C H A P T E R V

ANALYSIS OF DATA : TECHNIQUES AND SEGMENTS: I

In the previous chapter we discussed the responses to question 1.2, 3 and 5; of the questionnaire i.e. about the deposits, profits and advances, priority and non-priority advances segment-wise advances within priority sector advance and facilitywise advances of various branches of scheduled commercial banks in Baroda City over a period of time.

This forms the background information and base for the study, so far as type of sample is concerned.

In the present chapter the responses to subjective questions are discussed i.e. mainly Q.6 and Q.7 of the questionnaire. This is divided broadly into three sections. The section I studies ranking of factors like character, capability etc. by respondents from various branches. The Section II studies the extent of application of Management Accounting Techniques and Relationship between application thereof and the Section III studies the application of techniques with reference to specialization of branch and with reference to size and volume of business.

The section I examines the relative importance given to various factors with reference to particular segment. This is examined from the following three angles :

i. the relationship in ranking of factors under study with reference to segments,

ii. the relationship in ranking of factors with reference to particular respondent;

iii. the relationship in ranking of factors with refeerence to bank branch within a given segment and the bank branches which form a group so far as the ranking of factors is concerned.

All the above points are examined with the use of Rank - Correlation - Coefficient and Linkage analysis.

The Sections II amd III deal with analysis of responses to Q.7 of the questionnaire, which inquires into the application of techniques or otherwise with reference to segments.

The Section II in particular is devoted to the study of:

i. the percentage of respondents giving affirmation to the application of technique.

ii. the relative affirmation given to application of particular technique with reference to segment, which is examined with the use of rank correlation coefficient.

iii. the relationship between application of techniques within particular segment which is examined with the use of phi-coefficient, and

iv. with the use of (iii) it is further examined which of the techniques are applied together when a lending decision is taken for particular segment. This is studied with the use of linkage analysis.

The Section III deals with the following :

i. The examination of branches which apply the techniques the most. This is examined with the use of Composite Index.

ii. The relationship between the extent of application attributed by the branch to a particular segment and specialization of branch to particular segment. This is examined with the use of Rank Correlation Coefficient.

iii. Examination of dependence of level of application of technique for various segments on the total advances of the branch and on the volume of business of the branch. This is examined by the use of LOGIT MODEL on account of dummy dependent variable.

SECTION I

RANKING OF THE FACTORS

As discussed in Chapter 3 dealing with questionnaire, Q.6 is for the ranking of the factors. Here the factors which were considered unavoidable for being taken into consideration while taking lending decision were included in the question and the respondents were required to give ranks in the order of importance being assigned to those factors for various segments. The factors as discussed in Chapter 3 are Character, Capability, Security offered by the borrower, purpose, economic viability, financial feasibility, technical feasibility and national interest and suitability, and the segments for which the respondents are required to give ranking are, agriculture, SSI, BMRT, SEPR, TO,

EDU and NP C & T.

The analysis of this ranking given by respondents is carried out mainly from three angles :

(A) the relationship in the ranking of factors between the segments

(B) within a segment between the factors for a bank branch

(C) within a segment for factors between the bank branches.

(A) RELATIONSHIP IN RANKING OF FACTORS BETWEEN THE SEGMENTS:

Here an attempt is made to analyse the relationship between various segments i.e. in the ranking of various factors under consideration. As the respondents were required to give the ranks to the factors, rank correlation was found to be best suited for the purpose of analysis.[1]

On the basis of discussion with various lending officers at pre-questionnaire session it was felt that generally the ranking or relative importance of various factors varies with different segments viz. Agriculture, SSI etc. It is, therefore, essential to find out between which segments the ranking of various factors are highly and positively related and where the ranking moves in the opposite direction. This will throw the light on the relative importance given to various factors on an average while sanctioning the loan by various branches of scheduled commercial banks.

---

1. Edwards Allen L., Statistical Analysis, p. 161.

For the purpose of examining the above mentioned aspect the following steps of calculation are carried out.

i. The rank assigned to particular factor by respondents were totalled for all the respondents for different segments separately.

ii. Based on the final totals the first rank is assigned to the lowest total, the second rank is assigned to the factor where total is higher than that of the earlier factor and last rank is assigned to the factor with the highest total. When first rank is assigned to a particular factor it implies that top priority has been given to that factor by lending officers while sanctioning the advance. Based on this the ranking which is found is reflected in Table V.1.

TABLE V.1

SEGMENTWISE RANKING OF THE FACTORS

Factors → / Segment ↓	Character	Capability	Security	Purpose	Economic Viability	Finanucial Feasibility	Technical Feasibility	National Interest and Suitability
AGRI	2	4	6	1	3	7	8	5
SSI	3.5	3.5	7	2	1	6	5	8
BMRT	1	3	5	2	4	6	8	7
SEPR	1	3	8	2	4	5	6	7
TO	1	3	6	2	4	5	7	8
EDU	2	3	6	1	5	7	8	4
NP C & I	3	2	6	1	4	5	7	8

As discussed in the previous chapter, an attempt is also made to contact the appraising officers of big banks who are dealing with the proposals of lending. For the large public sector bank, as opined by the appraising officer at regional office, the ranking of factors are presented in Table V.2.

TABLE V.2

SEGMENTWISE RANKING OF FACTORS BY APPRAISING OFFICER AT REGIONAL OFFICE

Factors / Segments	Character	Capability	Security	Purpose	Economic-Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
AGRI	3	2	5	1	4	-	-	6
SSI	3	2	7	1	6	5	4	8
BMRT	3	2	5	1	4	-	-	6
SEPR	3	2	5	1	4	-	-	6
TO	3	2	4	1	5	-	-	6
EDU	3	2	5	1	-	4	-	6
NP C & T	3	2	7	1	6	5	4	8

Both the tables indicate that the purpose is being given top most priority irrespective of the segment. This is in line with the comments of experts on the subject. Shri Karunasagar comments on this point that : "The concept of bank credit has undergone a change from security oriented to purpose oriented and need-based system of lending."[2] However this does not mean that security aspect is not

2. Karunasagar : Credit Monitoring System - a review of health code classification of borrowal accounts by commercial banks. A Thesis submitted to NIBM for post-graduate Diploma in Bank Management, 1990-91, NIBM, Pune, p. 17.

to be considered at all and hence emphasising the importance of both the factors Mallya states that - "Instead of granting a loan to incur marriage expenses if a loan is given to a manufacturer to buy raw materials or equipment, the result will be more production, more employment and similar activities all round, means better standard of living for all sooner or later. This has resulted in what is called the purpose oriented Bank lending."[3] He further comments that "Although the Bank credit has become purpose oriented or need based one, this does not mean that the Bank should become benevolent and give all loans without any security, whetever securities are readily available or where the assets are created out of the loan proceeds they have to be properly tagged on as even in changed concept of lending. Securities have their own significance as an insurance against non-payment though they have lost their role as determinants of credit."[4]

iii. After final ranks were assigned to factors based on responges for various segments rank - correlation was found out between the segments. e.g. when the estimated RCC between agriculture and SSI is +1 it shows that ranking of various factors is exactly idential in these two segments. When the RCC is -1 the ranking of various factors is just in the opposite direction. Where the RCC is zero, it shows absence of relationship in the ranking of factors as far as two segments are concerned.

---

3. Mallaya K.G., ABC of Bank Credit, pp. 45-46.

4. Ibid., p. 48.

The V. 3 gives the results of such analysis i.e. RCCs. The figures in bracket below rank - correlation coefficient indicates the t-value. The estimated t-value shows that whether the estimated rank correlation coefficient is statistically significant or not.

A review of the table indicates the following :

(A) In all, 28 rank - correlation coefficients are worked out. Out of these 25 Rcc are found to be significant, applying test of significance, the t-test. These significant relationships are observed based on the fact that for 25 RCC the estimated t-value was higher than table-value of t. Therefore, we reject the null hypothesis of no relationship in the ranking of factors in different segments; and we accept the alternative hypothesis that there exists a significant relationship between the segments in ranking of factors so far as these 25 RCC are concerned.

A glance at these table shows that the highest rank correlation is observed between BMRT and TO, which is 0.9524. This indicates that importance to be assigned to these factors is very much similar for these two segments. The next highest RCC is found between AGRI and EDU, where RCC is 0.9286. This shows that the ranking of factors for these two segments was almost similar. The same extent of relationship is observed between TO and NP C&I, BEPR and TO and BMRT and NP others. i.e. the RCC between these segments is also 0.9286.

The next highest RCC is found to be 0.9048, which is found between TO and NP others and NP C & I and NP others. Followed by

TABLE V.3

RANK CORRELATION COEFFICIENT BETWEEN SEGMENTS REGARDING RANKING OF FACTORS

SEGMENTS	AGRI	SSI	BMRT	SEPR	TO	EDU	NP C&I	NP OTHERS
AGRI	1							
SSI	0.7083* (2.4578)	1						
BMRT	0.8810* (4.5612)	0.6488 (2.0884)	1					
SEPR	0.7619* (2.8814)	0.7679* (2.9364)	0.8333 (3.6566)	1				
TO	0.7857* (3.1111)	0.7440* (2.7274)	0.9524* (7.4524)	0.9286* (6.1296)	1			
EDU	0.9286* (6.1296)	0.4464 (1.2219)	0.8333* (3.6566)	0.7143* (2.5001)	0.7143* (2.5001)	1		
NP C & I	0.7619* (2.8814)	0.7798* (3.0512)	0.8810* (4.5612)	0.8571* (4.0754)	0.9286* (6.1296)	0.7143* (2.5001)	1	
NP OTHERS	0.7619* (2.8814)	0.6131 (1.9010)	0.9286* (6.1296)	0.7381* (2.6797)	0.9048* (5.2046)	0.7381* (2.6797)	0.9048* (5.2046)	1

(Figures in the bracket represents the estimated t-value and '*' indicates significant relationship at 5% level of significance)

this are RCC between AGRI and BMRT and NP C & I and BMRT; for which RCC is found to be 0.8810. The RCC between SEPR and NP C & I was found to be 0.8571.

The relationship between BMRT and SEPRR and BMRT and EDU is also found to be significant having RCC 0.8333. The RCC between AGRI and TO is found to be lower i.e. 0.7857 which is also significant. The relationship in ranking is even lower than this between SSI and NP C & I, which is 0.7798 however this is also significant based on test of significance.

Followed by above are RCCs between SSI and SEPR, AGRI and SEPR, AGRI and NP C & I, AGRI and NP Others (0.7619); SSI and TO (0.7440); SSI and NP Others, EDU and NP Others (.7381) and EDU and TO, EDU and NP C & I, EDU and SEPR (0.7143) and AGRI and SSI (0.7083).

All these RCCs are found significant at 5% level of significance with d.f=6 (n=8, d-f = n-2).

The relationship is found insignificant between three segments viz. SSI and BMRT, SSI and NP Others and SSI and EDU; where RCCs are 0.6488, 0.6133 and 0.4464 respectively. The reason for these insignificant relationships is obvious from the fact that the nature of analysis of proposal for BMRT, NP OTHERS and EDU will be considerably different than the analysis of proposal for SSI segment.

It is to be pointed out here that in none of the case the estimated RCC is +1. This tends to suggest that though the degree

of relationship in the ranking of the factors is quite high it is not identical for two segments. At the same time it is not equal to zero in any case, implying thereby some degree of relationship between two segments.

(B) ANALYSIS OF RANK - CORRELATION WITHIN THE SEGMENT FOR EACH BRANCH BETWEEN THE FACTORS :

In the questionnaire each branch manager was requested to assign rank to various factors in the order of priority for different segmens separately. Hence, as a next step an attempt is made to examine the relationship between the ranking of two factors for a given respondent i.e. here for each branch the difference in ranking of two factors was considered and taking all branches or respondents together the RCC is found out between the factors.

In addition to the above various factors as mentioned in the earlier pages which are considered by branch managers while sanctioning the loan represents various aspects of the proposed borrower and the plan proposed by the borrower. It means that these factors are multi-facet factors. It is, therefore, necessary to examine empirically whether all these factors form one single group or otherwise. If these factors have more than one group we have to find out which factors go together while sanctioning the loan by branch manager.

In order to examine above mentioned aspects the method of linkage analysis is applied. The steps followed for linkage

analysis as pointed out by Bennet and Bowers[5] are as follows :

i. underline the highest value in each column of the matrix.

ii. select the highest value in the whole matrix; this gives the first two variables of the first cluster.

iii. read along the rows corresponding to the two variables which emerged in step (ii), select any underlined values; the corresponding variables also belong to the first cluster,

iv. read along the rows corresponding to the variables which emerged in step (iii) and again choose any underlined value; this variables again belong to the first cluster. Repeat this process until no further variables emerge. This completes the variables belonging to this cluster;

v. excluding all the variables which fall into previous cluster return to step (ii) and repeat the process.

The segmentwise analysis is shown here :

a. Agriculture : The table V.4 gives RCC between the factors for agriculture segment.

---

5. Bennet Spencer and Bowers David, An Introduction to Multivariate Techniques for Social and Behavioural Science, pp. 68-69.

TABLE V.4

RANK CORRELATION COEFFICEENT BETWEEN THE FACTORS : AGRICULTURE SEGMENT

FACTORS → ↓	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Character	1							
Capability	0.9931	1						
Security	0.9885	0.9932	1					
Purpose	0.9900	0.9898	0.9854	1				
Economic viability	0.9882	0.9913	0.9898	0.9918	1			
Financial feasibility	0.9862	0.9818	0.9924	0.9869	0.9950	1		
Technical feasibility	0.9851	0.9900	0.9910	0.9858	0.9945	0.9868	1	
National Interest and suitability	0.9863	0.9861	0.9870	0.9888	0.9886	0.9898	0.9884	1

It can be seen from the table that all RCC are more than 0.90 which are also significant. This conveys that there exists high correlation in ranking the factors within segment by the branch manager.

On the basis of linkage analysis as carried out for agricultural segment it is seen that the factors 4, 5, 6, 7 and 8 go together i.e. purpose, economic viability, financial feasibility, technical feasibility and national interest and suitability forms one cluster and factors 1, 2 and 3 i.e. character, capability and security offered by the borrower forms another group so far as agricultural segment is concerned i.e. factors under study are divided in two groups so far as agricultural segment is concerned.

(b) SSI : The table V.5 gives the relationship between ranking of factors for SSI segment.

The table shows that RCC are more than 0.90 between all the factors and the relationship is significant. This conveys that ranking of the factors by the branch manager is significantly related within the segment.

When the method of linkage analysis is applied to SSI segment it is observed that the factors character and capability go together and all other factors go together i.e. the one cluster is of character and capability and another cluster is of six factors - i.e. security, purpose, economic viability, financial feasibility, technical feasibility and national interest and suitability. Here also various factors form two

TABLE V.5

RANK CORRELATION COEFFICIENT BETWEEN THE FACTORS : SSI

	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Character	1							
Capability	0.9949	1						
Security	0.9922	0.9941	1					
Purpose	0.9915	0.9922	0.9911	1				
Economic Viability	0.9926	0.9937	0.9928	0.9940	1			
Financial feasibility	0.9927	0.9939	0.9952	0.9938	0.9968	1		
Technical feasibility	0.9925	0.9934	0.9935	0.9930	0.9961	0.9975	1	
National Interest and Suitability	0.9885	0.9887	0.9919	0.9905	0.9912	0.9933	0.9919	1

groups as in the case of AGRI, but in SSI the factor security falls in the second group.

(c) BMRT : In this segment it is observed that between all the factors the RCC was more than 0.90 and it is found that the ranking of this factors is significantly related to each other. This is presented by Table V. 6.

On further application of linkage analysis it is observed that the first four factors form one cluster and the next four factors form another cluster, i.e. ranking for factors character, capability, security offered by the borrower and purpose of loan go together and the economic viability, financial feasibility, technical feasibility and national interest and suitability form the other cluster.

(d) SEPR : Coming to the discussion of this segment here it is observed that the RCC are above 0.90 and it is found that the relationship was significant between the factors within the segment. This is presented by Table V. 7.

On further application of linkage analysis it has been observed that clusters were same as that of SSI segment i.e. factors security, purpose, economic viability, financial feasibility, technical feasibility and national interest and suitability form one group and character and capability form another group, i.e. the ranking of first six factors go together and the next two factors go together.

TABLE V.6

RANK CORRELATION COEFFICIENT BETWEEN THE FACTORS : BMRT

	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Character	1							
Capability	0.9961	1						
Security	0.9928	0.9954	1					
Purpose	0.9932	0.9940	0.9923	1				
Economic Viability	0.9917	0.9936	0.9925	0.9939	1			
Financial Feasibility	0.9908	0.9932	0.9947	0.9930	0.9971	1		
Technical Feasibility	0.9877	0.9907	0.9927	0.9905	0.9952	0.9979	1	
National Interest and Suitability	0.9877	0.9884	0.9909	0.9901	0.9939	0.9939	0.9942	1

TABLE V. 7

RANK CORRELATION BETWEEN THE FACTORS : SBPR

FACTORS	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Chatacter	1							
Capability	0.9961	1						
Security	0.9885	0.9921	1					
Purpose	0.9939	0.9943	0.9897	1				
Economic Viability	0.9921	0.9947	0.9923	0.9948	1			
Financial Feasibility	0.9895	0.9926	0.9947	0.9928	0.9972	1		
Technical Feasibility	0.9891	0.9912	0.9938	0.9919	0.9959	0.9981	1	
National Interest and Suitability	0.9882	0.9883	0.9915	0.9910	0.9927	0.9933	0.9932	1

(e) TO : The next is advances to transport operators. Table V.8 shows the RCC between the factors for branches within the segment. All the RCC are found to be above 0.95.

While applying the linkage analysis this segment is found to be an exception in the sense that whereas for all other segments these 8 factors are divided in two clusters for this segment these 8 factors are divided in 3 clusters. One cluster is of factors purpose and economic viability, the other cluster is of factors security, financial feasibility, technical feasibility and national interest and suitability and yet another is of factors character and capability.

(f) EDU : The next is educational advances. Table V.9 presents the RCC between the factors for branches within the segment.

This conveys that there exists high rank correlation between the factors within the segment. Like all other segments here also the RCCs are found to be more than 0.90 i.e. all these relationships are significant.

Applying the linkage analysis here also the eight factors are divided in two groups. One cluster is of factors 3, 5, 6, 7 and 8, i.e. security, economic viability, financial feasibility, technical feasibility and national interest and suitability and other cluster is of factors 1, 2 and 4 i.e. character, capability and purpose.

(g) NP C & I : The next is advances to commercial and industrial sector in non-priority area. Table V.10 gives the RCCs between the factors for these advances.

TABLE V.8

RANK CORRELATION BETWEEN THE FACTORS : TO

FACTORS	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Character	1							
Capability	0.9953	1						
Security	0.9911	0.9939	1					
Purpose	0.9917	0.9925	0.9914	1				
Economic Viability	0.9925	0.9932	0.9926	0.9989	1			
Financial Feasibility	0.9911	0.9933	0.9951	0.9930	0.9959	1		
Technical Feasibility	0.9883	0.9908	0.9931	0.9920	0.9939	0.9960	1	
National Interest and Suitability	0.9863	0.9864	0.9907	0.9899	0.9910	0.9925	0.9934	1

TABLE V.9

RANK CORRELATION COEFFICIENT BETWEEN THE FACTORS : EDU

FACTORS	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest & Suitability
Character	1							
Capability	0.9949	1						
Security	0.9889	0.9936	1					
Purpose	0.9938	0.9934	0.9876	1				
Economic Viability	0.9888	0.9914	0.9930	0.9915	1			
Financial Feasibility	0.9875	0.9901	0.9943	0.9891	0.9970	1		
Technical Feasibility	0.9852	0.9873	0.9927	0.9867	0.9966	0.9971	1	
National Interest and Suitability	0.9886	0.9878	0.9892	0.9912	0.9930	0.9919	0.9915	1

TABLE V.10

RANK CORRELATION COEFFICIENTS BETWEEN THE FACTORS : NP C & I

FACTORS	Character	Capability	Security	Purpose	Economic Viability	Financial Feasibility	Technical Feasibility	National Interest and Suitability
Character	1							
Capability	0.9951	1						
Security	0.9910	0.9937	1					
Purpose	0.9911	0.9922	0.9916	1				
Economic Viability	0.9904	0.9937	0.9917	0.9940	1			
Financial Feasibility	0.9905	0.9932	0.9933	0.9939	0.9917	1		
Technical Feasibility	0.9874	0.9911	0.9911	0.9906	0.9953	0.9975	1	
National Interest and Suitability	0.9846	0.9868	0.9889	0.9876	0.9909	0.9927	0.9926	1

The table indicates that there exists a high relationship between the factors, within this segment. All the RCCs are above 0.90 and are found significant.

The application of linkage analysis gives the results that factors 4, 5, 6, 7 and 8 form one cluster and factors 1, 2 and 3 form another cluster. i.e. the factors purpose, economic viability, financial feasibility, technical feasibility and national interest and suitability go together and factors character, capability and security go together.

In brief it may be argued that ranking of factors within segment are highly correlated and the various factors under consideration while sanctioning the loan form generally two groups.

(C) RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS :

The present study examines relative importance given to various factors, e.g. character, capability etc. by branches of various commercial banks. It makes it necessary to examine the type and degree of relationship between various branches in ranking of the factors. It is attempted here to find out whether all branches of one single bank are highly correlated and they form one group of not. On a priori basis we expect all branches of a single bank to go together as far as the relative importance of various factors are concerned.

In order to examine the above aspect procedure followed is mentioned below :

i. For each segment RCCs are found out for difference in ranking of factors between the bank branches to examine type and degree of relationship.

ii. Based on these RCCs the linkage analysis is applied to examine whether various branches of single bank form one group or not.

The segmentwise analysis of above aspects is presented in the following lines.

a. AGRI :

Table V.11 gives the RCCs between the branches for ranking of the factors which should be considered while taking loan decision by various respondents from different branches for agricultural loan.

A glance at a table shows the following :

i. There are certain branches where the relationship in ranking of factors is one to one, i.e. the rank assigned by two different respondents from different branches is same. This is observed for the following cells :

(4, 5); (4, 11); (5, 11); (49, 65); (72, 73); (72, 81); (73, 81) and (91, 93). Here it may be noted that bank branch Nos. 4, 5 and 11 are the branches of one bank only and hence it is quite possible that the relative importance assigned to factors

TABLE V.11

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS AGRICULTURE

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	15	16
1	1.0000													
2	0.2857	1.0000												
3	-0.4524	-0.1667	1.0000											
4	-0.4524	0.4762	0.6905	1.0000										
5	-0.4524	0.4762	0.6905	1.0000	1.0000									
6	-0.5952	0.0952	0.3333	0.5238	0.5238	1.0000								
7	-0.4524	0.2143	0.8095	0.8809	0.8809	0.2381	1.0000							
9	-0.2857	0.2143	0.8333	0.7143	0.7143	0.2143	0.7857	1.0000						
10	-0.5714	0.0952	0.8571	0.9048	0.9048	0.3571	0.9524	0.7143	1.0000					
11	-0.4524	0.4762	0.6905	1.0000	1.0000	0.5238	0.8810	0.7143	0.9047	1.0000				
12	-0.6429	-0.3333	0.3571	0.4285	0.4285	0.3095	0.5000	-0.0476	0.6190	0.4285	1.0000			
13	0.4048	0.5952	0.0238	0.4285	0.4285	0.1190	0.4048	0.1190	0.3095	0.4285	0.4048	1:0000		
15	-0.6667	-0.5238	0.7381	0.3571	0.3571	0.2143	0.5952	0.6190	0.5952	0.3571	0.4286	0.0238	1.0000	
16	-0.4762	-0.0476	0.7143	0.7381	0.7381	0.1428	0.9048	0.5476	0.9048	0.7381	0.7381	0.5000	0.6429	1.0000
17	-0.0952	0.6905	0.5476	0.8809	0.8809	0.3809	0.7857	0.6667	0.7143	0.8809	0.1429	0.5000	0.0714	0.5476
18	0.0952	-0.7619	-0.1429	-0.5714	-0.5714	-0.4047	-0.3810	-0.2619	-0.3571	-0.5714	0.0000	0.1190	0.3333	-0.0714
19	-0.4940	-0.0654	0.7321	0.7440	0.7440	0.1369	0.8988	0.5417	0.9226	0.7440	0.7559	0.4583	0.6369	0.9940
21	0.0952	-0.3333	-0.0952	-0.3571	-0.3571	-0.8095	-0.0476	0.0476	-0.1667	-0.3571	-0.1667	0.1190	0.2857	0.0238
23	-0.0714	0.6429	0.3333	0.6905	0.6905	0.1904	0.6191	0.3571	0.5714	0.6905	0.2143	0.4048	-0.1667	0.3809
24	-0.8571	-0.2143	0.3095	0.3095	0.3095	0.3809	0.3571	0.2381	0.3809	0.3095	0.4286	-0.0714	0.5476	0.2619
25	-0.3809	-0.0238	0.2619	0.4524	0.4524	0.0000	0.5952	0.2857	0.5238	0.4524	0.5714	0.6905	0.5476	0.7857
26	-0.6905	0.1429	0.5000	0.6905	0.6905	0.3333	0.7857	0.6190	0.6904	0.6905	0.4524	0.4047	0.6905	0.7143
27	-0.8274	-0.0893	0.7083	0.7679	0.7679	0.5416	0.8274	0.5179	0.8750	0.7679	0.7798	0.2679	0.7083	0.8274
28	-0.4047	-0.1190	-0.1667	-0.0952	-0.0952	-0.1905	0.0714	-0.1190	-0.0238	-0.0952	0.2143	0.1190	0.1905	0.0238
29	0.2381	0.7381	0.5000	0.8095	0.8095	0.1905	0.6905	0.6190	0.6667	0.8095	0.1429	0.6190	0.0238	0.5476
34	-0.7262	-0.5833	0.2500	0.0952	0.0952	0.6905	0.0119	-0.1309	0.2024	0.0952	0.6071	-0.0595	0.4524	0.1548
35	-0.4762	-0.5476	-0.3333	-0.4048	-0.4048	0.1667	-0.4762	-0.5714	-0.3333	-0.4048	0.2619	-0.1667	0.0238	-0.3571
36	-0.2202	-0.4702	0.6250	0.1012	0.1012	0.1369	0.3155	0.5536	0.3155	0.1012	0.1607	-0.0417	0.8750	0.3274
39	-0.2857	-0.7619	0.4048	-0.1667	-0.1667	-0.0238	0.1667	0.2381	0.1190	-0.1667	0.2381	0.0238	0.8095	0.3095
40	0.7143	0.4286	-0.0952	0.0714	0.0714	-0.6190	0.1905	0.0476	0.0476	0.0714	-0.0952	0.7380	-0.2857	0.2381
43	0.7143	-0.2857	-0.3571	-0.6905	-0.6905	-0.8809	-0.4524	-0.2619	-0.5714	-0.6905	-0.4762	0.2143	-0.1667	-0.3333
44	-0.2619	-0.1429	0.1905	0.0000	0.0000	-0.1904	0.2381	0.1667	0.1429	0.0000	0.0952	0.0714	0.2619	0.0714
46	0.4524	0.2381	0.0952	0.1429	0.1429	-0.5952	0.3810	0.2857	0.1905	0.1429	-0.0238	0.7143	0.1190	0.4524
47	0.1905	0.3333	0.4048	0.4524	0.4524	-0.2143	0.5952	0.3095	0.5238	0.4524	0.2381	0.4048	-0.0714	0.4762
48	0.2381	0.2857	0.3805	0.3095	0.3095	-0.4047	0.4286	0.4047	0.3809	0.3095	-0.0714	0.1429	-0.0476	0.2381
49	0.1190	-0.2381	-0.2619	-0.3809	-0.3809	-0.8333	-0.1190	-0.0952	-0.2381	-0.3809	-0.1429	0.2143	-0.1429	-0.0238
50	-0.0476	0.2381	-0.2143	0.1190	0.1190	-0.5000	0.1667	-0.1905	0.1429	0.1190	0.2619	0.4048	-0.2381	0.1905
52	0.2321	0.5178	0.6131	0.7083	0.7083	-0.0059	0.6845	0.7440	0.6488	0.7083	-0.0059	0.4702	0.1726	0.5536
53	-0.2381	0.5476	0.0714	0.6667	0.6667	-0.0238	0.5476	0.1667	0.5476	0.6667	0.4286	0.6905	-0.0714	0.5714
55	-0.9821	-0.3036	0.4702	0.4702	0.4702	0.5892	0.4464	0.3036	0.5536	0.4702	0.6131	-0.0179	0.6845	0.4464
57	0.0714	-0.3333	0.1190	-0.2619	-0.2619	-0.7143	0.1190	0.1905	-0.0238	-0.2619	-0.1190	0.0238	0.3571	0.0952

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	15	16
58	0.1250	0.4702	0.5179	0.5417	0.5417	-0.0298	0.4464	0.6607	0.4583	0.5417	-0.2679	0.0536	-0.0059	0.1607
59	-0.1429	-0.3571	-0.3571	-0.4762	-0.4762	0.1667	-0.4524	-0.4762	-0.4524	-0.4762	0.0719	-0.0239	0.0000	-0.4286
60	-0.2619	0.5238	0.6429	0.9048	0.9048	0.2143	0.8809	0.6667	0.8571	0.9048	0.3333	0.4048	0.1905	0.6905
61	0.6429	0.4286	0.1190	0.1429	0.1429	-0.6190	0.2143	0.3809	0.0952	0.1429	-0.4286	0.4286	-0.1667	0.1190
63	-0.6190	0.1429	0.3809	0.6905	0.6905	0.0952	0.7619	0.3095	0.7619	0.6905	0.7381	0.5000	0.4048	0.8095
64	-0.7619	0.1667	0.7143	0.8809	0.8809	0.7143	0.8095	0.6429	0.8571	0.8809	0.5714	0.2381	0.5952	0.6905
65	0.1190	-0.2381	-0.2619	-0.3809	-0.3809	-0.8333	-0.1190	-0.0952	-0.2381	-0.3809	-0.1429	0.2143	0.1429	-0.0238
66	0.6190	0.1429	0.1190	-0.0476	-0.0476	-0.8095	0.2143	0.2857	0.0476	-0.0476	-0.3095	0.4047	-0.0238	0.1905
67	0.7619	0.3333	0.0000	-0.0714	-0.0714	-0.7143	0.0476	0.1429	-0.0714	-0.0714	-0.4524	0.3095	-0.3809	-0.0714
68	-0.7857	-0.5238	0.5952	0.4048	0.4048	0.3333	0.5952	0.3333	0.8429	0.4048	0.7857	0.2143	0.8809	0.7619
69	0.1190	-0.7381	-0.1190	-0.6190	-0.6190	-0.3571	-0.4524	-0.1905	-0.4285	-0.6190	-0.1667	-0.0476	0.3333	-0.2381
71	0.0774	-0.3274	0.2083	0.0893	0.0893	-0.0298	0.0417	-0.1488	0.2440	0.0893	0.4821	0.3274	0.0893	0.3393
72	0.3333	0.4048	0.4048	0.5238	0.5238	-0.2619	0.5000	0.4524	0.5000	0.5238	0.0000	0.5000	-0.0714	0.4762
73	0.3333	0.4048	0.4048	0.5238	0.5238	-0.2619	0.5000	0.4524	0.5000	0.5238	0.0000	0.5000	-0.0714	0.4762
74	-0.1905	-0.0714	0.0238	-0.0714	-0.0714	-0.0476	0.1667	0.0476	0.0000	-0.0714	0.0952	0.1190	0.2143	0.0238
75	-0.5952	0.3333	0.3333	0.7619	0.7619	0.7619	0.4762	0.1667	0.6190	0.7619	0.5714	0.3095	0.0238	0.4048
77	-0.6905	0.2381	0.6667	0.8809	0.8809	0.3571	0.9048	0.6428	0.9048	0.8809	0.5714	0.3095	0.5238	0.7857
79	0.3095	-0.0476	0.2381	0.0000	0.0000	-0.7381	0.2381	0.2381	0.1905	0.0000	-0.0714	0.1429	0.0714	0.2143
80	-0.7619	0.0238	0.2143	0.4762	0.4762	0.1190	0.5476	0.2381	0.5238	0.4762	0.5714	0.3095	0.4762	0.5476
81	0.3333	0.4048	0.4048	0.5238	0.5238	-0.2619	0.5000	0.4524	0.5000	0.5238	0.0000	0.5000	-0.0714	0.4762
82	-0.3036	-0.1250	0.6131	0.4702	0.4702	-0.0179	0.5893	0.6845	0.5893	0.4702	0.2440	0.2797	0.7678	0.6488
83	-0.3571	-0.2143	0.3095	0.2857	0.2857	-0.1190	0.3571	0.3809	0.3809	0.2857	0.2619	0.3333	0.6190	0.5238
85	-0.4643	0.1786	0.8452	0.8690	0.8690	0.6548	0.7976	0.7262	0.8929	0.8690	0.5595	0.2381	0.6309	0.7024
86	-0.2381	-0.1429	0.5714	0.5000	0.5000	-0.1905	0.5714	0.4524	0.6667	0.5000	0.4048	0.3095	0.4524	0.7142
87	-0.5238	-0.8809	0.4524	-0.0476	-0.0476	-0.0714	0.2143	0.0476	0.3333	-0.0476	0.6190	-0.0714	0.7143	0.4524
88	0.8631	0.3274	0.0417	-0.0536	-0.0536	-0.4940	-0.0238	0.1845	-0.1011	-0.0536	-0.4702	0.3750	-0.3036	-0.0893
90	-0.2857	0.1190	-0.0357	0.3690	0.3690	0.2262	0.3214	-0.3095	0.3809	0.3690	0.8214	0.6548	-0.0952	0.5000
91	0.0238	-0.1904	0.3095	0.0714	0.0714	-0.4524	0.4524	0.4286	0.2619	0.0714	0.1190	0.4286	0.6190	0.5238
92	0.1250	0.4464	0.5179	0.7321	0.7321	0.6250	0.5179	0.4107	0.6250	0.7321	0.4583	0.6131	0.1845	0.5417
93	0.0238	-0.1905	0.3095	0.0714	0.0714	-0.4524	0.4524	0.4286	0.2619	0.0714	0.1190	0.4286	0.6190	0.5238
94	-0.7321	0.1250	0.2679	0.5535	0.5535	0.6845	0.4583	0.1964	0.4940	0.5535	0.6131	0.2798	0.3988	0.3988
95	-0.6429	-0.2143	0.5952	0.4762	0.4762	0.2381	0.5476	0.6904	0.5477	0.4762	0.2143	0.1190	0.8571	0.5476
96	-0.0476	0.3571	0.7381	0.7857	0.7857	0.0952	0.7857	0.6667	0.8095	0.7857	0.2381	0.3095	0.1667	0.6428
97	-0.0238	-0.2857	0.4524	0.2619	0.2619	0.3809	0.1667	0.0476	0.3571	0.2619	0.4048	0.2143	0.1190	0.3333
98	-0.0476	0.0952	0.8571	0.6429	0.6429	0.2857	0.6667	0.6905	0.7143	0.6429	0.1667	0.1190	0.3095	0.5238
99	-0.5714	-0.2857	0.6429	0.4524	0.4524	-0.0238	0.6905	0.6667	0.6429	0.4524	0.3809	0.2143	0.9048	0.7381
100	-0.4286	0.2857	0.5952	0.8333	0.8333	0.7381	0.6905	0.4047	0.7619	0.8333	0.5714	0.4047	0.2143	0.6190
101	0.6429	0.3809	0.2381	0.2619	0.2619	-0.3333	0.3809	0.1905	0.3095	0.2619	0.1428	0.6190	-0.1429	0.3809
102	0.8571	0.0952	-0.4524	-0.4524	-0.4524	-0.7857	-0.3095	-0.3333	-0.4524	-0.4524	-0.3333	0.5952	-0.4286	-0.1667
103	-0.8333	-0.3095	0.6190	0.5714	0.5714	0.2143	0.7143	0.4762	0.7619	0.5714	0.7143	0.2143	0.8333	0.8095
106	0.3571	0.3095	0.3571	0.4048	0.4048	-0.5000	0.5000	0.4286	0.4524	0.4048	0.0000	0.5000	0.0000	0.5000

BANK NO	34	35	36	39	40	43	44	46	47	48	49	50	52	53	55	57
1																
2																
3																
4																
5																
6																
7																
9																
10																
11																
12																
13																
15																
16																
17																
18																
19																
21																
23																
24																
25																
26																
27																
28																
29																
34	1.0000															
35	0.6786	1.0000														
36	0.4345	0.2321	1.0000													
39	0.4048	0.1190	0.8750	1.0000												
40	-0.7262	-0.6190	-0.1607	-0.1905	1.0000											
43	-0.5357	-0.1667	0.2679	0.2619	0.5714	1.0000										
44	0.0357	0.3333	0.3750	0.2143	-0.0952	0.0000	1.0000									
46	-0.6429	-0.6905	0.1369	0.1667	0.8809	0.5476	-0.0714	1.0000								
47	-0.3690	-0.4524	-0.0893	-0.2143	0.5714	-0.0476	0.4286	0.4048	1.0000							
48	-0.4762	-0.3095	0.1012	-0.2381	0.5000	0.1667	0.5476	0.3333	0.8333	1.0000						
49	-0.3929	0.1190	0.3512	0.2381	0.3809	0.6667	0.3809	0.5000	-0.0476	0.2619	1.0000					
50	-0.3214	0.1429	-0.2202	-0.4286	0.4285	0.0476	0.4524	0.2619	0.4762	0.5714	0.5476	1.0000				
52	-0.4048	-0.7440	0.1607	-0.1369	-0.5893	0.0059	-0.1369	0.5893	0.5774	0.6012	-0.0536	0.1131	1.0000			
53	-0.2381	-0.2857	-0.2917	-0.5000	0.4285	-0.3809	-0.0952	0.3809	0.3809	0.2857	0.0952	0.6667	0.5060	1.0000		
55	0.7559	0.5060	0.5119	0.3274	-0.6369	-0.6845	0.3512	-0.4226	-0.1607	-0.1488	-0.1012	0.0417	-0.1250	0.1726	1.0000	
57	-0.3095	0.0476	0.5655	0.4524	0.2857	0.5952	0.7143	0.4286	0.2619	0.5238	0.8333	0.4047	0.0417	-0.1429	-0.0059	1.0000

BANK NO	34	35	36	39	40	43	44	46	47	48	49	50	52	53	55
58	-0.3869	-0.4345	0.1488	-0.3631	0.2679	-0.1012	0.1964	0.1369	0.5417	0.8036	-0.0536	0.2202	0.7857	0.2797	-0.0476
59	0.5238	0.8333	0.2679	0.2857	-0.4286	0.0476	0.5000	-0.4762	-0.2857	-0.2619	0.1190	0.0000	-0.7202	-0.4762	0.3036
60	-0.1786	-0.5000	-0.0059	-0.2857	0.2857	-0.5238	0.2381	0.2619	0.7619	0.6428	-0.2381	0.3571	0.7559	0.6667	0.2559
61	-0.8333	-0.7381	0.0535	-0.2143	0.8333	0.5476	-0.0952	0.7619	0.4524	0.6428	0.3809	0.2619	0.7798	0.2857	-0.6012
63	0.1309	-0.0238	0.0893	-0.0238	0.1429	-0.4762	0.3095	0.2619	0.4286	0.2857	0.1667	0.6190	0.3155	0.8095	0.5893
64	0.4762	-0.0238	0.3274	0.1190	-0.3095	-0.8095	0.2143	-0.1429	0.2381	0.0952	-0.3809	0.0000	0.3631	0.4286	0.8036
65	-0.3929	0.1190	0.3512	0.2381	0.3809	0.6667	0.3809	0.5000	-0.0476	0.2619	1.0000	0.5476	-0.0536	0.0952	-0.1012
66	-0.7976	-0.6667	0.1845	0.0714	0.8571	0.7143	0.1190	0.8571	0.5238	0.6429	0.5476	0.2857	0.6012	0.1190	-0.6012
67	-0.8333	-0.5952	-0.0655	-0.2857	0.8095	0.5952	0.1429	0.5952	0.6429	0.7857	0.3095	0.3333	0.5774	0.0714	-0.7321
68	0.6429	0.1905	0.6369	0.6904	-0.2857	-0.3571	0.1905	0.0476	-0.0238	-0.1904	0.0238	-0.0714	0.0179	0.1428	0.7798
69	0.1905	0.3095	0.6845	0.6667	-0.0714	0.6667	-0.0952	0.0952	-0.5714	-0.3095	0.5000	-0.3095	-0.2679	-0.5714	-0.0536
71	0.2857	0.0655	0.1726	0.0893	0.2559	0.1607	-0.4226	0.1488	0.0654	0.0417	-0.0179	0.0774	0.2857	0.2083	0.0000
72	-0.5476	-0.8095	-0.0536	-0.3095	0.7143	0.0952	-0.3333	0.6190	0.5714	0.5714	-0.0476	0.1905	0.9345	0.5238	-0.3750
73	-0.5476	-0.8095	-0.0536	-0.3095	0.7143	0.0952	-0.3333	0.6190	0.5714	0.5714	-0.0476	0.1905	0.9345	0.5238	-0.3750
74	0.0833	0.2857	0.2917	0.3095	-0.0952	-0.0238	0.8809	-0.0238	0.3095	0.2381	0.2381	0.2381	-0.2917	-0.1905	0.2797
75	0.4643	0.0952	-0.1726	-0.4047	-0.2857	-0.9524	-0.0476	-0.4047	0.2380	0.0238	-0.6667	0.1190	0.2202	0.5238	0.5655
77	0.1787	-0.1429	0.2321	0.0000	-0.0476	-0.6667	0.3809	0.0952	0.4762	0.3809	-0.0952	0.3571	0.4702	0.6429	0.6845
79	-0.5000	-0.2143	0.2798	0.0238	0.5952	0.5476	0.4524	0.5238	0.5952	0.8571	0.6429	0.5952	0.4702	0.1905	-0.2321
80	0.2500	-0.2857	0.2440	0.0952	-0.1429	-0.4524	0.5000	0.0476	0.1190	0.1190	0.3333	0.5714	0.0059	0.5952	0.7559
81	-0.5476	-0.8095	-0.0536	-0.3095	0.7143	0.0952	-0.3333	0.6190	0.5714	0.5714	-0.0476	0.1905	0.9345	0.5238	-0.3750
82	0.0655	-0.2321	0.6905	0.4821	0.1607	0.0893	-0.0417	0.4821	-0.0238	0.1369	0.3869	0.0298	0.5655	0.3393	0.4048
83	0.0714	-0.1190	0.5417	0.3809	0.1190	0.0952	-0.2381	0.4285	-0.2857	-0.1190	0.4524	0.0714	0.3512	0.3809	0.3512
85	0.5000	0.0595	0.4821	0.2024	-0.1071	-0.4881	0.2500	-0.0119	0.3690	0.3452	-0.2024	0.1071	0.5655	0.4405	0.7440
86	-0.0595	-0.3571	0.3512	0.1190	0.3333	0.0000	-0.2143	0.4524	0.2381	0.3333	0.2143	0.2381	0.6726	0.5238	0.1845
87	0.5833	0.4286	0.7202	0.7143	-0.2381	0.0714	0.3095	-0.0476	-0.0238	0.0238	0.2857	0.0476	-0.1369	-0.1667	0.5417
88	-0.6607	-0.5893	0.4762	-0.1607	0.7798	0.6607	-0.1845	0.6012	0.3988	0.5417	0.1964	0.0536	0.6488	0.0059	-0.7262
90	0.3036	0.1667	-0.3036	-0.2143	0.1785	-0.4405	0.0357	0.0476	0.3928	0.0000	-0.2024	0.4762	-0.0119	0.6071	0.2738
91	-0.2500	-0.3333	0.6012	0.6667	0.4523	0.4762	0.2857	0.7857	0.1904	0.1904	0.6429	0.1190	0.3036	0.0952	0.0416
92	0.3333	-0.1369	0.1369	-0.0298	0.3036	-0.2083	-0.2917	0.2202	0.3393	0.1726	-0.3512	0.0059	0.6845	0.5178	0.2440
93	-0.2500	-0.3333	0.6012	0.6667	0.4523	0.4762	0.2857	0.7857	0.1905	0.1904	0.6428	0.1190	0.3036	0.0952	0.0416
94	0.6369	0.4702	0.2083	0.0893	-0.4107	-0.7083	0.4107	-0.3155	0.0536	-0.0893	-0.1726	0.2202	-0.1012	0.3750	0.8690
95	0.2619	-0.1190	0.7321	0.5238	-0.2381	-0.2381	-0.0238	0.1667	-0.2857	-0.1428	0.1667	-0.2143	0.3274	0.1667	0.6250
96	-0.2262	-0.6190	0.0774	-0.2143	0.3809	-0.3095	0.0714	0.3095	0.7857	0.7143	-0.2857	0.1905	0.8750	0.4762	0.0417
97	0.4048	-0.1905	0.1607	0.1190	0.0000	-0.2143	-0.5238	-0.0952	0.1190	-0.0952	-0.6429	-0.4524	0.3274	-0.0952	-0.0059
98	0.0119	-0.5476	0.3036	0.0714	0.1428	-0.2857	0.0238	0.1190	0.6190	0.5238	-0.5000	-0.2381	0.7440	0.0476	0.0654
99	0.1429	-0.1667	0.7321	0.6190	0.0000	-0.0714	-0.2143	0.4048	0.0238	0.0952	0.3809	0.0476	0.3631	0.2619	0.5655
100	0.3690	-0.2619	-0.0179	-0.1190	-0.0952	-0.8095	-0.0952	-0.1190	-0.4285	0.0714	-0.7619	-0.1429	0.4345	0.3809	0.4107
101	-0.4167	-0.4286	-0.0298	-0.0952	0.8809	0.4286	-0.1667	0.6905	0.8571	0.7381	0.1905	0.4524	0.6607	0.3809	-0.3988
102	-0.6905	-0.4524	-0.1250	-0.0476	0.8571	0.8333	-0.2619	0.7381	0.1667	0.1429	0.4286	0.1429	0.1964	-0.0238	-0.8631
103	0.4405	0.1190	0.5655	0.4524	-0.1905	-0.4047	0.2619	0.1190	0.0714	0.0476	0.1905	0.2143	0.2083	0.4286	0.8155
106	-0.6429	-0.7619	0.0298	-0.1905	0.8095	0.2857	-0.1429	0.7619	-0.6190	0.6667	0.2381	0.3571	0.8750	0.5238	-0.3869

BANK NO	68	69	71	72	73	74	75	77	79	80	81	82	83	85
58														
59														
60														
61														
63														
64														
65														
66														
67														
68	1.0000													
69	0.1667	1.0000												
71	0.2440	0.3274	1.0000											
72	-0.1429	-0.2857	0.4702	1.0000										
73	-0.1429	-0.2857	0.4702	1.0000	1.0000									
74	0.2143	-0.1190	-0.5893	-0.5238	-0.5238	1.0000								
75	0.2857	-0.7143	0.1488	0.0952	0.0952	-0.0714	1.0000							
77	0.5952	-0.5476	-0.0536	0.2619	0.2619	0.2619	0.6667	1 0000						
79	-0.0952	0.1429	0.2440	0.5238	0.5238	0.1190	-0.3571	0.1429	1.0000					
80	0.6190	-0.2381	-0.1488	-0.1667	-0.1667	0.4286	0.4048	0.7857	0.0952	1.0000				
81	-0.1429	-0.2857	0.4702	1.0000	1.0000	-0.5238	0.0952	0.2619	0.5238	-0.1667	1.0000			
82	0.6012	0.3631	0.3393	0.4345	0.4345	-0.1964	-0.0179	0.4821	0.3393	0.4226	0.4345	1.0000		
83	0.5476	0.4286	0.3988	0.2857	0.2857	-0.3571	-0.0952	0.3095	0.1905	0.4286	0.2857	0.9345	1.0000	
85	0.6309	-0.1786	0.2917	0.3690	0.3690	0.1071	0.7500	0.8452	0.1309	0.5357	0.3690	0.5774	0.3928	1.0000
86	0.4286	0.0952	0.6726	0.7143	0.7143	-0.5000	0.1190	0.4524	0.5000	0.2619	0.7143	0.8155	0.7619	0.5595
87	0.7619	0.5238	0.4940	-0.1667	-0.1667	0.1429	-0.0714	0.2143	0.2857	0.3333	-0.1667	0.4702	0.4286	0.3929
88	-0.5178	0.1488	0.3036	0.7202	0.7202	-0.2917	-0.3988	-0.3036	0.6012	-0.5536	0.7202	0.1429	0.0059	-0.0655
90	0.3571	-0.4762	0.3333	0.0595	0.0595	0.1309	0.6309	0.4286	-0.1190	0.4524	0.0595	-0.1369	-0.0714	0.3214
91	0.4762	0.3809	-0.0298	0.1905	0.1905	0.3333	-0.4762	0.2381	0.4524	0.3333	0.1905	0.6607	0.5714	0.1309
92	0.2917	-0.1131	0.6369	0.6607	0.6607	-0.2917	0.7083	0.4345	0.0059	0.0774	0.6607	0.3869	0.3155	0.6964
93	0.4762	0.3809	-0.0298	0.1905	0.1905	0.3333	-0.4762	0.2381	0.4524	0.3333	0.1905	0.6607	0.5714	0.1309
94	0.6012	-0.3274	-0.1548	-0.3393	-0.3393	0.4821	0.7440	0.7202	-0.3155	0.7917	-0.3393	0.1369	0.1012	0.6607
95	0.6905	0.2619	0.0536	0.0714	0.0714	-0.0952	0.0714	0.5238	-0.0238	0.5000	0.0714	0.9107	0.8333	0.6309
96	0.1190	-0.5476	0.2678	0.8095	0.8095	-0.1429	0.4524	0.6429	0.4524	0.0952	0.8095	0.3512	0.0714	0.7024
97	0.2381	0.0238	0.7679	0.3809	0.3809	-0.5476	0.3333	-0.0238	-0.1429	-0.4286	0.3809	0.1250	0.0238	0.4405
98	0.1905	-0.3333	0.2678	0.6190	0.6190	-0.1190	0.3571	0.4524	0.2619	-0.1667	0.6190	0.2976	-0.0476	0.7024
99	0.7857	0.2381	0.0893	0.1667	0.1667	0.1190	-0.0238	0.6190	0.2619	0.6190	0.1667	0.9107	0.8095	0.5833
100	0.4047	-0.6667	0.1607	0.2857	0.2857	-0.0238	0.8571	0.6667	-0.3095	0.2143	0.2857	0.0893	-0.0952	0.7738
101	-0.1190	-0.1429	0.3869	0.7619	0.7619	0.0952	0.0238	0.1667	0.6905	-0.0952	0.7619	0.1012	-0.0476	0.1786
102	-0.4524	0.2857	0.2321	0.3571	0.3571	-0.1667	-0.6905	-0.5714	0.4047	-0.4762	0.3571	-0.0417	0.0000	-0.4881
103	0.9048	0.0238	0.2083	0.0476	0.0476	0.1429	0.3571	0.7857	0.1190	0.8095	0.0476	0.7440	0.6904	0.7262
106	-0.0952	0.1667	0.4107	0.9524	0.9524	-0.3571	-0.0952	0.2619	0.7143	-0.0476	0.9524	0.4940	0.3571	0.2738

TABLE V.11 CONTD

BANK NO	98	99	100	101	102	103	106
58							
59							
60							
61							
63							
64							
65							
66							
67							
68							
69							
71							
72							
73							
74							
75							
77							
79							
80							
81							
82							
83							
85							
86							
87							
88							
90							
91							
92							
93							
94							
95							
96							
97							
98	1.0000						
99	0.2143	1.0000					
100	0.6667	0.1190	1.0000				
101	0.5238	0.0000	0.2381	1.0000			
102	-0.2143	-0.2381	-0.5000	0.6667	1.0000		
103	0.1905	0.8809	0.3571	-0.0714	-0.5000	1.0000	
106	0.5000	0.2857	0.0952	0.8095	0.4762	0.1191	1.0000

by one branch is same as that of another branch. Similarly bank branch Nos. 72 and 73 also belong to one bank only. However, bank branch Nos. 72 and 81, 73 and 81 and 49 and 65 belong to two different banks. Again bank branch Nos. 91 and 93 belong to same bank only.

ii. The second aspect revealed from the table is branches where no relationship exist. This is indicated by RCC = 0. This is observed for the following cells :

(3, 67); (4, 44); (4, 79); (5, 44); (5, 79); (6, 25); (10, 74) (11, 44); (11, 79); (12, 18); (12, 72); (12, 73); (12, 81); (12, 10 (15, 59); (15, 106); (18, 61); (26, 48); (26, 72); (26, 73); (26, 81); (29, 68); (39, 77); (40, 97); (40, 99); (43, 44); (44, 86); (48, 90); (50, 59); (50, 64); (55, 71); (61, 69); (63, 66); (64, 106); (66, 74); (83, 102); (87, 96); (87, 101); (90, 98) and (99, 101).

For these forty cells RCCs are observed to be zero. The scrutiny of these cells indicate that out of forty cells only for four cells it is found that the two branches belong to one bank. These are (6, 25); (12, 18); (43, 44) and (63, 66). For remaining 36 cells it is observed that the branches represented by these cells belong to different banks. Here, it can be said that between two branches of different banks the ranking of factors may differ.

iii. The third aspect is even further to no relationship. It is the situation where the ranking of two branches goes in the

opposite direction. Here, it may be noted that for no branch the ranking of factors is found to be absolutely opposite to another; i.e. for no cell RCC is found to be -1; however, where RCC is less than -0.9 it indicates that it tends towards -1 and hence one can say that the ranking is almost in the opposite direction. This is observed for 3 cells; viz. (1, 55); (43, 75); and (18, 23) where RCC are -0.9821, -0.9524 and -0.9048 respectively. It may further be noted that whereas branches denoted by first two cells belong to two different banks, the branches denoted by the last cell belong to one bank only.

This indicates that the branches of same bank may also give ranking of the factors in the opposite direction.

iv. The next observation is regarding whether the branches of one bank form one group or not. To examine this, linkage analysis is applied. On applying this linkage analysis total respondents are divided in 17 groups. This is presented in Table V. 12.

TABLE V.12

LINKAGE ANALYSIS : AGRICULTURE SEGMENT

Cluster No.	BANK BRANCH NO.
I	4, 5, 11, 60, 17, 23, 96, 98, 3, 10, 7, 77, 9, 63, 53, 80, 50
II	72, 73, 81, 52, 106, 29, 2
III	91, 93
IV	16, 19, 25
V	21, 49, 57, 65
VI	18, 69
VII	27, 26, 64, 85
VIII	82, 83, 86, 95, 99, 15, 36, 39
IX	61, 66, 88, 1, 67
X	68, 87, 103
XI	24, 55, 34, 94
XII	40, 46, 101, 102, 13, 47, 43
XIII	44, 74, 28
XIV	75, 6, 100, 92, 97, 71
XV	79, 48, 58
XVI	35, 59
XVII	12, 90

The cluster I has almost 50% of the branches of a single bank; however of the same bank the branches are coming in cluster II, IV, V, VI, VII, VIII, IX, XI, XII, XIII, XIV and XVII; i.e.

of the same bank branches are scattered in various clusters. This necessarily implies that all the branches of one bank are not going together.

Another bank with less number of branches than previous one is scattered over five clusters. viz. clusters VII, XI, XII, XIII and XVI.

The bank with still lesser number of branches was also scattered over 5 clusters I, II, V, XII and XV.

There are cases where the bank having only two branches are divided in two different clusters, or bank having only three branches is divided in three clusters.

On the basis of discussion, it is concluded here that in none of the scheduled commercial banks all branches belong to a single group, with respect to ranking of the factors, if number of branches are more than five.

b. SSI :

Table V. 13 gives RCCs for ranks assigned by various respondents to various factors to be given importance while taking lending decision for the SSI segment.

The following aspects are revealed from the table.

i. Nine cells are observed with RCC = 1. This indicates that the ranks assigned by two branches indicated by these cells have identical ranking of the factors. These cells are : (46); (4, 11); (5, 11); (14, 31); (24, 57); (33, 82); (49, 65); (72, 73) and (91, 93). The detailed scrutiny of these branch Nos. indicates

TABLE V.13 283

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS SSI

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	14
1	1.0000												
2	0.3571	1.0000											
3	0.3571	0.0714	1.0000										
4	-0.1905	-0.1667	0.2143	1.0000									
5	-0.1905	-0.1667	0.2143	1.0000	1.0000								
6	0.2143	-0.0714	0.9524	0.3095	0.3095	1.0000							
7	-0.2857	-0.7143	0.3809	0.3809	0.3809	0.5714	1.0000						
9	-0.0952	-0.0476	0.7381	0.2619	0.2619	0.8571	0.6429	1.0000					
10	-0.2857	-0.0238	0.5714	0.5238	0.5238	0.7619	0.6191	0.8571	1.0000				
11	-0.1905	-0.1667	0.2143	1.0000	1.0000	0.3095	0.3810	0.2619	0.5238	1.0000			
12	0.3452	-0.3690	0.0833	0.0595	0.0595	-0.0595	0.0833	-0.2500	-0.4880	0.0595	1.0000		
13	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5714	1.0000	
14	0.2381	0.0714	0.6905	0.6190	0.6190	0.7381	0.2381	0.5952	0.6190	0.6190	0.0119	0.5000	1.0000
15	0.0238	0.2381	0.4762	0.7143	0.7143	0.5476	0.2619	0.6667	0.6905	0.7143	-0.1786	0.5000	0.8095
16	0.2619	0.2381	0.6905	0.6429	0.6429	0.6905	0.1905	0.6429	0.5952	0.6429	0.0119	0.5000	0.9286
17	0.2857	0.4048	0.6667	0.3333	0.3333	0.6667	-0.0476	0.5952	0.5476	0.3333	-0.1548	0.5000	0.9048
18	-0.3571	0.0238	0.2857	0.9047	0.9047	0.4048	0.4048	0.5000	0.7381	0.9047	-0.2262	0.5000	0.5714
19	-0.4286	0.1190	-0.5714	-0.5952	-0.5952	-0.5476	-0.2619	-0.1190	-0.3095	-0.5952	-0.0833	0.5000	-0.6012
20	0.6905	0.2381	0.0000	-0.6667	-0.6667	-0.0714	-0.3571	-0.2143	-0.3810	-0.6667	0.0833	0.5000	-0.0952
21	0.2857	0.7857	-0.3333	0.0000	0.0000	-0.3810	-0.6667	-0.2619	-0.1429	0.0000	-0.3214	0.5000	0.0476
22	-0.0952	-0.1429	-0.0238	0.3333	0.3333	-0.0714	0.1429	0.1667	-0.0952	0.3333	0.5119	0.5000	0.1429
23	0.0714	0.1905	0.0476	0.2619	0.2619	-0.1429	-0.1429	-0.2143	-0.2381	0.2619	0.3929	0.5000	-0.2143
24	0.5476	0.5952	0.1429	0.2619	0.2619	0.0952	-0.1905	0.1667	0.1429	0.2619	-0.1548	0.5000	0.3571
25	-0.5952	0.2619	0.0952	0.0952	0.0952	0.1190	-0.1667	0.3095	0.3333	0.0952	-0.2262	0.5000	0.1905
26	0.1905	0.3809	0.7619	0.1905	0.1905	0.7619	0.0476	0.7381	0.6190	0.1905	-0.2024	0.5000	0.8095
27	-0.2619	0.2143	0.5952	0.5238	0.5238	0.7143	0.3571	0.7381	0.9286	0.5238	-0.5119	0.5000	0.6190
28	-0.9048	0.6190	0.4286	-0.0714	-0.0714	0.2619	-0.4524	-0.0476	-0.0952	-0.0714	0.0595	0.5000	0.4048
29	0.1190	0.5000	0.0238	0.4286	0.4286	-0.0952	-0.0952	0.0000	0.0238	0.4286	0.2262	0.6190	0.0000
31	0.2381	0.0714	0.6905	0.6190	0.6190	0.7381	0.2381	0.5952	0.6190	0.6190	0.0119	0.5000	1.0000
33	-0.0893	0.1131	0.3988	0.8750	0.8750	0.5298	0.4583	0.6250	0.7917	0.8750	-0.1607	0.5714	0.7560
34	0.1190	-0.3571	0.5238	0.8214	0.8214	0.5595	0.5238	0.2738	0.4405	0.8214	0.3214	0.5119	0.6310
35	0.5238	-0.0238	0.1905	0.4286	0 4286	0.1429	0.0000	-0.2857	-0.0238	0.4286	0.2262	0.5000	0.2857
36	0.1250	0.5655	-0.1726	0.3036	0.3036	-0.1369	-0.0298	0.1369	0.2202	0.3036	-0.1845	0.6250	0.0655
37	-0.1607	0.5893	-0.4583	0.2083	0.2083	-0.3988	-0.3274	-0.1131	0.1012	0.2083	-0.3750	0.5655	-0.0536
38	-0.3571	0.4048	-0.0714	0.3809	0.3809	0.0000	-0.3571	0.0952	0.3333	0.3809	-0.3512	0.5000	0.4762
39	0.0714	0.2381	-0.0238	0.1429	0.1429	-0.1905	-0.1190	-0.2381	-0.2143	0.1429	0.2262	0.5000	-0.3810
40	0.2917	0.5060	0.0298	-0.2083	-0.2083	-0.0893	-0.0893	0.1607	-0.1250	-0.2083	0.2202	0.6250	-0.2083
41	0.2143	-0.1190	0.4048	0.4881	0.4881	0.3452	0.2381	0.3810	0.1190	0.4881	0.5595	0.5119	0.5833
42	0.4107	0.3750	0.0417	-0.3988	-0.3988	-0.0179	0.0179	-0.0536	0.0774	-0.3988	-0.0179	0.5298	0.0179
43	-0.0952	0.5000	-0.7381	-0.1667	-0.1667	-0.8095	-0.5952	-0.5714	-0.4762	-0.1667	-0.1071	0.5000	-0.5952
44	0.5238	0.3809	0.5000	0.4762	0.4762	0.4524	-0.0476	0.4048	0.3095	0.4762	0.0833	0.5000	0.8095
45	-0.1667	-0.2381	0.2857	0.9286	0.9286	0.3810	0.5952	0.3571	0.5714	0.9286	0.0833	0.5238	0.4524
46	-0.2143	0.5714	-0.2857	-0.2857	-0.2857	-0.3571	-0.5714	-0.0476	-0.1905	-0.2857	-0.0833	0.5238	-0.1429
47	0.3333	-0.0714	0.0238	-0.4524	-0.4524	-0.0952	-0.1667	0.0000	-0.4762	-0.4524	0.6071	0.5000	-0.0238
48	0.3809	0.0238	-0.1905	-0.4524	-0.4524	-0.2143	-0.1429	-0.0476	-0.3810	-0.4524	0.3214	0.5238	-0.0714
49	0.3095	0.8095	-0.3571	-0.0952	-0.0952	-0.4286	-0.7857	-0.3810	-0.2381	-0.0952	-0.2976	0.5000	0.0000
50	-0.2143	-0.0476	-0.0714	0.3571	0.3571	-0.0714	-0.2857	-0.3571	-0.0238	0.3571	0.1310	0.5000	0.2619

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16
51	-0.0714	0.6190	0.2619	0.2143	0.2143	0.3571	0.0000	0.5952	0.6905	0.2143	-0.7024	0.5000	0.4048	0.6905	0.5238
52	-0.3512	-0.1131	-0.0893	-0.2683	-0.2683	0.0298	0.2083	0.3988	0.1726	-0.2683	0.0417	0.5655	0.0536	0.1726	0.0536
53	-0.5476	0.1190	-0.3333	0.3095	0.3095	-0.1905	-0.1905	-0.0714	0.2381	0.3095	-0.2500	0.5000	0.3095	0.4286	0.2619
54	-0.0476	0.3809	0.2619	0.2381	0.2381	0.2619	-0.3810	0.1190	0.2857	0.2381	-0.1786	0.5000	0.6190	0.3571	0.4762
55	0.3393	-0.0417	0.7440	0.6131	0.6131	0.8036	0.3750	0.5655	0.6369	0.6131	0.0298	0.5060	0.9464	0.6845	0.8274
56	0.3095	0.5238	0.1429	-0.0298	-0.0298	0.0952	-0.1905	-0.0952	0.1667	-0.0298	-0.4167	0.5000	-0.1190	-0.0952	-0.0952
57	0.5476	0.5952	0.1429	0.2619	0.2619	0.0952	-0.1905	0.1667	0.1429	0.2619	-0.1548	0.5000	0.3571	0.6190	0.5476
58	-0.0119	0.1309	-0.0952	-0.4643	-0.4643	-0.0714	0.1074	0.3333	-0.0119	-0.4643	-0.0595	0.5119	-0.2738	0.0714	-0.0833
59	0.6667	0.2381	0.3571	0.2381	0.2381	0.2143	0.0000	-0.1429	-0.0476	0.2381	0.2738	0.5476	0.0952	0.0000	0.1429
60	0.3333	0.3095	0.5952	0.3571	0.3571	0.6190	-0.0238	0.5238	0.5000	0.3571	-0.1071	0.5000	0.9286	0.7381	0.8571
61	-0.2857	0.2143	-0.5714	-0.5238	-0.5238	-0.5238	-0.3095	-0.1190	-0.2619	-0.5238	-0.1310	0.5238	-0.4286	-0.1667	-0.3571
63	0.1667	0.6190	0.1429	0.3809	0.3809	0.1190	-0.3095	0.2857	0.2619	0.3809	-0.1786	0.5000	0.5714	0.8095	0.7381
64	0.5417	0.3750	-0.0774	0.1250	0.1250	-0.1369	-0.4940	-0.3750	-0.2321	0.1250	0.1964	0.5655	0.3631	0.1012	0.2202
65	0.3095	0.8095	-0.3571	-0.0952	-0.0952	-0.4286	-0.7857	-0.3810	-0.2381	-0.0952	-0.2976	0.5000	0.0000	0.1429	0.0714
66	-0.3330	-0.2143	0.1429	0.8571	0.8571	0.2381	0.5238	0.4048	0.5000	0.8571	0.0833	0.5000	0.3810	0.7143	0.5476
67	0.0000	0.1190	-0.6190	-0.6667	-0.6667	-0.6667	-0.3810	-0.3571	-0.6190	-0.6667	0.1786	0.5000	-0.6488	-0.3810	-0.5000
68	0.0952	0.1429	0.5714	0.7619	0.7619	0.5714	0.1429	0.5000	0.5238	0.7619	0.1071	0.5000	0.9048	0.8810	0.9524
69	-0.1905	0.3333	-0.3809	0.5714	0.5714	-0.3333	-0.1190	-0.2143	0.1429	0.5714	-0.2500	0.5238	-0.0476	0.3333	0.0952
71	-0.4226	-0.3869	-0.4345	0.4940	0.4940	-0 3512	0.7738	-0.2917	-0.1250	0.4940	0.4464	0.5655	0.0893	0.0893	0.0059
72	-0.5000	-0.2381	-0.4286	-0.3095	-0.3095	-0.3333	-0.0476	0.0238	-0.1667	-0.3095	0.1310	0.5000	-0.1667	-0.0714	-0.1905
73	-0.5000	0.2381	-0.4286	-0.3095	-0.3095	-0.3333	-0.0476	0.0238	-0.1667	-0.3095	0.1310	0.5000	-0.1667	-0.0714	-0.1905
74	0.5000	0.5238	-0.1667	0.0000	0.0000	-0.3333	-0.6905	-0.6667	-0.4286	0.0000	0.0833	0.5000	-0.0952	-0.2381	-0.1190
75	-0.0952	0.3571	-0.3809	0.4048	0.4048	-0.4524	-0.4524	-0.5714	-0.1905	0.4048	-0.0357	0.5000	-0.1667	-0.0238	-0.0952
76	-0.2559	-0.0774	0.2679	0.9702	0.9702	0.3988	0.4702	0.4226	0.6964	0.9702	-0.1012	0.5298	0.6131	0.7679	0.6488
77	0.0238	0.3333	0.2619	0.5000	0.5000	0.3571	0.0000	0.5000	0.5476	0.5000	-0.2738	0.5000	0.7857	0.8810	0.8095
78	0.0238	0.6905	-0.4524	0.0238	0.0238	-0.4524	-0.4524	-0.2619	-0.0714	0.0238	-0.2381	0.6190	-0.1667	0.1190	-0.0714
79	0.0595	0.5000	-0.6309	-0.3214	-0.3214	-0.6548	-0.5833	-0.3571	-0.4048	-0.3214	-0.1190	0.5119	-0.3214	-0.0119	-0.1905
80	-0.6667	-0.0714	-0.7381	0.1429	0.1429	-0.6429	0.0000	-0.3571	-0.0952	0.1429	-0.1786	0.5000	-0.6190	-0.1905	-0.5000
81	-0.1905	-0.1667	0.0238	-0.1429	-0.1429	0.1190	0.1905	0.4524	0.1429	-0.1429	0.1071	0.5000	0.2381	0.3333	0.2619
82	-0.0893	0.1131	0.3988	0.8750	0.8750	0.5298	0.4583	0.6250	0.7917	0.8750	-0.1607	0.5655	0.7560	0.9345	0.8155
83	-0.3809	0.3333	-0.0476	0.4762	0.4762	0.0952	-0.1190	0.2619	0.5238	0.4762	-0.4405	0.5238	0.5238	0.6190	0.4762
84	-0.2381	0.5238	-0.5238	0.3333	0.3333	-0.4762	-0.4048	-0.3095	0.0476	0.3333	-0.3929	0.5238	-0.0952	0.2381	0.0000
85	0.3333	-0.1190	0.6905	0.4762	0.4762	0.6905	0.1905	0.3810	0.3810	0.4762	0.2738	0.5000	0.9048	0.5000	0.7381
86	-0.1190	0.1905	0.4286	0.7381	0.7381	0.5238	0.2381	0.6429	0.7143	0.7381	-0.2024	0.5000	0.8333	0.9762	0.9048
87	-0.2857	0.2619	-0.3809	0.6190	0.6190	-0.3810	-0.2381	-0.3571	0.0238	0.6190	-0.1071	0.5000	-0.0476	0.2381	0.0714
88	-0.2381	0.1667	-0.5595	-0.5357	-0.5357	-0.5238	-0.2381	-0.1190	-0.2917	-0.5357	-0.0476	0.5357	-0.4881	-0.2324	-0.3929
90	-0.0476	0.3809	0.2857	-0.1429	-0.1429	0.2381	-0.4048	0.0952	0.1429	-0.1429	-0.1071	0.5238	0.3333	0.0238	0.1905
91	0.1429	0.8333	-0.2381	-0.0952	-0.0952	-0.2381	-0.5238	-0.0714	0.0952	-0.0952	-0.6071	0.5000	-0.0476	0.2381	0.0714
92	-0.1250	-0.2083	0.3393	0.8155	0.8155	0.3036	0.2321	0.1250	0.2440	0.8155	0.4226	0.5060	0.5060	0.4583	0.5417
93	0.1429	0.8333	-0.2381	-0.0952	-0.0952	-0.2381	-0.5238	-0.0714	0.0952	-0.0952	-0.6071	0.5000	-0.0476	0.2381	0.0714
94	0.5179	0.0536	0.8988	0.2917	0.2917	0.8631	0.2917	0.5298	0.4702	0.2917	0.2321	0.5655	0.7917	0.3988	0.6607
95	-0.2381	0.2381	0.3809	0.5476	0.5476	0.5476	0.2619	0.7143	0.8571	0.5476	-0.5119	0.5000	0.7381	0.8571	0.7381
96	-0.4286	0.1190	-0.3809	0.5476	0.5476	-0.3571	-0.0714	-0.3095	0.0714	0.5476	-0.1310	0.5000	-0.2143	0.0952	-0.0952
97	-0.6905	-0.5714	-0.4524	0.3809	0.3809	-0.3810	0.1191	-0.3333	-0.1667	0.3809	0.4167	0.5000	-0.1429	-0.1429	-0.2143
98	0.0952	-0.5476	0.4524	-0.0714	-0.0714	0.4762	0.5476	0.5238	0 1190	-0.0714	0.5357	0.5000	0.3095	0.1667	0.2857
99	-0.3809	0.4286	-0.1667	0.2857	0.2857	-0.0714	-0.2857	0.2143	0.3333	0.2857	-0.3929	0.5000	0.3810	0.5952	0.4286
100	-0.6190	-0.4286	-0.0238	-0.1190	-0.1190	0.0476	0.4048	0.0714	0.1667	-0.1190	-0.0119	0.5000	-0.4523	-0.4524	-0.5000
101	0.0952	0.0952	-0.2619	-0.3333	-0.3333	-0.3571	-0.2143	-0.1667	-0.4762	-0.3333	0.5833	0.6190	-0.2381	-0.1429	-0.1429
102	-0.2619	0.3809	-0.7143	-0.4286	-0.4286	0.8333	-0.6905	-0.6190	-0.6429	-0.4286	0.0833	0.5000	-0.7143	-0.4526	-0.5476
103	0.5476	0.2381	0.3809	0.5952	0.5952	0.2381	-0.1905	-0.0238	-0.0238	0.5952	0.4405	0.5000	0.6429	0.5476	0.7143
105	0.9238	0.5000	0.1190	0.6905	0.6905	0.2143	0.2143	0.4048	0.5952	0.6905	-0.1190	0.7143	0.5000	0.7857	0.5952
106	-0.2619	0.1667	-0.5238	-0.3095	-0.3095	-0.5238	-0.5238	-0.2619	-0.3810	-0.3095	0.1071	0.5000	-0.1190	-0.0476	-0.1190

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42	43
1															
2															
3															
4															
5															
6															
7															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27	1.0000														
28	0.0238	1.0000													
29	0.1667	0.1429	1.0000												
31	0.6190	0.4048	0.0000	1.0000											
33	0.7440	0.0774	0.3988	0.7559	1.0000										
34	0.4286	0.1190	0.2024	0.6310	0.6250	1.0000									
35	0.0238	0.5476	0.1429	0.2857	0.2202	0.6786	1.0000								
36	0.1845	0.2083	0.6726	0.0655	0.5298	-0.0833	0.0417	1.0000							
37	0.1488	0.0536	0.5417	-0.0536	0.4048	-0.2738	-0.0893	0.8988	1.0000						
38	0.5000	0.0238	0.1667	0.4762	0 5179	0.0119	-0.1429	0.3036	0.5655	1.0000					
39	-0.0476	0.0000	0.8571	-0.3810	0.0059	0.1547	0.1905	0.3155	0.1250	-0.3333	1.0000				
40	-0.1250	0.1726	0.6726	-0.2559	0.0417	-0.3452	-0.3155	0.6548	0.4345	-0.1250	0.5060	1.0000			
41	0.0655	0.0952	0.3929	0.5833	0.5238	0.4345	-0.0476	0.1905	-0.0833	0.0714	0.0357	0.3333	1.0000		
42	0.0893	0.3988	0.7202	0.0179	0.4107	0.3095	0.5417	0.7143	0.4464	-0.1964	0.6488	0.4286	0.1190	1.0000	
43	-0.3810	-0.0476	0.6667	-0.5952	-0.1012	-0.5357	-0.1667	0.7559	0 8036	0.0952	0.4524	0.6250	-0.2262	0.4702	1.0000
44	0.3095	0.6190	0.3095	0.8095	0.6726	0.3690	0.2381	0.4345	0.2202	0.3333	-0.1429	0.2321	0.7143	0.3631	-0.1429
45	0.5238	-0.1429	0.5000	0.4524	0.8155	0.8333	0.4286	0.3274	0.1250	0.0952	0.3571	-0.0655	0.4286	0.6369	-0.1429
46	-0.0476	-0.0714	0.4048	-0.1429	-0.0179	-0.6429	-0.6905	0 4464	0.5774	0.5238	0.0000	0.6250	0.1190	-0.1964	0.5476
47	-0.5714	0.0952	0.0000	-0.0238	-0.2679	-0.3690	-0.4524	0.0179	-0.1726	-0.2381	-0.2619	0.5536	0.5357	-0.3155	-0.0476
48	-0.5714	0.1905	-0.0952	-0.0714	-0.1726	-0.4762	-0.3095	0.3274	0.1607	-0.1905	-0.4286	0.5298	0.2857	-0.1011	0.1667
49	-0.0952	0.5476	0.3571	0.0000	0.1012	-0.3929	0.1190	0.6845	0.7917	0.4762	-0.0238	0.3393	-0.1786	0.3750	0.6667
50	0.1905	0.0238	0.0000	0.2619	0.1250	0.3929	0.4048	0.2559	0.0059	0.5714	-0.1190	-0.5417	-0.1548	-0.2559	-0.1905

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42	43
51	0.7143	0.2143	0.2857	0.4048	0.6488	-0.1071	-0.2143	0.6726	0.6250	0.5238	-0.1190	0.3155	0.0119	0.2917	0.1429
52	0.0179	-0.3869	-0.1011	0.0536	0.1250	-0.4048	-0.7440	0.2321	0.2321	0.2679	-0.4940	0.3869	0.2559	-0.4821	0.0059
53	0.2619	-0.2857	0.0714	0.3095	0.4702	-0.1429	-0.3810	0.3750	0.6131	0.8810	-0.5000	-0.0417	0.1429	-0.3155	0.1667
54	0.5000	0.3095	-0.0476	0.6190	0.3393	0.1547	0.0714	-0.0536	0.1726	0.8571	-0.4048	-0.2917	0.0476	-0.3393	-0.2619
55	0.6012	0.4583	-0.0774	0.9464	0.7024	0.7559	0.5060	-0.0059	-0.1786	0.2679	0.3274	-0.3095	0.4464	0.1250	-0.6845
56	0.3095	0.4762	0.3095	-0.1190	0.0655	0.0833	0.5238	0.3274	0.2559	-0.0952	0.4286	0.0893	-0.5714	0.6131	0.2143
57	0.1190	0.6190	0.5000	0.3571	0.5179	0.0476	0.2381	0.8036	0.5655	0.1190	0.1190	0.5060	0.3571	0.7321	0.3571
58	-0.1905	-0.1667	0.1667	-0.2738	-0.3071	-0.6190	-0.7143	0.5119	0.2857	-0.2500	-0.0952	0.8095	0.1607	0.0119	0.2857
59	0.0476	0.6190	0.4524	0.0952	0.1131	0.5238	0.8333	0.1726	-0.0774	-0.3571	0.6190	0.1369	0.0119	0.7440	0.0476
60	0.5238	0.5476	-0.0714	0.9286	0.6131	0.3214	0.1429	0.1488	0.0893	0.5714	-0.5238	-0.0893	0.4643	-0.0655	-0.4524
61	-0.3333	-0.2857	0.0714	-0.4286	-0.1964	-0.8333	-0.7381	0.4821	0.5655	0.1905	-0.2857	0.5774	-0.1429	-0.1964	0.5476
63	0.3333	0.3810	0.4762	0.5714	0.6488	0.0000	-0.1190	0.6726	0.6250	0.6429	-0.0952	0.3988	0.5357	0.2917	0.2619
64	-0.1488	0.6845	0.0298	0.3631	0.1190	0.1250	0.5655	0.2440	0.3333	0.4226	-0.2679	-0.0833	0.0655	0.1607	0.1607
65	-0.0952	0.5476	0.3571	0.0000	0.1012	-0.3929	0.1190	0.6845	0.7917	0.4762	-0.0238	0.3393	-0.1786	0.3750	0.6667
66	0.4286	-0.3333	0.5952	0.3810	0.8274	0.5952	0.0476	0.4583	0.2559	0.1667	0.3095	0.1607	0.6071	0.4345	0.0000
67	-0.7143	-0.1667	0.1429	-0.6190	-0.4345	-0.8333	-0.5952	0.4226	0.3750	-0.2143	-0.0952	0.7083	-0.0595	-0.1011	0.5952
68	0.5923	0.2619	0.3333	0.9048	0.8155	0.6429	0.1905	0.1845	0.0774	0.5476	-0.0714	-0.0417	0.7381	0.1369	-0.3571
69	0.2143	-0.0238	0.7143	-0.0476	0.5298	0.1905	0.3095	0.7798	0.7917	0.3333	0.4762	0.2083	-0.0595	0.7321	0.6667
71	-0.1488	-0.4226	0.2083	0.0893	0.2798	0.2857	0.0655	0.1369	0.2679	0.4107	-0.0893	-0.1250	0.3036	-0.1369	0.1607
72	-0.2857	-0.5476	-0.1429	-0.1667	-0.0893	-0.5476	-0.8095	0.1250	0.2202	0.2619	-0.5476	0.2798	0.1548	-0.6369	0.0952
73	-0.2857	-0.5476	-0.1429	-0.1667	-0.0893	-0.5476	-0.8095	0.1250	0.2202	0.2619	-0.5476	0.2798	0.1548	-0.6369	0.0952
74	-0.1905	0.6429	0.3571	-0.0952	-0.1369	0.0833	0.6905	0.2083	0.2679	0.0952	0.3571	0.0059	-0.3214	0.4702	0.3810
75	0.0476	0.0952	0.6667	-0.1667	0.1845	0.2143	0.4762	0.3988	0.5179	0.3095	0.5952	0.0179	-0.2262	0.5417	0.5714
76	0.6845	-0.1011	0.4345	0.6131	0.9345	0.7559	0.3393	0.3929	0.3036	0.4345	0.1488	-0.1369	0.4048	0.4167	-0.1250
77	0.5238	0.2619	0.1429	0.7857	0.7917	0.1786	-0.0714	0.5060	0.4821	0.7143	-0.4524	0.0774	0.4881	0.0774	-0.0952
78	0.0238	0.2143	0.5238	-0.1667	0.1845	-0.3452	0.0238	0.8155	0.9464	0.5000	0.2143	0.4821	-0.2024	0.4345	0.8810
79	-0.4167	0.1071	0.3214	-0.3214	-0.0655	-0.6964	-0.3452	0.7440	0.7917	0.2381	-0.0952	0.6190	-0.0595	0.1845	0.7976
80	-0.0952	-0.6429	0.5238	-0.6190	0.0893	-0.2024	-0.1905	0.5417	0.6131	0.0476	0.4286	0.2679	-0.3452	0.3036	0.6905
81	-0.0476	-0.2619	-0.1429	0.2381	0.2083	-0.3214	-0.7143	0.2083	0.1131	0.1905	-0.6190	0.3631	0.4881	-0.4583	-0.1667
82	0.7440	0.0774	0.3988	0.7559	1.0000	0.6250	0.2202	0.5298	0.4048	0.5179	0.0059	0.0417	0.5238	0.4107	-0.1012
83	0.5952	-0.0238	0.1429	0.5238	0.6726	0.0714	-0.1190	0.4464	0.6488	0.9524	-0.3810	-0.1012	0.0833	0.0774	0.0952
84	0.1667	0.0238	0.5714	-0.0952	0.3869	-0.1190	0.1190	0.7798	0.9345	0.5714	0.2381	0.2083	-0.2262	0.4940	0.7619
85	0.4048	0.4286	-0.1667	0.9048	0.4821	0.6905	0.4286	0.2500	-0.3512	0.3095	-0.4048	-0.3750	0.5000	-0.1607	-0.7619
86	0.7143	0.0952	0.3095	0.8333	0.9345	0.4524	-0.0238	0.4226	0.3393	0.6429	-0.1905	0.0417	0.6071	0.1607	-0.2143
87	0.1905	-0.0952	0.7381	-0.0476	0.4464	0.2857	0.3333	0.5536	0.6369	0.4048	0.5476	0.0654	-0.0357	0.5774	0.5714
88	-0.3929	-0.2976	0.1190	-0.4881	-0.2262	-0.8095	-0.7143	0.4940	0.5238	0.0595	-0.1905	0.6488	-0.1071	-0.1845	0.5714
90	0.3810	0.2381	-0.1190	0.3333	-0.0059	-0.0833	-0.1190	-0.2321	-0.0059	0.6429	-0.3095	-0.1488	-0.1429	-0.5179	-0.2619
91	0.1905	0.4048	0.3810	-0.0476	0.2321	-0.4286	-0.0238	0.8036	0.8512	0.4048	0.0595	0.4226	-0.3214	0.4702	0.6429
92	0.3631	-0.0774	0.4821	0.5060	0.5655	-0.4286	0.3690	-0.0836	-0.1369	0.2559	0.3512	-0.1607	0.5774	0.1726	-0.2798
93	0.1905	0.4048	0.3810	-0.0476	0.2321	-0.4286	-0.0238	0.8036	0.8512	0.4048	0.0476	0.4226	-0.3214	0.4702	0.6429
94	0.5060	0.5774	-0.1011	0.7917	0.3750	0.6369	0.4702	-0.2262	-0.3988	0.1131	-0.1726	-0.1726	0.3571	-0.0119	-0.7080
95	0.8333	0.0476	0.0952	0.7381	0.8631	0.2619	-0.1190	0.4226	0.4107	0.6905	-0.3810	-0.0417	0.2619	0.0417	-0.2381
96	0.2143	-0.2857	0.7143	-0.2143	0.3631	0.2738	0.2619	0.4702	0.5298	0.2381	0.6429	0.0654	-0.1667	0.5417	0.5238
97	-0.1429	-0.7143	0.1905	-0.1429	0.1012	0.2500	-0.0952	-0.1131	0.0298	0.2381	0.0476	-0.2559	0.1310	-0.3036	0.0238
98	-0.0952	-0.1667	-0.2143	0.3095	0.0893	0.1547	-0.3333	-0.2321	-0.6298	-0.3333	-0.3810	0.1964	0.6310	-0.3988	-0.6429
99	0.4048	-0.0714	0.2381	0.3810	0.5536	-0.2024	-0.4048	0.5457	0.7202	0.9048	-0.3571	0.1607	0.1905	-0.1250	0.2619
100	0.1905	-0.6667	0.0476	-0.4524	-0.1726	0.0476	-0.2143	-0.2679	-0.2679	-0.2619	0.2857	-0.0536	-0.4405	-0.2440	-0.1905
101	-0.5000	-0.0714	0.2857	-0.2381	-0.2321	-0.4167	-0.4286	0.2559	0.2202	0.0238	0.0476	0.6726	0.3691	-0.1726	0.4286
102	-0.4762	-0.2381	0.5238	-0.7143	-0.3988	-0.6905	-0.4524	0.3869	0.5298	0.1190	0.3810	0.5893	-0.2500	0.0059	0.8333
103	0.0952	0.5952	0.4762	0.6429	0.4821	0.6190	0.5714	0.1964	0.0298	0.2143	0.2143	0.0655	0.6786	0.4345	-0.0952
105	0.5952	0.2143	0.6190	0.5000	0.8521	0.3214	0.2143	0.3631	0.3512	0.6905	0.2143	0.3869	0.3690	0.5774	0.5000
106	-0.3571	-0.1905	0.0238	-0.1190	-0.1250	-0.6190	-0.6190	0.2559	0.4464	0.5000	-0.4524	0.3155	0.1190	-0.4821	0.3571

BANK NO	54	55	56	57	58	59	60	61	63	64	65	66	67	68
51														
52														
53														
54	1.0000													
55	0.4821	1.0000												
56	0.0000	0.0655	1.0000											
57	-0.0238	0.3155	0.2857	1.0000										
58	-0.4643	-0.3750	-0.2738	0.2857	1.0000									
59	-0.1429	0.3036	0.7143	0.3571	-0.3690	1.0000								
60	0.7143	0.8274	-0.0952	0.4524	-0.1071	-0.0238	1.0000							
61	-0.0952	-0.6012	-0.3333	0.0476	0.7381	-0.6190	-0.1667	1.0000						
63	0.4524	0.3512	-0.0952	0.7619	0.2143	-0.0952	0.6905	0.2143	1.0000					
64	0.5417	0.3571	0.1726	0.3988	-0.3155	0.2917	0.5060	0.0298	0.3869	1.0000				
65	0.3333	-0.1011	0.3571	0.6429	0.0595	0.1190	0.2619	0.3810	0.6190	0.6964	1.0000			
66	-0.1190	0.3274	-0.1905	0.2857	-0.0238	0.0714	0.1190	-0.2619	0.3810	-0.1964	-0.2381	1.0000		
67	-0.4286	-0.7321	-0.3571	0.0952	0.7500	-0.3810	-0.3810	0.8810	0.0476	0.0417	0.3095	-0.3571	1.0000	
68	0.5714	0.7798	-0.1905	0.3810	-0.2738	0.0952	0.7857	-0.4048	0.6905	0.2440	0.0238	0.6190	-0.5714	1.0000
69	-0.0238	-0.0536	0.4286	0.4762	-0.1548	0.3095	-0.1190	0.0000	0.3810	0.1964	0.5000	0.5476	-0.0952	0.1667
71	0.2083	0.0000	-0.4940	-0.2202	0.2440	0.2321	-0.0298	0.1607	0.0893	0.2976	-0.0179	0.4107	0.0774	0.2440
72	0.0476	-0.3750	-0.8095	-0.2857	0.5357	-0.8571	-0.0238	0.8095	0.1190	-0.0536	-0.0476	-0.0952	0.6429	-0.1429
73	0.0476	-0.3750	-0.8095	-0.2857	0.5357	-0.8571	-0.0238	0.8095	0.1190	-0.0536	-0.0476	-0.0952	0.6429	-0.1429
74	0.2381	-0.0059	0.6429	0.2619	-0.5595	0.6905	-0.0238	-0.2857	0.0476	0.6964	0.6190	-0.3333	-0.1667	-0.0714
75	0.1667	-0.1488	0.5000	0.1429	-0.5714	0.4762	-0.2381	-0.2381	0.1190	0.3393	0.4524	0.2143	-0.2619	0.0714
76	0.2559	0.6071	0.0893	0.2917	-0.3214	0.1964	0.3750	-0.4107	0.4107	0.0357	-0.0655	0.8750	-0.6250	0.7321
77	0.5714	0.6131	-0.1905	0.5952	0.1071	-0.2381	0.8571	0.1190	0.8810	0.3929	0.4048	0.4048	-0.1012	0.7619
78	0.2143	-0.2559	0.4048	0.5000	0.2738	0.0714	0.0238	0.6190	0.5000	0.4702	0.8810	0.0238	0.5000	-0.0714
79	-0.0714	-0.4762	-0.0833	0.4881	0.5536	-0.2619	-0.4760	0.8214	0.4881	0.3810	0.7738	-0.1786	0.8095	-0.2500
80	-0.3810	-0.6250	0.1190	-0.1190	0.0833	-0.0952	-0.6905	0.3333	-0.1429	-0.2560	0.0952	0.3333	0.2381	-0.3810
81	0.0476	0.0417	-0.7857	0.0714	0.6786	-0.7143	0.3571	0.6190	0.3810	-0.0655	-0.0952	0.0952	0.4762	0.1905
82	0.3393	0.7024	0.0655	0.5179	-0.0357	0.1131	0.6131	-0.1964	0.6488	0.1190	0.1012	0.8274	-0.4345	0.8155
83	0.7381	0.3512	-0.0476	0.2381	-0.1071	-0.3571	0.5952	0.2381	0.6667	0.3631	0.4524	0.3095	-0.1905	0.5476
84	0.2143	-0.1726	0.3810	0.4286	-0.0833	0.0714	-0.0238	0.2857	0.4762	0.3631	0.7381	0.2619	0.0952	0.0714
85	0.6190	0.9107	-0.1667	0.0714	-0.4881	0.1905	0.8095	-0.5714	0.2619	0.4464	-0.1667	0.1429	-0.6667	0.7619
86	0.5000	0.6845	-0.1667	0.4762	-0.0238	-0.1190	0.7619	-0.1429	0.7857	0.1250	0.1190	0.6905	-0.4286	0.9048
87	0.1190	-0.0774	0.3333	0.2381	-0.4286	0.3095	-0.1667	-0.1667	0.2857	0.1964	0.3810	0.5238	-0.2619	0.2381
88	-0.2262	-0.6369	-0.3214	0.0595	0.7976	-0.5476	-0.2500	0.9881	0.1548	-0.0298	0.3214	-0.2262	0.9286	-0.4524
90	0.8810	0.2202	0.0476	-0.2857	-0.2976	-0.1667	0.4762	0.0476	0.1667	0.3512	0.1905	-0.4048	-0.2381	0.2619
91	0.1905	-0.1131	0.5476	0.6667	0.2500	0.0952	0.1905	0.4048	0.5714	0.3750	0.8810	-0.1190	0.2381	-0.0476
92	0.2917	0.4762	-0.1488	-0.0655	-0.5890	0.3036	0.2202	-0.6369	0.1726	0.0357	-0.3155	0.6845	-0.6667	0.7321
93	0.1905	-0.1131	0.5476	0.6667	0.2500	0.0952	0.1905	0.4048	0.5714	0.3750	0.8810	-0.1190	0.2381	-0.0476
94	0.5060	0.8690	0.1726	0.1131	-0.2976	0.4226	0.7202	-0.5417	0.1369	0.3214	-0.1726	0.0298	-0.0589	0.6012
95	0.5476	0.6250	0.0000	0.3810	0.0476	-0.2381	0.7381	0.0000	0.6667	0.0893	0.1667	0.4762	-0.4048	0.6905
96	-0.0476	-0.1964	0.3810	0.0476	-0.3929	0.3095	-0.3810	-0.1905	0.0476	-0.0417	0.1667	0.5238	-0.2857	0.0714
97	0.0714	-0.2083	-0.5238	-0.5952	-0.3810	-0.2857	-0.3333	0.0000	-0.2381	-0.0536	-0.3571	0.3571	-0.0952	0.0714
98	-0.1905	0.2798	-0.7143	-0.1667	0.3929	-0.2619	0.2381	0.0238	-0.0714	-0.2321	-0.6429	0.1190	0.0952	0.2143
99	0.6190	0.1250	-0.2381	0.3095	0.1548	-0.5238	0.5238	0.4762	0.7857	0.2798	0.5238	0.2619	0.0952	0.4762
100	-0.2381	-0.3393	0.1190	-0.7857	-0.1310	-0.0238	-0.6190	-0.1190	-0.7381	-0.6131	-0.6667	0.0000	-0.2381	-0.4048
101	-0.0714	-0.3988	-0.4762	0.0238	0.6071	-0.2619	-0.0952	0.7381	0.1905	0.1607	0.1905	-0.0952	0.8571	-0.1190
102	-0.1190	-0.8631	-0.0476	-0.0952	0.2619	-0.1905	-0.5476	0.6429	0.0476	0.0298	0.4286	-0.2381	0.6667	-0.4524
103	0.3333	0.6012	0.0000	0.5238	-0.4167	0.5238	0.5476	-0.5238	0.5476	0.5417	0.2381	0.3810	-0.4048	0.7619
105	0.4048	0.4107	0.3095	0.6905	0.2738	0.1667	0.5000	0.3333	0.7857	0.3750	0.5952	0.6905	0.1190	0.5952
106	0.3095	-0.3750	-0.6190	-0.0476	0.3571	-0.6905	0.1190	0.8095	0.3810	0.3274	0.4048	-0.2381	0.6667	-0.0476

BANK NO	81	82	83	84	85	86	87	88	90	91	92	93	94	95
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														
61														
63														
64														
65														
66														
67														
68														
69														
71														
72														
73														
74														
75														
76														
77														
78														
79														
80														
81	1.0000													
82	0.2083	1.0000												
83	0.2857	0.6726	1.0000											
84	-0.2381	0.3869	0.6190	1.0000										
85	0.0952	0.4821	0.2857	-0.3333	1.0000									
86	0.3571	0.9345	0.7381	0.2619	0.5476	1.0000								
87	-0.5238	0.4464	0.4048	0.8333	-0.1905	0.2619	1.0000							
88	0.6071	-0.2262	0.1190	0.2381	-0.6190	-0.3024	-0.1786	1.0000						
90	0.0476	-0.0059	0.4762	0.0000	0.4286	0.1667	-0.1190	-0.0595	1.0000					
91	-0.0952	0.2321	0.4762	0.7619	-0.3333	0.1905	0.3571	0.3571	0.0952	1.0000				
92	0.2321	0.5655	0.1964	0.0298	0.5417	0.5060	0.4940	-0.6310	0.0893	-0.4345	1.0000			
93	-0.0952	0.2321	0.4762	0.7619	-0.3333	0.1905	0.3571	0.3571	0.0952	1.0000	-0.4345	1.0000		
94	0.0059	0.3750	0.1012	-0.3988	0.8988	0.3988	-0.2798	-0.5595	0.4702	-0.2083	0.4048	-0.2083	1.0000	
95	0.3571	0.8631	0.8333	0.3095	0.4286	0.9047	0.1429	-0.0833	0.2857	0.3571	0.2083	0.3571	0.3631	1.0000
96	-0.5952	0.3631	0.2619	0.7381	-0.3333	0.1190	0.9524	-0.1786	-0.1905	0.2381	0.4583	0.2381	-0.3393	0.0476
97	0.0000	0.1012	0.1905	0.1429	-0.0238	0.0000	0.4048	0.0000	0.0238	-0.5238	0.5417	-0.5238	-0.2440	-0.1429
98	0.6905	0.0893	-0.2619	-0.7857	0.3810	0.1429	-0.7381	0.0833	-0.0952	-0.6667	0.0774	-0.6667	0.4107	0.0238
99	0.4762	0.5536	0.9286	0.5952	0.0952	0.6905	0.3095	0.3690	0.4048	0.5238	0.0536	0.5238	-0.0893	0.7381
100	-0.3095	-0.1726	-0.2381	-0.1905	-0.3333	-0.3810	0.0000	-0.0714	0.0714	-0.4286	0.0893	-0.4286	-0.0774	-0.2381
101	0.6190	-0.2321	-0.0476	0.0000	-0.1905	-0.1429	-0.1429	0.7738	0.0952	0.0000	-0.1250	0.0000	-0.2083	-0.2619
102	-0.0476	-0.3988	0.0000	0.4762	-0.7381	-0.4048	0.3333	0.6548	0.0714	0.3333	-0.2559	0.3333	-0.6726	-0.4286
103	-0.1667	0.4821	-0.1429	0.0952	0.6429	0.5000	0.3333	-0.5238	0.0476	-0.0238	0.6726	-0.0238	0.5179	0.1667
105	0.3095	0.8512	0.8095	0.8095	0.2143	0.7857	0.6905	0.2976	0.1429	0.6905	0.3631	0.6905	0.1369	0.7857
106	0.6429	-0.1250	0.4286	0.2381	-0.1667	0.0476	-0.0952	0.7500	0.3333	0.1905	-0.2798	0.1905	-0.3393	0.0476

that the branches represented by Cell Nos. 1st, 2nd, 3rd, 4th, 8th and 9th belong to one bank. This is congruent with our expectation that within the same bank ranking of factors will generally be same. Branches represented by Cell Nos. 5th, 6th and 7th belong to two different banks and still their ranking is identical.

ii. The second observation is regarding the branches having no relationship. This is observed from 74 cells having RCC = 0. These cells are as follows :

(1, 67); (3, 20); (4, 21); (4, 74); (5, 21) (5, 74); (6, 38); (7, 35); (7, 51); (7, 77); (7, 80); (7, 59); (9, 29); (9, 47); (11, 21); (11, 74); (14, 29); (14, 49); (14, 65); (15, 59); (16, 84); (19, 90); (20, 72); (20, 73); (21, 22); (21, 39); (21, 81); (22, 38); (22, 85); (23, 28); (23, 44); (23, 50); (25, 49); (25, 69); (25, 65); (26, 29); (26, 48); (26, 72); (26, 73); (28, 39); (29, 31); (29, 47); (29, 50); (31, 49); (31, 65); (34, 63); (39, 46); (43, 66); (45, 98); (46, 96); (51, 75); (51, 103); (53, 103); (54, 56); (55, 71); (56, 95); (56, 103); (61, 95) (61, 97); (66, 100); (69, 88); (74, 80); (75, 86); (77, 101); (81, 97); (83, 102); (84, 101); (86, 97); (87, 100); (88, 97); (91, 101); (93, 101); (97, 98); and (101, 103).

The scrutiny of above going cells indicates that out of 74 cells only 11 cells represent branches of the one bank. Such cells are underlined above. This indicates that even between the branches of the same bank there may be independent ranking of the factors, to be looked into at the time of sanctioning the advance

iii. Moreover, an attempt is also made to examine for which branches the ranking of factors goes in the opposite direction to one another. When it is so RCC should be -1. In the table it can be seen that there is no cell with RCC $\leq$ -1. Hence, like agriculture segment, here also if the RCC is less than -0.9 it is considered as tending towards -1. However, here from the table it is observed that there is not even a single cell where the RCC is less than -0.9; i.e. there exists negative relationship but they go upto -0.89 and not beyond that. Hence these branches are not pointed out here.

iv. Further, an attempt is made to find out which banks go together so far as ranking of factors is concerned. Based on the linkage analysis, respondents are divided in 22 groups. This is presented in Table V.14.

TABLE V.14

LINKAGE ANALYSIS : SSI SEGMENT

Cluster No.	Bank branch Nos.
I	4, 5, 76, 92, 18, 45, 11, 34, 66
II	72, 73, 52, 106, 81, 98
III	91, 93, 2
IV	33, 82
V	24, 57
VI	61, 46, 88, 19, 67, 101, 47, 12, 48
VII	15, 86, 77, 95, 63, 51
VIII	17, 26, 60

IX	21, 49, 65, 64
X	3, 6, 94, 9, 102
XI	16, 44, 68, 103
XII	23, 29, 39
XIII	38, 25, 54, 83, 50, 90, 99, 53
XIV	87, 69, 75, 96, 74, 80, 100
XV	14, 55, 31, 85
XVI	37, 36, 78, 84, 105, 43, 79, 13
XVII	10, 27
XVIII	71, 97, 7
XIX	1, 28, 20
XX	22, 41
XXI	35, 59
XXII	40, 58

The bank which has a considerably high number of branches in Baroda is scattered over 17 groups and at maximum only 4 branches are falling in one group; and minimum is 1 branch, going along-with branch of another bank. This, necessarily implies that not only that all the branches of one bank are not going toggther; but even majority of the branches are also not going together. i.e. eventhough the staff of one bank is trained under one roof; they behave differently when they are given the opions.

The SSI segment is such a segment of the priority sector which is much more defined and specific forms and definitions

exist for the industrial advance (and SSI falls under the group of industrial advance). Eventhough all these things exist so far as ranking of subjective factors is concerned there exists a wide variation.

Another bank for which there are less number of branches in Baroda, as compared to previous one and the number of branches under study are also less than half of the bank mentioned in the previous para is also scattered over 9 clusters.

This is to convey that not only the bank having considerably high number of branches in Baroda has shown wide variations in ranking of the factors, but branches of other bank are also scattered over various groups.

(C) BMRT :

Table V.15 gives information regarding the rank correlation coefficient computed on the basis of difference in ranking of factors between various branches while sanctioning the loan to business man and retail trader. (BMRT).

On a review of a Table, it shows the following :

i. There are certain branches where there exists one to one relationship i.e. ranking by one branch is identical with that of another branch. Here the RCC is 1. Such relationship is observed for the following cells :

(4, 5); (4, 11); (5,11), (14, 31); (33, 82); (49, 65); (72, 73); (85, 97); and (91, 93).

TABLE V.15

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS BHRT

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16
1	1.0000														
2	0.6429	1.0000													
3	-0.0952	-0.1190	1.0000												
4	0.9286	0.6667	0.0476	1.0000											
5	0.9286	0.6667	0.0476	1.0000	1.0000										
6	0.7381	0.7381	0.3810	0.8571	0.8571	1.0000									
7	0.5476	0.5238	0.3571	0.7143	0.7143	0.8810	1.0000								
9	0.8810	0.7619	-0.2143	0.8810	0.8810	0.7143	0.4286	1.0000							
10	0.7381	0.2381	0.2619	0.7619	0.7619	0.6905	0.5714	0.6190	1.0000						
11	0.9286	0.6667	0.0476	1.0000	1.0000	0.8571	0.7143	0.8810	0.7619	1.0000					
12	0.6190	0.3095	0.4286	0.7143	0.7143	0.8095	0.7857	0.5000	0.9286	0.7143	1.0000				
13	0.4048	0.5952	0.5952	0.5238	0.5238	0.7857	0.7857	0.4048	0.5952	0.5238	0.7857	1.0000			
14	0.6190	0.2857	-0.3810	0.6190	0.6190	0.4048	0.3333	0.6905	0.7381	0.6190	0.6190	0.4048	1.0000		
15	0.6667	0.2143	-0.3571	0.5952	0.5952	0.3571	0.3571	0.5476	0.7619	0.5952	0.6429	0.4048	0.9048	1.0000	
16	0.8095	0.4524	-0.0714	0.7619	0.7619	0.6667	0.5476	0.7381	0 9048	0.7619	0.8333	0.5952	0.8810	0.9048	1.0000
17	0.7381	0.6429	0.1905	0.7619	0.7619	0.7143	0.4048	0.7143	0.6905	0.7619	0.6190	0.5952	0.4048	0.4524	0.6667
18	0.6667	0.4762	0.3810	0.6905	0.6905	0.6667	0.6667	0.6667	0.6667	0.6905	0.6667	0.6429	0.6667	0.5714	0.6667
19	0.2381	0.8095	-0.0238	0.3810	0.3810	0.6190	0.6190	0.4286	0.0238	0.3810	0.2619	0.7143	0.1905	0.0476	0.2381
20	0.5667	0.3571	-0.1905	0.1905	0.1905	0.0952	-0.1190	0.2381	0.1667	0.1905	0.0952	0.4048	0.1905	0.2857	0.2619
21	-0.1667	-0.1667	-0.5000	-0.2143	-0.2143	-0.4524	-0.6429	0.0476	0.0000	-0.2143	-0.2143	0.0238	0.3571	0.2857	0.1190
22	-0.1667	-0.3095	0.1667	-0.0952	-0.0952	0.0476	0.3571	-0.3333	0 3333	-0.0952	0.5000	0.5952	0.3095	0.4524	0.3333 -
23	-0.6667	-0.9762	-0.0476	-0.6429	-0.6429	-0.7857	-0.5476	-0.7381	-0.2619	-0.6429	-0.3333	-0.1667	-0.1667	-0.1190	-0.4047 -
24	0.6726	0.5774	-0.2679	0.7202	0.7202	0.4583	0.2440	0.6845	0.4821	0.7202	0.3512	0.3631	0.4821	0.5417	0.5536
25	0.4236	0.4048	0.1667	0.5952	0.5952	0.7381	0.9286	0.3571	0.5714	0.5953	0.7857	0.7857	0.5238	0.5238	0.6190
26	0.7857	0.8095	-0.2619	0.6905	0.6905	0.6667	0.4762	0.8095	0.5714	0.6905	0.5476	0.5952	0.6905	0.6905	0.8333
27	0.5238	0.4524	-0.2381	0.6429	0.6429	0.5476	0.4524	0.6905	0.6905	0.6429	0.6667	0.5952	0.9048	0.7619	0.8095
28	0.3333	0.4286	0.0476	0.3333	0.3333	0.2619	-0.0952	0.4048	0.3095	0.3333	0.1905	0.4048	0.1429	0.1905	0.3095
29	0.5714	0.3571	0.4048	0.6667	0.6667	0.5952	0.4048	0.6429	0.4762	0.6667	0.4048	0.3333	0.2619	0.0714	0.3095
31	0.6190	0.2857	-0.3810	0.6190	0.6190	0.4048	0.3333	0.6905	0.7381	0.6190	0.6190	0.4048	1.0000	0.9048	0.8809
33	0.6964	0.1012	-0.2619	0.6369	0.6369	0.3155	0.3393	0.5536	0.7559	0.6369	0.5893	0.2798	0.8631	0.9345	0.8154
34	0.6786	0.0357	0.4286	0.7143	0.7143	0.5714	0.5357	0.4048	0 7976	0.7143	0.7143	0.3690	0.3333	0.4524	0.5595
35	0.3333	-0.0952	0.3810	0.4048	0.4048	0.1905	-0.0476	0.2381	0.4286	0.4048	0.2381	0.1190	-0.0238	0.0238	0.1190
36	0.7857	0.4048	0.2143	0.8095	0.8095	0.6905	0.7857	0.5952	0.7857	0.8095	0.7857	0.6190	0.6905	0.7857	0.5714
37	-0.1786	-0.3512	-0.5530	-0.2679	-0.2679	-0.5655	-0.5893	-0.0417	-0.0536	-0.2679	-0.2679	-0.1011	0.4107	0.3393	0.0774
38	-0.1131	-0.2321	0.2559	0.1250	0.1250	0 2202	0.3631	0.0417	0.3631	0.1250	0.4702	0.4583	0.4226	0.1726	0.2321
39	0.5238	0.2619	-0.4286	0.6190	0.6190	0.2857	0.2143	0.5714	0.5714	0.6190	0.4286	0.3095	0.7619	0.7619	0.6429
40	0.2798	0.5179	0.1607	0.3750	0.3750	0.4107	0.0179	0.6131	0.3036	0.3750	0.2321	0.4583	0.3036	0.0298	0.2917
41	0.1905	0.0238	0.3929	0.2857	0.2857	0.4881	0.5952	0.1190	0.7024	0.2857	0.8452	0.7976	0.5476	0.5595	0.6547
42	0.0417	-0.4226	-0.1250	-0.0417	-0.0417	-0.3750	-0.3750	-0.1964	0.1607	-0.0417	-0.0535	-0.0417	0.0417	0.3155	0.0655
43	-0.7143	-0.7143	-0.2857	-0.7857	-0.7857	-0.9048	-0.8571	-0.6429	-0.4524	-0.7857	-0.5714	-0.1667	-0.1905	-0.1667	-0.4285
44	0.9286	0.5714	0.0476	0.9762	0.9762	0.8095	0.6190	0.8810	0.8571	0.9762	0.7619	0.5000	0.6905	0.6667	0.8333
45	0.7083	0.5774	0.5536	0.7321	0.7321	0.7917	0.6250	0.7083	0.6250	0.7321	0.6250	0.6131	0.3810	0.2679	0.5417
46	-0.3333	0.0000	-0.2857	-0.4286	-0.4286	-0.2857	-0.2857	-0.1429	-0.1905	-0.4286	-0.1429	0.3333	0.2143	0.1190	0.0714
47	-0.3333	0.2381	0.2381	-0.1190	-0.1190	0.2381	0.3810	-0.2143	-0.0714	-0.1190	0.2381	0.7857	-0.0476	-0.0714	0.0000
48	-0.3810	0.1667	-0.1190	-0.1190	-0.1190	0.0000	0.1310	-0.1429	-0.2143	-0.1190	-0.0238	0.5238	0.0476	-0.0476	-0.1190
49	-0.1905	-0.1190	-0.4048	-0.2381	-0.2381	-0.4286	-0.6905	0.0714	-0.0476	-0.2381	-0.2619	0.0235	0.2619	0.1429	0 0476
50	0.8810	0.5952	0.2381	0.9048	0.9048	0.8571	0.5952	0.8571	0.8809	0.9048	0.8095	0.5952	0.6190	0.5714	0.8333

BANK NO	1	2	3	4	5	6	7	9	10	11	12	13	14	15
51	0.4524	0.2857	-0.8571	0.2619	0.2619	-0.0952	-0.1905	0.4762	0.1667	0.2619	-0.0476	0.0238	0.6429	0.6905
52	-0.1011	0.2917	-0.3036	0.0179	0.0179	0.1250	0.3393	0.0893	-0.1369	0.0179	0.0536	0.4702	0.3274	0.1726
53	0.3333	0.2143	-0.2143	0.3810	0.3810	0.2857	0.1190	0.5238	0.6429	0.3810	0.5476	0.5000	0.8571	0.7143
54	-0.2381	0.1905	-0.4524	-0.2143	-0.2143	-0.0952	0.0476	0.0000	-0.3095	-0.2143	-0.1667	0.3095	0.2381	0.0476
55	0.9226	0.5655	0.0417	0.9702	0.9702	0.7917	0.6131	0.8512	0.8512	0.9702	0.7559	0.5060	0.6726	0.6845
56	0.5476	0.6190	-0.2143	0.5238	0.5238	0.3095	-0.0476	0.6190	0.1905	0.5238	0.0238	0.2143	0.1429	0.1667
57	-0.1905	0.0238	-0.1190	0.0000	0.0000	-0.0476	-0.1667	0.0714	0.1429	0.0000	0.1190	0.4048	0.3096	0.1905
58	-0.0536	0.4702	0.2679	0.1964	0.1964	0.4821	0.4940	0.2321	0.0714	0.1964	0.3155	0.7440	0.1845	-0.0655
59	0.2381	-0.0714	0.3810	0.1905	0.1905	0.0476	-0.1190	0.0000	0.2381	0.1905	0.0952	0.1667	-0.2381	0.0000
60	-0.8333	-0.1905	-0.0952	-0.6905	-0.6905	-0.4762	-0.3810	-0.5238	-0.6905	-0.6905	-0.5238	0.2143	-0.3571	-0.5476
61	0.2619	0.7619	-0.1190	0.4048	0.4048	0.5952	0.6667	0.4048	0.0714	0.4048	0.3095	0.7143	0.2857	0.1905
63	0.5476	0.4286	0.0476	0.6429	0.6429	0.6667	0.5238	0.6905	0.8095	0.6429	0.8095	0.6905	0.8571	0.6905
64	0.8571	0.5714	0.4762	0.8810	0.8810	0.8810	0.7619	0.7143	0.7619	0.8810	0.7619	0.6190	0.4048	0.4286
65	-0.1905	-0.1190	-0.4048	-0.2381	-0.2381	-0.4286	-0.6905	0.0714	-0.0476	-0.2381	-0.2619	0.0238	0.2619	0.1429
66	-0.3333	-0.8810	-0.0952	-0.3571	-0.3571	-0.5952	-0.4524	-0.4048	0.0714	-0.3571	0.0952	-0.1667	0.1667	0.1667
67	-0.8333	-0.2619	-0.2143	-0.6905	-0.6905	-0.5476	-0.3571	-0.6190	-0.6667	-0.6905	-0.5000	0.2143	-0.3095	-0.3810
68	0.7381	0.2857	0.0714	0.6905	0.6905	0.6190	0.5238	0.6190	0.9524	0.6905	0.8810	0.5952	0.8333	0.8810
69	-0.0714	-0.6667	-0.2857	-0.1905	-0.1905	-0.5714	-0.5714	-0.1667	0.1429	-0.1905	-0.1429	-0.2381	0.2619	0.3333
71	-0.1488	-0.4107	0.3869	0.0179	0.0179	0.0655	0.1845	-0.0595	0.3274	0.0179	0.3631	0.3274	0.2917	0.0893
72	-0.4048	0.0238	-0.1905	-0.2381	-0.2381	-0.0476	0.1667	-0.1429	-0.2619	-0.2381	-0.0476	0.4048	0.1667	-0.0714
73	-0.4048	0.0238	-0.1905	-0.2381	-0.2381	-0.0476	0.1667	-0.1429	-0.2619	-0.2381	-0.0476	0.4048	0.1667	-0.0714
74	-0.2619	-0.0714	0.7143	-0.0476	-0.0476	0.3333	0.5476	-0.3810	0.1667	-0.0476	0.4762	0.7857	-0.2143	-0.1190
75	0.7381	0.7143	0.1190	0.8571	0.8571	0.9286	0.9048	0.7143	0.7143	0.8571	0.8333	0.7857	0.6190	0.5952
77	0.6905	0.7143	-0.0952	0.7857	0.7857	0.7619	0.5714	0.8333	0.7143	0.7857	0.7143	0.6905	0.7857	0.6667
78	0.5714	0.7619	0.0952	0.5952	0.5952	0.5714	0.3810	0.5714	0.3809	0.5952	0.3810	0.6429	0.2857	0.3809
79	-0.5952	-0.2976	-0.4524	-0.5357	-0.5357	-0.6071	-0.5833	-0.3214	-0.3690	-0.5357	-0.4048	0.0833	0.1071	-0.0119
80	-0.5476	-0.8571	-0.2619	-0.6190	-0.6190	-0.8333	-0.6190	-0.6190	-0.4286	-0.6190	-0.5476	-0.3571	-0.2143	-0.1905
81	0.2857	0.4048	-0.3810	0.4048	0.4048	0.4048	0.5476	0.4048	0.3571	0.4048	0.4762	0.5952	0.7381	0.6429
82	0.6964	0.1012	-0.2679	0.6369	0.6369	0.3155	0.3452	0.5536	0.7559	0.6369	0.5893	0.2798	0.8631	0.9345
83	0.4048	0.1429	-0.4762	0.3333	0.3333	0.0952	-0.0476	0.5952	0.4286	0.3333	0.2381	0.1429	0.8333	0.6190
85	0.9048	0.5476	0.1429	0.9286	0.9286	0.8333	0.6429	0.8333	0.9286	0.9286	0.8571	0.5952	0.7143	0.7143
86	0.7619	0.6667	0.0000	0.8571	0.8571	0.8333	0.6667	0.8571	0.8095	0.8571	0.8095	0.6905	0.8095	0.6905
87	0.2143	-0.1429	0.7143	0.3571	0.3571	0.5238	0.5714	0.0714	0.7619	0.3571	0.8571	0.6905	0.3095	0.3333
88	0.8095	0.8095	-0.1905	0.7857	0.7857	0.6667	0.3810	0.9048	0.6190	0.7857	0.5238	0.5476	0.6905	0.6429
90	0.8988	0.7917	-0.0417	0.9226	0.9226	0.8631	0.7440	0.8988	0.7440	0.9226	0.7440	0.6607	0.7559	0.7202
81	0.5238	0.4048	-0.0238	0.5476	0.5476	0.5238	0.4524	0.4762	0.7381	0.5476	0.7381	0.7143	0.7143	0.8095
92	0.9137	0.7500	-0.0119	0.9405	0.9405	0.8690	0.7738	0.8690	0.7738	0.9405	0.7738	0.6548	0.7381	0.7381
93	0.5238	0.4048	-0.0238	0.5476	0.5476	0.5238	0.4524	0.4762	0.7381	0.5476	0.7381	0.7143	0.7143	0.8095
94	0.8631	0.7917	0.3155	0.8869	0.8869	0.8988	0.6726	0.7917	0.6726	0.8869	0.6726	0.6607	0.3631	0.3988
95	0.4226	0.3036	-0.1369	0.5536	0.5536	0.4226	0.2083	0.7202	0.5655	0.5536	0.4583	0.3631	0.7679	0.4464
96	0.5417	0.5179	0.0417	0.6488	0.6488	0.7559	0.8750	0.4940	0.6369	0.6488	0.8036	0.7917	0.6607	0.6607
97	0.9047	0.5476	0.1429	0.9286	0.9286	0.8333	0.6429	0.8333	0.9286	0.9286	0.8571	0.5952	0.7143	0.7143
98	-0.0238	0.0952	-0.0476	0.1667	0.1667	0.2857	0.6667	-0.0952	0.1190	0.1667	0.3810	0.5952	0.2619	0.3095
99	0.5714	0.3571	-0.5000	0.5000	0.5000	0.3095	0.2143	0.6428	0.6190	0.5000	0.5000	0.4048	0.9524	0.9048
100	0.8810	0.4286	0.0952	0.9524	0.9524	0.7381	0.5714	0.8095	0.8333	0.9524	0.7143	0.4048	0.6190	0.5952
101	0.7143	0.6190	-0.2381	0.7381	0.7381	0.5952	0.6190	0.6667	0.6190	0.7381	0.6190	0.6190	0.7857	0.8571
102	-0.8095	-0.5476	-0.0238	-0.8810	-0.8810	-0.7381	-0.6905	-0.6905	-0.5714	-0.8810	-0.5476	0.0238	-0.3810	-0.4285
103	0.3095	-0.4286	0.1190	0.3333	0.3333	0.1190	0.3333	0.0000	0.6190	0.3333	0.5476	0.2143	0.4286	0.5952
105	0.5952	0.4048	0.3095	0.7143	0.7143	0.5952	0.4048	0.6905	0.7857	0.7143	0.6905	0.6190	0.7262	0.5952
106	-0.2857	0.0238	-0.1667	-0.1905	-0.1905	-0.0476	-0.0714	0.0714	0.0000	-0.1905	0.0714	0.4048	0.4048	0.0952

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42	43
1															
2															
3															
4															
5															
6															
7															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27	1.0000														
28	0.3333	1.0000													
29	0.2381	0.1190	1.0000												
31	0.9048	0.1429	0.2619	1.0000											
33	0.6488	0.0774	0.3036	0.8631	1.0000										
34	0.2262	0.1190	0.6310	0.3333	0.6250	1.0000									
35	0.0000	0.5476	0.5714	-0.0238	0.2202	0.6786	1.0000								
36	0.5952	0.1190	0.5238	0.6905	0.8512	0.7976	0.3095	1.0000							
37	0.2440	0.0536	-0.1250	0.4107	0.4048	-0.2798	-0.0893	0.0893	1.0000						
38	0.4583	-0.4345	0.3750	0.4226	0.2797	0.1786	-0.1369	0.4107	0.1488	1.0000					
39	0.8095	0.4762	0.1429	0.7619	0.7321	0.3333	0.3095	0.5952	0.3512	0.1131	1.0000				
40	0.4940	0.6607	0.5536	0.3036	0.0059	0.0179	0.3690	0.0774	0.1369	0.1667	0.2917	1.0000			
41	0.5952	-0.0238	0.0714	0.5476	0.4524	0.3631	-0.1190	0.6071	-0.0119	0.6488	0.2500	0.0833	1.0000		
42	-0.0774	0.3988	-0.1488	0.0417	0.4107	0.3095	0.5417	0.2917	0.4464	-0.3631	0.4107	-0.1786	-0.0833	1.0000	
43	-0.2857	-0.0476	-0.4286	-0.1905	-0.1012	-0.5397	-0.1667	-0.2619	0.8036	-0.0655	-0.1429	-0.1012	-0.1548	0.4702	1.0000
44	0.6905	0.4048	0.6429	0.6905	0.6964	0 7500	0.4762	0.7857	-0.1845	0.1369	0.6667	0.4226	0.3452	0.0417	-0.7143
45	0.3512	0.2321	0.9107	0.3750	0.3869	0.6667	0.4464	0.6607	-0.1250	0.3810	0.1369	0.5655	0.3631	-0.1250	-0.3750
46	0.1905	-0.0714	-0.3333	0.2143	-0.0179	-0.6429	-0.6905	-0.0476	0.5774	0.1607	-0.1429	0.1726	0.2857	-0.1964	0.5476
47	0.2857	0.0952	-0.2857	-0.0476	-0.2679	-0.3690	-0.4524	0.1190	-0.1726	0.2679	0.0000	0.1369	0.5119	-0.3155	-0.0476
48	0.3810	0.1905	-0.2619	0.0476	-0.1726	-0.4762	-0.3095	0.0476	0.1607	0.2440	0.3095	0.2321	0.2143	-0.1012	0.1667
49	0.2857	0.5476	-0.1190	0.2619	0.1012	-0.3929	0 1190	-0.1667	0.7917	-0.1011	0.3571	0.5576	-0.1071	0.3750	0.6667
50	0.6429	0.4762	0.6667	0.6190	0.5655	0.7143	0.4762	0.6905	-0.2440	0.1488	0.5000	0.5576	0.4286	-0.0535	-0.6905

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42	43
51	0.4524	0.2143	-0.0952	0.6429	0.6488	-0.1071	-0.2143	0.4048	0.6250	-0.2917	0.5714	0.0774	-0.0833	0.2917	0.1429
52	0.3988	-0.3869	-0.0417	0.3274	0.1250	-0.4048	-0.7440	0.3274	0.2321	0.4762	0.0893	0.0179	0.3155	-0.4821	0.0059 -
53	0.9048	0.4286	0.1190	0.8571	0.5893	0.1071	0.0476	0.4048	0.4940	0.4226	0.7143	0.5655	0.5952	0.0893	0.0714
54	0.2381	-0.4762	-0.1429	0.2381	-0.0059	-0.6429	-0.9286	0.1190	0.3274	0.3393	-0.1429	0.0179	0.1667	-0.6012	0.1190 -
55	0.6845	0.4583	0.5892	0.6726	0.7024	0.7559	0.5060	0.7917	-0.1786	0.0833	0.7083	0.3929	0.3393	0.1250	-0.6845
56	0.2619	0.8571	0.3095	0.1429	0.1488	0.1548	0.5238	0.2143	-0.0179	-0.5893	0.5000	0.5893	-0.3571	0.2917	-0.2857
57	0.5714	0.5952	-0.1190	0.3095	0.0774	-0.2262	0.1667	0.0238	0.4345	0.2083	0.5952	0.5576	0.2500	0.2559	0.3333
58	0.4702	0.0417	0.2798	0.1845	-0.1369	-0.1964	-0.2798	0.2202	-0.1011	0.5774	0.0655	0.5178	0.4345	-0.5774	-0.2083
59	-0.2381	0.6190	0.2381	-0.2381	0.1131	0.5238	0.8333	0.2619	-0.0774	-0.4821	0.1429	0.1250	-0.1548	0.7440	0.0476
60	-0.1667	-0.2143	-0.2857	-0.3571	-0.5655	-0.8690	-0.5952	-0.3571	0.3155	0.2083	-0.3810	0.1488	-0.0833	-0.3512	0.5238 -
61	0.5000	0.0000	0.0952	0.2857	0.0536	-0.1905	-0.5238	0.4286	-0.2559	0.1845	0.1905	0.2202	0.3095	-0.5774	-0.5238
63	0.9286	0.2857	0.3810	0.8571	0.5893	0.3452	0.0476	0.5952	0.1131	0.5655	0.5714	0.5655	0.7381	-0.2083	-0.3571
64	0.3810	0.2619	0.7857	0.4048	0.5179	0.8452	0.5000	0.8095	-0.3393	0.1964	0.2857	0.3393	0.3929	-0.0059	-0.6429
65	0.2857	0.5476	-0.1190	0.2619	0.1012	-0.3929	0.1190	-0.1667	0.7917	-0.1011	0.3571	0.5576	-0.1071	0.3750	0.6667 -
66	-0.0952	-0.4167	0.0238	0.1667	0.3988	0.1310	0.0952	0.2143	0.6845	0.4107	0.0238	-0.2679	0.1548	0.4583	0.6429 -
67	-0.1190	-0.1667	-0.5000	-0.3095	-0.4345	-0.8333	-0.5952	-0.2619	0.3750	0.1131	-0.1905	-0.0536	-0.0357	-0.1012	0.5952 -
68	0.7381	0.2619	0.3095	0.8333	0.8155	0.6429	0.1905	0.7857	0.0774	0.3036	0.5714	0.2321	0.7381	0.1369	-0.3571
69	-0.0238	-0.0238	0.0238	0.2619	0.5298	0.1905	0.3095	0.2381	0.7917	0.0536	0.2619	-0.1190	-0.0357	0.7321	0.6667 -
71	0.2321	-0.4226	0.4583	0.2917	0.2798	0.2857	0.0655	0.3750	0.2679	0.9286	-0.0179	0.1309	0.5417	-0.1369	0.1607 -
72	0.2619	-0.5476	-0.0714	0.1667	-0.0893	-0.5476	-0.8095	0.1190	0.2202	0.6250	-0.1429	0.0298	0.3214	-0.6369	0.0952 -
73	0.2619	-0.5476	-0.0714	0.1667	-0.0893	-0.5476	-0.8095	0.1190	0.2202	0.6250	-0.1429	0.0298	0.3214	-0.6369	0.0952 -
74	0.0238	-0.0714	-0.0714	-0.2143	-0.1845	0.1429	-0.0952	0.3095	-0.4464	0.3631	-0.1905	-0.1131	0.6547	-0.1369	-0.1905 -
75	0.7381	0.1905	0.4048	0.6190	0.5060	0.4881	0.0000	0.7857	-0.3750	0.2917	0.5000	0.2798	0.5952	-0.3036	-0.8095
77	0.9285	0.5000	0.3571	0.7857	0.5298	0.2976	0.0952	0.5952	-0.0179	0.2559	0.7143	0.6131	0.5119	-0.1726	-0.5238
78	0.4762	0.8571	0.2143	0.2857	0.2559	0.2500	0.3810	0.4524	-0.0298	-0.2798	0.5714	0.5298	0.1548	0.3155	-0.1905
79	0:1905	0.1071	-0.4048	0.1071	-0.0655	-0.6964	-0.3452	-0.2024	0.7917	0.1429	0.1905	0.2024	0.0000	0.1845	0.7976
80	-0.5000	-0.6429	-0.0952	-0.2143	0.0893	-0.2024	-0.1905	0.0238	0.6131	0.1250	-0.3333	-0.4821	-0.2500	0.3036	0.6905 -
81	0.8095	-0.1190	-0.0238	0.7381	0.5179	-0.0595	-0.5238	0.5952	0.1845	0.4821	0.5476	0.0893	0.5833	-0.3036	-0.2619
82	0.6488	0.0774	0.3036	0.8631	1.0000	0.6250	0.2202	0.8512	0.4048	0.2798	0.7321	0.0059	0.4524	0.4107	-0.1011
83	0.6429	-0.0238	0.3571	0.8333	0.6726	0.0714	-0.1190	0.4286	0.6488	0.4107	0.4524	0.3988	0.2500	-0.0774	0.0952
85	0.7143	0.4286	0.5714	0.7143	0.6964	0.7500	0.4286	0.7857	-0.1845	0.1726	0.6190	0.4226	0.5000	0.0416	-0.6667
86	0.9048	0.3810	0.4762	0.8095	0.6014	0.4524	0.1429	0.6905	-0.0893	0.3512	0.6667	0.5576	0.5914	-0.2083	-0.6190
87	0.3571	0.0238	0.3571	0.3095	0.3631	0.6785	0.3333	0.5952	-0.2321	0.6131	0.1429	0.1131	0.8452	0.0416	-0.2857
88	0.7619	0.6905	0.3810	0.6904	0.5298	0.2976	0.2381	0.5476	0.0774	-0.0893	0.6905	0.6488	0.2381	0.0416	-0.4048
90	0.7798	0.3274	0.5060	0.7559	0.6607	0.5119	0.1131	0.8036	-0.1131	0.1905	0.6131	0.4107	0.4583	-0.1369	-0.6369
81	0.8095	0.5714	-0.0238	0.7143	0.6131	0.3333	0.1190	0.6190	0.1369	0.1250	0.7381	0.3036	0.6905	0.2798	-0.1667
92	0.7500	0.3095	0.5000	0.7381	0.6905	0.5833	0.1548	0.8452	-0.1548	0.1726	0.6190	0.3393	0.4702	-0.0833	-0.6667
93	0.8095	0.5714	-0.0238	0.7143	0.6131	0.3333	0 1190	0.6190	0.1369	0.1250	0.7381	0.3036	0.6905	0.2798	-0.1667
94	0.4583	0.5774	0.6131	0.3631	0.3750	0.6369	0.4702	0.6607	-0.3988	-0.0952	0.3988	0.5000	0.2619	-0.0119	-0.7087
95	0.8036	0.1964	0.6012	0.7679	0.4940	0.2202	0.1726	0.4107	0.3155	0.6012	0.5655	0.7143	0.3393	-0.2440	-0.2202
96	0.7321	-0.0536	0.1845	0.6607	0.5476	0.3452	-0.2798	0.7917	-0.2143	0.4464	0.4345	0.0595	0.1559	-0.3095	-0.6012
97	0.7143	0.4286	0.5714	0.7143	0.6964	0.7500	0.4286	0.7857	-0.1845	0.1726	0.6190	0.4226	0.5000	0.0416	-0.6667
98	0.3571	-0.4524	-0.1429	0.2619	0 2679	0.0119	-0.5476	0.5952	-0.1369	0.4702	0.1905	-0.3750	0.5595	-0.2559	-0.2857
99	0.8571	0.2381	0.0714	0.9524	0.7917	0.1429	-0.1667	0.5952	0.4821	0.2202	0.7143	0.2917	0.4881	0.0774	-0.0714
100	0.5952	0.3333	0.7143	0.6190	0.6964	0.8333	0.5952	0.7857	-0.1845	0.1726	0.6429	0.3631	0.2738	0.1131	-0.6905
101	0.8095	0.3571	0.1667	0.7857	0.7559	0.3690	0.0238	0.8095	0.1845	0.1488	0.8095	0.1964	0.4881	0.2083	-0.2619
102	-0.4286	-0.2381	-0.3571	-0.3810	-0.3988	-0.6905	-0.4524	-0.3571	0.5298	0.0298	-0.5714	-0.0417	-0.0595	0.0059	0.8333
103	0.2143	-0.2857	0.2143	0.4286	0.7679	0.7500	0.2857	0.7857	0.1250	0.3869	0.3571	-0.4107	0.5000	0.4583	-0.0952
105	0.7857	0.6905	0.6190	0.6905	0.6131	0.6071	0.6905	0.6190	0.2202	0.4583	0.7857	0.7440	0.5119	0.3869	0.0238
106	0.4762	-0.1667	0.0238	0.4048	0.0298	-0.4881	-0.5476	0.0238	0.4821	0.6369	0.0238	0.4345	0.4167	-0.4821	0.2857

BANK NO	54	55	56	57	58	59	60	61	63	64	65	66	67	68
51														
52														
53														
54	1.0000													
55	-0.3512	1.0000												
56	-0.4286	0.5655	1.0000											
57	0.0000	0.1131	0.3095	1.0000										
58	0.5774	0.0833	-0.0536	0.4107	1.0000									
59	-0.8571	0.3036	0.5476	0.0714	-0.4107	1.0000								
60	0.6190	-0.7679	-0.3809	0.3571	0.5774	-0.4762	1.0000							
61	0.6190	0.2559	0.0952	0.1190	0.7679	-0.4762	0.2381	1.0000						
63	0.1905	0.6845	0.1429	0.4286	0.5060	-0.2143	-0.2143	0.4286	1.0000					
64	-0.2143	0.8393	0.3809	-0.1904	0.2083	0.3809	-0.5714	0.3095	0.5238	1.0000				
65	0.0476	-0.1012	0.3571	0.7143	0.0059	0.1190	0.3095	-0.2619	0.1905	-0.3333	1.0000			
66	-0.0714	-0.2679	-0.5476	0.0238	-0.3274	0.0238	0.0000	-0.6667	-0.0714	-0.1905	0.2619	1.0000		
67	0.5476	-0.7321	-0.3571	0.4524	0.4583	-0.3809	0.9286	0.2381	-0.2619	-0.6429	0.3095	0.0476	1.0000	
68	-0.0952	0.7798	0.1429	0.1190	0.0654	0.0952	-0.6190	0.1667	0.8333	0.6667	0.0238	0.0714	-0.5714	1.0000
69	-0.2381	-0.0536	-0.0952	0.1190	-0.5297	0.3095	-0.1905	-0.7143	-0.0714	-0.1190	0.5000	0.8810	-0.0952	0.1667
71	0.2083	0.0000	-0.5774	0.1012	0.3750	-0.2321	0.1964	-0.0893	0.3869	0.2083	-0.0179	0.6607	0.0774	0.2440
72	0.9047	-0.3750	-0.5952	0.1429	0 7440	-0.8571	0.7143	0.5952	0.2381	-0.2143	-0.0476	0.0238	0.6429	-0.1429
73	0.9047	-0.3750	-0.5952	0.1429	0.7440	-0.8571	0.7143	0.5952	0.2381	-0.2143	-0.0476	0.0238	0.6429	-0.1429
74	-0.0476	-0.0655	-0.4048	0.1429	0.5060	0.4760	0.1905	0.3095	0.1429	0.2143	-0.4286	-0.1667	0.2619	0.0952
75	0.0952	0.8036	0.2381	0.0714	0.4940	-0.1190	-0.4286	0.7143	0.7619	0.7619	-0.3571	-0.5000	-0.4048	0.7143
77	0.1190	0.8036	0.4762	0.4524	0.4940	-0.0952	-0.2857	0.5952	0.9048	0.5714	0.1667	-0.4048	-0.2857	0.7381
78	-0.0952	0.6250	0.8572	0.4762	0.3036	0.5238	-0.0952	0.5000	0.3809	0.5000	0.2857	-0.4762	0.0000	0.3809
79	0.4524	-0.4762	-0.1071	0.7024	0.2619	-0.2619	0.7381	0.0000	0.0238	-0.6190	0.7738	0.3333	0.8095	-0.2500
80	0.1190	-0.6250	-0.6190	-0.2857	-0.3750	-0.0952	0.2143	-0.5952	-0.5238	-0.3809	0.0952	0.8333	0.2381	-0.3809
81	0.6429	0.3512	-0.1190	0.3095	0.5774	-0.5952	0.0952	0.7619	0.6905	0.1905	-0.0238	-0.1429	0.1905	0.5000
82	-0.0059	0.7024	0.1488	0.0774	-0.1369	0.1131	-0.5655	0.0536	0.5893	0.5178	0.1012	0.3988	-0.4345	0.8155
83	0.4286	0.3512	0.0476	0.1667	0.1369	-0.3571	-0.0952	0.0952	0.6429	0.2143	0.4524	0.3571	-0.1905	0.5476
85	-0.2857	0.9702	0.4524	0.0952	0.1369	0.2381	-0.7381	0.2619	0.7857	0.8571	-0.0952	-0.2381	-0.7381	0.8809
86	0.0714	0.8631	0.3809	0.3095	0.4583	-0.0952	-0.4048	0.5476	0.9286	0.6905	0.0238	-0.3333	-0.4286	0.8095
87	-0.3095	0.4226	-0.2857	0.1190	0.2559	0.1905	-0.3333	-0.0238	0.5714	0.5714	-0.2619	0.2143	-0.3333	0.6429
88	0.0238	0.8155	0.7619	0.3571	0.2679	0.1667	-0.3571	0.4762	0.7143	0.5952	0.3095	-0.4286	-0.3571	0.6667
90	0.1488	0.8869	0.4583	0.0893	0.3690	-0.0059	-0.4464	0.6369	0.7798	0.7917	-0.1011	-0.3631	-0.4464	0.7798
81	-0.0238	0.6607	0.3571	0.5476	0.2440	0.1667	-0.2857	0.3809	0.7619	0.4048	0.2619	-0.1429	-0.1190	0.8095
92	0.0714	0.9107	0.4405	0.0476	0.3095	0.0476	-0.5238	0.5952	0.7500	0.8217	-0.1667	-0.3452	-0.5000	0.7976
93	-0.0238	0.6607	0.3333	0.5476	0.2440	0.1667	-0.2857	0.3809	0.7619	0.4048	0.2619	-0.1429	-0.1190	0.8095
94	-0.2798	0.8690	0.6726	0.0179	0.2440	0.4226	-0.5535	0.4226	0.5298	0.8988	-0.1726	-0.5417	-0.5893	0.6012
95	0.1965	0.5595	0.2083	0.4345	0.4583	-0.2679	-0.0893	0.2321	0.8274	0.3869	0.3631	0.0893	-0.2321	0.5298
96	0.3393	0.5952	-0.0774	0.0654	0.5238	-0.3274	-0.2440	0.7440	0.7440	0.5774	-0.3631	-0.2917	-0.1726	0.7083
97	-0.2857	0.9702	0.4524	0.0952	0.1369	0.2381	-0.7381	0.2619	0.7857	0.8571	-0.0952	-0.2381	-0.7381	0.8809
98	0.4762	0.0654	-0.4762	0.0238	0.5060	-0.4762	0.1429	0.6667	0.2619	0.1429	-0.5000	-0.0952	0.3095	0.1905
99	0.3333	0.5655	0.2143	0.3333	0.1488	-0.2381	-0.7381	0.3333	0.7857	0.2857	0.3809	0.0714	-0.1905	0.7857
100	-0.4286	0.9702	0.4762	0.0238	0.0298	0.3095	-0.8095	0.1190	0.6190	0.8571	-0.1667	-0.1429	-0.8095	0.7143
101	0.2619	0.7440	0.4286	0.3333	0.3036	0.0476	-0.2381	0.6429	0.6667	0.5238	0.0952	-0.1429	-0.0714	0.7143
102	0.3809	-0.8631	-0.5000	0.0952	0.0774	0.1905	0.7381	-0.2857	-0.3571	-0.5714	0.4286	0.4048	0.6667	-0.4524
103	-0.3333	0.3988	-0.3333	-0.1667	-0.2917	0.2143	-0.6190	-0.2857	0.2381	0.4286	-0.3095	0.5952	-0.4524	0.5714
105	-0.0714	0.7917	0.5952	0.6905	0.4107	0.4524	-0.0714	0.2381	0.7857	0.6190	0.5000	0.2143	-0.0714	0.6905
106	0.7619	-0.2202	-0.3572	0.4286	0.6726	-0.6905	0.6429	0.3571	0.5238	0.1905	0.4286	0.1667	0.5000	0.1190

BANK NO	82	83	85	86	87	88	90	91	92	93	94	95	96	97	98
51															
52															
53															
54															
55															
56															
57															
58															
59															
60															
61															
63															
64															
65															
66															
67															
68															
69															
71															
72															
73															
74															
75															
77															
78															
79															
80															
81															
82	1.0000														
83	0.6726	1.0000													
85	0.6964	0.4048	1.0000												
86	0.6012	0.5238	0.9047	1.0000											
87	0.3631	0.0238	0.5476	0.4524	1.0000										
88	0.5298	0.5000	0.8095	0.8571	0.0952	1.0000									
90	0.6607	0.4940	0.8988	0.9345	0.3274	0.8750	1.0000								
81	0 6131	0.3095	0.7143	0.7619	0.4762	0.7381	0.6964	1.0000							
92	0.6905	0.4405	0.9167	0.9167	0.3690	0.8452	0.9940	0.7024	1.0000						
93	0.6131	0.3095	0.7143	0.7619	0.4762	0.7381	0.6964	1.0000	0.7024	1.0000					
94	0.3750	0.1012	0.8631	0.7559	0.3631	0.8036	0.8393	0.5576	0.8512	0.5576	1.0000				
95	0.4940	0.7917	0.5893	0.7559	0.2798	0.6012	0.5952	0.3869	0.5417	0.3869	0.3452	1.0000			
96	0.5476	0.2917	0.6607	0.7916	0.5060	0.5298	0 8214	0.6964	0.8274	0.6964	0.5357	0.3869	1.0000		
97	0.6964	0.4048	1.0000	0.9047	0.5476	0.8095	0.8988	0.7143	0 9107	0.7143	0.8631	0.5892	0.6607	1.0000	
98	0.2679	-0.0476	0.0714	0.2619	0.2857	-0.0238	0.3393	0.3333	0.3571	0.3333	0.0179	-0.0179	0.7559	0.0714	1.0000
99	0.1012	0.8095	0.6190	0 7381	0.1429	0.7381	0.7202	0.7619	0.6905	0.7619	0.3274	0.6369	0.6131	0.6190	0.2143
100	0.6964	0.3571	0.9286	0.7857	0.4524	0.6905	0.8036	0.5000	0.8333	0.5000	0.8036	0.5893	0.4940	0.9286	0.0000
101	0.7559	0.4524	0.7143	0.7857	0.2381	0.7857	0.8631	0.8333	0.8690	0.8333	0.6131	0.4345	0.8155	0.7143	0.5714
102	-0.3988	0.0000	-0.7619	-0.6429	-0.2381	-0.5000	-0.6369	-0.3333	-0.6905	-0.3333	-0.6726	0.2917	-0.5060	-0.7619	-0.2143
103	0.7679	0.1905	0.4048	0.1905	0.6190	-0.0476	0.2440	0.3095	0.3214	0.3095	0.1012	0.0893	0.3512	0.4048	0.3333
105	0.6131	0.5238	0.7857	0.7857	0.5952	0.7381	0.6607	0.7143	0.6548	0.7143	0.6607	0.7917	0.4583	0.7857	0.1190
106	0.0298	0.5952	-0.0952	0.2619	0.0714	0.1190	0.1131	0.1667	0.0238	0.1667	0.2440	0.5774	0.2559	-0.0952	0.2143

On going to the details of above bank branch numbers it can be said that the bank branch nos. 4, 5 and 11 belong to the same bank and bank branch Nos. 14 and 31 also belong to the same bank. Cells (33, 82); (49, 65) and (85, 97) denote the branches of two different banks, whereas cells (72, 73) and (91, 93) denote branches of the same bank.

From above it follows that the identical ranking may prevail between the branches of one bank or between the banks i.e. between the branches of two different banks.

ii. Similarly, it is also examined between which branches there does not exist relationship at all. Here the cells where RCC is '0' is to be identified. The following cells are with RCC = 0.

(2, 46); (3, 86); (4, 57); (5, 57); (6, 48); (9, 54); (9,103); (9, 59); (10, 21); (10, 106); (11, 57); (15, 59); (16, 47); (16,74), (17, 48); (16, 54); (18, 20); (18, 43); (18, 67); (19, 78); (20,69), (20, 74); (21, 22); (22, 78); (23, 78); (24, 41); (23,98); (25, 57); (26, 48); (26, 72); (26, 73); (27, 35); (28, 61); (36, 75); (39, 47); (41, 79); (46, 74); (50, 74); (55, 71); (60, 66); (67, 78); (83, 102) and (98, 100).

The detailed scrutiny of the above branch numbers reveal that in majority of the cases, the one branch of the cell and another branch denoted by the same cell belong to two different banks. However, out of 43 cells where RCC is '0', 3 cells denote the branches of the same bank; where there does not exist any relationship in ranking of the factors. These are (10, 21), (18,20)

and (21, 22). In brief, the probability of no relation between two branches of the same bank with respect to ranking of the factors is very low.

iii. Further to this it is examined where the ranking of the factors goes almost in the opposite direction. For this purpose if the RCC is -1 it indicates that the ranking is absolutely in reverse order of one compared to another. However, it may be noted here that for no cell RCC is found to be -1. However, for RCC less than -0.9 one can state that the ranking of those two branches is almost in the reverse order.

In the light of above it may be stated that the negative RCC, less than -0.9 is observed for only 3 cells. The branches denoted by these 3 cells are (2, 23); (6, 43) and (35, 54) where RCC is -0.9762, -0.9048 and -0.9286 respectively. From the number of branches it may be further stated that eventhough branches 6 and 43 and branches 35 and 54 belong to different banks, branches 2 and 23 belong to the same bank.

iv. As a next step an attempt is made to identify which of the bank branches form one group as far as ranking of factors is concerned. For this purpose the linkage analysis is applied. In the process it is observed that the total respondents are divided in as many as 22 groups. This information is presented in Table V.16.

TABLE V.16

LINKAGE ANALYSIS : ADVANCES TO BUSINESS MAN AND RETAIL TRADER

Cluster	Bank Branch No.
I	4, 5, 11, 1
II	14, 31, 99, 51
III	33, 82, 15, 36, 103
IV	65, 21, 49, 37, 57, 79, 43, 102
V	72, 73, 52, 106, 54, 46
VI	85, 97, 50, 94
VII	91, 93
VIII	92, 90, 75, 101, 6
IX	44, 55, 100
X	16, 68, 10, 12, 41, 87, 22, 3
XI	61, 19, 2, 58
XII	77, 86, 63, 27, 88, 95, 53, 9, 26, 105, 40
XIII	25, 96, 13, 81, 7, 98, 74
XIV	17, 83
XV	38, 71
XVI	60, 67
XVII	29, 45, 18, 64, 34
XVIII	20, 28
XIX	23, 66, 69, 80
XX	24, 78, 39, 56
XXI	35, 59, 42
XXII	47, 48

The analysis of these groups/clusters indicate that the all branches of one bank do not go together but they are scattered in various groups except where the branch nos. are very less say less than 5. The bank which has considerably high number of branches in Baroda is scattered over fourteen groups. Also out of these fourteen groups only two groups i.e. cluster I and XVIII are such which consists of branches of one bank only. In rest of the 12 clusters, the branches of these bank is coupled with the branches of other bank. The bank which has also considerably high number of branches eventhough lower than the previous one is scattered over 9 groups. This adds to above observation that all branches of one bank do not go together.

The extreme situation is observed when the branches under study are only two of one bank and they are falling in two groups.

(d) SEPR :

Table V.17 gives the RCC between the banks for denoting the relationship in ranking of factors for advances to self employed and professional.

Following aspects are observed from the table.

i. There are certain cells where RCC is equal to 1. This indicates that the ranking of these two bank branches is identical. Such cells are :

(4, 5); (4, 11); (5, 11); (12, 17); (14, 31); (19, 61); (49, 65); (33, 82); (72, 73) and (91, 93).

TABLE V.17

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS SEPR

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16
1	1.0000													
2	-0.6429	1.0000												
3	-0.7619	0.4524	1.0000											
4	-0 1667	0.4524	0.1429	1.0000										
5	-0.1667	0.4524	0.1429	1.0000	1.0000									
6	-0.0714	0.3333	0.1190	0.9762	0.9762	1.0000								
7	-0.6905	0 4286	0.8810	0.4048	0.4048	0.4286	1.0000							
9	-0.3857	0.1190	0.2381	0.7143	0.7143	0.7857	0.5000	1.0000						
11	-0.1667	0 4524	0.1429	1.0000	1.0000	0.9762	0.4048	0.7143	1 0000					
12	-0.4762	0.5000	0.6667	0 6905	0 6905	0.6429	0.7857	0 1428	0 6905	1.0000				
13	-0 1667	0.5952	0.7857	0.4048	0.4048	0.4048	0.7857	0.4048	0.4048	0.7857	1 0000			
14	-0.1190	0.5238	0.1190	0.9762	0.9762	0 9524	0.3333	0 6667	0 9762	0.6190	0 4048	1 0000		
15	-0 2143	0.3571	0.0952	0.9524	0 9524	0.9286	0 3571	0 8095	0 9524	0 6429	0.4048	0.9048	1.0000	
16	-0 4524	0.5952	0.4286	0.9048	0.9048	0.8333	0.5476	0.6667	0 9048	0.8333	0.5952	0 8809	0.9048	1.0000
17	0.1667	0.0476	0.2381	0.1905	0.1905	0 2857	0.1429	0.3095	0 1905	0.0000	0 3095	0.3333	0.0714	0.1429
18	0.1905	0.4762	0.6667	0.6667	0.6667	0 6667	0.6667	0.5714	0 6667	0.6667	0.6429	0.6667	0.5714	0.6667
19	-0 4762	0.5238	0.6190	0.2143	0.2143	0.2857	0.6667	0.5000	0.2143	0.3095	0.7143	0.2857	0.1905	0.3095
20	-0.4286	0.5238	-0.0952	-0.0476	-0.0476	-0.1905	-0.0952	-0.2381	-0.0476	0.0476	0.3095	-0.0714	0.0476	0.0952
21	0.4762	0.1667	-0.7143	0 2619	0.2619	0.2143	-0.6429	-0.0714	0.2619	-0.2143	0.0238	0.3571	0.2857	0.1190
22	0.2381	-0.2619	0.0952	0.3810	0.3810	0.5000	0.3571	0.5000	0.3810	0.5000	0.5952	0.3095	0.4524	0.3333
23	0.9048	-0.7857	-0.7143	-0.1190	-0.1190	-0.0238	-0.5476	-0.1905	-0.1190	-0.3333	-0 1667	-0.1667	-0.1190	-0.4048
24	-0.4286	0.5476	-0 1905	0.2857	0 2857	0.1667	-0.0714	0.1667	0.2857	0.0714	0 2143	0.2619	0.4048	0.3333
25	-0.4524	0.3571	0.7143	0.5714	0.5714	0.6429	0.9286	0.6667	0.5714	0.7857	0.7857	0.5238	0.5238	0.6190
26	-0.6429	0 7143	0.5000	0.6429	0.6429	0.5714	0.4762	0 6429	0 6429	0.5476	0.5952	0.6905	0.6905	0.8333
27	-0.4286	0.5476	0.5476	0 7619	0.7619	0.6905	0.6905	0.3810	0 7619	0.9762	0 6905	0.6905	0.6905	0.8571
28	-0.4048	0.6667	-0.0238	0.1190	0.1190	-0.0476	-0.0952	-0.1905	0.1190	0 1905	0.4048	0.1429	0.1905	0.3095
29	0.3333	0.0000	-0.2143	0.4286	0.4286	0.4286	0.0952	0.2143	0.4286	0.3809	0.3333	0.3095	0.4762	0.2857
31	-0.1190	0.5238	0 1190	0.9762	0.9762	0 9524	0.3333	0.6667	0 9762	0.6190	0.4048	1.0000	0.9048	0.8809
33	-0.0536	0 2679	0.0774	0.9345	0.9345	0.9107	0.3393	0 7440	0.9345	0.5893	0.2798	0.8631	0.9345	0.8155
34	0.4405	0 2262	0 4286	0.4881	0.4881	0.3929	0 5357	0.2024	0 4881	0.7143	0.3690	0 3333	0.4524	0.5595
35	0.2381	0 2857	-0.0476	0.0714	0.0714	-0 0952	-0.0476	-0.4286	0.0714	0.2381	0.1190	-0.0238	0.0238	0.1190
36	0.5000	0.2143	-0.1667	0.7857	0.7857	0.7857	0.0238	0.5952	0.7857	0.3095	0.2381	0.7857	0.7857	0.5952
37	0.7559	-0 1369	-0.7080	0.3393	0.3393	0.3631	-0.5890	0.1488	0.3393	-0.2679	-0 1012	0.4107	0.3393	0.0774
38	-0.0655	0 3036	0 1369	0.9464	0.9464	0 9702	0 3750	0.8333	0.9464	0.5893	0 4107	0.9464	0.9345	0.8512
39	0.6905	0 4524	-0 7143	-0.3333	-0.3333	-0.2619	-0.7857	-0 2143	-0 3333	-0.6571	-0.3571	-0.2143	-0.3571	-0.5714
40	0 3750	-0 0179	0 2321	0.5179	0.5179	0.6250	0.3631	0.7917	0.5179	0 3631	0.5655	0.5178	0.6012	0.4702
41	-0 2024	0.2143	0.4286	0 6071	0.6071	0.6429	0 6667	0 5714	0.6071	0 8452	0.7976	0.5238	0.6548	0.6786
42	0.2202	-0.2083	-0 5655	0.1607	0 1607	0.1012	-0.3750	0.0417	0.1607	-0.0536	-0.0417	0 0417	0.3155	0.0654
43	0.8810	-0.5714	-0.8810	-0.2381	0 2381	-0.1905	-0.8571	-0.2857	-0 2381	-0 5714	-0.1667	-0.1905	-0.1667	-0.4286
44	-0.7619	0.7619	0 5476	0.5714	0.5714	0.4286	0.5238	0.2857	0.5714	0.5952	0.4048	0 5476	0.5000	0.7143
45	0.1607	0.4107	0.6250	0.7917	0.7917	0.7917	0 7917	0.7679	0.7917	0 7917	0.6131	0.7083	0 7679	0.7917
46	0.4762	-0 0952	-0 1905	0.0714	0.0714	0 1429	-0.2857	0.1905	0.0714	-0.1429	0.3333	0.2143	0.1190	0.0714
47	-0.0714	0.1905	0.3095	-0.0952	-0.0952	0.0000	0.3810	0.0952	-0.0952	0.2381	0.7857	-0.0476	-0.0714	0.0000
48	0.1429	0 2619	-0.0714	-0.0238	-0.0238	0.0714	0.1190	0.0476	-0 0238	-0.0238	0.5238	0.0476	-0.0476	-0.1190
49	0.4524	0.2143	-0.6667	0.1429	0.1429	0.0714	-0.6905	-0.2381	0.1429	-0.2619	0.0238	0.2619	0.1429	0.0476
50	-0 2143	0.2857	0.4048	0.7619	0.7619	0.8571	0 7143	0.8333	0.7619	0.6429	0.5952	0.7381	0.7143	0.6667
51	-0.0476	0.2381	-0 3095	0.5952	0 5952	0.5714	-0 1905	0.6429	0.5952	-0.0476	0.0238	0.6429	0.6905	0.5000
52	0.1845	0 1012	0.2202	0.2321	0.2321	0.3869	0.3393	0.5179	0.2321	0.0536	0.4702	0.3274	0.1726	0.1131

BANK NO	1	2	3	4	5	6	7	8	11	12	13	14	15	16
53	0.0000	0.4524	0.0000	0.9048	0.9048	0 9286	0.2619	0.7143	0.9048	0.4762	0 4048	0.9524	0.8571	0.7619
54	-0.1429	0.2143	0.3095	0.4762	0.4762	0.5952	0.4524	0.7857	0 4762	0.2381	0.5000	0.5476	0.4762	0.4286
55	-0.6964	0.7559	0.4940	0.7321	0.7321	0.6131	0.6131	0.4226	0.7321	0.7559	0.5060	0.6726	0.6845	0.8274
56	0.1667	0.0000	-0.6905	-0.0952	-0.0952	-0.1905	-0.7619	-0.1905	-0.0952	-0.6190	-0.3571	-0.0476	-0.0238	-0.1905
57	0.1190	0.2381	-0.4524	0.6429	0.6429	0.6190	-0.1429	0.4524	0.6429	0.2143	0.2143	0.6190	0.7381	0.5000
58	0.1369	0.0298	0.0179	0.0655	0.0655	0.2202	0.2917	0.3155	0.0655	0.0779	0.5536	0.0893	0.0774	-0.0536
59	-0.2143	0.0714	-0.0714	-0.1190	-0.1190	-0.2619	-0.1190	-0.2857	-0.1190	0.0952	0.1167	-0.2381	0.0000	0.0238
60	0.5714	-0.2381	-0.3095	-0.5000	-0.5000	-0.3810	-0.3810	-0.3571	-0.5000	-0.5238	0.2143	-0.3571	-0.5476	-0.5952
61	-0.4762	0.5238	0.6190	0.2143	0.2143	0.2857	0.6667	0.5000	0.2143	0.3095	0.7143	0.2857	0.1905	0.3095
63	-0.2619	0.7143	0.4286	0.8095	0.8095	0.7619	0.5238	0.4048	0.8095	0.8095	0.6905	0.8571	0.6905	0.8571
64	0.0238	0.6905	0.5000	0.6905	0.6905	0.6905	0.5000	0.5952	0.6905	0.5000	0.6190	0.7857	0.5952	0.6905
65	0.4524	0.2143	-0.6667	0.1429	0.1429	0.0714	-0.6905	-0.2381	0.1429	-0.2619	0.0238	0.2619	0.1429	0.0476
66	0.1429	-0.2143	-0.0476	0.6905	0.6905	0 7381	0 3095	0 5714	0.6905	0.5238	0.2143	0.5476	0.6905	0.5000
67	0.5714	-0.3095	-0.4286	-0.4048	-0.4048	-0.2619	-0.3571	-0.1667	-0.4048	-0.5000	0.2143	-0.3095	-0.3809	-0.5476
68	-0.3571	0.4762	0.4048	0.8810	0.8810	0.8095	0.5238	0.5952	0.8810	0.8809	0.5952	0.8333	0.8809	0.9762
69	0.6429	-0.3809	-0.7143	0.3095	0.3095	0 2857	-0.5714	0.0238	0.3095	0.1429	-0.2381	0.2619	0.3333	0.0714
71	0.5417	-0.1250	0.1012	0.2917	0.2917	0.3512	0.1845	-0.0536	0.2917	0.3631	0.3274	0.2917	0.0893	0.1250
72	0.3571	-0.0714	0.0952	0.0476	0.0476	0.2143	0.1667	0.2143	0.0476	-0.0476	0.4048	0.1667	-0.0714	-0.0952
73	0.3571	-0.0714	0.0952	0.0476	0.0476	0.2143	0.1667	0.2143	0.0476	-0.0476	0.4048	0.1667	-0.0714	-0.0952
74	0.1667	0.1190	-0.3810	-0.2381	-0.2381	-0.4048	-0.5952	-0.7143	-0.2381	-0.1667	0.0238	-0.2143	-0.2381	-0.1429
75	-0.7381	0.7143	0.7857	0.6429	0.6429	0.6190	0.9048	0.5952	0.6429	0.8333	0.7857	0.6190	0.5952	0.7857
77	-0.0952	0.5714	0.0238	0.9286	0.9286	0.9048	0.2381	0.6429	0.9286	0.5238	0.4048	0.9767	0.8809	0.8333
78	-0.6429	0.8809	0.6905	0.5952	0.5952	0.5000	0.6905	0.5000	0.5952	0.6905	0.7143	0.5952	0.5952	0.7857
79	0 5238	0 1429	-0.4286	0.1190	0.1190	0.1905	-0.2381	-0.0476	0.1190	-0.0952	0.3333	0.2143	0.0714	-0.0714
80	0.8333	-0.8571	-0.6905	-0.1905	-0.1905	-0.0952	-0.6190	-0.1190	-0.1905	-0.5476	-0.3571	-0.2143	-0.1905	-0.4762
81	-0.0238	0.2381	0.2619	0.3810	0.3810	0.5238	0.4762	0.5952	0.3810	0.2619	0.5952	0.4524	0.3333	0.2857
82	-0.0536	0.2678	0.0774	0.9345	0.9345	0.9107	0.3393	0.7440	0.9345	0.5893	0.2797	0.8631	0.9345	0.8155
83	0 2143	0.3333	-0.0952	0.7381	0.7381	0.7143	-0 0476	0.4048	0.7381	0.2381	0.1429	0.8333	0.6190	0.5952
85	-0.4286	0.5714	0.6429	0.6667	0 6667	0.7143	0.8095	0.6667	0.6667	0.7381	0.7857	0.6905	0.5952	0.7143
86	-0 0238	0.4048	0.0952	0.9524	0.9524	0.9762	0.3571	0.7381	0.9524	0.5714	0 4048	0.9762	0.8809	0.8095
87	0.3571	0.0714	-0.5238	0.5714	0.5714	0.5476	-0.2619	0.2619	0.5714	0.2381	0.2143	0.5476	0.6429	0.4286
88	-0.0476	0 0238	0.3571	0.2857	0.2857	0.4524	0 5952	0.6905	0.2857	0.2381	0.5476	0.2857	0.2857	0.1905
90	-0.6250	0.7917	0.6726	0.7559	0.7559	0.6964	0 7440	0.6607	0 7559	0 7440	0.6607	0.7559	0.7202	0.8750
91	-0.3512	0.4345	0.3750	0 8988	0.8988	0.8631	0.5060	0.7917	0 8988	0.7559	0.5536	0.8750	0.9345	0.9702
92	-0.3214	0.3333	0.5952	0 6786	0.6786	0.6190	0.6905	0.4286	0.6786	0.9405	0.6548	0.5714	0.6548	0.7976
93	-0.3512	0.4345	0.3750	0.8988	0.8988	0.8631	0 5060	0.7917	0.8988	0.7559	0.5536	0.8750	0.9345	0.9702
94	-0.8036	0.7917	0.7440	0.3988	0.3988	0.2679	0.6726	0.2679	0.3988	0.6726	0.6607	0.3631	0.3988	0.6607
95	-0.2143	0.4286	0.0714	0.8809	0.8809	0.8571	0.2381	0.7619	0.8809	0.3809	0.2143	0.9048	0.8571	0.7857
96	-0 2381	0.1190	0.3571	0.7619	0.7619	0.7381	0.4524	0.7143	0.7619	0.7381	0 5000	0.6905	0.8333	0.8571
97	-0.0952	0.3571	0.2143	0.9286	0.9286	0.9762	0.5476	0.7619	0 9286	0.6905	0.5000	0.9048	0.8571	0.7857
98	-0.0714	0.0000	0.2619	0.2619	0.2619	0.4286	0.5714	0.6190	0.2619	0.2857	0.5952	0.2381	0.2857	0.1667
99	-0.0238	0.3810	0.0238	0.8810	0.8810	0.9048	0.2381	0 7857	0.8810	0.4524	0.4048	0.9286	0.8809	0.7857
100	-0.1190	-0.3333	0.3095	-0.0476	-0.0476	0.0476	0.3333	0.2857	-0.0476	-0.0952	0.0238	-0.0952	-0.1190	-0.1429
101	-0.3571	0.5714	0.4762	-0.8571	-0.8571	0.8571	0 7143	0.8810	-0.8571	0.7143	0.6190	0.8095	0.8809	0.8571
102	0 7857	-0.5952	-0.5238	-0.4762	-0.4762	-0.4048	-0.6905	-0.3810	-0.4762	-0.5476	0.0238	-0.3809	-0.4285	-0.5238
103	-0.6429	0.9524	0.4286	0.4524	0.4524	0.3333	0.4286	0.1667	0 4524	0.5714	0.6905	0.5000	0.4286	0.6429
105	0.1488	0.3631	0.0059	0.7798	0.7798	0 7440	0.2917	0.2679	0.7798	0.6488	0.3750	0.7202	0.6607	0.6131
106	0.3333	0.0714	0.0476	0.1667	0.1667	0.3095	0.1190	0.2619	0.1667	-0.0238	0 4048	0.3095	0.0476	0 0238

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42
1														
2														
3														
4														
5														
6														
7														
9														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27	1.0000													
28	0.2619	1.0000												
29	0.4524	0.3095	1.0000											
31	0.6905	0.1429	0.3095	1.0000										
33	0.6726	0.0774	0.5417	0.8631	1.0000									
34	0.7738	0.1190	0.4881	0.3333	0.6250	1.0000								
35	0.3810	0.5476	0.5238	-0.0238	0.2202	0.6786	1.0000							
36	0.4048	0.2143	0.6190	0.7857	0.8512	0.3214	0.2143	1.0000						
37	-0.1607	0.0536	0.3988	0.4107	0.4048	-0.2798	-0.0893	0.8512	1.0000					
38	0.6131	-0.0536	0.3036	0.9460	0.8810	0.2857	-0.2321	0.7917	0.4048	1.0000				
39	-0.8095	-0.3571	-0.1667	-0.2143	-0.1845	-0.7143	-0.4286	0.4048	0.6964	-0.1726	1.0000			
40	0.2798	-0.1250	0.3631	0.5179	0.5417	0.0595	-0.3750	0.6607	0.4821	0.7143	0.2679	1.0000		
41	0.7738	0.0952	0.5714	0.5238	0.5238	0.4345	-0.0476	0.3690	-0.0833	0.6071	-0.7024	0.6309	1.0000	
42	0.0535	0.3988	0.8155	0.0417	0.4107	0.3095	0.5417	0.5774	0.4464	0.0476	-0.0179	0.1667	0.1190	1.0000
43	-0.5238	-0.0476	0.3810	-0.1905	-0.1012	-0.5357	-0.1667	0.5000	0.8035	-0.1369	0.6667	0.3512	-0.2262	0.4702
44	0.6667	0 4048	0.0238	0.5476	0.5655	0.6786	0.4762	0.3095	-0.2440	0.3988	-0.5476	-0.0179	0.1667	-0.0536
45	0.7917	0.0655	0.4583	0.7083	0.8452	0.7917	0.2798	0.6131	0.0833	0.7559	-0.2440	0.6071	0.6726	0.2083
46	-0.2143	-0.0714	-0.0952	0.2143	-0.0179	-0.6429	-0.6905	0.4286	0.5774	0.3155	0.4762	0.7083	0.1190	-0.1964
47	0.0952	0.0952	0.1429	-0.0476	-0.2679	-0.3690	-0.4524	-0.0714	-0.1726	0.0059	-0.2857	0.4702	0.5357	-0.3154
48	-0.0714	0.1905	0.2857	0.0476	-0.1726	-0.4762	-0.3095	0.1429	0.1607	0.0179	0.0476	0.3512	0.2857	-0.1012
49	-0.1429	0.5476	0.2857	0.2619	0.1012	-0.3929	0.1190	0.5952	0.7917	0.1131	0.4286	0.1369	-0.1786	0.3750
50	0.5952	-0.2619	0.2619	0.7381	0.6607	0.2500	-0.3809	0.5000	0.0417	0.8274	-0.3571	0.7083	0.7262	-0.2202
51	0.0238	0.2143	0.1190	0.6429	0.6488	-0.1071	-0.2143	0.7857	0.6250	0.6726	0.2857	0.5178	0.0119	0.2917
52	-0.0417	-0.3869	-0.1012	0.3274	0.1250	-0.4048	-0.7440	0.3274	0.2321	0.4405	0.3155	0.7321	0.2559	-0.4821

BANK NO	27	28	29	31	33	34	35	36	37	38	39	40	41	42
53	0.5238	0.0952	0.3095	0.9524	0.7679	0.0833	-0.2381	0.7857	0.5059	0.9345	-0.0714	0.6250	0.5238	0.0179
54	0.1429	-0.3095	-0.1429	0.5476	0.3631	-0.2619	-0.7857	0.4048	0.1488	0.6845	0.0476	0.7917	0.3929	-0.4583
55	0.8274	0.4583	0.3036	0.6726	0.7024	0.7560	0.5060	0.4107	-0.1786	0.5417	-0.6845	0.0952	0.4464	0.1250
56	-0.4762	0.3810	0.0952	-0.0476	0.1131	-0.2262	0.2619	0.5000	0.5893	-0.1369	0.5714	-0.0536	-0.6548	0.5179
57	0.3095	0.4762	0.7143	0.6190	0.6488	0.0833	0.1429	0.7857	0.6250	0.5893	-0.0714	0.4345	0.4286	0.6726
58	-0.0179	-0.1250	0.3155	0.0893	-0.0417	-0.3988	-0.5298	0.1726	0.0893	0.1786	-0.0417	0.5774	0.4762	-0.1429
59	0.1667	0.6190	0.5476	-0.2381	0.1131	0.5238	0.8333	0.1667	-0.0774	-0.3155	-0.3333	-0.1607	0.0119	0.7440
60	-0.5952	-0.2143	-0.1190	-0.3571	-0.5655	-0.8690	-0.5952	0.0238	0.3155	-0.3274	0.5714	0.3274	-0.2262	-0.3512
61	0.1905	0.0000	-0.2143	0.2857	0.0536	-0.1905	-0.5238	0.0476	-0.2559	0.3274	-0.2143	0.4940	0.3571	-0.5774
63	0.8333	0.2857	0.2143	0.8571	0.5893	0.3452	0.0476	0.5000	0.1131	0.7440	-0.4762	0.3869	0.6429	-0.2083
64	0.5000	0.2143	0.0476	0.7857	0.5650	0.1786	-0.0714	0.6190	0.3750	0.7440	0.2143	0.6131	0.3690	-0.1845
65	-0.1429	0.5476	0.2857	0.2619	0.1012	-0.3929	0.1190	0.5952	0.7917	0.1131	0.4286	0.1369	-0.1786	0.3750
66	0.5714	-0.3095	0.7143	0.5476	0.8274	0.6310	0.1429	0.6905	0.2559	0.6488	-0.3095	0.5417	0.6071	0.4345
67	-0.5714	-0.1667	0.1190	-0.3095	-0.4345	-0.8333	-0.5952	0.1190	0.3750	-0.2321	0.5000	0.4345	-0.0595	-0.1012
68	0.9048	0.2619	0.3810	0.8333	0.8155	0.6429	0.1905	0.5952	0.0774	0.8155	-0.6190	0.4702	0.7381	0.1369
69	0.0000	-0.0238	0.6190	0.2619	0.5298	0.1905	0.3095	0.8095	0.7917	0.2679	0.3809	0.2917	-0.0595	0.7321
71	0.3869	-0.4226	0.3393	0.2917	0.2798	0.2857	0.0655	0.4286	0.2679	0.2738	0.0654	0.3631	0.3036	-0.1369
72	-0.1429	-0.5476	-0.1667	0.1667	-0.0893	-0.5476	-0.8095	0.2143	0.2202	0.2559	0.3333	0.6250	0.1548	-0.6369
73	-0.1429	-0.5476	-0.1667	0.1667	-0.0893	-0.5476	-0.8095	0.2143	0.2202	0.2559	0.3333	0.6250	0.1548	-0.6369
74	-0.0476	0.6429	0.2857	-0.2143	-0.1369	0.0833	0.6905	0.2143	0.2679	-0.4107	0.0476	-0.2917	-0.3214	0.4702
75	0.7857	0.1905	0.0952	0.6190	0.5060	0.4888	0.0000	0.2143	-0.3750	0.5893	-0.7381	0.3631	0.6667	-0.3036
77	0.5952	0.2619	0.3095	0.9762	0.7917	0.1786	-0.0714	0.7857	0.4821	0.9107	-0.1429	0.5178	0.4881	0.0774
78	0.6905	0.5952	0.1429	0.5952	0.5179	0.5119	0.3095	0.3333	-0.1488	0.5059	-0.4524	0.2798	0.4643	0.0059
79	-0.0714	0.2143	0.4286	0.2143	-0.0179	-0.5000	-0.2143	0.4286	0.5774	0.1488	0.2857	0.3750	0.2143	0.1131
80	-0.5000	-0.6429	0.2619	-0.2143	0.0893	-0.2024	-0.1905	0.5000	0.6131	-0.0774	0.6905	0.3750	-0.3452	0.3036
81	0.1667	-0.2619	0.0238	0.4524	0.2083	-0.3214	-0.7143	0.3095	0.1131	0.5417	-0.0238	0.7083	0.4881	-0.4583
82	0.6726	0.0774	0.5417	0.8631	1.0000	0.6250	0.2202	0.8512	0.4048	0.8809	-0.1845	0.5417	0.5238	0.4107
83	0.3333	-0.0238	0.0476	0.8333	0.6726	0.0774	-0.1190	0.8095	0.6488	0.7679	0.2857	0.4583	0.0833	-0.0774
85	0.6667	-0.0238	0.0714	0.6905	0.4702	0.2024	-0.3333	0.3095	-0.1488	0.7083	-0.5000	0.5774	0.7143	-0.4345
86	0.6190	-0.0238	0.3095	0.9762	0.8393	0.2381	-0.1905	0.7857	0.4345	0.9702	-0.1429	0.6250	0.5595	-0.0179
87	0.3333	0.4048	0.7857	0.5476	0.5774	0.0952	0.1905	0.7857	0.6964	0.5179	-0.0476	0.4345	0.4643	0.6964
88	0.1190	-0.4286	0.0952	0.2857	0.2440	-0.1310	-0.6429	0.2619	-0.0179	0.4583	-0.0238	0.7559	0.4881	-0.3274
90	0.7440	0.3274	0.0893	0.7560	0.6607	0.5119	0.1131	0.4226	-0.1131	0.7024	-0.4702	0.3869	0.5179	-0.1369
91	0.7560	0.1607	0.2560	0.8750	0.8393	0.4643	-0.0655	0.6488	0.1607	0.9167	-0.4464	0.6250	0.6845	0.0655
92	0.9405	0.1429	0.4762	0.5714	0.6905	0.8750	0.4048	0.4167	-0.1548	0.5714	-0.7024	0.3809	0.7619	0.1667
93	0.7560	0.1607	0.2560	0.8750	0.8393	0.4643	-0.0655	0.6488	0.1607	0.9167	-0.4464	0.6250	0.6845	0.0655
94	0.6726	0.5774	0.0893	0.3631	0.3750	0.6369	0.4702	0.1369	-0.3988	0.2559	-0.6488	0.0655	0.3571	-0.0119
95	0.4524	0.0476	0.1190	0.9048	0.8631	0.2619	-0.1190	0.7857	0.4107	0.8988	-0.0238	0.5178	0.2619	0.0417
96	0.7143	-0.0238	0.3095	0.6905	0.7917	0.5595	0.0476	0.5952	0.1012	0.8036	-0.4762	0.6607	0.7024	0.1488
97	0.7143	-0.0952	0.4286	0.9048	0.8274	0.3690	-0.1429	0.6905	0.2559	0.9226	-0.3333	0.6250	0.7143	-0.0059
98	0.1667	-0.3333	0.2619	0.2381	0.1964	-0.1429	-0.5952	0.2143	-0.0655	0.3988	-0.2143	0.7083	0.6190	-0.2202
99	0.4762	0.0714	0.2381	0.9286	0.7679	0.0476	-0.3333	0.7857	0.5059	0.9583	-0.0476	0.7083	0.5238	0.0179
100	-0.1429	-0.8095	-0.2381	-0.0953	0.1607	0.1786	-0.3095	0.1190	-0.2202	0.0536	0.1429	0.3274	-0.2024	-0.3869
101	0.7143	0.2381	0.4048	0.8095	0.8274	0.5238	0.0714	0.6190	0.1131	0.8393	-0.3333	0.6131	0.6905	0.1726
102	-0.5952	-0.2381	0.0000	-0.3810	-0.3988	-0.6905	-0.4524	0 2143	0.5298	-0.2798	0.6429	0.4107	-0.2500	0.0059
103	0.5952	0.7857	0.1429	0.5000	0.2679	0.2262	0.2857	0.2143	0.1369	0.3155	-0.5714	0.0655	0.3929	-0.0536
105	0.7679	0.2202	0.7560	0.7202	0.7560	0.6369	0.5179	0.7083	0 3631	0.6012	-0:2917	0.2679	0.5595	0.4048
106	-0.0952	-0.4048	-0.1667	0.3095	-0.0059	-0.5714	-0.7857	0.3095	0.3274	0.3631	0.3571	0.6250	0.1548	-0.6012

BANK NO	54	55	56	57	58	59	60	61	63	64	65	66	67
53													
54	1.0000												
55	0.1250	1.0000											
56	-0.3333	-0.0655	1.0000										
57	0.1667	0.3512	0.3333	1.0000									
58	0.5655	-0.1905	-0.4583	0.2679	1.0000								
59	-0.7143	0.3036	0.3810	0.2143	-0.4107	1.0000							
60	0.1905	-0.7679	-0.0952	-0.1905	0.5655	-0.4762	1.0000						
61	0.8095	0.2559	-0.4286	-0.0476	0.6250	-0.4762	0.2381	1.0000					
63	0.4524	0.6845	-0.3571	0.3810	0.1607	-0.2143	-0.2143	0.4286	1.0000				
64	0.7857	0.5536	0.1190	0.3095	0.3155	-0.2143	0.2143	0.7143	0.7857	1.0000			
65	-0.1429	-0.1012	0.6190	0.5952	-0.0298	0.1190	0.3095	-0.2619	0.1905	0.3095	1.0000		
66	0.1429	0.3750	-0.2619	0.4524	0.0655	0.0714	-0.5238	-0.1905	0.3095	0.2143	-0.2143	1.0000	
67	0.2381	-0.7321	-0.0714	0.0714	0.7440	-0.3810	0.9286	0.2381	-0.2619	0.1190	0.3095	-0.3333	1.0000
68	0.3095	0.7798	-0.2619	0.4762	-0.1012	0.0952	-0.6190	0.1667	0.8333	0.5952	0.0238	0.5952	-0.5714
69	-0.3095	-0.0536	0.5238	0.5238	-0.3155	0.3095	-0.1905	-0.7143	-0.0714	0.0476	0.5000	0.5476	-0.0952
71	0.0655	0.0000	-0.4107	-0.1011	0.1190	-0.2321	0.1964	-0.0893	0.3869	0.3750	-0.0179	0.4940	0.0774
72	0.7143	-0.3750	-0.4762	-0.1667	0.6726	-0.8571	0.7143	0.5952	0.2381	0.5952	-0.0476	-0.0714	0.6429
73	0.7143	-0.3750	-0.4762	-0.1667	0.6726	-0.8571	0.7143	0.5952	0.2381	0.5952	-0.0476	-0.0714	0.6429
74	-0.8095	-0.0059	0.5238	0.1190	-0.5536	0.6905	-0.0714	-0.6429	-0.0952	-0.0714	0.6190	-0.3095	-0.1667
75	0.5476	0.8036	-0.5238	0.1429	0.2440	-0.1190	-0.4286	0.7143	0.7619	0.6905	-0.3571	0.2619	-0.4048
77	0.5714	0.6131	0.0476	0 7143	0.1846	-0.2381	-0.2381	0.3333	0.8333	0.7857	0.4048	0.4286	-0.1667
78	0.4048	0.8869	0.0238	0.3095	0.0774	0.2619	-0.3571	0.6190	0.6905	0.7143	0.0238	0.1190	-0.3571
79	0.2381	-0.2321	0.0238	0.5238	0.7202	-0.2381	0.6905	0.2143	0.2619	0.3333	0.6429	-0.0476	0.7857
80	-0.1905	-0.6250	0.2619	-0.0476	-0.1488	-0.0952	0.2143	-0.5952	-0.5238	-0.0714	0.0952	0.3095	0.2381
81	0.9048	0.0417	-0.5000	0.1905	0.8274	-0.7143	0.4048	0.8333	0.4762	0.6905	-0.0952	0.1190	0.4762
82	0.3631	0.7024	0.1131	0.6488	-0.0417	0.1131	-0.5655	-0.0536	0.5893	0.5655	0.1012	0.8274	-0.4345
83	0.4524	0.3512	0.2381	0.3810	-0.1488	-0.3571	-0.0952	0.0952	0.6429	0.8095	0.4524	0.3095	-0.1905
85	0.7857	0.5536	-0.6190	0.1905	0.5060	-0.4524	-0.0952	0.8095	0.8095	0.7857	-0.2381	0.2857	-0.0714
86	0.6667	0.5536	-0.1429	0.5952	0.2440	-0.3810	-0.2381	0.3571	0.8095	0.7857	0.1905	0.5952	-0.1667
87	0.0000	0.1964	0.2381	0.9286	0.1964	0.2381	-0.0952	-0.2619	0.3810	0.2143	0.6667	0.5000	0.1190
88	0.8571	0.0298	-0.5000	0.0714	0.7917	-0.5476	0.2857	0.7857	0.2381	0.5476	-0.3810	0.2857	0.4048
90	0.5655	0.8869	-0.1369	0.2917	0.0774	-0.0059	-0.4464	0.6369	0.7798	0.8036	-0.1011	0.2798	-0.4464
91	0.5536	0.7024	-0 1845	0.5060	0.0000	-0.0774	-0.5297	0.3274	0.7798	0.6964	0.0179	0.5536	-0.4583
92	0.1071	0.7440	-0.4167	0.2143	-0.1071	0.2976	-0.6071	0.0952	0.6667	0.4167	-0.2500	0.6786	-0.5233
93	0.5536	0.7024	-0.1845	0.5060	0.0000	-0.0774	-0.5297	0.3274	0.7798	0.6964	0.0179	0.5536	-0.4583
94	0.1012	0.8690	-0.0655	0.0774	-0.1726	0.2976	-0.5530	0.4226	0.5298	0.5179	-0.1726	0.0298	-0.5890
95	0.5952	0.6250	0.1905	0.5238	-0.0774	-0.0774	-0.4524	0.2857	0 6190	0.7857	0.1667	0.4524	-0.4048
96	0.3809	0.5417	-0.2857	0.3571	-0.1488	0.4226	-0.5952	0.0952	0.5952	0.5000	-0.1429	0.6667	-0.5238
97	0.6429	0.5893	-0.3571	0.5476	0.3750	-0.3333	-0.2857	0.4048	0.7857	0.6905	-0.0238	0.7143	-0.1667
98	0.7381	0.0059	-0.6190	0.1905	0.8988	-0.4762	0.2619	0.7143	0.2381	0.4048	-0.3571	0.3095	0.4524
99	0.7381	0.4464	-0.0238	0.6667	0.2798	-0.3810	-0.1429	0.4048	0.7381	0.7857	0.3095	0.4524	-0.0476
100	0 2857	-0.0417	-0.2381	-0.5714	-0.1250	-0.3333	-0.1905	0.1905	-0.2619	0.3095	-0.7619	0.2143	-0.2619
101	0.6667	0.8036	-0.0714	0.5714	0.3393	0.0476	-0.3571	0.5952	0.6905	0.7143	-0.0476	0.5952	-0.2143
102	-0 0952	0.8631	0.1190	-0.1190	0.1012	-0.1905	0.7381	-0.2857	-0.3571	0.0238	0.4286	-0.3095	0 6667
103	0.1905	0.7321	-0.0476	0.3810	0.1250	0.1905	-0.2381	0.5000	0.7143	0.5952	0.2619	-0.1667	-0.2381
105	0.0298	0.6309	-0.0655	0.6012	0.1131	0.2083	-0.3155	-0.0774	0.6726	0.4226	0.2559	0.7440	-0.2321
106	0.7619	-0.2798	-0.3571	-0.0238	0.6488	-0.8571	0 6905	0 6190	0.3571	0.6905	0.1190	-0.0952	0.6190

BANK NO	82	83	85	86	87	88	90	91	92	93	94	95	96	97
53														
54														
55														
56														
57														
58														
59														
60														
61														
63														
64														
65														
66														
67														
68														
69														
71														
72														
73														
74														
75														
77														
78														
79														
80														
81														
82	1.0000													
83	0.6726	1.0000												
85	0.4702	0.3810	1.0000											
86	0.8393	0.8095	0.7381	1.0000										
87	0.5774	0.3810	0.0714	0.5238	1.0000									
88	0.2440	0.0952	0.7143	0.4524	-0.0714	1.0000								
90	0.6607	0.4940	0.8155	0.6964	0.1012	0.3869	1.0000							
91	0.8393	0.6250	0.7083	0.8393	0.4345	0.3036	0.8214	1.0000						
92	0.6905	0.2739	0.5476	0.5119	0.2738	0.1309	0.6607	0.7440	1.0000					
93	0.8393	0.6250	0.7083	0.8393	0.4345	0.3036	0.8214	1.0000	0.7440	1.0000				
94	0.3750	0.1014	0.4940	0.2321	-0.0774	0.0298	0.8393	0.5357	0.6429	0.5357	1.0000			
95	0.8631	0.8333	0.5476	0.8810	0.3571	0.2857	0.7559	0.8274	0.4048	0.8274	0.3631	1.0000		
96	0.7917	0.4762	0.5238	0.6667	0.3810	0.2143	0.6250	0.9226	0.8214	0.9226	0.4107	0.6429	1.0000	
97	0.8274	0.6190	0.8095	0.9524	0.4762	0.5714	0.6964	0.8036	0.6190	0.8036	0.2679	0.7619	0.6667	1.0000
98	0.1964	-0.0714	0.6905	0.4048	0.0714	0 9524	0.3036	0.2559	0.1429	0.2559	-0.0179	0.1429	0.1667	0.5714
99	0.7679	0.7857	0.6905	0.9524	0.5714	0.4524	0.6607	0.8512	0.3809	0 8512	0.1964	0.8810	0.6667	0.8571
100	0.1607	0.0476	0.0952	0.0000	-0.6667	0.4524	0.1488	-0.0417	0.0833	-0.0417	0.0059	0.1429	0.0476	0.0714
101	0.8274	0.4762	0.8095	0.8095	0.3810	0.5952	0.8988	0.8631	0.6667	0.8631	0.6488	0.8095	0.7143	0.8571
102	-0.3988	0.0000	-0.4524	-0.3095	0.1190	-0.0952	-0.6369	-0.3988	-0.4404	-0.3988	-0.6726	-0.4286	-0.2619	-0.4286
103	0.2679	0.2143	0.5714	0.3810	0.2381	0.0238	0.7559	0.4940	0.3929	0.4940	0.7917	0.3571	0.2143	0.3571
105	0.7560	0.5060	0.3988	0.6845	0.6607	0.0774	0.4464	0.5238	0.6786	0.5238	0.2857	0.4821	0.4583	0.7440
106	-0.0059	0.4286	0.5476	0.4524	-0.0238	0.6905	0.1488	0.1131	-0.1786	0.1131	-0.2798	0.2143	-0.0476	0.4048

The detailed scrutiny of these cells reveals that except 6th, 7th and 8th (in sequence mentioned above) cells mentioned above, all represent branches of one bank only. This indicates the dual possibility i.e. the branches of one bank may have identical ranking and branches of different banks may also have the identical ranking.

ii. The second observation is about the cells where there does not exist relationship. This is denoted by RCC = 0. The following 31 cells have RCC = 0.

(1, 53); (2, 29); (2, 56); (2, 98); (3, 53); (6, 47); (15,59) (16, 47); (18, 20); (18, 43); (18, 67); (19, 27); (21, 22); (21,81) (23, 48); (24, 85); (26, 48); (26, 72); (26, 73); (27, 69); (28,61) (29, 102); (35, 75); (54, 87); (55, 71); (58, 91); (58, 93); (74, 80); (83, 102); (86, 100); and (103, 106).

The review of the above cells indicate that out of 31 cells having '0' value only four cells are such where both the bank branches belong to one bank. They are (2, 29), (18, 20), (19,27) and (21, 22). All other cells represent combination of branches of two different banks.

iii. The third observation is regarding negative RCC below -0.90; indicating the ranking of factors in almost a reverse order. Such cell is only (80, 103) where the RCC is found to be -0.9048. Both the branches denoted by this cell belong to different banks.

iv. Further to this an attempt is also made to examine whether the branches of one bank go together or not; whether there is a

specific distinction between the two banks or not. For this study, linkage-analysis is applied; and it is observed that the total respondents are divided in 24 groups. The details are given in Table V.18.

TABLE V.18

LINKAGE ANALYSIS : ADVANCES TO SELF EMPLOYED AND PROFESSIONAL

Cluster	Bank Branch No.
I	4, 5, 6, 11, 15, 105, 38, 86, 97, 53, 50, 77, 99
II	14, 31, 83, 95, 51
III	19, 61
IV	33, 82, 36, 66, 37, 69, 39
V	49, 21, 65, 56
VI	72, 73, 106, 17
VII	91, 93, 96
VIII	12, 27, 92, 34
IX	16, 63, 68
X	2, 103
XI	88, 98
XII	78, 90, 26, 75, 101, 94, 9, 40
XIII	44, 55
XIV	52, 81, 54
XV	7, 25, 85, 3
XVI	20, 28, 24
XVII	57, 87
XVIII	60, 67
XIX	48, 58, 47, 79
XX	1, 23, 80, 43, 102, 46
XXI	18, 45, 64, 71, 100
XXII	22, 41, 13
XXIII	35, 59, 74
XXIV	29, 42

The scrutiny of above groups indicates that branches of one bank are not going together consistently. For e.g. the bank with considerably high number of branches in Baroda is scattered over 15 groups out of 24 groups. Also in these 15 groups it is not only the branches of this bank but also with this bank there are branches of another bank (except cluster XVI). The other bank which has also a high number of branch eventhough less than first one mentioned above is scattered over nine groups.

This indicates that the ranking of factors of branches of one bank does not go together, but they differ from each other to such an extent that branches of one bank do not form one group except where the respondent branches of a bank are less than 5.

(e) TO :

Similar to other segments here also for the ranking given to various factors for loan decision for transport operators RCCs are computed between the bank branches. Table V.19 gives the RCC between the bank branches for loan decision for transport operators. On a look to the table following things are observed :

i. Between few cells it is found that the RCC is 1. This indicates the identical ranking by two different respondents. Such cells are : (4, 5), (4, 11), (5, 11), (14, 31), (33, 82), (49, 65), (72, 73) and (91, 93). It may be noted here that except the two cells viz. (33, 82) and (49, 65) all cells represent the branches of the same bank. Hence, it can be said that eventhough there exists identical relationship in ranking of two branches of one

TABLE V.19

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS TRANSPORT OPERATOR

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16	17
1	1.0000														
2	0.2857	1.0000													
3	-0.1429	-0.0476	1.0000												
4	0.1131	-0.2798	0.4107	1.0000											
5	0.1131	-0.2798	0.4107	1.0000	1.0000										
6	0.2381	-0.3809	0.1905	0.9226	0.9226	1.0000									
7	-0.7619	-0.5952	0.1429	0.3512	0.3512	0.2857	1.0000								
9	0.1905	-0.2852	0.6190	0.9226	0.9226	0.8571	0.1667	1.0000							
11	0.1131	-0.2798	0.4107	1.0000	1.0000	0.9226	0.3512	0.9226	1.0000						
12	-0.1429	-0.4524	0.2143	0.8869	0.8869	0.7619	-0.5714	0.6905	0.8869	1.0000					
13	0.1905	0.1905	0.6667	0.6250	0.6250	0.4762	0.6667	0.5714	0.6250	0.6667	1.0000				
14	0.2857	-0.1429	0.1905	0.9345	0.9345	0.9524	0.1667	0.8571	0.9345	0.7381	0.4762	1.0000			
15	0.2619	-0.1905	0.1429	0.8750	0.8750	0.9286	0.1429	0.7857	0.8750	0.7381	0.3809	0.9048	1.0000		
16	0.0238	-0.1667	0.1667	0.9107	0.9107	0.8333	0.2857	0.7619	0.9107	0.8810	0.4762	0.8810	0.9048	1.0000	
17	0.2619	-0.0238	0.2143	0.6131	0.6131	0.4048	-0.0238	0.4762	0.6131	0.7143	0.5714	0.4524	0.5476	0.6667	1.0000
18	0.1905	0.0000	0.3810	0.6726	0.6726	0.6667	0.5714	0.6667	0.6726	0.6667	0.7143	0.6667	0.5714	0.6667	0.3810
19	-0.4762	0.0238	0.2857	0.6488	0.6488	0.5238	0.6667	0.4762	0.6488	0.6429	0.5952	0.5952	0.5238	0.6905	0.1905
20	0.1905	0.6905	0.0952	0.1726	0.1726	0.0476	-0.1905	0.0238	0.1726	0.1190	0.3809	0.1667	0.3095	0.2857	0.4524
21	0.8333	0.6429	-0.0952	0.1726	0.1726	0.2143	-0.6190	0.1429	0.1726	-0.0952	0.2857	0.3571	0.2857	0.1190	0.2619
22	0.1190	-0.5952	-0.3095	0.3750	0.3750	0.5000	0.4286	0.1429	0.3750	0.5714	0.4762	0.3095	0.4524	0.3333	0.3810
23	0.3095	0.0000	0.0476	-0.0774	-0.0774	-0 1667	-0.0238	-0.1190	-0.0774	-0.0476	0.6667	-0.1429	-0.3810	-0.3571	0.0952
24	0.1667	0.5952	0.5000	0.3036	0.3036	0.1667	-0.2381	0.3333	0.3036	0.0952	0.3809	0.2619	0.4048	0.3333	0.3810
25	0.0476	-0.3571	-0.1190	0.7917	0.7917	0.8095	-0.3095	0.5952	0.7917	-0.8571	0.3809	0.7857	0.8810	0.9286	0.6190
26	-0.2381	0.1667	0.0238	0.6488	0.6488	0.5714	0.3333	0.4524	0.6488	0.6190	0.3809	0.6905	0.6905	0.8333	0.3333
27	0.6429	0.3333	-0.4286	0.4226	0.4226	0.5476	-0.3333	0.2619	0.4226	0.2619	0.1905	0.6667	0.6190	0.5238	0.3095
28	0.1429	0.7143	0.3333	0.2202	0.2202	-0.0476	-0.2619	0.1429	0.2202	0.1667	0.4762	0.1429	0.1905	0.3095	0.5952
29	0.4048	0.0952	0.5000	0.1607	0.1607	0.2619	-0.1905	0.3810	0.1607	-0.0714	0.3095	0.1429	0.3571	0.0714	0.0952
31	0.2857	-0.1429	0.1905	0 9345	0.9345	0.9524	0.1667	0.8571	0.9345	0.7381	0.4762	1.0000	0.9048	0.8810	0.4524
33	0.3631	-0.2321	0.3155	0.8393	0.8393	0.9107	0.0893	0.8750	0.8393	0.6488	0.3988	0.8631	0.9345	0.8155	0.4821
34	-0.1071	-0.4524	0.5357	0.5536	0.5536	0.3929	0.1548	0.6429	0.5536	0.5952	0.4881	0.3333	0.4524	0.5595	0.6190
35	0.1905	0.1667	0.6667	0.1726	0.1726	-0.0952	-0.3810	0.3572	0.1726	0.0952	0.4762	-0.0238	0.0238	0.1190	0.5714
36	-0.2857	-0.0952	0.5714	0.5774	0.5774	0.3810	0.4762	0.5714	0.5774	0.6667	0.6190	0.3809	0.4762	0.6667	0.5714
37	0.9107	0.3631	-0.1845	0.1607	0.1607	0.3631	-0.5298	0.2083	0.1607	-0.1369	0.2083	0.4107	0.3393	0.0774	0.0298
38	0.3571	-0.3095	0.2857	0.5298	0.5298	0.4048	-0.1905	0.6190	0.5298	0.4762	0.4762	0.4524	0.3333	0.4524	0.5952
39	0.3095	0.5000	0.0952	-0.0536	-0.0536	-0.3095	-0.4524	-0.0476	-0.0536	-0.0714	0.4762	-0.0714	-0.3095	-0.0714	0.3571
40	-0.1667	0.2381	0.2619	0.6726	0.6726	0.5000	0.3095	0.5238	0.6726	0.6905	0.5000	0.6190	0.6667	0.8571	0.5952
41	-0.0476	-0.4286	-0.0119	0.6250	0.6250	0.4762	0.4167	0.3929	0.6250	0.8810	0.6309	0.4524	0.4881	0.6786	0.8214
42	0.6250	-0.2321	0.2202	0.0655	0.0655	0.1012	-0.5530	0.1845	0.0655	-0.0774	0.2202	0.0417	0.3155	0.0655	0.4345
43	0.8095	0.3333	-0.5000	-0.3869	-0.3869	-0.1905	-0.6905	-0.3810	-0.3869	-0.5000	0.0952	-0.1905	-0.1667	-0.4286	-0.0952
44	0.0000	0.1905	0.1190	0.1607	0.1607	0.0476	-0.3095	0.2857	0.1607	0.0238	0.1905	0.2381	0.0714	0.2857	0.0476
45	0.2381	-0.4524	0.1190	0.7679	0.7679	0.7619	0.3810	0.6667	0.7679	0.8571	0.5952	0.6905	0.7143	0.7619	0.6905
46	0.3333	0.2619	-0.7619	-0.0298	-0.0298	0.1429	-0.0476	-0.2857	-0.0298	0.0000	0.2143	0.2143	0.1190	0.0714	-0.0952
47	-0.3333	-0.0952	-0.1667	0.0655	0.0655	0.0000	0.6429	-0.2381	0.0655	0.3095	0.6667	-0.0476	-0.0714	0.0000	0.0952
48	-0.0238	0.1429	0.1429	0.1012	0.1012	0.0714	0.4048	-0.0476	0.1012	0.0952	0.6905	0.0476	-0.0476	-0.1190	-0.0478
49	0.7857	0.7381	-0.1190	0.0774	0.0774	0.0714	-0.6667	0.0476	0.0774	-0 1667	0.2857	0.2619	0.1429	0.0476	0.2381
50	-0.5714	-0.1667	-0.0238	0.1012	0.1012	-0.0952	0.5000	-0.0238	0.1012	0.2857	0.5714	0.0238	-0.2619	0.1190	-0.0476
51	0.3809	0.3571	-0.0714	0.4107	0.4107	0.5714	-0.2619	0.4048	0.4107	0.0952	0.0952	0.6429	0.6905	0.5000	0.0000

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16	17
52	-0.1607	-0.1964	-0.1845	0.2262	0.2262	0.3869	0.6250	0.0774	0.2262	0.2083	0.4940	0.3274	0.1726	0.1131	-0.3750
53	-0.0476	0.1905	0.4762	0.8274	0.8274	0.6667	0.2381	0.7619	0.8740	0.6429	0.5714	0.8095	0.6905	0.8095	0.4286
54	0.0714	0.4762	0.2381	0.5179	0.5179	0.2619	-0.0238	0.4048	0.5179	0.4286	0.5714	0.5238	0.2857	0.5476	0.4762
55	-0.1726	-0.0893	0.6488	0.8214	0.8214	0.6131	0.2798	0.8274	0.8214	0.7321	0.5774	0.6726	0.6845	0.8274	0.6012
56	0.1429	0.3809	0.7619	0.2798	0.2798	0.1429	-0.2857	0.4762	0.2798	0.0000	0.3809	0.1905	0.3095	0.2143	0.2619
57	0.4524	-0.6667	0.0476	0.5779	0.5779	0.6429	-0.0238	0.5952	0.5129	0.4286	0.3809	0.5238	0.4762	0.3571	0.2857
58	-0.0476	0.3809	0.5476	0.6845	0.6845	0.4762	0.1429	0.6190	0.6845	0.5238	0.5714	0.6190	0.5952	0.6905	0.5000
59	0.1667	0.3333	0.3810	-0.0774	-0.0774	-0.2619	-0.3810	0.0238	-0.0774	-0.0476	0.3333	-0.2381	0.0000	0.0238	0.5238
60	0.0952	0.2143	-0.4524	-0.4702	-0.4702	-0.3810	0.0238	-0.5952	-0.4702	-0.4286	0.3809	-0.3571	-0.5476	-0.5952	-0.4762
61	-0.4583	0.0893	-0.3988	-0.0833	-0.0833	0.0655	0.4464	-0.2560	0.0774	-0.0655	0.1964	0.0655	0.0536	0.0417	-0.5535
63	0.0000	0.0476	-0.0952	0.0774	0.0774	0.0476	0.3571	-0.0952	0.0774	0.0952	0.6667	0.0952	-0.1905	-0.1429	-0.1429
65	0.7857	0.7381	-0.1190	0.0774	0.0774	0.0714	-0.6667	0.0476	0.0774	-0.1667	0.2857	0.2619	0.1429	0.0476	0.2381
66	0.6667	-0.2381	-0.4524	-0.3036	-0.3036	0.0476	-0.4762	-0.2381	-0.3036	-0.3333	0.0952	-0.1905	-0.0952	-0.3810	-0.0952
67	0.1667	0.1667	-0.3810	-0.3988	-0.3988	-0.2619	0.0476	-0.5238	-0.3988	-0.3809	0.3809	-0.3095	-0.3810	-0.5476	-0.4048
68	0.0952	-0.2619	0.1190	0.8869	0.8869	0.8095	0.2381	0.7381	0.8869	0.9048	0.4762	0.8333	0.8810	0.9762	0.7619
69	0.9048	0.0714	-0.0476	0.1250	0.1250	0.2857	-0.7143	0.2857	0.1250	-0.1190	0.1190	0.2619	0.3333	0.0714	0.2381
71	0.3036	-0.5179	0.0298	0.3274	0.3274	0.3512	0.1845	0.3393	0.3274	0.3631	0.5893	0.2917	0.0893	0.1250	0.2083
72	-0.1190	-0.3095	-0.3571	0.0655	0.0655	0.2143	0.5000	-0.0952	0.0655	0.0952	0.4762	0.1667	-0.0714	-0.0952	-0.4286
73	-0.1190	-0.3095	-0.3571	0.0655	0.0655	0.2143	0.5000	-0.0952	0.0655	0.0952	0.4762	0.1667	-0.0714	-0.0952	-0.4286
74	-0.2381	0.1429	0.7143	-0.1964	-0.1964	-0.4286	0.0952	-0.0476	-0.1964	-0.2381	0.6667	-0.4286	-0.5000	-0.4524	-0.0714
75	0.3571	0.3333	0.2381	0.3750	0.3750	0.1190	-0.2381	0.2619	0.3750	0.4286	0.5714	0.2381	0.2857	0.4048	0.9048
77	-0.3512	0.0774	0.5417	0.7083	0.7083	0.5536	0.5060	0.6488	0.7083	0.5655	0.6250	0.6488	0.5179	0.6486	0.1726
79	0.4762	0.2619	0.0000	0.1607	0.1607	0.1905	0.0000	0.0476	0.1607	0.0476	0.5952	0.2143	0.0714	-0.0714	0.0952
81	0.3809	0.6667	0.2857	0.4821	0.4821	0.4762	0.3810	0.3810	0.4821	0.3809	0.7143	0.5714	0.4762	0.4762	0.2857
82	0.3631	-0.2321	0.3155	0.8393	0.8393	0.9107	0.0893	0.8750	0.8393	0.6488	0.3988	0.8631	0.9345	0.8155	0.4821
83	0.4762	0.0714	-0.0476	0.6250	0.6250	0.7143	-0.1429	0.6190	0.6250	0.3571	0.3095	0.8333	0.6190	0.5952	0.1429
85	0.2143	-0.4286	0.4762	0.8512	0.8512	0.7381	0.1190	0.8810	0.8512	0.7857	0.5714	0.7143	0.7143	0.7619	0.7381
86	-0.1667	-0.4048	0.5714	0.7798	0.7798	0.5476	0.3571	0.7619	0.7798	0.8333	0.6667	0.5476	0.5476	0.7381	0.7381
87	0.3809	-0.4048	0.2857	0.8036	0.8036	0.7143	0.1429	0.7381	0.8036	0.7857	0.6667	0.6905	0.6190	0.6429	0.7619
88	0.1071	0.0714	-0.2619	-0.3810	-0.3810	-0.2262	0.2143	-0.4286	-0.3810	-0.3214	0.4167	-0.3095	-0.3690	-0.4881	-0.4286
90	-0.2679	0.3155	0.4583	0.5595	0.5595	0.2321	0.2798	0.4226	0.5595	0.5893	0.6726	0.4107	0.3274	0.6131	0.6012
91	0.0952	-0.3333	0.2500	0.6488	0.6488	0.5238	0.2738	0.5357	0.6488	0.8095	0.5833	0.4524	0.6310	0.7024	0.8929
92	0.2917	-0.2440	0.3155	0.4405	0.4405	0.3155	-0.0179	0.5298	0.4405	0.3988	0.5893	0.3750	0.1488	0.3036	0.4107
93	0.0952	-0.3333	0.2500	0.6488	0.6488	0.5238	0.2738	0.5357	0.6488	0.8095	0.5833	0.4524	0.6310	0.7024	0.8929
94	-0.4226	0.1252	0.5179	0.5357	0.5357	0.2679	0.4107	0.4702	0.5357	0.6012	0.5893	0.3631	0.3988	0.6607	0.5179
95	0.1131	-0.1369	0.4821	0.9524	0.9524	0.8750	0.3036	0.9226	0.9524	0.7440	0.6250	0.9345	0.7798	0.8155	0.4226
96	-0.2440	-0.4583	0.1131	0.8512	0.8512	0.8036	0.7083	0.6250	0.8512	0.9464	0.6250	0.7559	0.7560	0.8512	0.4940
97	-0.0476	-0.3095	0.5238	0.7798	0.7798	0.5714	0.1905	0.7857	0.7798	0.7857	0.5714	0.5952	0.6190	0.7857	0.7619
98	-0.6905	-0.8333	0.1667	0.1012	0.1012	0.0238	0.7619	0.0476	0.1012	0.4048	0.5714	-0.1667	-0.0952	0.0476	0.0476
99	0.2857	-0.0714	-0.0714	0.7917	0.7917	0.9048	0.1905	0.6429	0.7917	0.6190	0.3809	0.9285	0.8810	0.7857	0.2857
100	-0.0714	-0.1905	0.7381	0.7207	0.7207	0.5952	0.1190	0.8810	0.7202	0.5000	0.4762	0.6190	0.5952	0.6429	0.3333
101	-0.0476	-0.1429	0.4286	0.8631	0.8631	0.8571	0.5714	0.7857	0.8631	0.7857	0.5952	0.8095	0.8810	0.8571	0.4286
102	0.4524	0.2381	-0.8095	-0.5774	-0.5774	-0.4048	-0.4286	-0.6905	-0.5774	-0.5000	0.0952	-0.3809	-0.4286	-0.5238	-0.2619
103	0.0191	0.1667	-0.0476	-0.5060	-0.5060	-0.6667	-0.5238	-0.4048	-0.5060	-0.3809	0.2857	-0.5952	-0.6190	-0.4762	0.1667
105	0.4524	-0.2381	0.5952	0.7917	0.7917	0.6905	0.0714	0.8571	0.7917	0.6662	0.6905	0.6667	0.6190	0.5952	0.7143
106	-0.0714	-0.0714	-0.3571	0.0774	0.0774	0.1667	0.3810	-0.0952	0.0774	0.0714	0.4762	0.2143	-0.0952	-0.0476	-0.3810

BANK NO	28	29	31	33	34	35	36	37	38	39	40	41	42	43
1														
2														
3														
4														
5														
6														
7														
9														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28	1.0000													
29	0.1429	1.0000												
31	0.1429	0.1429	1.0000											
33	0.0774	0.5417	0.8631	1.0000										
34	0.1190	0.3810	0.3333	0.1625	1.0000									
35	0.5476	0.4286	-0.0238	0.2202	0.6726	1.0000								
36	0.3809	0.3095	0.3810	0.5417	0.8691	0.5714	1.0000							
37	0.0536	0.3988	0.4107	0.4048	-0.2798	0.0893	-0.3155	1.0000						
38	0.0238	0.0952	0.4524	0.5417	0.7143	0.5952	0.4762	0.1607	1.0000					
39	0.5000	-0.2619	-0.0714	-0.2202	0.0119	0.5238	0.0952	0.1607	0.4762	1.0000				
40	0.6190	0.0714	0.6190	0.5536	0.4880	0.2619	0.7857	-0.0893	0.2381	0.1190	1.0000			
41	0.1667	-0.1905	0.4524	0.4167	0.5774	0.1905	0.5833	-0.1667	0.5595	0.1548	0.5238	1.0000		
42	0.3988	0.8155	0.0417	0.4107	0.3095	0.5417	0.1726	0.4464	0.1607	-0.0179	0.0655	0.0000	1.0000	
43	-0.0476	0.2619	-0.1905	-0.1011	-0.5357	-0.1667	-0.5714	0.8036	-0 1250	0.1667	-0.4762	-0.2738	0.4702	1.0000
44	0.0952	-0.0238	0.2381	0.2798	0.3690	0 3571	0.4762	0.0417	0.5476	0.4524	0.4286	-0.0119	-0.1726	-0.3333
45	-0.0238	0.1667	0.6905	0.7560	0.7024	0.2143	0.5952	0.1845	0.7381	0.0476	0.4762	0.8690	0.1845	-0.0714
46	-0.0714	-0.2857	0.2143	-0.0179	-0.6429	-0.6905	-0.3571	0.5774	-0.2619	0.0476	0.0476	0.0714	-0.1964	0.5476
47	0.0952	-0.3095	-0.0476	-0.2679	-0.3690	-0.4524	0.0000	-0.1726	-0.4524	-0.1191	0.0952	0.3452	-0.3154	-0.0476
48	0.1905	0.0000	0.0476	-0.1726	-0.4762	-0.3095	-0 1667	0.1607	-0.4524	-0.0476	-0.0476	0.0000	-0.1012	0.1667
49	0.5476	0.1190	0.2619	0.1012	-0 3929	0.1190	-0.2857	0.7917	0.0714	0.5476	0.0952	-0.1309	0.3750	0.6667
50	-0.1190	-0.0190	0.0238	-0.2633	0.0595	-0.1190	0.3810	-0.4226	0.2143	0.3810	0.2857	0.3214	-0.8274	-0.5714
51	0.2143	0.4286	0.6429	0.6488	-0.1071	-0.2143	0.0952	0.6250	-0.1190	-0.2852	0.4762	-0.2024	0.2917	0.1429

BANK NO	28	29	31	33	34	35	36	37	38	39	40	41	42	43	44
52	-0.3869	-0.1011	0.3274	0.1250	-0.4048	-0.7440	-0.0774	0.2321	-0.3274	-0.3631	0.0417	0.0059	-0.4821	0.0059	-0.2560
53	0.5238	0.0714	0.8095	0.6131	0.3214	0.1905	0.5714	0.0893	0.2619	0.1190	0.8333	0.3095	-0.0655	-0.5000	0.3571
54	0.6667	-0.2857	0.5238	0.2083	0.1071	0.2857	0.3810	0.1131	0.3571	0.6667	0.6905	0.3333	-0.1964	-0.2619	0.5000
55	0.4583	0.2559	0.6726	0.7024	0.7560	0.5060	0.8631	-0.1786	0.4821	0.0417	0.8393	0.4821	0.1250	-0.6845	0.4107
56	0.6190	0.7381	0.1905	0.4107	0.3929	0.6667	0.4762	0.1012	0.0714	0.0238	0.4048	-0.2143	0.6250	-0.1905	0.1429
57	-0.4762	0.2857	0.5238	0.6845	0.4881	0.0952	0.1905	0.3988	0.7381	-0.0952	-0.0714	0.4286	0.1845	0.1190	0.1190
58	0.7619	0.1905	0.6190	0.4821	0.2857	0.3333	0.5714	0.0298	0.0952	0.1429	0.8333	0.2381	0.1488	-0.4286	0.1905
59	0.6190	0.5476	-0.2381	0.1131	0.5238	0.8333	0.5230	-0.0774	0.2381	0.3095	0.2857	0.1309	0.7440	0.0476	0.1429
60	-0.2143	-0.2857	-0.3571	-0.5655	-0.8690	-0.5952	-0.5714	0.3155	-0.5000	0.1429	-0.4762	-0.2976	-0.3512	0.5238	-0.4762
61	-0.2202	-0.1131	0.0655	-0.0476	-0.5298	-0.8274	-0.0298	0.0000	-0.7202	-0.5298	0.2440	-0.2738	-0.4881	-0.1845	-0.1369
63	-0.0476	-0.3810	0.0952	-0.2679	-0.5714	-0.4524	-0.2857	0.2083	-0.2143	0.2143	-0.1429	0.0714	-0.4821	0.1667	-0.4048
65	0.5476	0.1190	0.2619	0.1012	-0.3929	0.1190	-0.2857	0.7917	0.0714	0.5476	0.0952	-0.1309	0.3750	0.6667	0.0476
66	-0.4762	0.3810	-0.1905	0.0893	-0.1667	-0.1429	-0.3810	0.6131	0.1190	-0.1190	-0.5952	-0.0833	0.4583	0.8095	-0.3333
67	-0.1667	-0.0476	-0.3095	-0.4345	-0.8333	-0.5952	-0.5714	0.3750	-0.6190	-0.0952	-0.4762	-0.2976	-0.1012	0.5952	-0.7381
68	0.2619	0.0714	0.8333	0.8155	0.6429	0.1905	0.6667	0.0774	0.5714	-0.0238	0.7857	0.7857	0.1369	-0.3571	0.2619
69	-0.0238	0.6190	0.2619	0.5298	0.1905	0.3095	-0.0714	0.7917	0.6762	0.1190	-0.1429	-0.0357	0.7321	0.6667	0.1429
71	-0.4226	-0.0536	0.2917	0.2798	0.2857	-0.3512	0.1131	0.2679	0.6964	0.2798	-0.1726	0.4821	-0.1369	0.1607	0.1369
72	-0.5476	-0.3333	0.1667	-0.0893	0.5476	-0.8095	-0.2857	0.2202	-0.2619	-0.2143	-0.2143	0.0119	-0.6369	0.0952	-0.3333
73	-0.5476	-0.3333	0.1667	-0.0893	0.5476	-0.8095	-0.2857	0.2202	-0.2619	-0.2143	-0.2143	0.0119	-0.6369	0.0952	-0.3333
74	0.2857	0.2619	-0.4286	-0.3512	0.0357	0.4762	0.1905	-0.2798	-0.1190	0.2619	-0.1667	-0.2381	0.0774	-0.1905	-0.2381
75	0.8095	0.0714	0.2381	0.2083	0.3571	0.6429	0.3810	0.1131	0.4286	0.5952	0.4762	0.5833	0.4821	0.0952	0.0000
77	0.3631	0.0417	0.6488	0.4524	0.2262	0.0298	0.5774	-0.1250	0.0298	-0.0655	0.7440	0.1786	-0.2738	-0.6726	0.2321
79	0.2143	0.0476	0.2143	-0.0179	-0.5000	-0.2143	-0.3571	0.5774	-0.1667	0.1905	-0.1429	0.0238	0.1131	0.5476	-0.5476
81	0.5714	0.3095	0.5714	0.3988	0.0119	0.0952	0.3333	0.5893	0.0952	0.3810	0.5952	0.2500	0.2202	0.3810	0.2357
82	0.0774	0.5417	0.8631	1.0000	0.6250	0.2202	0.5417	0.4048	0.5417	-0.2202	0.5536	0.4167	0.4107	-0.1012	0.2798
83	-0.0238	0.0476	0.8333	0.6726	0.0714	-0.1190	0.1190	0.6488	0.4762	0.1667	0.3810	0.1548	-0.0774	0.0952	0.5238
85	0.1429	0.2857	0.7143	0.8155	0.8452	0.5238	0.6667	0.0774	0.8333	0.0952	0.5000	0.6905	0.2798	-0.3333	0.2857
86	0.2619	0.1190	0.5476	0.6131	0.8929	0.2857	0.8571	-0.2917	0.7143	0.1429	0.6429	0.7500	0.0774	-0.6429	0.3095
87	0.1190	0.0952	0.6905	0.6488	0.5595	0.3333	0.3810	0.2440	0.7619	0.2143	0.3095	0.7738	0.2083	-0.0476	0.0000
88	-0.3095	0.0952	-0.3095	-0.3036	-0.5119	-0.4286	-0.2976	0.3155	-0.3690	-0.0476	-0.4048	-0.2083	-0.0893	0.5357	-0.3690
90	0.7679	-0.1488	0.4107	0.2143	0.3512	0.4107	0.6726	-0.2619	0.2202	0.4226	0.8393	0.4702	-0.1012	-0.5655	0.2917
91	0.3095	0.2619	0.4524	0.6190	0.8036	0.4762	0.7262	-0.0833	0.5833	0.0357	0.5714	0.8810	0.4286	-0.2024	0.0119
92	-0.0536	-0.0059	0.3750	0.3750	0.5595	0.4940	0.3988	0.1726	0.9345	0.5893	0.1369	0.4821	-0.0417	-0.0655	0.5774
93	0.3095	0.2619	0.4524	0.6190	0.8036	0.4762	0.7262	-0.0833	0.5833	0.0357	0.5714	0.8810	0.4286	-0.2024	0.0119
94	0.5774	0.0893	0.3631	0.3750	0.6369	0.4702	0.9226	-0.3988	0.2679	0.1726	0.8988	0.4643	-0.0119	-0.7083	0.4583
95	0.2202	0.1369	0.9345	0.7679	0.3988	0.1250	0.4821	0.2321	0.4583	0.0179	0.6250	0.4107	-0.0536	-0.3869	0.2559
96	0.0417	-0.0774	0.7560	0.6310	0.4048	-0.1845	0.5774	-0.1071	0.2321	-0.2917	0.6726	0.7440	-0.2024	-0.5059	-0.0774
97	0.3095	0.1905	0.5952	0.6964	0.9167	0.6190	0.8571	-0.1845	0.7619	0.1667	0.6905	0.7024	0.1845	-0.5714	0.4286
98	-0.4524	-0.0238	-0.1667	0.0298	0.4881	-0.0238	0.5714	-0.6607	0.1190	-0.3571	0.0476	0.4643	-0.3155	-0.6190	-0.1905
99	0.0714	0.1190	0.9286	0.7679	0.0476	-0.3333	0.1905	0.5060	0.1429	-0.2619	0.5476	0.3333	0.0179	-0.0238	0.0238
100	0.1905	0.4524	0.6190	0.7560	0.7619	0.5238	0.7619	-0.0536	0.5476	-0.0476	0.5952	0.2024	0.1607	-0.6190	0.5238
101	0.2381	0.4048	0.8095	0.8274	0.5238	0.0714	0.6905	0.1131	0.2143	-0.3095	0.7619	0.4762	0.1726	-0.3571	0.1190
102	-0.2381	-0.1667	-0.3810	-0.3988	-0.6905	-0.4524	-0.5714	0.5298	-0.2381	0.2143	-0.4762	-0.1786	0.0059	0.8333	-0.2619
103	0.1190	0.0000	-0.5952	-0.3869	0.1548	0.5714	0.0952	-0.0536	0.3810	0.6905	-0.2619	0.0357	0.2083	0.2619	0.2619
105	0.2381	0.4048	0.6667	0.7321	0.7024	0.5952	0.5000	0.3036	0.8095	0.2619	0.3333	0.5952	0.4226	-0.0238	0.1667
106	-0.3571	-0.4524	0.2143	-0.1369	-0.6071	-0.7381	-0.2857	0.2679	-0.2143	0.0238	-0.0952	-0.0119	-0.6964	0.0952	-0.1429

BANK NO	55	56	57	58	59	60	61	63	65	66	67	68	69	71	72
52															
53															
54															
55	1.0000														
56	0.5893	1.0000													
57	0.1845	-0.1667	1.0000												
58	0.8155	0.6667	-0.2143	1.0000											
59	0.3036	0.6429	-0.1429	0.2381	1.0000										
60	-0.7679	-0.5714	-0.2857	-0.4048	-0.4762	1.0000									
61	-0.1548	-0.2917	-0.4345	0.0655	-0.5417	0.3274	1.0000								
63	-0.2798	-0.4286	-0.0952	0.0238	-0.5714	0.8095	0.2559	1.0000							
65	-0.1012	0.2143	-0.0714	0.3095	0.1190	0.3095	-0.1726	0.2857	1.0000						
66	-0.6250	-0.3333	0.5238	-0.7143	0.0238	0.2619	-0.3274	-0.0714	0.1905	1.0000					
67	-0.7321	-0.4048	-0.2619	-0.3333	-0.3810	0.9286	0.3274	0.7381	0.3095	0.3571	1.0000				
68	0.7798	0.1429	0.4762	0.5714	0.0952	-0.6190	-0.1131	-0.1905	0.0238	-0.2381	-0.5714	1.0000			
69	-0.0536	0.2381	0.6190	-0.1429	0.3095	-0.1905	-0.4940	-0.3333	0.5000	0.7381	-0.0952	0.1667	1.0000		
71	0.0000	-0.4107	0.8155	-0.3036	-0.2321	0.1964	-0.3274	0.3750	-0.0179	0.4583	0.0774	0.2440	0.3274	1.0000	
72	-0.3750	-0.6905	0.1429	-0.2619	-0.8571	0.7143	0.5417	0.8095	-0.0476	0.0952	0.6429	-0.1429	-0.2857	0.4702	1.0000
73	-0.3750	-0.6905	0.1429	-0.2619	-0.8571	0.7143	0.5417	0.8095	-0.0476	0.0952	0.6429	-0.1429	-0.2857	0.4702	1.0000
74	0.0417	0.4286	-0.3571	0.1429	0.3571	0.1429	-0.3393	0.2381	-0.0714	-0.2857	0.1667	-0.4762	-0.2857	-0.0298	-0.1667
75	0.4226	0.3571	0.0000	0.5238	0.6190	-0.2381	-0.5898	0.0000	0.5000	-0.1190	-0.1905	0.4762	0.2143	0.0536	-0.4762
77	0.7738	0.4107	-0.1250	0.8512	-0.1607	-0.2798	0.3512	0.2083	-0.0179	-0.4583	-0.2798	0.4940	-0.3988	-0.1190	0.1250
79	-0.2321	-0.0476	0.0238	0.1667	-0.2381	0.6905	0.0417	0.8095	0.6429	0.2262	0.7857	-0.0952	0.1429	0.2440	0.5238
81	0.3869	0.3810	0.0952	0.6667	0.1429	0.5714	0.6726	0.6667	0.6667	0.0952	0.5714	0.3810	0.2143	0.2083	0.5714
82	0.7024	0.4107	0.6845	0.4821	0.1131	-0.5655	-0.0476	-0.2679	0.1012	0.0893	-0.4345	0.8155	0.5298	0.2798	-0.0893
83	0.3512	0.0000	0.5238	0.3333	-0.3571	-0.0952	0.1250	0.1429	0.4524	0.0238	-0.1905	0.5476	0.4286	0.3988	0.2857
85	0.7798	0.3095	0.7143	0.4286	0.2381	-0.6905	-0.5298	-0.2381	-0.0476	-0.0714	-0.6429	0.8333	0.3571	0.4940	-0.2619
86	0.8750	0.3095	0.4286	0.5238	0.3095	-0.7143	-0.4345	-0.2143	-0.2619	-0.4048	-0.7143	0.7857	-0.0238	0.3512	-0.3095
87	0.5179	0.0476	0.7381	0.3095	0.0476	-0.2857	-0.5298	0.1667	0.1667	0.1190	-0.2381	0.7381	0.3571	0.6726	0.0476
88	-0.6012	-0.3690	-0.0238	-0.4286	-0.2381	0.8690	0.4341	0.6071	0.1071	0.5000	0.8690	-0.4881	0.0119	0.2976	0.6905
90	0.7619	0.3988	-0.2917	0.8631	0.2797	-0.3155	-0.0357	0.1250	0.1607	-0.8155	-0.3750	0.5417	-0.3869	-0.1429	-0.2321
91	0.6369	0.2143	0.4762	0.3571	0.4881	-0.5357	-0.3690	-0.2381	-0.1071	0.0357	-0.4167	0.8095	0.2262	0.3155	-0.2976
92	0.3631	-0.0417	0.6964	0.0298	0.0893	-0.1607	-0.5238	0.1012	0.0893	0.1369	-0.3452	0.3988	0.3512	0.8333	0.0536
93	0.6369	0.2143	0.4762	0.3571	0.4881	-0.5397	-0.3690	-0.2381	0.1071	0.0357	-0.4167	0.8095	0.2262	0.3155	-0.2976
94	0.8690	0.4821	-0.1607	0.7560	0.4226	-0.5536	0.0833	-0.2083	-0.1726	-0.7321	-0.5893	0.6012	-0.3274	-0.1548	-0.3393
95	0.7857	0.3274	0.4226	0.7321	-0.1964	-0.3512	0.0119	0.1964	0.1726	-0.3988	-0.3274	0.7440	0.0774	0.2917	0.1607
96	0.6429	-0.0774	0.3393	0.5060	-0.2560	-0.2917	0.2440	0.1964	-0.2202	-0.3631	-0.2202	0.8274	-0.2321	0.2679	0.3036
97	0.8988	0.3810	0.4524	0.5476	0.3810	-0.8095	-0.4584	-0.3571	-0.1667	-0.3571	-0.8095	0.8333	0.1190	0.2917	-0.4286
98	0.1607	-0.3095	0.2143	-0.2619	-0.0238	-0.2143	-0.0298	-0.0476	-0.9048	-0.1429	-0.2143	0.1190	-0.4524	0.3869	0.1429
99	0.4464	0.0476	0.3810	0.5238	-0.3810	-0.1429	-0.3393	0.1905	0.3095	-0.0952	-0.0476	0.7143	0.2143	0.1488	0.3333
100	0.8988	0.6429	0.3571	0.6190	0.2381	-0.8095	-0.2321	-0.4045	-0.1667	-0.4524	-0.7857	0.5952	0.1429	0.1012	-0.3810
101	0.8036	0.4286	0.3333	0.7143	0.0476	-0.3571	0.3631	0.0238	-0.0476	-0.2619	-0.2143	0.7857	0.0476	0.0893	0.1429
102	-0.8571	-0.6429	-0.0476	-0.6429	-0.1905	0.7381	0.0774	0.3333	0.4286	-0.5238	0.6667	-0.4524	0.2857	0.2321	0.3571
103	-0.2917	-0.0952	-0.0238	-0.4286	0.5714	0.0238	-0.6964	-0.2143	0.0952	0.2857	-0.1429	-0.3333	0.2381	0.2798	-0.4524
105	0.6488	0.4048	0.7381	0.4286	0.2857	-0.3571	-0.5417	0.0476	0.2143	0.1429	-0.2857	0.6667	0.5000	0.6012	-0.0952
106	-0.3154	-0.6429	0.0238	-0.1190	-0.8333	0.7381	0.5417	0.8571	0.1429	-0.0476	0.5952	-0.1190	-0.3095	0.4107	0.9524

TABLE V.19 CONTD (T

BANK NO	87	88	90	91	92	93	94	95	96	97	98	99	100	101	102	103
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																
63																
65																
66																
67																
68																
69																
71																
72																
73																
74																
75																
77																
79																
81																
82																
83																
85																
86																
87	1.0000															
88	-0.2262	1.0000														
90	0.3274	-0.3988	1.0000													
91	0.7500	-0.3036	0.4345	1.0000												
92	0.6845	-0.0893	0.2202	-0.3988	1.0000											
93	0.7500	-0.3036	0.4345	1.0000	0.3988	1.0000										
94	0.2202	-0.4167	0.8690	0.5476	0.2202	0.5476	1.0000									
95	0.6845	-0.3214	0.5714	0.4107	0.4405	0.4107	0.5000	1.0000								
96	0.6250	-0.1726	0.5000	0.6488	0.2024	0.6488	0.5357	0.7440	1.0000							
97	0.7143	-0.6071	0.6131	0.8214	0.6131	0.8214	0.7440	0.6607	0.6012	1.0000						
98	0.1667	0.1547	-0.0059	0.4405	0.2321	0.4405	0.3036	-0.0417	0.3988	0.3095	1.0000					
99	0.5000	-0.1071	0.2560	0.3095	0.0893	0.3095	0.1964	0.7917	0.7321	0.3095	-0.2619	1.0000				
100	0.4286	-0.5476	0.4702	0.4405	0.4583	0.4405	0.6726	0.7440	0.4226	0.8095	0.1190	0.3571	1.0000			
101	0.5000	-0.1429	0.5179	0.5952	0.1369	0.5952	0.6488	0.8155	0.8630	0.6429	0.2857	0.7857	0.7143	1.0000		
102	-0.2381	0.7024	-0.5536	-0.3214	-0.0655	-0.3214	-0.6726	-0.5774	-0.4583	-0.7143	-0.3810	-0.1667	-0.8810	-0.5000	1.0000	
103	-0.0476	0.1190	-0.1012	0.0833	0.4583	0.0833	0.0655	-0.5536	-0.6250	0.0000	0.0000	-0.7619	-0.2619	-0.5714	0.3333	1.0000
105	0.9286	-0.2262	0.3631	0.7143	0.7202	0.7143	0.3274	0.7202	0.4940	0.7857	0.1667	0.4286	0.6667	0.5476	-0.3333	0.0714
106	0.0238	0.6071	-0.0536	-0.3690	0.1131	-0.3690	-0.2440	0.2202	0.2560	-0.4048	-0.0476	0.3571	-0.3571	0.0952	0.3810	-0.3810

bank there can be identical ranking between the branches of two different banks.

ii. For some other few cells it is observed that there does not exist any relationship i.e. here RCC is 0. Such cells are : (1, 44); (1, 63); (2, 18); (2, 23); (3, 79); (6, 47); (7, 79); (12, 57); (17, 51); (18, 20); (18, 43); (18, 67); (20, 22); (20, 69), (20, 86); (20, 87); (21, 22); (23, 28); (25, 72); (25, 73); (26, 38); (26, 48); (26, 72); (26, 73); (29, 103); ((36, 47); (37, 61); (41, 42); (41, 48); (44, 75); (44, 87); (45, 103); (48, 50); (51, 87); (55, 71); [illegible]; (56, 83); ((57, 75); (63, 75); (81, 98); (81, 103); (83, 102); (97, 103); and (98, 103).

Out of these 43 cells it is observed that 8 cells represent the branches of one bank only. The remaining 35 cells represent the branches of two different banks. From this it can be said that in majority of the cases no relationship is found between branches of two different banks.

iii. The third observation is regarding ranking of factors in the opposite direction. This is indicated by the RCC = -1. However, there is no cells with RCC = -1. Two cells were observed where RCC is less than -0.90. This necessarily indicates that the ranking of factors is almost in the reverse order. These cells are (49, 98) and (65, 98). It may further be noted that branches denoted by these cells are those of two different banks.

iv. Further to these, an attempt is also made to find out which of the bank branches go together; i.e. they form a cluster/group. This is worked out with the help of linkage-analysis.

On the analysis it is observed that the total sample is divided in 25 groups. The groups formed are presented in Table V.20.

TABLE V.20

LINKAGE ANALYSIS : ADVANCES TO TRANSPORT OPERATOR

Cluster	Bank Branch No.
I	4, 5, 11, 95, 9
II	14, 31, 6, 99, 20, 51, 46, 83
III	33, 82, 15, 101
IV	49, 65, 2, 21
V	72, 73, 52, 106, 61, 63
VI	91, 93, 41, 45, 18, 22, 44, 50
VII	16, 68, 25
VIII	86, 97, 34, 55, 85, 100, 105, 87
IX	12, 96, 7, 98
X	19, 77
XI	38, 92, 71, 57
XII	26, 40
XIII	53, 58
XIV	60, 67, 88
XV	36, 94, 90, 54
XVI	1, 37, 69
XVII	17, 75
XVIII	20, 28
XIX	24, 56, 3, 74
XX	48, 79, 23, 47
XXI	35, 59
XXII	43, 102, 66
XXIII	29, 42
XXIV	13, 81
XXV	39, 103

On the scrutiny of above bank branch numbers it may be noted that all branches of one bank do not fall in one group. The bank, which has a considerably high number of branches in Baroda, is found to have been scattered over 16 groups. One other bank, which also has sufficiently large number of branches eventhough less than those the bank mentioned previously, is also scattered over 9 groups. From above, it follows that so far as ranking of factors for loan decision is concerned the branches of one bank have neither the identical ranking nor do they form one group.

(f) EDU :

Similar to other segments the RCC for ranking of factors for educational loans is also calculated. Table V.21 gives the RCC between the banks for ranking of factors. From the table, the following things can be observed :

i. There are certain cells where the ranking is found identical which is indicated by RCC = 1. Such cells are (4, 5), (4, 11), (5, 11), (14, 31) and (72, 73). It may be noted that all these cells represent the branches of one bank only.

ii. The next observation is regarding the branches between which there does not exist relationship, so far as ranking of factors is concerned. This is indicated by RCC = $\emptyset$. This is observed for the following cells :

(2, 50); (2, 51); (3, 81); (6, 35); (7, 60); (7, 79); (9, 99); (14, 17); (15, 59); (17, 18); (17, 31); (19, 72); (19, 73); (21, 22); (25, 27); (28, 61); (34, 86); (38, 44); (39, 79); (42, 77)

TABLE V.21 321

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN RANKING OF THE FACTORS EDUCATION

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16
1	1.0000													
2	0.5952	1.0000												
3	0.2619	0.1429	1.0000											
4	0.4286	0.3333	0.5476	1.0000										
5	0.4286	0.3333	0.5476	1.0000	1.0000									
6	0.6905	0.5952	0.6190	0.7619	0.7619	1.0000								
7	0.8810	0.6905	0.4286	0.5238	0.5238	0.6905	1.0000							
9	-0.4048	0.1429	-0.7143	-0.4524	-0.4524	-0.5238	-0.2381	1.0000						
11	0.4286	0.3333	0.5476	1.0000	1.0000	0.7619	0.5238	-0.4524	1.0000					
12	0.4762	0.5952	0.3571	0.7381	0.7381	0.7857	0.3810	-0.4524	0.7381	1.0000				
13	0.6667	0.5952	0.4762	0.5952	0.5952	0.4762	0.6667	0.0952	0.5952	0.5714	1.0000			
14	0.0476	0.0714	0.5238	0.8571	0.8571	0.4286	0.3333	-0.2381	0.8571	0.3571	0.4762	1.0000		
15	0.0476	-0.0476	0.5000	0.8571	0.8571	0.5000	0.1905	-0.3571	0.8571	0.5000	0.3810	0.9048	1.0000	
16	0.3095	0.3333	0.7143	0.9524	0.9524	0.7619	0.4524	-0.5714	0.9524	0.7381	0.5714	0.8333	0.8095	1.0000
17	0.1667	-0.0238	0.0000	-0.1667	-0.1667	-0.0476	0.3571	0.2857	-0.1667	-0.6190	0.1905	0.0000	-0.2143	-0.2619
18	0.7143	-0.6429	0.6905	0.8333	0.8333	0.9524	0.8095	-0.4524	0.8333	0.7619	0.5952	0.5952	0.5952	0.8333
19	0.6905	0.6190	0.6667	0.8095	0.8095	0.9286	0.7381	-0.4762	0.8095	0.8333	0.5952	0.5476	0.6190	0.8095
20	0.3333	0.5952	0.6429	0.8095	0.8095	0.6429	0.5952	-0.3095	0.8095	0.6667	0.6667	0.7619	0.6190	0.8810
21	-0.7381	-0.1905	-0.2619	0.0476	0.0476	-0.5000	-0.5238	0.4524	0.0476	-0.0952	0.2857	0.3571	0.2857	0.0476
22	0.3571	-0.1667	-0.2619	0.4286	0.4286	0.0952	0.1905	-0.1190	0.4286	0.1905	0.4762	0.3095	0.4524	0.1429
23	0.5952	0.2381	0.4286	0.7619	0.7619	0.5714	0.7381	-0.2857	0.7619	0.3571	0.5714	0.7381	0.7143	0.6190
24	0.4762	0.4286	0.6905	0.9524	0.9524	0.7857	0.5952	-0.5952	0.9524	0.7619	0.6667	0.7857	0.7381	0.9762
25	0.2619	0.1190	-0.0952	0.2381	0.2381	0.3333	0.3571	0.2857	0.2381	-0.1190	0.0952	0.2381	0.2143	0.0476
26	0.5000	0.6905	0.4286	0.8810	0.8810	0.7381	0.6667	-0.2381	0.8810	0.7857	0.6667	0.7143	0.6190	0.8571
27	0.3571	0.5952	0.5237	0.8810	0.8810	0.6667	0.5714	-0.2857	0.8810	0.7381	0.6667	0.7857	0.6667	0.9048
28	-0.2381	0.3571	0.0952	0.2857	0.2857	0.1429	-0.2381	-0.0952	0.2857	0.6429	0.4762	0.1429	0.1905	0.4048
29	0.4048	0.5714	0.5714	0.8333	0.8333	0.6905	0.6667	0.0476	0.8333	0.5952	0.5952	0.8571	0.7857	0.8095
31	0.0476	0.0714	0.5238	0.8571	0.8571	0.4286	0.3333	-0.2381	0.8571	0.3571	0.4762	1.0000	0.9048	0.8333
33	0.0298	-0.1845	0.6726	0.7559	0.7559	0.4464	0.1726	-0.3988	0.7560	0.3274	0.3988	0.8631	0.9345	0.7560
34	0.2738	-0.1667	0.7024	0.5595	0.5595	0.5357	0.1310	-0.9405	0.5595	0.4405	0.4881	0.3333	0.4524	0.6310
35	-0.2381	-0.2143	0.4286	0.0952	0.0952	0.0000	-0.3571	-0.6667	0.0952	0.2381	0.4762	-0.0238	0.0238	0.2857
37	-0.6607	-0.3988	-0.1607	-0.0059	-0.0059	-0.5059	-0.4226	0.6488	-0.0059	-0.3869	0.2083	0.4107	0.3393	-0.0536
38	0.7619	0.5952	0.6429	0.8333	0.8333	0.9286	0.7619	-0.6429	0.8333	0.8095	0.6667	0.5000	0.5000	0.8333
39	0.6429	0.3571	0.3333	0.8095	0.8095	0.7381	0.7143	-0.2381	0.8095	0.5238	0.4762	0.6667	0.7143	0.6429
40	0.7619	0.6905	0.4767	0.8095	0.8095	0.8095	0.8571	-0.2857	0.8095	0.7381	0.6905	0.5952	0.5714	0.7381
42	0.3095	0.5714	0.4286	0.5000	0.5000	0.5952	0.2381	-0.1905	0.5000	0.8810	0.5952	0.2381	0.4048	0.5714
43	-0.7619	-0.5714	-0.7143	-0.4762	-0.4762	-0.8809	-0.7619	0.6190	-0.4762	-0.5952	0.0952	-0.1905	-0.1667	-0.5952
44	0.0476	0.1429	0.0952	0.1905	0.1905	0.1190	0.4048	0.4286	0.1905	-0.3333	0.1905	0.4524	0.2381	0.0952
46	-0.1905	0.1429	-0.6190	0.0714	0.0714	0.2143	-0.0476	0.8095	0.0714	-0.1429	0.2143	0.2143	0.1190	-0.1429
47	0.5714	0.5714	-0.4286	0.1905	0.1905	0.1190	0.4762	0.2381	0.1905	0.3571	0.6667	-0.0476	-0.0714	-0.0238
48	0.2857	0.4524	-0.2619	0.0476	0.0476	-0.1429	0.3571	0.3571	0.0476	0.1429	0.6905	0.0476	-0.0476	-0.0714
49	-0.6429	0.7619	0.4286	0.6905	0.6905	0.6429	0.7857	-0.0952	0.6905	-0.7143	0.5952	0.5238	0.5238	0.6429
50	0.0714	0.0000	0.4048	0.7619	0.7619	0.3333	0.2619	-0.2143	0.7619	0.4048	0.4762	0.8810	0.9286	0.6905
51	-0.4048	0.0000	0.2857	0.3810	0.3810	0.1667	-0.0952	0.2381	0.3810	0.1429	0.0952	0.6429	0.6905	0.4048
52	0.4702	0.4464	-0.0417	0.2321	0.2321	0.1845	0.6845	0.4821	0.2321	0.0536	0.4940	0.3274	0.1726	0.0536

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16
53	Ø.6190	Ø.5952	Ø.1667	Ø.4048	Ø.4048	Ø.3333	Ø.8333	Ø.1190	Ø.4048	Ø.2143	Ø.6667	Ø.4048	Ø.2381	Ø.2857
54	Ø.3333	Ø.2857	-Ø.Ø238	Ø.3810	Ø.3810	Ø.3095	Ø.5714	Ø.3571	Ø.3810	-Ø.Ø714	Ø.2857	Ø.4762	Ø.3333	Ø.1905
55	Ø.3036	Ø.3036	Ø.8512	Ø.8274	Ø.8274	Ø.7559	Ø.3988	-Ø.7202	Ø.8274	Ø.7321	Ø.5774	Ø.6726	Ø.2798	Ø.9464
56	Ø.2857	Ø.5952	Ø.4048	Ø.5476	Ø.5476	Ø.5714	Ø.2857	-Ø.Ø714	Ø.5476	Ø.8571	Ø.5952	Ø.3571	Ø.5ØØØ	Ø.5952
57	Ø.1429	-Ø.Ø714	Ø.5ØØØ	Ø.8Ø95	Ø.8Ø95	Ø.4Ø48	Ø.3Ø95	-Ø.3571	Ø.8Ø95	Ø.3810	Ø.4762	Ø.9Ø48	Ø.9524	Ø.7381
58	Ø.6250	Ø.5774	Ø.1964	Ø.2917	Ø.2917	Ø.3512	Ø.7797	Ø.1488	Ø.2917	Ø.2321	Ø.6Ø12	Ø.2679	Ø.2Ø83	Ø.1845
59	-Ø.2381	-Ø.1667	Ø.1667	-Ø.Ø238	-Ø.Ø238	Ø.Ø238	-Ø.5ØØØ	-Ø.4Ø48	-Ø.Ø238	Ø.3571	Ø.3333	-Ø.2381	Ø.ØØØØ	Ø.Ø952
60	-Ø.Ø714	Ø.1Ø95	-Ø.7619	-Ø.4762	-Ø.4762	-Ø.5952	Ø.ØØØØ	Ø.8Ø95	-Ø.4762	-Ø.4762	Ø.3810	-Ø.3571	-Ø.5476	-Ø.6429
61	Ø.7381	Ø.8571	Ø.1Ø95	Ø.4524	Ø.4524	Ø.6190	Ø.8810	Ø.1429	Ø.4524	Ø.4762	Ø.5952	Ø.2857	Ø.1Ø95	Ø.3571
63	Ø.7857	Ø.7381	Ø.2857	Ø.6Ø95	Ø.6Ø95	Ø.7857	Ø.9Ø48	-Ø.Ø952	Ø.6Ø95	Ø.5476	Ø.5714	Ø.4762	Ø.3810	Ø.5714
66	-Ø.1Ø95	Ø.2143	Ø.1Ø95	Ø.4286	Ø.4286	Ø.1Ø95	-Ø.1Ø95	-Ø.1Ø95	Ø.4286	Ø.6Ø95	Ø.4762	Ø.3333	Ø.4762	Ø.5ØØØ
67	Ø.4524	Ø.6190	Ø.1190	Ø.3810	Ø.3810	Ø.3810	Ø.5238	Ø.3095	Ø.3810	Ø.5238	Ø.5952	Ø.3095	Ø.3810	Ø.2857
68	Ø.2143	Ø.Ø714	Ø.4762	Ø.9524	Ø.9524	Ø.6429	Ø.2619	-Ø.5238	Ø.9524	Ø.6429	Ø.4762	Ø.8333	Ø.8810	Ø.9Ø48
69	Ø.8571	Ø.4762	Ø.2619	Ø.4Ø48	Ø.4Ø48	Ø.5833	Ø.8214	-Ø.1190	Ø.4Ø48	Ø.3690	Ø.5833	Ø.2Ø24	Ø.2738	Ø.2500
71	Ø.1845	-Ø.2679	-Ø.Ø536	Ø.2Ø83	Ø.2Ø83	-Ø.1369	Ø.2Ø83	-Ø.1250	Ø.2Ø83	-Ø.3155	Ø.5893	Ø.2917	Ø.Ø893	Ø.Ø893
72	Ø.3571	Ø.2857	-Ø.3Ø95	Ø.Ø476	Ø.Ø476	-Ø.Ø952	Ø.5476	Ø.5ØØØ	Ø.Ø476	-Ø.3Ø95	Ø.4767	Ø.1667	-Ø.Ø714	-Ø.1667
73	Ø.3571	Ø.2857	-Ø.3Ø95	Ø.Ø476	Ø.Ø476	-Ø.Ø952	Ø.5476	Ø.5ØØØ	Ø.Ø476	-Ø.3Ø95	Ø.4767	Ø.1667	-Ø.Ø714	-Ø.1667
75	Ø.3571	Ø.2143	Ø.8810	Ø.5476	Ø.5476	Ø.4524	Ø.5952	-Ø.5952	Ø.5476	Ø.2381	Ø.6667	Ø.5952	Ø.4286	Ø.6667
77	Ø.4048	Ø.7381	Ø.Ø714	Ø.2143	Ø.2143	Ø.2619	Ø.6Ø95	Ø.3Ø95	Ø.2143	Ø.Ø476	Ø.5714	Ø.2143	-Ø.1429	Ø.1Ø95
78	Ø.5ØØØ	Ø.7143	Ø.6Ø95	Ø.8Ø95	Ø.8Ø95	Ø.8810	Ø.5952	-Ø.2619	Ø.8Ø95	Ø.8810	Ø.6429	Ø.5952	Ø.5952	Ø.8810
79	-Ø.1429	Ø.Ø952	-Ø.3810	Ø.Ø238	Ø.Ø238	-Ø.4524	Ø.ØØØØ	Ø.4762	Ø.Ø238	-Ø.Ø952	Ø.5952	Ø.2143	Ø.Ø714	-Ø.Ø952
80	-Ø.5238	-Ø.1667	-Ø.5ØØØ	-Ø.1429	-Ø.1429	-Ø.6429	-Ø.2619	Ø.7381	-Ø.1429	-Ø.4762	Ø.2857	Ø.2381	Ø.Ø476	-Ø.2619
81	Ø.5476	Ø.4762	Ø.ØØØØ	Ø.4286	Ø.4286	Ø.2857	Ø.7381	Ø.2381	Ø.4286	Ø.1667	Ø.5714	Ø.4524	Ø.3333	Ø.2381
82	Ø.2381	Ø.4524	Ø.5238	Ø.8810	Ø.8810	Ø.7619	Ø.4286	-Ø.3333	Ø.8810	Ø.7619	Ø.5238	Ø.8Ø95	Ø.8Ø95	Ø.9524
83	-Ø.2619	-Ø.Ø476	Ø.3333	Ø.5238	Ø.5238	Ø.1190	Ø.1190	Ø.1429	Ø.5238	-Ø.Ø714	Ø.3Ø95	Ø.8333	Ø.6190	Ø.5238
85	Ø.6Ø95	Ø.4762	Ø.5ØØØ	Ø.4881	Ø.4881	Ø.9Ø48	Ø.5714	-Ø.5476	Ø.5ØØØ	Ø.5952	Ø.3810	Ø.Ø952	Ø.1Ø95	Ø.5ØØØ
86	Ø.6Ø95	Ø.5714	Ø.1190	Ø.6667	Ø.6667	Ø.5238	Ø.8333	-Ø.Ø238	Ø.6667	Ø.3571	Ø.6667	Ø.5476	Ø.3571	Ø.5ØØØ
87	Ø.5238	Ø.4762	-Ø.Ø714	Ø.4286	Ø.4286	Ø.3333	Ø.6Ø95	Ø.3Ø95	Ø.4286	Ø.1Ø95	Ø.4767	Ø.4286	Ø.3571	Ø.2143
88	Ø.7143	Ø.6Ø95	Ø.1429	Ø.4Ø48	Ø.4Ø48	Ø.5ØØØ	Ø.8333	Ø.2381	Ø.4Ø48	Ø.3571	Ø.5952	Ø.3Ø95	Ø.2619	Ø.2619
90	Ø.5476	Ø.7143	Ø.2143	Ø.4762	Ø.4762	Ø.4762	Ø.8Ø95	Ø.4Ø48	Ø.4762	Ø.2381	Ø.5952	Ø.5ØØØ	Ø.2857	Ø.3810
92	Ø.5238	Ø.4Ø48	Ø.7381	Ø.9Ø48	Ø.9Ø48	Ø.8Ø95	Ø.6Ø95	-Ø.2619	Ø.9Ø48	Ø.6190	Ø.5952	Ø.8571	Ø.8571	Ø.8810
94	Ø.4821	Ø.6250	Ø.6726	Ø.6845	Ø.6845	Ø.8631	Ø.4702	-Ø.4940	Ø.6845	Ø.8631	Ø.5893	Ø.3631	Ø.3988	Ø.7917
95	Ø.4881	Ø.6310	Ø.7024	Ø.8810	Ø.8810	Ø.8690	Ø.6Ø95	-Ø.2738	Ø.8810	Ø.7262	Ø.5833	Ø.7619	Ø.6Ø95	Ø.9167
96	Ø.9286	Ø.6190	Ø.2857	Ø.4Ø48	Ø.4Ø48	Ø.6Ø95	Ø.8571	-Ø.2381	Ø.4Ø48	Ø.5ØØØ	Ø.5952	Ø.Ø952	Ø.1667	Ø.2857
97	Ø.9762	Ø.5714	Ø.4Ø48	Ø.5714	Ø.5714	Ø.7857	Ø.9Ø48	-Ø.5ØØØ	Ø.5714	Ø.5238	Ø.6667	Ø.2143	Ø.1Ø95	Ø.4762
98	Ø.6190	Ø.4Ø48	-Ø.Ø714	Ø.3Ø95	Ø.3Ø95	Ø.2381	Ø.6Ø95	Ø.1667	Ø.3Ø95	Ø.1667	Ø.5714	Ø.2619	Ø.2381	Ø.Ø952
99	Ø.4524	Ø.4Ø48	Ø.3810	Ø.6190	Ø.6190	Ø.4286	Ø.7381	Ø.ØØØØ	Ø.6190	Ø.2619	Ø.5714	Ø.7143	Ø.5952	Ø.5238
100	Ø.Ø178	Ø.2559	Ø.8155	Ø.3155	Ø.3155	Ø.3036	Ø.3759	-Ø.2798	Ø.3155	Ø.Ø536	Ø.4821	Ø.4821	Ø.2440	Ø.5179
101	Ø.4286	Ø.4524	Ø.6190	Ø.8333	Ø.8333	Ø.7143	Ø.5714	-Ø.1429	Ø.8333	Ø.7143	Ø.5952	Ø.7857	Ø.8571	Ø.8Ø95
102	-Ø.4762	-Ø.2857	-Ø.9286	-Ø.5238	-Ø.5238	-Ø.7381	-Ø.5238	Ø.7857	-Ø.5238	-Ø.5952	Ø.Ø952	-Ø.3810	-Ø.4286	-Ø.7143
103	Ø.2381	Ø.4Ø48	Ø.5952	Ø.7143	Ø.7143	Ø.6Ø95	Ø.2143	-Ø.6429	Ø.7143	Ø.8571	Ø.5714	Ø.4286	Ø.4762	Ø.8333
105	Ø.4583	Ø.6726	Ø.6607	Ø.8631	Ø.8631	Ø.8393	Ø.6726	-Ø.1964	Ø.8631	Ø.7440	Ø.5892	Ø.7560	Ø.6845	Ø.8988
106	Ø.6429	Ø.5952	Ø.Ø476	Ø.4762	Ø.4762	Ø.3571	Ø.8Ø95	Ø.1429	Ø.4762	Ø.2857	Ø.6667	Ø.4286	Ø.2857	Ø.3Ø95

BANK NO	28	29	31	33	34	35	37	38	39	40	42	43	44	46
1														
2														
3														
4														
5														
6														
7														
9														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28	1.0000													
29	0.2857	1.0000												
31	0.1429	0.8571	1.0000											
33	0.0774	0.6845	0.8631	1.0000										
34	0.1190	0.2143	0.3333	0.6250	1.0000									
35	0.5476	-0.1190	-0.0238	0.2202	0.6786	1.0000								
37	0.0536	0.2559	0.4107	0.4048	-0.2798	-0.0893	1.0000							
38	0.2143	0.6905	0.5000	0.4464	0.6071	0.1429	-0.5060	1.0000						
39	-0.1905	0.8095	0.6667	0.6012	0.2500	-0.4524	-0.0893	0.7143	1.0000					
40	0.1667	0.8571	0.5952	0.4345	0.2619	-0.1905	-0.2560	0.8810	0.8571	1.0000				
42	0.8095	0.9238	0.2381	0.3036	0.3810	0.4524	-0.1250	0.5952	0.2857	0.5714	1.0000			
43	-0.0476	-0.2619	-0.1905	-0.1012	-0.5357	-0.1667	0.8036	-0.8810	-0.4762	-0.6429	-0.2619	1.0000		
44	-0.5476	0.5714	0.4524	0.3036	-0.3330	-0.7143	0.3988	0.0000	0.4524	0.2381	-0.3333	-0.0238	1.0000	
46	-0.0714	0.3333	0.2143	-0.0179	-0.6429	-0.6905	0.5774	-0.2857	0.2381	0.0476	-0.1429	0.5476	0.5476	1.0000
47	0.0952	0.3095	-0.0476	-0.2679	-0.3690	-0.4524	-0.1726	0.2619	0.3810	0.5476	0.3095	-0.0476	-0.0714	0.4048
48	0.1905	0.3571	0.0476	-0.1726	-0.4762	-0.3095	0.1607	0.0476	0.1667	0.4286	0.3095	0.1667	0.0000	0.3333
49	0.2381	0.8810	0.5238	0.3631	0.0714	-0.2857	-0.1845	0.7619	0.7857	0.9524	0.6429	-0.5714	0.2857	0.1190
50	0.1667	0.8095	0.8810	0.8393	0.2381	-0.0952	0.4345	0.4048	0.6905	0.6190	0.3810	-0.0476	0.2619	0.1905
51	0.2143	0.6905	0.6429	0.6488	-0.1071	-0.2143	0.6250	0.0000	0.3333	0.2143	0.3095	0.1429	0.4762	0.3571
52	-0.3869	0.6131	0.3274	0.1250	-0.4048	-0.7440	0.2202	0.1845	0.6131	0.5536	-0.0536	0.0059	0.7679	0.5893

BANK NO	28	29	31	33	34	35	37	38	39	40	42	43	44	46
53	-0.1667	0.7143	0.4048	0.1488	-0.2500	-0.5476	-0.0179	0.4524	0.6429	0.7857	0.1905	-0.3333	0.4762	0.2619
54	-0.5238	0.6429	0.4762	0.2917	-0.2857	-0.8333	0.2202	0.2143	0.7143	0.4762	-0.2143	-0.1190	0.9048	0.6429
55	0.4583	0.6845	0.6726	0.7024	0.7559	0.5060	-0.1786	0.8274	0.4702	0.6488	0.6607	-0.6845	-0.0893	-0.4226
56	0.7857	0.6429	0.3571	0.3631	0.2619	0.3095	0.0059	0.5714	0.3810	0.6429	0.9702	-0.1905	-0.1905	0.0000
57	0.0476	0.7857	0.9048	0.9107	0.3929	-0.0476	0.3631	0.4762	0.7381	0.6190	0.3095	-0.1429	0.2857	0.0952
58	-0.1607	0.6607	0.2679	0.1369	-0.2440	-0.5298	-0.0417	0.3988	0.6131	0.7440	0.3036	-0.2917	0.4107	0.1845
59	0.6190	-0.1905	-0.2381	0.1131	0.5238	0.8333	-0.0774	0.0238	-0.4048	-0.2381	0.6190	0.0476	-0.7857	-0.4762
60	-0.2143	-0.0714	-0.3571	-0.5655	-0.8690	-0.5952	0.3155	-0.5238	-0.2381	-0.1667	-0.2619	0.5238	0.2381	0.6429
61	0.0000	0.7381	0.2857	0.0536	-0.1905	-0.5238	-0.2560	0.6190	0.6905	0.8571	0.4048	-0.5238	0.4286	0.2619
63	-0.0952	0.7857	0.4762	0.2560	0.0714	-0.4762	-0.3155	0.7857	0.8571	0.9048	0.3095	-0.6667	0.4762	0.2381
66	0.9048	0.4286	0.3333	0.3393	0.1905	0.4524	0.1726	0.2619	0.0476	0.3095	0.8571	0.0000	-0.5000	-0.0714
67	0.3095	0.6905	0.3095	0.2202	-0.1786	-0.2857	0.1488	0.3810	0.5714	0.7143	0.6429	0.0000	0.2143	0.3571
68	0.2619	0.6905	0.8333	0.8155	0.6429	0.1905	0.0774	0.6905	0.6905	0.5952	0.4048	-0.3571	0.0952	0.0476
69	-0.2976	0.5595	0.2024	0.2381	0.1071	-0.4286	-0.2738	0.5833	0.7738	0.7738	0.3214	-0.4286	0.2976	0.0476
71	-0.4226	0.0893	0.2917	0.2798	0.2857	0.0655	0.2679	0.0655	0.1607	0.0298	-0.3869	0.1607	0.2917	0.1488
72	-0.5476	0.3810	0.1667	-0.0893	-0.5476	-0.8095	0.2202	-0.0238	0.4048	0.3333	-0.3333	0.0952	0.6905	0.6190
73	-0.5476	0.3810	0.1667	-0.0893	-0.5476	-0.8095	0.2202	-0.0238	0.4048	0.3333	-0.3333	0.0952	0.6905	0.6190
75	0.0238	0.6190	0.5952	0.5774	0.5238	0.3095	-0.0655	0.6190	0.3571	0.5714	0.2857	-0.6190	0.1905	-0.6667
77	-0.0714	0.5238	0.2143	-0.1607	-0.3333	-0.4840	-0.0893	0.3333	0.2619	0.4762	0.0000	-0.3810	0.5714	0.3333
78	0.5952	0.8095	0.5952	0.5179	0.5119	0.3095	-0.1488	0.8810	0.5952	0.8095	0.8095	-0.5476	0.1190	-0.0476
79	0.2143	0.2857	0.2143	-0.0179	-0.5000	-0.2143	0.5774	-0.2381	0.0000	0.1429	0.0952	0.5476	0.0714	0.5238
80	-0.0476	0.2143	0.2381	0.0297	-0.6786	-0.4286	0.8631	-0.5714	-0.1190	-0.1905	-0.2619	0.7619	0.4286	0.7619
81	-0.2619	0.7143	0.4524	0.2038	0.3214	-0.7143	0.1131	0.3571	0.7381	0.7381	0.0952	-0.1667	0.5714	0.4762
82	0.5238	0.8810	0.8095	0.7321	0.4881	0.2381	0.0655	0.7619	0.6190	0.7381	0.6905	-0.4762	0.1905	-0.0238
83	-0.0238	0.6667	0.8333	0.6726	0.0714	-0.1190	0.6488	0.1190	0.3571	0.2143	-0.0952	0.0952	0.7143	0.4286
85	-0.0476	0.3810	0.0952	0.2321	0.5714	0.0476	-0.6726	0.7857	0.5238	0.5476	0.4284	-0.8810	0.0238	-0.3333
86	-0.1667	0.7143	0.5476	0.2440	0.0000	-0.4762	-0.1131	0.6429	0.7857	0.8095	0.0952	-0.4286	0.5000	0.3810
87	-0.2857	0.7143	0.4286	0.2083	-0.3571	-0.8095	0.1131	0.3333	0.7857	0.7143	0.0952	-0.1429	0.6190	0.5714
88	-0.1190	0.7143	0.3095	0.1488	-0.2024	-0.5714	-0.0655	0.5000	0.7381	0.8095	0.3333	-0.2857	0.5000	0.3571
90	-0.0714	0.7857	0.5000	0.2202	-0.1786	-0.4762	0.1488	0.4762	0.6667	0.7143	0.1607	-0.1905	0.7857	0.5476
92	0.1429	0.9286	0.8571	0.8274	0.5238	0.0238	0.1131	0.8095	0.8810	0.8571	0.5000	-0.4048	0.4762	0.0952
94	0.5774	0.5774	0.3631	0.3750	0.6369	0.4702	-0.3988	0.8631	0.3988	0.6488	0.7917	-0.7083	-0.1488	-0.3155
95	0.3333	0.9167	0.7619	0.6190	0.4286	0.0476	-0.0833	0.8690	0.7381	0.8571	0.5833	-0.6190	0.3690	0.0357
96	-0.1905	0.5238	0.0952	0.1131	0.1429	-0.3571	-0.5060	0.6905	0.7143	0.8095	0.4286	-0.6429	0.1429	-0.0952
97	-0.2143	0.5000	0.2143	0.1845	0.4048	-0.1667	-0.6250	0.8571	0.7143	0.8095	0.3095	-0.8333	0.1190	-0.2143
98	-0.3095	0.5714	0.2619	0.1250	-0.2976	-0.6905	0.0059	0.3095	0.6905	0.6905	0.1429	-0.1429	0.3810	0.3571
99	-0.1429	0.8810	0.7143	0.5179	-0.0595	-0.4762	0.1845	0.5000	0.7857	0.8095	0.2143	-0.3095	0.5952	0.2619
100	0.1250	0.5536	0.4821	0.4286	0.2917	0.3036	0.0952	0.3631	0.0655	0.3036	0.2202	-0.4821	0.3393	-0.3512
101	0.3571	0.9286	0.7857	0.7559	0.3690	0.0238	0.1845	0.7143	0.8095	0.8571	0.6905	-0.2619	0.3095	0.1429
102	-0.2381	-0.3095	-0.3810	-0.3988	-0.6905	-0.4524	0.5298	-0.7857	-0.3810	-0.5714	-0.4048	0.8333	0.1429	0.7381
103	0.7143	0.5000	0.4286	0.4345	0.6786	0.6190	-0.3036	0.7619	0.2619	0.5238	0.7857	-0.6190	-0.3810	-0.3810
105	0.3988	0.9345	0.7560	0.5893	0.3571	0.0417	-0.0417	0.8393	0.7202	0.8631	0.6250	-0.5774	0.3631	0.0893
106	-0.1429	0.7143	0.4286	0.1488	-0.2500	-0.5952	-0.0179	0.4762	0.7143	0.8095	0.1905	-0.2857	0.4524	0.3810

BANK NO	58	59	60	61	63	66	67	68	69	71	72	73	75	77
53														
54														
55														
56														
57														
58	1.0000													
59	-0.4940	1.0000												
60	0.3274	-0.4762	1.0000											
61	0.8750	-0.4762	0.2143	1.0000										
63	0.6845	-0.5000	-0.0238	0.9048	1.0000									
66	-0.0198	0.5714	-0.3095	0.0476	-0.0476	1.0000								
67	0.8631	-0.0714	0.3333	0.7857	0.5714	0.5000	1.0000							
68	0.0059	0.0952	-0.6191	0.1667	0.4762	0.4048	0.1667	1.0000						
69	0.8631	-0.3095	0.0833	0.7976	0.7500	-0.0833	0.7262	0.1905	1.0000					
71	-0.0059	-0.2321	0.1964	-0.0893	0.1012	-0.4226	-0.2083	0.2440	0.1071	1.0000				
72	0.6607	-0.8571	0.7143	0.5952	0.5238	-0.5000	0.4286	-0.1429	0.5238	0.4702	1.0000			
73	0.6607	-0.8571	0.7143	0.5952	0.5238	-0.5000	0.4286	-0.1429	0.5238	0.4702	1.0000	1.0000		
75	0.4107	-0.0952	-0.4286	0.3333	0.3810	0.1190	0.2143	0.4048	0.3452	0.3036	0.0476	0.0476	1.0000	
77	0.5059	-0.6190	0.4286	0.7143	0.6667	0.2619	0.3095	-0.0238	0.2976	0.2321	0.6667	0.6667	0.3333	1.0000
78	0.3869	0.2619	-0.3571	0.6190	0.6905	0.5952	0.5238	0.6905	0.4167	-0.1012	-0.0714	-0.0714	0.5952	0.4048
79	0.4226	-0.2381	0.6905	0.2143	0.0000	0.3095	0.5476	-0.0952	0.0952	0.2440	0.5238	0.5238	0.0000	0.2381
80	0.1488	-0.4286	0.6905	-0.0238	-0.1667	0.0000	0.2619	-0.1667	-0.1905	0.2797	0.5476	0.5476	-0.2143	0.2143
81	0.8988	-0.7143	0.4048	0.8333	0.7619	-0.0714	0.7619	0.1905	0.7738	0.2083	0.8333	0.8333	0.2857	0.5714
82	0.2917	0.1429	-0.5238	0.4524	0.5714	0.6190	0.4524	0.8095	0.2738	-0.1012	-0.1429	-0.1429	0.5952	0.2381
83	0.0536	-0.3571	-0.0952	0.0952	0.2619	0.0238	0.0476	0.5476	-0.0952	0.3988	0.2857	0.2857	0.4048	0.3571
85	0.1250	0.1190	-0.5952	0.4286	0.6190	-0.0952	0.1190	0.4286	0.4881	-0.0774	-0.1905	-0.1905	0.2619	0.1667
86	0.6369	-0.6190	0.1905	0.7857	0.9048	-0.1190	0.4762	0.4762	0.6429	0.4226	0.7143	0.7143	0.3928	0.7143
87	0.8512	-0.7143	0.3810	0.8333	0.7857	-0.0952	0.7619	0.2143	0.7738	0.1250	0.8095	0.8095	0.1429	0.5238
88	0.9583	-0.4762	0.3571	0.9524	0.8333	0.0238	0.8571	0.1429	0.8929	0.0298	0.7143	0.7143	0.3095	0.5952
90	0.7679	-0.5476	0.4286	0.8810	0.8571	-0.0714	0.6190	0.2619	0.6310	0.2679	0.8095	0.8095	0.4048	0.8810
92	0.5655	-0.0714	-0.3333	0.6190	0.7619	0.3333	0.5476	0.8095	0.6310	0.2083	0.2381	0.2381	0.7143	0.3333
94	0.1369	0.4226	-0.5536	0.4226	0.5298	0.5060	0.2917	0.6012	0.2738	-0.1548	-0.3393	-0.3393	0.5060	0.2440
95	0.4524	-0.0714	-0.3810	0.6667	0.7976	0.3810	0.4762	0.7500	0.4583	0.0179	0.1071	0.1071	0.6667	0.5000
96	0.8036	-0.2381	-0.0238	0.8333	0.7857	-0.0476	0.6905	0.1667	0.9643	-0.0298	0.3810	0.3810	0.3333	0.3333
97	0.5714	-0.2381	-0.2143	0.7143	0.8333	-0.1667	0.3810	0.3810	0.8095	0.2440	0.3095	0.3095	0.4762	0.4286
98	0.9226	-0.5952	0.4048	0.7857	0.6667	-0.0714	0.8095	0.0714	0.8690	0.1488	0.7619	0.7619	0.1905	0.3810
99	0.8512	-0.5952	0.0714	0.7619	0.7381	0.0952	0.7143	0.4048	0.7024	0.1726	0.6190	0.6190	0.5952	0.5000
100	0.2143	-0.0774	-0.3393	0.2202	0.2083	0.0774	0.0774	0.1964	0.0238	0.1131	-0.0417	-0.0417	0.8512	0.4464
101	0.6488	0.0476	-0.2381	0.6429	0.6667	0.5952	0.7619	0.7143	0.6310	-0.0298	0.1667	0.1667	0.5952	0.2143
102	-0.2440	-0.1905	0.7381	-0.2857	-0.3810	-0.3333	-0.0476	-0.4524	-0.2976	0.2321	0.3571	0.3571	-0.8095	-0.0476
103	-0.0893	0.5238	-0.6905	0.1667	0.3095	0.6667	0.1667	0.6905	0.0238	-0.1488	-0.5476	-0.5476	0.4524	0.0238
105	0.4881	-0.0655	-0.3155	0.6964	0.7917	0 4464	0.5417	0.7202	0.4524	-0.0357	0.1250	0.1250	0.6369	0.5179
106	0.8988	-0.6429	0.3809	0.8810	0.8095	0.0000	0.7619	0.2143	0.7738	0.2083	0.7857	0.7857	0.3571	0.6429

TABLE V.21 CONTD (EDU)

BANK NO	92	94	95	96	97	98	99	100	101	102	103	105	106
53													
54													
55													
56													
57													
58													
59													
60													
61													
63													
66													
67													
68													
69													
71													
72													
73													
75													
77													
78													
79													
80													
81													
82													
83													
85													
86													
87													
88													
90													
92	1.0000												
94	0.6488	1.0000											
95	0.9167	0.8155	1.0000										
96	0.5952	0.4345	0.5119	1.0000									
97	0.6429	0.5774	0.6190	0.8810	1.0000								
98	0.5000	-0.0536	0.3095	0.7619	0.5476	1.0000							
99	0.8095	0.1964	0.6786	0.5952	0.5000	0.8095	1.0000						
100	0.5417	0.4643	0.6071	0.0298	0.1488	-0.1131	0.3988	1.0000					
101	0.9286	0.6131	0.8452	0.5952	0.5000	0.5714	0.8095	0.4226	1.0000				
102	-0.4762	-0.6726	-0.5952	-0.4524	-0.5714	-0.0476	-0.3571	-0.6369	-0.4286	1.0000			
103	0.5714	0.9345	0.7262	0.1667	0.3571	-0.2381	0.0714	0.3750	0.5714	-0.7143	1.0000		
105	0.9345	0.8036	0.9940	0.5060	0.5774	0.3393	0.6964	0.5952	0.8631	-0.5536	0.7202	1.0000	
106	0.5952	0.1369	0.5238	0.7143	0.6190	0.9286	0.8810	0.1131	0.6190	-0.1429	-0.0238	0.5536	1.0000

(43, 66); (43, 67); (44, 48); (46, 56); (51, 86); (55, 71); (63,79); (66, 80); (66, 106); (75, 79); (83, 102); and (88, 103).

Out of these 32 cells representing no relationship in ranking between the two branches only 6 cells indicate the branches of the same bank, whereas the remaining cells indicate the branches of two different banks. From this it follows that in between the branches of two different banks there may not exist relationship so far as ranking of factors is concerned.

iii. The third observation is regarding the inverse relationship. If the ranking of factors by one branch is in inverse direction than that of another branch the RCC will be -1. It may be noted from the table that there does not exist any cell with RCC = -1. However, if the RCC is less than -0.90 it will indicate that the ranking of factors is almost in the reverse order. On a glance at the table only two cells are found with RCC less than -0.90. Such cells are (3, 102) and (17, 66). Both these cells represent the branches of two different banks.

iv. An attempt is also made to examine which of the bank branches go together, i.e. which of the bank branches form a group. As mentioned in the discussion of previous segment, this is analysed with the help of linkage analysis. On applying this statistical tool it is found that the sample is divided in 24 groups. This is presented in Table V. 22.

TABLE V. 22

LINKAGE ANALYSIS : EDUCATION

Cluster	Bank Branch No.
I	4, 5, 11, 68
II	14, 31, 83
III	72, 73, 52, 90, 77
IV	95, 105, 29, 78, 92, 94, 101, 103
V	1, 97, 7, 63, 86
VI	16, 24, 55, 82, 34
VII	18, 19, 6, 38, 85
VIII	20, 27, 26
XIX	50, 57, 15, 33, 51
X	53, 106, 99
XI	81, 87, 98, 22
XII	42, 56, 12
XIII	69, 96
XIV	58, 88, 61, 67, 2
XV	40, 49, 13, 71
XVI	23, 39
XVII	28, 66
XVIII	44, 54, 25, 17
XIX	3, 75, 100
XX	37, 80, 21
XXI	48, 79, 47
XXII	35, 59
XXIII	43, 102
XXIV	9, 46, 60

From above table it follows that the bank which has considerably high number of branches is scattered over 18 groups out of 24 groups. The bank which has branches less than the first mentioned bank but still higher number of respondent branches than the others is scattered over 9 clusters. These two things indicate that all the branches of one bank do not go together except where the respondent branches of a particular bank are less than three. This indicates that the ranking of factors under consideration differs widely among branches of one bank.

(g) NP C & I :

The last segment under study is commercial and industrial sector for non-priority sector i.e. here an attempt is made to examine the relationship in ranking of various factors for lending decision to C & I Sector; between the banks. Table V.23 gives the RCC between the banks. On a glance at the table the following things are observed :

i. There are certain bank branches which have the identical ranking as that of other branches. such branches are represented by the following cells :

(4, 5); (4, 11); (5, 11); (14, 31); (49, 65); (72, 73); (86, 97). Out of these 7 cells, two cells represent those where the branches represented by cell are not of one bank, but both the branches belong to two different banks. This indicates the identical ranking of factors between the branches of two different banks.

TABLE V.23

RELATIONSHIP BETWEEN VARIOUS BRANCHES IN BANKING ON THE FACTORS NPC & I

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16
1	1.0000													
2	0.6429	1.0000												
3	-0.2381	-0.2857	1.0000											
4	0.2440	-0.1012	-0.2083	1.0000										
5	0.2440	-0.1012	-0.2083	1.0000	1.0000									
6	0.1667	-0.4524	0.0238	0.5655	0.5655	1.0000								
7	-0.0476	-0.1190	-0.0238	-0.1488	-0.1488	-0.5238	1.0000							
9	0.5000	0.7857	-0.2143	0.0774	0.0774	-0.2857	-0.3095	1.0000						
11	0.2440	-0.1012	-0.2083	1.0000	1.0000	0.5655	-0.1488	0.0774	1.0000					
12	0.3095	0.0000	0.0238	-0.0179	-0.0179	0.0952	0.2619	0.1667	-0.0179	1.0000				
13	0.5000	0.5000	0.5000	0.5060	0.5060	0.5000	0.5000	0.5000	0.5060	0.5000	1.0000			
14	0.0238	-0.1905	-0.2857	0.9345	0.9345	0.3571	0.0714	0.0000	0.9345	0.0476	0.5000	1.0000		
15	0.2381	0.0000	0.0952	0.8750	0.8750	0.3810	-0.0952	0.0238	0.8750	-0.2857	0.5000	0.7619	1.0000	
16	0.4286	0.0714	-0.0714	0.9226	0.9226	0.6190	-0.3333	0.2619	0.9226	0.1667	0.5000	0.7857	0.8095	1.0000
17	0.4048	0.2619	-0.5714	0.6369	0.6369	0.5238	-0.4286	0.1190	0.6369	-0.0476	0.5000	0.5238	0.4524	0.6667
18	-0.0714	-0.2143	0.2619	0.6369	0.6369	0.5238	-0.4762	-0.1429	0.6369	-0.6190	0.5000	0.4524	0.8095	0.5714
19	0.4762	0.3095	-0.3333	0.7560	0.7560	0.3095	-0.1429	0.4762	0.7560	0.4524	0.5000	0.7381	0.5238	0.8571
20	0.8810	0.5952	-0.3571	0.5417	0.5417	0.0714	0.1429	0.5238	0.5417	0.2857	0.5000	0.4286	0.5000	0.6190
21	0.4048	0.6905	-0.5476	0.1726	0.1726	-0.4762	0.1905	0.4524	0.1726	-0.4286	0.5000	0.1667	0.2857	0.0476
22	-0.1905	-0.4762	0.0000	0.3750	0.3750	0.2143	0.4762	-0.7857	0.3750	-0.1905	0.5000	0.4524	0.4524	0.1429
23	-0.2143	-0.0952	-0.5476	0.1726	0.1726	-0.3810	0.6905	-0.1190	0.1726	0.2381	0.5000	0.4762	-0.0476	-0.0714
24	0.6429	0.4286	-0.2143	0.4464	0.4464	-0.0952	0.3095	0.2381	0.4464	-0.2381	0.5000	0.3333	0.6190	0.3571
25	0.2143	0.1190	-0.3095	0.8274	0.8274	0.3333	-0.3333	0.5238	0.8274	0.0476	0.5000	0.7857	0.6190	0.8095
26	0.3333	0.0476	0.3571	0.6488	0.6488	0.5952	-0.4286	0.1667	0.6488	0.2381	0.5000	0.4762	0.6667	0.8571
27	0.3810	-0.0476	-0.1190	0.9226	0.9226	0.6429	0.2143	0.1667	0.9226	0.3095	0.5000	0.8333	0.7381	0.9762
28	0.9762	0.7619	-0.3333	0.2202	0.2202	0.0238	-0.0238	0.6190	0.2202	0.3333	0.5000	0.0476	0.1905	0.4048
29	0.2619	0.3095	0.0238	0.5060	0.5060	0.4286	-0.3571	0.5476	0.5060	0.5000	0.6190	0.4762	0.2857	0.6905
31	0.0238	-0.1905	-0.2857	0.9345	0.9345	0.3571	0.0714	0.0000	0.9345	0.0476	0.5000	1.0000	0.7619	0.7857
33	0.4821	0.0417	0.2321	0.7321	0.7321	0.8155	-0.4821	0.2321	0.7321	0.1250	0.5655	0.4821	0.6964	0.8750
34	0.2738	-0.3214	0.1190	0.5536	0.5536	0.9643	-0.5833	-0.1429	0.5536	-0.0119	0.5119	0.2857	0.4524	0.6310
35	0.6429	0.1905	-0.3095	0.1726	0.1726	0.5714	-0.5238	0.2857	0.1726	-0.0238	0.5000	-0.1190	0.0238	0.2857
36	0.2083	0.3274	0.0179	0.2679	0.2679	-0.2202	0.4226	0.1607	0.2679	-0.4583	0.6250	0.2560	0.5060	0.0655
37	0.0714	0.0000	0.1190	0.8393	0.8393	0.1905	0.0952	0.1429	0.8393	-0.2143	0.5476	0.8333	0.9286	0.7143
38	0.6905	0.1429	-0.0238	-0.1012	-0.1012	0.3095	0.0238	-0.0952	-0.1012	0.0476	0.5000	-0.3571	-0.0238	-0.0238
39	0.6190	0.8571	-0.5952	-0.0298	-0.0298	-0.2143	-0.3095	0.8333	-0.0298	0.1190	0.5000	-0.1190	-0.1667	0.1190
40	0.7917	0.7917	0.0059	0.2440	0.2440	0.0774	0.1250	0.6250	0.2440	-0.0179	0.7083	-0.0774	0.3750	0.2917
41	0.3452	-0.0476	-0.2143	0.3155	0.3155	0.1547	0.5833	-0.4405	0.3155	0.2619	0.5119	0.3571	0.2976	0.2262
42	0.0774	0.0179	-0.5655	0.8333	0.8333	0.3988	-0.2440	0.2202	0.8333	-0.1607	0.5298	0.8393	0.5893	0.6845
43	-0.0952	0.3095	-0.3095	-0.3869	-0.3869	-0.6190	0.3095	-0.0952	-0.3869	-0.6667	0.5000	-0.3333	-0.1667	-0.5952
44	0.1905	0.6190	-0.2381	-0.2679	-0.2679	-0.4524	-0.2143	0.4286	-0.2679	-0.6905	0.5000	-0.3810	-0.0476	-0.3095
45	0.2560	0.5893	-0.4940	-0.1488	-0.1488	-0.2440	-0.2321	0.2917	-0.1488	-0.6369	0.5179	-0.2440	-0.0298	-0.2083
46	-0.2917	-0.3512	-0.3869	0.2500	0.2500	0.3393	0.2679	-0.3512	0.2500	-0.2917	0.7083	0.2679	0.3512	0.0298
47	0.7381	0.2619	-0.0714	0.5893	0.5893	0.6190	-0.4286	0.4762	0.5893	0.4286	0.5000	0.3571	0.4286	0.8095
48	0.0714	0.4524	0.2857	0.4940	0.4940	0.0238	-0.1190	0.5238	0.4940	-0.2143	0.6667	0.4762	0.6429	0.5000
49	0.4286	0.7857	-0.6190	0.0774	0.0774	-0.5000	0.0952	0.5476	0.0774	-0.3571	0.5000	0.0714	0.1429	0.0000

BANK NO	1	2	3	4	5	6	7	9	11	12	13	14	15	16
50	0.4286	0.1429	-0.2619	0.7321	0.7321	0.5952	-0.4048	0.3571	0.7321	0.4524	0.5000	0.6429	0.4524	0.8810
51	0.1667	0.4286	0.2381	0.4107	0.4107	-0.2857	-0.0238	0.4762	0.4107	-0.3810	0.5000	0.3571	0.6905	0.4048
52	-0.4821	-0.2321	0.1250	0.2262	0.2262	-0.2917	0.5774	-0.1131	0.2262	0.2083	0.5655	0.5179	0.1726	0.0536
53	0.3810	0.2381	-0.0238	0.8393	0.8393	0.4286	-0.3333	0.3571	0.8393	0.1429	0.5000	0.7381	0.7857	0.9524
55	0.5178	0.0417	0.0059	0.8214	0.8214	0.7083	-0.4107	0.3274	0.8214	0.2560	0.5060	0.6250	0.6845	0.9464
56	-0.3333	0.0476	0.1905	-0.9345	-0.9345	-0.6905	0.3095	0.0000	-0.9345	0.0714	0.5000	-0.8095	-0.8571	-0.9286
57	0.9048	0.6905	0.0952	-0.0536	-0.0536	-0.0714	0.0476	0.4762	-0.0536	0.3095	0.5000	-0.2619	0.0952	0.1905
58	-0.2202	0.0893	-0.2679	-0.3631	-0.3631	-0.8036	0.8274	-0.0298	-0.3631	0.0655	0.5060	-0.0893	-0.3631	-0.5774
59	0.7381	0.3333	0.0952	-0.0774	-0.0774	0.3810	-0.2381	0.1905	-0.0774	0.0714	0.5476	-0.3810	0.0000	0.0952
60	0.6667	0.5476	-0.3095	0.6369	0.6369	0.2381	-0.2381	0.6429	0.6369	0.4048	0.5000	0.5476	0.4762	0.8095
61	-0.4286	0.0952	-0.1667	-0.2083	-0.2083	-0.7857	0.6667	0.0000	-0.2083	-0.0952	0.5238	0.0952	-0.1667	-0.4286
63	0.5714	0.2381	0.1190	0.7440	0.7440	0.3333	-0.1429	0.5000	0.7440	0.2381	0.5000	0.5952	0.7381	0.8571
64	0.3810	0.1310	0.1905	0.7560	0.7560	0.5833	-0.2500	0.3929	0.7560	0.4762	0.5833	0.6667	0.6190	0.9167
65	0.4286	0.7857	-0.6190	0.0774	0.0774	-0.5000	0.0952	0.5476	0.0774	-0.3571	0.5000	0.0714	0.1429	0.0000
66	-0.0476	-0.3810	0.0476	0.1369	0.1369	0.1667	0.2619	-0.5714	0.1369	-0.5952	0.5000	0.0476	0.3333	-0.1190
67	0.4048	0.7619	-0.5952	-0.0774	-0.0774	-0.6190	0.2619	0.4762	-0.0774	-0.2857	0.5000	-0.0476	0.0000	-0.1667
68	0.3095	0.0000	-0.0476	0.8869	0.8869	0.6429	-0.3333	-0.0238	0.8869	-0.1190	0.5000	0.7381	0.8810	0.9048
69	0.0238	0.1429	-0.1429	0.1250	0.1250	0.0238	-0.2381	0.0000	0.1250	-0.8810	0.5238	-0.0238	0.3333	-0.0476
71	-0.4226	-0.4226	-0.4107	0.3274	0.3274	0.4107	-0.1250	-0.3750	0.3274	-0.2619	0.5655	0.4107	0.0893	0.0892
72	-0.0238	0.1667	-0.0238	0.0417	0.0417	-0.0476	-0.2857	-0.0476	0.0417	-0.9524	0.5000	-0.1190	0.3333	-0.0952
73	-0.0238	0.1667	-0.0238	0.0417	0.0417	-0.0476	-0.2857	-0.0476	0.0417	-0.9524	0.5000	-0.1190	0.3333	-0.0952
75	0.1905	0.7143	-0.4286	-0.3155	-0.3155	-0.8095	0.2381	0.5952	-0.3155	-0.2381	0.5000	-0.2381	-0.2381	-0.3810
76	0.0059	-0.2440	0.1607	0.6905	0.6905	0.6607	-0.4821	-0.1012	0.6905	-0.5179	0.5417	0.4940	0.7679	0.6131
77	0.2143	0.1905	-0.2381	0.8869	0.8807	0.1429	-0.0238	0.2857	0.8869	-0.1905	0.5000	0.8810	0.8810	0.7857
79	0.1190	0.2143	-0.6190	0.1607	0.1607	-0.4524	0.7143	0.0476	0.1607	0.0000	0.5238	0.3571	0.0714	-0.0952
80	-0.6190	-0.2619	0.0714	-0.3869	-0.3869	-0.2857	-0.0476	-0.3571	-0.3869	-0.8333	0.5000	-0.3571	-0.1905	-0.6190
81	-0.1905	0.3333	-0.5238	-0.0059	-0.0059	-0.6905	0.4048	0.1429	-0.0059	-0.4524	0.5000	0.1905	0.0476	-0.2619
82	0.3750	0.0417	0.2679	0.8452	0.8452	0.7321	-0.2917	0.2083	0.8452	-0.0536	0.6250	0.6488	0.8750	0.8750
83	-0.1190	0.2381	-0.2381	0.6250	0.6250	0.0238	-0.3333	0.3810	0.6250	-0.4524	0.5238	0.6429	0.6190	0.5238
85	0.4762	0.2619	-0.2143	0.7321	0.7321	0.5714	-0.5238	0.4524	0.7321	0.3095	0.5000	0.5952	0.5238	0.9048
86	0.4762	0.0476	-0.0476	0.8512	0.8512	0.7381	-0.4524	0.2381	0.8512	0.2143	0.5000	0.6667	0.7143	0.9762
87	-0.4048	-0.1905	-0.2143	-0.5774	-0.5774	-0.5714	0.6429	-0.4762	-0.5774	-0.2381	0.5000	-0.3810	-0.5238	-0.8333
88	-0.3155	0.1607	-0.1250	-0.3512	-0.3512	-0.7798	0.7321	0.0179	-0.3512	0.0417	0.5536	-0.0655	-0.3155	-0.5298
90	0.2679	0.3274	-0.5536	0.3036	0.3036	0.2797	-0.4345	0.4583	0.3036	0.4345	0.5060	0.3036	-0.0655	0.4464
92	-0.0774	-0.4821	0.0655	0.5952	0.5952	0.8036	-0.5060	-0.3274	0.5952	-0.4583	0.5060	0.3988	0.5774	0.4940
94	0.6131	0.2202	0.1964	0.5357	0.5357	0.6250	-0.3036	0.4107	0.5357	0.6131	0.5655	0.3631	0.3988	0.7917
95	0.0655	0.2321	0.1369	0.7143	0.7143	0.2917	0.0417	0.4464	0.7143	0.2797	0.7083	0.7917	0.6012	0.7083
96	0.0476	-0.0238	0.2381	0.7917	0.7917	0.3095	-0.2857	0.2143	0.7917	-0.3095	0.5000	0.6905	0.9048	0.7619
97	0.4762	0.0476	-0.0476	0.8512	0.8512	0.7381	-0.4524	0.2381	0.8512	0.2143	0.5000	0.6667	0.7143	0.9762
98	-0.1190	-0.5714	0.2619	0.3274	0.3274	0.3095	0.4524	-0.4286	0.3274	0.6667	0.5000	0.4524	0.1667	0.3095
99	0.1905	0.2381	-0.0952	0.8274	0.8274	0.0952	-0.0476	0.2619	0.8274	-0.2381	0.5000	0.8095	0.9048	0.7619
100	0.2619	-0.1667	0.2143	0.6607	0.6607	0.6190	-0.3333	0.2857	0.6607	0.4762	0.5000	0.5476	0.4762	0.8095
101	0.7619	0.3571	-0.0952	0.1726	0.1726	0.5238	-0.0238	0.0714	0.1726	0.3333	0.6190	-0.0238	0.1190	0.3095
102	-0.3333	0.2381	-0.2381	-0.5774	-0.5774	-0.6667	0.2857	-0.2143	-0.5774	-0.4286	0.5000	-0.4286	-0.4286	-0.7143
103	-0.0238	0.0476	-0.3571	0.1369	0.1369	0.2143	-0.4524	-0.0952	0.1369	-0.8571	0.5000	-0.0238	0.2143	-0.0238
106	-0.2381	0.0952	-0.4762	0.0179	0.0179	-0.3810	0.4048	0.0000	0.0179	0.3571	0.5000	0.3095	-0.2143	-0.0714

BANK NO	28	29	31	33	34	35	36	37	38	39	40	41	42
1													
2													
3													
4													
5													
6													
7													
9													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28	1.0000												
29	0.3333	1.0000											
31	0.0476	0.4762	1.0000										
33	0.3869	0.6131	0.4821	1.0000									
34	0.1190	0.3810	0.2857	0.8869	1.0000								
35	0.5476	0.2143	-0.1190	0.5774	0.6786	1.0000							
36	0.2083	-0.2202	0.2560	0.0536	-0.0833	0.0417	1.0000						
37	0.0714	0.3095	0.8333	0.5298	0.2500	-0.1429	0.5893	1.0000					
38	0.5476	-0.2381	-0.3571	0.3036	0.4167	0.7143	0.2440	-0.2381	1.0000				
39	0.7381	0.4524	-0.1190	0.1012	-0.1309	0.4762	0.1250	-0.1429	0.1429	1.0000			
40	0.7917	0.1964	0.0774	0.3988	0.2381	0.6250	0.7143	0.3155	0.6607	0.7083	1.0000		
41	0.3095	-0.0238	0.3571	0.0833	0.0417	-0.0952	0.2381	0.1905	0.3452	-0.1786	0.2381	1.0000	
42	0.1250	0.5298	0.8393	0.4702	0.3631	0.2202	0.2917	0.6488	-0.2679	0.2560	0.2679	0.1012	1.0000
43	-0.0476	-0.5000	-0.3333	-0.5298	-0.5357	-0.1667	0.7560	-0.0714	0.1190	0.1429	0.5536	0.0833	-0.1012
44	0.2381	-0.1905	-0.3810	-0.1369	-0.2500	0.2381	0.6846	0.0000	0.1905	0.5238	0.7917	-0.3571	0.0179
45	0.3036	-0.1012	-0.2440	-0.0893	-0.1190	0.3512	0.6012	-0.0536	0.2679	0.5893	0.7679	-0.0952	0.2083
46	-0.3750	-0.0655	0.2679	0.1964	0.3512	0.0417	0.5833	0.4226	0.1488	-0.3750	0.2262	0.1905	0.2738
47	0.6905	0.6667	0.3571	0.8631	0.6786	0.6667	-0.1250	0.2857	0.3571	0.4048	0.4583	0.0833	0.3750
48	0.1429	0.5476	0.4762	0.4345	0.1190	-0.0714	0.5417	0.7381	-0.2857	0.2857	0.4821	-0.1071	0.5179
49	0.5476	0.0238	0.0714	-0.1369	-0.3928	0.1190	0.6846	0.2143	0.0714	0.7143	0.7917	0.0833	0.3393

BANK NO	28	29	31	33	34	35	36	37	38	39	40	41	42	43
50	0.4524	0.8810	0.6429	0.7440	0.5357	0.3333	-0.2560	0.3810	-0.0952	0.3333	0.1845	0.1786	0.6369	-0.7143
51	0.2143	0.1905	0.3571	0.3155	-0.1071	-0.2143	0.6726	0.7857	-0.2381	0.1190	0.5417	-0.1548	0.2679	0.1429
52	-0.3869	0.2440	0.5179	-0.2083	-0.4048	-0.7440	0.2321	0.4702	-0.6726	-0.3274	-0.1726	0.2083	0.2500	0.0059
53	0.4048	0.7619	0.7381	0.7797	0.4405	0.0952	0.0655	0.7143	-0.1905	0.1905	0.2917	0.1905	0.6250	-0.5238
55	0.4583	0.6607	0.6250	0.9405	0.7559	0.5060	-0.0059	0.5774	0.1607	0.1607	0.3393	0.0893	0.5714	-0.6845
56	-0.2857	-0.2857	-0.8095	-0.6845	-0.6548	-0.2857	0.0655	-0.6190	-0.0476	0.0000	0.1250	-0.3571	-0.6964	0.3810
57	0.8810	0.1429	-0.2619	0.3274	0.0714	0.4286	0.2083	-0.0476	0.6667	0.5000	0.7679	0.2500	-0.2917	-0.0238
58	-0.1131	-0.3155	-0.0893	-0.7321	-0.8393	-0.5298	0.4702	-0.0536	-0.2202	0.0059	0.1845	0.1964	-0.1488	0.5655
59	0.6190	0.0238	-0.3810	-0.4702	0.5238	0.8333	0.1726	-0.2143	0.9286	0.3571	0.7321	0.1071	-0.1964	0.0476
60	0.7381	0.7857	0.5476	0.6131	0.2500	0.2857	-0.0059	0.4286	-0.0238	0.5952	0.4583	0.2024	0.5417	-0.4524
61	-0.2857	-0.1190	0.0952	-0.6488	-0.8333	-0.7381	0.4821	0.1667	-0.5476	-0.0476	0.0893	0.0952	0.0298	0.5476
63	0.5476	0.5238	0.5952	0.7798	0.4405	0.2857	0.2321	0.7143	0.0952	0.1905	0.4583	0.0714	0.4345	-0.5238
64	0.3810	0.8690	0.6667	0.8333	0.5714	0.2262	-0.0952	0.5833	-0.0833	0.1786	0.2143	0.1488	0.5298	-0.6667
65	0.5476	0.0238	0.0714	-0.1369	-0.3929	0.1190	0.6845	0.2143	0.0714	0.7143	0.7917	0.0833	0.3393	0.6667
66	-0.1905	-0.5714	0.0476	0.0774	0.2500	0.1429	0.7083	0.2857	0.4762	-0.4762	0.3869	0.3095	0.0417	0.4762
67	0.5238	-0.0952	-0.0476	-0.2917	-0.5238	0.0476	0.6845	0.0952	0.1190	0.6667	0.7679	0.1429	0.1845	0.7381
68	0.2619	0.5238	0.7381	0.8155	0.6429	0.1905	0.4440	0.7143	0.0238	-0.0476	0.2917	0.3810	0.6488	-0.3571
69	-0.0238	-0.2619	-0.0238	0.1488	0.1905	0.3095	0.7798	0.3095	0.2619	0.0952	0.6488	-0.1548	0.2917	0.6667
71	-0.4226	0.2083	0.4107	0.0774	0.2857	0.0655	0.1369	0.1607	-0.2202	-0.1369	-0.0298	0.1250	0.6369	0.1607
72	-0.0714	-0.2857	-0.1190	0.1250	0.1309	0.1905	0.7560	0.2857	0.2143	0.0238	0.6250	-0.1786	0.1607	0.6667
73	-0.0714	-0.2857	-0.1190	0.1250	0.1309	0.1905	0.7560	0.2857	0.2143	0.0238	0.6250	-0.1786	0.1607	0.6667
75	0.3333	-0.0952	-0.2381	-0.4464	-0.6905	-0.0714	0.6012	-0.0238	-0.0714	0.6429	0.6607	-0.2024	0.0179	0.6905
76	-0.1017	0.2321	0.4940	0.7560	0.7559	0.3393	0.3929	0.6726	0.0893	-0.2202	0.3214	-0.0714	0.5714	-0.1250
77	0.2619	0.4286	0.8810	0.5060	0.1786	-0.0714	0.5060	0.9286	-0.2857	0.1190	0.3750	0.2262	0.7917	-0.0952
79	0.2143	-0.1429	0.3571	-0.3750	-0.5000	-0.2143	0.6131	0.2619	-0.0476	0.2143	0.3869	0.5000	0.3512	0.5476
80	-0.6429	-0.4524	-0.3571	-0.3631	-0.2024	-0.1905	0.5417	-0.0476	-0.1190	-0.3093	0.1964	-0.3690	-0.1012	0.6905
81	-0.0476	-0.1429	0.1905	-0.4940	-0.6786	-0.4286	0.7083	0.2857	-0.3810	0.2381	0.3869	0.0952	0.3274	0.7619
82	0.2917	0.5179	0.6488	0.9405	0.8155	0.4583	0.3512	0.7679	0.2321	0.0417	0.4583	0.1488	0.6190	-0.2560
83	-0.0238	0.5000	0.6429	0.3393	0.0714	-0.1190	0.4464	0.7381	-0.5476	0.2381	0.3155	-0.2024	0.7917	0.0952
85	0.5000	0.8810	0.5952	0.8036	0.5595	0.3810	-0.1726	0.4286	-0.0714	0.4048	0.2917	0.0833	0.6369	-0.6429
86	0.4286	0.7143	0.6667	0.9345	0.7500	0.4286	-0.0536	0.5714	0.0952	0.1429	0.2917	0.1905	0.6131	-0.6667
87	-0.3810	-0.5714	-0.3810	-0.7679	-0.6190	-0.3809	0.4226	-0.3333	0.0238	-0.2381	0.1250	0.2143	-0.3155	0.7381
88	-0.1845	-0.1488	-0.0655	-0.6845	-0.8274	-0.6250	0.4345	-0.0059	-0.3631	0.0298	0.1488	0.1488	-0.1131	0.5893
90	0.3750	0.8631	0.3036	0.3214	0.1786	0.2798	-0.3690	-0.0536	-0.2321	0.6250	0.1667	0.0000	0.5298	-0.4226
92	-0.2202	0.1488	0.3988	0.7024	0.8512	0.4345	-0.2262	0.4583	0.1845	-0.3393	0.1905	-0.0357	0.5119	-0.2083
94	0.5774	0.7917	0.3631	0.8393	0.6369	0.4702	-0.2262	0.2797	0.2440	0.2917	0.3214	0.1667	0.2738	-0.7083
95	0.1489	0.8274	0.7917	0.5119	0.2500	-0.0536	0.2440	0.7321	-0.3750	0.2560	0.2321	0.1429	0.7381	-0.1250
96	0.0238	0.4048	0.6905	0.6964	0.4167	-0.0238	0.4226	0.9286	-0.2619	-0.1429	0.2917	-0.1071	0.5774	-0.2857
97	0.4286	0.7143	0.6667	0.9345	0.7500	0.4286	-0.0536	0.5714	0.0952	0.1429	0.2917	0.1905	0.6131	-0.6667
98	-0.1667	0.2857	0.4524	0.2083	0.1548	-0.3333	-0.2321	0.2381	-0.1429	-0.5714	-0.2917	0.5119	0.0179	-0.6429
99	0.2381	0.4286	0.8095	0.5060	0.1429	-0.1667	0.5060	0.9286	-0.3095	0.0714	0.3750	0.2262	0.6845	-0.0714
100	0.2143	0.7143	0.5476	0.8155	0.6309	0.2857	-0.2202	0.4762	-0.0714	-0.0238	0.0774	-0.0833	0.3988	0.9048
101	0.6905	0.2857	-0.0238	0.4821	0.5238	0.6905	0.0774	-0.1190	0.8095	0.4048	0.6131	0.5833	0.0774	0.0476
102	-0.2381	-0.2857	-0.4286	-0.6845	-0.6905	-0.4524	0.3869	-0.3095	-0.1667	0.0714	0.2560	0.1071	-0.2440	0.8333
103	-0.0714	-0.1429	-0.0238	0.1845	0.3214	0.4286	0.5536	0.1429	0.2381	0.1429	0.5417	-0.1548	0.3988	0.5476
106	-0.0714	0.3810	0.3095	-0.3988	-0.5714	-0.5714	-0.0655	0.0000	-0.5952	0.1429	-0.1012	0.3452	0.2560	0.0476

BANK NO	56	57	58	59	60	61	63	64	65	66	67	68	69	71	72
50															
51															
52															
53															
55															
56	1.0000														
57	-0.0476	1.0000													
58	0.5774	-0.1310	1.0000												
59	0.0000	0.7381	-0.3750	1.0000											
60	-0.6429	0.4762	-0.3155	0.1429	1.0000										
61	0.4524	-0.3333	0.8988	-0.6190	-0.2381	1.0000									
63	-0.6667	0.4524	-0.3750	0.2143	0.7619	-0.3333	1.0000								
64	-0.5833	0.2500	-0.4524	0.0952	0.8214	-0.2976	0.8214	1.0000							
65	-0.0476	0.3333	0.3750	0.1190	0.3333	0.3810	0.0952	-0.1190	1.0000						
66	-0.1429	-0.0952	0.0774	0.2857	-0.5000	-0.0238	-0.0952	-0.3214	0.0476	1.0000					
67	0.1190	0.3571	0.5298	0.1190	0.2143	0.4762	-0.0238	-0.2500	0.9762	0.0714	1.0000				
68	-0.9762	0.0952	-0.6131	0.0952	0.6190	-0.4048	0.6429	0.7500	0.0238	0.1190	-0.1429	1.0000			
69	-0.1190	-0.0476	-0.0655	0.3095	-0.2381	0.0000	-0.0476	-0.2500	0.5000	0.6905	0.4286	0.1667	1.0000		
71	-0.1964	-0.6845	0.0179	-0.2321	-0.1488	0.1607	-0.3036	0.0417	-0.0179	0.2797	-0.0774	0.2440	0.3274	1.0000	
72	-0.1190	-0.0238	-0.1369	0.2857	-0.2857	-0.0238	-0.0952	-0.2738	0.4524	0.6429	0.3810	0.1667	0.9762	0.2202	1.0000
73	-0.1190	-0.0238	-0.1369	0.2857	-0.2857	-0.0238	-0.0952	-0.2738	0.4524	0.6429	0.3810	0.1667	0.9762	0.2202	1.0000
75	0.4286	0.2381	0.6369	0.0000	0.0476	0.5952	-0.1190	-0.3333	0.8571	-0.0952	0.9048	-0.4524	0.3333	-0.1726	0.2857
76	-0.6726	-0.1607	-0.6012	0.1965	0.1369	-0.4107	0.4583	0.4464	-0.0655	0.4940	-0.2321	0.7321	0.6131	0.4048	0.5893
77	-0.7857	0.0000	-0.1012	-0.2381	0.6429	0.1190	0.7143	0.6190	0.4048	0.0714	0.2619	0.7619	0.2381	0.1726	0.1905
79	0.0476	-0.0238	0.8036	-0.2381	0.0952	0.7143	-0.0476	-0.1786	0.6429	0.2381	0.7143	-0.0952	0.1429	0.2440	0.0238
80	0.4048	-0.5238	0.2321	-0.0952	-0.8095	0.3333	-0.6190	-0.6071	0.0952	0.5476	0.1190	-0.3810	0.7143	0.4226	0.7143
81	0.1429	-0.2381	0.7202	-0.4286	-0.0714	0.8333	-0.2381	-0.3214	0.7619	0.1429	0.7857	-0.1667	0.4048	0.2798	0.3571
82	-0.6250	0.2202	-0.5000	0.3512	0.5417	-0.3631	0.7917	0.7679	0.0417	0.3274	-0.1131	0.8750	0.3988	0.2381	0.3750
83	-0.5000	-0.2857	-0.1131	-0.3571	0.4286	0.2381	0.3810	0.4405	0.4524	-0.0714	0.2857	0.5476	0.4286	0.3988	0.4048
85	-0.7857	0.2381	-0.6250	0.1429	0.9048	-0.4762	0.7143	0.9167	0.0476	-0.4524	-0.1190	0.7619	-0.1905	0.0893	-0.2381
86	-0.9048	0.2381	-0.7083	0.2381	0.7857	-0.5952	0.8095	0.9167	-0.0952	-0.1429	-0.2619	0.8810	-0.0714	0.0893	-0.1190
87	0.6429	-0.3095	0.7917	-0.1667	-0.7381	0.6667	-0.7857	-0.7500	0.1667	0.4048	0.3333	-0.6667	0.1905	0.2797	0.1429
88	0.6250	-0.1854	0.9524	-0.4464	-0.2679	0.9702	-0.3988	-0.3571	0.3750	-0.0179	0.5060	-0.5179	-0.0417	0.1012	-0.0655
90	-0.3393	0.0298	-0.2738	-0.0179	0.7083	-0.1726	0.1845	0.5833	0.1488	-0.7202	0.0536	0.2917	-0.3512	0.2976	-0.4345
92	-0.6488	-0.2917	-0.6548	0.2440	-0.0298	-0.5417	0.2679	0.3393	-0.2679	0.5417	-0.4108	0.6250	0.5298	0.5417	0.4702
94	-0.4702	0.5178	-0.5536	0.4226	0.7917	-0.5417	0.7560	0.9107	-0.1726	-0.3512	-0.2679	0.6012	-0.3274	-0.1548	-0.3512
95	-0.2083	-0.0417	0.0893	-0.2202	0.6607	0.3631	0.5774	0.7917	0.2321	-0.1607	0.1250	0.6250	0.0536	0.4286	0.0298
96	-0.7143	-0.0476	-0.4107	-0.1190	0.4286	-0.1429	0.7619	0.6667	0.0476	0.1429	-0.1190	0.7381	0.3095	0.0536	0.3095
97	-0.9048	0.2381	-0.7083	0.2381	0.7857	-0.5952	0.8095	0.9167	-0.0952	-0.1429	-0.2619	0.8810	-0.0714	0.0893	-0.1190
98	-0.2381	-0.1429	0.0417	-0.2619	0.1190	0.0238	0.2381	0.4881	-0.6429	-0.0952	-0.5952	0.2143	-0.6905	0.0655	-0.7381
99	-0.7619	0.0476	-0.1488	-0.2381	0.6190	0.1190	0.6905	0.6190	0.3869	0.0476	0.2381	0.7857	0.2381	0.0893	0.2381
100	-0.5952	0.1190	-0.5655	0.0952	0.6190	-0.5000	0.8095	0.9167	-0.4047	-0.3095	-0.5238	0.5476	-0.3571	-0.0655	-0.4286
101	-0.1429	0.6667	-0.2321	0.8095	0.4048	-0.4048	0.1905	0.2976	0.1905	0.1905	0.1905	0.3810	0.1190	0.0893	0.0952
102	0.5238	-0.1905	0.5655	-0.1905	-0.4762	0.6429	-0.7857	-0.6190	0.4286	0.0952	0.5238	-0.4524	0.2857	0.2321	0.3333
103	-0.2381	-0.1905	-0.2440	0.3095	-0.2143	-0.1667	-0.1905	-0.2262	0.4048	0.5714	0.3095	0.2143	0.9286	0.5417	0.8810
106	0.0714	-0.3095	0.5417	-0.6190	0.2143	0.6667	-0.2619	0.1071	0.1905	-0.5000	0.2381	-0.0952	-0.4762	0.3274	-0.5238

TABLE V.23 CONTD (C & I)

BANK NO	86	87	88	90	92	94	95	96	97	98	99	100	101	102	103	106
50																
51																
52																
53																
55																
56																
57																
58																
59																
60																
61																
63																
64																
65																
66																
67																
68																
69																
71																
72																
73																
75																
76																
77																
79																
80																
81																
82																
83																
85																
86	1.0000															
87	-0.8810	1.0000														
88	-0.6607	0.7679	1.0000													
90	0.4940	-0.4702	-0.1548	1.0000												
92	0.5417	-0.3631	-0.6190	-0.0833	1.0000											
94	0.8631	-0.7679	-0.5060	0.5714	0.2381	1.0000										
95	0.6250	-0.2083	0.2440	0.6071	0.2976	0.5298	1.0000									
96	0.6667	-0.6429	-0.3155	-0.0417	0.5655	0.3988	0.7083	1.0000								
97	1.0000	-0.8810	-0.6607	0.4940	0.5417	0.8631	0.6250	0.6667	1.0000							
98	0.2857	-0.1190	0.0417	0.0298	-0.0059	0.4107	0.4107	0.0714	0.2857	1.0000						
99	0.6190	-0.4762	-0.0536	0.1488	0.2917	0.3274	0.7679	0.8571	0.6190	0.0714	1.0000					
100	0.8333	-0.8571	-0.5417	0.3750	0.3750	0.8631	0.6250	0.5952	0.8333	0.5000	0.3810	1.0000				
101	0.4286	-0.0476	-0.2560	0.3750	0.2202	0.5536	0.0417	-0.1429	0.4286	0.0952	-0.0238	0.1429	1.0000			
102	-0.7619	0.7619	0.7083	-0.1845	-0.4464	-0.6726	-0.0179	-0.5238	-0.7619	-0.4524	-0.2381	-0.9524	0.0238	1.0000		
103	0.0000	0.1190	-0.1964	-0.1131	0.6131	-0.2798	0.0536	0.1667	0.0000	-0.7143	0.1190	-0.3571	0.2381	0.2619	1.0000	
106	-0.1667	0.2857	0.6607	0.4940	-0.5536	-0.0774	0.5536	-0.2857	-0.1667	0.3095	0.1190	-0.1905	-0.0476	0.4048	-0.4048	1.0000

ii. Certain bank branches are also observed between which no relationship is found. This is indicated by RCC = 0. The following pair of bank branches represent RCC = 0. (2, 12); (2, 15); (2,37); (2, 68); (3, 22); (9, 14); (9, 31); (9, 56); (9, 61); (9, 69); (9, 106); (12, 79); (15, 59); (15, 67); (16, 49); (16, 65); (17, 51); (20, 22); (20, 69); (21, 22); (21, 85); (24, 100); (25, 75); (37, 44); (37, 106); (39, 56); (41, 90); (44, 96); (56, 59); (57, 77); (59, 75); (61, 69); (81, 95); (83, 102); (86, 103) and (97, 103).

Out of these 36 cells, 8 cells represent the branches of the same bank, whereas the remaining cells represent the branches of different banks. This indicates that in majority of the cases no relationship in ranking of actors is observed between the branches of two different banks.

iii. Further to no relationship in ranking of the factors, it is quite possible that the ranking of factors for two bank branches may go in opposite direction to one another. This will be indicated by RCC = -1. Here it may be noted that there is no cell with RCC = -1 in the entire table. However, the cells where RCC is less than -0.90, it necessarily indicates that the ranking of the factors is almost in the opposite direction of those two branches. This is observed for the following cells :

(4, 56); (5, 56); (11, 56); (12, 72); (12, 73); (16, 56); (26, 87); (27, 56); (43, 100); (44, 98); (56, 86); (56, 97); (100, 102).

Here it is of interest to note that no cell represents the branches of the same bank. This suggests that eventhough negative RCC are observed between the branches of the same bank, in no case these ranking goes in opposite direction to an extreme.

iv. In addition to this an attempt is also made to study whether ranking of factors of all the branches of one bank goes together, i.e. whether the branches of one bank form one group or they are scattered over various groups. For this purpose, as mentioned in the previous para, linkage analysis is applied. On doing this the total sample is divided in 23 groups. They are as per Table V.24.

TABLE V. 24

LINKAGE ANALYSIS : NON-PRIORITY SECTOR :C & I

Cluster	Bank Branch No.
I	4, 5, 11
II	14, 31
III	49, 65, 40, 21, 67, 36, 75, 24
IV	72, 73, 69, 103
V	86, 97, 16, 55, 64, 27, 53, 68, 33, 63, 26, 100, 17, 82, 3
VI	1, 28, 20, 57
VII	50, 85, 29, 90, 95, 13
VIII	77, 99, 37, 15, 96
IX	18, 76, 92
X	61, 88, 58, 52, 81, 7, 87, 56
XI	6, 34
XII	19, 60

XIII	47, 94
XIV	38, 59, 35, 101
XV	44, 45
XVI	48, 83, 51
XVII	2, 39, 9
XVIII	23, 79, 106
XIX	25, 42
XX	43, 102
XXI	46, 66, 71, 80
XXII	22, 41
XXIII	12, 98

On review of above groups it is observed that the bank which has considerably high number of branches in Baroda is scattered over 16 groups. The other bank which has also considerably high number of branches eventhough less than the previous one, is scattered over 10 groups. This necessarily indicates that the all branches of the one bank do not always go together, unless the respondent branches of a particular bank are less than three.

From all above it can be said that

i. Some of the branches of one bank have identical ranking of factors, however all of them do not have the identical ranking of factors.

ii. There are the cases where the branches of one bank may not have any relationship in ranking of factors.

iii. It is also quite possible that the ranking of factors under study may go in the reverse order, between the branches of the same bank.

iv. On observation of Tables V. 11 to V. 24 if we analyse the groups which are formed of various banks, it is observed that bank branch Nos. 4, 5, and 11 always go together. Similarly bank branch Nos. 72 and 73 also go together and bank branch Nos. 91 and 93 also go together. Bank branch Nos. 21, 49 and 65 also go together except the educational advances. For other bank branches no consistency is observed, i.e. in one segment the branch may go with one branch, in the another segment that branch may go with another branch.

SECTION II

APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES WITH REFERENCE TO SEGMENTS :

In Chapters II and III we have discussed the importance of various management accounting techniques in lending decisions by the commercial banks in India and recommendations by various committees e.g. Tondon, Chore etc. in connection with lending decision of commercial banks. The study attempts to examine the application of various management accounting techniques with reference to different segments considering branches of various scheduled commercial banks in Baroda City. This was inquired into by question 7. Here in the matrix the rows indicate techniques and columns indicate the segments i.e. the respondents were required

to respond the application or otherwise of the said technique, segmentwise. The detailed discussion regarding question is already made in Chapter III.

In the present section analysis of response to this question is made from the following angles :

A. Percentage of application of various management accounting techniques with reference to particular segment while taking decision regarding sanction of loan.

B. Rank correlation between the segments with reference to percentage of application of techniques to various segments.

C. Estimating the relationship between application of techniques within the segment with the use of phi- coefficient and

D. Examining the techniques which go together within the segment.

A. APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES :

In order to examine the extent to which a particular management accounting technique is applied while taking lending decisions and whether the applicability of these techniques differ with respect to segment the percentage analysis is carried out segmentwise.

Table V. 25 gives the percentage of application of each technique to each segment.

TABLE V. 25

PERCENTAGE APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES : SEGMENTWISE

(Figures in Percentage)

SEGMENTS / TECHNIQUES	AGRI	SSI	BMRT	SEPR	TO	EDU	NP C & I WC	NP C & I TL
1. Business Plan	36.67	95.05	76.40	78.16	75.61	37.14	95.00	95.68
2. Break even Analysis	18.33	93.07	26.97	31.03	45.12	12.86	80.00	90.72
3. Method of Costing	33.33	68.32	24.72	27.59	41.46	14.29	73.00	72.16
4. Funds Flow	16.67	90.10	26.97	28.74	32.93	11.43	82.00	87.63
5. Cash Flow	23.33	87.13	30.34	35.63	39.02	17.14	82.00	82.47
6. Budgets	30.00	82.18	47.19	41.38	48.78	27.14	79.00	79.38
7. Ratio Analysis	8.33	96.04	52.81	37.93	36.59	15.71	96.00	87.63

It should be noted here that for various segments the number of the respondents are not identical i.e. some respondents have complied to SSI segment but not to agriculture or they have not responded to educational advances. The reason attributed for non-response is non-experience, i.e. to say that the respondent has no experience as far as advances in that segment are concerned. Hence the number of respondents differ for various segments. Based on the respondents the percentage is worked out for application or otherwise of particular technique to particular segment.

Analysis of the Table :

a. AGRI : The first column which stands for segment agriculture reveals that the maximum application is there for technique 'Business Plan' and the minimum for 'Ratio Analysis'. However, for all the techniques it is observed that the percentage of application of technique is lower than the percentage of non-application of technique; hence it can be said that on the whole so far as agricultural segment is concerned majority of technique are not being applied. This is clear from the percentage reflecte in the Table that business plan which is the most applied technique based on responses, is also only being applied by 36.67% of the respondents.

The less percentage of application is congruent with the nature of segment-the agriculture which is more controlled by nature rather than by man.

b. SSI :

From the table it is very clear that the percentage of application of technique to this segment is very high. For no technique the response as to application of technique falls below 80% except one technique i.e. method of costing for which it is observed that 68% responded that method of costing is being used while taking lending decision for SSI segment.

The highest application here is for technique ratio analysis. 96% of the respondents said that it is being used while taking lending decision for SSI segment. Thus for SSI segment it can be

said that on the whole, the techniques are used widely while taking lending decision for SSI segment.

c. BMRT :

Having a clue to the third column of the said table it shows that the highest percentage of application is for business plan, followed by ratio analysis. These are the only two techniques where more than 50% of the respondents gave affirmation to the application of technique. For other techniques less than 50% of the respondents gave affirmation to the application of technique.

d. SEPR :

The fourth column of the table gives information for SEPR. This conveys that the highest percentage of application is for the business plan, i.e. about 78% of the respondents affirms to the use of business plan. While taking lending decision. For all other techniques the percentage of respondents affirming to the application of technique were less than 50%. However, on the whole it can be said that the use of technique for SEPR and BMRT is very much nearer.

e. TO :

Coming to the next column of TO here also it is seen that the business plan is the highest applied technique and funds flow is the lowest. The percentage of respondents affirmative to application of technique are above 50% only for business plan; however on the whole it can be seen that the application of technique is

slightly higher than that of BMRT and SEPR.

f. EDU :

The six column reveals that there is no much application of any technique so far as educational advances are concerned. For all the techniques more than 50% of the respondents said that the techniques are not being used. However, the most applied technique is business plan and the least the funds flow. This lower application of techniques may be on account of non-commercial nature of use of advances.

The next two are the types of advances, working capital and term loan for commercial and industrial sector in non-priority sector.

g. NP C & I WC :

The highest applied technique here is the ratio analysis followed by business plan. The percentage of affirmative answer here are marginally lower than the ratio analysis. It is observed that for all the techniques more than 50% of the respondents gave affirmative answer. On the whole it can be seen that the percentage of respondents giving affirmative answer is very near to that of SSI, the only thing is that they are slightly lower than SSI barring method of costing.

h. NP C & I TL :

Coming to the term loan for non-priority sector it can be seen that here also the highest applied technique is business plan. About 95% of the respondents, responded affirming the use

of this technique. Followed by this is break-even analysis and there after funds flow and ratio analysis. Like working capital advance, here also the percentage of respondents to reply affirmatively are more than 50%.

In brief, it can be said that in the case of SSI segment various management accounting techniques are applied to a greater extent as compared to other segments.

So far as the application of management accounting techniques is concerned it is observed that the tool of business plan is being used the most followed by budgeting.

The views of persons dealing with big proposals at region office of large size public sector bank indicate that all techniques are applied in case of SSI advances. Similarly all techniques are applied in case of NP C & I WC and NP C & I TL except cash flow. For no segment the business plan is an exception i.e. for any loan decision the business plan of the borrower is beigg looked into. Over and above the three types of advances mentioned above break-even-analysis is being carried out for transport operator whereas it need not be considered for loan decision for business man and retail trader, self employed and professional and educational advances. So far as the method of costing is concerned it is not applied to any segment except SSI and NP C & I.

It is observed that the tool of funds flow is applied widely to all segments except educational advances; whereas on the otherhand cash flow is being applied only to SSI; so far as

detailed budgets are concerned, they find their application only to SSI and NP C & I; and the tool of ratio analysis finds its application to SSI, SEPR, NP C & I WC and NP C & I TL.

B. RELATIONSHIP FOR APPLICATION OF TECHNIQUES BETWEEN THE SEGMENTS IN LENDING DECISION :

The application of each technique while taking lending decision has its own significance. In this section an attempt is made to examine the type and degree of relationship between ranking of the techniques while considering the proposal of the borrower by bank officers for different segments. In order to examine the above mentioned proposition the rank is assigned on the basis of the percentage of affirmation for application of particular technique to each technique for various segments and the RCC is estimated.

Table V. 26 gives the RCC between the segments based on difference in ranking of techniques.

It follows from the Table that there is an existence of negative relationship which implies that where in one segment there was higher ranking for technique, in another there was a lower ranking. This conveys that whereas in one segment the percentage of respondents for affirmative answer is higher than other technique in another segment it was otherwise. Such negative relationship is found between AGRI and SSI, AGRI and NP C & I WC, AGRI and NP C & I TL, SSI and TO and TO and NP C & I WC.

TABLE V. 26

RCC BETWEEN THE SEGMENTS REGARDING APPLICATION OF TECHNIQUES

Segments	AGRI	SSI	BMRT	SEPR	TO	EDU	NP C&I WC	NP C&I TL
AGRI	1							
SSI	-0.4286 (-1.0607)	1						
BMRT	0.0982 (0.2206)	0.6339 (1.8327)	1					
SEPR	0.2500 (0.5774)	0.4643 (1.3235)	0.9554* (7.2341)	1				
TO	0.7857* (2.8400)	-0.0714 (-0.1600)	0.3661 (0.8797)	0.5714 (1.9144)	1			
EDU	0.6071 (2.2109)	0.0714 (0.1600)	0.7768* (2.7582)	0.8571* (3.7203)	0.6786 (2.0659)	1		
NP C&I WC	-0.3839 (-0.9297)	0.8839* (4.2261)	0.7232 (2.3415)	0.5089 (1.3219)	-0.2411 (0.5555)	0.2232 (0.5120)	1	
NP C&I TL	-0.1161 (-02614)	0.8432* (3.5807)	0.4911 (1.2506)	0.4196 (1.0337)	0.2054 (0.4693)	0.0625 (0.1400)	0.6696 (2.0159)	1

(Figures in bracket represents t-value)

Following relationships are found statistically significant. The relationship between AGRI and TO, SSI and NP C & I WC, SSI and NP C & I TL, BMRT and SEPR, BMRT and EDU, SEPR and EDU. This suggests that the relative affirmation to the application of techniques though not identical is highly related. The signi-ficant relationships are marked with '*' in the table.

From the Table No. V. 26 it follows that the highest relation-ship exists in the relative affirmation to application of tech-niques between SEPR and BMRT, where RCC is 0.9554.

C. RELATIONSHIP BETWEEN THE TECHNIQUES WITHIN THE SEGMENT :

Earlier we have examined the degree of relationship between various segments considering the relative affirmation to the application of techniques, while taking lending decision. Over and above this, it is also required to examine the degree of relationship between various techniques for each segment separately. i.e. what is the degree of relationship between Business Plan and Break Even Analysis in SSI etc.? This will throw light on the application of various techniques in a particular segment and the relationship among them.

Here the 'yes' for one technique is compared with the 'yes'(or 'no' for another technique and the 'no' for one technique with the 'no' or the 'yes' for another technique, i.e. the combination of responses here will be (i) Yes, Yes (ii) Yes, No (iii) No, Yes and (iv) No, No. To establish relationship between such variables the relationship is found by Phi-Coefficient.[6]

---

6. Edwards Allen L., Statistical Analysis, pp. 162-63.

Accordingly '1' is assigned to yes and 'o' to 'NO', and the formula to establish relationship is

$$r_\phi = \frac{bc - ad}{\sqrt{(a+c)\ (b+d)\ (a+b)\ (c+d)}}$$

where, a, b, c and d are represented in the following manner :

	X_o	X_1	
Y_1	a	b	(a+b)
Y_o	c	d	(c+d)
	(a+c)	(b+d)	n

Further, to examine whether the value of r_ϕ (Phi-Coefficient) represents significant degree of association between the attributes or not the test of χ^2 is applied. This χ^2 is given by nr_ϕ^2

In the case of Phi-Coefficient as the possibility is only 'Yes' or 'No' the d.f. will be 1 and if the calculated value of χ^2 is higher than the table value of χ^2 One has to reject the null hypothesis i.e. the two variables are independent.

Usin, this statistical tool an attempt is made to examine the relationship between the techniques within a segment.

a. AGRI :

The Table V. 27 gives the calulated value of phi-Coefficient.

The table reveals that there exists significant relationship between business plan, and break even analysis, business plan and budgeting and business plan and ratio analysis, i.e. when one

TABLE V. 27

RELATIONSHIP BETWEEN THE TECHNIQUES : AGRICULTURE

Techniques ⇨	B.P.	B.E.A.	M.O.C.	F.F.	C.F.	B.T.	RATIO
Business Plan	1						
Break Even Analysis	0.2652* (4.2199)	1					
Method of Costing	-0.0978 (0.5739)	0.3046* (5.5669)	1				
Funds Flow	0.1237 (0.9181)	0.3660* (8.0374)	0.2530 (3.8405)	1			
Cash Flow	0.0709 (0.3016)	0.2478 (3.6843)	0.1115 (0.7459)	0.8107* (39.4341)	1		
Budget	0.4076* (9.9683)	0.2538* (3.8649)	0.1543 (1.4285)	0.2928* (5.1439)	0.2408 (3.4791)	1	
Ratio Analysis	0.3963* (9.4232)	0.6364* (24.3003)	0.2985* (5.3461)	0.6742* (27.2727)	0.5465* (17.9197)	0.4606* (12.7291)	1

(Figures in bracket represent the estimated value of χ^2 and '*' indicates the significant relationship at 5% level of significance)

technique is used the other is also used in the majority of cases. And when one (here business plan) is not used, another technique is also not used in majority of the cases. It is also observed that the relationship between the business plan and cash flow and business plan and funds flow is eventhough positive it is not significant. It is also observed from the table that there exists negative relationship between business plan and method of costing, however, this negative relationship is found to be in significant. It is further observed that the technique break even analysis is significantly related to all other techniques except with cash flow. This conveys that when break even analysis is applied all other techniques are applied in majority of the cases. And when BEA is not applied all other techniques are not applied in majority of the cases.

The relationship of method of costing is significant only with break even analysis and ratio analysis. With all other techniques the relationship is found insignificant.

The relationship of funds flow with an other techniques is found positive. This relationship is also significant except with techniques business plan and method of costing.

The relationship of Cash Flow with all other techniques is found positive, however, the relationship is found significant only with two techniques viz. funds flow and ratio- analysis. With all other techniques the relationship is found insignificant.

The relationship of budget is found to be significant with all other techniques except method of costing and cash flow.

So far as the ratio- analysis is concerned, the relationship is found significant with all other techniques.

Thus so far as agriculture segment is concerned out of 21 Phi-Coefficients worked out seven are found insignificant and fourteen are found to be significant; i.e. for seven phi-coefficients it is observed that the two techniques behave independently of each other whereas for fourteen phi-coefficients it is found that the application of the two techniques is not independent, however they are related with each another.

The highest relationship is observed between the techniques cash flow and funds flow and the lowest relationship is observed between business plan and method of costing, which is represented by negative phi-coefficient.

b. SSI :

A similar exercise is carried out for the SSI segment i.e. here also the phi-coefficients are found between the techniques. The Table V.28 gives the details of the phi-coefficients between the techniques for SSI segment.

Unlike the agriculture segment, no phi-coefficient is found to be negative here i.e. there exists a positive relationship between all the techniques. Out of twenty one phi-coefficients, sixteen are found to be significant i.e. the techniques represented by these coefficients do not behave independently but the appli-

TABLE V. 28

RELATIONSHIP BETWEEN THE TECHNIQUES : SSI

Techniques	B.P.	BEA	MOC	FF	CF	Bdt.	R.A.
Business Plan	1						
Break Even Analysis	0.2972* (8.9211)	1					
Method of Costing	0.1389 (1.9486)	0.3169* (10.1430)	1				
Funds Flow	0.0772 (0.6019)	0.5622* (31.9229)	0.2730* (7.5274)	1			
Cash Flow	0.0486 (0.2386)	0.3608* (13.1478)	0.1818 (3.3382)	0.5655* (32.2988)	1		
Budget	0.3708* (13.8868)	0.5860* (34.6830)	0.4213* (17.9269)	0.5386* (29.2991)	0.4391* (19.4737)	1	
Ratio Analysis	0.1877 (3.5584)	0.5443* (29.9225)	0.2982* (8.9812)	0.4426* (19.7854)	0.2251* (5.1177)	0.3034* (9.2972)	1

(Figures in Breacket represents the estimated value of χ^2 and '*' indicates the significant relationship at 5% level of significance).

cation or otherwise of the same goes together to a higher extent. These are : business plan with break-even-analysis, and budget; break-even-analysis with method of costing, funds flow, cash flow, budget and ratio analysis; method of costing with funds flow, budget and ratio analysis; funds flow with cash flow, budget and ratio analysis; cash flow with budget and ratio analysis and budget and ratio analysis.

The highest relationship is observed between budget and break even analysis where r_ϕ is 0.5860.

The remaining five phi-coefficients are found to be insignificant i.e. techniques represented by these phi-coefficients behave independently of one another. These relationships are between, business plan and method of costing, business plan and funds flow, business plan and cash flow, business plan and ratio analysis and method of costing and cash flow. The lowest relationship is observed between business plan and cash flow, where r_ϕ is 0.0486.

c. BMRT :

The Table V.29 gives the phi-coefficients between the techniques for BMRT segment.

Here out of twenty one phi-coefficients fourteen are found to be significant and seven are found to be insignificant.

Amongst thebsignificant relationships following are found : between, business plan and break even analysis, business plan and budget, break even analysis and method of costing, break even analysis and funds flow, break even analysis and cash flow, break

TABLE V. 29

RELATIONSHIP BETWEEN THE TECHNIQUES : BMRT

Techniques ↓→	B.P.	BEA	MOC	FF	CF	Bdt.	R.A.
Business Plan	1						
Break Even Analysis	0.2184* (4.2452)	1					
Method of Costing	0.0117 (0.0122)	0.4148* (15.3133)	1				
Funds Flow	0.0395 (0.1389)	0.4295* (16.4178)	0.0396 (0.1396)	1			
Cash Flow	-0.0938 (0.7831)	0.3701* (12.1907)	0.2451* (5.3466)	0.6454* (37.0722)	1		
Budget	0.2603* (6.0303)	0.2371* (5.0033)	0.2409* (5.1649)	0.2371* (5.0033)	0.2085* (3.8690)	1	
Ratio Analysis	0.0578 (0.2973)	0.2701* (6.4929)	0.1765 (2.7725)	0.2194* (4.2841)	0.1342 (1.6029)	0.2173* (4.2025)	1

(Figures in bracket represent the estimated value of χ^2; '*' indicates the significant relationship at 5% level of significance)

even analysis and budget, break even analysis and ratio analysis, method of costing and cash flow, method of costing and budget, funds flow and cash flow, funds flow and budget, funds flow and ratio analysis, cash flow and budget, and budget and ratio analysis. The significant relationship indicates that the two techniques go together in majority of the cases. The highest relationship is found between funds flow and cash flow where phi-coefficient is found to be 0.6454.

The seven relationships which are found insignificant are between business plan and method of costing, business plan and funds flow, business plan and cash flow, business plan and ratio analysis, method of costing and funds flow, method of costing and ratio analysis and cash flow and ratio analysis. The lowest relationship is found between business plan and cash flow where the negative relationship is found, and ϕ here is -0.0938.

d. SEPR :

Table V.30 gives the relationship between application of techniques for advances to SEPR.

The examination of table indicates that out of twenty one phi-coefficients, for eleven phi-coefficients the estimated value of χ^2 is greater than the table - value of χ^2. This implies that these relationships are significant i.e. the application of the techniques represented by phi-coefficient go together in majority of the cases. These significant relationships are found between :

TABLE V. 30

RELATIONSHIP BETWEEN THE TECHNIQUES : SEPR

Techniques ↓→	B.P.	BEA	MOC	FF	CF	BDT	R.A.
Business Plan	1						
Break Even Analysis	0.2343* (4.7760)	1					
Method of Costing	0.1395 (1.6930)	0.4211* (15.4273)	1				
Funds Flow	0.1512 (1.9889)	0.3976* (13.7535)	0.2900* (7.3167)	1			
Cash Flow	0.1609 (2.2523)	0.3828* (12.7486)	0.1852 (2.9840)	0.6944* (41.9506)	1		
Budget	0.3311* ((9.5376)	0.1426 (1.7691)	0.2647* (6.0974)	0.1885 (3.0913)	0.2521* (5.5292)	1	
Ratio Analysis	0.1265 (1.3922)	0.1925 (3.2239)	0.1535 (2.0490)	0.2365* (4.8661)	0.2098 (3.8294)	0.2571* (5.7507)	1

(The figures in bracket represent the estimated value of χ^2 '*' -indicates the significant relationship at 5% level of significance)

business plan and break even analysis, business plan and budget, break even analysis and method of costing, break-even analysis and funds flow, break even analysis and cash flow, method of costing and funds flow, method of costing and budget, funds flow and cash flow, funds flow and ratio analysis, cash flow and budget and budget and ratio analysis. The highest relationship is observed between funds flow and cash flow for which phi-coefficient is found to be 0.6944. For ten phi-coefficients the estimated value of χ^2 is lower than the table value of χ^2 which conveys that the techniques represented by phi-coefficients do not have significant relationship, they behave independently. The insignificant relationships are observed between the following techniques business plan and method of costing, business plan and funds flow, business plan and cash flow, business plan and ratio analysis, break even analysis and budget, break even analysis and ratio analysis, method of costing and cash flow, method of costing and ratio analysis, funds flow and budget and cash flow and ratio analysis. The lowest relationship is found between business plan and ratio analysis for which phi-coefficient is found to be 0.1265.

e. TO :

The Table V. 31 gives phi-coefficients between various techniques for advances to transport operator.

Out of 21 phi-coefficients 8 are found to be significant i.e. the application of techniques represented by these 8 phi-coefficients is significantly related. These 8 phi-coefficients are observed between the techniques : business plan and

TABLE V. 31

RELATIONSHIP BETWEEN THE TECHNIQUES : TO

Techniques ⇩	B.P.	BEA	MOC	FF	CF	BDT	R.A.
Business Plan	1						
Break even Analysis	0.1726 (2.4428)	1					
Method of Costing	-0.1561 (2.0007)	0.1322 (1.4331)	1				
Funds Flow	0.0354 ((0.1028)	0.3555* (10.3632)	0.2531* (5.2529)	1			
Cash Flow	0.1051 (0.9059)	-0.0123 (0.0124)	0.0371 (0.1129)	0.5566* (25.4039)	1		
BDT	0.3270* (8.7682)	0.4401* (15.8824)	-0.0290 (0.0690)	0.0950 (0.7401)	0.1696 (2.3587)	1	
Ratio Analysis	0.1956 (3.1373)	0.2271* (4.2291#	-0.1253 (1.2874)	0.2759* (6.2419)	0.2747* (6.1877)	0.1705 (2.3838)	1

(Figures in bracket represent the estimated value of χ^2 '*' - indicates significant relationship at 5% level of significance)

budget, break even analysis and funds flow, break even analysis and budget, break even analysis and ratio analysis, method of costing and funds flow, funds flow and cash flow, funds flow and ratio analysis and cash flow and ratio analysis. The highest relationship is found between funds flow and cash flow for which phi-coefficient is found to be 0.5566.

Thirteen phi-coefficients are found to be insignificant i.e. the techniques represented by these phi-coefficients behave independently. The relationship between following techniques is found to be insignificant :

business plan and break even analysis, business plan and method of costing, business plan and funds flow, business plan and cash flow, business plan and ratio analysis, break even analysis and method of costing, break even analysis and cash flow, method of costing and cash flow, method of costing and budget, method of costing and ratio analysis, funds flow and budget, cash flow and budget and budget and ratio analysis. Out of these four are found to be negative. The lowest relationship is found between business plan and method of costing, where phi-coefficient is found to be -0.1561.

f. EDU :

The Table V. 32 gives the phi-coefficients for degree of relationship between techniques for educational loans.

The table indicates that out of twenty one phi-coefficients seventeen are significant i.e. the application or otherwise of

TABLE V. 32

RELATIONSHIP BETWEEN THE TECHNIQUES : EDU

Techniques ↓→	B.P.	BEA	MOC	FF	CF	BDT	R.A.
Business Plan	1						
Break even Analysis	0.3230* (7.3030)	1					
Method of Costing	0.1086 (0.8256)	0.4530* (14.3646)	1				
Funds Flow	0.0956 (0.6398)	0.5327* (19.8638)	0.4949* (17.1448)	1			
Cash Flow	0.0426 (0.1270)	0.5047* (17.8305)	0.4642* (15.0837)	0.7897* (43.6538)	1		
Budget	0.3286* (7.5585)	0.2454* (4.2155)	0.3016* (6.3674)	0.2856* (5.7097)	0.2338 (3.8264)	1	
Ratio Analysis	0.3992* (11.1552)	0.6584* (30.3443)	0.4968* (17.2767)	0.3384* (8.0160)	0.3244* (7.3665)	0.3543* (8.7870)	1

(Figures in bracket represents the estimated value of χ^2 '*' -indicates the significant relationship at 5% level of significance)

technique represented by the phi-coefficient goes together in majority of the cases. These are found between the following techniques : business plan and break even analysis, business plan and budget, business plan and ratio analysis, break even analysis and method of costing, break even analysis and funds flow, break even analysis and cash flow, break even analysis and budget, break even analysis and ratio analysis, method of costing and funds flow, method of costing and cash flow, method of costing and budget, method of costing and ratio analysis, funds flow and cash flow, funds flow and budget, funds flow and ratio analysis, cash flow and ratio analysis and budget and ratio analysis. The highest relationship is observed between funds flow and cash flow for which phi-coefficient stood at 0.7897.

Phi-coefficient between the following techniques was found to be insignificant : business plan and method of costing, business plan and funds flow, business plan and cash flow and cash flow and budget. This brings out that the application of these techniques does not go together in majority of the cases. The lowest relationship is observed between business plan and cash flow for which phi-coefficient is found to be 0.0426. Here, no phi-coefficient is found to be negative i.e. by and large the application of one technique and the other technique goes in one direction.

g. NP C & I WC :

The loan to non-priority segment is divided further according to the type of loan i.e. working capital and term loan. The phi-coefficient representing the relationship between application of

two techniques is presented in Table V.33.

A glance at the table highlights that eventhough based on the percentage analysis, the percentage of application of techniques for this advances are quite high the simulteneous application of techniques seems to be low for some of the techniques and this is reflected in negative phi-coefficient between business plan and cash flow.

Out of total twenty one phi-coefficients twelve are found to be significant These are :
business plan and break even analysis, business plan and method of costing, business plan and budget, break even analysis and method of costing, break even analysis and budget, method of costing and budget, method of costing and ratio analysis, funds flow and cash flow, funds flow and budget, funds flow and ratio analysis, cash flow and budget and budget and ratio analysis.

The highest phi-coefficient is observed between funds flow and cash flow which is found to be 0.7967.

The remaining nine phi-coefficients are found to be insignificant. These are observed between business plan and funds flow, business plan and ratio analysis, break even analysis and funds flow, break even analysis and cash flow, breakm even analysis and ratio analysis, method of costing and funds flow, method of costing and cash flow, cash flow and ratio analysis and business plan and cash flow. The lowest relationship is observed between business plan and cash flow where phi-coefficient is found to be -0.1075.

TABLE V. 33

RELATIONSHIP BETWEEN THE TECHNIQUES : NP C & I WC

Techniques	B.P.	BEA	MOC	FF	CF	BDT	R.A.
Business Plan	1						
Break even Analysis	0.3441* (11.8405)	1					
Method of Costing	0.2739* (7.5021)	0.4843* (23.4546)	1				
Funds Flow	0.0119 (0.0142)	0.0911 (0.8299)	0.0668 (0.4462)	1			
Cash Flow	-0.1075 (1.1556)	0.0260 (0.0676)	0.0504 (0.2540)	0.7967* (63.4731)	1		
Budget	0.3323* (11.0423)	0.2946* (8.6789)	0.4054* (16.4349)	0.3336* (11.1289)	0.2058* (4.2354)	1	
Ratio Analysis	0.1920 (3.6864)	0.1531 (2.3440)	0.2207* (4.8708)	0.3028* (9.1688)	0.1700 (2.8900)	0.3959* (15.6737)	1

(Figures in bracket represent the estimated value of χ^2 '*' -indicates significant relationsip at 5% level of significance)

h. NP C & I TL:-

Table V.34 gives the phi-coefficients for degree of relationship between techniques for term loan to non-priority segment.

A look at the table indicates that the highest phi-coefficient exists between the techniques budget and ratio analysis where it is 0.5825. The lowest relationship exists between method of costing and ratio analysis, where phi-coefficient is found to be 0.0461.

Out of twenty one phi-coefficients twelve are found to be significant. The relationships represented by these twelve phi-coefficients are between business plan and break even analysis, break even analysis and method of costing, break even analysis and funds flow, break even analysis and cash flow, break even analysis and ratio analysis, method of costing and funds flow, funds flow and cash flow, funds flow and budget, funds flow and ratio analysis, cash flow and budget, cash flow and ratio analysis and budget and ratio analysis. This indicates that the two techques represented by each phi-coefficient go together in majority of the cases.

Amongst the phi coefficients found insignificant are : business plan and method of costing, business plan and funds flow, business plan and cash flow, business plan and budget, business plan and ratio analysis, break even analysis and budget, method of costing and cash flow, method of costing and budget and method of costing and ratio analysis. This indicates that these two techniques behave independently from one another.

TABLE V. 34

RELATIONSHIP BETWEEN THE TECHNIQUES : NP C&I TL

TECHNIQUES	B.P.	BEA	MOC	FF	CF	BDT	R.A.
Business Plan	1						
Break-even Analysis	0.2911* (8.2197)	1					
Method of Costing	0.1026 (1.0211)	0.2771* (7.4481)	1				
Funds Flow	0.0795 (0.6131)	0.2036* (4.0209)	0.2557* (6.3421)	1			
Cash Flow	0.0956 (0.8865)	0.2264* (4.9719)	0.0767 (0.5706)	0.5680* (31.2945)	1		
Budget	0.1506 (2.2200)	0.1005 (0.9797)	0.1952 (3.6960)	0.3503* (11.9029)	0.2342* (5.3204)	1	
Ratio Analysis	0.0795 (0.6131)	0.2036* (4.0209)	0.0461 (0.2061)	0.4294* (17.8853)	0.3209* (9.9887)	0.5825* (32.9127)	1

(Figures in breket represents the estimated value of χ^2)

* - indicates significant relationship at 5% level of significance)

On the basis of the foregoing discussion it may be concluded that in many cases the degree of relationship between the application of various techniques while taking lending decisions in case of various segments is very high as well as statistically significant but in none of the case, the coefficient is one indicating one to one relationship between two techniques. However, the relationship between funds flow and cash flow and funds flow and ratio analysis is found to be significant irrespective of the segment.

Over and above these two relationships which are found to be significant in all the segments, certain relationships are found to be significant barring only one segment. Such relationship are between :

i. business plan and break even analysis, break even analysis and methods of costing and budget and ratio analysis for all the segments except for advances to transport operators;

ii. business plan and budget except for term loan to non-priority sector, and

iii. break even analysis and funds flow except for working capital advances to non-priority sector.

D. LINKAGE ANALYSIS :

The estimation and examination of phi-coefficients between various techniques for various segments show the degree of relationship between application of various techniques. Over and above this one is interested in finding out the application of various

techniques which go together segmentwise i.e. various techniques are applied to examine various aspects of proposed borrower, it is essential to find out whether all these techniques form one single group or they form more than one group and whether this remains the same for all the segments or not. To examine this aspect, the linkage analysis is carried out for the application of various management accounting techniques for each segment. The following para discusses the group of techniques formed for each segment.

a. AGRI :

So far as advances to agriculture segment are concerned it is observed that the application or otherwise of all techniques go together, i.e. there is only one cluster for all the techniques.

b. SSI :

For lending decision to SSI segment, it is observed that the techniques business plan, break even analysis, method of costing, budget and ratio analysis form one group i.e. the application of these techniques go together and techniques cash flow and funds flow go together, i.e. they form another group.

c. BMRT :

For lending decision to business man and retail trader, the application or otherwise of techniques break even analysis, method of costing, funds flow, cash flow and ratio analysis go together i.e. they form one group whereas the techniques business plan and budget form another group.

d. SEPR :

For lending decision to self employed and professional it is observed that the seven techniques are divided in three groups. The first group is of cash flow and funds flow; the second group is of break even analysis and method of costing and the third group is of business plan, budget and ratio analysis. This implies that the application of all techniques do not go together.

e. TO :

Coming to linkage analysis about loan to transport operators it is observed that the techniques are divided in two clusters. The first group is of method of costing, funds flow, cash flow and ratio analysis and the second group is of business plan break even analysis and budgets.

f. EDU :

Here also the application of techniques is divided in two groups. The first group consists of the techniques cash flow and funds flow and the second group consists of the techniques business plan, break even analysis, method of costing, budget and ratio analysis.

g. NP C & I WC :

Here it is observed that the techniques are divided in two groups. The one group is of cash flow and funds flow and the other group consists of business plan, break even analysis, method of costing, budget and ratio analysis.

h. NP C & I TL :

For lending decision about term loan for commercial and industrial sector falling in non-priority sector, it is observed that the techniques are divided in three groups. The first one consists of budget and ratio analysis, the second one consists of cash flow and funds flow and the third one consists of business plan, break even analysis and method of costing.

Thus, it is observed that except agriculture segment, the various techniques form more than one group. For all eight groups it is consistently observed that both cash flow and funds flow go together and business plan and budget also go together (except C & I TL for non-priority sector). So far as other techniques are concerned, they may go with any of the techniques.

This is about which techniques go together within the segment, i.e. which techniques are applied simulteneously by the branch manager, while taking lending decision.

SECTION III

APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES WITH REFERENCE TO BRANCH, THEIR SPECIALIZATION AND SIZE

In section II an attempt is made to examine the application of various management accounting techniques for various segments.

The present section attempts to find out the level of application of various management accounting techniques for different branches, relationship there of with branch specialization and the relationship between the extent of indepth application of

management accounting techniques and advances and volume of business of branch. Thus the section intends

A. to study which branch applies the management accounting techniques the most and whether within the segment all branches of one bank go together (with the use of composite index) or not.

B. to study the relationship between application of all techniques taken together to a particular segment by the respondent and proportion of that segment's advance to total advance of the branch (with the use of Rank Correlation Co-efficient).

C. to study the probability of application of technique with reference to advances and volume of business of the branch (with the use of LOGIT MODEL).

A. BRANCHWISE INDEX OF THE APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES :

After examining the relationship between various techniques in taking lending decisions segmentwise by respondents, the study tries to focus on the relative positions of various branches under study with respect to application of various techniques segmentwise and whether the branches of one single bank generally fall in the same group for each segment or not.

Here the simple course of action is to sum up in how many techniques the 'yes' is said and then to say that the branch which has maximum 'yes' is applying the techniques to a maximum

extent and the branch responding the minimum 'yes' is applying the techniques the least. However, in this method the relationship between the techniques with respect to application is ignored. To take this aspect into consideration the method of "Principal Component"[7] is applied here.

The method is a follows :

i. Start by simple correlation between K explanatory variable. Here the use of phi-coefficient is to be made. These correlation coefficients may be arranged in a table which we shall call the "correlation table". The main diagonal includes units since the elements of this diagonal are the self correlations, that is the correlation of each xi with it self. The correlation matrix is symmetrical i.e. the elements of each row are identical to the elements of corresponding columns since

$$r_{\phi} XiXj = r_{\phi} XjXi$$

ii. Next sum each column of correlation table, obtaining K sums of simple correlation coefficients.

$$\left[\sum_{j}^{K} r_{\phi} x_i x_j\right]$$

iii. Compute the sum total of the column sums

$$\sum_{i}^{K} \sum_{j}^{K} r_{\phi} x_i x_j$$ and take its square root.

iv. Finally, obtain the loading for the first principal Component Pi by dividing each column sum by square root of grand total. This is known as factor loading.

---

7. Koutsoyiannis A., Theory of Econometrics - An Introductory Exposition of Econometric Methods, pp. 426-27.

We get such factor loading for each technique. There after for each branch, for the techniques applied respective factor loading is added. The highest composite index indicates the highest degree of applicability of management accounting techniques.

Table V. 35 presents the composite index of each branch for application of techniques for each segment separately. It also gives information regarding average Composite Index for various segments and variations between the branches for Composite Index which are denoted by standard deviation and coefficient of variations.

a. AGRI :

A look at the table shows that out of the total respondents only 6.67% responded that all the techniques are being applied whereas 26.67% of the respondents responded that no techniques are being applied and hence their composite index was nil.

The average composite index for application of techniques taking all the branches together is found to be 0.9914. The variations in application of techniques which are represented by standard deviation was found to be 1.1848 and c.v. is found to be 119.5221.

b. SSI :

A look at the table indicates that the higher average application of technique is found in this segment. The respondents are highest in number for SSI segment. Unlike AGRI in this segment no

TABLE V.35

COMPOSITE INDEX OF APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES - SEGMENTWISE

Bank Branch No.	AGRI 1	SSI 2	BMRT 3	SEPR 4	EDU 5	TO 6	NP C&I WC 7	NP C&I TL 8
1.	1.1535	3.2626	2.2166	2.1042	2.7300	2.6988	4.0110	4.0913
2.	-	4.6215	0.3716	0. 0	0	1.6834	4.0110	4.0913
3.	-	4.6215	0.3716	0.2807	0	0.8932	4.0110	4.0913
4.	-	4.0524	3.4901	2.2496	0	3.4519	3.3873	3.6138
5.	-	4.0524	3.4901	2.2496	0	3.4519	3.3873	3.6138
6.	0.4768	4.0524	0.8879	0.8151	1.1827	0.8932	2.0507	1.7616
7.	0	3.4030	0.3716	3.5387	0	1.0891	4.0110	4.0913
9.	0	0.4588	0.8879	0	-	-	2.0507	2.1306
10.	0.4768	2.5774	0.9011	-	-	-	-	-
11.	0	4.0524	0.9958	0.9890	0.7074	2.7282	4.0110	4.0913
12.	0	4.6215	0	0	0	0.5208	2.7906	3.4749
13.	1.0642	4.0111	2.2298	0.6027	0	1.6131	3.4771	2.8242
14.	-	4.6215	4.0196	4.0731	4.7487	3.8243	4.0110	4.0913
15.	0	4.6215	1.6193	1.4378	2.0187	1.6540	4.0110	4.0913
16.	0	4.6215	0.8879	0.8151	0.4838	1.0486	4.0110	4.0913
17.	0.9224	3.8297	1.6451	0.2807	0.6989	2.2782	3.2711	3.4525
18.	0	4.6215	1.1030	0.2807	0.4838	2.2074	2.8282	4.0913
19.	0	4.6215	0.9689	0.8788	0.5989	1.9893	0.8679	4.0193
20	-	4.6215	1.4852	1.4132	1.8148	1.6169	4.0110	4.0913
21.	-	4.6215	-	4.0731	-	-	4.0110	4.0913
22.	-	4.6215	4.0196	4.0731	4.7487	3.8243	4.0110	4.0913
23.	1.0642	4.6215	0.9689	0.8788	1.0627	1.0891	2.0883	4.0913
24.	0.4456	4.6215	0	0	0	0.3724	2.7654	4.0913
25.	-	4.6215	-	-	-	-	3.4771	-
26.	0	4.6215	1.6193	3.3469	0.4838	0.8932	4.0110	4.0913
27.	1.4416	4.6215	1.7898	1.7152	1.4522	1.6020	3.3873	-
28.	-	4.6215	1.5372	2.3379	-	0.3724	4.0110	4.0913
29.	1.0954	4.6215	1.4174	1.4815	1.4522	1.4615	1.5404	2.5353
31	-	4.6215	4.0196	4.0731	4.7487	3.8243	4.0110	4.0913

	1	2	3	4	5	6	7	8
65.	4.5426	4.6215	3.5033	1.5061	-	1.4986	4.0110	4.0913
66.	1.8872	4.6215	1.9102	2.0572	0	2.7757	4.0110	2.8018
67.	0	4.0524	0	1.4378	0	1.0891	3.3873	3.6138
68.	-	4.6215	2.7719	1.4815	-	2.6241	4.0110	1.0785
69.	1.0954	3.3039	1.2215	1.4132	-	2.7795	1.6078	2.9083
71.	-	1.1082	-	-	-	-	4.0110	2.8018
72.	-	4.6215	4.0196	-	-	-	4.0110	3.4749
73.	-	4.6215	4.0196	-	-	-	4.0110	3.4749
74.	1.0954	3.2606	1.1136	1.4178	-	2.8465	2.1371	2.2919
75.	2.0602	4.0524	0.9689	1.5871	0.5789	1.0891	3.3873	3.0511
76.	-	4.0524	-	-	-	-	3.3873	3.6138
77.	-	4.6215	-	-	-	-	4.0110	4.0913
78.	0.4456	4.6215	0.8879	0.2807	-	0.3724	4.0110	4.0913
79.	-	4.6215	-	-	-	-	4.0110	4.0913
80.	1.2852	2.8018	2.5212	2.5916	3.5201	2.7352	4.0110	4.0913
81.	4.5426	4.0111	1.1136	1.1325	0.5789	2.2517	2.8804	3.6138
82.	1.1434	4.0524	1.5121	1.5234	1.1912	1.6058	2.7906	4.0913
83.	-	2.5121	-	-	-	-	1.9985	2.2695
84.	-	0.4588	0	0	0.4838	0	2.9040	3.0889
85.	0.6666	4.0524	0.5163	0.5344	0	1.0850	2.0507	3.4749
86.	1.1223	4.6215	0	0	0	0	1.5404	4.0913
88.	-	4.6215	0.9689	2.2098	0.5789	1.6945	4.0110	4.0913
89.	0.4768	4.0524	1.4852	1.4132	1.0627	1.7945	2.8282	2.2919
90.	0	4.6215	0.9689	0.8788	-	0.5208	4.0110	4.0913
91.	-	4.6215	1.4852	0.8788	0	1.0891	4.0110	1.4799
92.	-	4.6215	1.4852	4.0731	0	2.2517	4.0110	3.4525
93.	-	4.6215	1.4852	0.8788	0	1.0891	4.0110	1.4799
94.	1.1535	4.0524	2.3871	2.8477	0	2.8836	2.7906	3.6138
95.	1.4416	4.6215	0.3716	1.5061	0	3.4519	2.8282	3.6138
96.	4.5426	4.6215	0.3716	0.2807	0	1.4986	4.0110	4.0913
97.	0	4.0524	1.1030	0.2807	0.4838	0.5208	1.1070	1.0024
98.	0	1.1082	0.8879	0.8151	-	1.0486	2.0883	-
99.	0.6767	4.6215	2.3245	2.2098	0.5789	2.2517	4.0110	3.6138

	1	2	3	4	5	6	7	8
32.	0.4768	4.6215	2.8406	2.1215	0	3.1519	4.0110	4.0913
33.	-	4.6215	-	-	-	-	4.0110	4.0913
34.	-	4.6215	2.7461	1.4815	-	1.0891	4.0110	4.0913
35.	0.6666	0.6104	0.6242	0.7083	0.7074	0.5572	0.5339	0.6164
36.	4.5426	4.6215	4.0196	4.0731	-	3.8243	2.8282	4.0913
37.	0	4.0524	1.6451	3.4704	0	2.3558	3.4143	3.6138
38.	-	2.1914	2.1345	0.9034	0	1.2778	2.6474	2.9750
39.	0.4456	4.6215	2.3193	2.9406	1.0627	2.1228	2.0883	2.8018
40.	-	4.6215	1.1405	0	0	0	4.0110	4.0913
41.	-	4.0111	1.6182	2.2027	-	2.1339	4.0110	4.0913
42.	-	4.6215	2.0147	4.0731	-	-	4.0110	4.0913
43.	1.1223	2.4708	2.1488	1.5061	2.2350	1.4986	4.0110	4.0913
44.	0	4.6215	0	0	0	0	4.0110	4.0913
45.	-	3.4420	-	-	-	-	4.0110	4.0913
46.	1.0954	4.6215	0.3716	0.2807	0.4838	0.5208	4.0110	4.0913
47.	0.4456	4.6215	0.5295	0.2807	0.4838	1.0961	4.0110	4.0913
48.	-	4.6215	-	-	-	-	4.0110	4.0913
49.	4.0970	4.0524	0.3716	0.2807	0	0.5208	2.7906	3.6138
50.	0.4456	4.1627	1.6431	1.7352	0	1.5461	4.0110	3.6516
51.	-	4.6215	1.4852	1.4132	1.8148	1.6189	2.2315	2.2067
52.	-	4.6215	-	-	-	-	4.0110	4.0913
53.	0	2.4708	0.8879	0	0	0.6054	4.0110	4.0913
54.	-	4.0524	0.9958	0.9034	1.2359	2.2223	4.0110	4.0913
55.	-	2.4671	-	-	-	-	2.0507	2.9750
56.	-	3.2606	0.6242	0.7083	0	1.6540	2.6474	2.2734
57.	1.5410	4.6215	0.9958	0.8788	1.0627	2.8465	3.4144	4.0913
58.	1.8872	4.0524	2.2424	0.2807	0	1.6463	4.0110	3.0511
59.	-	2.6502	2.2686	2.1640	2.0187	2.3264	1.4646	2.3586
60.	0.4456	4.6215	1.0458	1.1371	1.4510	0.9002	4.0110	4.0913
61.	0.4768	4.6215	0.8879	0.8115	1.2666	2.2223	4.0110	4.0913
62.	0.6186	4.6215	1.2215	0.7262	0	0.3724	4.0110	4.0913
63.	1.0954	4.6215	1.4852	1.4132	0.4838	1.4615	4.0110	2.4347
64.	-	4.8524	0.3716	1.7152	-	-	2.6474	2.9750

	1 1	2	3	4	5	6	7	8
100.	1.7409	4.6215	4.0196	2.3179	0.6989	-	1.7307	1.4799
101.	0.4456	3.8297	0.3716	0.9034	-	0.8932	1.6931	2.8018
102.	-	4.6215	4.0196	4.0731	4.7437	3.8243	4.0110	4.0913
103.	1.0954	4.6215	0.3716	2.3133	1.0627	1.7504	4.0110	4.0913
105.	-	4.6215	0.3716	0.2807	-	3.2965	2.8282	4.0913
106.	0.4768	4.6215	1.4984	2.3133	1.0627	2.7393	2.8282	3.6138
Average	0.9914	4.0518	1.5287	1.4902	0.8619	1.7305	3.3152	3.4805
STD	1.1848	0.9776	1.1201	1.1867	1.2092	1.0306	0.9075	0.8535
C.V.	119.5221	24.1276	73.2692	79.6336	140.2962	59.5551	27.3752	24.5216

respondent has said that no technique is to be applied. The standard deviation eventhough higher for SSI as compared to NPWC and NPTL CV is found to be minimum for SSI segment.

The table also indicates that 58% of the respondents said that all the techniques are being applied. Out of two banks having highest and next to highest branches it is observed that 65% and 57% respectively of their respondent branches stated that all the management accounting techniques are applied while taking lending decision for SSI segment.

The highest composite index is found to be 4.6215 and the lowest is found to be 0.4588.

c. BMRT :

Coming to the discussion of this segment it may be observed that 8.98% of the respondents stated that all the techniques were being applied. The average of composite index of all branches is found to be 1.5286. 6.74% of the respondents stated that no technique is being applied to take lending decision for BMRT segment. The variations in application of technique which are explained by standard deviation is found to be 1.1201 and c.v. is found to be 73.2692. This shows that the extent of variations is high as compared to SSI.

d. SEPR :

The table V.35 shows that only 9.20% respondents stated that all the techniques are being applied and 10.34% of respondents

stated that no techniques are being applied while taking lending decision for SEPR. The average of composite index representing on an average the level of application is found to be 1.4902. standard deviation representing variations between the branches is found to be 1.1867 and the c.v. is found to be 79.6336.

e. TO :

The branchwise composite index, indicating level of application of management accounting techniques, average and variations there in are presented in column (6) of table V.35. It may be observed from the table that 6.25% of the respondents are in the top category responding that all the techniques are being applied while taking lending decision for this segment. On the other hand 5% of the respondents replied that non of the techniques need be adopted when lending decision is to be taken for this segment. The average of composite index for all branches is found to be 1.7305 and standard deviation which represents variations between the branches is found to be 1.0306. The c.v. the relative measure of variations is found to be 59.5551.

f. EDU :

The composite index regarding application of management accounting techniques for each branch, the average of it and variations there in for educational advances is presented at colum (5) of Table V.35. This column indicates that only 5.71% of the total respondents rehlised that all the techniques are adopted while taking lending decision. As many as 41.43% of the respondents, stated that no technique need be applied while taking

lending decision.

On account of this eventhough the maximum composite index was very high the average count is reduced to a greater extent and it was found to be 0.8618. The standard deviation which indicates the variations between the branches in the application of techniques is found to be 1.2092 and c.v. is found to be 140.2962.

The next two are the types of advances for non-priority sector to commercial and industrial sector. Here, it is divided according to the types of advances, because when it is a non-priority advance the things are at the discretion of the lending officer and the aspects which are to be taken into consideration for working capital advance may differ than the aspects to be taken into consideration for term loan.

g. NP C & I WC :

The number of respondents here are almost equal to the number of respondents for the SSI segment. column (7) of Table V.35 gives the composite index of the techniques applied for working capital advance to non-priority segment of C & I. It is observed from the table that 54% of the respondents replied that all the techniques need be applied when a lending decision is to be taken for non-priority sector for working capital advance. Just alike SSI segment here also no respondent said that no technique need be applied while taking this lending decision. The average composite index is found to be as high as 3.3154 and the standard deviation which indicates the variations between the branches is found to be 0.9075 The c.v., the relative measure of variation is found to be 27.37515. It is observed that 50% of the branches of the bank having sufficiently large number

of branches in Baroda, replied that all the techniques are being applied and 64% of the branches of the bank having the pen ultimate highest branches in Baroda stated that all the techniques need be adopted, while taking lending decision. The banks which are falling in the highest group are also falling in the lowest group of the composite index. This necessarily implies that all the respondents of one bank are not acting similarly or are not behaving in the same way, eventhough they are being trained under the same roof.

Analysing the 'why' of the question it may be stated as follows :

i. During the course of interview with the branch manager it was observed that the respondents who stand at the top in the decending order of composite index, indicating that all the techniques are being applied are those having positive approach for their function and are those who are much concerned about the bank;

ii. Those who stood in the middle were those who have less exposure to advance portfolio i.e. they may be concerned about the bank but the experience which they have of the advance portfolio was less.

h. NP C & I TL :

This is a group of term loan to non-priority segment. Column (8) of Table V.35 gives the details of branchwise composite index. The number of respondent is slightly less than those in the SSI

segment. 69% of the branches of the bank which has the large number of branches in Baroda, fall at the top of descending order of composite index. 64% of the branches of the bank having pen ultimate highest branches in Baroda also fall at the tops of descending order of composite index. The average of composite index is found to be 3.4805 which is quite high and the standard deviation which represents the variations between the branch is found to be 0.8535. This is lower as compared to working capital advance for non-priority segment C & I. C.v. is found to be 24.5216.

Viewing all the segments as a whole it is observed that only SSI, NP C & I WC and NP C & I TL have very high percentage in the top category responding that all the techniques should be applied and have no respondent stating that no techniques need be adopted. It can be said that in the SSI segment and for non-priority segment all the branches are applying either one or another technique or all the techniques. However, in the segments AGRI, BMRT, SEPR, TO and EDU it is observed that there are few respondents stating that no technique is being applied.

The main purpose of this computation of composite index is to study whether all the branches of the same bank have the same extent of application of techniques or not, and it is observed through this computation of composite index that the branches of the same bank are not applying the management accounting techniques to the same extent but they differ to a considerable extent, even-though they are trained under the same roof i.e. whereas one branch is applying management accounting techniques to a greater

extent the another branch is applying very less number of techniques.

We also tried to examine whether the branches falling in the upper group and lower group of the composite index are same for all the segments or they differ. On analysis of the contents of Table V.35 it is observed that so far as SSI and non-priority segments (NP C & I WC and NP C & I TL) are concerned the upper group remains almost same, i.e. in majority of the cases the respondent who stated that all techniques need be applied for taking lending decision for SSI segment also said that all techniques be applied for taking lending decisions for non-priority segment also.

Similarly when small borrowers group is considered, i.e. advances to BMRT, SEPR, TO and EDU it is observed that the respondents falling in upper and lower group are consistent, i.e. those who believe that all techniques be applied while taking lending decision for BMRT also believe that all techniques need be applied for taking lending decision for BMRT also believe that no technique need be applied while taking lending decision for SEPR, TO and EDU.

The opinion for AGRI is not much comparable with any other segment. This may be on account of unique nature of the segment.

B. RELATIONSHIP BETWEEN EXTENT OF APPLICATION OF TECHNIQUE AND SPECIALISATION OF BRANCH WITH REFERENCE TO SEGMENT :

The share of advance in a particular segment to total advance reflects the specialisation of that branch in advances to that

segment. If the agricultural advance to total advances is high for a particular branch, it shows that the branch is agriculture advances oriented, and that will reflect the expertise of that branch as far as advances in a given segment are concerned. In the light of this an exercise is carried out to find out the degree of relationship between composite index of the management accounting techniques of a branch for a particular segment and share of it's advances in total advances.

The chapter IV deals with the ratio of each segment's advance to total advance for the branches for which these data are available and the extent to which details are available.

For examining the relationship between the two sides viz. the extent of application of techniques and the specialization of the branch, the data should be available for both, i.e. if the respondent has given the data regarding the size of branch but has refrained from giving his view regarding application of management accounting techniques, relationship can't be examined and if the respondent has given his views regarding application of management accounting techniques but has not revealed the branch data the relationship cannot be established. i.e. the number of respondents will get reduced on account of both these reasons.

Secondly, so far as AGRI and SSI are concerned, the data about these advances are available separately, however, the advances to BMRT, SEPR, TO and EDU are generally clubbed together under the head 'small borrowers'. This requires the combined information for all these segments for one branch regarding the

extent of application of techniques. As composite index can not be added the alternative course of action is adopted of ranking.

Here the composite indices are ranked. The highest composite index is ranked 1 and so on for each segment. Hence the branches for which data are available ranking is made, considering the composite index of that branch. Simulteneously the proportion of that segment's advance to total advance is to be found out. Such data are available individually for AGRI and SSI only, hence, first of all the proportion of this segment's advance to total advance is found and on the basis of it ranking is made, starting with rank 1 to branch having highest proportion of the segment's advance to total advance and RCCs are estimated between these ranking.

In the case of small borrowers, the number of respondents for BMRT and SEPR are higher as compared to TO and EDU; and in particular for EDU the respondents are lowest because many respondents were not conversent with these advances. As the study intended to examine the relationship between the extent of application of techniques and the proportion of that segment's advance to total advance here the common respondents to all four (sub-segments) are taken. Only for these common respondents the ranking has been made for each sub-segment separately. Then it is added and then ranking is made as rank 1 for minimum total. On the other hand the propotion of small borrower's advance to total advance is found and ranking is also made to this and RCC is estimated between these two.

So far as non-priority segment C & I WC and TL are concerned, the separate data for NP C & I WC and NP C & I TL for non-priority were again not available. Hence, here also the same process as that of small borrower's advances is adopted and an attempt is made to estimate RCC.

On the basis of above, following RCCs are estimated.

a. AGRI :

Following the method discussed in the above going paragraphs, the RCC is estimated to examine the relationship between the extent of application of techniques and the proportion of AGRI advance to total advance. Here the RCC is found to be 0.4122 and t-value at 5% level of significance is found to be 2.86 which is higher than table value of t. This implies that the extent of application of techniques and proportion of that segment's advance to total advance are significantly related to each other.

b. SSI :

For this segment based on the above method the RCC between the ranks for extent of application of techniques and ranks for proportion of this segment's advance to total advance is found to be 0.0792. This clearly shows that the relationship is very low. On applying the test of significance, t-test at 5% level of significance, t-value is found to be 0.6408. This indicates that there does not exist any significant relationship between the extent of application of techniques and proportion of this segment's advance to total advance i.e. both these variables behave independently.

On the basis of our earlier empirical findings that the application of management accounting techniques is very high in SSI Segment, we may conclude that eventhough the branch has no much SSI portfolio they are well aware that these techniques should be applied while taking lending decision for SSI segment.

c. Small borrowers :

The ranking for these small borrowers is made as discussed at the beginning, hence, these ranking will represent the extent of application of techniques for four sub-segments taken together i.e. BMRT, SEPR, TO and EDU. Here the RCC is found to be 0.0522 and when the test of significance (here t-test) is applied at 5% level of significance it is found that there does not exist significant relationship between extent of application of techniques and the proportion of that segment's advance to total advance.

As compared to SSI the average composite indices for all these four sub-segments were considerably lower. Hence, we can say that, whether the proportion of these segment's advance to total advance is more or less, the branch managers believe that many techniques need not be applied to these segments.

d. Non-priority :

Here also the ranks are assigned to NP WC and NPTL separately and then ranks are derived for these segment as a whole. An attempt is made to examine the relationship between the extent of application of technique and proportion of that segment's advance to total advance.

The RCC is found to be 0.0890 here and on applying the test of significance it is observed that t-value is 0.8243 which is less than table value at 5% level of significance and this conveys that there does not exist any significant relationship between the extent of application of technique and proportion of that segment's advance to total advance.

Just alike SSI we can say that whether the branch has the higher or lower proportion of this non-priority advance the branch managers are conversent about the application of management accounting techniques while taking lending decision for non-priorit segment.

In brief it may be argued that the share of advance of a particular segment in total advance of the branch does not play any significant role as far as the application of management accounting techniques is concerned; while taking lending decision in a given segment.

C. EFFECT OF ADVANCES AND VOLUME OF BSSINESS ON PROBABILITY OF APPLICATION OF TECHNIQUES :

It is clear from our discussion in the previous section that the advance expertise of a branch in a particular segment and the application of various management accounting techniques in lending decision in the segment are not necessarily related to each other. However the size of branch is very important factor which affects the probability of applicability of various technique i.e. with increase in the advance or volume of business of the branch, the probability of application of techniques increases and

vice versa. This is assumed to be so on account of the following reasons :

i. Based on volume of business the scale of manager to be appointed at that particular branch is decided. With small branch there will be a manager, with still big branch there will a senior manager and still big branch there will be a chief manager.

During the course of visit to various branches it is noticed that whereas in one branch there is only one manager (i.e. branch manager), in the other branch it may be that the branch manager is the chief manager and senior managers (which may be four or five) are heading various sections. It is not overemphasising then to state that the approach with which loan portfolio is dealt with and the knowledge and experience which the officers at two different branches possesses will differ significantly. Further not only that the probability of application of management accounting techniques depends on advances and/or volume of business of the branch, but it also depends on the segment. Take for example, industrial advances. If one refers to the forms for industrial advances may it be working capital or term loan they are very much in detail. Also, for some of the banks it is observed that for industrial advances the application form and appraisal procedure is same, may it be non-priority (C & I) or priority (SSI. Here the probability of application of above techniques will in general be higher, whereas on the other hand, if we take advances to small business man, or retail trader where finance is generally upto Rs.25000 only, there does not exist much scope and logic for

application of management accounting techniques.

In the light of above aspects the opinions about the application of techniques are collected segmentwise and for particular segment only, the relationship between the probability of application of techniques and the size of branch and advances of the branch is estimated. Hence an exercise is carried out for all the techniques taken together because of following reasons :

If one attempts to examine the probability of the application of a particular technique, there are only two possible answers : yes or no and here the linear probability model is required to be estimated which has number of technical problems as discussed below. To overcome this problems logit model is preferred to examine our hypothesis. It will be clear from the discussion that it requires grouped data. To satisfy this requirement the exercise is carried out for all techniques taken together for each segment.

We proceed now to detailed discussion and analysis :

Here an attempt is made to examine the dependence of application of techniques on volume of business and advances of that branch. Here the possibilities are only two, i.e. either a particular technique is being applied or it is not being applied i.e. the dependent variable is dichotomous. When the dependent variable is dichotomous the error term also becomes dichotomous. Hence, if we apply the Simple Regression method i.e. OLS the assumption of homoscadesticity is not satisfied. To overcome this, Linear Probability Model can be applied. In this model y is regressed on

x (where y takes only two values either '0' or '1') i.e.

$$y = B_1 + B_2 x + U_i \quad \text{i.e.}$$

The estimated value of y gives the probability of presence or absence of a particular phenomenon; for example, if the study is conducted about the probability of owning a house at various income level takes only two values i.e. '0' for not owning the house and '1' for owning the house.

However, here the problem arises that the $\hat{y}_i$ may lie outside the interval 0-1 (within which the probability should lie). This is far from reality. The other main limitation of linear probability Model is that it assumes $P_i = E\ (y = 1/x)$ increases linearly with x; i.e. the marginal or incremental effect of x remains constant throughout. However, in reality any increase in x beyond x^* will have little effect on y and before certain level of x is reached it will affect to a very less extent to y.

Hence, we need a probability model that has mainly two features (1) As x_i increases, $P_i = E(y = 1 / x)$ increases but never steps outside the interval 0-1 and (2) the relationship between P_i and x_i is non-linear i.e. "One which approaches zero at a slower and slower rates as X_i gets very large."[8] small and approaches one at slower and slower rate as xi gets

And this requirement is satisfied by the Logit Model[9] given below :

---

8. Gujarati Damodar N., Basic Econometrics, p. 480 and Pindyck Robert S. and Rubin Feld Daniell : Econometric Models and Economic Forecasts, p. 280-81.

9. Ibid.,

Here $P_i = \frac{1}{1+e^{-(B_1+B_2 xi)}}$ Where P_i is the probability of the application of management accounting techniques and x represents advances or size of the branch.

Here P_i is non-linear in parameter and therefore, the OLS procedure cannot be used to estimate B_1 and B_2 and therefore one has to convert this model in the linear form which makes it possible to apply the OLS method and to estimate B_1 and B_2.

Following is the linear transformation of the above model :

$$Li = \ln \left[\frac{P_i}{1 - P_i} \right]$$

$$= B_1 + B_2 X_i$$

In this model also there is the problem of heteroscadesticity and to overcome this problem weighted least squares method is to be followed.

The various steps in estimating the logit regression are as follows :

i. For each size or advance level (of branch) X, compute the estimated probability of application of management accounting technique as $\hat{P}_i = \frac{n_i}{N_i}$ Where n represents the number of favourable events and N - exhaustive events

ii. For each X_i, obtain the logit as

$$\hat{L}_i = \ln \left[\frac{\hat{P}_i}{1 - \hat{P}_i} \right]$$

iii. To resolve the problem of heteroscadesticity, transform as follows :

$$\sqrt{wi}\ Li = B_1\sqrt{wi} + B_2\sqrt{wi}\ X_i + \sqrt{wi}\ \mu i$$

Which one can write as,

$$Li^* = B_1\sqrt{wi} + B_2\ X_i^* + V_i$$

Where weights $wi = Ni\ \hat{P}_i\ (1 - \hat{P}_i)$;

Li^* = transformed or weighted Li;

X_i^* = transformed or weighted X_i and

V_i = transformed error term.

It is easy to verify that the transformed error term is homoscedastic. Keeping in mind that the original error variance is

$$\sigma_\mu^2 = \frac{1}{[Ni\ P_i(1-P_i)]}$$

iv. Estimate by OLS

Here there will be no intercept; therefore regression through origin has to be applied.

v. Establish confidence intervals and/or test hypothesis in the usual OLS frame work.

Further, since R^2 as a measure of goodness of fit is not particularly well-suited for the dichotomous dependent variable models one alternative is the χ^2 test. This is given by

$$\chi^2 = \sum_{t=1}^{G} \frac{Ni\ (\hat{P}_i - P_i^*)^2}{P_i^*(1 - P_i^*)}$$

Where, Ni = number of observation in the ith cell

$\hat{P}_i$ = actual probability of the event occuring $(\frac{ni}{Ni})$

P_i^* = estimated probability

G = number of cells (i.e. number of levels at which xi is measured)

1. Estimation of P_i :

For the above calculations estimation of P_i is made as follows

As there are only seven techniques and so far as SSI and non-priority segments are concerned, it is quite possible that all the techniques are applied and hence probability becomes 1. When probability is 1, $(1-P_i)$ becomes 0 and hence it affects on weight and hence $Li\sqrt{wi}$ and $x_i\sqrt{wi}$ become '0' and even at stage prior to these Li which is log $Pi/1-P_i$, where this $Pi/1-P_i$ will become ∞ . To circumvent this problem probability is estimated taking into consideration all the questions in detail. Here, the questions from 7A to 7F of the questionnaire were considered, (because there are seven techniques under study). Hence for the technique which is not applied it will be zero. However, where the technique is applied, probability will not be taken directly as 1/7 but the detailed questions are referred for this purpose; for example when there is 'yes' for business plan all the detailed questions of business plan will be referred and proportion of true

answers to 1/7 will be worked out and so on. Hence the possibility of probability being 1 is reduced and logically also it is felt necessary on the consideration that the respondent may say that he is applying the technique but if it is not applied with all angles, it implies that the technique is not applied in toto.

Based on this probability all further steps are calculated.

2. The second step is to find out the log of $(P_i/1-P_i)$.

3. In the third step weight is given to Li (i.e. log of $P_i/1-P_i$) of $\sqrt{Ni\ P_i\ (1-P_i)}$, this Li $\sqrt{wi}$ is regressed on $\sqrt{wi}$ and on Xi $\sqrt{wi}$.

4. Two logit models are fitted for each segment considering advances as an explanatory variable in one case and volume of business as an explanatory variable in another case.

The results of regression by using this logit model are summarised in Tables V.36 and V.37.

From the Tables V.36 and V.37 it follows that the t-value of x-coefficient is found significant for the segments SSI, TO NP C & I WC and NP C & I TL. As stated in step 4, there is no intercept and hence the regression is run through origin. The equation is

$$Li\ \sqrt{wi} = B_1\ \sqrt{wi} + B_2\ \sqrt{wi}\ xi$$

Here if we take x = 0 the equation becomes

$$Li\ \sqrt{wi} = B_1\ \sqrt{wi}$$

hence $Li = B_1$ (Ommiting $\sqrt{wi}$ from both sides).

TABLE V.36

REGRESSION RESULTS BY LOGIT MODEL OF PROBABILITY OF APPLICATION OF TECHNIQUES ON ADVANCES OF BRANCH

	Segment	Coeff. / $\sqrt{wi}$	Coeff. xi*	R^2	t-value / $\sqrt{wi}$	t-value xi*	Chi-Square
1.	SSI	0.660921	0.0001	-0.1327	6.2421	2.12306*	104.8766*
2.	AGRI	-0.97061	-0.000069	-0.1237	-5.5732	-0.7642	52.8560
3.	BMRT	-0.54339	0.000082	-0.0091	-4.6655	1.2648	105.9331
4.	SEPR	-0.50296	0.000044	-0.0416	-4.1193	0.6814	94.1971
5.	EDU	-1.05322	0.000139	-0.0177	-5.3431	1.0920	97.6703
6.	TO	-0.53401	0.000197	0.0456	-4.3659	2.2471*	86.3397*
7.	NP C&I WC	0.493581	0.000158	-0.1428	4.7264	2.1730*	98.7329*
8.	NP C&I TL	0.580219	0.000137	-0.1396	5.4397	2.0602*	94.8986*

TABLE V.37

REGRESSION RESULTS BY LOGIT MODEL OF PROBABILITY OF APPLICATION OF TECHNIQUES ON SIZE OF BRANCH

Segment	Coeff. $\sqrt{wi}$	Coeff. xi*	R^2	t-value $\sqrt{wi}$	t-value xi*	Chi-Square
1. SSI	0.658596	0.0000989	-0.1369	6.0760	2.0200*	105.1774*
2. AGRI	-0.986613	-0.000019	-0.1327	-5.5722	-0.5332	53.5695
3. BMRT	-0.556311	0.000038	-0.0048	-4.6948	1.3850	106.0428
4. SEPR	-0.51494	0.000023	-0.0380	-4.1511	0.8350	94.5420
5. EDU	-1.08257	0.000067	0.0115	-5.6592	1.4845	73.5171
6. TO	-0.53092	0.000075	00.0344	-4.2492	2.0535*	86.9100*
7. NP C&I WC	0.466756	0.000079	-0.1355	4.2775	2.0227*	98.3659*
8. NP C&I TL	0.55997	0.000069	-0.1351	5.0469	2.1617*	95.3306*

This gives Log $\left(\frac{P_i}{1-P_i} \right) = B_1$,

Where B_1 stands for coefficient of $\sqrt{wi}$, i.e. in the table the first column after segment represents value of B_1. As this is Log $\left(\frac{P_i}{1-P_i} \right)$, taking antilog of this value and converting it to P_i we get the probability of application of management accounting techniques when x is zero. Calculating in the above said manner the probability of application of techniques for SSI segment comes to 0.65946, when regression is run of probability of application of techniques on advances and 0.65894 when the regression is run of probability of application of techniques on size of the branch. Similarly, the probability of application of techniques when advances of branch are zero comes to 0.27475, 0.36740, 0.37684, 0.25860, 0.36958, 0.62094 and 0.64111 respectively for AGRI, BMRT, SEPR, EDU, TO , NP C & I WC and NP C & I TL, when regression of probability of application of techniques is run on the advances of the branch.

The probability of application of techniques when volume of business of the branch is zero for various segments comes to 0.27158, 0.36440, 0.37403, 0.25302, 0.37030, 0.61461 and 0.63644 respectively for AGRI, BMRT, SEPR, EDU, TO , NP C & I WC and NP C&I TL; when regression of probability of application of techniques is run on volume of business.

This indicates that the probability of application of techniques, when advances and volume of business of the branch is zero is the highest for segment SSI and lowest for educational advances.

The slope coefficient (i.e. x-coefficient) gives the change in the log of odds ratio of application of techniques per unit increase in advances of the branch or per unit increase in volume of business of the branch. Hence, if we want to measure the change in the probability of application of technique per unit change in advances or volume of business, we cannot find it directly from this coefficient, but we have to take into consideration the level from which we want to measuee the change. On account of this, the x-coefficient, which indicates change in Log $\left(\frac{P_i}{1-P_i}\right)$ is not converted into P_i, to indicate the change in probability of application of technique, with unit change in advance or volume of business.

The step 5 of the method of estimation of logit model as explained on the previous pages talks about the test of significance, i.e. here the estimated t-value of x-coefficient is to be compared with the table value of t and if the estimated value of t is greater than the table-value, it indicates that there exists significant relationship between the two variables under study. Such significant relationships are marked with '*', in the table in the relevant column. From this it follows that the relationship is found to be significant for SSI, TO, NP C & I WC and NP C & I TO, both when the regression is run of probability of application of technique on advances of the branch and volume of business. The relation, between the above said two variables is found to be insignificant for the balance four segments i.e.

AGRI, BMRT, SEPR and EDU. It may be further noted that the x-coefficient was found to be negative for AGRI, which indicates the existence of inverse relationship between the probability of application of techniques and the advances or volume of business of the branch. However, the estimate t-value is very much lower than the table value of t which indicates that the inverse relationship is not significant i.e. so far as the AGRI. Segment is concerned the probability of application of techniques and advances or volume of business of branch are behaving independently to each other.

For the three segments i.e. BMRT, SEPR and EDU eventhough the x-coefficient is found to be positive, the estimated t-value is found to be lower than the table-value of t at 5% level of significance, which indicates that for these three segments also the probability of application of techniques is not significantly affected by the advances or volume of business of the branch.

For these three segments the reasons for this insignificant relationship are explained in the following lines :

So far as advances for retail trade are concerned "Retail trade for the purpose of priority sector has two categories as under :

i. Retail trade in essential commodities such as fair price shops and consumer co-operative societies;

ii. Other private retail trade with credit limits not exceeding Rs.25000"[10]

---

10. How to Borrow from financial and Banking Institutions. A Nabhi Publication, 1992, New Delhi, p. 425.

Further, "Application form for credit limits upto Rs.25000 is very simple and has been standardised by RBI."[11]

So far as advances to small business man are concerned it includes, advances to "the person providing any services not being professional service as covered under the category of "professional and self-employed" in the form of business enterprise. It is in fact, a residual category and all small loans which are not classified elsewhere may be included under this category."[12]

Over and above the said criteria, the other condition for these are "the original cost price of equipment used for the business must not exceed Rs.2,00,000. Cost of equipment denotes the value of fixed assets owned by the business and includes cost of land and building, if any. The working capital limits sanctioned to the borrower by bank must not exceed Rs.1,00,000."[13]

So far as SEPR category advances are concerned the necessary condition is that "the maximum borrowing from the bank should be limited to Rs.2 lacs out of which working capital limits should not exceed Rs.1 lac."[14] Further like BMRT, simple application forms and appraisal is involved for credit facilities upto Rs.25000, whereas detailed assessment is involved for credit limits in excess of Rs.25000.

---

11. Ibid., pp. 425-426.
12. Ibid., p. 426-427.
13. Ibid., p. 427.
14. Ibid., p. 426.

So far as educational advances are concerned, there is no such specific limit as is given for SEPR or BMRT, however every bank is free to frame their special schemes for the purpose.

The above information explains why an insignificant effect is found of advances or volume of business of a branch on the possibility of application of techniques to these segments.

Testing Goodness of Fit of the Model :

Coming to the value of R^2 it is clear from the table that when regression is run of probability of application of techniques on advances of the branch, all R^2 values except that for TQ are negative, and when regression of probability of application of technique is run on size or volume of business of the branch all R^2 values except that for TQ and EDU are found to be negative. Here, it may be mentioned that when the regression line is passing through origin (in the logit model the intercept is to be taken as 0), the model does not satisfy the property of conventional model that the error term ($\sum e_j$) be zero and the fact that for this model the conventionally computed R^2 can be negative on occasions."[15]

Moreover, in the case of dichotomous dependent variable model R^2 as a measure of goodness of fit is of questionable value."[16]

---

15. Gujarati Damodar N., Basic Econometrics, p. 155.

16. Ibid., p. 489.

Considering the above two remarks the value of R^2 is not interpreted here.

Hence to judge the goodness of fit of this model we have used the Chi-square test. The formula used is discussed in the previous pages and from that the value of Chi-square is computed. The main aim here is to examine the extent to which the estimated probability based on the coefficients derived from regression are well suited to the actual probability. Hence here after deriving the value of Chi-square based on formula given, the value of Chi-square is to be compared with the table value of Chi-square. If the estimated (calculated) value of Chi-square is lower than the table value of Chi-square it indicates that the estimated probabilities are well suited with the actual probability and hence the model (i.e. the relationship established) holds good.

In Table V.36 and Table V.37 the Chi-square values which are found to be lower than the table values are marked with '*' i.e. for those segments the model fits well or relationship which the study intends to establish holds good.

In both the regressions i.e. (i) regression of probability of application of techniques on advances of the branch and (ii) regression of probability of application of techniques on volume of business of the branch, the value of Chi-square is found to be significant for four segments. viz. SSI, TO[illegible], NP C & I WC and NP C & I TL, whereas for the other four segments the value of Chi-square is found to be greater than the table value of Chi-squar

which indicates that the relationship which is intended to be established does not hold good for those other four segments viz. AGRI, BMRT, SEPR and EDU.

The above model is useful for estimating the probability of application of techniques when the advance or size of the branch is known and the value of $\sqrt{wi}$ is known.

Take for example, the value of xi - i.e. advances in lakhs to be Rs.10900 and $\sqrt{wi}$ for SSI segment for this advances to be 0.681385. Taking the valued of Xi^* coefficient and coefficient of $\sqrt{wi}$ from the regression run, for SSI segment we get the estimated probability to be 0.85206. On the otherhand when the advances of the branch are taken to be Rs.9.89 lacs and value of $\sqrt{wi}$ to be 0.925819, the estimated value of probability comes to 0.65968. This indicates how the estimated probability are different when the advances of branch differ.

When we estimate probability by taking Xi^* coefficient of regression run of probability of application of techniques on size of the branch for a given value of Xi^* we get estimated P_i = 0.95224 (where Xi = Rs.23600 lacs and $\sqrt{wi}$ 0.681385), whereas for Xi = Rs.135.49 lacs and $\sqrt{wi}$ to be 0.925819 we get estimated P_i to be 0.66194.

The estimated probability is derived for four segments at two different levels of advances by following the steps mentioned here below :

1. Put the given value of Xi and $\sqrt{wi}$ in the given equation.

$$Li\sqrt{wi} = B_1\sqrt{wi} + B_2\sqrt{wi}\ Xi$$

ii. Put the estimated value of B_1 and B_2 for the particular segment, when we want to estimate P_i for particular segment.

iii. Divide by $\sqrt{wi}$

The value which we get is of Li i.e. log $\left(\frac{P_i}{1-P_i}\right)$

iv. Take the antilog.

v. Divide the value received in step (iv) by adding to it 1.

The estimated probabilities are presented in the following table for the segments for which relationship is found significant.

TABLE V. 38

ESTIMATED VALUE OF P_i AT TWO DIFFERENT LEVEL OF ADVANCES - SEGMENTWISE

Segment	X_i	$\sqrt{wi}$	P_i^*	X_i	$\sqrt{wi}$	P_i^*
SSI	10900	0.681385	0.85206	9.89	0.925819	0.65968
TO	10900	0.681385	0.83440	9.89	0.925819	0.370032
NP C&I WC	10900	0.681385	0.902207	9.89	0.925819	0.621318
NP C&I TL	10900	0.681385	0.889240	9.89	0.925819	0.641431

The above table is derived by using the regression coefficient of X_i^* and $\sqrt{wi}$, when regression is run of probability of application of techniques on advances of the branch.

The table indicates that eventhough the value of X_i is same for all segments, we find variations in the estimated value of P_i, and when we compare the estimated P_i, for different values of X for a given segment it is observed that with the increase in value

of X, estimated value of P_i increases. It implies that with the increase in amount of advances the probability of application of management accounting techniques increases.

Similarly when an attempt is made to estimate the value of P_i by using the regression coefficient of the regression run of probability of application of technique on size of the branch, the following is observed; for the segments where significant relationship is found.

TABLE V. 39

ESTIMATED VALUE OF P_i AT TWO DIFFERENT LEVEL OF VOLUME OF BUSINESS : SEGMENTWISE

		PART-I			PART-II	
Segment	X_i	$\sqrt{Wi}$	P_i^*	X_i	$\sqrt{wi}$	P_i^*
1. SSI	23600	0.681385	0.95224	135.49	0.925819	0.66194
2. TO	23600	0.681385	0.777001	135.49	0.925819	0.372685
3. NP C&I WC	23600	0.681385	0.913199	135.49	0.925819	0.617178
4.NP C&I TL	23600	0.681385	0.899293	135.49	0.925819	0.638607

Part I in the above table indicates the estimated P_i for big size branches, for various segments. The value of estimated P_i indicates, how it differs, between the segments eventhough volume of business is same. The estimated P_i varies from 0.95224 to 0.777001. The Part II of the table gives the value of estimated P_i, for small size branch, and it can be observed from the table that for all the segments the value of estimated P_i is lower as compared to Part I.

It is to be noted here that value of X_i and $\sqrt{wi}$ are not assumed figures but these are actual figures based on the data collected and therefore we find different values of $\sqrt{wi}$ for a given value of X.

It tends to conclude that with the increase in the size of the branch, the probability of the application of various management accounting techniques increases.

CONCLUSION :

Based on the analysis carried out in the present chapter, results can be summarised as follows :

On analysis of ranking of various factors to be taken into consideration while taking lending decisions it is observed that eventhough the ranking of factors between the segments are significantly related, they are not identical between the segments. It is further observed that so far as ranking of factors by various branches is concerned neither all the branches of one bank have identical ranking nor do they form a single cluster unless the respondent branches for particular bank are very few.

On analysis of responses regarding application of various management accounting techniques it is observed that it is in the SSI segment where the techniques are found to be applied the most. Further the relative affirmation to the application of techniques differs between the segments. When looked into the techniques which are significantly related irrespective of the

segments those are only funds flow and cash flow and funds flow and ratio analysis.

The application of techniques as denoted by composite index does not have much relationship with the specialisation of that branch, however the extent of application of management accounting techniques is considerably dependent on the advances and volume of business of the branch, so far as advances of SSI TO , NP C&I WC and NP C&I TL are concerned.

Of further importance are the points viz. how well the judgement is given to the hypothetical situations developed by researcher for taking loan decision, the compliance to indepth aspect of techniques and determination of problem credit based on the application of management accounting techniques. This is discussed in the following chapter.