### Investigating the relationship between resources and expenditures of Agricultural Bank and its effect on national production and Iranian Capital and Labor Support in Agriculture

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#### Abstract

This research investigates the relationship between resources and expenditures of Agricultural Bank and its effect on national production and Iranian Capital and Labor Support during 2007-2011. The statistical population of the research is Central Agricultural Bank of Iran; therefore, the sample in this research is equal to the population. It is a descriptive correlation research with a practical goal. In order to rest hypotheses, the researcher has used regression method to assess the effect of credit facilities on National Production in agriculture. Moreover, the effect of attracting banking sources on paying facilities was examined too. Before testing the hypotheses, the researcher administered Kolmogorov -Smirnov test to make sure if the data were normally distributed. The results of testing hypotheses showed that there was no relationship between paying the facilities in agronomy and gardening and National Production in this sector. There was a direct relationship between paying facilities in livestock and poultry and National Production in this sector. There was a direct relationship between paying facilities in fisheries and aquaculture and National Production in this sector. Finally, there was a direct relationship between attracting banking sources and paying facilities.

**Keywords**: facilities, banking sources, National Production in agriculture, Agricultural Bank

#### Introduction

Regarding to the message of the supreme leader about supporting Iranian capital and labor and cre-

ating an epic on all levels, fulfilling primary needs has certainly been the main reason of man, caring for agriculture. The most ancient civilizations were formed in locations where agricultural activities were possible in terms of geographical and environmental situation. In fact, other economic sector was generated gradually and with regard to agricultural needs. The need to agricultural tools and instruments has played an important role in developing industry (industry development). Also, exchanging products has played an important role in developing services. Even though after the Industrial Revolution and gradual elimination of political-economical system of feudalism, the capital and industry became relatively more important in production, this sector is still known as the axis of economic growth and development. Relatively high practicality of agriculture in comparison to industry and mining sectors and its capability of creating job opportunities, the possibility of earning foreign exchanges through exports and saving in using foreign currency in terms of decreasing agricultural imports and increasing domestic production, strategic nature of some of the agricultural products, providing some required data especially for industry and services sectors and also being a market for other sector's output are some reasons that why agriculture is significant in National Economy.

#### **Statement of the Problem**

Factors such as industrialization and changes in social activities and thus the emergence of new requirements are important factors which affect National Production and Capital & Labor Support in agriculture.

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Economic growth and development is an important effective factor in developing and expanding financial institutions and it could be said that advanced financial institutions with modern approaches are directly related to the Country development and each financial institution tries to attract more sources to be able to get a larger share of the market. Of course, by absorbing different sources and their close competition, the role of expenditure is highly important due to the insufficient sources and the capability of increasing National Production is emphasized in all sectors. Recent studies indicate that in spite of conventional output reduction, the gas production has dramatically increased in mechanized sector and the stand of agriculture in economy is quite clear for everyone and it is actually considered as the locomotive which is pulling the economy and has been able to provide 13% of gross domestic product (GDP) and more than 90% of required food and about 19% of non-oil exports. Now this question is posed that how the Agricultural Bank-as the agent of paying agricultural facilities- affected National Production in agriculture. To answer this question, it is necessary to define the concept of National Production in agriculture section. It actually seeks for utilizing available resources optimally and paying facilities for increasing the National Production in agriculture sector by means of all the existing instruments. Another important reason is its high capacity creating job opportunities. Therefore, the relationship between obtaining resources and its effect on payment time in agriculture and National Production in agriculture is studied in 6 main parts to clarify if there is any relationship or not.

#### Significance of the study

Managing the resources and expenditures is one of the biggest challenges which a banking system is facing and the reason that the science of economy has appeared, is the lack of resources which makes it inevitable to optimize the allocation of resources. Optimal allocation of financial resources in general, and efficiency of institutions in specific, are very important in Macro-Economy Theories and also on financial innovations during recent decades. Financial statements are the ultimate product of financial accounting process which is considered as a base for investment and other decisions which are among the challenges that the drafters of accounting standards and the users of accounting information are facing. The main reason of these challenges for the banks is that the largest resources of the banks are supplied through short-term deposits. On the other hand, agricultural productions and the growth

and development of this sector -which is one of the main elements of National Production -is mainly -by the Agricultural Bank which has a difficult responsibility. National production is classified to 4 parts:

- 1. Industry and mining
- 2. Oil
- 3. Business services
- 4. Agriculture

Increasing the gap between the banks' resources and expenditures due to the government pressure:

In recent years, the balance between the resources and expenditures of banking network of the country -especially state banks -has severely been disturbed; which is worrisome. The gap between resources and expenditures due to the imposition of non-equilibrium interest rates and pressures on banks to offer financial facilities to the government sponsored sectors, has caused and increased lack of balance in resources and expenditures of banking system of the country and has increased the banks' motivations to make use of powerful resources of ventral bank and also to make use of the ratio of the past due and deferred and doubtful claims to the total granted facilities has added to the banks problems in equipping reliable resources. The ratio of facilities to deposits in banking network of the country is about 110% at present which has increased about 7% in comparison to last year's and without considering specialized banks, this proportion is much more than its permitted value which is between 70% to 80%. In general, this situation indicates inappropriate growth of banks' expenditures in form of granting facilities in comparison to deposit resources which is attained by them especially in public banks. Generally, it could be claimed that unprofessional several public banks has made it difficult for the central bank to control funds and liquidity. Considering the commercial banks as developing institutions -which must offer their deposits for the social goals of the government without financial risks -places the bank resources under a great pressure. In short, it could be said that if this trend continues, financial problems of the banks will increase which will finally affect the financial provision of all the productive economical activities and will weaken the economic growth of the country. Accordingly, regarding to the banks' capabilities in offering facilities to non-governmental sectors based on their ability in obtaining deposit resources and the imposition of outside pressure on them, it is necessary to limit the granting facilities to government sponsored sectors and to adopt a proper policy. According to the instructions of resources and expenditures, banks are committed to consume facilities in desired areas of central bank political package based on the instructions of how to grant facilities. Agriculture will get 25%, industry and mining 33%, Housing and construction 20%, exports 15%, and services 7% shares of the total facilities. Of course, the weak monitoring of the way banking facilities are paid, has been criticized by some officials. Facilities are received from the banks and are consumed in other areas and it could be the biggest injustice for the country's agriculture and industry and mining. Regarding the rules of Islamic banking, equipping resources is done in two ways:

1. Via current deposits (visual)

2. Via public deposits including visual and long term deposits received from other banks

3. Receiving facilities from the central bank or other banks

4. Other resources (other liabilities) such as receiving in advance from the customers and receiving facilities from the fund

5. Capital resources such as revenues and equities

Of course, revenues include interest and pledge fee and other revenues. Some of the necessities for performing the research are as follows: Recognition of factors affecting National Production in banks and better control of effective factors and the possibility of predicting required resources in the future with regard to definite commitments and expenditures and identified resources.

#### **Research Objectives**

In this research, it has been tried to investigate the correlation between resources and expenditures as an independent variables and National Production in agriculture as a dependent variable by performing appropriate tests. In other words, the main purpose of the research is to examine the relationship between resources and expenditures and National Production in agriculture within the agricultural bank. Some other objectives of the research are introduced in the following;

1. Presenting the concepts of resources and expenditures and their classification and determining their importance and stand in agriculture

2. Offering approaches to assess expenditures and its effectiveness in National Production in agriculture

3. Presenting the concept of National Production in agriculture for the consumers to use in agriculture sector

#### **Review of literature**

The first priority in allocating resources, is for the assets which are used for urgent provision of cash, for meeting loan demands and deposit withdrawal demands (Reed & Gill, 1999, p.118). These items include the bank account in central bank, balances of deposits in commercial banks, treasury cash and items which are being collected (Gardner, 1994, p.358).

Secondary Deposits: There are cash equivalents with higher profitability such as bonds which are kept to cover liquidity for a short time and in addition to help the bank profitability; they can be converted to cash quickly and without any delay or risk (Gardner, 1994, p.118).

**Tertiary reserves:** Long term investments which provide potential liquidity which are used for tertiary reserves (ibid, p. 358)

**Portfolio Securities:** Portfolio securities as a source of management (especially for selecting an optimal combination of cash and assets with better profitability) are inseparable components of liquidity management (ibid; p. 358).

#### **Research Hypotheses**

This research studies the capability of independent variables of resources and expenditures by the dependent variable of National Production. In other words, it investigates if there is any significant relationship between them or not.

1. There is a significant relationship between the bank resources and expenditures and National Production in agriculture.

2. There is a significant relationship between the bank resources and National Production in agriculture.

3. There is a significant relationship between the bank expenditures and National Production in agriculture.

#### Secondary Hypotheses

There is a significant relationship between granted the facilities in agronomy, livestock, fisheries, and related subsidized services and National Production in agriculture.

#### Methodology

#### **Research Site**

The Location of doing the present research is Iranian Bank of Agriculture and its realm term is since the beginning of 2007 to Sep 22, 2012.

#### **Research Variables**

In this research, three variables were uses as independent variables.

• Investigating post event information in order to recognize factors affecting National

Production in agricultural bank and the quality of the effect

• Identifying the effect rate of the affective factors on National Production in Iranian Bank of Agricultural

• Accurate control of factors affecting National Production

• Management principles of resources and expenditures for designing National Production management system in agriculture

#### **Descriptive Statistics**

Table 1. Growth of loans (figures are in billion Rials)in agronomy and gardening sector.

| Growth % | Rate  | Year |
|----------|-------|------|
| -        | 17564 | 2007 |
| 18/13    | 19879 | 2008 |
| 796/6    | 21230 | 2009 |
| 58/58    | 33667 | 2010 |
| 62/33    | 44987 | 2011 |

Table 2. Growth of loans (figures are in billion Rials)in livestock and poultry sector.

| Growth % | Rate  | Year |
|----------|-------|------|
| -        | 10435 | 2007 |
| 24/17    | 12234 | 2008 |
| 17/10    | 13478 | 2009 |
| 08/64    | 19688 | 2010 |
| 41/68    | 33156 | 2011 |

Table 3. Growth of loans (figures are in billion Rials)in fisheries and aquaculture sector.

| Growth % | Rate | Year |
|----------|------|------|
| -        | 1000 | 2007 |
| 1/10     | 1101 | 2008 |
| 1        | 1112 | 2009 |
| 8/43     | 1599 | 2010 |
| 9/72     | 2764 | 2011 |

Table 4. Growth of loans (figures are in billion Rials)in industry and agricultural services sector

| Growth % | Rate  | Year |
|----------|-------|------|
| -        | 16546 | 2007 |
| 8/18     | 19656 | 2008 |
| 73/10    | 21765 | 2009 |
| 785/5    | 23024 | 2010 |
| 24/54    | 35513 | 2011 |

### Table 5. Growth of loans (figures are in billion Rials)subsidized plans

| Growth % | Rate  | Year |
|----------|-------|------|
| -        | 21890 | 2007 |
| 27/21    | 26546 | 2008 |
| 35/11    | 29560 | 2009 |
| 698/6    | 31540 | 2010 |
| 49/23    | 38950 | 2011 |

### Table 6. Growth of loans (figures are in billion Rials)in total

| Growth % | Rate   | Year |
|----------|--------|------|
| -        | 80609  | 2007 |
| 625/21   | 98041  | 2008 |
| 3829/4   | 102338 | 2009 |
| 108/29   | 132127 | 2010 |
| 56/41    | 187039 | 2011 |

Table 7. Growth of loans (figures are in billion Rials)in agronomy and gardening sector.

| Growth % | National production | Year |
|----------|---------------------|------|
| -        | 41700000            | 2007 |
| 3/21-    | 32800000            | 2008 |
| 0/29     | 42300000            | 2009 |
| 5/12-    | 37000000            | 2010 |
| 9/5      | 39200000            | 2011 |

Table8. Growth of national production (figures arein billion Rials) in livestock and poultry sector

| Growth % | National production | Year |
|----------|---------------------|------|
| -        | 12700000            | 2007 |
| 57/1     | 12900000            | 2008 |
| 33/2     | 13200000            | 2009 |
| 55/4     | 13800000            | 2010 |
| 17/2     | 14100000            | 2011 |

| Table 9.Growt     | h of national p | production ( | (figures are |
|-------------------|-----------------|--------------|--------------|
| in billion Rials) | in fisheries a  | ind aquacult | ture sector. |

| Growth % | National productio | Year |
|----------|--------------------|------|
| -        | 5800000            | 1386 |
| 8/13     | 6600000            | 1387 |
| 5/4      | 6900000            | 1388 |
| 3/4      | 7200000            | 1389 |
| 1/18     | 8500000            | 1390 |

Table 10. Growth of national production (figures are in billion Rials) in industry and agricultural services sector.

| Growth % | National pproductio | Year |
|----------|---------------------|------|
| -        | 27200000            | 2007 |
| 09/8     | 29400000            | 2008 |
| 82/7     | 31700000            | 2009 |
| 95/0     | 32000000            | 2010 |
| 38/9     | 35000000            | 2011 |

 Table 11. Growth of national production (figures are in billion Rials) subsidized plans

| Growth% | Production | Year |
|---------|------------|------|
| -       | 7000000    | 2007 |
| 29/14   | 8000000    | 2008 |
| 75/18   | 6500000    | 2009 |
| 08/23   | 5000000    | 2010 |
| 00/60   | 2000000    | 2011 |

Table 12. Growth of national production (figuresare in billion Rials) in total

| Growth % | Production | Year |
|----------|------------|------|
| -        | 101000000  | 2007 |
| 93/6     | 108000000  | 2008 |
| 70/3     | 112000000  | 2009 |
| 25/6-    | 105000000  | 2010 |
| 38/12    | 118000000  | 2011 |

Table 13. Growth of saving accounts (figures are inbillion Rials)

| Growth % | Production | Year |
|----------|------------|------|
| -        | 17656      | 2007 |
| 48/14    | 20212      | 2008 |
| 38/15    | 23321      | 2009 |
| 08/21    | 28236      | 2010 |
| 7/16-    | 23509      | 2011 |

Table 14.Growth of deposit accounts (figures arein billion Rials)

| Growth % | Production | Year |
|----------|------------|------|
| -        | 31234      | 2007 |
| 67/10    | 34567      | 2008 |
| 934/3    | 35927      | 2009 |
| 71/4-    | 34236      | 2010 |
| 43/99    | 68276      | 2011 |

### Table 15. Growth of long term deposits (figures arein billion Rials)

| Growth %       | Production     | Year         |
|----------------|----------------|--------------|
| -              | 54654          | 2007         |
| 24/12          | 61342          | 2008         |
| 769/5          | 64881          | 2009         |
| 28/13          | 73494          | 2010         |
| 33/33          | 97990          | 2011         |
| 28/13<br>33/33 | 73494<br>97990 | 2010<br>2011 |

## Table 16. Growth of other deposits (figures are inbillion Rials)

| Growth % | Production | Year |
|----------|------------|------|
| -        | 328        | 2007 |
| 18/5     | 345        | 2008 |
| 97/17    | 407        | 2009 |
| 40/34    | 547        | 2010 |
| 61/344   | 2432       | 2011 |

## Table 17.Growth of total deposits (figures are inbillion Rials)

| Growth | Production | Year |
|--------|------------|------|
| -      | 103872     | 2007 |
| 12/12  | 116466     | 2008 |
| 93/6   | 124536     | 2009 |
| 62/9   | 136513     | 2010 |
| 80/40  | 192207     | 2011 |

# Table 18.Kolmogorov – Smirnov test to investigate the normal or abnormal condition of granting facilities data

| Significant<br>level | Test score |                                  |
|----------------------|------------|----------------------------------|
| 744/0                | 680/0      | Agronomy & gardening             |
| 830/0                | 625/0      | Livestock & poultry              |
| 729/0                | 689/0      | Fisheries & aquaculture          |
| 703/0                | 705/0      | Industry & agricultural services |
| 995/0                | 414/0      | Subsidized plans                 |
| 877/0                | 590/0      | Total facilities                 |

At the above table, it is observed that the significant level of Kolmogorov – Smirnov test for all the data of variables of granted facilities in agriculture sector by agricultural bank is more than 5%. Therefore, these variables have been normally distributed. 

 Table 19. Kolmogorov – Smirnov test to investigate the normal or abnormal condition of national production data

| Significant<br>level | Test score |                                  |
|----------------------|------------|----------------------------------|
| 997/0                | 422/0      | Agronomy & gardening             |
| 992/0                | 432/0      | Livestock & poultry              |
| 969/0                | 491/0      | Fisheries & aquaculture          |
| 995/0                | 417/0      | Industry & agricultural services |
| 947/0                | 523/0      | Subsidized plans                 |
| 1                    | 333/0      | Total national production        |

According to the above table, it is observed that the significant level of Kolmogorov – Smirnov test for all the data of variables of National Production in agriculture sector by agricultural bank is more than 5%; therefore, these variables have been normally distributed.

Table 20. Kolmogorov – Smirnov test to investigate the normal or abnormal condition attracting financial resources

| Р     | t     |                  |
|-------|-------|------------------|
| 982/0 | 466/0 | Saving account   |
| 327/0 | 951/0 | deposit          |
| 954/0 | 515/0 | Longterm deposit |
| 357/0 | 927/0 | Other deposites  |
| 831/0 | 624/0 | total            |

According to the above table, it is observed that the significant level of Kolmogorov – Smirnov test for all the data of variables of attracting different resources by agricultural bank is more than 5%; Therefore, these variables have normal distribution.

#### Conclusions

This research has investigated the relationship between granted facilities by Agricultural Bank and National Production. Results showed that there was a direct relationship between the granted financial facilities and National Production in livestock and poultry sector, fisheries and aquaculture, industry and services related to agriculture. In other words, more granted facilities in these sectors would result in more National Production, but there was an inverse relationship between subsidized granted facilities and National Production. Thus, according to this research, granting subsidized facilities should be stopped. There was a direct relationship between attracting different financial resources and granting facilities, too.

#### **Suggestions for Future Research**

• Assessing the optimal rate of available currencies in the bank

• Using multiple regression approach for investigating different banking issues like different classes of clients and the rate of deferred credits of the bank

• Investigating the title of this research with more detailed classification of resources and expenditures

• Investing the condition of resources and expenditures with titles the same as the title of this research or similar titles in shorter periods of time

• Measuring required resources and expenditures is normal and critical scenarios.

• Identifying different ways of providing resources in emergencies

• Identifying and monitoring executive plans in agriculture sectors and the output

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