

# Comparative Study of the Impact of TQM on the Banks Profitability: A Case Study of Mehr-Egtesad and Saderat Banks in Zanzan Province

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## Abstract

Since financial service provider organizations, especially banks work in an environment with indistinct products, quality of their services is the first competitive tool. This research aimed at examining the impact of total quality management on profitability of Mehr-Egtesad Bank and Saderat Bank. For doing so, six hypotheses were tested. The research statistical population consisted of 135 individuals. The research sample size was 100 individuals chosen via Cochran formula (limited population). The data were collected by a standard questionnaire including 27 items with six scales. The questionnaires were distributed among 100 managers and employees of the mentioned banks. The research main variables factors were identified by exploratory factor analysis and then the hypotheses were evaluated by Lisrel software using structural equations modeling. The results showed a positive impact of total quality management in Mehr-Egtesad Bank and Saderat Bank confirmed by previous research results.

**Keywords:** Total quality management (TQM), bank profitability, structural equations.

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## Introduction

Total quality management tries to reduce cost and increase quality and speed of services providing. Management, customer satisfaction, employees' participation, continuous improvement process, suppliers partnership and performance measures are the basic concepts of TQM. Total Quality Management influences organization goals fulfillment and finally, leads to customer satisfaction, enhancement of efficiency and competitiveness in the markets. Quality improves the products and productive services functional and structural capabilities and consumes organizational resources. Consumption of organizational resources increases cost. The cost of quality is affected by change in the quality of products and services and as a result influences the company's profit. Thus, improving quality impacts on profitability and return on investment. This article investigated the impact of TQM on banks profitability.

In order to achieve sustainable development, organizations must employ a complex model including total quality control and operational management principles. We live in a complex world with two main characteristics of limited resources and ever-increasing and unlimited needs. This condition has led to paying attention to productivity. Productivity or improvement of organizations performance paves the way for growth, development, and organizational excellence. In world modern competitive market, managers have found that only physical development does not help organizations to surpass on their competitors and there are other influential factors such customer satisfaction and efficiency (Pierce, 1997).

TQM is one of the most common terms in business world which has been used in efforts for improving quality. TQM is improvement of the quality of work done in the traditional way to ensure survival in a competitive world and it aims to increase productivity and improve process and products and meet the customers' present and future needs. This system is famous for quality in control in enterprise level in Japan and total quality management in Europe. TQM increases banks profitability and aids organizations in fulfillment of their goals and increase profitability, efficacy and effectiveness (Foote & Tang, 2008).

This research aimed at investigating the impact of TQM in Mehr-Egtesad Bank and Saderat Bank in Zanjan province. In the following, the review of the related literature, conceptual model, research methodology, research statistical population and sample and data analysis via inferential statistics in these banks are proposed.

## Review of related literature

**TQM:** Total quality management includes principles of quality which unifies all organizational activities and processes by continuous quality improvement so that enhances customer satisfaction. TQM involves systematic determination, assurance, measurement and improvement of the organization quality by the aim of achieving higher level of customer satisfaction, profitability and job satisfaction (Bayazita, 2007). In this research TQM components are measured by 27 items of the mentioned questionnaire.

**Profitability ratios:** profitability ratios are used for measuring corporate profitability via assessment of administrative operations. These ratios measure the corporate success in achieving net returns and sales profit to income or to investment. Profitability ratios also measure the corporate's overall performance and efficiency of management in obtaining profit.

**Return on assets:** return on assets is achieved by the corporate profitability dependent on the total assets of that corporate. It offers an idea on efficient management of using assets in generating profit (productive assets) and it is calculated by dividing the annual dividend to the total assets of the company (Kerosene et al, 2008).

**Profit margin:** this ratio is also called net profit and it calculates profitability of income in banks and the profit after tax is divided to joint and non-joint revenues (Vallahmohammadi, Roshanzamir, 2015, O'Neil et al., 2015).

**Joint and non-joint revenues:** joint revenues are obtained from the joint venture between depositors and the banks fee as well as joint income between banks and borrowers. Non-joint revenues are derived from offering a variety of services and received banking fees (Vallahmohammadi, Roshanzamir, 2015, O'Neil et al., 2015).

**Net operating profit:** it measures fitness between the interests and the bank loans cost via difference of interest paid for deposits. Unnatural increase of net operation profit ratio can be result of increase of profitability in the loan sector which constitutes the bank main income resource and it might be result of inability of the bank in attracting resources through long-term deposits. It is obvious that this state influences the bank lending (Vallahmohammadi, Roshanzamir, 2015, O'Neil et al., 2015).

**Residual income:** it is the amount of income that an individual has after all personal debts and expenses, including a mortgage, have been paid (ibid).

In this research the conceptual model of Vallahmohammadi and Roshanzamir( 2015) and O'Neil et al. (2015) has been used.

### **Research conceptual model**

Following hypotheses were proposed according to the research conceptual model:

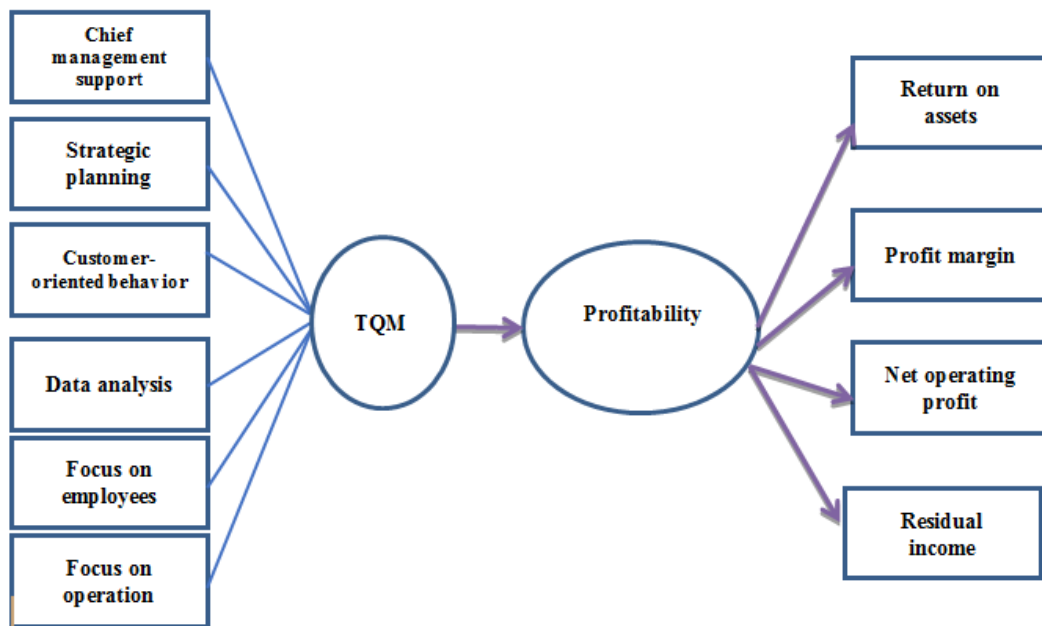


Figure 1: Conceptual framework (Vallahmohammadi and Roshanzamir (2015) and O'Neil et al. (2015)).

### Hypothesis of this research

According to the proposed conceptual model, hypotheses as following are presented:

#### *Main hypothesis*

There is a significant difference between TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.

#### *Secondary hypotheses*

1. There is a significant difference between the impact of chief management support of TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.
2. There is a significant difference between the impact of strategic planning in TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.
3. There is a significant difference between the impact of customer-oriented behavior in TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.
4. There is a significant difference between the impact of data analysis in TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.
5. There is a significant difference in the impact of focus on employees in TQM on profitability of Mehr-Egtesad Bank and Saderat Bank in Zanzan province.

6. There is a significant difference between the impact of focus on operation in TQM and profitability of Mehr-Egtesad Bank and Saderat Bank in Zanjan province.

### Research methodology

This research was applied in terms of goal and the data were collected via retrospective method and it was descriptive-analytical and correlation research and its aims were to determine the relationship among the research hypotheses. This research was conducted with a process including six steps shown in figure 2.

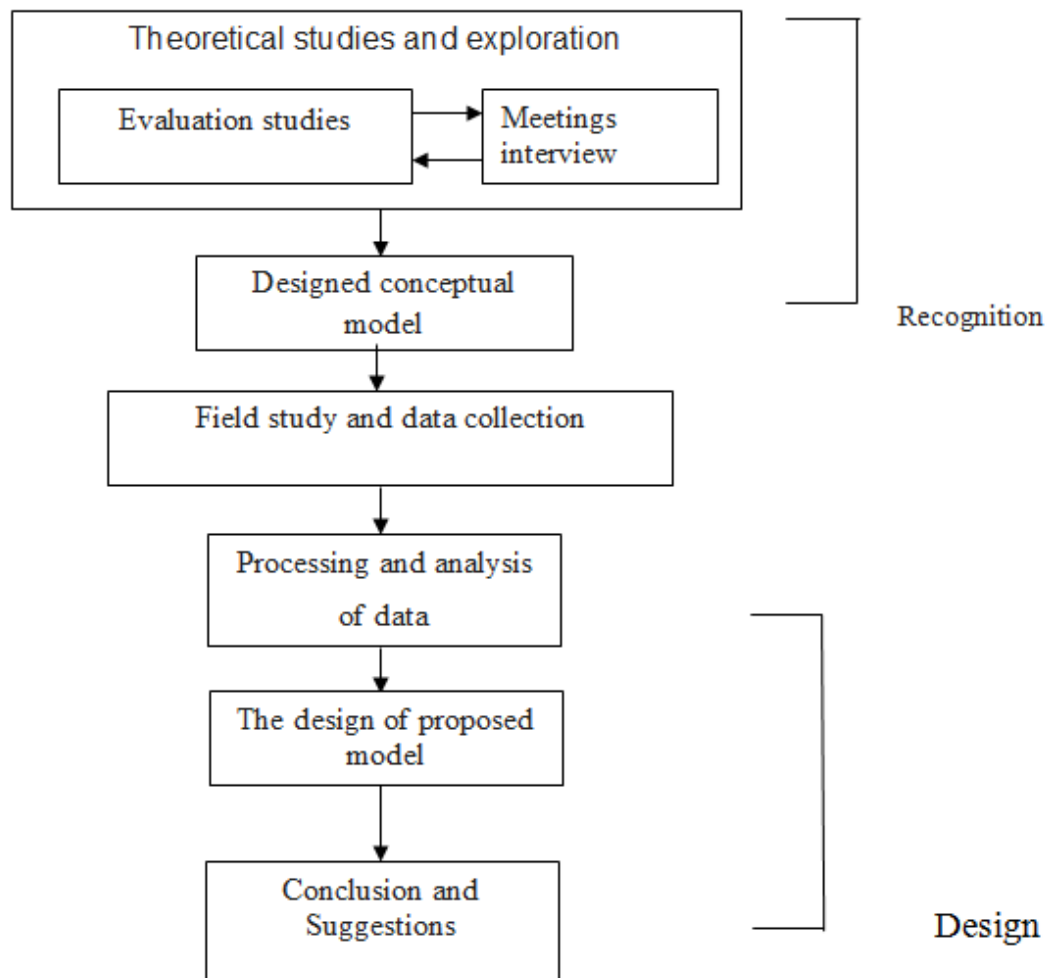


Figure 2: Research process (Khaki, 2008)

$$n = \frac{\frac{Z^2 q p}{d^2}}{1 + \frac{1}{N} \left( \frac{Z^2 q p}{d^2} - 1 \right)}$$
$$n = \frac{(1.96)^2 (0.5)(0.5)}{1 + \frac{1}{135} \left( \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} - 1 \right)} = 100.08 \cong 100$$

N= statistical population equals 135

n= sample size equals 100

$\alpha$ =%5 estimation error

P=0.5

q=(q=1-p)=0.5

d=estimation accuracy 0.05

$Z^2_{\frac{\alpha}{2}}$ =1.96 standard variable value in peer unit with desired confidence level

According to above formula, in this research 100 questionnaires were distributed and collected in the branches of each bank.

### **Data analysis**

Descriptive statistics includes tables, frequency and mean. In inferential statistics, t test and structural equations including confirmatory factor analysis were used by Lisrel software.

Generally, SPSS and Lisrel were used for classification and inference of the data. The hypotheses were tested in order to measure concurrent, direct and indirect relationships among variables.

### **Reliability of variables**

At first the reliability of variables was calculated by Cronbach' alpha for 27 components and the results are shown as in the below table:

Table 1: Variables reliability coefficients Inferential statistical

Factor	Number of questions	Cronbach' alpha
chief management support	5	0.68
strategic planning	5	0.88
customer-oriented	5	0.76
data analysis	4	0.75
focus on employees	4	0.72
focus on operations	4	0.86

The data were collected from the chosen population and then the inferential statistics was used including Cronbach' alpha, test, confirmatory factor analysis, regression correlation test and path analysis.

### Kolmogorov- Smirnov (K-S) test

Table 2: Kolmogorov- Smirnov (K-S) test for examining normality of data distribution (Saderat Bank)

Variable	Number	T-values	Test Statistic
chief management support	100	0.667	0.764
strategic planning	100	0.315	0.961
customer-oriented	100	0.116	1.193
data analysis	100	0.502	0.872
focus on employees	100	0.121	0.938
focus on operations	100	0.505	0.526

Coefficients higher than 0.05 in the above table shows normal distribution of the data.

Table 3: Kolmogorov- Smirnov (K-S) test for examining normality of data distribution (Mehr- Egtesad Bank)

Number	T-values	Test Statistic	Variable
100	0.071	1.018	chief management support
100	0.063	0.776	strategic planning
100	0.096	1.232	customer-oriented
100	0.060	1.325	data analysis
100	0.138	1.156	focus on employees
100	0.511	0.608	focus on operations

Coefficients higher than 0.05 in the above table shows normal distribution of the data.

### Pearson correlation test

Correlation among variables was examined before investigating the model from structural equations point of view. Table 4 depicts correlation and significance among variables as paired comparison.

Table 4: Correlation and significance among variables of the model (Saderat Bank)

		chief management support	strategic planning	customer-oriented	data analysis	focus on operations	focus on employees	Return on Assets	Profit margin	Operational Net income	Remainder Profit
chief management support	Correlation Coefficient	1.000	.560**	.473**	.336**	.268**	.475**	.723**	.502**	.475**	.459**
	Significant		.000	.000	.001	.007	.000	.000	.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
strategic planning	Correlation Coefficient	.560**	1.000	.406**	.436**	.399**	.453**	.812**	.420**	.496**	.333**
	Significant	.000		.000	.000	.000	.000	.000	.000	.000	.001
	Number	100	100	100	100	100	100	100	100	100	100
customer-oriented	Correlation Coefficient	.473**	.406**	1.000	.497**	.367**	.400**	.448**	.893**	.591**	.645**
	Significant	.000	.000		.000	.000	.000	.000	.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
data analysis	Correlation Coefficient	.336**	.436**	.497**	1.000	.311**	.332**	.397**	.486**	.385**	.495**
	Significant	.001	.000	.000		.002	.001	.000	.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
focus on operations	Correlation Coefficient	.268**	.399**	.367**	.311**	1.000	.582**	.388**	.371**	.482**	.565**
	Significant	.007	.000	.000	.002		.000	.000	.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
focus on employees	Correlation Coefficient	.475**	.453**	.400**	.332**	.582**	1.000	.473**	.389**	.429**	.552**
	Significant	.000	.000	.000	.001	.000		.000	.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
Return on Assets	Correlation Coefficient	.723**	.812**	.448**	.397**	.388**	.473**	1.000	.456**	.553**	.379**
	Significant	.000	.000	.000	.000	.000	.000		.000	.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
Profit margin	Correlation Coefficient	.502**	.420**	.893**	.486**	.371**	.389**	.456**	1.000	.612**	.790**
	Significant	.000	.000	.000	.000	.000	.000	.000		.000	.000
	Number	100	100	100	100	100	100	100	100	100	100
Operational Net income	Correlation Coefficient	.475**	.496**	.591**	.385**	.482**	.429**	.553**	.612**	1.000	.545**
	Significant	.000	.000	.000	.000	.000	.000	.000	.000		.000
	Number	100	100	100	100	100	100	100	100	100	100
Remainder Profit	Correlation Coefficient	.459**	.333**	.645**	.495**	.565**	.552**	.379**	.790**	.545**	1.000
	Significant	.000	.001	.000	.000	.000	.000	.000	.000	.000	
	Number	100	100	100	100	100	100	100	100	100	100

Table 4 shows that the correlation coefficients less than 0.3 show an insignificant relationship, correlations varies 0.3 to 0.5 show a medium relationship and higher than 0.5 show a significant relationship.



Table 5: Correlation and significance among variables of the model (Mehr-Egtesad Bank)

	chief management support	strategic planning	customer-oriented	data analysis	focus on operations	focus on employees	Return on Assets	Profit margin	Operational Net income	Remainder Profit	Return on Assets	Economical Value Additional
chief management support	Correlation Coefficient	1.000	.360**	.278**	.176*	0.126	.194**	.161*	0.128	.146*	-0.010	-0.074
	Significant		0.000	0.000	0.012	0.076	0.006	0.023	0.070	0.039	0.886	0.297
	Number	200	200	200	200	200	200	200	200	200	200	200
strategic planning	Correlation Coefficient	.360**	1.000	.530**	0.124	.186**	.247**	.281**	-0.032	0.052	-.172*	-0.005
	Significant	0.000		0.000	0.081	0.009	0.000	0.000	0.649	0.464	0.015	0.946
	Number	200	200	200	200	200	200	200	200	200	200	200
customer-oriented	Correlation Coefficient	.278**	.530**	1.000	.268**	.223**	.281**	.312**	-0.083	0.128	-.184**	0.032
	Significant	0.000	0.000		0.000	0.002	0.000	0.000	0.243	0.071	0.009	0.652
	Number	200	200	200	200	200	200	200	200	200	200	200
data analysis	Correlation Coefficient	.176*	0.124	.268**	1.000	.404**	.269**	.265**	0.019	0.106	-0.060	.173*
	Significant	0.012	0.081	0.000		0.000	0.000	0.000	0.791	0.135	0.400	0.014
	Number	200	200	200	200	200	200	200	200	200	200	200
focus on operations	Correlation Coefficient	0.126	.186**	.223**	.404**	1.000	.401**	.376**	0.053	.245**	0.109	.261**
	Significant	0.076	0.009	0.002	0.000		0.000	0.000	0.457	0.000	0.125	0.000
	Number	200	200	200	200	200	200	200	200	200	200	200
focus on employees	Correlation Coefficient	.194**	.247**	.281**	.269**	.401**	1.000	.405**	-0.006	.358**	0.096	.228**
	Significant	0.006	0.000	0.000	0.000	0.000		0.000	0.938	0.000	0.178	0.001
	Number	200	200	200	200	200	200	200	200	200	200	200
Return on Assets	Correlation Coefficient	.161*	.281**	.312**	.265**	.376**	.405**	1.000	0.013	.386**	0.057	.261**
	Significant	0.023	0.000	0.000	0.000	0.000	0.000		0.853	0.000	0.424	0.000
	Number	200	200	200	200	200	200	200	200	200	200	200
Profit margin	Correlation Coefficient	0.128	-0.032	-0.083	0.019	0.053	-0.006	0.013	1.000	-0.034	.253**	0.010
	Significant	0.070	0.649	0.243	0.791	0.457	0.938	0.853		0.635	0.000	0.889
	Number	200	200	200	200	200	200	200	200	200	200	200
Operational Net income	Correlation Coefficient	.146*	0.052	0.128	0.106	.245**	.358**	.386**	-0.034	1.000	.239**	.178*
	Significant	0.039	0.464	0.071	0.135	0.000	0.000	0.000	0.635		0.001	0.012
	Number	200	200	200	200	200	200	200	200	200	200	200
Remainder Profit	Correlation Coefficient	-0.010	-.172*	-.184**	-0.060	0.109	0.096	0.057	.253**	.239**	1.000	0.102
	Significant	0.886	0.015	0.009	0.400	0.125	0.178	0.424	0.000	0.001		0.149
	Number	200	200	200	200	200	200	200	200	200	200	200
Economical Value Additional	Correlation Coefficient	-0.074	-0.005	0.032	.173*	.261**	.228**	.261**	0.010	.178*	0.102	1.000
	Significant	0.297	0.946	0.652	0.014	0.000	0.001	0.000	0.889	0.012	0.149	
	Number	200	200	200	200	200	200	200	200	200	200	200

## Hypotheses test

### Confirmatory factor analysis

In order to examine the validity of the research variables (explaining of the variables by the related questions of this research) confirmatory factor analysis was used. It is a theoretical test that the researcher begins his or her analysis with a former hypothesis.

This model which is based on a powerful theoretical and experiential foundation identifies correlation between variables and factors and factors with other factors. In the following the factors related to variables are shown.

*First variable: TQM*

Total quality management variable includes 27 questions. Below table shows standard coefficients (factor), assumed variances and significance levels. All questions have obtained required significance (more than 1.96).

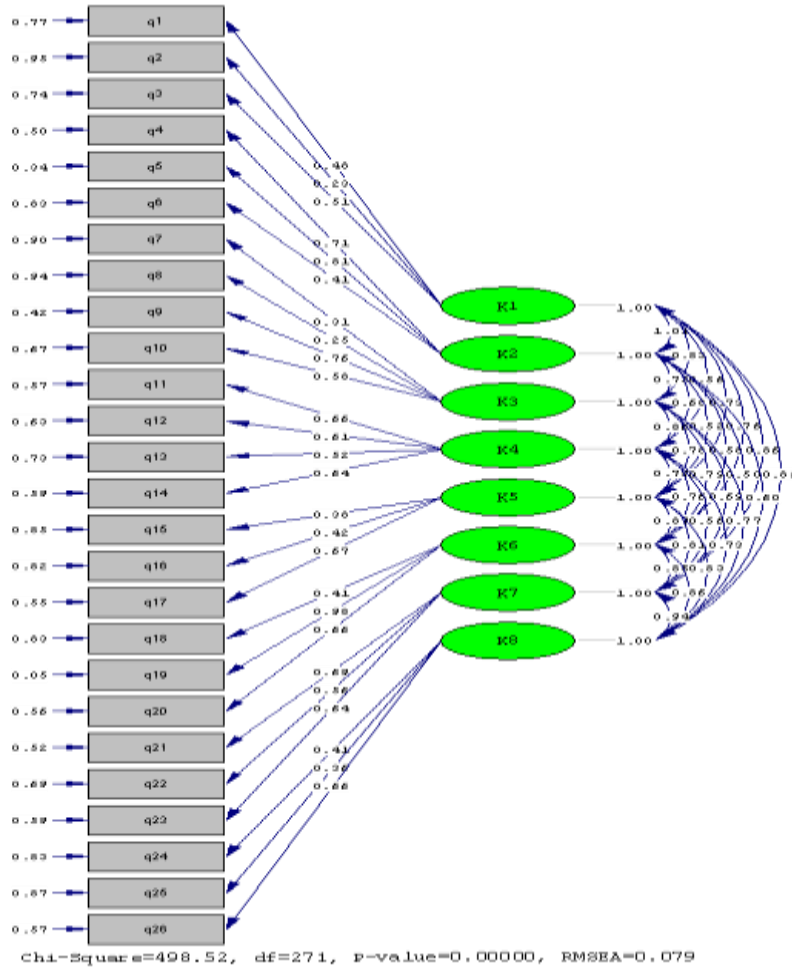


Figure 3: Confirmatory factor analysis (standard coefficients and assumed variances of Mehr-Egtesad Bank)

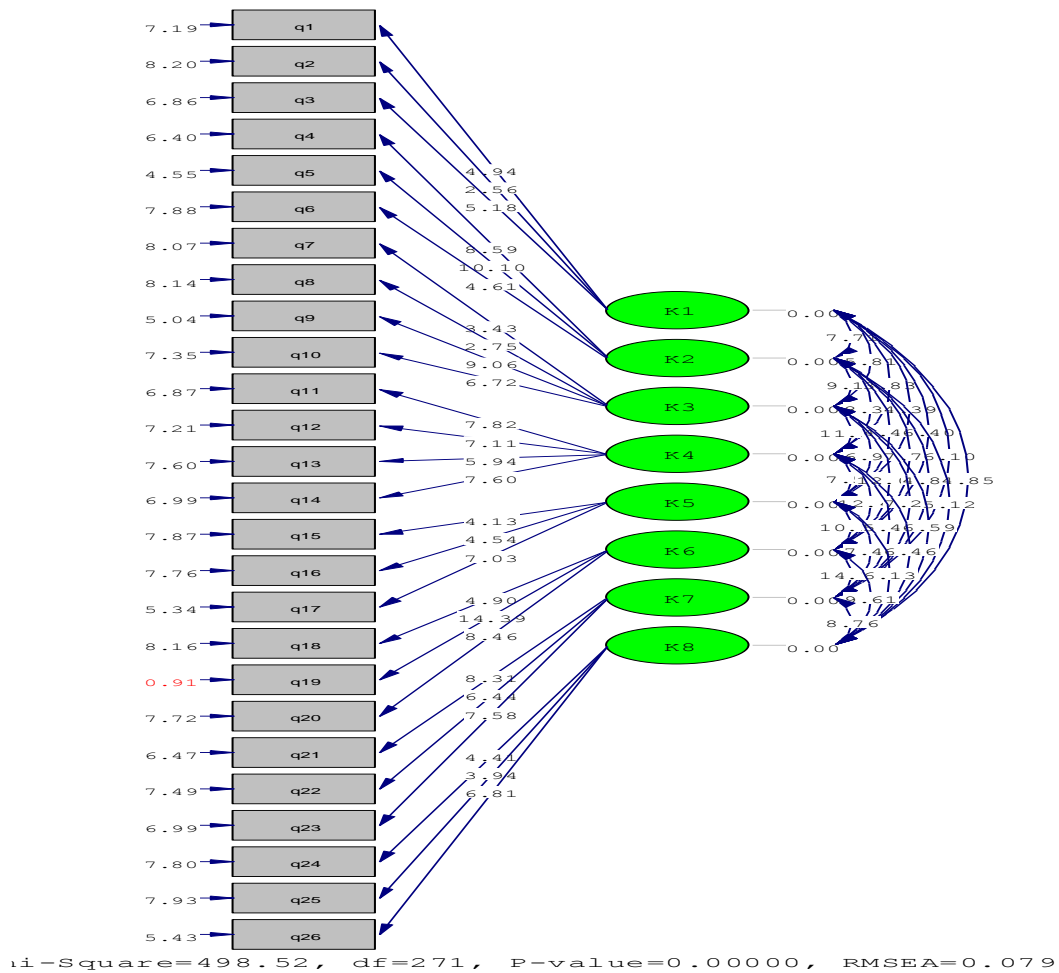


Figure 4: Confirmatory factor analysis (standard coefficients and assumed variances of Saderat Bank)

The standard estimation model is obtained by conformity of two matrices of the data covariance and depicts the model parameters real estimation. This model shows the coefficient of the relationship between structure and dimension and dimension and indicator. If the coefficient is higher than 0.2, it can be said that the mentioned questions have powerful explanation; as it is seen all questions of the standardized coefficients measurement model have high correlation.

Table 6: Confirmatory factor analysis model goodness of fit (Saderat Bank)

Research Model Statistic	Acceptation Criterion	Fitting Index
1.83	$\frac{k2}{df} \leq 3$	(Chi square) $\chi^2$
0.079	RMSEA<0.08	RMSEA <sup>2</sup>
0.93	NFI>0.90	NFI <sup>3</sup>
0.96	CFI>0.95	CFI <sup>4</sup>
0.88	GFI>0.90	GFI <sup>5</sup>
0.82	AGFI>0.85	AGFI <sup>6</sup>
0.91	IFI>0.90	IFI

Table 7: Confirmatory factor analysis model goodness of fit (Mehr-Egtesad Bank)

Research Model Statistic	Acceptation Criterion	Fitting Index
1.6	$\frac{k2}{df} \leq 3$	(Chi square) $\chi^2$
0.067	RMSEA<0.08	RMSEA <sup>7</sup>
0.96	NFI>0.90	NFI <sup>8</sup>
0.98	CFI>0.90	CFI <sup>9</sup>
0.9	GFI>0.90	GFI <sup>10</sup>
0.86	AGFI>0.85	AGFI <sup>11</sup>
0.98	IFI>0.9	IFI <sup>12</sup>

According to fitness indices in the research confirmatory factor analysis model, it can be found that all fitness indices are fitted to a high explanatory power except GFI which its value is less than 0.9. If all fitness indices have high value and only GFI and AGFI values are less than 0.9, it means that the research sample size is not sufficient and the research requires sample size higher than 100.

### Relationship between the research variables and hypotheses test

<sup>2</sup>Root Mean Square error of Approximation

<sup>3</sup>Normed Fit Index

<sup>4</sup>Comparative Fit Index

<sup>5</sup>Goodness of Fit Index

<sup>6</sup>Adjusted Goodness of Fit Index

<sup>7</sup>Root Mean Square error of Approximation

<sup>8</sup>Normed Fit Index

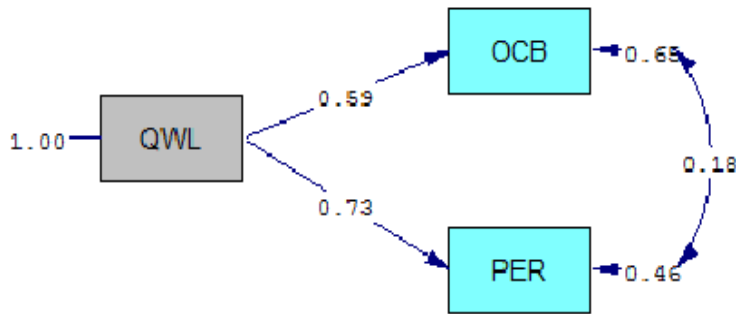
<sup>9</sup>Comparative Fit Index

<sup>10</sup>Goodness of Fit Index

<sup>11</sup>Adjusted Goodness of Fit Index

<sup>12</sup> Incremental Fit Index

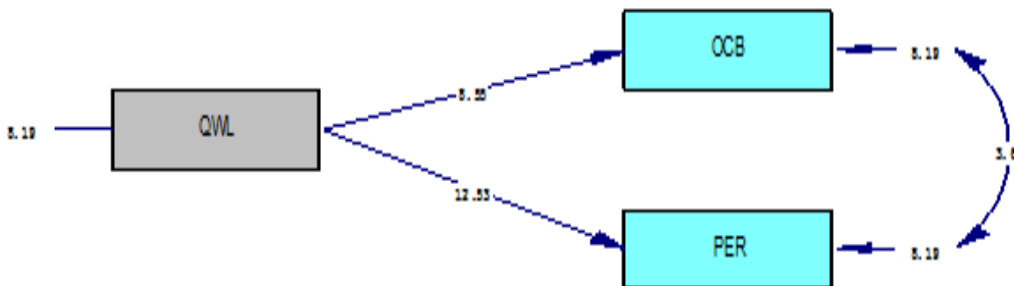
*Saderat Bank*



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Figure 5: Path analysis model based on hypotheses (standard coefficients)

*Mehr-Egtesad Bank*



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Figure 6: Path analysis model based on hypotheses (significance coefficients)

The model relationships and parameters coefficients are shown in the following table.

Table 8: Results of standard coefficients and significance coefficients (acceptance or rejection of hypotheses)

Accept or Reject of Hypothesis	T-values	Standard Coefficient	To	From	Hypothesis
Accept	3.14	0.19	Profitability	chief management support	H1
Accept	4.06	0.41	Profitability	strategic planning	H2
Accept	2.49	0.25	Profitability	customer-oriented	H3
Accept	3.28	0.24	Profitability	data analysis	H4
Accept	7.28	0.52	Profitability	focus on operations	H5
Accept	6.67	0.43	Profitability	focus on employees	H6
Accept	5.65	0.45	Profitability	Adoption of TQM	Master Hypothesis

Table 9: Standard Coefficient and Significant (Accept or Reject of Hypothesis) in Mehr-Egtesad Bank

Accept or Reject of Hypothesis	T-values	Standard Coefficient	To	From	Hypothesis
Accept	2.78	0.41	Profitability	chief management support	H1
Accept	3.90	0.65	Profitability	strategic planning	H2
Accept	2.98	0.23	Profitability	customer-oriented	H3
Accept	2.99	0.88	Profitability	data analysis	H4
Accept	4.90	0.90	Profitability	focus on operations	H5
Accept	3.12	0.12	Profitability	focus on employees	H6
Accept	5.43	0.34	Profitability	Adoption of TQM	Master Hypothesis

Since the significance coefficients are higher than 1.96, thus all variables are significant and the hypotheses are accepted.

Table 8 and table 9 show that the standard coefficients for one main hypothesis and six secondary hypotheses in two separated models of Saderat Bank and Mehr-Egtesad Bank have obtained required significance coefficients (higher than 1.96) and six secondary hypotheses are accepted.

### Results of the hypotheses model goodness of fit based on relationships among variables dimensions

Software Lisrel provides different indices for the model fitness. There are 30 indices for this research model fitness. These indices aid us in judgment on acceptability or rejection of the model. In other words, it shows that do the data confirm our theoretical foundations or not?

If one of these indices is not accepted it does not imply that our model is rejected, but it shows relative weakness of the model resultant from sampling method, population or other factors.

Table 10 and table 11 show that path analysis models have good fitness.

Table 10: Goodness of fit in Saderat Bank hypotheses path analysis based on the variables interrelationships

Research Model Statistics	Acceptation Criterion	Fitting Index
0.000	$\frac{k2}{df} \leq 3$	(Chi square) $\chi^2$
0.000	RMSEA<0.08	RMSEA <sup>13</sup>
0.9>	NFI>0.90	NFI <sup>14</sup>
0.95>	CFI>0.95	CFI <sup>15</sup>
0.9>	GFI>0.90	GFI <sup>16</sup>
0.85>	AGFI>0.85	AGFI <sup>17</sup>

<sup>13</sup>Root Mean Squarer or of Approximation

<sup>14</sup>Normed Fit Index

<sup>15</sup>Comparative Fit Index

<sup>16</sup>Goodness of Fit Index

<sup>17</sup>Adjusted Goodness of Fit Index

Table 11: Goodness of fit in Mehr-Egtesad Bank hypotheses path analysis based on the variables interrelationships

Research Model Statistics	Criterion Acceptation	Fitting Index
0.000	$\frac{k^2}{df} \leq 3$	(Chi square) $\chi^2$
0.000	RMSEA<0.08	RMSEA <sup>18</sup>
>0.9	NFI>0.90	NFI <sup>19</sup>
>0.95	CFI>0.95	CFI <sup>20</sup>
>0.9	GFI>0.90	GFI <sup>21</sup>
>0.85	AGFI>0.85	AGFI <sup>22</sup>

### Discussion and conclusion

This research goal was to investigate the impact of TQM components on profitability of Saderat Bank and Mehr-Egtesad Bank in Zanjan province. The finding of this research is consistent to the theories of Morgan, Lynden and Klingle findings. Findings of this research showed that chief management support of TQM components plays an important role in increase of profitability of the mentioned banks.

Also the results depicted that strategic planning is one of the determinant factors in the bank profitability. Hence, the bank managers and supervisors can take an action toward providing contexts for increase of short-terms and long-terms profitability in the mentioned banks by adopting an appropriate strategic planning system for compiling short-term and long-term strategies. Diverse and flexible strategies in an organization increase profitability.

Also the findings showed that customer-oriented behaviors predict profitability to high extent. Promoting customer- orientation behaviors and paying attention to the customer behavior are fundamental factors in fulfillment of goals of selling in an organization. Commercial banks should arrange proper customer orientation contexts for increase of attention to the customer taste and attraction of more deposits. Table 9 summarizes these results.

<sup>18</sup>Root Mean Square error of Approximation

<sup>19</sup>Normed Fit Index

<sup>20</sup>Comparative Fit Index

<sup>21</sup>Goodness of Fit Index

<sup>22</sup>Adjusted Goodness of Fit Index



Table 12: Results of hypotheses test in Saderat Bank and Mehr-Egtesad Bank-effectiveness and un-effectiveness

Hypotheses	Hypotheses	Mehr-Egtesad Bank			Saderat Bank		
		Value	Reject	Accept	Value	Reject	Accept
1	Chief management support affects positivity on bank profitability	0.41		✓	0.19		✓
2	Strategic planning affects positivity on bank profitability	0.65		✓	0.41		✓
3	Customer-oriented affects positivity on bank profitability	0.23		✓	0.25		✓
4	Data analysis affects positivity on bank profitability	0.88		✓	0.24		✓
5	Focus on operations affects positivity on bank profitability	0.90		✓	0.52		✓
6	Focus on employees affects positivity on bank profitability	0.12		✓	0.43		✓
Master	TQM system affects positivity on bank profitability	0.34		✓	0.45		✓

In the analysis of structural equations model causative relations (path analysis), the relationship between focus on employees and profitability was confirmed. In other words, increase of focus on employees in the studied banks enhances profitability. It should be pointed that some of results of research on the relationship between focus on employees and increase of profitability confirm the results of this research (Peter et al., 2015, Zaerei Matin & Jandaghi, 2006, Diyanati Delamipour & Pourchangiz, 2014).

The results of this research depicted that promotion of data analysis has a positive relationship with increase of profitability. It means that by increase of data analysis level profitability is also increased. This finding is consistent to the findings of Cristal et al.(2010), Naveh(2005), Ben(2007), Kheradmand, Valilu & Lotfi (2010). They concluded that there is a relationship between promotion of data analysis and profitability.

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