Identification, composition & prioritization of Performance Appraisal criteria in economical departments of export guarantee fund of Iran (EGFI)

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Abstract: The main objective of this research is identify, compensation and prioritize financial and non-financial performance indicators based on two well known and widely used models: balanced scorecard (BSC) and the European foundation for quality management (EFQM). In The aim aspect, this study includes applied research and in tool aspect, it is descriptive-survey. Export Guarantee Fund of Iran's population are employees of whose population size of 124 individuals using judgmental sampling (non-probability purposeful) based on Morgan, 92 of the sample was also assessed. First, a questionnaire to collect raw data that was designed by researcher based on the literature and previous research; and then the survey of experts and Guarantee Fund experts and professors of 8 types of the original questionnaire design, and was distributed. For data analysis and ranking, PASW Software was used; so that for ranking the common and general indicators with exploratory factor analysis method, and for ranking the special units indicators of guarantee fund, Friedman and W. Kendall's test was used. Finally 55 indicators were composition and prioritization. Of these, 14 numbers indicators, a set of indicators were public and common, and 41 indicators in special indicators cluster for economical units Triple of export Guarantee Fund of Iran were classified.

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Introduction

In our current economic situation, where a single-product economy is dominant and economy is significantly dependent on price of oil and oil products, in order to achieve economic development we have no alternative other than reinforcement of non-oil exports and conversion of raw oil products into secondary and consumer goods and products for exportation. This way, we can obtain much more added value in addition to creating lots of employment in industry, agricultural and service-providing sections. One problem faced by our emerging exporters including legal and corporate ones is lack of environmental confidence and fear of bankruptcy due to lack of both knowledge and experience. Export Guarantee Fund of Iran is one of the entities that have removed these problems to some extent. Therefore, this Fund can be considered one of the most and strategic organizations significant development of non-oil exportations. Comprehensive support by private and public sections may improve the influence and role-play of this Fund, on the other hand, content and happy employees, organizational Justice, quality and relevance of rewards and punishments and the like within the borders of the organization can reinforce the status of the Fund in national economy. This would not be realized in Export Guarantee Fund unless an appropriate performance measurement system exists and such systems cannot be effective unless they bear high validity and reliability indices. As a result, in current research, we are intended to determine, codify and prioritizethese indices for economic secretary units of Export Guarantee Fund.

Problem statement

Today, managers have realized the impact and value of performance measurement tools but they hardly ever think to apply it as a part of corporate strategies that are considered guides towards long-run organizational objectives; for example, managers may provide a new strategy and create the necessary operational processes to achieve a dramatic success but they are still thinking about application of shortterm financial profiles which can be used for tens of years such as investment return, sale growth and operational income. Not only can not these people present measurement tools to monitor the new processes and goals, but also they have no answer to this question whether their traditional measurement tool is suitable for appraisal of novel initiatives and not. Traditional performance measures measurement systems are mainly dependent on financial measurements and the financial affairs unit is responsible for this assessment. Over the economic age, financial criteria were suitable indicators for performance and success measurement because

competitive advantage of that period of time was mostly based on reduction of the end price due to saving in scales and mass production. Complexity of economic relations and business issues in the beginning of the 21st century indicated the reliance of companies on financial measurement for performance appraisal and failure of pure financial measurements become more and more clear (Kaplan & Norton, 1996:12).

As a result, application of performance measurement systems which are only based on financial indicators may bring about problems for the firm. Nowadays, in information age, organizational revolutions and complexities have forced all organizations to cope with their surrounding environment. Economies are not any more based on giant and inefficient public organizations but effective and productive and even smaller organizations have replaced them shaping the future paths for global economy. In order to achieve their objectives and not to fall behind the global and economic revolutions, public organizations have to be in conformity with their surrounding environment. In order to achieve this, such organizations must gain an optimal level of productivity. One standard for obtaining productivity is high and superior performance of organization in industry. Export Guarantee Fund of Iran is one of the main practitioners to guarantee exports and create tranquility of mind for exporters, particularly for the new-comers into exportation affairs. This fund is considered a public organization. This organization, like any other organizations, must cope with changes in the surrounding environment and the first step to this end is to evaluate current performance of the organization. In order to evaluate performance, first, suitable and concerned indicators with the necessary validity must be used from which the main idea of current article originates. Several indicators have consistently been offered for organizational performance appraisal but there is no comprehensive and suitable indicator to be common in all organizations. One indicator may give great outcomes in an organizational unit but leave adverse and inappropriate impacts in another organization or even a unit in the same firm. Therefore, we must see in Export Guarantee Fund that what are suitable performance measurement indicators for economic secretary units and how should they be measured? And how are they prioritized?

Importance and necessity of the subject

Lord Queen stated that "when you can measure what you are talking about and express it using numbers and figures, you can claim that you know something about it but when you cannot measure it your knowledge about that subject is trivial and unsatisfactory. Another well-known statement says

that "what you couldn't measure cannot be controlled and what cannot be controlled cannot be handled to be improved (Iranzadeh & Bargi, 2009; 3). The above statements suggest the significance of performance appraisal which is considered infrastructure for conducting improvement and development operations. When managers are not aware of their performance, they will not be able to perceive unusable and potential capacities. So in order to get informed of the existing capacities, performance must be measured and evaluated carefully through which managers can operationalize the necessary and suitable strategies. There are several methods and tools for organizational performance appraisals, most of which only take financial indicators into account for performance measurement (Iranzadeh & Barghi, 2009). In 1990, a research under title of "performance appraisal in future organizations" was conducted. The motivating idea of this study was that the existing performance appraisal views principally emphasize on cost accounting appraisals. Participants in this project found that reliance on quick financial performance appraisals prevents organizations from creating future economic value (Kaplan & Norton, 1996: 12). We observe that performance appraisal like any other activity must follow its specific regulations and principles and its indicators must be accountable in the changing environment and to emerging needs in organizations. The title of research showed its significance but another aspect of significance is the statistical community under study. Our country is known as the third world and single-product country significantly dependent on oil and oil income. Some decades ago, scientists and economists have raised the necessity of paying attention to non-oil exports. However, no significant step has been taken so far to this end. Perhaps the main reason of failure is that lack of support on the part of practitioners to exporters; Export Guarantee Fund of Iran, though, has taken steps in this regard. Therefore, the necessity and importance of this study becomes clear that getting feedback from measures conducted by this organization provides grounds for more development and leads to expansion of influence of the Fund on exports. This is realized only using suitable appraisal indicators and subsequent models to evaluate the performance of this Fund.

Research Questions

- 1- What are performance appraisal indicators for economic secretary units of Exports Guarantee Fund of Iran?
- 2- What is prioritization for general and specialized indicators of performance appraisal for units of this Fund?

Research objectives

1.IdentifyPerformance

EvaluationindicatorsforEconomical units in guarantee Fund

2.Prioritizepublic and professional performance assessment indicators identified for each unit of the Department of Economic

Business credit insurance

The term "Credit" takes its root from the Latin word "credere" meaning trust (Edward, 1997:5). Transactional credit is between two business parties, on one side of which the creditor or lender lends a given amount of money, product or service to the other party or debtor in lieu of obligation on the part of the latter to return it in future. In this exchange, some interest rate is paid to the creditor (Joseph, 2006:3). Business credit insurance, also called exports credit insurance, is an insurance contract and a product of risk management that undertakes risk of payment after product or service delivery. This insurance is a portfolio that covers payment of agreed percentage of invoice or balance amount of debt as the risk of long-term lack of debt payment, of inability to pay debts or risk of bankruptcy. In order to gain confidence about receivable accounts, business credit insurance is purchased by business entities to

compensate losses arising from lack of debt payment by debtors. This insurance can be expanded to cover losses resulting from political risks including currency exchange, war. domestic conflicts, detention. dispossession of property and nationalization. Commonly, the expenses called premium are calculated and received monthly and a percentage of sales during that month or a percentage of total receivables are delayed. Business credit insurance does not insure people but it covers payment risks of supplier companies (Jones, 2012:4). This is a contract between an insurance company and a business entity by which the business entity (insurer) is assured that all unusual credit losses crated due to bankruptcy. inability or reluctance of business debtors will be compensated (Huebner, Black & Webb, 1996:353). A model of business credit insurance is illustrated in figure 1.

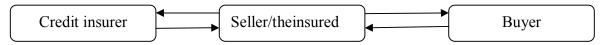


Figure 1: business credit insurance. Source (Carl, Raturi & Schmolck, 2002:16)

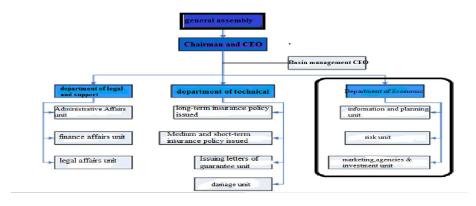


Figure 2: Chart Export Guarantee Fundof Iran and the present study population (Department of Economics)

Exports Guarantee Fund of Iran

One of the main concerns for exporters is the existence of political and business risks in the course

of their exportation, because each of such risks may lead to lack of reception of products or services price. Lack of due collection of claims from foreign purchasers most often leaves the exporters in financial bottlenecks and results in inability in undertaking his financial obligations to domestic creditors and sometimes leads to full bankruptcy. In order to encourage exporters to develop their exportation activities and decrease their concern to this respect and to provide them with the necessary coverage against political and commercial risks, governments establish"exports credit insurance companies". Such insurance companies are mainly dependent on the government and its financial support and cover those risks the insurance company is not able to cover. To this end and to provide financial security of Iranian exporters and to effectively develop non-oil Exports Guarantee Fund of Iran with an independent financial and legal character was established in 1973. The history and record of this fund dates back to 1967. The first steps for establishment were taken by foreign experts in 1971 and in July, 1973, its establishment rule including 10 articles was passed by the parliament (Sehhat & Zandi, 2011:117).

In current study, we aim to identify, codify and prioritize performance appraisal indicators for units of economic secretary of Exports Guarantee Fund. As it is seen in figure 2, economic secretary is formed of three units of information management and planning, marketing and agencies, and risks.

Performance appraisal

Performance appraisal includes the process of quantification of effectiveness and efficiency of operations (Nelly, Gregory & Plot, 1995:116) and periodical measurement of achievement of short-term and long-term objectives as well as reporting the results to decision makers as an effort to improve performance of the plan (Poister, 1983: 141). Performance appraisal is a tool for organizational control and stabilization to ensure that the organization is taking steps towards strategies that lead to achievement of organizational objectives (French, 1998:48).

Limitations of performance appraisal

Wisninewski & Shafti (2003) conducted a survey of performance measurement systems across different British firms and identified the following challenges in their performance appraisals: lack of top managers' support, unsuitable organizational culture, lack of perception/seriousness, selection of inappropriate indicators, lack of strategic thinking, fear in employees and bureaucracy/large time consumption.

Requirements of performance measurement systems

Tangen (2004) has summarized requirements that must be satisfied by a measurement system from different standpoints into six categories (general, practical performance criteria, beneficiaries, hierarchical levels, time horizon, information architecture) according to table 1:

Table 1. Requirements ofperformance measurementsystems(Tangen, 2004)

| Beneficiaries | General | | |
|---|---|--|--|
| Internal needs are considered | Provision of exact information | | |
| External needs are considered | Supporting the objectives | | |
| Beneficiaries' needs are considered | A few number of indicators exist | | |
| Practical performance criteria | Information architecture | | |
| Financial criteria are used | Information is easily accessible | | |
| Non-financial criteria are used | Information is communicated to a competent | | |
| Causal relationship criteria | individual | | |
| | There is an advanced information architecture | | |
| Time horizon | Hierarchical levels | | |
| Short- and long-term are consistently covered | The highest hierarchical levels are covered | | |

Models, methods and systems of performance appraisal

Performance appraisal model is a tool for measuring performance of an organization for practitioners of performance appraisal. Appraisal methods must be extremely exact as performance results significantly affect the important plans and purchasing decisions (Kurian & Eeckhout, 2006:6).

European organizational elevation model(EFOM)

This model whose name is heard everywhere in organizations is a set of methods and tools for appraisal and self-appraisal of organizations and is also a model of movement towards organizational elevation (Mohebbi Moghadam, 2008:6). European organizational elevation model makes it possible for the organization to appraise its performance using a number of criteria. Such calculations are used for

comparison of internal and external improvements and the results lead to increasing focus on improving performance of key processes and to organizational elevation (Iranzadeh & Barghi, 2010:131). This model considers an organization in relation with two areas of empowering activities and the observed outcomes. The five empowering criteria include: leadership, human resource, procedure and strategy,

involvement and resources, and processes and four outcome criteria involve: performance, customers, people and community. Current organizational performance is measured using the score obtained from these nine criteria and considering 32 statements of standards. Criteria and a general scheme of European organizational elevation model are presented in figure 3:

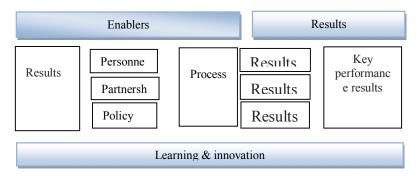


Figure 3: Criteria and a general scheme of European organizational elevation model

Total quality management (TQM):

Over recent years, giant companies around the world have been using a new method called "total quality management" to compete at international level, reduce production costs and waste, increase effectiveness of methods and more productivity and finally make prices competitive. This management method was

developed by Dr. W. Deming & Feigenbaum (1950) in the U.S. (Mehraban, 2009:9). TQM must be considered a management system which ensures proper and consistency of conducting affairs at all organizational levels. A general schematic representation of TQM is illustrated in figure 4.

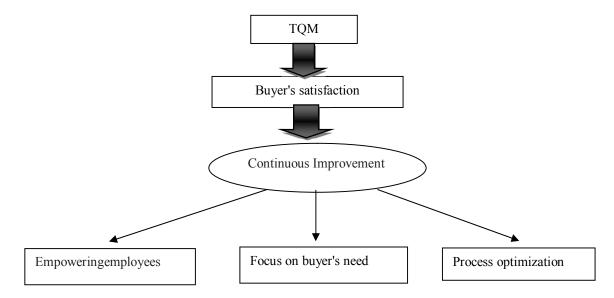
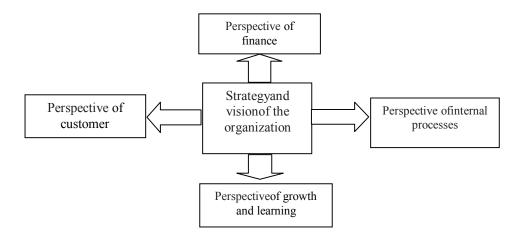


Figure 4. Total Quality Management (mehraban, 2009:26)



The balanced scorecard (BSC) model

BSC is a framework for description of measures performed within an organization from four different aspects through a number of indicators. A good scorecard establishes a strategic logic, i.e. causal relationships between current measures and long-run achievements. As organizations and companies become more and more dependent on their intangible capitals, BSCs are important tools for management control (Soleymani, 2007:8). Financial measurements are good indicators to reflect te past events. However, they are inefficient in indicating real factors and motivators of value-creation such as intangible assets including employees' knowledge and capabilities, information networks and relationships customers in today organizations. Financial indicators are also called indicators leggingwhich show the results of past actions. In addition to considering these indicators legging, BSC also takes the indicators related to future performance motivators into account. i.e. the leading indicators. With the balanced appraisal method, the leading and legging indicators are determined according to organizational strategy and perspective (see fig.4) (Iranzadeh& Barghi, 2009:206). In the general model presented by Kaplan and Norton in their first book "balanced scorecard" published in 1996, they proposed four aspects: financial, customer, internal processes, learning and development aspects (the same reference, 2009:206). You can observe these criteria and their relationships with organizational perspective and strategy in figure 5

Improvement of BSC model

Presented by Kaplan & Norton and wide acceptance of economic entities and organizations, BSC developed gradually and four generations of it were established. BSC is a system for performance management, the initial idea of which was based on

research conducted by Kaplan and Norton in the field of new methods for organizational performance measurement. This idea slowly developed so that it has been converted to a strategic management system. In the first generation, variety of indicators was the main challenge which was removed in the second generation. Variety of indicators and lack of reliance and casual relationships between indicators were challenges for the second generation of BSCs. Presenting the third generation and emergence of strategy-oriented concepts and plans resolved this challenge. However, the major challenge in implementing BSC was inability in operationalization and connection of strategies to organizational operations. Strategies were codified at the top levels of the organization and did not reach the lower layers in implementation so that at lower levels, projects had an operational nature. Connecting these processes to strategies of top levels required a fourth generation of BSCs which was offered by Kaplan & Norton in 2008. The goal was connecting organizational strategies to operations and directing operational improvement activities along strategic preferences with a new title "the new system of strategic management" in which operations and improvements played a significant role. In current work, we are more intended towards the second generation of BSCs.

Malcolm Baldrige (MA) model

This model is a method that helps in implementation of concepts within an organization in which 7 criteria and TQM implementation methods are presented. Any organization that obtains a high score at Baldridge institution auditing, it is the winner of Malcolm Baldridge prize. Actually, appraisals in this method aim to determine the level of implementation of Baldridge criteria which are the same as TQM concepts (Iranzadeh &Barghi, 2009, 101). This model appraises the organizations in 7

areas related to quality. Each area has its related score the total of which reaches 1000 in the best cases. Baldridge appraisal criteria are among the most reliable quality prizes in the world which focus on three factors:

- 1- Approach: processes applied for handling an organization.
- 2- Implementation: performing an approach.
- 3- Results: the output of an approach and its implementation.

Baldridge prize was established based on 7 principles including:

- Leadership
- 2- strategic planning
- 3- customer and market focus
- 4- information and analysis
- 5- human resource focus
- 6- process management
- 7- business results

Research methodology and data analysis:

This research was among applied and practical ones because it is going to find appropriate indicators for performance appraisal and their application to identify an appropriate appraisal model for Exports Guarantee Fund of Iran. Also, as this study uses questionnaires and interviews to collect data and receive answers to the author's questions, it is among descriptive surveys. In terms of chronology, it is a cross-sectional research. A review of literature, questionnaires and interviews were used here to identify performance appraisal indicators. Exploratory factor analysis and Freedman's and W. Kendal's ranking methods were used to classify and prioritize indicators. Statistical community included 124 experts and employees at Exports Guarantee Fund and the number of secretary unit employees was 36. As general indicators were common among all units, all experts and staff of the Fund have given their opinions about them (total sample of the Fund included 92 subjects selected using Morgan Table and Cochran's formula. The number of experts questioned with respect to professional indicators was 33 people and Friedman and Kendal's test was applied to rank these indicators.

Kaiser-Myer-Olkin sampling sufficiency indicator test and Bartlet's Sphericitytest:

This test denoted by KMO, specifies the first objective of factor analysis. It determines whether the variance of research variables is affected by common variance of some of the main and mutual factors or not. The values of this test are between 0 and 1.

Table 2. Bartlett'stestofsphericity andkmo test

| Bartlett and KMO test | | | |
|---|------------|--------|--|
| Kaiser-Myer-Olkin sampling sufficiency indicator test | | 0.704 | |
| Dortlett's Cuberiaity | Chi-square | 719.40 | |
| Bartlett's Sphericity test | Df | 136 | |
| lest | Sig | 0.000 | |

Bartlett's test also aims to satisfy the second goal of factor analysis. It helps us to provide the possibility of data reduction to a series of hidden factors and make a new structure based on correlations between variables and factors and determine their implicit meanings (Habibpour & Safari, 2012:322). Regarding the results provided in table 2 we can claim that as the value of KMO test (0.704) is larger than 0.69, data concerning general indicators is suitable for factor analysis that shows K-square value (719.40) and significance level (0.00). The matrix of general indicators-related data is incongruous. Therefore, we can say that rotation of this matrix may help to find new and hidden variables.

Results of exploratory factor analysis test

The results of this test which was conducted on general indicators are as follows:

Table 3. Common indicators of total variance explained by factor

| explained by factor | | | | |
|---------------------|------------|--|--|--|
| Communalities | | | | |
| | Extraction | | | |
| Indicator 1 | .715 | | | |
| Indicator 2 | .490 | | | |
| Indicator3 | .671 | | | |
| Indicator4 | .823 | | | |
| Indicator5 | .751 | | | |
| Indicator6 | .795 | | | |
| Indicator7 | .749 | | | |
| Indicator8 | .746 | | | |
| Indicator9 | .748 | | | |
| Indicator10 | .787 | | | |
| Indicator 11 | .779 | | | |
| Indicator12 | .729 | | | |
| Indicator13 | .594 | | | |
| Indicator14 | .673 | | | |
| Indicator15 | .653 | | | |
| Indicator16 | .671 | | | |
| Indicator17 | .469 | | | |

1- The first column called "initial" indicates total variance of each variable and the whole factors can describe it. As the factors may explain total variance of a variable (100%), we see in the table that the variance value for all options is 1.

2- The second column called "extraction" indicates some value of each variable and all factors can explain it. Its value varies between 0-1. The closer the values to 1, the better. Smaller values suggest that the respective variable is not suitable enough for factor analysis and must be discarded. The

general rule states that those variables that factors can't determine more than 50% of their changes will be balanced or discarded. As the values for the explained changes by 3 indicators and 17 were less than 0.5, they are removed.

Table4. Total Variance Explained

| | Total Variance Explained | | | | | | | | |
|------|--|---------------|--------------|-------------------------------------|----------|-----------------------------------|-------|----------------|--------------|
| _ | | Initial Eigen | values | Extraction Sums of Squared Loadings | | Rotation Sums of Squared Loadings | | uared Loadings | |
| Com | Total | % of | Cumulative % | Total | % of | Cumulative % | Total | % of | Cumulative % |
|) | | Variance | | | Variance | | | Variance | |
| 1 | 4.512 | 26.539 | 26.539 | 4.512 | 26.539 | 26.539 | 3.621 | 21.298 | 21.298 |
| 2 | 2.656 | 15.624 | 42.164 | 2.656 | 15.624 | 42.164 | 2.666 | 15.681 | 36.979 |
| 3 | 2.062 | 12.131 | 54.295 | 2.062 | 12.131 | 54.295 | 2.386 | 14.037 | 51.016 |
| 4 | 1.698 | 9.987 | 64.282 | 1.698 | 9.987 | 64.282 | 1.712 | 10.071 | 61.088 |
| 5 | 1.016 | 5.976 | 70.258 | 1.016 | 5.976 | 70.258 | 1.559 | 9.170 | 70.258 |
| 6 | .925 | 5.442 | 75.700 | | | | | | |
| 7 | .682 | 4.014 | 79.714 | | | | | | |
| 8 | .641 | 3.770 | 83.484 | | | | | | |
| 9 | .540 | 3.176 | 86.660 | | | | | | |
| 10 | .431 | 2.535 | 89.195 | | | | | | |
| 11 | .393 | 2.311 | 91.506 | | | | | | |
| 12 | .355 | 2.089 | 93.595 | | | | | | |
| 13 | .323 | 1.900 | 95.494 | | | | | | |
| 14 | .273 | 1.606 | 97.100 | | | | | | |
| 15 | .216 | 1.271 | 98.371 | | | | | | |
| 16 | .157 | .925 | 99.295 | | | | | | |
| 17 | .120 | .705 | 100.000 | | | | | | |
| Extr | Extraction Method: Principal Component Analysis. | | | | | | | | |

Rotated factors matrix:

Initial factors matrix is not applicable here. So we suffice to draw the table of finding rotation matrix using varimax method. In this table, correlation

between options and factors after rotation are presented in which correlation varies between +1 and -1. According to this table, we classify each option based on the highest factor loading.

Table 5. Component matrix

| component | | | indicators | | |
|-----------|------|-------|------------|------|--|
| 1 | 2 | 3 | 4 | 5 | |
| .787 | .262 | 016 | 166 | .002 | level of jobsatisfaction for Workers |
| .505 | .444 | .101 | 166 | .017 | The rate of staffturnover |
| .782 | 089 | .032 | 174 | 142 | Motivational levelsof employees |
| .882 | 097 | .073 | 005 | .176 | Commitment andloyalty to the organization |
| .112 | 016 | . 849 | .130 | 030 | Collaborationwithlocalgroups and associations and unions |
| .475 | 399 | .393 | .487 | .141 | Numberofhonorsand awards |
| .152 | .823 | .100 | 393 | .100 | The rateofcustomer complaintsProducts |
| .781 | .230 | .013 | .219 | .188 | Staff morale(the rate ofconvergence withorganization's target) |
| .284 | .294 | .270 | 070 | .709 | Effectiveness ofrewards and incentive spaid |
| .345 | .352 | 035 | .728 | 110 | Net incomeoffull-time staff |
| .009 | 012 | .095 | .841 | .252 | The average annual cost per employee |
| 356 | .197 | .744 | 069 | .068 | Qualityof services provided toclients |
| .355 | .629 | .069 | 256 | 055 | Number of complaints and grievances of policyholders after sales service |
| .038 | .390 | . 791 | .033 | .211 | % Customer's personal satisfactionOfserviceprocess |

Rotation method: varimax with Kaiser Normalization

The results of factor analysis will be suitable when the extracted factors explain an acceptable degree of variance. In human-social research, explaining 60% of the sample variance suffices. The following table indicates the explained variance of the factors.

Table 6: Total Variance Explained

| Tuote of Total Variation Emplation | | | | |
|------------------------------------|-------------------------------------|----------|------------|--|
| Component | Extraction Sums of Squared Loadings | | | |
| | Total | % of | Cumulative | |
| | | Variance | % | |
| 1 | 4.512 | 26.539 | 26.539 | |
| 2 | 2.656 | 15.624 | 42.164 | |
| 3 | 2.062 | 12.131 | 54.295 | |
| 4 | 1.698 | 9.987 | 64.282 | |
| 5 | 1.016 | 5.976 | 70.258 | |

The results of analyses of Friedman's and Kendal's tests for units dependent on economic secretary

1. The result of Friedman's and Kendal's tests for information and planning unit:

Statement of significance or lack of significance of difference among average appraisal ranks of each indicator by experts: with respect to the following table and Ksquare value (21.195) which is significant at error level 0.01, with reliability 0.99 % we can say that appraisals by experts and employees at information and planning units are different from significance of indicators recognized for this unit. This finding suggests that hypothesis H0 is rejected and H1 is confirmed which denotes appraisal differences between experts and staff at information and planning units. Regarding the value of W. Kendal's test (0.214), we can state that there is a relatively good agreement on the importance of the above indicators among experts and staff of information and planning units.

Table 7. Test Statistics for information and planning

| N | 11 | |
|---|--------|--|
| Kendall's W ^a | .214 | |
| Chi-Square | 21.195 | |
| df | 9 | |
| Asymp. Sig. | .012 | |
| a. Kendall's Coefficient of Concordance | | |

b) The quality of average rank difference of experts' appraisals of ten indicators identified for information and planning unit: with regard to the results of this table, we may say,

for example, that indicator No. 7 (7.27) and No. 5 (2.91) respectively showed the highest and lowest significance from experts' views.

Table 8. Ratingindicators relating to information and planning unit

| Ranks | | | |
|-----------------------------|-----------|--|--|
| | Mean Rank | | |
| Information and planning1 | 6.45 | | |
| Information and planning 2 | 5.91 | | |
| Information and planning 3 | 5.27 | | |
| Information and planning 4 | 4.36 | | |
| Information and planning 5 | 2.91 | | |
| Information and planning 6 | 6.41 | | |
| Information and planning 7 | 7.27 | | |
| Information and planning 8 | 4.68 | | |
| Information and planning 9 | 6.55 | | |
| Information and planning 10 | 5.18 | | |

2. The result of Friedman's and Kendal's tests for risk management unit:

- Statement of significance or lack of significance of difference among average appraisal ranks of each indicator by experts: with respect to the following table and Ksquare value (21.195) which is significant at error level 0.01, with reliability 0.99 % we can say that appraisals by experts and employees at information and planning units are different from significance of indicators recognized for this unit. This finding suggests that hypothesis H0 is rejected and H1 is confirmed which denotes appraisal differences between experts and staff at information and planning units. Regarding the value of W. Kendal's test (0.214), we
- b) can state that there is a relatively good agreement on the importance of the above indicators among experts and staff of information and planning units.

Table 9. Test Statistics for risk management unit

| N | 11 | |
|---|--------|--|
| Kendall's W ^a | .179 | |
| Chi-Square | 19.640 | |
| df | 10 | |
| Asymp. Sig. | .033 | |
| a. Kendall's Coefficient of Concordance | | |

c) The quality of average rank difference of experts' appraisals of ten indicators identified for information and planning unit: with regard to the results of this table, we may say, for example, that indicator No. 7 (7.27) and

No. 5 (2.91) respectively showed the highest and lowest significance from experts' views.

Table 10. Ratingindicators relating to risk management unit

| Ranks | | |
|--------|-----------|--|
| | Mean Rank | |
| Risk1 | 6.05 | |
| Risk2 | 5.55 | |
| Risk3 | 4.95 | |
| Risk4 | 5.05 | |
| Risk5 | 3.41 | |
| Risk6 | 7.09 | |
| Risk7 | 7.59 | |
| Risk8 | 5.27 | |
| Risk9 | 7.41 | |
| Risk10 | 6.36 | |
| Risk11 | 7.27 | |

3. The result of Friedman's and Kendal's tests for marketing and agencies unit:

Statement of significance or lack of significance of difference among average appraisal ranks of each indicator by experts: with respect to the following table and K-square value (21.195) which is significant at error level 0.01, with reliability 0.99 % we can say that appraisals by experts and employees at information and planning units are different from significance of indicators recognized for this unit. This finding suggests that hypothesis H0 is rejected and H1 is confirmed which denotes appraisal differences between experts and staff at information and planning units. Regarding the value of W. Kendal's test (0.214), we can state that there is a relatively good agreement on the importance of the above indicators among experts and staff of information and planning units.

Table 11. Statistics of test marketing, brokerage and investment

| mvestment | | | |
|---|--------|--|--|
| N | 11 | | |
| Kendall's W ^a | .188 | | |
| Chi-Square | 39.345 | | |
| df | 19 | | |
| Asymp. Sig004 | | | |
| a. Kendall's Coefficient of Concordance | | | |

b) The quality of average rank difference of experts' appraisals of ten indicators identified for information and planning unit: with regard to the results of this table, we may say, for example, that indicator No. 7 (7.27) and No. 5 (2.91) respectively showed the highest and lowest significance from experts' views.

Table 12. Ratingindicators relating to the marketing, brokerage and investment

| Ranks | | | | |
|-------------------------|-----------|--|--|--|
| Indicators | Mean Rank | | | |
| Marketing & agencies 1 | 12.32 | | | |
| Marketing & agencies 2 | 11.27 | | | |
| Marketing & agencies 3 | 7.27 | | | |
| Marketing & agencies 4 | 9.09 | | | |
| Marketing & agencies 5 | 8.73 | | | |
| Marketing & agencies 6 | 13.45 | | | |
| Marketing & agencies 7 | 14.05 | | | |
| Marketing & agencies 8 | 9.91 | | | |
| Marketing & agencies 9 | 9.73 | | | |
| Marketing & agencies 10 | 10.36 | | | |
| Marketing & agencies 11 | 7.09 | | | |
| Marketing & agencies 12 | 5.91 | | | |
| Marketing & agencies 13 | 12.32 | | | |
| Marketing & agencies 14 | 12.18 | | | |
| Marketing & agencies 15 | 9.45 | | | |
| Marketing & agencies 16 | 12.00 | | | |
| Marketing & agencies 17 | 6.68 | | | |
| Marketing & agencies 18 | 12.68 | | | |
| Marketing & agencies 19 | 12.00 | | | |
| Marketing & agencies 20 | 13.50 | | | |

The research findings and conclusions:

The analyzes were performed using the 14 following indicators based on factor loadings for each of the following categories, and prioritized.

Vice-economic indicators related to specialized subsidiaries are prioritized as follows:

Ranking indicators for information and planningunit

- 1. Review and update of system and process
- 2.the number of trained staff to manage the units and sections
- 3.Conduct scientific research and professional management are consistent with the goals and mission of each
- 4. Process and the amount of the company's Internet and Intranet
- 5. Prepare and update regulations and the operation of a fund
- 6. The number of employees in training hours and other areas of specialized insurance fund
- 7. Satisfaction of researchers from the Partnership Fund Management and Planning
- 8. Statistical design and introduction of new products and services
- 9. The amount of research done and applied
- 10. The number of software utilized

Table 13. Categorizeand prioritizecommonperformance evaluation parameters between units

| indicator | component | Priority |
|---|---|----------|
| Motivational levels of employees (0.882) Commitment and loyalty to the organization (0.849) | | |
| Job satisfaction (0.787) Staff morale (convergence rate of employees with organizational goals) | Human resource (21.298) | 1 |
| (0.709) The staff turnover rate (0.505) | | |
| Number of complaints and grievances of policyholders after-sales service (0.891) The rate of customer complaints Products (0.871) | Production and after-sales services(15.681) | 2 |
| Ofpersonal satisfactioncustomerserviceprocess(baseline: number ofcustomercomplaints andfeedbackfromstaff andfunds) (0.767) Qualityof services provided tocustomers (0.629) Collaborationwithlocalgroups and associationsand unions(0.487) | Statusof customers(14.037) | 3 |
| Net incomeoffull-time staff(0.841) Numberofhonorsand awards(0.823) The average annualcostperemployee(0.744) | Productivity (10.071) | 4 |
| Effectiveness ofrewards and incentives (0.728) | Productivity of assess (9.170) | 5 |

Rankingindicators for risk management unit

- 1 .Level surveys and studies in the field of export credit insurance and peer institutions
- 2.The amount reflected in the Fund's performance and News International
- 3.Risks reported exports
- 4.Communicate with export credit insurance agencies and other relevant institutions in the world 5.Number of clients reporting risks and ranking them
- 6.Ratio of the reinsurance risk transfer
- 7.Attendance at meetings of the Joint Economic Commission between Iran and other countries.
- 8.Updated models and benchmarks for measuring credit risk
- 9.Suggestions of strategies for establishing and expanding international cooperation in the Export Guarantee Fund of bilateral , regional and international
- 10. The accuracy of the identification and evaluation of commercial and political risks
- 11. Communication with international organizations and unions (EU Berne Union, Amman, Credit Alliance, ...)

Ranking indicators for the marketing, brokerage and investment

- 1. Preservation and conservation of the company's current customer (Customer Loyalty Index)
- 2. The overall picture in the minds of the customers of the service organization
- 3. Attract new agents
- 4. The amount and variety of investment funds
- 5. Earn money by marketing costs
- 6.Identify new markets

- 7.Than investments in customer education (investment in education on the customer number)
- 8.Amount appropriation and sale of real estate owned
- 9.% Share recorded revenues from new services
- 10.Good work and enable their growth rate
- 11.Renewal of insurance policies (whole divided by the number of extended insurance policy this year, both with new extended, multiplied by 100) to review promotional and advertising activities.
- 12.In addition to attracting new customers, existing customers
- 13.Usefulness of large customers (cost ratio from doing business with them)
- 14.Profit growth investments and return on investments
- 15. Absorbed by the ratio of premiums to brokers gross premiums
- 16.Number of meetings held by organizations exports
- 17. Proportion to the total number of insurance brokers insurance companies
- 18. Timely reminder of the insurer to renew your insurance policy contract
- 19.Development of virtual and real branches in the provinces
- 20.Market Analysis

Conclusion

With respect to analyses conducted so far, we can propose the following conclusions to improve performance appraisal plans in Exports Guarantee Fund:

Among general indicators, financial component had the fewest number of indicators and

development and internal processes had the largest number of indicators. The only component with an indicator in all units was development. Therefore, it is necessary to care special attention to development components which may lead to establishment of an independent management called human resource management and specific attention to this discussion because there is no specialized unit called human resource management at the fund.

In national risk and information and planning units, the main indicator of development is the market. As a result, in cases of performance appraisals for these units, non-financial issues are more preferred. By attracting professional experts in the field of marketing and current employees training we can promote performance of such units to improve the market and identify export risks.

Marketing unit possessed the largest number of indicators in the field of market and customers so that among prioritized indicators, 10 first indicators belonged to market and customer indicators. Therefore, we conclude that these units have the most relationships with customers and insurers. So we have to care more about those indicators which measure the status of market and customers' satisfaction. However, development indicators are particularly important here.

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