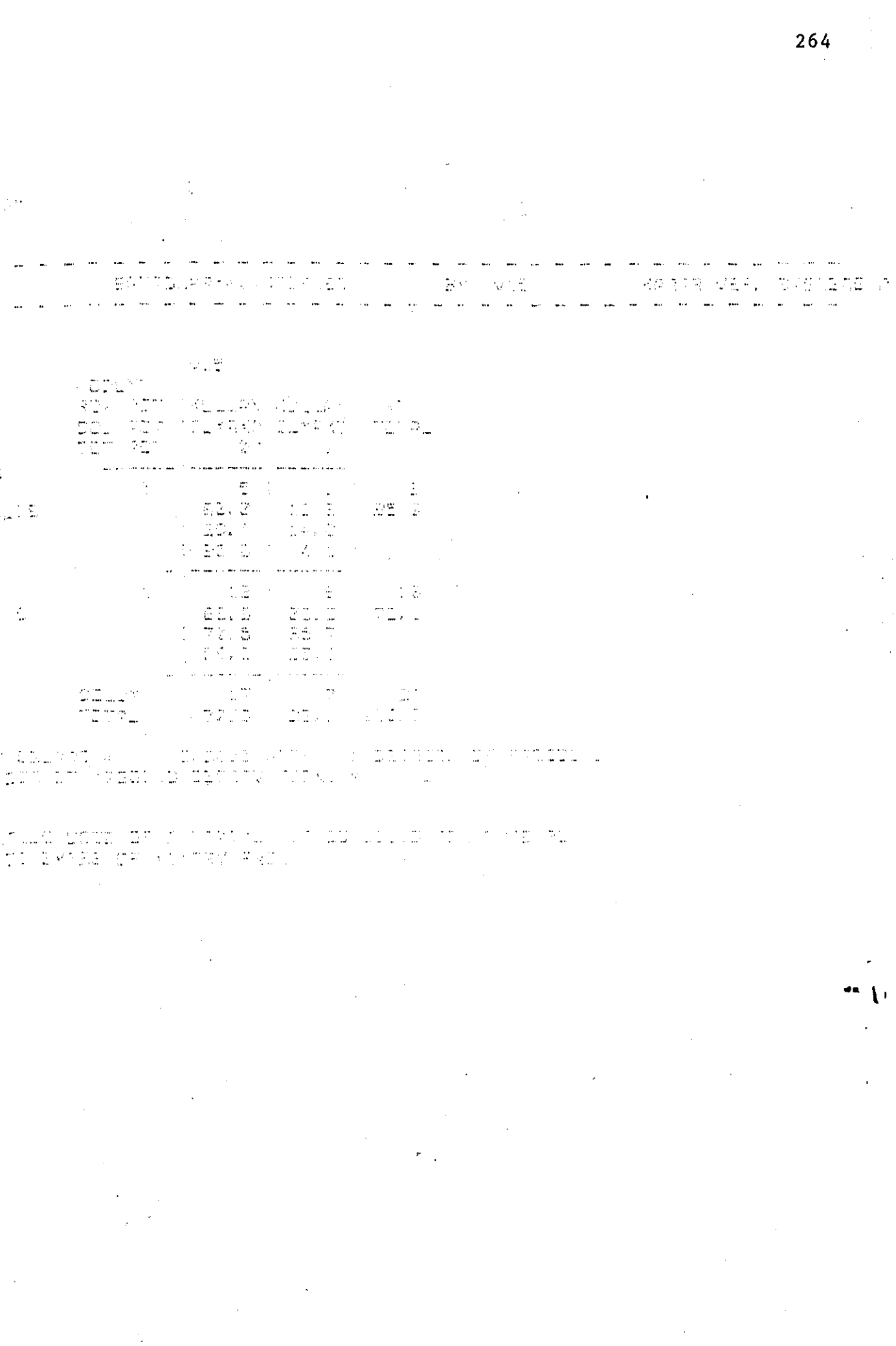
VAR 1 [illegible] BY VAR 2 [illegible]

VAR 3

	1	2	3	ROW TOTAL
VAR 1				
0	3	5	2	10
	2.0	10.0	2.0	24.2
	4.0	33.3	3.0	
	8.2	27.1	6.2	
1	1	20	3	25
	5.0	62.1	20.1	75.8
	100.0	66.6	100.0	
	4.1	58.1	20.2	
COLUMN TOTAL	4	25	5	35
	4.8	75.8	20.0	100.0

[illegible]

```
ORY

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
1          BATISBLARIN.AKTIFLER          BY  V14          KARAR VER. FON RKD
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                      V14

           COUNT
           ROW PCT   KULLAN   KULLAN     ROW
           COL PCT   ILMAYOR  ILIYOR     TOTAL
           TOT PCT        0        1
1          --------+--------+--------+
                  0 :      3 :      3 :      6
OLDE                :   50.0 :   50.0 :   25.0
                    :   25.0 :   25.0 :
                    :   12.5 :   12.5 :
                    +--------+--------+
                  1 :      9 :      9 :     18
TIS                 :   50.0 :   50.0 :   75.0
                    :   75.0 :   75.0 :
                    :   37.5 :   37.5 :
                    +--------+--------+
           COLUMN         12       12       24
           TOTAL        50.0     50.0    100.0

  SQUARE =      [illegible]  WITH    1 DEGREE OF FREEDOM
MBER OF MISSING OBSERVATIONS =      0

CELLS USED OF A MAX. OF 80 CELLS FOR THIS RUN.
480 BYTES OF MEMORY FREE.
```



[illegible]

[illegible]

[illegible]

[illegible]

[illegible] CROSSTABULATION OF V1 BY V17 [illegible]

	V17		
COUNT / ROW PCT / COL PCT / TOT PCT	0	1	TOTAL
V1			
0	8	3	11
	72.7	27.3	44.0
	38.1	21.4	
	32.0	12.0	
1	13	11	24
	54.2	45.8	96.0
	61.9	78.6	
	52.0	44.0	
COLUMN TOTAL	21	14	35
	84.0	56.0	140.0

[illegible] 0.5833 [illegible] DEGREES OF FREEDOM.
[illegible] OF MISSING OBSERVATIONS = 2

[illegible] USED UP A MAXIMUM OF 85 CELLS FOR THIS RUN.
[illegible] BYTES OF MEMORY FREE.

```
[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
21          BOTIBLARIN.AKTIFLER            BY  V18             SABIT VE DEGISKEN
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                        V18
           COUNT
           ROW PCT   [illegible]     [illegible] [illegible] D    ROW
           COL PCT                   [illegible] [illegible]      TOTAL
           TOT PCT         1            2           3
21         --------+-----------+-----------+-----------+
                 0 |     2     |     1     |     1     |     4
[illegible]        |  50.0     |  25.0     |  25.0     |  30.7
                   |  [illegible] | [illegible] | [illegible] |
                   |  15.[illegible] |   7.[illegible] |   7.[illegible] |
                   +-----------+-----------+-----------+
                 1 |     5     |     [illegible] |     1     |     9
[illegible]        |  [illegible] |  [illegible] |  [illegible] |  69.2
                   |  75.[illegible] |  [illegible] |  [illegible] |
                   |  [illegible] |  [illegible] |   7.[illegible] |
                   +-----------+-----------+-----------+
           COLUMN        [illegible]     [illegible]     [illegible]     13
           TOTAL     [illegible]     [illegible]     [illegible]   100.0

[illegible]
[illegible]

[illegible]
[illegible]
```

```
ORY

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
1          SATISLARIN [illegible]         BY  V15          ROW. PERCENTAGE BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                   V15
        COUNT
        ROW PCT  UYGULA  UYGULA    ROW
        COL PCT  NMIYOR  YOR       TOTAL
        TOT PCT      0       1
1      ---------+-------+-------+
              0 |    2  |    4  |     6
ALIS            | 33.3  | 66.7  |  23.1
                | 13.3  | 36.4  |
                |  7.7  | 15.4  |
               -+-------+-------+
              1 |   13  |    7  |    20
TIS             | 65.0  | 35.0  |  76.9
                | 86.7  | 63.6  |
                | 50.0  | 26.9  |
               -+-------+-------+
        COLUMN      15      11      26
        TOTAL     57.7    42.3   100.0

 CHI SQUARE =     1.0[illegible] WITH    1 DEGREES OF FREEDOM
NUMBER OF MISSING OBSERVATIONS =

 CELLS USED OF [illegible] MAXIMUM OF [illegible] CELLS FOR THIS RUN
[illegible] BYTES OF MEMORY FREE.
```

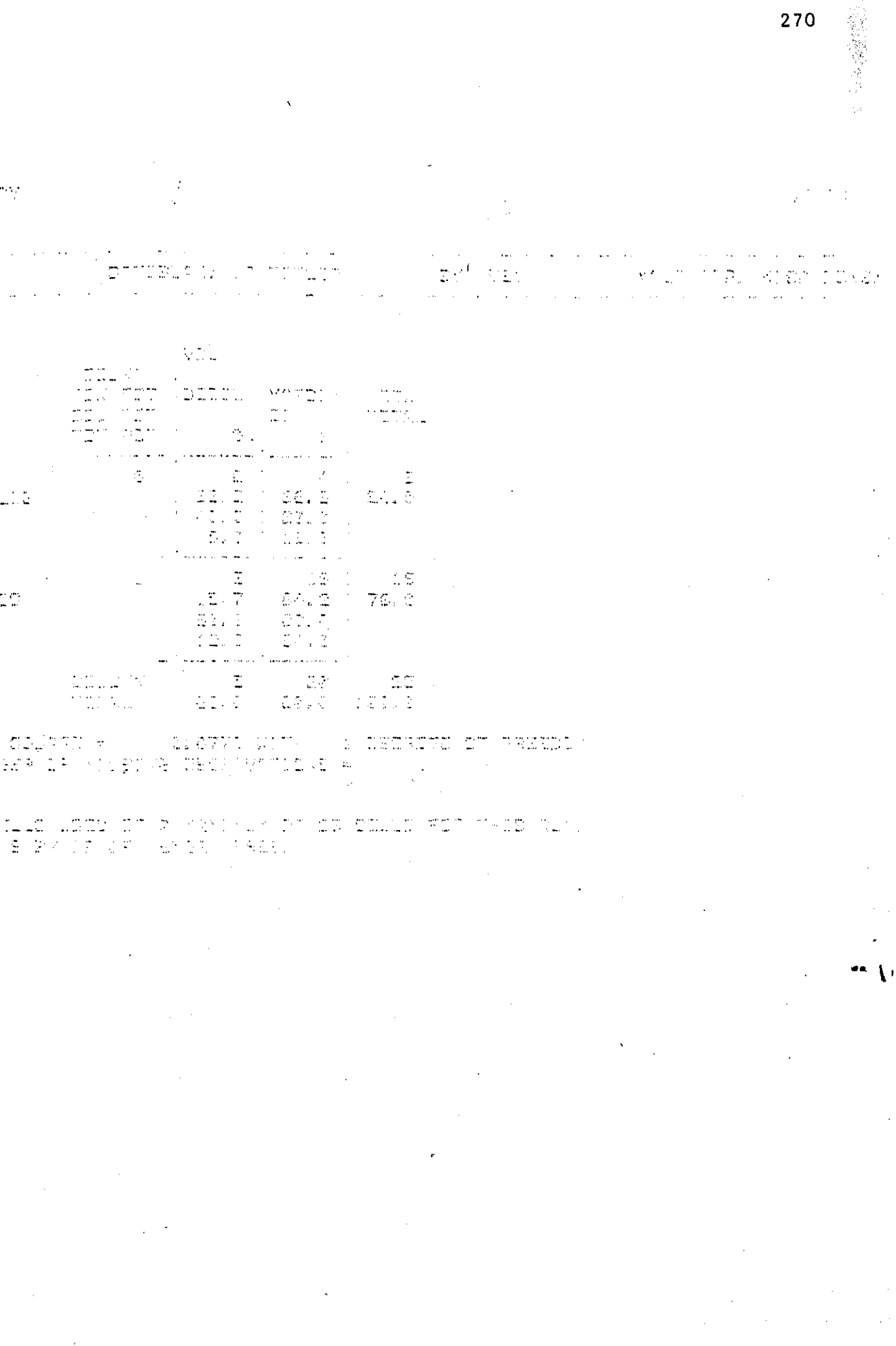
[illegible]

[illegible]

VBZ

	0	1	
	50.0	50.0	54.2
	38.2	71.8	
	10.0	18.2	
1	12	7	19
	63.1	36.8	75.8
	92.0	73.2	
	45.8	63.0	
	55	19	24
	69.2	30.7	100.0

[illegible]



[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

```
Y

 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
            [illegible]            BY VIE            [illegible]
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                       VIE
          [illegible]
          [illegible]  I[illegible] I[illegible]   ROW
          [illegible]  I[illegible] I[illegible]   TOTAL
          [illegible]  I      2.I      1.I
            ---------+--------+--------+
                  0  I      0 I      6 I      6
[illegible]          I    0.0 I  100.0 I   25.0
                     I    0.0 I   26.1 I
                     I    0.0 I   25.0 I
                   --+--------+--------+
                     I      1 I     17 I     18
[illegible]          I    5.6 I   94.4 I   75.0
                     I  100.0 I   73.9 I
                     I    4.2 I   70.8 I
                   --+--------+--------+
          COLUMN            1       23       24
          TOTAL           4.2     95.8    100.0

 SQUARE =       0.34783 WITH     1 DEGREE OF FREEDOM.
BER OF MISSING OBSERVATIONS =       7


LLS USED OF A MAXIMUM OF 20 CELLS FOR THIS RUN.
2 BYTES OF MEMORY FREE.
```

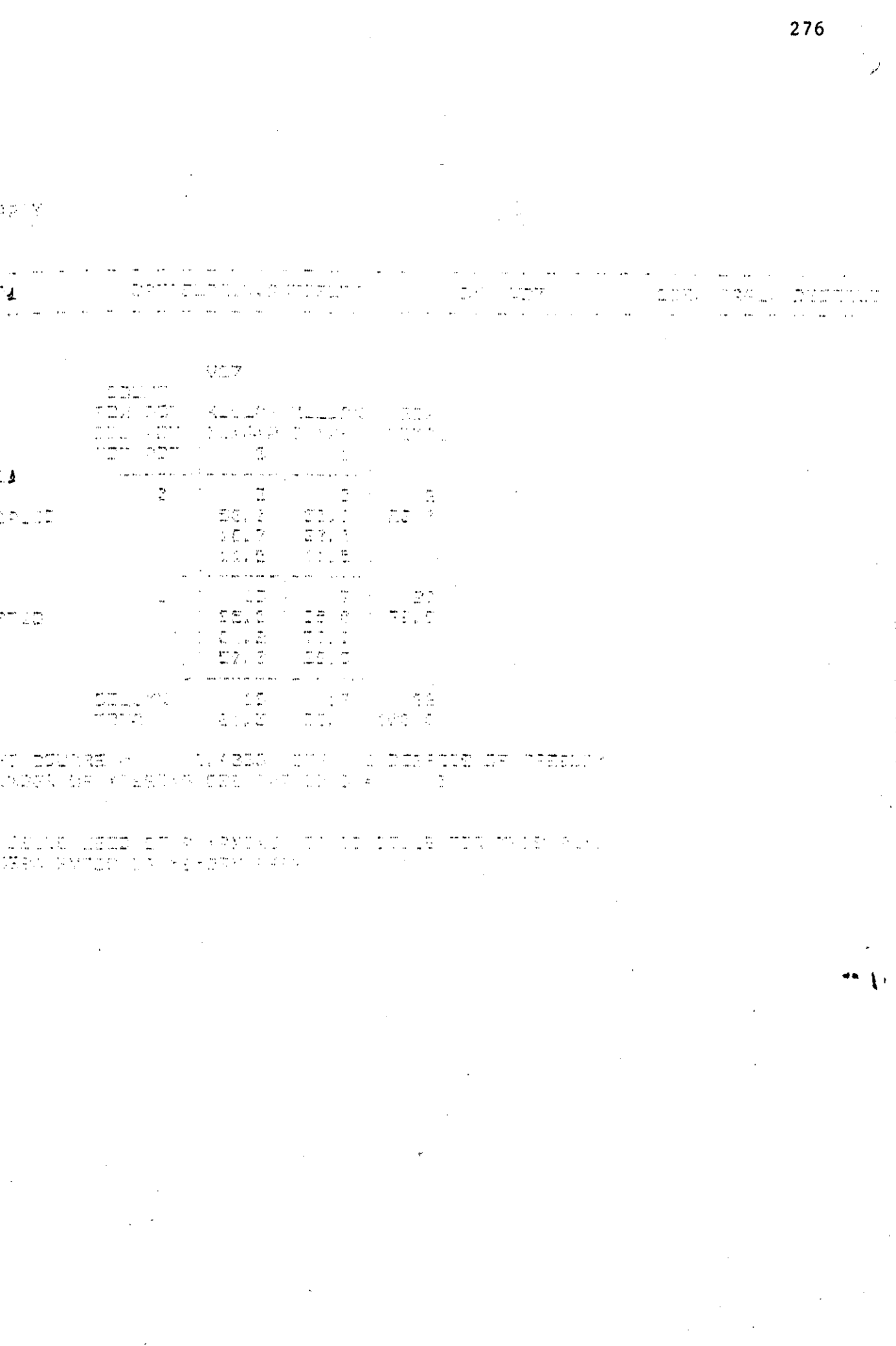
[illegible]

[illegible] SPECIATION OF [illegible] BY VOC [illegible] TOTAL DESTRUC[illegible]

	VOC		
	REACTIVITY		
	ADJUSTMENT (GRAMS/GRAM)	MASS (KILOGRAMS)	MASS PERCENT
	SPECIATION (GRAMS/GRAM)	(KILOGRAMS)	TOTAL
	TOTAL (GRAMS/GRAM)		
[illegible]			
	0	1	0
[illegible]	16.9	33.3	22.0
	1488.0	56.1	
	2.8	18.8	
	1	0	0
[illegible]	5.2	115.2	76.0
	8.2	37.1	
	5.1	78.1	
ADJUSTMENT	1	37	24
TOTAL	3.8	151	100.0

[illegible] SPECIATION = [illegible] [illegible] [illegible] DESTROYED BY TROPEC[illegible]
[illegible] OF HYDROXYL RADICAL = [illegible]

[illegible] LOSS OF [illegible] BY OH [illegible] PER MOLE [illegible]
[illegible] OF REACTIVE ORGANIC [illegible]



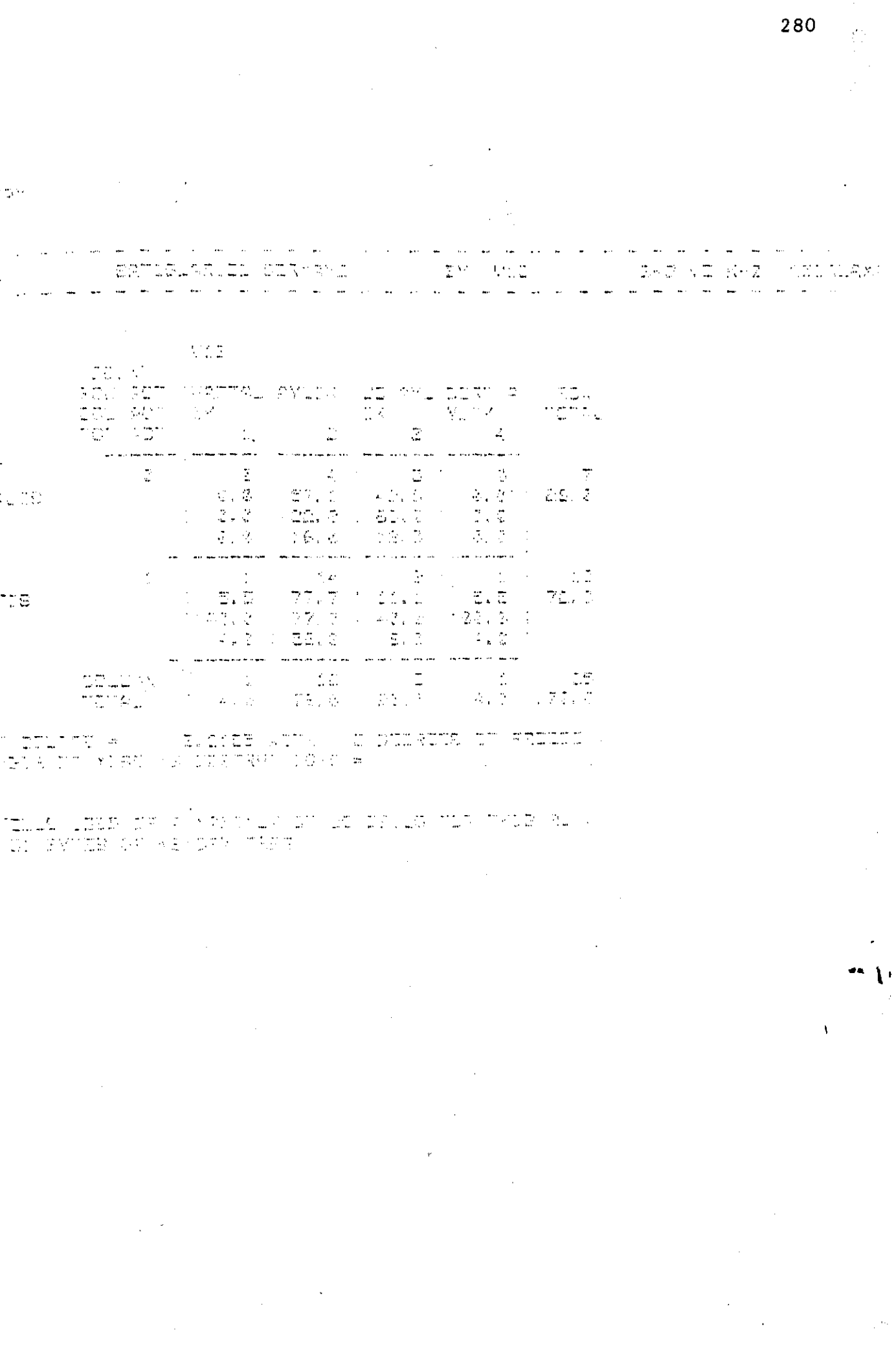
```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        SATISLARIN ARTISI        BY  V25          [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                      V25

           COUNT
           ROW PCT   KULLAN-  KULLAN-    ROW
           COL PCT  :MIYOR    IYOR      TOTAL
           TOT PCT  :    2        1
           ---------+--------+--------+
                  2 :     3  :     2  :     5
OLUS                :  60.0  :  40.0  :  20.8
                    :  17.6  :  28.6  :
                    :  12.5  :   8.3  :
                   -+--------+--------+
                  1 :    14  :     5  :    19
ADIR                :  73.7  :  26.3  :  79.2
                    :  82.4  :  71.4  :
                    :  58.3  :  20.8  :
                   -+--------+--------+
           COLUMN        17        7        24
           TOTAL       70.8     29.2     100.0

 CORRECTED CHI SQUARE =  0.0067 WITH  1 DEGREE OF FREEDOM
NUMBER OF MISSING OBSERVATIONS =    2


CELLS USED OF A MAXIMUM OF 20 CELLS FOR THIS RUN
BYTES OF MEMORY USED
```

BATTLE OF ARTIFLEX BY VEC PTR. TRAIL ERROR LTD.

	VEC		
DOWN			
YOU PUT	KILLEX	KILLAX	RED
SOIL PUT	ILYANA	TUNAIR	TYPE
NOT PUT	0	1	
7	2	1	1
	66.3	16.4	82.2
	22.7	68.2	
	15.8	3.6	
1	17	1	22
	85.3	15.0	78.1
	77.6	78.0	
	65.3	11.5	
KILLEX	22	6	28
TOTAL	84.6	15.1	100.7

EQUARD [illegible] ; STATED IT TOGETHER.
IN BE [illegible] CHECK-STATUS = 1

[illegible] LEED BY A MAYENLY OF 28 KILLS TO THE RED.
BATTLE OF [illegible] FIRE.



[illegible]

[illegible] BETWEEN-DAY VARIANCE BY VIA WITHIN-DAY VAR. PER VIA

VIA

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
2	2	1	7
[illegible]	48.9	50.1	99.1
	85.3	33.3	
	18.5	16.4	
1	5	5	17
[illegible]	52.3	47.2	72.5
	75.0	66.5	
	37.5	33.3	
DELUXY	12	12	24
TOTAL	50.3	50.3	102.2

[illegible] = 2.8217 with [illegible] degrees of freedom.
PROB OF LARGER VALUE = [illegible]

[illegible] LEVEL OF A VARIATE AT IT WILL BE USED FOR THIS DAY.
[illegible] OF [illegible] LEVEL

[illegible]

[illegible] CONTRIBUTIONS BY [illegible] BY AGE [illegible] WHITE VER. BARBADOS

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

FDY

1 [illegible] BY VAR [illegible]

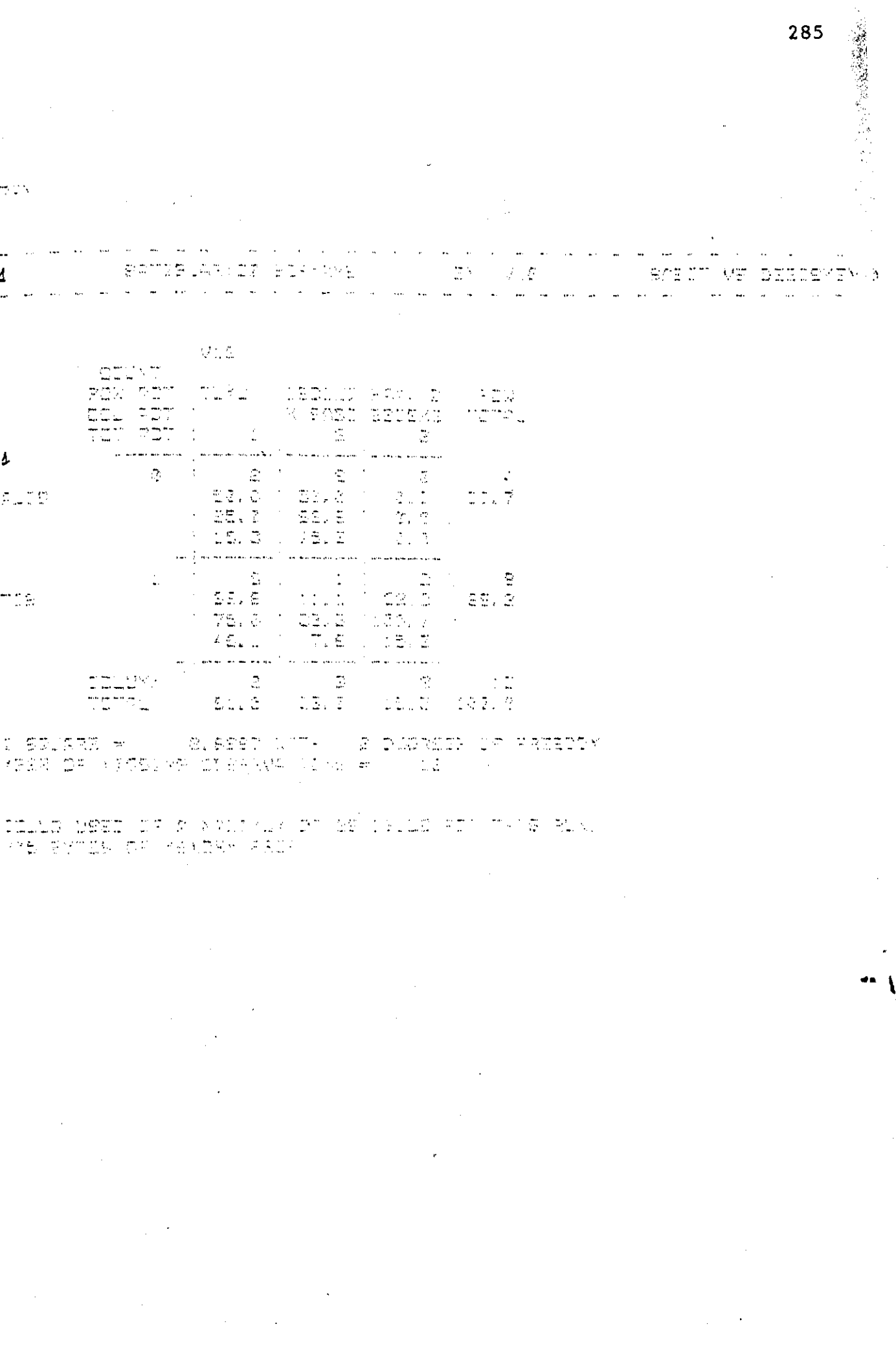
VAR

	5	6	7
1	14.8	25.7	25.1
	11.1	43.2	
	4.1	25.0	
4	8	9	17
TOT	47.8	93.9	72.8
	25.8	50.4	
	33.3	37.5	
COLUMN	9	18	34
TOTAL	37.5	68.8	128.3

[illegible] = 0.8782 WITH [illegible] DEGREES OF FREEDOM.
[illegible] OF MISSING OBSERVATIONS = 2

[illegible] USED IN [illegible] OF [illegible] FOR [illegible]
[illegible] DIVIDED BY N-2 OR DFY FOR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ST          CROSSTABULATION OF            BY V17            ...
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                     V17
          COUNT     I
         ROW PCT    IYAPILM  YAPILM     ROW
         COL PCT    IAYIRMA  AKTA       TOTAL
         TOT PCT    I    0   I    1   I
ST       --------   I--------I--------I
                2   I     4  I     4  I      8
                    I  50.0  I  50.0  I   30.8
                    I  30.8  I  30.8  I
                    I  15.4  I  15.4  I
                    I--------I--------I
                1   I     9  I     9  I     18
                    I  50.0  I  50.0  I   69.2
                    I  69.2  I  69.2  I
                    I  34.6  I  34.6  I
                    I--------I--------I
           COLUMN        13       13        26
           TOTAL       50.0     50.0     100.0

    CHI SQUARE =      0.0000 WITH    1 DEGREE OF FREEDOM.
 NUMBER OF MISSING OBSERVATIONS =       0
```



PARTY

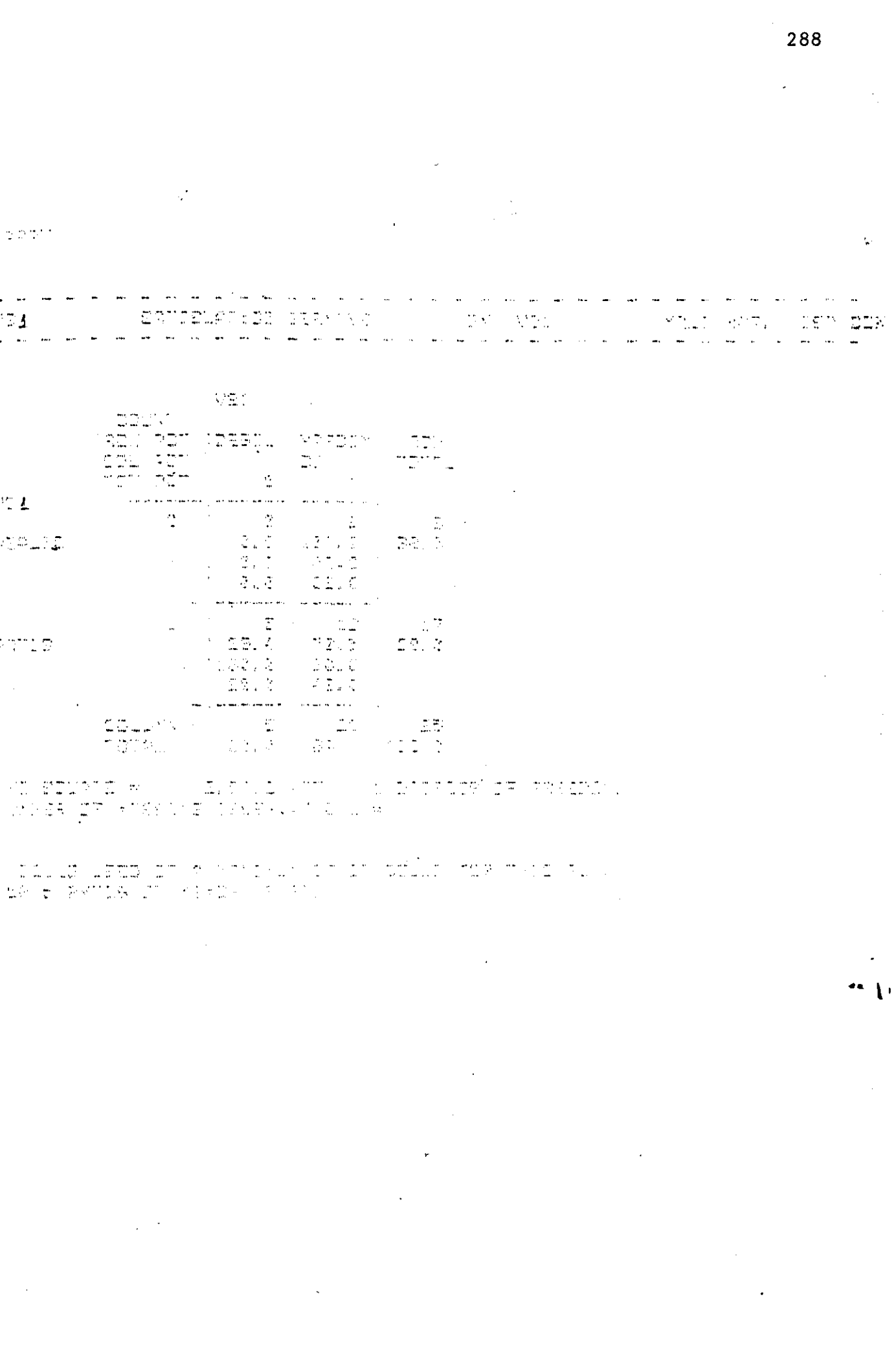
V31 STANDARDIZED RESPONSE BY V18 BY V19 BY V20

V18

	1	2	3	
V31				
1	1	2	3	
STRONG	68.5	37.8	23.7	
	29.2	27.2		
	2.3	11.5		
	14	52	38	104
WEAK	35.8	44.2	28.2	
	50.4	72.1		
	34.4	23.7		
	16	33	55	104
COLUMN	15.8	48.1	36.1	100.0

[illegible]

```
                                                                                        PAGE
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
V51          SATISLARIMI SIRKETE              BY   V52                  REL. LEVEL DEN
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                     V52
            COUNT   I
           ROW PCT  IIDEALI    YARDIM     ROW
           COL PCT  I          CI         TOTAL
           TOT PCT  I     .0  I     1.
V51        ---------+--------+--------+
               0    I     5  I     3  I     8
 ZALIS              I  62.5  I  37.5  I  32.0
                    I  33.3  I  30.0  I
                    I  20.0  I  12.0  I
                  -+--------+--------+
               1    I    10  I     7  I    17
 RTIS               I  58.8  I  41.2  I  68.0
                    I  66.7  I  70.0  I
                    I  40.0  I  28.0  I
                  -+--------+--------+
            COLUMN       15       10       25
            TOTAL      60.0     40.0    100.0

 I SQUARE =      0.0306 WITH     1 DEGREE OF FREEDOM
 UMBER OF MISSING OBSERVATIONS =     0

 CELLS [illegible]
 SEN. BY [illegible]
```

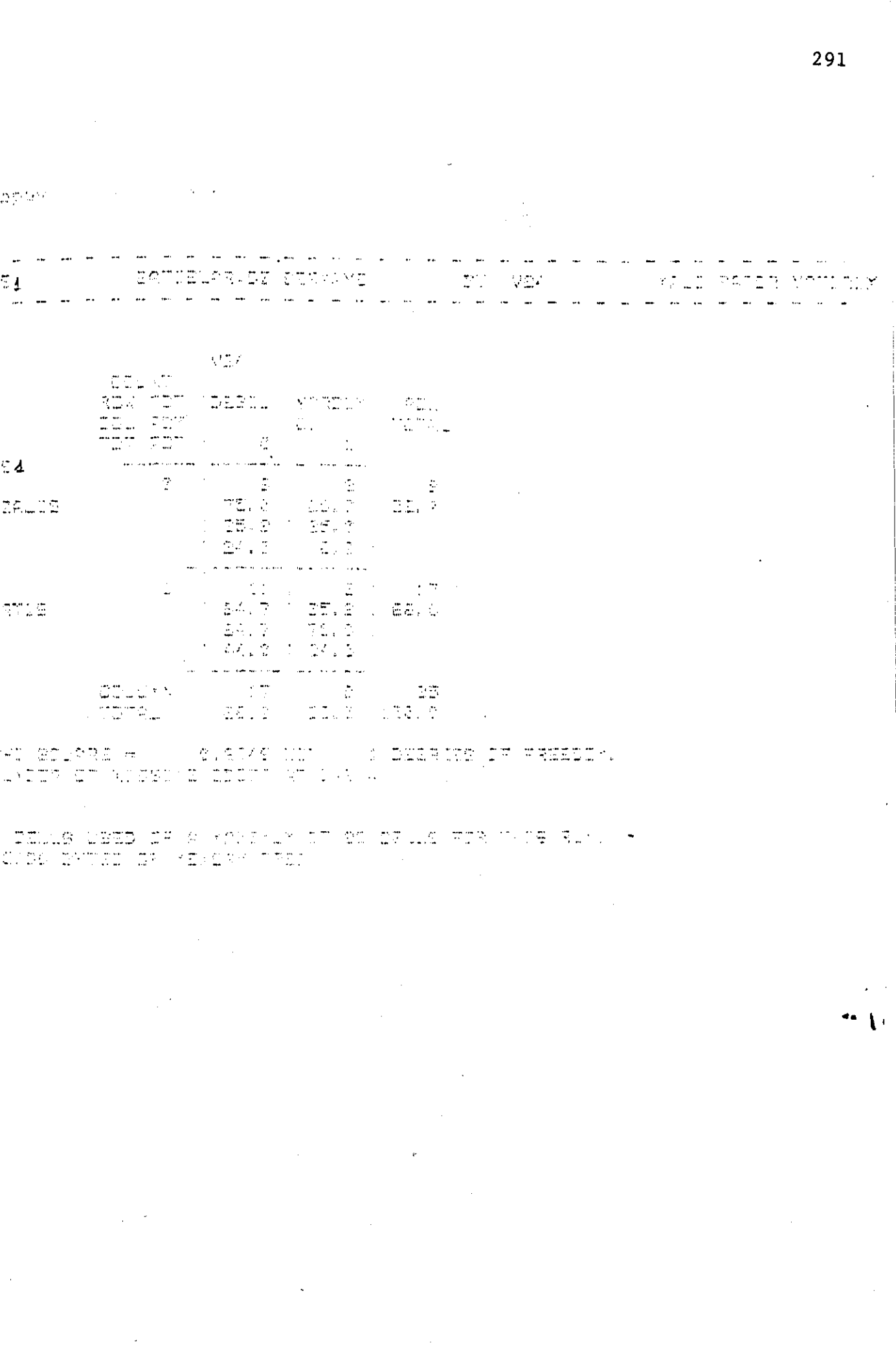


```
GEN'

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
1         [illegible]                  BY  V13          [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                    V13
          COUNT
          ROW PCT   [illegible]  [illegible]     ROW
          COL PCT                2.             TOTAL
          TOT PCT  I     2      1
1         --------I--------I--------I
               2  I     1  I     7  I     8
ALSE              I  12.5  I  87.5  I  32.0
                  I  33.3  I  31.8  I
                  I   4.0  I  28.0  I
                  -I--------I--------I
               1  I     2  I    15  I    17
TRUE              I  11.8  I  88.2  I  68.0
                  I  66.7  I  68.2  I
                  I   8.0  I  60.0  I
                  -I--------I--------I
          COLUMN        3        22       25
          TOTAL      12.0      88.0    100.0

  SQUARE =      0.0000 WITH    1 DEGREE OF FREEDOM.
 BER OF  MISSING OBSERVATIONS =     [illegible]

 CELLS USED OF A MAXIMUM OF 25 CELLS FOR THIS TA
 [illegible]
```

[illegible]

[illegible]

[illegible]



COPY

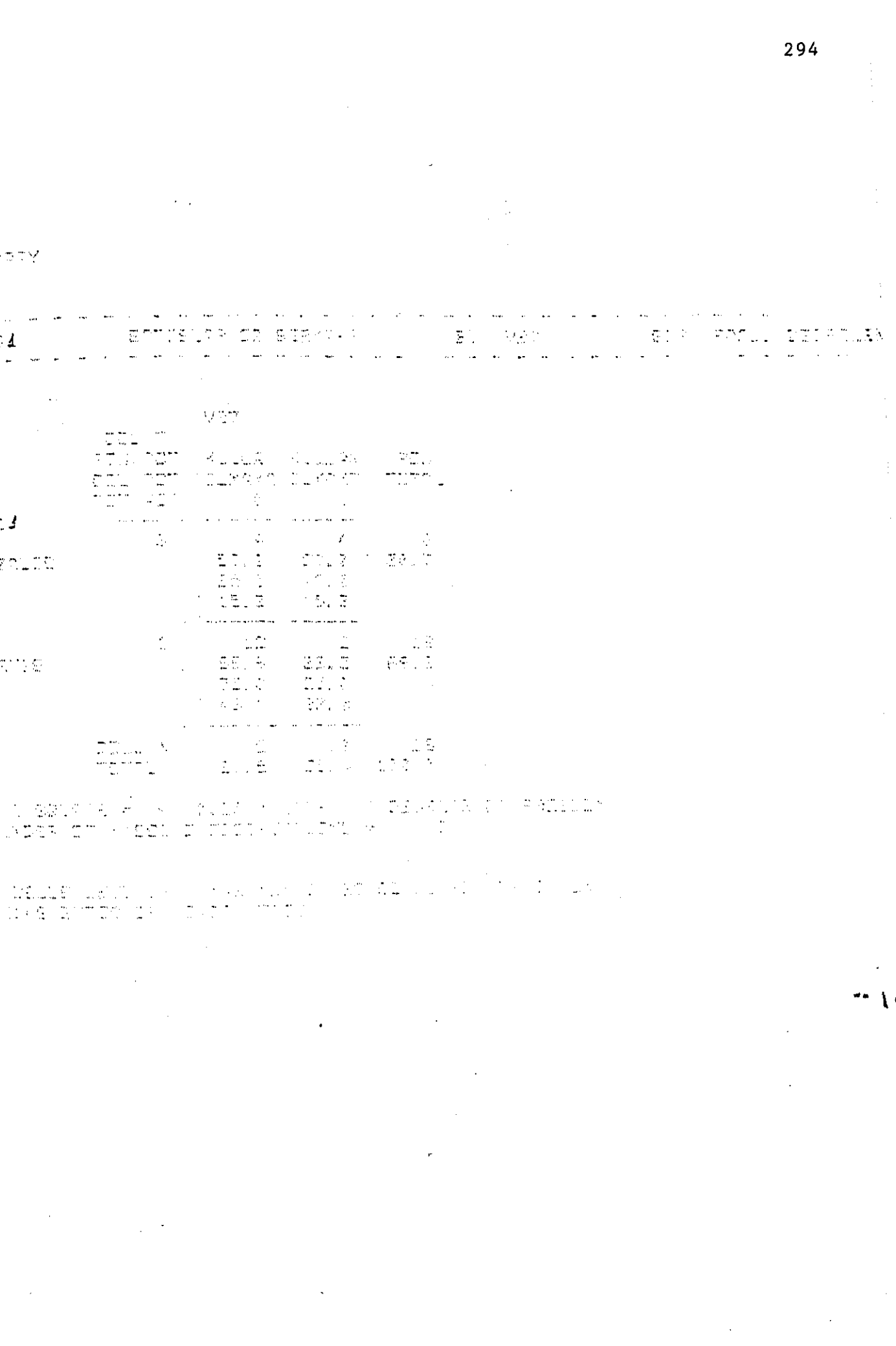
[illegible] BAYESIAN SEQUENCE BY USE [illegible]

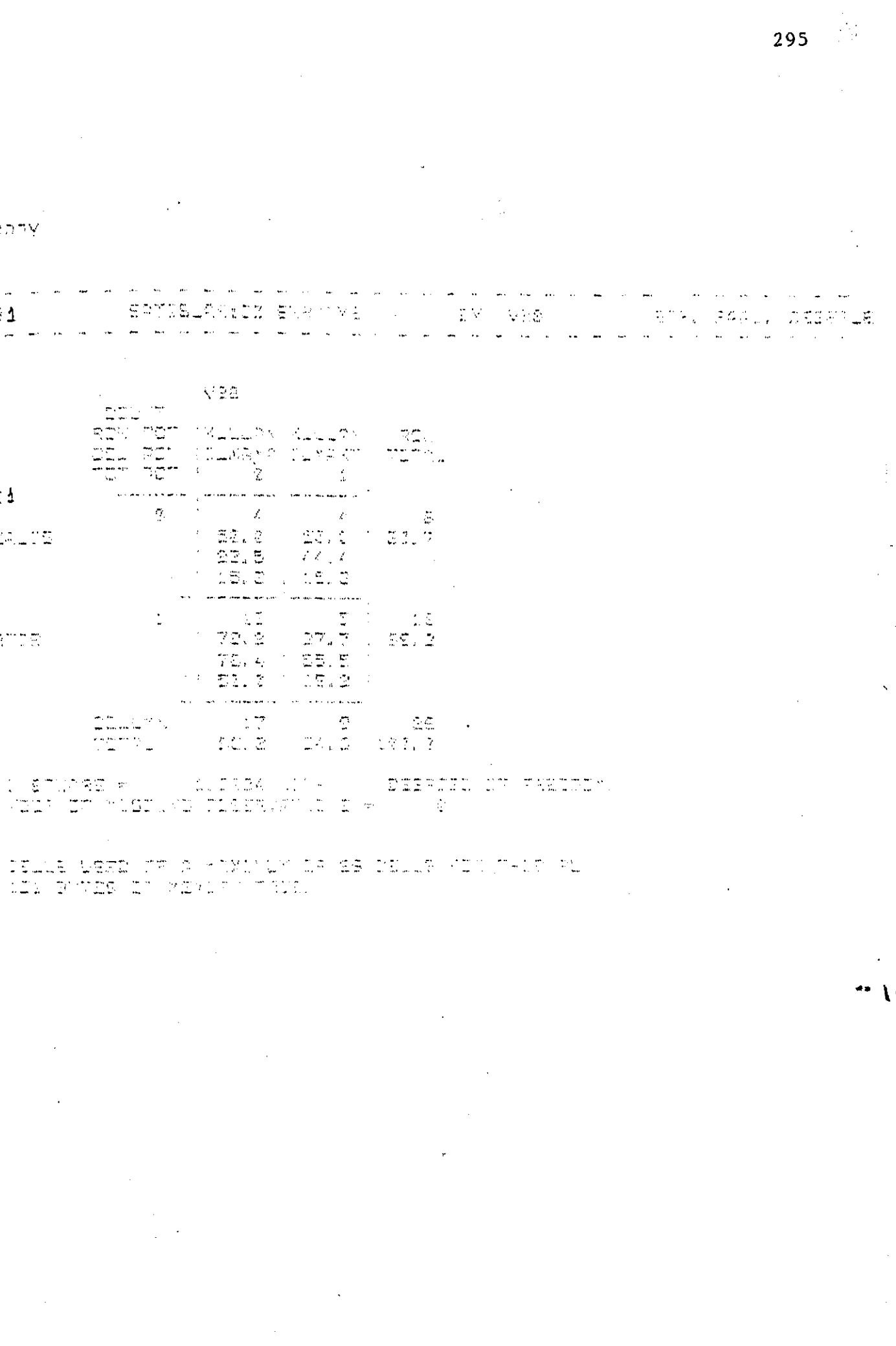
USE

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible] = 2.4668 [illegible]

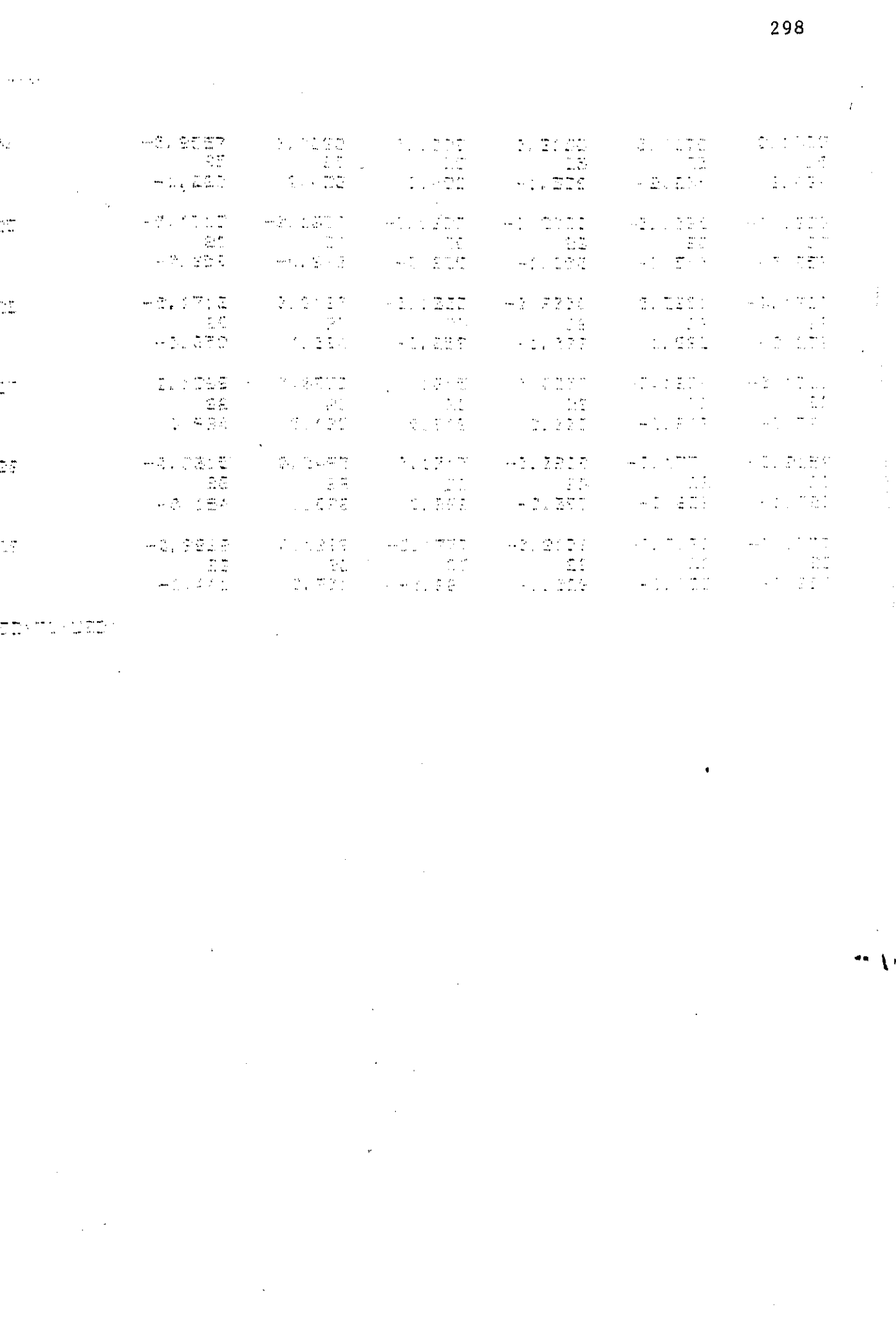
[illegible] USED BY A MAXIMAL [illegible]





```
[illegible]

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 S1          BATTSLARIZ [illegible]          BY   V85          [illegible]
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                         V85
              COUNT     I
              ROW PCT   I[illegible] [illegible]    ROW
              COL PCT   I[illegible] [illegible]   TOTAL
              TOT PCT   I      2I       1I
 S1           ----------+--------+--------I
                    4   I      6 I      2 I       8
 [illegible]            I   75.0 I   25.0 I    30.7
                        I   27.3 I   50.0 I
                        I   23.1 I    7.7 I
                        -+--------+--------I
                    1   I     16 I      2 I      18
 [illegible]            I   88.9 I   11.1 I    69.2
                        I   72.7 I   50.0 I
                        I   61.5 I    7.7 I
                        -+--------+--------I
              COLUMN          22        4        26
              TOTAL         84.6     15.3     100.0

 CHI SQUARE =    0.5[illegible]7 WITH    1 DEGREE OF FREEDOM.
 NUMBER OF MISSING OBSERVATIONS =     3

 [illegible]
 [illegible]
```

APPENDIX C



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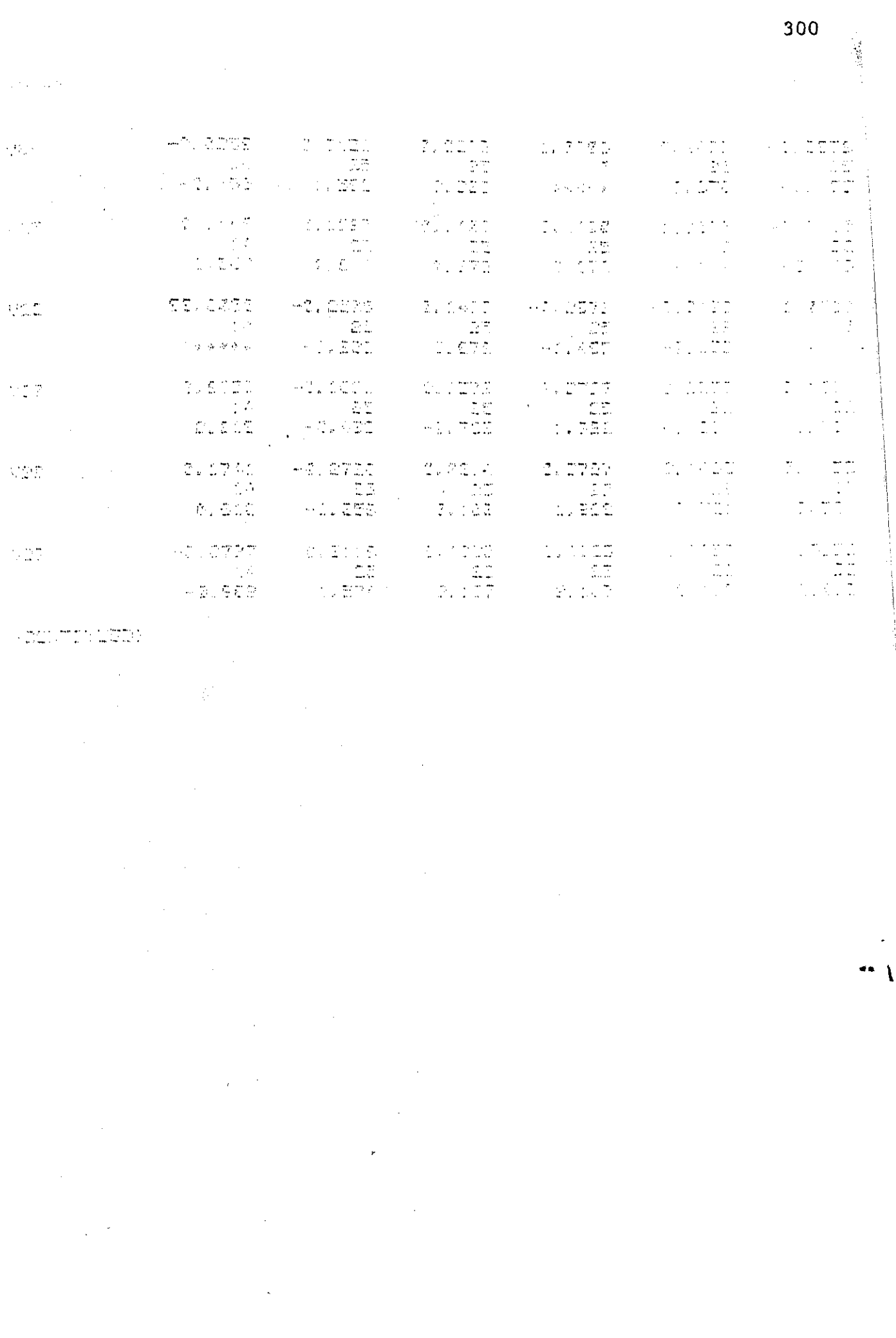

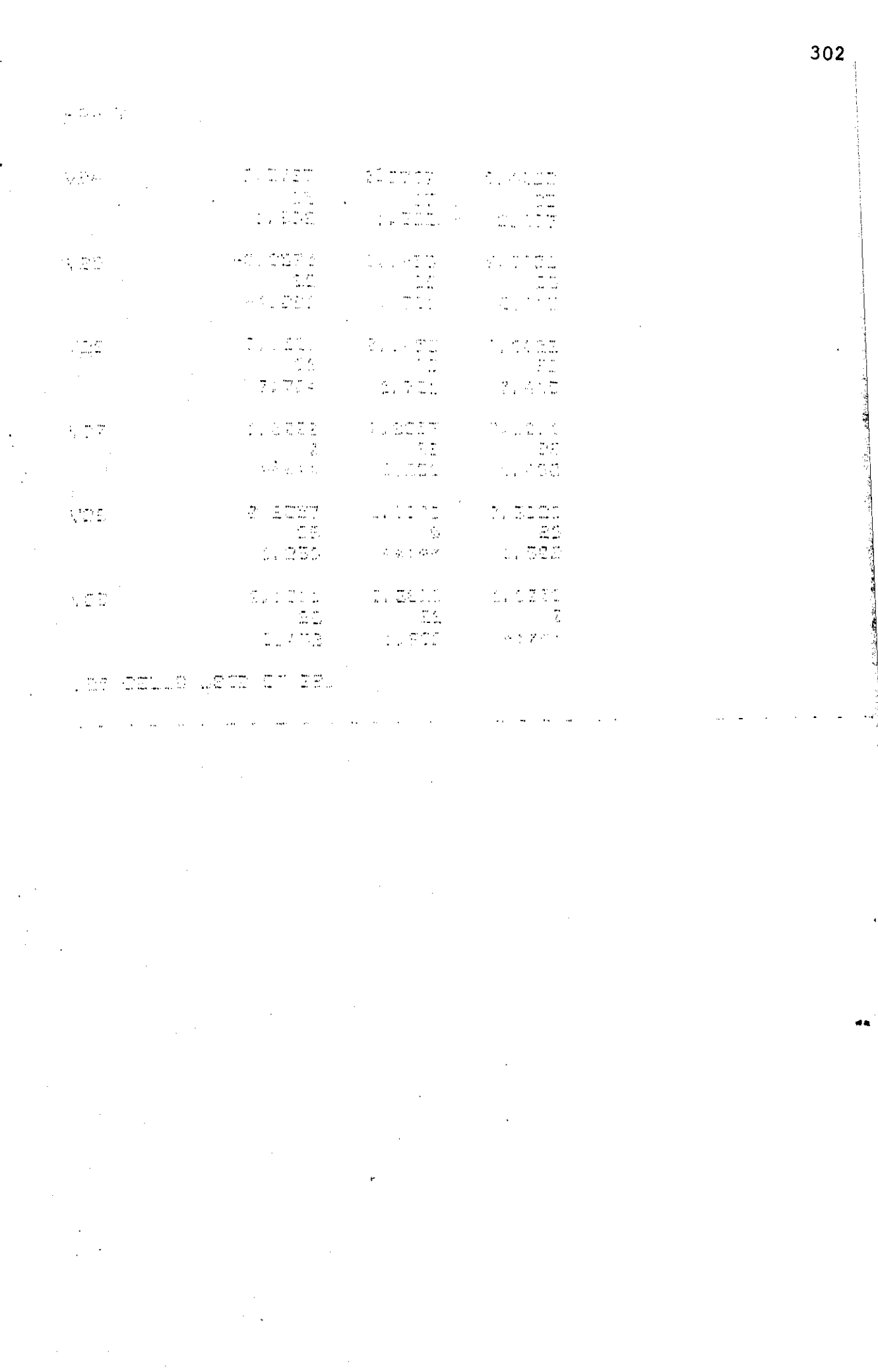

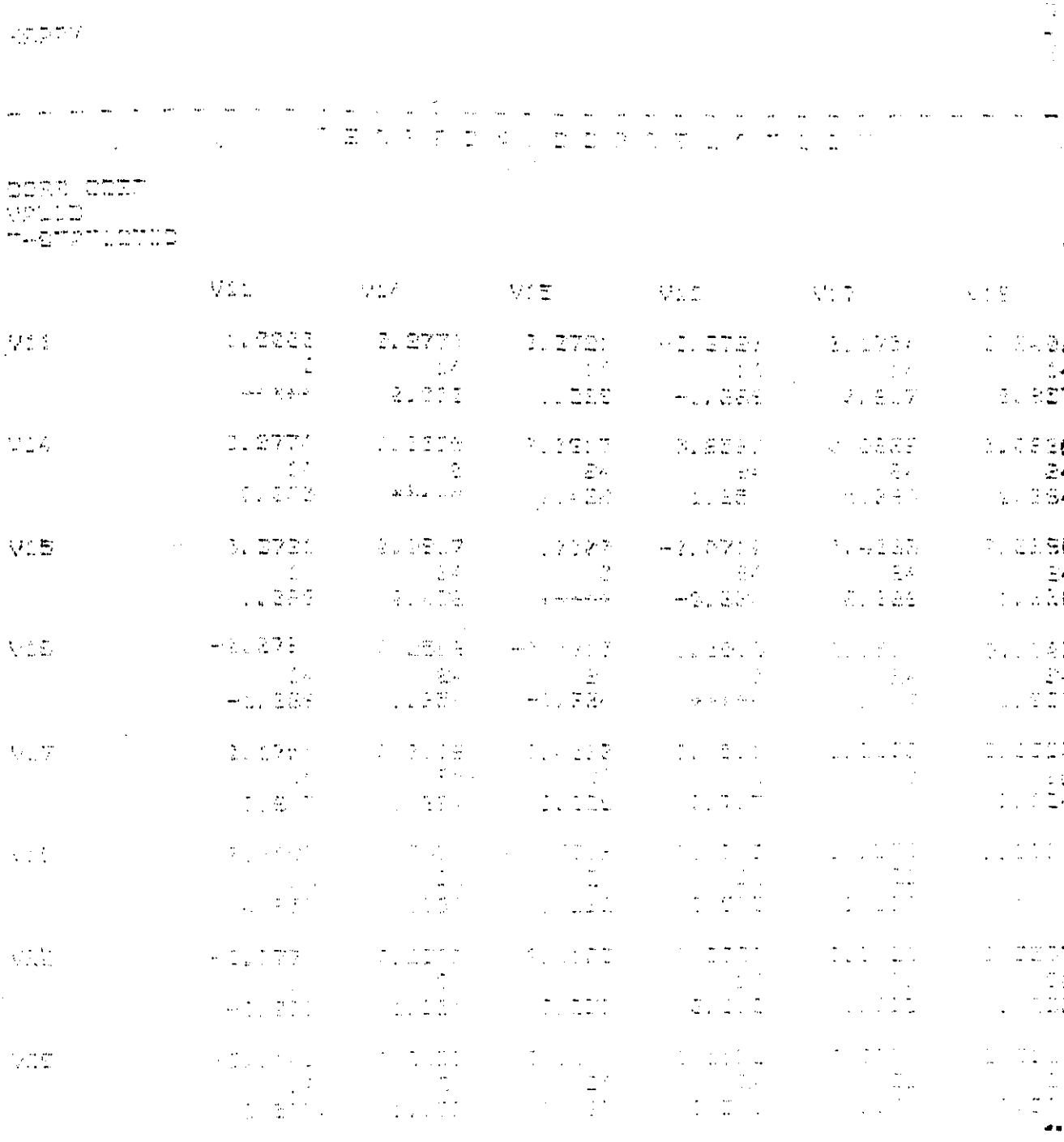

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V4	0.3774 .4 0.012	1.0000 . ********	0.6817 .0 2.438	0.3522 .0 1.804	0.2622 .0 0.894	0.[illegible] [illegible] 0.79
V5	0.2726 .4 1.369	0.6817 .0 2.438	1.0000 . ********	-0.2719 .0 -1.364	0.4262 .0 1.578	0.[illegible] [illegible] .37
V6	-0.2721 .4 -1.365	0.3522 .0 1.804	-0.2719 .4 -1.364	1.0000 . ********	0.[illegible] .0 1.717	0.[illegible] [illegible] 0.[illegible]
V7	0.1750 .2 0.877	0.2622 .0 0.894	0.4262 .0 1.578	0.[illegible] .0 ********	1.0000 . ********	0.[illegible] [illegible] 0.[illegible]
V8	0.[illegible] .2 0.[illegible]	0.[illegible] .0 2.[illegible]	0.[illegible] .0 1.[illegible]	0.[illegible] .0 2.[illegible]	0.[illegible] .0 1.[illegible]	1.0000 . ********
V9	-0.[illegible] .2 -0.[illegible]	0.[illegible] .0 1.[illegible]	0.[illegible] .0 2.[illegible]	0.[illegible] .0 2.[illegible]	0.[illegible] .0 1.[illegible]	0.[illegible] [illegible] 0.[illegible]
V10	0.[illegible] .2 0.[illegible]	-0.[illegible] .0 -2.[illegible]	-0.[illegible] .0 -1.[illegible]	0.[illegible] .0 1.[illegible]	-0.[illegible] .0 -1.[illegible]	0.[illegible] [illegible] 0.[illegible]
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V11	-0.[illegible] .1 -0.[illegible]	0.[illegible] [illegible] 0.[illegible]	1.0000 . ********

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	-2.720	9.217	[illegible]	1.171
[illegible]	0.3573	-0.2024	0.2182	0.9453
	35	0	24	94
	1.984	-1.754	0.748	7.413
V25	-0.0547	1.0240	0.1020	0.2152
	27	94	21	19
	-1.321	-1.210	1.830	6.873
V26	0.1078	0.0857	0.0552	0.1053
	10	34	94	24
	4.688	1.211	1.211	6.219
V27	0.1441	-0.2232	-0.0279	0.1582
	68	21	68	20
	2.691	-1.191	-1.037	4.754
[illegible]	0.0827	0.0711	-0.2253	0.1031
	42	21	71	22
	1.222	1.021	-1.177	6.232
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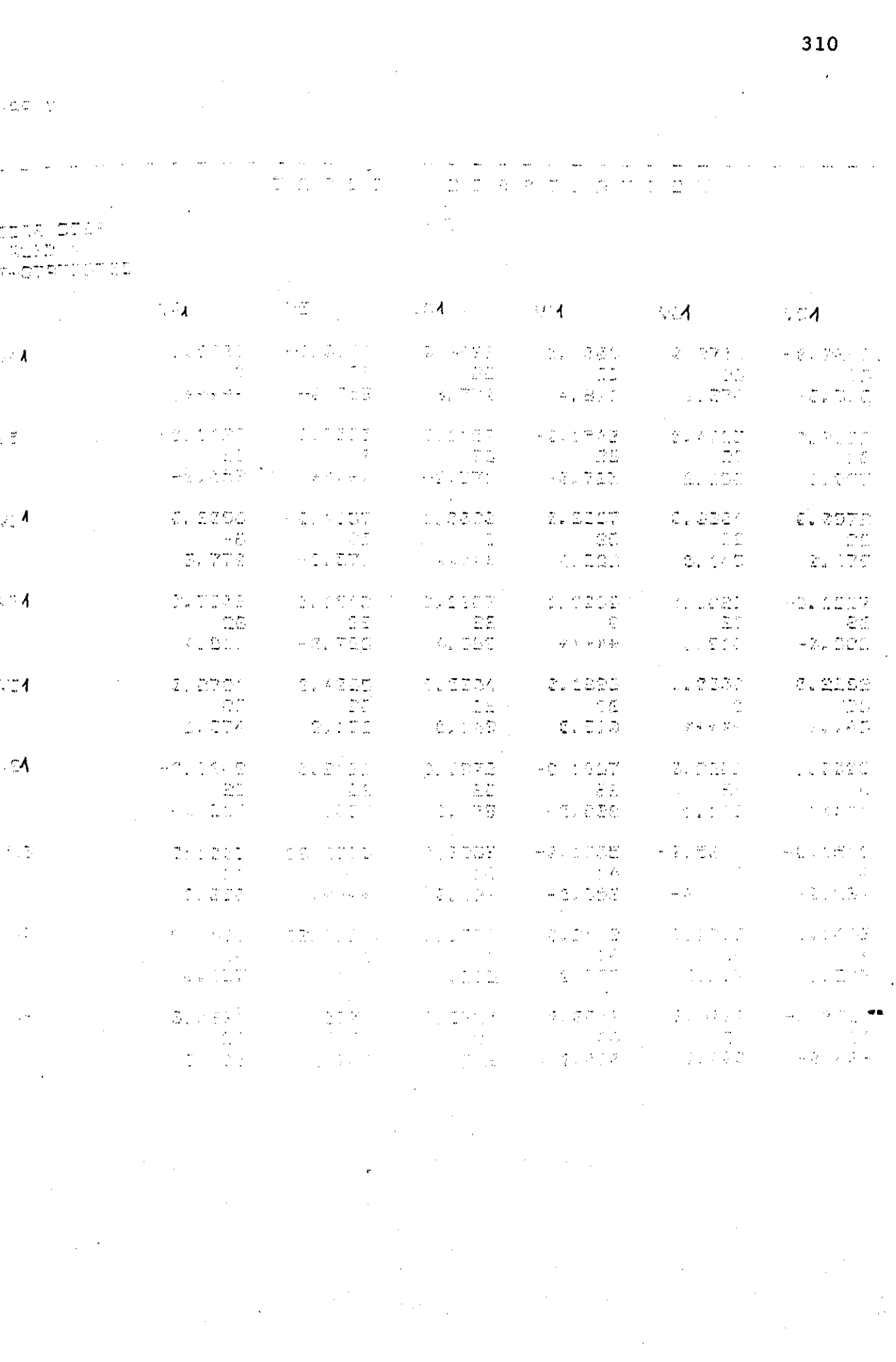

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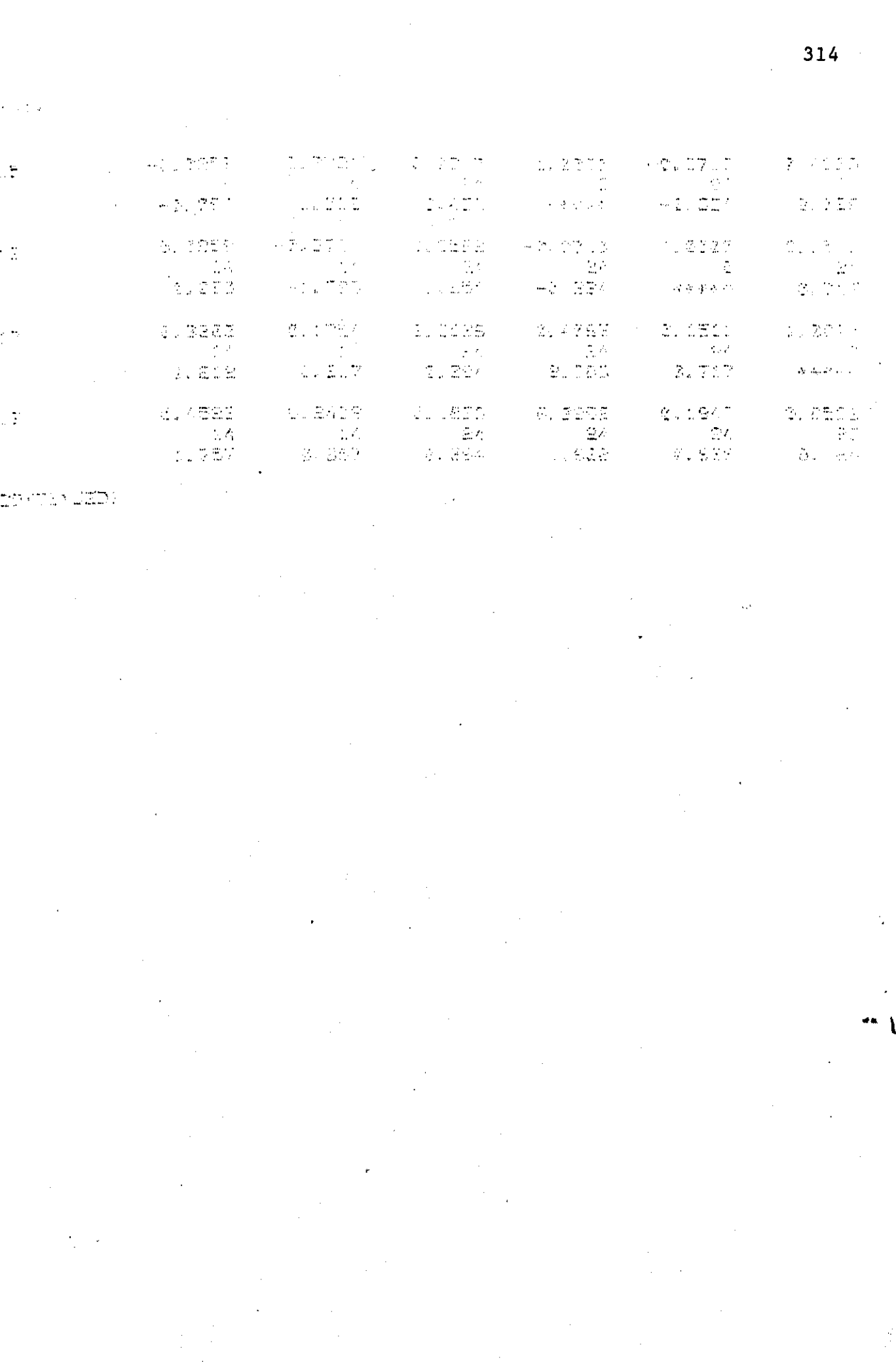

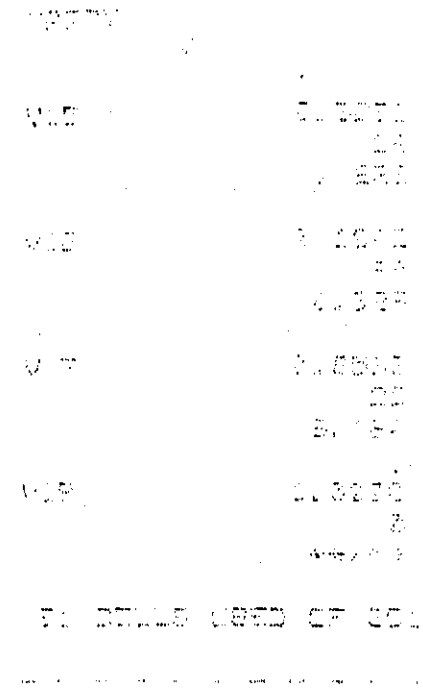

V28	-1.978. 26 -2.357.	2.4.51 13 2.113	0.5.36 15 2.85.	0.1331 17 2.563	3.2007 19 2.256	0.2.11 21 1.721
V29	-0.2847 28 -1.962	2.3851 29 3.277	-2.1417 30 -1.311	-2.1443 31 -2.150	0.1.7 32 0.57.	-3.1526 33 -3.188
V34	-0.2537 34 -1.163	2.1031 35 2.772	2.1032 36 2.155	-2.2105 37 -1.563	-0.4.71 38 -0.207	0.1.71 39 0.96
V35	-0.17.3 40 -0.153.	-2.1082 41 -0.833	-3.1733 42 -2.155	-2.2220 43 -1.223	-0.1951 44 -1.643	-0.1337 45 -0.585
V36	-0.17.3 46 -2.653	0.2.82 47 1.82(	-0.1332 48 -3.253	-0.2332 49 -1.822	0.245. 50 1.920	-0.1333 51 -0.556
V37	0.1825 52 1.924	0.1576 53 0.751	0.1.75 54 0.515	0.0.92 55 0.922	-0.1355 56 -0.643	-0.1.1. 57 -0.797

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	V31	V32	V21	V22	V23	V24
X1	0.1218	-1.2557	-2.2403	-0.3794	-1.2557	-0.2557
	.4	25	25	25	25	25
	0.329	-2.476	-0.193	-0.382	-1.268	-1.268
E	59.9802	0.2323	0.2686	0.4186	0.3526	0.0698
	.4	25	25	25	25	25
	0.0000	1.135	1.665	2.153	1.325	0.433
E1	0.2253	-0.1437	-0.1330	0.2106	-0.2647	0.1029
	.4	25	25	25	25	25
	2.252	-0.372	-0.499	0.651	-1.312	0.496
M1	-0.1325	-0.1217	0.2591	0.1084	-0.1418	-0.2158
	.4	25	25	25	25	25
	-0.337	-0.318	0.395	0.523	-0.551	-0.562
M1	-0.8311	-0.1147	0.1871	0.2617	0.1017	-0.4170
	.4	25	25	25	25	25
	-3.171	-0.353	1.010	1.006	0.521	-0.[illegible]
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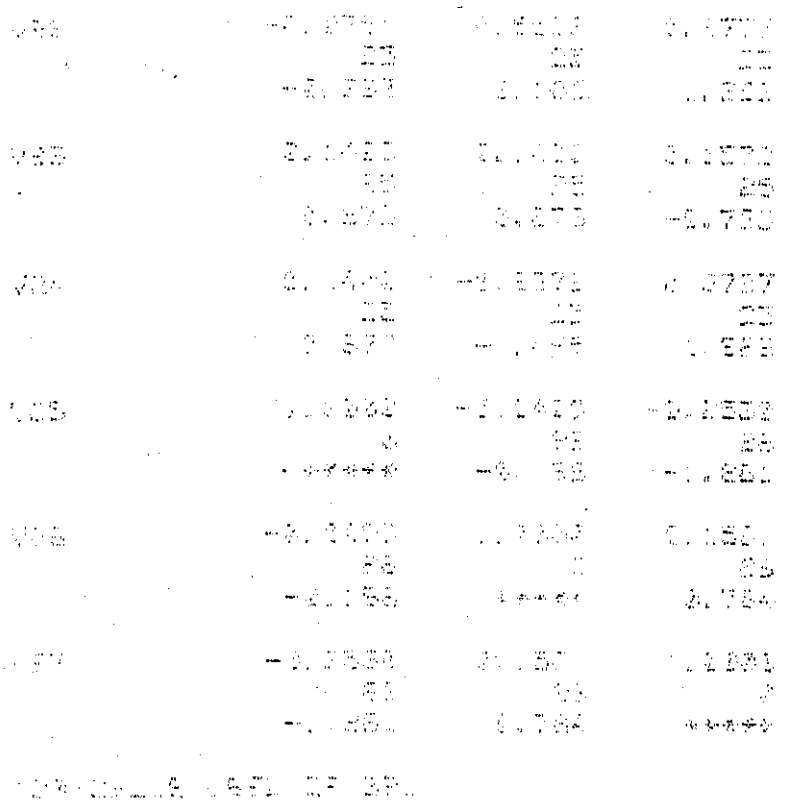

TABLE 7

PEARSON CORRELATIONS

PAIR OF VARIABLES	PEARSON CORRELATIONS	T-STATISTICS	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE (%)
V5-V17	0.4629	2.558	25	1
V5-V19	0.3243	1.680	25	10
V5-V20	0.2303	1.135	24	20
V5-V21	0.3626	1.817	24	5
V5-V22	0.4166	2.019	24	5
V5-V23	0.2626	1.305	24	20
V5-V24	0.0898	0.433	24	50
V5-V25	-0.1852	-0.923	25	30
V5-V26	0.2160	1.084	25	20
V5-V27	0.0976	0.480	25	50
V5-V28	0.3493	1.826	25	5
V5-V29	0.1809	0.901	25	30
V14-V19	0.0836	0.394	23	50
V15-V19	0.3296	1.638	23	10
V16-V19	0.1943	0.929	23	30
V17-V19	0.8563	8.124	25	0.1
V17-V20	0.2942	1.476	24	10
V17-V21	0.0830	0.387	24	50
V17-V22	0.1334	0.557	24	50
V17-V23	-0.1991	-0.974	24	30
V17-V24	0.1442	0.699	24	40
V17-V25	-0.2000	-1.000	25	30
V17-V26	-0.2000	-1.000	25	30
V17-V27	0.1581	0.784	25	40
V17-V28	0.2425	1.225	25	20
V19-V20	0.2632	1.308	24	20
V19-V21	0.1581	0.784	24	40
V19-V22	0.0760	0.380	24	50
V19-V23	-0.2626	-1.305	24	20
V19-V24	0.2557	1.268	24	20
V19-V25	0.1713	0.852	25	40
V19-V26	-0.2335	-1.177	25	20
V19-V27	0.1231	0.608	25	50
V19-V28	0.3587	1.883	25	5
V19-V29	0.0664	0.326	25	50
V41-V5	-0.0120	-0.059	25	50
V41-V14	0.0861	0.405	23	50
V41-V15	-0.2604	-1.265	23	20
V41-V16	-0.0667	-0.313	23	50
V41-V17	-0.0778	-0.383	25	50
V41-V19	-0.2121	-1.063	25	20
V41-V20	-0.0987	-0.476	24	50
V41-V21	-0.0403	-0.193	24	50
V41-V22	-0.0794	-0.382	24	50
V41-V23	-0.2557	-1.268	24	20

(c[illegible])

PAIR OF VARIABLES	PEARSON CORRELATIONS	T-STATISTICS	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE (%)
V41-V24	-0.2557	-1.268	24	20
V41-V25	-0.1713	-0.852	25	40
V41-V26	-0.1713	-0.857	25	40
V41-V27	0.1969	0.984	25	30
V41-V28	-0.0315	-0.154	25	50
V41-V29	-0.2822	-1.441	25	10
V61-V5	-0.1157	-0.571	25	50
V61-V14	0.2750	1.342	23	20
V61-V15	-0.3950	-2.016	23	5
V61-V16	0.2604	1.265	23	20
V61-V19	-0.1038	-0.511	25	50
V61-V20	-0.1400	-0.678	24	50
V61-V21	-0.1280	-0.622	24	50
V61-V22	0.0106	0.051	24	50
V61-V23	-0.2647	-1.316	24	20
V61-V24	0.1029	0.496	24	50
V61-V25	-0.1333	-0.659	25	50
V61-V26	-0.1333	-0.659	25	50
V61-V27	0.1845	0.919	25	30
V61-V28	0.1347	0.666	25	50
V61-V29	-0.1777	-0.884	25	30
V71-V5	-0.1543	-0.765	25	40
V71-V15	-0.2750	-1.342	23	10
V71-V16	0.0861	0.405	23	50
V71-V17	-0.0769	-0.378	25	50
V71-19	-0.2335	-1.177	25	20
V71-V20	-0.1307	-0.632	24	50
V71-V21	0.0801	0.385	24	50
V71-V22	0.1084	0.523	24	50
V71-V23	-0.1442	-0.699	24	40
V71-V24	-0.3158	-1.596	24	10
V71-V25	-0.2000	-1.000	25	30
V71-V26	-0.2000	-1.000	25	30
V71-V28	-0.0808	-0.397	25	50
V71-V29	-0.2132	-1.069	25	20
V81-V5	0.4085	2.192	25	2
V81-V15	0.1588	0.754	23	40
V81-V16	-0.0497	-0.233	23	50
V81-V17	-0.1826	-0.910	25	30
V81-V19	-0.2701	-1.374	25	10
V81-V20	-0.1147	-0.554	24	50
V81-V21	0.1873	0.915	24	30
V81-V22	0.0807	0.[illegible]	24	50
V81-V23	0.1847	[illegible]	24	30
V81-V24	-0.4176	[illegible]	24	2
V81-V25	[illegible]	[illegible]	25	50
V81-V26	0.3651	[illegible]	25	5
V81-V27	-0.1299	[illegible]	25	50
V81-V28	-0.1771	[illegible]	25	30

PAIR OF VARIABLES	PEARSON CORRELATIONS	T-STATISTICS	DEGREES OF FREEDOM	LEVEL OF SIGNIFICANCE (%)
V81-V29	-0.0195	-0.095	25	50
V91-V5	0.2186	1.097	25	30
V91-V14	-0.0917	-0.432	23	50
V91-V15	0.0084	0.039	23	50
V91-V16	-0.3077	-1.517	23	10
V91-V19	0.0649	0.318	25	50
V91-V20	0.0350	0.168	24	50
V91-V21	-0.3430	-1.751	24	5
V91-V22	0.0106	0.051	24	50
V91-V23	-0.0809	-0.389	24	50
V91-V24	0.1029	0.496	24	50
V91-V25	-0.1333	-0.659	25	50
V91-V26	-0.1333	-0.659	25	50
V91-V27	-0.1581	-0.784	25	40
V91-V28	-0.2156	-1.082	25	20
V91-V29	-0.1777	-0.884	25	30

APPENDIX D

DISCRIMINANT ANALYSIS

Discriminant analysis has been performed to statistically distinguish between the following groups.

(1) Group of companies which use computer in the operations of the comany with the group of companies which do not use.

(2) Group of companies which classify costs as variable and fixed costs in the cost accounting systems with the group of companies which do not classify.

(3) Group of companies which apply variable cost accounting method in financial internal reporting with the group of companies which do not apply.

For the purpose of the research, the following variables are selected as discriminating variables.

(1) The usage of computer in the operations of the company (V5).

(2) The classification of costs as variable and fixed costs in the cost accounting systems (V17).

(3) The application of variable cost accounting method in financial internal reporting (V19).

(4) The usefulness of balance sheet and income statement in long term planning (V20).

(5) The usefulness of balance sheet and income statement in short term planning (V21).

(6) The usefulness of balance sheet and income statement in pricing decisions (V22).

(7) The usefulness of balance sheet and income statement in purchasing decisions (V23).

(8) The usefulness of balance sheet and income statement in investment decisions (V24).

(9) The usage of balance sheet in evaluating the operations of the company (V25).

(10) The usage of income statement in evaluating the operations of the company (V26).

(11) The usage of sources and uses statement in evaluating the operations of the company (V27).

(12) The usage of ratio analysis in evaluating the operations of the company (V28).

(13) The usage of monthly budget compared reports in evaluating the operations of the company (V29).

(14) The performance in profit over assets ratio (V41).

(15) The performance in profit over capital stock ratio (V61).

(16) The performance in profit over sales ratio (V71).

(17) The performance in sales over assets ratio (V81).

(18) The performance in sales over capital stock ratio (V91).

Through the interpretation of discriminant analysis, the discriminant functions have been statistically significant and the selected discriminating variables have been reliable.

The first group of analysis, where groups of those companies which use computer in the operati of the company versus those which do not use, has a one pe t probability

of occurring due to chances of sampling. Clearly the discriminant function of this analysis is statistically significant. The second group of analysis, where groups of those companies which classify costs of variable and fixed versus which do not classify, and the third analysis, where groups of those companies which apply variable costing in internal reporting versus which do not apply, have nearly 0 probability of occuring due to chances of sampling.

The results of discriminant analysis are shown in Table 8 and Table 9.

TABLE 8

DISCRIMINANT ANALYSIS

	CANONICAL CORRELATIONS	WILKS' LAMBDA	CHI-SQUARE	SIGNIFICANCE
Analysis 1	0,95	0,10	33.266	0,0104
Analysis 2	0,97	0,05	43.158	0,0005
Analysis 3	0,98	0,04	45.427	0,0002

TABLE 9

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

ANALYSIS	VARIABLE	COEFFICIENTS	CONTRIBUTION RANK
ANALYSIS 1	V17	2,57	2
	V19	-2,71	1
	V20	2,20	4
	V21	1,37	7
	V22	-0,54	14
	V23	-0,31	16
	V24	-1,09	9
	V25	0,84	10
	V26	-0,22	17
	V27	1,74	6
	V28	2,35	3
	V29	-0,64	13
	V41	-0,80	12
	V61	-0,81	11
	V71	0,51	15
	V81	1,24	8
	V91	2,10	5
ANALYSIS 2	V5	-1,78	4
	V19	-2,35	1
	V20	1,17	7
	V21	1,12	8
	V22	-0,94	11
	V23	-0,48	14
	V24	-0,73	12
	V25	1,83	3
	V26	0,21	16
	V27	1,55	6
	V28	1,58	5
	V29	-0,07	17
	V41	-0,69	13
	V61	-1,09	9
	V71	1,05	10
	V81	0,46	15
	V91	2,23	2
ANALYSIS 3	V5	-1,73	6
	V17	2,17	1
	V20	1,65	7
	V21	1,10	10
	V22	0,76	14
	V23	0,81	12
	V24	1,20	8
	V25	1,79	5
	V26	,33	16

ANALYSIS	VARIABLE	COEFFICIENTS	CONTRIBUTION RANK
	V27	1,80	4
	V28	1,97	3
	V29	-0,23	17
	V41	-1,12	9
	V61	-0,85	11
	V71	0,77	13
	V81	0,58	15
	V91	2,12	2

DISCRIMINANT ANALYSIS

FIRST ANALYSIS

```
OPERATING SYSTEM =  NOS 2.4.1 630/628.   85/04/03. PRINTED = 86/06/24. 11.56.24.

UJN          =  AUOI        FAMILY     = UNIST        JOB ORIGIN     = INTERACTIVE.
CREATING JSN =  ACNP        USER NAME  = AYDINL       SERVICE CLASS  = INTERACTIVE.
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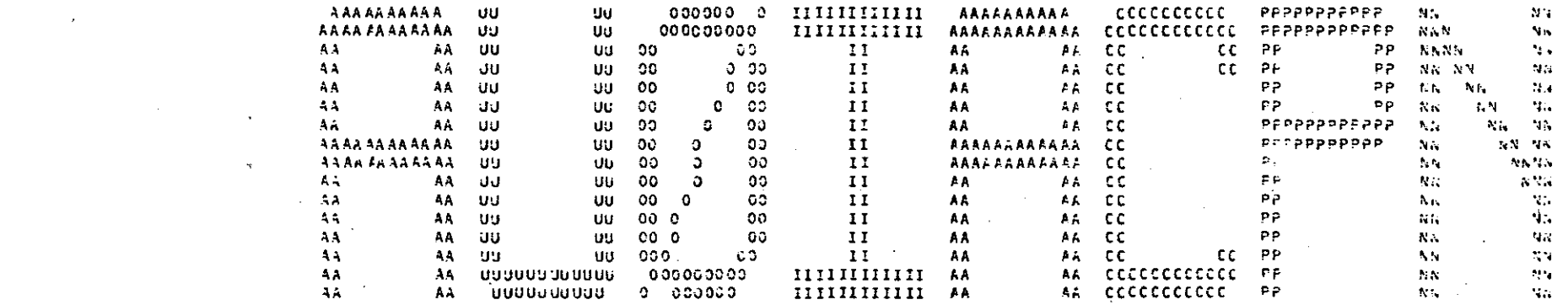

SPSS INC LICENSE NUMBER: 19223

NEW FEATURES IN SPSS-X RELEASE 2
FOR MORE DETAILS, USE THE COMMAND: INFO OVERVIEW FACILITIES.
PLOT - SCATTER PLOTS, OVERLAY PLOTS, CONTOUR PLOTS ON THE PRINTER.
HILOGLINEAR - FAST LOGLINEAR ANALYSIS FOR HIERARCHICAL MODELS.
CLUSTER - HIERARCHICAL CLUSTER ANALYSIS.
QUICK CLUSTER - FAST CLUSTER ANALYSIS FOR A FIXED NUMBER OF CLUSTERS.
IMPORT/EXPORT - PORTABLE SYSTEM FILES FOR TRANSFER TO OTHER KINDS OF COMPUTERS.
PROBIT - DICHOTOMOUS PROBIT AND LOGISTIC REGRESSION ANALYSIS.
SET WIDTH - WIDTH CONTROL FOR PRINTED OUTPUT.
XSAVE - ALLOWS NEW FLEXIBILITY IN SAVING SYSTEM FILES.
END SUBCOMMAND - WITH DATA LIST, YOU CAN DETECT END OF FILE.

```
1  0          SUBTITLE  ***  DR  IREM NUHOGLU  PROGRAM  61  ***
2  0          DATA LIST RECORDS =1 FIXED
3  0                            /CODE,V17,V19,V20,V21,V22,V23,V24,
4  0                             V25,V26,V27,V28,V29,V41,V61,V71,
5  0                             V81,V91(F2.0,17F1.0)
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THE ABOVE DATA LIST STATEMENT WILL READ 1 RECORDS FROM FILE INLINE .

VARIABLE	REC	START	END	FORMAT	WIDTH	DEC
CODE	1	1	2	F	2	0
V17	1	3	3	F	1	0
V19	1	4	4	F	1	0
V20	1	5	5	F	1	0
V21	1	6	6	F	1	0
V22	1	7	7	F	1	0
V23	1	8	8	F	1	0
V24	1	9	9	F	1	0
V25	1	10	10	F	1	0
V26	1	11	11	F	1	0
V27	1	12	12	F	1	0
V28	1	13	13	F	1	0
V29	1	14	14	F	1	0
V41	1	15	15	F	1	0
V61	1	16	16	F	1	0
V71	1	17	17	F	1	0
V81	1	18	18	F	1	0
V91	1	19	19	F	1	0

END OF DATALIST TABLE.

CODE	V71
1	.73571
2	.54545
TOTAL	.66000

STANDARD DEVIATIONS

CODE	V17	V19	V20	V21	V22	V23	V24	V25
1	.46681	.51355	.51387	.42726	0.00000	.51355	.49726	.46726
2	.46710	.46710	.46710	.50452	.46710	.50452	.46710	.46710
TOTAL	.50990	.50662	.50000	.48025	.33166	.47610	.47619	.48000

CODE	V26	V27	V28	V29	V41	V51	V71	V81
1	0.00000	.51355	.51387	.42562	.51355	.49726	.51355	.46726
2	.30151	.46710	.40452	.30151	.52223	.46710	.52223	.52223
TOTAL	.20000	.43990	.46990	.37417	.50662	.47618	.50990	.48989

CODE	V71
1	.42562
2	.52223
TOTAL	.47613

WITHIN-GROUPS COVARIANCE MATRIX WITH 23 DEGREES OF FREEDOM

	V17	V19	V20	V21	V22	V23	V24	V25
V17	.2196853							
V19	.1942405	.2439307						
V20	.5138340E-01	.5138340E-01	.2470356					
V21	-.5194805E-01	-.5815923E-01	-.6126432E-01	.1510446				
V22	-.7905138E-02	-.7905138E-02	-.7905138E-02	.3953569E-01	.9486166E-01			
V23	-.7951604E-01	-.8532722E-01	.6324111E-01	.5025409E-01	.2371542E-01	.2402146		
V24	.2653868E-01	.5759458E-01	.7312253E-01	-.2599774E-01	-.7905138E-02	.1559167E-01	.2346132	
V25	-.1242236E-01	.2434472E-01	.2173913E-01	-.3166590E-02	0.	.1863354E-01	.1552795E-01	.4037267E-01
V26	-.3162055E-01	-.3162055E-01	-.3162055E-01	.2765798E-01	.3162055E-01	.7905138E-02	-.3162055E-01	0.
V27	.3396104E-01	.3274966E-01	-.3557312E-01	-.2389215E-01	.3557312E-01	-.4850814E-01	.8805348E-01	-.2434472E-01

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*** DR IREM NUHOGLU PROGRAM 61 ***

	V17	V19	V20	V21	V22	V23	V24	V25
V28	.1976285E-01	.6324111E-01	-.8893281E-01	.5335968E-01	.2371542E-01	-.1581028E-01	.6498024E-01	.2175913E-01
V29	-.1806269E-01	.5646527E-03	.5335968E-01	.2512705E-01	.1185771E-01	.6062902E-01	.7199322E-01	.9516770E-02
V41	-.1753562E-01	-.5251270E-01	-.2766798E-01	-.1072340E-01	-.1581028E-01	-.6050457E-01	-.6493070E-01	-.1663304E-01
V61	.1693958E-01	-.1411632E-01	-.2964427E-01	-.1948052E-01	.7905138E-02	-.5702993E-01	.2625633E-01	-.1552795E-01
V71	.3317916E-02	-.4030152E-01	-.2766798E-01	.2653368E-01	.2766798E-01	-.2879729E-01	-.7755743E-01	-.2434472E-01
	-.8338861E-01	-.8977979E-01	-.4940711E-01	.4799548E-02	-.1581028E-01	.1468097E-01	-.9909050E-01	-.3105590E-02
	-.2145680E-01	.3387916E-02	-.5928654E-02	-.8838815E-01	-.1581028E-01	-.3500847E-01	.1891587E-01	-.9516770E-02

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.3952569E-01							
V27	.1185771E-01	.2439307						
V28	.7905138E-02	.6324111E-01	.2233202					
V29	.3952569E-02	.1919819E-01	.5731225E-01	.1420102				
V41	-.1976285E-01	.4065500E-01	-.3952569E-02	-.5477132E-01	.2676454			
V61	-.1185771E-01	.4178430E-01	.4545455E-01	-.2551496E-01	.1518916	.2340132		
V71	-.1976285E-01	-.9034444E-02	-.3952569E-02	-.3813778E-01	.1869001	.1643139	.2676454	
V81	.2371542E-01	-.5251270E-01	-.6916996E-01	-.1439664E-01	.5646527E-01	.1214003E-01	.5025409E-01	.1589497
V91	-.1976285E-01	-.5372388E-01	-.6916996E-01	-.3724337E-01	-.2428007E-01	.2450259E-01	-.4291561E-01	.2236378E-01

	V91
V91	.2210615

POOLED WITHIN-GROUPS CORRELATION MATRIX

	V17	V19	V20	V21	V22	V23	V24	V25	V26	V27	V28
V17	1.00000										
V19	.34023	1.00000									
V20	.22087	.20932	1.00000								
V21	-.26557	-.30299	-.31716	1.00000							
V22	-.05483	-.05197	-.05164	.33029	1.00000						
V23	-.39247	-.37031	.27114	.27555	.16458	1.00000					
V24	.11786	.24075	.30374	-.12743	-.05299	.05962	1.00000				
V25	-.13209	.25036	.21768	-.03977	0.00000	.19762	.15955	1.00000			
V26	-.33930	-.32203	-.32000	.35808	.51640	.06473	-.32838	0.00000	1.00000		
V27	.16854	.13426	-.14491	-.10884	.23335	-.20952	.37057	-.25036	.12076	1.00000	
V28	.05935	.27096	-.37665	.29053	.16294	-.07129	.37128	.26895	.05414	.27756	1.00000
V29	-.10244	.00303	.28439	.17157	.10216	.37677	.39442	.12304	.05276	.10315	.32188
V41	-.06296	-.20552	-.10760	-.05336	-.09922	-.27212	-.25913	-.17926	-.19215	.15911	-.01617
V61	.07472	-.05901	-.12314	-.10348	.05299	-.25090	.11191	-.15955	-.12314	.17486	.19656
V71	.01399	-.18121	-.13760	.13199	.17364	-.11862	-.30671	-.23901	-.19215	-.05526	-.01617
V81	-.44732	-.46595	-.24933	.03098	-.12876	.07847	-.51316	-.03877	.29926	-.26869	-.36719
V91	-.09750	.01459	-.02537	-.42369	-.10916	-.15807	.03500	-.09862	-.21142	-.25269	-.01131

	V29	V41	V61	V71	V81	V91
V29	1.00000					
V41	-.28394	1.00000				
V61	-.15622	.63615	1.00000			
V71	-.13536	.69831	.65572	1.00000		
V81	-.09584	.27376	.06237	.24365	1.00000	
V91	-.22149	-.09982	.10735	-.17642	.11896	1.00000

CORRELATIONS WHICH CANNOT BE COMPUTED ARE PRINTED AS 99.0.

LAMBDA (U-STATISTIC) AND UNIVARIATE F-RATIO
WITH 1 AND 23 DEGREES OF FREEDOM

VARIABLE	WILKS' LAMBDA	F	SIGNIFICANCE
V17	.80753	5.482	.0232
V19	.91078	2.253	.1469
V20	.94697	1.288	.2681
V21	.86351	3.432	.0748
V22	.82645	4.830	.0333
V23	.93105	1.703	.2048
V24	.99193	.1871	.6694
V25	.96726	.7735	.3867
V26	.94697	1.288	.2681
V27	.97403	.6133	.4415
V28	.89173	2.793	.1053
V29	.97209	.6603	.4243
V41	.99933	.1553E-01	.9019
V61	.99193	.1871	.6694
V71	.98651	.3144	.5804
V81	.80172	5.686	.0257
V91	.93464	1.609	.2174

COVARIANCE MATRIX FOR GROUP 1.

	V17	V19	V20	V21	V22	V23	V24	V25
V17	.2197802							
V19	.1758242	.2637363						
V20	-.7692308E-01	-.7692308E-01	.2692308					
V21	-.2197802E-01	-.3296703E-01	-.3846154E-01	.7142857E-01				
V22	0.	0.	0.	0.	0.			
V23	-.9890110E-01	-.1098901	.1538462	.3296703E-01	0.	.2637363		
V24	-.4395604E-01	.1098901E-01	.3846154E-01	.2747253E-01	0.	-.1098901E-01	.2472527	
V25	-.2197802E-01	.4395604E-01	.3846154E-01	-.5494505E-02	0.	.3296703E-01	.2747253E-01	.7142857E-01
V26	0.	0.	0.	0.	0.	0.	0.	0.
V27	.5494505E-01	.4395604E-01	-.7692308E-01	-.4395604E-01	0.	-.1978022	.6593407E-01	-.4395604E-01
V28	.7692308E-01	.1538462	-.1153846	.3846154E-01	0.	-.7692308E-01	.1153846	.3846154E-01
V29	-.1098901E-01	.2197802E-01	.1153846	.1648352E-01	0.	.5494505E-01	.7142857E-01	.1648352E-01
V41	.2197802E-01	-.4395604E-01	0.	-.3296703E-01	0.	-.1098901	-.6593407E-01	-.3846154E-01
V61	.4395604E-01	-.1098901E-01	-.3846154E-01	.4945055E-01	0.	-.6593407E-01	.6043956E-01	-.2747253E-01
V71	.5494505E-01	-.3296703E-01	0.	.3296703E-01	0.	-.4395604E-01	-.8791209E-01	-.4395604E-01
V81	-.2197802E-01	-.3296703E-01	.3846154E-01	-.5494505E-02	0.	.3296703E-01	-.4945055E-01	-.5494505E-02
V91	-.6593407E-01	-.2197802E-01	-.3846154E-01	-.1648352E-01	0.	.2197802E-01	.5494505E-02	-.1648352E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	0.							
V27	0.	.2637363						
V28	0.	.7692308E-01	.2692308					
V29	0.	-.2197802E-01	.3846154E-01	.1813187				
V41	0.	.1208791	0.	-.5494505E-01	.2637363			
V61	0.	.8791209E-01	.1153846	.5494505E-02	.1428571	.2472527		
V71	0.	.3296703E-01	0.	-.2197802E-01	.1978022	.1648352	.2637363	
V81	0.	-.4395604E-01	-.3846154E-01	.1648352E-01	.4395604E-01	-.2747253E-01	.3296703E-01	.7142857E-01
V91	0.	-.5494505E-01	-.3846154E-01	-.2747253E-01	-.9890110E-01	-.1648352E-01	.1813187	-.1648352E-01

	V91
V91	.1813187

ATRIX FOR GROUP 2

	V17	V19	V20	V21	V22	V23	V24	V25
V17	.2131813							
V19	.2131813	.2131813						
V20	.2131813	.2131813	.2131813					
V21	-.9090909E-01	-.9090909E-01	-.9090909E-01	.2545455				
V22	-.1313182E-01	-.1313182E-01	-.1313182E-01	.9090909E-01	.2131813			
V23	-.5454545E-01	-.5454545E-01	-.5454545E-01	.7272727E-01	.5454545E-01	.1363364		
V24	.1131813	.1131813	.1131813	-.9090909E-01	-.1313182E-01	.4545455E-01	.2131813	
V25	0.	0.	0.	0.	0.	0.	0.	0.
V26	-.7272727E-01	-.7272727E-01	-.7272727E-01	.6363636E-01	.7272727E-01	.1313182E-01	-.7272727E-01	0.
V27	.1313182E-01	.1313182E-01	.1313182E-01	.9090909E-02	.1313182E-01	.1454545	.1131813	0.
V28	-.5454545E-01	-.5454545E-01	-.5454545E-01	.7272727E-01	.5454545E-01	.6363636E-01	.4545455E-01	0.
V29	-.2727273E-01	-.2727273E-01	-.2727273E-01	.3636364E-01	.2727273E-01	.1818182E-01	.7272727E-01	0.
V41	-.6363636E-01	-.6363636E-01	-.6363636E-01	.1818182E-01	-.3636364E-01	-.9090909E-02	-.6363636E-01	0.
V61	-.1313182E-01	-.1313182E-01	-.1313182E-01	-.1090909	.1313182E-01	-.4545455E-01	-.1313182E-01	0.
V71	-.6363636E-01	-.6363636E-01	-.6363636E-01	.1818182E-01	-.3636364E-01	-.9090909E-02	-.6363636E-01	0.
V81	-.1636364	-.1636364	-.1636364	.1818182E-01	-.3636364E-01	-.9090909E-02	-.1636364	0.
V91	.3636364E-01	.3636364E-01	.3636364E-01	-.1818182	-.3636364E-01	-.1090909	.3636364E-01	0.

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.9090909E-01							
V27	.2727273E-01	.2131813						
V28	.1313182E-01	.4545455E-01	.1636364					
V29	.9090909E-02	.7272727E-01	.1818182E-01	.9090909E-01				
V41	-.4545455E-01	-.6363636E-01	-.9090909E-02	-.5454545E-01	.2727273			
V61	-.2727273E-01	-.1818182E-01	-.4545455E-01	-.7272727E-01	.1636364	.2131813		
V71	-.4545455E-01	-.6363636E-01	-.9090909E-02	-.5454545E-01	.1272727	.1363364	.2727273	
V81	.5454545E-01	-.6363636E-01	-.1090909	-.5454545E-01	.7272727E-01	.6363636E-01	.7272727E-01	.2727273
V91	-.4545455E-01	-.6363636E-01	-.1090909	-.5454545E-01	.7272727E-01	.1363364	.7272727E-01	.7272727E-01

	V91
V91	.2727273

TOTAL COVARIANCE MATRIX WITH 24 DEGREES OF FREEDOM

	V17	V19	V20	V21	V22	V23	V24	V25
V17	.2600000							
V19	.2200000	.2566667						
V20	.7500000E-01	.6666667E-01	.2500000					
V21	-.1666667E-01	-.3333333E-01	-.4166667E-01	.1666667				
V22	.2333333E-01	.1333333E-01	.8333333E-02	.5833333E-01	.1100000			
V23	-.4833333E-01	-.6333333E-01	.7500000E-01	.6666667E-01	.4000000E-01	.2266667		
V24	.3500000E-01	.1666667E-01	.7500000E-01	-.1666667E-01	-.1666667E-02	.1833333E-01	.2266667	
V25	-.2000000E-01	.1833333E-01	.1666667E-01	-.8333333E-02	-.5000000E-02	.1333333E-01	.1333333E-01	.4666667E-01
V26	-.2000000E-01	-.2333333E-01	-.2500000E-01	.3333333E-01	.3666667E-01	.1333333E-01	-.8333333E-01	-.1666667E-02
V27	.5500000E-01	.4333333E-01	-.2500000E-01	-.8333333E-02	.4500000E-01	-.3666667E-01	.8333333E-01	-.2666667E-01
V28	.5500000E-01	.3500000E-01	-.8666667E-01	.7500000E-01	.4500000E-01	.5000000E-02	.8333333E-01	.1500000E-01
V29	-.3333333E-02	.1000000E-01	.5333333E-01	.3333333E-01	.2000000E-01	.7166667E-01	.7166667E-01	.6666667E-02
V41	-.1100000E-01	-.4833333E-01	-.2500000E-01	-.3333333E-02	-.1333333E-01	-.6166667E-01	-.8166667E-01	-.1833333E-01
V51	.8666667E-02	-.2000000E-01	-.3333333E-01	-.2500000E-01	.1666667E-02	-.6000000E-01	.8333333E-01	-.1833333E-01
V71	-.1000000E-01	-.5333333E-01	-.3333333E-01	.1666667E-01	.1833333E-01	-.3500000E-01	-.7666667E-01	-.2166667E-01
V81	-.3666667E-01	-.5666667E-01	-.2500000E-01	.3333333E-01	.1166667E-01	.3833333E-01	-.8666667E-01	-.1000000E-01
V91	.8666667E-02	.2166667E-01	.8333333E-02	-.6666667E-01	.1666667E-02	-.1833333E-01	.8333333E-01	-.1333333E-01

	V26	V27	V28	V29	V41	V51	V71	V81
V26	.4000000E-01							
V27	.1500000E-01	.2400000						
V28	.1500000E-01	.7333333E-01	.2400000					
V29	.8666667E-02	.2333333E-01	.6500000E-01	.1400000				
V41	-.1333333E-01	.4000000E-01	-.1666667E-02	-.5166667E-01	.2566667			
V51	-.1333333E-01	.3666667E-01	.3666667E-01	-.3000000E-01	.1450000	.2266667		
V71	-.2166667E-01	-.1333333E-01	-.1333333E-01	-.3833333E-01	.1783333	.1000000	.2666667	
V81	.3166667E-01	-.3500000E-01	-.3500000E-01	-.1566667E-02	.5666667E-01	.3333333E-02	.3666667E-01	.1900000
V91	-.1333333E-01	-.4666667E-01	-.4666667E-01	-.3000000E-01	-.2166667E-01	.1833333E-01	-.4833333E-01	.4500000E-01

	V91
V91	.2266667

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY CODE

ANALYSIS NUMBER 1

DIRECT METHOD: ALL VARIABLES PASSING THE TOLERANCE TEST ARE ENTERED.

MINIMUM TOLERANCE LEVEL..... .00100

CANONICAL DISCRIMINANT FUNCTIONS

MAXIMUM NUMBER OF FUNCTIONS..... 1
MINIMUM CUMULATIVE PERCENT OF VARIANCE... 100.00
MAXIMUM SIGNIFICANCE OF WILKS' LAMBDA.... 1.0000

PRIOR PROBABILITY FOR EACH GROUP IS .50000

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

CODE =	1	2
V17	140.1244	103.5002
V19	-123.5336	-91.94055
V20	57.59336	34.00032
V21	73.01578	52.01289
V22	-130.0414	-89.69076
V23	-5.703065	-2.949223
V24	-16.03635	-3.342385
V25	136.6124	102.6089
V26	137.3271	143.6336
V27	74.74162	54.47118
V28	59.07816	33.34061
V29	-11.09161	-1.349561
	-17.48371	-6.803431
	-61.52751	-51.66612
V71	79.20519	75.53933
V81	3.429907	-9.529436
V91	116.9539	93.13677
(CONSTANT)	-237.7429	-189.3362

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V17	2.56544
V19	-2.70852
V28	2.20438
V21	1.37429
V22	-.54153
V23	-.30571
V24	-1.09082
V25	.34286
V26	-.21727
V27	1.73512
V28	2.35369
V29	-.63623
V41	-.79623
V31	-.31136
V71	.50801
V51	1.24096
V91	2.09947

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*** DR IREM NUHOGLU PROGRAM 81 ***

STRUCTURE MATRIX:

POOLED WITHIN-GROUPS CORRELATIONS BETWEEN CANONICAL DISCRIMINANT FUNCTIONS AND DISCRIMINATING VARIABLES
VARIABLES ARE ORDERED BY THE FUNCTION WITH LARGEST CORRELATION AND THE MAGNITUDE OF THAT CORRELATION.

	FUNC 1
V31	.16655
V17	.16350
V23	.15347
V21	.13031
V26	.11609
V19	.10432
V28	.09113
V91	.08856
V25	.07925
V27	.07925
V25	-.06161
V22	.05674
V_7	.05469
V71	-.03916
V24	.03021
V51	-.03021
V41	.00879

UNSTANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V17	5.480935
V19	-5.434027
V20	4.435127
V21	3.536118
V22	-1.756222
V23	-.6514619
V24	-2.252044
V25	4.194619
V26	-1.092835
V27	3.513162
V28	4.980636
V29	-1.688440
V41	-1.539073
V51	-1.074459
V71	.9319615
V81	3.112623
V91	4.465325
(CONSTANT)	-12.20207

CANONICAL DISCRIMINANT FUNCTIONS EVALUATED AT GROUP MEANS (GROUP CENTROIDS)

GROUP	FUNC 1
1	2.53874
2	-3.23112

TEST OF EQUALITY OF GROUP COVARIANCE MATRICES USING BOX'S M

THE RANKS AND NATURAL LOGARITHMS OF DETERMINANTS PRINTED ARE THOSE OF TH GROUP COVARIANCE MATRICES.

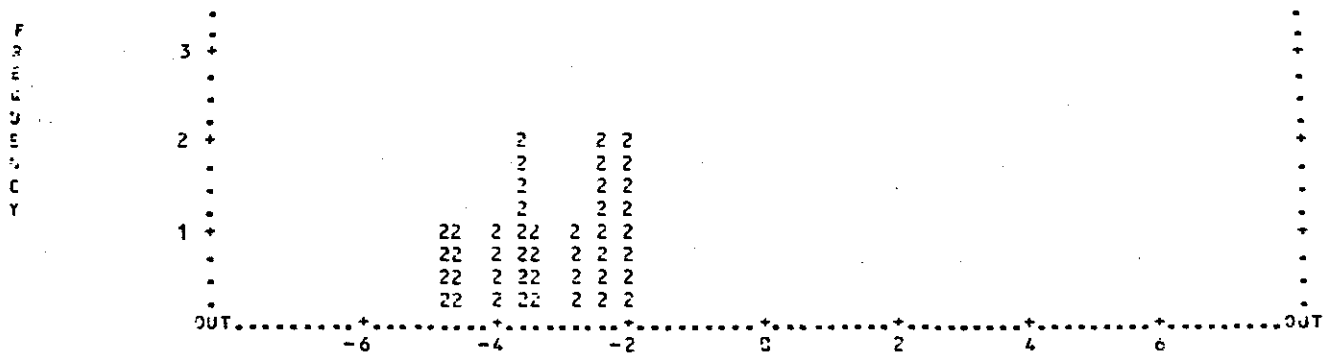
GROUP LABEL	RANK	LOG DETERMINANT
1	< 14	(TOO FEW CASES TO BE NON-SINGULAR)
2	< 11	(TOO FEW CASES TO BE NON-SINGULAR)
POOLED WITHIN-GROUPS COVARIANCE MATRIX	17	-43.129212

NO TEST CAN BE PERFORMED WITHOUT AT LEAST TWO NON-SINGULAR GROUP COVARIANCE MATRICES.

CASE SEQNUM	MIS VAL	SEL	ACTUAL GROUP	HIGHEST GROUP	PROBABILITY P(D/G)	PROBABILITY P(G/D)	2ND HIGHEST GROUP	PROBABILITY P(G/D)	DISCRIMINANT SCORES
1			1	1	.4524	1.0000	2	.0000	1.7874
2			1	1	.5511	1.0000	2	.0000	2.3510
3			1	1	.7759	1.0000	2	.0000	2.8235
4			1	1	.5572	1.0000	2	.0000	3.1256
5			1	1	.7759	1.0000	2	.0000	2.8235
6			1	1	.5330	1.0000	2	.0000	3.4020
7			1	1	.4649	1.0000	2	.0000	1.8079
8			1	1	.4561	1.0000	2	.0000	3.2840
9			1	1	.9956	1.0000	2	.0000	2.5442
10			1	1	.6247	1.0000	2	.0000	2.0496
11			1	1	.6434	1.0000	2	.0000	3.0017
12			1	1	.4058	1.0000	2	.0000	1.7073
13			1	1	.0223	.9694	2	.0306	.2527
14			1	1	.0410	1.0000	2	.0000	4.5818
15			2	2	.6499	1.0000	1	.0000	-3.4203
16			2	2	.1324	1.0000	1	.0000	-4.7357
17			2	2	.7276	1.0000	1	.0000	-3.5794
18			2	2	.3915	1.0000	1	.0000	-2.3743
19			2	2	.7171	1.0000	1	.0000	-3.5935
21			2	2	.2094	.9999	1	.0001	-1.9756
22			2	2	.7331	1.0000	1	.0000	-2.8901
23			2	2	.4355	1.0000	1	.0000	-2.4513
24			2	2	.2094	.9999	1	.0001	-1.9756
25			2	2	.4582	1.0000	1	.0000	-3.9729
26			2	2	.1796	1.0000	1	.0000	-4.5731

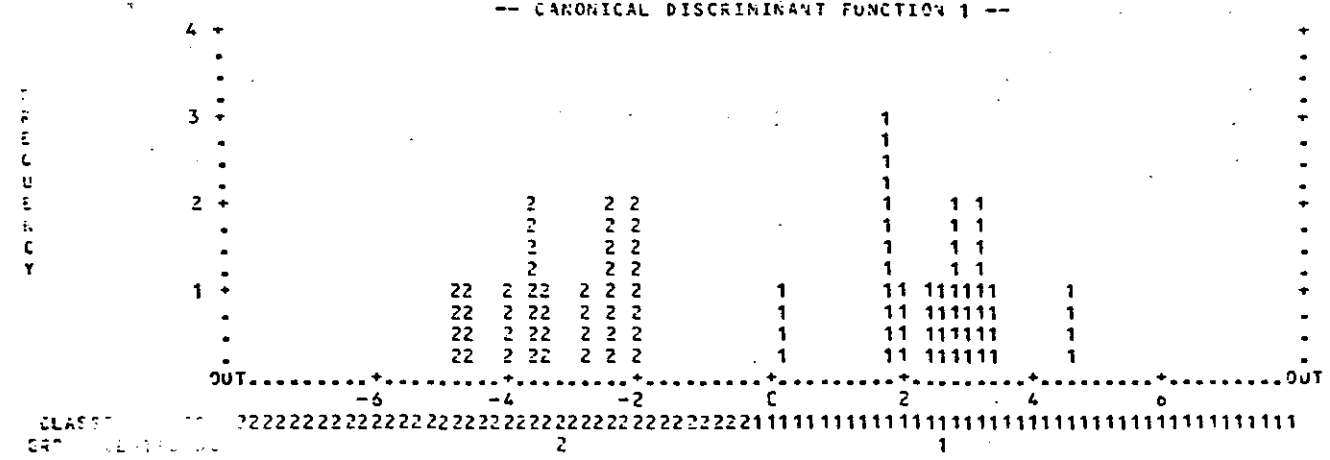
SYMBOLS USED IN PLOTS

SYMBOL	GROUP	LABEL
1	1	
2	2	



ALL-GROUPS STACKED HISTOGRAM

-- CANONICAL DISCRIMINANT FUNCTION 1 --



CLASSIFICATION RESULTS -

ACTUAL GROUP		NO. OF CASES	PREDICTED GROUP MEMBERSHIP 1	2
GROUP	1	14	14 100.0P	0 0.0P
GROUP	2	11	0 0.0P	11 100.0P

CLASSIFICATION RESULTS -

ACTUAL GROUP		NO. OF CASES	PREDICTED GROUP MEMBERSHIP 1	2
GROUP	1	14	14 100.0%	0 0.0%
GROUP	2	11	0 0.0%	11 100.0%

PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 100.0%

CLASSIFICATION PROCESSING SUMMARY

25 CASES WERE PROCESSED.
0 CASES WERE EXCLUDED FOR MISSING OR OUT-OF-RANGE GROUP CODES.
1 CASES HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
25 CASES WERE USED FOR PRINTED OUTPUT.

124 JUN 86 SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY
*** DR IREM NUHOGLU PROGRAM 31 ***

PRECEDING TASK REQUIRED 3.59 SECONDS CPU TIME; 39 SECONDS ELAPSED.

11 0 FINISH

11 COMMAND LINES READ.
0 ERRORS DETECTED.
0 WARNINGS ISSUED.
5 SECONDS CPU TIME.
58 SECONDS ELAPSED TIME.
END OF JOB.

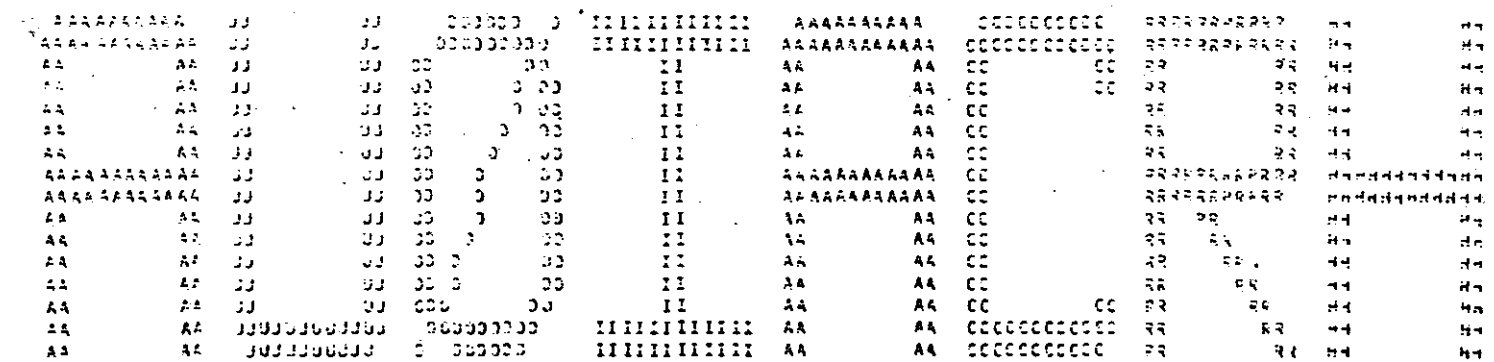
11.57.22.UCLP, [illegible] P03 , 2.783<LAS.

DISCRIMINANT ANALYSIS

SECOND ANALYSIS

OPERATING SYSTEM = VMS V4.4 on 630/626. 30/04/35. PRINTED = 30/05/34. 10.36.54.

JOB = AJOB FAMILY = UNIST JOB ORIGIN = INTERACTIVE.
QUEUING JOB = ACNP USER NAME = AYDIN) SERVICE CLASS = INTERACTIVE.



SPSS INC LICENSE NUMBER: 19228

NEW FEATURES IN SPSS-X RELEASE 2
FOR MORE DETAILS, USE THE COMMAND: INFO OVERVIEW FACILITIES.
PLOT - SCATTER PLOTS, OVERLAY PLOTS, CONTOUR PLOTS ON THE PRINTER.
HILOGLINEAR - FAST LOGLINEAR ANALYSIS FOR HIERARCHICAL MODELS.
CLUSTER - HIERARCHICAL CLUSTER ANALYSIS.
QUICK CLUSTER - FAST CLUSTER ANALYSIS FOR A FIXED NUMBER OF CLUSTERS.
IMPORT/EXPORT - PORTABLE SYSTEM FILES FOR TRANSFER TO OTHER KINDS OF COMPUTERS.
PROBIT - DICHOTOMOUS PROBIT AND LOGISTIC REGRESSION ANALYSIS.
SET WIDTH - WIDTH CONTROL FOR PRINTED OUTPUT.
XSAVE - ALLOWS NEW FLEXIBILITY IN SAVING SYSTEM FILES.
END SUBCOMMAND - WITH DATA LIST, YOU CAN DETECT END OF FILE.

```
  1  0          SUBTITLE *** DR  IREM  NUHOGLU  PROGRAM  82  ***
  2  0          DATA LIST RECORDS =1 FIXED
  3  0                          /CODE,V05,V19 TO V29,V41,V61,V71,V81,V91(F2.0,17F1.0)
```

THE ABOVE DATA LIST STATEMENT WILL READ 1 RECORDS FROM FILE INLINE .

VARIABLE	REC	START	END	FORMAT	WIDTH	DEC
CODE	1	1	2	F	2	0
V05	1	3	3	F	1	0
V19	1	4	4	F	1	0
V20	1	5	5	F	1	0
V21	1	6	6	F	1	0
V22	1	7	7	F	1	0
V23	1	8	8	F	1	0
V24	1	9	9	F	1	0
V25	1	10	10	F	1	0
V26	1	11	11	F	1	0
V27	1	12	12	F	1	0
V28	1	13	13	F	1	0
V29	1	14	14	F	1	0
V41	1	15	15	F	1	0
V61	1	16	16	F	1	0
V71	1	17	17	F	1	0
V81	1	18	18	F	1	0
V91	1	19	19	F	1	0

END OF DATALIST TABLE.

```
     5  )          BEGIN DATA
124 JUN 86   SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY                    PAGE
             *** DR  IBM  NJHOGLU  PROGRAM  32  ***


 PRECEDING TASK REQUIRED          .23 SECONDS CPU TIME;          4 SECONDS ELAPSED.

     5  )          DISCRIMINANT GROUPS=CODE(1,2)/VARIABLES=V05,V19 TO V29,V41,V61,V71,
     6  )                                 /31,V91/ANALYSIS=V05,V19 TO V29,V41,V61,V71,V31
     7  )                                 ,V91/METHOD=DIRECT/
     8  )          STATISTICS ALL

     32162 WORDS OF WORKSPACE AVAILABLE.
      5000 WORDS ARE USED TO SATISFY MAXIMUM WORKSPACE REQUESTS.


 THIS DISCRIMINANT ANALYSIS REQUIRES       1350 WORDS OF WORKSPACE.
124 JUN 86   SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY                    PAGE
             *** DR  IBM  NJHOGLU  PROGRAM  32  ***
```

- D I S C R I M I N A N T A N A L Y S I S -

0% GROUPS DEFINED BY CODE

25 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
0 HAD MISSING OR OUT-OF-RANGE GROUP CODES.
0 HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
25 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

CODE	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	13	13.0	
2	12	12.0	
TOTAL	25	25.0	

GROUP MEANS

CODE	V18	V19	V20	V21	V22	V23	V24	V25
1	.76923	.84615	.53846	.76923	.92308	.23077	.38462	.92308
2	1.00000	1.00000	.25000	.66667	.83333	.41667	.25000	1.00000
TOTAL	.88000	.92000	.40000	.72000	.88000	.32000	.32000	.96000

CODE	V26	V27	V28	V29	V41	V61	V71	V81
1	.92308	.46154	.46154	.15385	.53846	.69231	.46154	.69231
2	1.00000	.25000	.25000	.16667	.58333	.66667	.50000	.83333
TOTAL	.96000	.36000	.36000	.16000	.56000	.68000	.48000	.76000

ON GROUPS DEFINED BY CODE

```
           26 (UNWEIGHTED) CASES WERE PROCESSED.
            1 OF THOSE WERE EXCLUDED FROM THE ANALYSIS.
              0 HAD MISSING OR OUT-OF-RANGE GROUP CODES.
              1 HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
           25 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.
```

NUMBER OF CASES BY GROUP

CODE	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	13	13.0	
2	12	12.0	
TOTAL	25	25.0	

GROUP MEANS

CODE	V30	V19	V20	V21	V22	V23	V24	V25
1	.76923	.84615	.53846	.76923	.92308	.23077	.38462	.92308
2	.33333	1.00000	.25000	.83333	.33333	.41667	.25000	1.00000
TOTAL	.56000	.44000	.40000	.80000	.68000	.32000	.32000	.96000

CODE	V26	V27	V28	V29	V41	V61	V71	V31
1	.92308	.46154	.46154	.15385	.53846	.69231	.46154	.69231
2	1.00000	.25000	.25000	.16667	.58333	.66667	.50000	.83333
TOTAL	.96000	.36000	.36000	.16000	.56000	.68000	.48000	.76000

CODE	V71
1	.46154
2	.66667
TOTAL	.56000

GROUP STANDARD DEVIATIONS

CODE	V18	V19	V20	V21	V22	V23	V24	V25
1	.43853	.37553	.51687	.43853	.27735	.43853	.51687	.27735
2	.49237	.00000	.45227	.38925	.38925	.51493	.45227	.00000
TOTAL	.39662	.53662	.50903	.40825	.33166	.47613	.47613	.26090

CODE	V26	V27	V28	V29	V41	V61	V71	V81
1	.27735	.51687	.51687	.37553	.51687	.43853	.51687	.43853
2	.00000	.45227	.45227	.38925	.51493	.49237	.52223	.38925
TOTAL	.20000	.48990	.48990	.37417	.53662	.47613	.50990	.43589

CODE	V71
1	.43853
2	.49237
TOTAL	.47613

POOLED WITHIN-GROUPS COVARIANCE MATRIX WITH 23 DEGREES OF FREEDOM

	V05	V19	V20	V21	V22	V23	V24	V25
V05	.2162762							
V19	-.2000689E-01	.7357360E-01						
V20	.2675535E-01	.3344482E-02	.2382943					
V21	.8884169E-01	-.2006689E-01	-.3846154E-01	.1727952				
V22	.6243032E-01	-.6688963E-02	.1672241E-02	.6243032E-01	.1125975			
V23	.8307151E-01	-.2341137E-01	.9363936E-01	.6683222E-01	.4626533E-01	.2271460		
V24	.5688936E-02	.3344482E-01	.3772575E-01	-.1505017E-01	-.5016722E-02	.2591973E-01	.2316054	
V25	-.1003344E-01	.2675930E-01	.2341137E-01	-.1003344E-01	-.3344482E-02	.1003344E-01	.1672241E-01	.4013378E-01
V26	.3344482E-01	-.6688963E-02	-.2006689E-01	.3344482E-01	.4013378E-01	.1003344E-01	-.2675585E-01	-.3344482E-02
V27	.1672241E-01	-.3344482E-02	-.4264214E-01	-.5016722E-02	.4150602E-01	-.2759197E-01	.3344616E-01	-.2341137E-01

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	V05	V19	V20	V21	V22	V23	V24	V25
V28	.6023067E-01	.4013378E-01	-.3612040E-01	.2193763E-01	.4180602E-01	.1586629E-01	.3444616E-01	.1003344E-01
V29	.3455764E-01	.1337793E-01	.5352291E-01	.3455764E-01	.2118172E-01	.7418601E-01	.7525384E-01	.6688963E-02
V41	.1226716E-01	-.4013378E-01	-.2257525E-01	-.9476331E-02	-.1282351E-01	-.6661093E-01	-.6279035E-01	-.2006689E-01
V61	-.2006410E-01	-.2675585E-01	-.3678930E-01	-.2306410E-01	.1114827E-02	-.6131558E-01	.2341137E-01	-.1337793E-01
V71	-.2675585E-01	-.4682274E-01	-.3177256E-01	.1672241E-01	.2006689E-01	-.3846154E-01	-.7859336E-01	-.2341137E-01
V81	.1192662	-.2675585E-01	-.1505017E-01	.3230779E-01	.1560758E-01	.3286740E-01	-.5523426E-01	-.1337793E-01
V91	.1315330E-01	.1672241E-01	.5685963E-02	-.6911729E-01	.1114827E-02	-.1723724E-01	.2341137E-01	-.1337793E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V25	.4013378E-01							
V27	.2006689E-01	.2382943						
V28	.2006689E-01	.6638127E-01	.2382943					
V29	.6688963E-02	.2508361E-01	.6688127E-01	.1460424				
V41	-.2006689E-01	.4431436E-01	.3512048E-03	-.5406912E-01	.2672793			
V61	-.1337793E-01	.3678930E-01	.3678930E-01	-.3121516E-01	.1516165	.2363434		
V71	-.2341137E-01	-.1170569E-01	-.1170569E-01	-.4013378E-01	.1856187	.1672241	.2709030	
V81	.3010033E-01	-.2342809E-01	-.2342809E-01	-.2229654E-02	.5761360E-01	.4459309E-02	.3678930E-01	.1926651
V91	-.1337793E-01	-.5016722E-01	-.5016722E-01	-.3121516E-01	-.2229654E-01	.1895206E-01	-.5016722E-01	.4793757E-01

	V91
V91	.2363434

	V05	V19	V20	V21	V22	V23	V24	V25	V26	V27	V28
V05	1.00000										
V19	-.15907	1.00000									
V20	.11786	.02526	1.00000								
V21	.44404	-.17797	-.13954	1.00000							
V22	.40006	-.07349	.01021	.44757	1.00000						
V23	.39735	-.18129	.39992	.33481	.26929	1.00000					
V24	.02989	.05620	.26829	-.07523	-.03107	.11301	1.00000				
V25	-.10769	.67700	.23939	-.12048	-.04975	.10509	.17345	1.00000			
V26	.35395	-.12309	-.20520	.40161	.59702	.10509	-.27752	-.06333	1.00000		
V27	.07366	-.02526	-.17995	-.02472	.25522	-.11860	.35947	-.23939	.20520	1.00000	
V28	.26518	.30309	-.36140	.40360	.25522	.06328	.35947	.20520	.20520	.27018	1.00000
V29	.19446	.12905	.33167	.21755	.16518	.40704	.40916	.08737	.08737	.13446	.36752
V41	.25100	-.28619	-.08945	-.04409	-.07390	-.27034	-.25204	-.19375	-.19375	.17559	.00331
V61	-.11341	-.20289	-.15502	-.12688	.00683	-.25463	.10006	-.13736	-.13736	.15502	.15502
V71	-.11054	-.33165	-.12505	.07729	.11490	-.15505	-.31377	-.22453	-.22453	-.04607	-.04607
V81	.58406	-.22460	-.07020	.17710	.10591	.15713	-.40352	-.15236	.34213	-.13261	-.13261
V91	.27120	.12681	.02819	-.34203	.00683	-.07698	.10006	-.13736	-.13736	-.21139	-.21139

	V29	V41	V61	V71	V81	V91
V29	1.00000					
V41	-.27567	1.00000				
V61	-.16802	.60324	1.00000			
V71	-.20177	.68961	.66088	1.00000		
V81	-.01329	.25237	.02089	.16095	1.00000	
V91	-.16802	-.08671	.08019	-.19526	.22453	1.00000

CORRELATIONS WHICH CANNOT BE COMPUTED ARE PRINTED AS 99.0.

WILKS' LAMBDA (U-STATISTIC) AND UNIVARIATE F-RATIO
WITH 1 AND 25 DEGREES OF FREEDOM

VARIABLE	WILKS' LAMBDA	F	SIGNIFICANCE
V05	.30753	5.462	.0282
V19	.27473	60.72	.0000
V20	.91346	2.179	.1535
V21	.99359	.1634	.7036
V22	.98096	.4663	.5107
V23	.96036	.9493	.3400
V24	.97921	.4882	.4917
V25	.96154	.9200	.3475
V26	.96154	.9200	.3475
V27	.95152	1.172	.2903
V28	.95152	1.172	.2903
V29	.99969	.7823E-02	.9339
V41	.99796	.4701E-01	.8303
V61	.99925	.1736E-01	.8963
V71	.99852	.3407E-01	.8552
V81	.97278	.6435	.4307
	.99925	.1736E-01	.8963

COVARIANCE MATRIX FOR GROUP 1.

	V05	V19	V20	V21	V22	V23	V24	V25
V05	.1923077							
V19	-.3846154E-01	.1410256						
V20	-.1153846	.6410256E-02	.2692308					
V21	.1089744	-.3846154E-01	-.1153846	.1923077				
V22	.6410256E-01	-.1282051E-01	-.3846154E-01	.6410256E-01	.7692308E-01			
V23	.5769231E-01	-.4487179E-01	.3205128E-01	.5769231E-01	.1923077E-01	.1923077		
V24	-.7051282E-01	.6410256E-01	.1089744	-.7051282E-01	-.5128205E-01	-.1282051E-01	.2564103	
V25	-.1923077E-01	.7051282E-01	.4487179E-01	-.1923077E-01	-.6410256E-02	.1923077E-01	.3205128E-01	.7692308E-01
V26	.6410256E-01	-.1282051E-01	-.3846154E-01	.6410256E-01	.7692308E-01	.1923077E-01	-.5128205E-01	-.6410256E-02
V27	.3205128E-01	-.6410256E-02	-.1923077E-01	-.5128205E-01	.3846154E-01	-.1153846	.5769231E-01	-.4487179E-01
V28	.1153846	.7692308E-01	-.1025641	.1153846	.3846154E-01	.5128205E-01	.5769231E-01	.3846154E-01
V29	.3846154E-01	.2564103E-01	.7692308E-01	-.3846154E-01	.1282051E-01	.4487179E-01	.1025641	.1282051E-01
V41	.5128205E-01	-.7692308E-01	.1923077E-01	-.3205128E-01	-.3846154E-01	-.5128205E-01	-.5769231E-01	-.3846154E-01
V61	.6410256E-02	-.5128205E-01	.1282051E-01	.6410256E-02	-.2564103E-01	-.6410256E-02	.1282051	-.2564103E-01
V71	.3205128E-01	-.6974359E-01	-.1923077E-01	.3205128E-01	-.4487179E-01	-.3205128E-01	-.2564103E-01	-.4487179E-01
V81	.1730769	-.5128205E-01	-.7051282E-01	.6974359E-01	.5769231E-01	.7692308E-01	-.1217949	-.2564103E-01
V91	.6410256E-02	.3205128E-01	-.7051282E-01	-.7692308E-01	-.2564103E-01	-.6410256E-02	.4487179E-01	-.2564103E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.7692308E-01							
V27	.3846154E-01	.2692308						
V28	.3846154E-01	.1923077E-01	.2692308					
V29	.1282051E-01	.6410256E-02	.6974359E-01	.1410256				
V41	-.3846154E-01	.6410256E-01	-.1923077E-01	-.6410256E-02	.2692308			
V61	-.2564103E-01	.7051282E-01	.7051282E-01	.5128205E-01	.9615385E-01	.2307692		
V71	-.4487179E-01	.1923077E-01	.1923077E-01	.6410256E-02	.2307692	.1538462	.2692308	
V81	.5769231E-01	-.1282051E-01	.7051282E-01	.5128205E-01	.9615385E-01	-.1923077E-01	.7051282E-01	.2307692
V91	-.2564103E-01	-.1282051E-01	-.1282051E-01	-.3205128E-01	-.7051282E-01	-.1923077E-01	-.9615385E-01	-.1923077E-01

	V91
V91	.2307692

COVARIANCE MATRIX FOR GROUP 2

	V35	V19	V23	V21	V22	V23	V24	V25
V35	.2424242							
V19	0.	0.						
V23	.1212121	0.	.2045455					
V21	.6666667E-01	0.	.4545455E-01	.1515152				
V22	.6666667E-01	0.	.4545455E-01	.6060606E-01	.1515152			
V23	.1212121	0.	.1590909	.7575758E-01	.7575758E-01	.2651515		
V24	.9090909E-01	0.	.2272727E-01	.4545455E-01	.4545455E-01	.6818182E-01	.2045455	
V25	0.	0.	0.	0.	0.	0.	0.	0.
V26	0.	0.	0.	0.	0.	0.	0.	0.
V27	0.	0.	-.6818182E-01	.4545455E-01	.4545455E-01	.6818182E-01	.1136364	0.
V28	0.	0.	-.6818182E-01	.4545455E-01	.4545455E-01	-.2272727E-01	.1136364	0.
V29	.3787879E-01	0.	.4545455E-01	.3030303E-01	.3030303E-01	.1060606	.4545455E-01	0.
V41	-.3787879E-01	0.	-.6818182E-01	.1515152E-01	.1515152E-01	-.8333333E-01	-.6818182E-01	0.
V61	-.8712121E-01	0.	-.9090909E-01	-.6060606E-01	.3030303E-01	-.1212121	-.9090909E-01	0.
V71	-.9090909E-01	0.	-.4545455E-01	0.	.9090909E-01	-.4545455E-01	-.1363636	0.
V81	.6060606E-01	0.	.4545455E-01	-.3030303E-01	-.3030303E-01	-.1515152E-01	-.4545455E-01	0.
	.1212121	0.	.9090909E-01	-.6060606E-01	.3030303E-01	-.3030303E-01	0.	0.

	V26	V27	V28	V29	V41	V61	V71	V81
V25	0.							
V27	0.	.2045455						
V28	0.	.1136364	.2045455					
V29	0.	.4545455E-01	.4545455E-01	.1515152				
V41	0.	.2272727E-01	.2272727E-01	-.1060606	.2651515			
V61	0.	0.	0.	-.1212121	.2121212	.2424242		
V71	0.	-.4545455E-01	-.4545455E-01	-.9090909E-01	.1363636	.1515182	.2727273	
V81	0.	-.4545455E-01	-.1363636	-.6060606E-01	.1515152E-01	.3030303E-01	0.	.1515152
	0.	-.9090909E-01	-.9090909E-01	-.3030303E-01	.3030303E-01	.6060606E-01	0.	.1212121

	V21
V61	.2424242

TOTAL COVARIANCE MATRIX WITH 24 DEGREES OF FREEDOM

	V05	V19	V23	V21	V22	V23	V24	V25
V05	.2566667							
V19	.7666667E-01	.2566667						
V23	.8333333E-01	.6666667E-01	.2500000					
V21	.7500000E-01	-.3333333E-01	-.4166667E-01	.1666667				
V22	.7000000E-01	.1333333E-01	.8333333E-02	.5833333E-01	.1100000			
V23	.6333333E-01	-.6333333E-01	.7500000E-01	.6666667E-01	.4000000E-01	.2266667		
V24	.2166667E-01	.6166667E-01	.7500000E-01	-.1666667E-01	-.1666667E-02	.1833333E-01	.2266667	
V25	-.1333333E-01	.1833333E-01	.1666667E-01	-.8333333E-02	-.5000000E-02	.1333333E-01	.1333333E-01	.4000000E-01
V26	.2333333E-01	-.2333333E-01	-.2500000E-01	.3333333E-01	.3666667E-01	.1333333E-01	-.2833333E-01	-.1666667E-02
V27	.4000000E-01	.4333333E-01	-.2500000E-01	-.8333333E-02	.4500000E-01	-.3666667E-01	.8333333E-01	-.2666667E-01
V28	.2166667E-01	.8500000E-01	-.6666667E-01	.7500000E-01	.4500000E-01	.5000000E-02	.8333333E-01	.1500000E-01
V29	.2166667E-01	.1000000E-01	.5833333E-01	.3333333E-01	.2000000E-01	.7166667E-01	.7166667E-01	.5666667E-02
V41	.6666667E-02	-.4833333E-01	-.2500000E-01	-.8333333E-02	-.1333333E-01	-.8166667E-01	-.8166667E-01	-.1333333E-01
V61	-.2166667E-01	-.2000000E-01	-.3333333E-01	-.2500000E-01	.1666667E-02	-.6000000E-01	.2333333E-01	-.1333333E-01
V71	-.3000000E-01	-.5333333E-01	-.3333333E-01	.1666667E-01	.1833333E-01	-.3500000E-01	-.7666667E-01	-.2166667E-01
V81	.9333333E-01	-.5666667E-01	-.2500000E-01	.3333333E-01	.1166667E-01	.3833333E-01	-.5666667E-01	-.1000000E-01
V91	.2166667E-01	.2166667E-01	.8333333E-02	-.6666667E-01	.1666667E-02	-.1833333E-01	.2333333E-01	-.1333333E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.4000000E-01							
V27	.1200000E-01	.2400000						
V28	.1500000E-01	.7333333E-01	.2400000					
V29	.6666667E-02	.2333333E-01	.9000000E-01	.1400000				
V41	-.1333333E-01	.4000000E-01	-.1666667E-02	-.5166667E-01	.2566667			
V61	-.1333333E-01	.3666667E-01	.3666667E-01	-.3000000E-01	.1450000	.2266667		
V71	-.2166667E-01	-.1333333E-01	-.1333333E-01	-.3833333E-01	.1783333	.1600000	.2600000	
V81	.8166667E-01	-.3500000E-01	-.3500000E-01	-.1566667E-02	.5666667E-01	.3333333E-02	.3666667E-01	.1900000
V91	-.1333333E-01	-.4566667E-01	-.4566667E-01	-.3000000E-01	-.2166667E-01	.1833333E-01	-.4833333E-01	.4500000E-01

	V91
V91	.2266667

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*** DR IREM NUHOGLU PROGRAM 02 ***

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY CODE

ANALYSIS NUMBER 1

DIRECT METHOD: ALL VARIABLES PASSING THE TOLERANCE TEST ARE ENTERED.

MINIMUM TOLERANCE LEVEL..... .00100

CANONICAL DISCRIMINANT FUNCTIONS

MAXIMUM NUMBER OF FUNCTIONS..... 1
MINIMUM CUMULATIVE PERCENT OF VARIANCE... 100.00
MAXIMUM SIGNIFICANCE OF WILKS' LAMBDA.... 1.0000

PRIOR PROBABILITY FOR EACH GROUP IS .50000

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

CODE =	1	2
V00	-18.04595	-49.67015
V0[illegible]	-20.13548	-41.04655
V0[illegible]	14.16115	34.00032
V01	30.26061	52.61269
V02	-66.69391	-89.89576
V03	5.423206	-2.949223
V04	9.963580	-3.542385
V05	86.81034	102.6589
V06	134.7499	143.6326
V07	33.13225	54.47113
V08	3.571564	33.34061
V09	.2681143	-1.749561
V10	2.384455	-5.883461
V11	-53.27245	-81.66612
V12	56.70429	75.53933
V13	-13.19077	-9.529483
V14	55.24244	93.13677
(CONSTANT)	-97.10131	-169.4235

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS' LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
1*	18.61776	100.00	100.00	.9741795	0	.0509742	43.155	17	.0005

* MARKS THE 1 CANONICAL DISCRIMINANT FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V05	-1.77537
V19	-2.33231
V20	1.16903
V21	1.12165
V22	-.93967
V23	-.68169
V24	-.73236
V25	1.53306
V26	.20994
V27	1.58092
V28	1.87744
V29	-.27465
	-.66577
	-1.89131
1	1.34519
V81	.45918
V91	2.22693

STRUCTURE MATRIX:

POOLED WITHIN-GROUPS CORRELATIONS BETWEEN CANONICAL DISCRIMINANT FUNCTIONS AND DISCRIMINATING VARIABLES
VARIABLES ARE ORDERED BY THE FUNCTION WITH LARGEST CORRELATION AND THE MAGNITUDE OF THAT CORRELATION.

	FUNC 1
V19	-.37656
V35	-.11210
V20	-.07135
V27	-.05231
V28	-.05231
V23	.04739
V25	.04635
V26	.04635
V31	.03876
V24	-.03577
V22	-.03239
V21	.01868
V41	.01345
V71	.00872
V91	-.00637
V61	-.00557
V29	.00405

UNSTANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V35	-3.817546
V1	-5.672321
[illegible]	2.394227
V21	2.693259
V22	-2.830351
V23	-1.010568
V24	-1.521771
V25	9.133373
V26	1.048137
V27	3.177115
V28	3.231449
V29	-.1952772
V41	-1.326413
V61	-2.244774
V71	2.008115
V81	1.045581
V91	4.583727
(CONSTANT)	-8.556704

CANONICAL DISCRIMINANT FUNCTIONS EVALUATED AT GROUP MEANS (GROUP CENTROIDS)

GROUP	FUNC 1
1	-3.97620
2	4.53765

TEST OF EQUALITY OF GROUP COVARIANCE MATRICES USING BOX'S M

THE RANKS AND NATURAL LOGARITHMS OF DETERMINANTS PRINTED ARE THOSE OF THE GROUP COVARIANCE MATRICES.

GROUP	RANK	LOG DETERMINANT
1	< 18	(TOO FEW CASES TO BE NON-SINGULAR)
2	< 18	(TOO FEW CASES TO BE NON-SINGULAR)
POOLED WITHIN-GROUPS COVARIANCE MATRIX	17	-43.142115

NO TEST CAN BE PLACED WITHOUT AT LEAST TWO NON-SINGULAR GROUP COVARIANCE MATRICES.

CASE SEQ. NO.	ACTUAL GROUP	HIGHEST PROBABILITY GROUP	P(D/G)	P(G/D)	2ND HIGHEST GROUP	P(G/D)	DISCRIMINANT SCORES
1	1	1	.0134	1.0000	2	.0000	-1.4134
2	1	1	.8480	1.0000	2	.0000	-3.7765
3	1	1	.8309	1.0000	2	.0000	-4.1899
4	1	1	.4666	1.0000	2	.0000	-4.6720
5	1	1	.5764	1.0000	2	.0000	-3.4466
6	1	1	.9339	1.0000	2	.0000	-4.1599
7	1	1	.6841	1.0000	2	.0000	-4.3832
8	1	1	.0730	1.0000	2	.0000	-5.0610
9	1	1	.7495	1.0000	2	.0000	-3.6574
10	1	1	.9000	1.0000	2	.0000	-3.7294
11	1	1	.1778	1.0000	2	.0000	-5.3256
12	1	1	.8186	1.0000	2	.0000	-3.1050
13	1	1	.4403	1.0000	2	.0000	-4.7396
14	2	2	.2716	1.0000	1	.0000	3.2087
15	2	2	.3203	1.0000	1	.0000	4.5352
16	2	2	.3605	1.0000	1	.0000	5.2185
17	2	2	.5399	1.0000	1	.0000	3.6946
18	2	2	.2622	1.0000	1	.0000	3.1864
19	2	2	.2543	1.0000	1	.0000	3.1573
20	2	2	.7232	1.0000	1	.0000	4.6518
22	2	2	.1795	1.0000	1	.0000	5.6307
23	2	2	.2303	1.0000	1	.0000	5.3334
24	2	2	.1960	1.0000	1	.0000	5.6307
25	2	2	.9372	1.0000	1	.0000	4.2283
26	2	2	.2705	1.0000	1	.0000	3.2058

SYMBOLS USED IN PLOTS

SYMBOL	GROUP	LABEL
1	1	
2	2	

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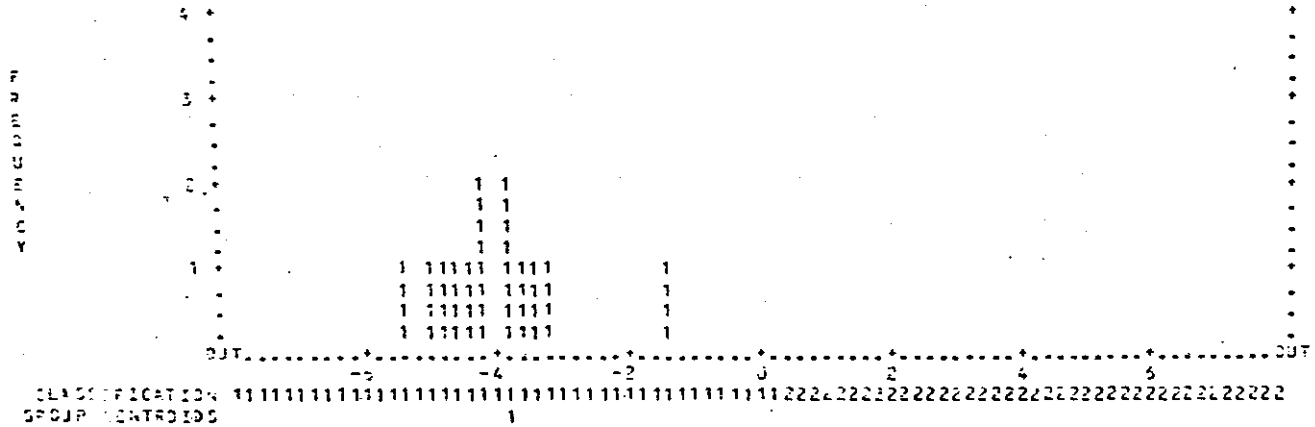
*** DR IREM NJHOGLU PROGRAM 02 ***

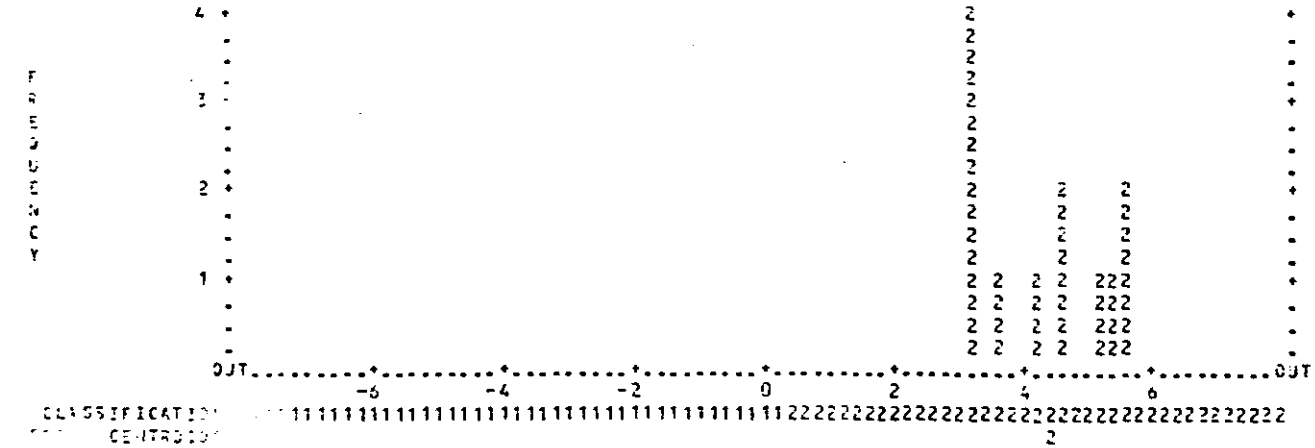
HISTOGRAM FOR GROUP 1

-- CANONICAL DISCRIMINANT FUNCTION 1 --



HISTOGRAM FOR GROUP 2

-- CANONICAL DISCRIMINANT FUNCTION 1 --



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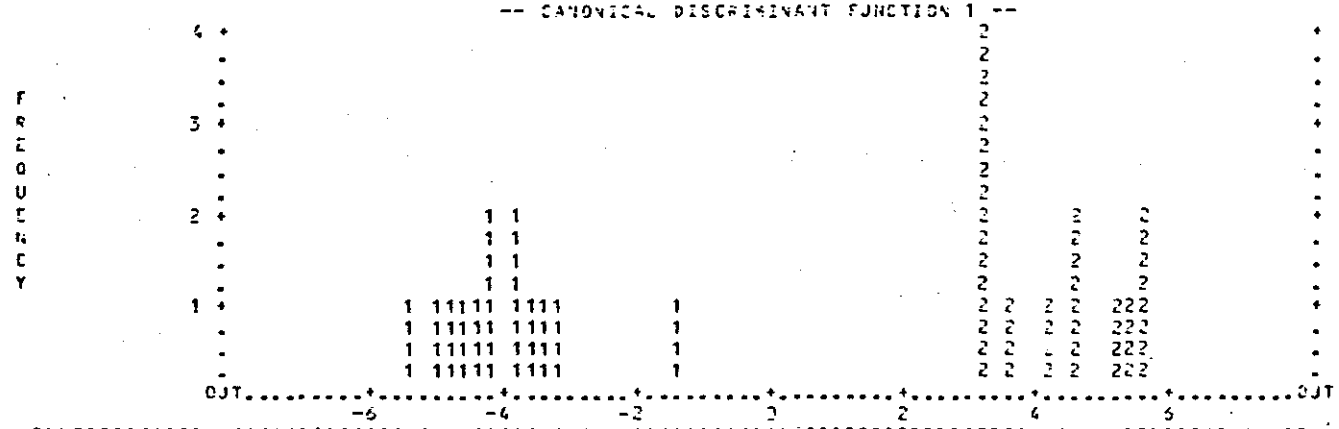
*** DR IREM NJHOGLU PROGRAM 02 ***



CLASSIFICATION RESULTS -

ACTUAL GROUP	NO. OF CASES	PREDICTED GROUP MEMBERSHIP 1	2
GROUP 1	13	13 100.0%	0 0.0%
GROUP 2	12	0 0.0%	12 100.0%

PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 100.00%

CLASSIFICATION PROCESSING SUMMARY

26 CASES WERE PROCESSED.
0 CASES WERE EXCLUDED FOR MISSING OR OUT-OF-RANGE GROUP CODES.
1 CASES HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
25 CASES WERE USED FOR PRINTED OUTPUT.

PRECEDING TASK REQUIRED 3.57 SECONDS CPU TIME; 37 SECONDS ELAPSED.

```
? 0          FINISH

9 COMMAND LINES READ.
  DETECTED.
  ISSUED.
  U TIME.
  ELAPSED TIME.
  OF JOB.
```

DISCRIMINANT ANALYSIS

THIRD ANALYSIS

SPSS INC LICENSE NUMBER: 19223

```
                    NEW FEATURES IN SPSS-X RELEASE 2
        FOR MORE DETAILS, USE THE COMMAND:  INFO OVERVIEW FACILITIES.
          PLOT - SCATTER PLOTS, OVERLAY PLOTS, CONTOUR PLOTS ON THE PRINTER.
  HILOGLINEAR - FAST LOGLINEAR ANALYSIS FOR HIERARCHICAL MODELS.
      CLUSTER - HIERARCHICAL CLUSTER ANALYSIS.
      KCLUSTER - FAST CLUSTER ANALYSIS FOR A FIXED NUMBER OF CLUSTERS.
      EXPORT - PORTABLE SYSTEM FILES FOR TRANSFER TO OTHER KINDS OF COMPUTERS.
      PROBIT - DICHOTOMOUS PROBIT AND LOGISTIC REGRESSION ANALYSIS.
   SET WIDTH - WIDTH CONTROL FOR PRINTED OUTPUT.
       XSAVE - ALLOWS NEW FLEXIBILITY IN SAVING SYSTEM FILES.
END SUBCOMMAND - WITH DATA LIST, YOU CAN DETECT END OF FILE.

   1  0          SUBTITLE *** DR IREM NUHOGLU  PROGRAM  83 ***
   2  0          DATA LIST RECORDS =1 FIXED
   3  0                           /CODE,V05,V17,V20,V21,V22,V23,V24
   4  0                            V25,V26,V27,V28,V29,V41,Vo1,V71,
   5  0                            V81,V91(F2.0,17F1.0)

THE ABOVE DATA LIST STATEMENT WILL READ   1 RECORDS FROM FILE INLINE .

          VARIABLE   REC  START    END         FORMAT  WIDTH  DEC

          CODE         1      1      2          F           2    0
          V05          1      3      3          F           1    0
          V17          1      4      4          F           1    0
          V20          1      5      5          F           1    0
          V21          1      6      6          F           1    0
          V22          1      7      7          F           1    0
          V23          1      8      8          F           1    0
          V24          1      9      9          F           1    0
          V25          1     10     10          F           1    0
          V26          1     11     11          F           1    0
          V27          1     12     12          F           1    0
          V28          1     13     13          F           1    0
          V29          1     14     14          F           1    0
          V41          1     15     15          F           1    0
          Vo1          1     16     16          F           1    0
          V71          1     17     17          F           1    0
          V81          1     18     18          F           1    0
          V91          1     19     19          F           1    0

END OF DATALIST TABLE.
```

```
  .  5  ?          BEGIN DATA
124 JUN 83    SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY                                    PAGE
              *** DR IREM NUHOGLU  PROGRAM  83 ***

 PRECEDING TASK REQUIRED          .24 SECONDS CPU TIME;          5 SECONDS ELAPSED.

     7  ?          DISCRIMINANT GROUPS =CODE(1,2)/VARIABLES =V05,V17,
     8  ?                              V20 TO V29,V41,V61,V71,V81,V91/
     9  ?                              ANALYSIS=V05,V17,V20 TO V29,V41,V61,
    10  ?                              V71,V81,V91/METHOD=DIRECT/
    11  ?          STATISTICS ALL

      32120 WORDS OF WORKSPACE AVAILABLE.
       6000 WORDS ARE USED TO SATISFY MAXIMUM WORKSPACE REQUESTS.

  THIS DISCRIMINANT ANALYSIS REQUIRES       1350 WORDS OF WORKSPACE.
124 JUN 83    SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY                                    PAGE
              *** DR IREM NUHOGLU  PROGRAM  83 ***
```

- D I S C R I M I N A N T A N A L Y S I S -

,3% GROUPS DEFINED BY CODE

25 (UNWEIGHTED) CASES WERE PROCESSED.
1 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
0 HAD MISSING OR OUT-OF-RANGE GROUP CODES.
1 HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
25 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

CODE	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	11	11.0	
2	14	14.0	
TOTAL	25	25.0	

GROUP MEANS

CODE	V05	V17	V20	V21	V22	V23	V24	V25
1	.72727	1.00000	.54545	.72727	.90909	.18182	.45455	1.00000
2	.42857	.14286	.28571	.85714	.85714	.42857	.21429	.92857
TOTAL	.56000	.52000	.40000	.80000	.88000	.32000	.32000	.96000

CODE	V26	V27	V28	V29	V41	V51	V71	V81
1	.90909	.45455	.54545	.18182	.45455	.63636	.36364	.63636
2	1.00000	.28571	.21429	.14286	.64286	.71429	.57143	.85714
TOTAL	.96000	.36000	.36000	.16000	.56000	.68000	.46000	.76000

CODE	V91
1	.72727
2	.64286
TOTAL	.68000

GROUP STANDARD DEVIATIONS

CODE	V05	V17	V20	V21	V22	V23	V24	V25
1	.46710	0.00000	.52223	.46710	.30151	.40452	.52223	0.00000
2	.51355	.36314	.46881	.36314	.36314	.51355	.42582	.46726
TOTAL	.50662	.50990	.50000	.40825	.33166	.47610	.47610	.46904

CODE	V26	V27	V28	V29	V41	V61	V71	V81
1	.30151	.52223	.52223	.40452	.52223	.50452	.50452	.50452
2	0.00000	.46881	.42582	.36314	.49725	.46881	.51355	.36314
TOTAL	.28000	.48990	.48990	.37417	.50662	.47610	.50990	.43589

CODE	V91
1	.46710
2	.49725
TOTAL	.47610

POOLED WITHIN-GROUPS COVARIANCE MATRIX WITH 23 DEGREES OF FREEDOM

	V05	V17	V20	V21	V22	V23	V24	V25
V05	.2439300							
V17	.4963944E-01	.7453416E-01						
V20	.4009034E-01	.1863354E-01	.2428007					
V21	.8365043E-01	.1242236E-01	-.3444332E-01	.1693958				
V22	.6333763E-01	.1242236E-01	.5081875E-02	.6267645E-01	.1140599			
V23	.3582722E-01	.6211180E-02	.9542631E-01	.6098250E-01	.4517222E-01	.2238146		
V24	.3387916E-02	-.1863354E-01	.6154715E-01	-.9034444E-02	-.5061875E-02	.3500847E-01	.2210615	
V25	-.2484472E-01	-.3726708E-01	.1242236E-01	-.6211180E-02	-.6211180E-02	.1863354E-01	.9316770E-02	.4037207E-01
V26	.3162055E-01	0.	-.1976285E-01	.3162055E-01	.3952569E-01	.7905138E-02	-.2371542E-01	0.
V27	.2823264E-01	.1863354E-01	-.3783173E-01	-.2823264E-02	.4460757E-01	-.2710333E-01	.6158999E-01	-.3190594E-01

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*** DR IREM NUHOGLU PROGRAM 63 ***

	V05	V17	V20	V21	V22	V23	V24	V25
V26	.5372388E-01	-.1863354E-01	-.9260305E-01	.2977979E-01	.4234690E-01	.2710333E-01	.7086594E-01	.9316770E-02
V29	.2992600E-01	-.1242236E-01	.5815923E-01	.3613778E-01	.2032750E-01	.7735743E-01	.7227555E-01	.6211180E-02
V41	.2202146E-01	.3105590E-01	-.1298701E-01	-.1524562E-01	-.1129305E-01	-.7679277E-01	-.5243038E-01	-.1552795E-01
V61	-.1637493E-01	.2434472E-01	-.2936174E-01	-.2879729E-01	.2323264E-02	-.6775833E-01	-.2936194E-01	-.1242236E-01
V71	-.1465097E-01	.3729708E-01	-.2032750E-01	.1016375E-01	.2202146E-01	-.5025409E-01	-.8602904E-01	-.1863354E-01
V81	.1202710	.1242236E-01	-.1072640E-01	.2710333E-01	.1524562E-01	.2540937E-01	-.7622812E-01	-.6211180E-02
V91	.5759458E-01	-.1242236E-01	.2823264E-02	-.6662902E-01	.5646527E-03	-.1355167E-01	.1891587E-01	-.1552795E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.3952569E-01							
V27	.1976285E-01	.2428007						
V28	.2371542E-01	.6154715E-01	.2210615					
V29	.7905138E-02	.2258611E-01	.6437041E-01	.1456864				
V41	-.2371542E-01	.5025409E-01	.1496330E-01	-.5194515E-01	.2563236			
V61	-.1581023E-01	.4178430E-01	.4517222E-01	-.3049125E-01	.1473744	.2346955		
V71	-.2766798E-01	-.4517222E-02	.4517222E-02	-.3783173E-01	.1756870	.1620209	.2597403	
V81	.2760793E-01	-.2653826E-01	-.1693958E-01	.5646527E-03	.4799546E-01	-.1129305E-02	.2597403E-01	.1552601
V91	-.1185771E-01	-.5251279E-01	-.5613295E-01	-.3218521E-01	-.1355121E-01	.2089215E-01	-.4573687E-01	.5194865E-01

	V91
V91	.2346132

POOLED WITHIN-GROUPS CORRELATION MATRIX

	V05	V17	V20	V21	V22	V23	V24	V25	V26	V27	V28
V05	1.00000										
V17	.36851	1.00000									
V20	.16473	.13851	1.00000								
V21	.43611	.11055	-.16934	1.00000							
V22	.41299	.13473	.03054	.45091	1.00000						
V23	.37031	.04843	.41269	.31574	.28502	1.00000					
V24	.01459	-.14516	.26566	-.04669	-.03200	.15867	1.00000				
V25	-.25036	-.67937	.12547	-.07511	-.09153	.19762	.69662	1.00000			
V26	.32203	0.00000	-.20174	.38644	.58867	.08473	-.25371	0.00000	1.00000		
V27	.11601	.13851	-.15531	-.01392	.26805	-.11721	.35096	-.31367	.20174	1.00000	
V28	.25289	-.14516	-.39971	.46395	.26670	.12284	.32056	.09862	.25371	.26566	1.00000
V29	.15875	-.11921	.30924	.23004	.15769	.43190	.40275	.08099	.10416	.12069	.05670
V41	.03773	.22381	-.05186	-.07288	-.06579	-.32197	-.21856	-.15205	-.23470	.20866	.06266
V61	-.06841	.18777	-.12295	-.14437	.01725	-.29792	.12885	-.12756	-.16406	.17496	.19625
V71	-.05832	.26784	-.08094	.04845	.12794	-.21013	-.27606	-.18196	-.27207	-.01799	.01685
V81	.56585	.10573	-.05059	.15302	.10489	.12532	-.37673	-.07163	.32338	-.12515	-.05572
V91	.24075	-.09394	.01183	-.33422	.00345	-.05962	.08306	-.15955	-.12314	-.22002	-.24670

	V29	V41	V61	V71	V81	V91
V29	1.00000					
V41	-.26778	1.00000				
V61	-.16433	.59327	1.00000			
V71	-.19448	.67793	.65837	1.00000		
V81	.08344	.21943	-.09541	.11842	1.00000	
V91	-.17409	-.07454	.08900	-.18528	.24921	1.00000

CORRELATIONS WHICH CANNOT BE COMPUTED ARE PRINTED AS 99.0.

	V29	V41	V61	V71	V81	V91
V29	1.00000					
V41	-.26778	1.00000				
V61	-.16483	.59327	1.00000			
V71	-.19448	.67793	.65837	1.00000		
V81	.00344	.21943	-.00541	.11342	1.00000	
V91	-.17409	-.07454	.08900	-.16528	.24921	1.00000

CORRELATIONS WHICH CANNOT BE COMPUTED ARE PRINTED AS 99.0.

WILKS' LAMBDA (U-STATISTIC) AND UNIVARIATE F-RATIO
WITH 1 AND 23 DEGREES OF FREEDOM

VARIABLE	WILKS' LAMBDA	F	SIGNIFICANCE
V05	.91078	2.253	.1469
V17	.27473	60.72	.0000
V20	.93074	1.712	.2037
V21	.97403	.6135	.4415
V22	.99370	.1457	.7061
V23	.93105	1.703	.2048
V24	.93464	1.609	.2174
V25	.96726	.7785	.3867
V26	.94697	1.286	.2681
V27	.96952	.7232	.4039
V28	.38271	3.056	.0938
29	.99722	.64195-01	.8022
V41	.96454	.3456	.3673
V61	.99312	.1592	.6935
V71	.95738	1.024	.3221
V81	.93415	1.621	.2156
V91	.99193	.1871	.6694

COVARIANCE MATRIX FOR GROUP 1

	V05	V17	V20	V21	V22	V23	V24	V25
V05	.2181818							
V17	0.	0.						
V20	-.1363636	0.	.2727273					
V21	.1181818	0.	-.1363636	.2181818				
V22	.7272727E-01	0.	-.4545455E-01	.7272727E-01	.9090909E-01			
V23	.5454545E-01	0.	-.9090909E-02	.5454545E-01	.1818182E-01	.1636364		
V24	-.6363636E-01	0.	.1272727	-.6363636E-01	-.5454545E-01	.9090909E-02	.2727273	
V25	0.	0.	0.	0.	0.	0.	0.	0.
V26	.7272727E-01	0.	-.4545455E-01	.7272727E-01	.9090909E-01	.1818182E-01	-.5454545E-01	0.
V27	.3636364E-01	0.	.2727273E-01	-.6363636E-01	.4545455E-01	-.9090909E-01	.7272727E-01	0.
V28	.1636364	0.	-.1272727	.1636364	.5454545E-01	.9090909E-01	.2727273E-01	0.
V29	.5454545E-01	0.	.9090909E-01	.5454545E-01	.1818182E-01	.6363636E-01	.1090909	0.
V41	.3636364E-01	0.	.2727273E-01	-.6363636E-01	-.5454545E-01	-.9090909E-01	-.2727273E-01	0.
V61	-.9090909E-02	0.	.1818182E-01	-.9090909E-02	-.3636364E-01	-.2727273E-01	.1818182	0.
V71	.9090909E-02	0.	-.1818182E-01	.9090909E-02	-.6363636E-01	-.7272727E-01	.1818182E-01	0.
V81	.1909091	0.	-.8181818E-01	.9090909E-01	.6363636E-01	.7272727E-01	-.1181818	0.
V91	.1818182E-01	0.	-.3636364E-01	-.8181818E-01	-.2727273E-01	.5454545E-01	.3636364E-01	0.

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.9090909E-01							
V27	.4545455E-01	.2727273						
V28	.5454545E-01	.2727273E-01	.2727273					
V29	.1818182E-01	.9090909E-02	.9090909E-01	.1636364				
V41	-.5454545E-01	.7272727E-01	.2727273E-01	.9090909E-02	.2727273			
V61	-.3636364E-01	.6818182E-01	.1181818	.7272727E-01	.6181818E-01	.2545455		
V71	-.6363636E-01	.1818182E-01	.8181818E-01	.2727273E-01	.2181818	.1454545	.2545455	
V81	.6363636E-01	-.1818182E-01	.1181818	.7272727E-01	.8181818E-01	-.4545455E-01	.4545455E-01	.2545455
V91	-.2727273E-01	-.6363636E-01	-.3636364E-01	-.4545455E-01	-.6363636E-01	-.9090909E-02	-.9090909E-01	-.9090909E-02

	V91
V91	.2181818

COVARIANCE MATRIX FOR GROUP 2

	V05	V17	V20	V21	V22	V23	V24	V25
V05	.2637363							
V17	.8791209E-01	.1318681						
V20	.1758242	.3296703E-01	.2197802					
V21	.6593407E-01	.2197802E-01	.4395604E-01	.1318681				
V22	.6593407E-01	.2197802E-01	.4395604E-01	.5494505E-01	.1318681			
V23	.1098901	.1098901E-01	.1758242	.6593407E-01	.6593407E-01	.2637363		
V24	.5494505E-01	-.3296703E-01	.1098901E-01	.3296703E-01	.3296703E-01	.5494505E-01	.1813187	
V25	-.4395604E-01	-.6593407E-01	.2197802E-01	-.1098901E-01	-.1098901E-01	.3296703E-01	.1648352E-01	.7142857E-01
V26	0.	0.	0.	0.	0.	0.	0.	0.
V27	.2197802E-01	.3296703E-01	-.8791209E-01	.4395604E-01	.4395604E-01	.2197802E-01	.8791209E-01	-.5494505E-01
V28	-.2197802E-01	-.3296703E-01	-.6593407E-01	.3296703E-01	.3296703E-01	-.2197802E-01	.1043956	.1648352E-01
V29	.1098901E-01	-.2197802E-01	.3296703E-01	.2197802E-01	.2197802E-01	.8791209E-01	.4395604E-01	.1098901E-01
V41	.1098901E-01	.5494505E-01	-.4395604E-01	.2197802E-01	.2197802E-01	-.6593407E-01	-.7142857E-01	-.2747253E-01
V61	-.2197802E-01	.4395604E-01	-.6593407E-01	-.4395604E-01	.3296703E-01	-.9890110E-01	-.8791209E-01	-.2197802E-01
V71	-.3296703E-01	.6593407E-01	-.2197802E-01	.1098901E-01	.8791209E-01	-.3296703E-01	-.1318681	-.3296703E-01
V81	.6593407E-01	.2197802E-01	.4395604E-01	-.2197802E-01	-.2197802E-01	-.1098901E-01	-.4395604E-01	-.1098901E-01
V91	.8791209E-01	-.2197802E-01	.3296703E-01	-.5494505E-01	.2197802E-01	-.6593407E-01	.5494505E-02	-.2747253E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	0.							
V27	0.	.2197802						
V28	0.	.8791209E-01	.1813187					
V29	0.	.3296703E-01	.4395604E-01	.1318681				
V41	0.	.3296703E-01	.5494505E-02	-.9890110E-01	.2472527			
V61	0.	.1098901E-01	-.1098901E-01	-.1098901	.1978022	.2197802		
V71	0.	-.2197802E-01	-.5494505E-01	-.8791209E-01	.1428571	.1758242	.2637363	
V81	0.	-.3296703E-01	-.1208791	-.5494505E-01	.2197802E-01	.3296703E-01	.1098901E-01	.1318681
V91	0.	-.4395604E-01	-.7142857E-01	-.2197802E-01	.1648352E-01	.4395604E-01	-.1098901E-01	.9890110E-01

	V91
V91	.2472527

TOTAL COVARIANCE MATRIX WITH 24 DEGREES OF FREEDOM

	V15	V17	V20	V21	V22	V23	V24	V25
V15	.2566667							
V17	.1133333	.2600000						
V20	.5333333E-01	.7500000E-01	.2500000					
V21	.7500000E-01	-.1666667E-01	-.4166667E-01	.1666667				
V22	.7000000E-01	.2333333E-01	.8333333E-02	.5833333E-01	.1100000			
V23	.6333333E-01	-.4833333E-01	.7500000E-01	.6666667E-01	.4000000E-01	.2266667		
V24	.2166667E-01	.3500000E-01	.7500000E-01	-.1666667E-01	-.1666667E-02	.1833333E-01	.2266667	
V25	-.1333333E-01	-.2000000E-01	.1666667E-01	-.8333333E-02	-.5000000E-02	.1333333E-01	.1333333E-01	.4666667E-01
V26	.2333333E-01	-.2000000E-01	-.2500000E-01	.3333333E-01	.3666667E-01	.1333333E-01	-.2833333E-01	-.1666667E-02
V27	.4000000E-01	.5500000E-01	-.2500000E-01	-.8333333E-02	.4500000E-01	-.3666667E-01	.6833333E-01	-.2666667E-01
	.2166667E-01	.5500000E-01	-.6666667E-01	.7500000E-01	.4500000E-01	.5000000E-02	.8833333E-01	.1500000E-01
	.2166667E-01	-.3333333E-02	.5833333E-01	.3333333E-01	.2000000E-01	.7166667E-01	.7166667E-01	.6666667E-02
	.6666667E-02	-.1166667E-01	-.2500000E-01	-.8333333E-02	-.1333333E-01	-.6166667E-01	-.6166667E-01	-.1633333E-01
V61	-.2166667E-01	.6666667E-02	-.3333333E-01	-.2500000E-01	.1666667E-02	-.6000000E-01	.2333333E-01	-.1633333E-01
V71	-.3000000E-01	-.1000000E-01	-.3333333E-01	.1666667E-01	.1833333E-01	-.3500000E-01	-.7666667E-01	-.2166667E-01
V81	.9333333E-01	-.3666667E-01	-.2500000E-01	.3333333E-01	.1166667E-01	.3833333E-01	-.6666667E-01	-.1500000E-01
V91	.5166667E-01	.6666667E-02	.8333333E-02	-.6666667E-01	.1666667E-02	-.1833333E-01	.2333333E-01	-.1633333E-01

	V26	V27	V28	V29	V41	V61	V71	V81
V26	.4000000E-01							
V27	.1500000E-01	.2400000						
V28	.1000000E-01	.7333333E-01	.2400000					
V29	.3666667E-02	.2333333E-01	.6500000E-01	.1400000				
V41	-.1333333E-01	.4000000E-01	-.1666667E-02	-.5166667E-01	.2566667			
V61	-.1333333E-01	.3666667E-01	.3666667E-01	-.3000000E-01	.1450000	.2266667		
V71	-.2166667E-01	-.1333333E-01	-.1333333E-01	-.3333333E-01	.1783333	.1600000	.2600000	
V81	.3166667E-01	-.3500000E-01	-.3500000E-01	-.1666667E-02	.5666667E-01	.3333333E-02	.3666667E-01	.1900000
V91	-.1333333E-01	-.4066667E-01	-.4666667E-01	-.3000000E-01	-.2166667E-01	.1833333E-01	-.4833333E-01	.4500000E-01

	V91
V91	.2266667

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY CODE

ANALYSIS NUMBER 1

DIRECT METHOD: ALL VARIABLES PASSING THE TOLERANCE TEST ARE ENTERED.

MINIMUM TOLERANCE LEVEL..... .00100

CANONICAL DISCRIMINANT FUNCTIONS

MAXIMUM NUMBER OF FUNCTIONS..... 1
MINIMUM CUMULATIVE PERCENT OF VARIANCE... 100.00
MAXIMUM SIGNIFICANCE OF WILKS' LAMBDA.... 1.0000

PRIOR PROBABILITY FOR EACH GROUP IS .50000

CLASSIFICATION COEFFICIENTS
(LINEAR DISCRIMINANT FUNCTIONS)

GROUP =	1	2
V05	-81.31220	-49.67016
V17	130.3385	103.5002
V20	64.33694	34.00032
V21	76.59246	52.61239
V22	-110.1364	-89.39676
V23	-3.47567	-2.949223
V24	35422	-3.042385
V25	310	162.6039
V26	126.3913	143.6326
V27	87.51672	54.47116
V28	63.19359	38.34061
[illegible]	-6.712337	-1.349561
V41	-28.49130	-8.603481
V61	-67.70294	-51.86812
V71	87.28768	73.53933
V81	2.764256	-9.529480
V91	132.7756	93.13877
(CONSTANT)	-304.1083	-169.5602

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS' LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
1*	21.93958	100.00	100.00	.9779607	0	.0435926	45.427	17	.0002

* MARKS THE 1 CANONICAL DISCRIMINANT FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V05	-1.72667
V17	2.16693
V20	1.65160
V21	1.10409
V22	-.75523
V23	-.30502
V24	-1.19542
V25	1.79427
V26	-.33479
V27	1.79903
V28	1.96665
V29	-.22615
V41	-1.11683
V61	-.84794
V71	.77416
V81	.53455
V91	2.11655

STRUCTURE MATRIX:

POOLED WITHIN-GROUPS CORRELATIONS BETWEEN CANONICAL DISCRIMINANT FUNCTIONS AND DISCRIMINATING VARIABLES
VARIABLES ARE ORDERED BY THE FUNCTION WITH LARGEST CORRELATION AND THE MAGNITUDE OF THAT CORRELATION.

	FUNC 1
V17	.34689
V28	.07782
V05	.06682
V27	.05624
V25	-.05810
V61	-.05668
V24	.05646
V26	-.05052
V71	-.04505
V41	-.04094
V25	.03928
V27	.03786
V21	-.03486
V91	.01926
[illegible]	-.01776
V22	.01699
V29	.01128

UNSTANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
V05	-3.496044
V17	7.937193
V20	3.351811
V21	2.632584
V22	-2.236219
V23	-1.715474
V24	-2.542515
V25	8.929823
V26	-1.083964
V27	3.651111
V28	4.132324
V29	-.5925185
V41	-2.197351
V01	-1.749546
V71	1.519018
V81	1.358301
V91	4.373842
(CONSTANT)	-14.32280

CANONICAL DISCRIMINANT FUNCTIONS EVALUATED AT GROUP MEANS (GROUP CENTROIDS)

GROUP	FUNC 1
1	5.06846
2	-3.98236

TEST OF EQUALITY OF GROUP COVARIANCE MATRICES USING BOX'S M

THE RANKS AND NATURAL LOGARITHMS OF DETERMINANTS PRINTED ARE THOSE OF THE GROUP COVARIANCE MATRICES.

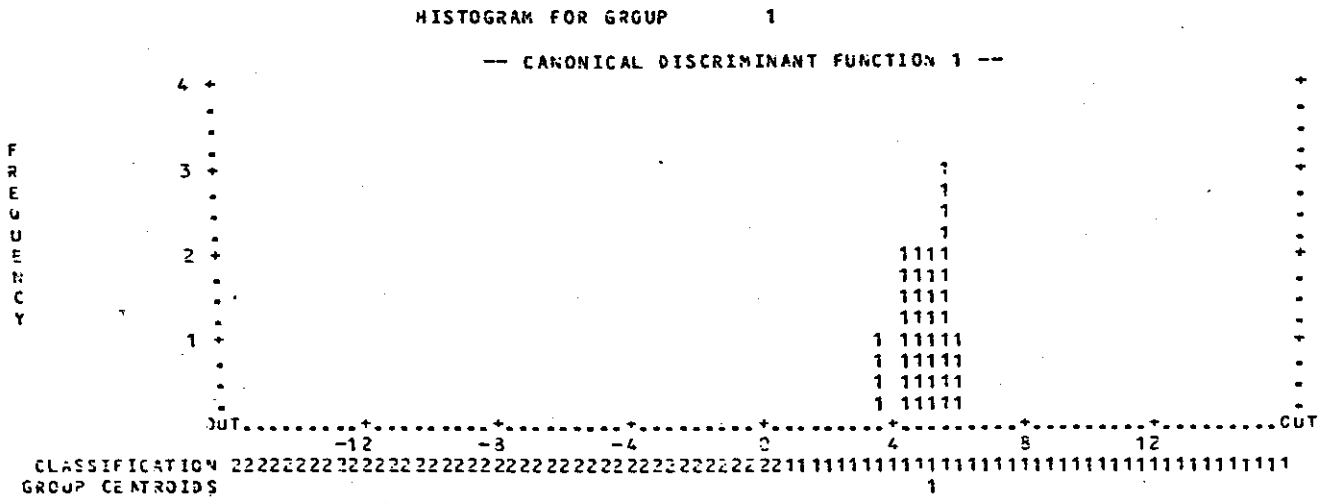
GROUP LABEL	RANK	LOG DETERMINANT
1	< 11	(TOO FEW CASES TO BE NON-SINGULAR)
2	< 14	(TOO FEW CASES TO BE NON-SINGULAR)
POOLED WITHIN-GROUPS COVARIANCE MATRIX	17	-43.129212

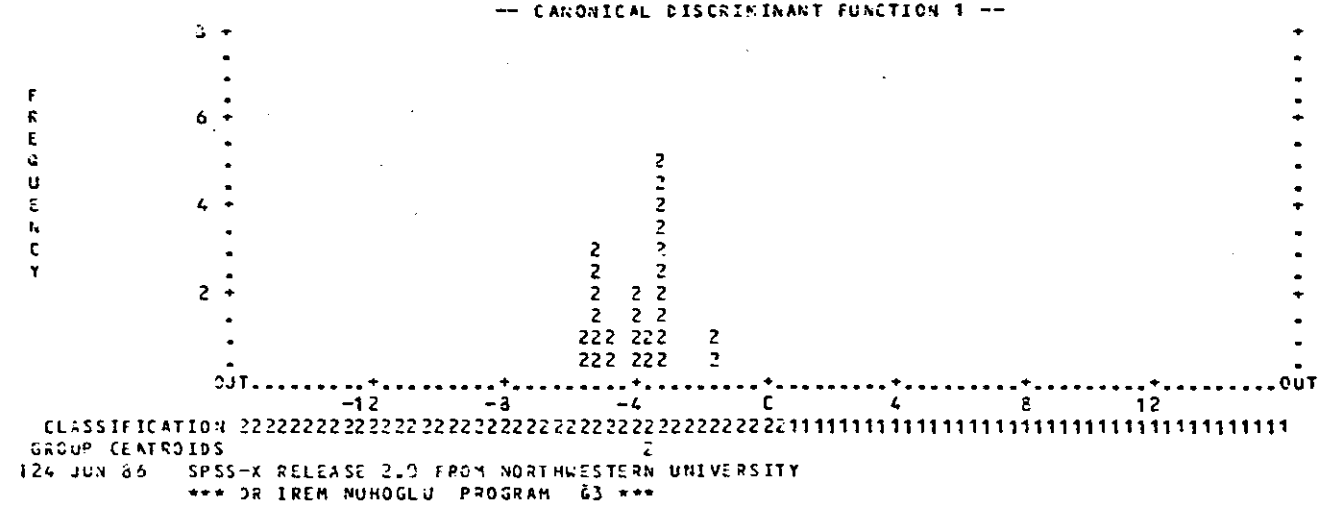
NO TEST CAN BE PERFORMED WITHOUT AT LEAST TWO NON-SINGULAR GROUP COVARIANCE MATRICES.

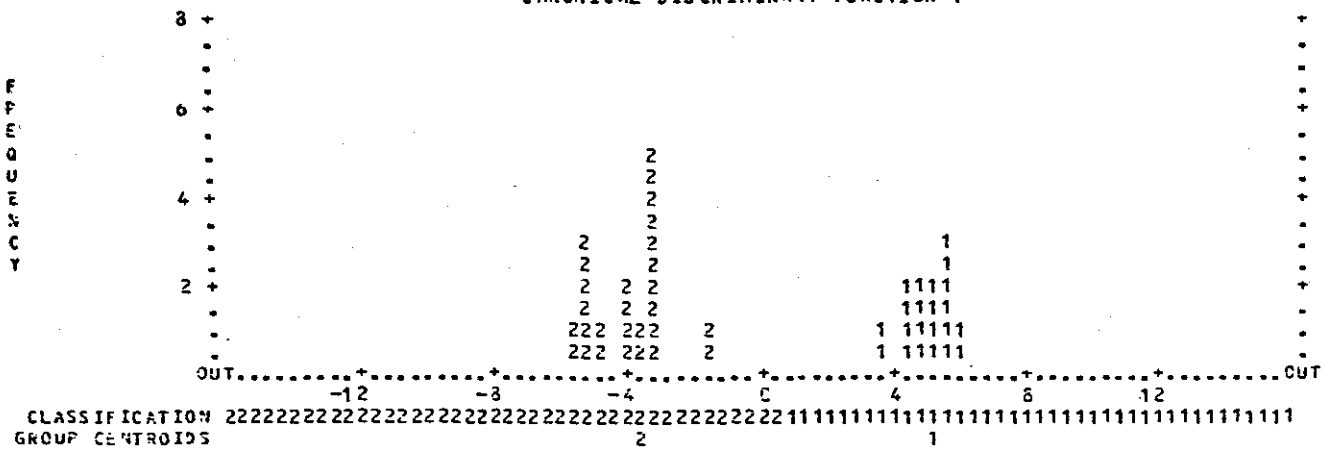
CASE SEQNUM	MIS VAL	SEL	ACTUAL GROUP	HIGHEST GROUP	PROBABILITY P(D/G)	P(G/D)	2ND HIGHEST GROUP	P(G/D)	DISCRIMINANT SCORES
1			1	1	.5503	1.0000	2	0.0000	5.6657
2			1	1	.5544	1.0000	2	.0000	4.4773
3			1	1	.5220	1.0000	2	0.0000	5.7087
4			1	1	.8173	1.0000	2	.0000	5.2995
5			1	1	.7820	1.0000	2	.0000	4.7917
6			1	1	.6216	1.0000	2	.0000	4.5749
7			1	1	.8187	1.0000	2	.0000	5.2977
8			1	1	.5106	1.0000	2	0.0000	5.7263
9			1	1	.1271	1.0000	2	.0000	3.5427
10			1	1	.3464	1.0000	2	0.0000	6.0191
11			1	1	.6813	1.0000	2	.0000	4.6534
12			2	2	.1874	1.0000	1	0.0000	-5.3097
13			2	2	.5276	1.0000	1	.0000	-3.3597
14			2	2	.0183	1.0000	1	.0000	-1.6227
15			2	2	.8560	1.0000	1	.0000	-4.1639
16			2	2	.7375	1.0000	1	.0000	-3.6471
17			2	2	.1904	1.0000	1	0.0000	-5.2917
18			2	2	.0747	1.0000	1	0.0000	-5.7645
19			2	2	.2287	1.0000	1	0.0000	-5.1860
20			2	2	.3511	1.0000	1	.0000	-3.0500
22			2	2	.5118	1.0000	1	.0000	-3.3265
23			2	2	.3440	1.0000	1	.0000	-3.0361
24			2	2	.5113	1.0000	1	.0000	-3.3265
25			2	2	.0644	1.0000	1	.0000	-3.8115
26			2	2	.3717	1.0000	1	0.0000	-4.8750

SYMBOLS USED IN PLOTS

SYMBOL	GROUP	LABEL
1	1	
2	2	


HISTOGRAM FOR GROUP 1
-- CANONICAL DISCRIMINANT FUNCTION 1 --
FREQUENCY
4
3
2
1
OUT
-12
-8
-4
0
4
8
12
OUT
CLASSIFICATION
GROUP CENTROIDS


HISTOGRAM FOR GROUP 2
-- CANONICAL DISCRIMINANT FUNCTION 1 --
FREQUENCY
8
6
4
2
OUT
-12
-8
-4
0
4
8
12
OUT
CLASSIFICATION
GROUP CENTROIDS



CLASSIFICATION RESULTS -

ACTUAL GROUP		NO. OF CASES	PREDICTED GROUP MEMBERSHIP 1	2
GROUP	1	11	11 100.0%	0 0.0%
GROUP	2	14	0 0.0%	14 100.0%

PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 100.00%

CLASSIFICATION PROCESSING SUMMARY

25 CASES WERE PROCESSED.
0 CASES WERE EXCLUDED FOR MISSING OR OUT-OF-RANGE GROUP CODES.
1 CASES HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
25 CASES WERE USED FOR PRINTED OUTPUT.

24 JUN 84 SPSS-X RELEASE 2.0 FROM NORTHWESTERN UNIVERSITY PAGE 1
*** DR IREM NUHOGLU PROGRAM 53 ***

PRECEDING TASK REQUIRED 3.54 SECONDS CPU TIME; 36 SECONDS ELAPSED.

12 0 FINISH

12 COMMAND LINES READ.
0 ERRORS DETECTED.
0 WARNINGS ISSUED.
4 SECONDS CPU TIME.
0 SECONDS ELAPSED TIME.
END OF JOB.

.42.UCLP, BU, P03 , 0.784KLNS.

APPENDIX E

A N K E T

Boğaziçi Üniversitesi

Doktora Tezi

Tarih:

1. NET SATIŞ GELİRİNİZ (1983) aşağıda belirtilen gruplardan hangisine girmektedir?

   ☐ 15 Milyar TL'nin üstü

   ☐ 10 - 14.9 Milyar TL arası

   ☐ 5 - 9.9 Milyar TL arası

   ☐ 2 - 4.9 Milyar TL arası

   ☐ 2 Milyar TL'nin altı

2. NET BİLANÇO KÂRINIZ (1983) aşağıda belirtilen gruplardan hangisine girmektedir?

   ☐ 1 Milyar TL'nin üstü

   ☐ 500 - 999 Milyon TL arası

   ☐ 250 - 499 Milyon TL arası

   ☐ 100 - 249 Milyon TL arası

   ☐ 100 Milyon TL'nin altı

3. YATIRIM HARCAMALARINIZ (1983) aşağıda belirtilen gruplardan hangisine girmektedir?

   ☐ 10 Milyar TL'nin üstü

   ☐ 5 - 9.9 Milyar TL arası

   ☐ 1 - 4.9 Milyar TL arası

   ☐ 500 - 999 Milyon TL arası

   ☐ 100 - 499 Milyon TL arası

   ☐ 100 Milyon TL'nin altı

4. ÖZ SERMAYENİZ (1983) .....

5. İHRACAT GELİRİNİZ (1983) aşağıda belirtilen gruplardan hangisine girmektedir?

☐ 20 Milyon $'ın üstü

☐ 10 - 19.9 Milyon $ arası

☐ 5 - 9.9 Milyon $ arası

☐ 1 - 4.9 Milyon $ arası

☐ 1 Milyon $'ın altı

6. Şirketinizde BİLGİSAYAR'dan yararlanıyor musunuz?

☐ EVET ☐ HAYIR

("HAYIR" ise 12. soruya geçiniz).

7. Kullandığınız bilgisayarın markası ve tipi nedir? (Birden fazla ise hepsinin markası, tipi ve adedi)

.....

.....

8. Bilgisayarı şirketinizin hangi bölümünde (veya bölümlerinde) kullanıyorsunuz?

☐ Genel Müdür

☐ Mali ve İdari İşler Bölümü

☐ İşletme (Fabrika) Bölümü

☐ Planlama Bölümü

☐ Diğer (Belirtiniz) .....

. Yalnız "Genel Müdür"ü işaretlediniz ise, 9. soruya geçiniz ve sonra 11. sorudan devam ediniz.

. Yalnız "Mali ve İdari İşler Bölümü"nü işaretlediniz ise, 10. soruya geçiniz ve devam ediniz.

. Her ikisini de işaretlediniz ise, 9. soruya geçiniz ve devam ediniz.

9. Genel Müdürlükte kullandığınız bilgisayardan nasıl yararlanıyorsunuz?

.....

.....

10. Mali ve İdari İşler Bölümünde kullandığınız bilgisayardan nasıl yararlanıyorsunuz?

.....

.....

11. Yönetici olarak karar verirken bilgisayardan ne kadar yararlandığınızı düşünüyorsunuz?

☐ Her konuda çok yararlı

☐ Bazı konularda çok yararlı

☐ Bazı konularda kısmen yararlı

☐ Hiçbir konuda yararlı değil

12. Yönetici olarak karar verirken bilanço ve kâr/zarar mali raporlarından yararlanıyor musunuz?

☐ EVET ☐ HAYIR

("HAYIR" ise 14. soruya geçiniz).

13. Bu raporlar şirketinizde ne sıklıkta hazırlanıyor?

☐ Haftalık

☐ Aylık

☐ 3 Aylık

☐ Yıllık

☐ Diğer (Belirtiniz) .....

14. Bu raporların (bilanço ve kâr/zarar) dışında karar vermenize yardımcı olması gayesi ile hangi raporlar hazırlanıyor?

- ☐ Fon Akım Tablosu
- ☐ Başabaş Analizi
- ☐ Oran Analizi
- ☐ Diğer (Belirtiniz) .....

15. Bir mamulün maliyetini hesaplarken aşağıda belirtilen masraflardan hangilerini maliyet muhasebe bölümünüz dikkate almaktadır? (Satılan malın maliyeti hesabına giren maliyet unsurları)

- ☐ İşçilik masrafları
- ☐ Hammadde masrafları
- ☐ İşletme malzemesi masrafları
- ☐ Aydınlatma ve ısıtma
- ☐ Enerji ve su
- ☐ Tamir ve bakım
- ☐ Fabrika binası amortismanı
- ☐ Makina amortismanı
- ☐ Fabrika kirası
- ☐ İdari personel masrafları
- ☐ Ofis malzemesi masrafları
- ☐ İdari bina amortismanı
- ☐ İdari bina kirası
- ☐ Satış personeli masrafları
- ☐ Reklam ve tanıtım masrafları
- ☐ Finansman masrafları
- ☐ Diğer (Belirtiniz) .....

21. Şirketin faaliyetlerini değerlendirirken hangi raporları kullanıyorsunuz?

- ☐ Bilanço
- ☐ Kâr/zarar
- ☐ Fon Akım Tablosu
- ☐ Oran Analizi
- ☐ Diğer (Belirtiniz) .....

ANKETİ DOLDURAN YÖNETİCİ HAKKINDA BİLGİLER

ÜNVANI : .....

YAŞI : .....

CİNSİYETİ : .....

MESLEĞİ : .....

MEZUN OLDUĞU OKUL : .....

TEŞEKKÜR EDERİZ

Not: TAM MALİYET SİSTEMİ:

Üretimde kullanılan hammadde, işçilik ve imalat ile ilgili tüm giderler (Genel İmalat Giderleri) maliyete verilir.

DEĞİŞKEN MALİYET SİSTEMİ:

Değişken giderler maliyete verilir ve tüm sabit giderler dönem gideri kabul edilir.

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