# Theoretical Basis of Finance Functioning in High Technological Sectors of Economy.

B V Malozyomov<sup>1</sup>, K C Akberov<sup>1</sup>, O S Atamanova<sup>1</sup>, Z Sh Aleskerova<sup>2</sup>

<sup>1</sup>Novosibirsk State Technical University, 20, Karla Marksa Av., Novosibirsk, 630073, Russia

<sup>2</sup>Federal State Budget Educational Institution of Higher Education «Industrial University of Tyumen», 38, volodarskogo Street, Tyumen, 625000, Russia

E-mail: mbv5@mail.ru

**Abstract**. The paper analyses the problem of money circulation and its role in the country's economy. It outlines the peculiarity of the present-day situation of money circulation. The paper describes the factors of economic stability, the balance between incomes and expenses of population, as well as essence and types of inflation. In addition, the paper proposes methods of inflation stabilization, essence of the concept finance management and management bodies and importance of planning. And the authors conclude that control over the state of the economy and the development of socio-economic relations in society is of great importance for the process of national economy management.

### 1. Introduction

The law of money circulation in high-technological sector of economy defines what amount of cash is needed for the country's economy.

K. Marx law of money circulation asserts that circulation of money is determined by a total sum of prices on goods, works and services to be realized, minus total sum of prices on goods, works and services sold on the terms of installment payment without the payment deadline having come yet, plus total sum of prices on the goods realized and paid earlier, minus mutual repayments [1].

In the present day situation characterized by demonetization of gold, the law of money circulation has undergone some changes. Today it is no longer possible to estimate the amount of money from the point of view of its approximate calculation in terms of gold, since it has gone out of circulation and does not fulfill the function of money [2].

### 2. Theory

The main factor of the economic stability is the conformity between the money demand of national economy and the actual receipt of currency into the circulation [3].

The sum of the monetary unit in circulation is called the money supply. Now its value is calculated by the following formula:

$$KD = (STS + P) / O + Ksb + Ko,$$

where KD - amount of money in circulation;

STS - sum of the prices of goods;

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P - compulsory and expected charges from population;

Ksb - estimated savings of population;

Ko - cash on hand in banks and enterprises;

O - velocity of money circulation.

Thus, the amount of money in circulation must be on such a level which will provide the opportunity to purchase all the goods and services to be realized at certain prices [4].

### 3. Money incomes and expenses of population

Money supply as an aggregate of non-cash and cash, purchasing and payment means, is to ensure the circulation of goods and services in the national economy [5, 6].

Its structure consists of an active part that allocates financial funds to provide economic turnover, and passive one provides monetary directions, which can potentially serve as payment means.

The change of the money supply volume depends not only on the increase of the amount of money in circulation but also on the velocity of its circulation.

The velocity of money circulation is its transaction velocity of money.

To analyze the level of financial resource capacity, a coefficient of monetization is used. It is calculated as the ratio of the annual average value of the money supply to the nominal value of GDP. This coefficient is a value inversely related to the money circulation velocity.

Money supply volume in the country largely depends on the level of total goods and services consumption by the population [7, 8].

The balance of money incomes and expenses of the population mirrors the movement of the part of RF GDP which in the form of money incomes (Table 1.1) is available for the population and used for goods purchasing, services payments, voluntary and compulsory charges and contributions. Moreover, all monetary resources directed to all types of savings are also registered.

**Table 1.1** The form of the money incomes and expenses balance of the RF population

INCOMES	EXPENSES
1. Payroll fund	Purchase of goods and payment for services
2. Social transfers including benefits and grants	2. Compulsory charges and voluntary contributions
3. Real property and entrepreneurial incomes	3. Growth of bank deposits rate, purchasing of property, foreign and bonds
Total monetary income	Total monetary income
Residual	Residual
Balance	Balance

### 4. The essence and the types of inflation

The term inflation literally means "swelling." The present day inflation is characterized by a number of distinctive features:

- 1. Earlier the inflation was of a sought character; now it has become overall and worldwide distributed.
  - 2. Earlier the inflation was periodic; now it has become chronic.
  - 3. Caused by monetary and non-monetary factors.

Two types of inflation are distinguished:

- 1. Demand-push inflation.
- 2. Proposal inflation.

The first is characterized by the cash surplus in circulation with regard of the amount of goods and services available. It results in the increase of prices.



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The second leads to the increase of prices caused by production costs increase.

The increase of production costs is influenced by the rise of raw materials prices, trade-unions negotiated wage increase, national policy.

The following types of inflation are emphasized:

- 1. Anticipated inflation caused by political economic instability, the population discredit to the authorities, etc. It results in stocking up goods, demand increase producing imbalance between goods and money supply.
- 2. Open inflation occurs when prices are not controlled by the authorities and are influenced by market factors: prices are controlled with a demand-proposal ratio on the leading markets; this type of inflation is characterized by a continuous price rise.
- 3. Suppressed inflation refers to the situation when the authorities strictly control the prices and the incomes; it manifests itself not only in prices growth but in goods deficit intensification; this type of inflation is difficult to "treat".

Thus, inflation is the drop in the value of monetary units which are lately found in two main forms: the growth of goods and services prices, the drop of the currency rate of a monetary unit.

According to internationally accepted practice there are three forms of inflation-creeping, galloping, hyperinflation depending on the price growth rate.

Creeping inflation - prices rise does not exceed 3-5 percent a year. It is not accompanied by crisis situations and has become a common occurrence.

Galloping inflation in comparison with a creeping one is difficult to control. Prices rise is 10-50 percent a year or more.

Hyperinflation is the most dangerous and destructive form that can become uncontrolled. Prices rise can reach 100 percent a year. Sometimes the price growth can be given with 4 units. This inflation can occur as the consequence of long-term wars and serious social and political upheavals.

To define the level of inflation, the index of prices is used. Consumer price index measures the cost of a consumer basket (a set of consumer goods) which can be different in different countries. The index is calculated with the following formula:

Its = consumer basket cost within a base period / / consumer basket cost within an accounting period.

Inflation rate is calculated with the following formula:

$$P = (Oc - Op) / Op \times 100\%$$

where P is the inflation rate;

Qp is the index of consumer prices of the previous period;

Qc is the index of consumer prices of the current year.

### 5. The methods of inflation stabilization

The most important forms of money circulation are anti-inflationary policy and a certain monetary reform. Every country carries out anti- inflationary policy using direct and indirect methods. Direct methods include:

first - direct governmental control of financial processes and impact on the amount of monetary supply;

second - state price adjustment on goods and services;

third - state regulation of salaries in cooperation with trade-unions;

fourth - governmental impact on the processes of external economic relations including international trade, import and export of capital, impact on the exchange rate of the national currency. Indirect methods are associated with the regulation of the money supply on the basis of the central and commercial banks of the country: the regulation of the discount rate of commercial banks by the Central Bank, the impact on the refinancing processes of the latter, evaluation of legal reserve requirements of commercial banks by the Central Bank, Central Bank operations on foreign exchange and open financial market [9, 10].



# 6. Finance management, fiscal policy and fiscal control. The essence of the concept finance management

Management is a set of methods and techniques of the targeted impacts the object to achieve a certain result. Financial management is carried out through the established system of relations, stipulated by historical, economic and political conditions, and is subject to the fiscal policy of the state. Finance management is carried out by a special apparatus through certain methods and techniques including various sanctions and initiatives.

Finance management, as any other management system, has objects and subjects of management. Various forms of financial relations act as objects and the bodies that carry out management act as subjects.

There distinguished three groups of subjects:

- 1. financial enterprises;
- 2. insurance relations;
- 3. public finance.

The following subjects of managements fully correspond to the objects given above:

- 1. financial services of enterprises;
- 2. insurance bodies;
- 3. financial bodies;
- 4. taxation bodies.

A set of all organizational structures performing financial management is called a financial apparatus.

Managing decisions are made on the basis of an analysis of sufficiently complete and exact financial information, providing justified decisions. Financial information is based on bookkeeping and statistical reporting, operative records.

Operative management is a set of measures made on the basis of operative analysis data of a financial situation. These measures are aimed at realization of maximum efficiency with minimum expenditures through a redeployment of financial resources.

Besides, operative management is distinguished as a strategic management, which deals with financial resources through forecasting activity, establishing the volume of financial resources to implement target programs. Finance management is controlled by supreme legislative bodies through the adoption of financial law, approval of a budget and a budget implementation report, imposition or cancellation of some kinds of taxes, authorization of public debt limit and other financial parameters.

Automated management systems based on the use of economic and mathematical methods and computer technology are reconsidered as a part of the total system of finance management. The officers of fiscal control bodies cannot adequately manage finances without information technologies based on the use of financial estimates automated systems and automated systems of finance management.

To create such systems, financial cybernetics theory is used, i.e. finance management, exchange of financial and economic information between managing and managed subsystems.

The main aim of the creation and implementation of these systems is to improve the efficiency of finance management on the basis of labor saving of information acquisition, processing and analysis, multi-choice calculations of financial plans and their better coordination, optimization of the structure of a financial apparatus, etc.

A set of decisions on summary budget calculation, incomes and taxes, budget enterprises expenses, finance of national economy sectors are made in four subsystems.

### 7. Finance management bodies

General finance management in the Russian Federation according to the Constitution is carried out by highest bodies of state authority – the State Duma and Executive Office of the President. Finance management at the enterprises is carried out by Departments and Services of Finance. The sphere of insurance relations is managed by special insurance structures.



Total public financial management is carried out by the Ministry of Finance of the Russian Federation, its subordinate financial bodies and also Federal Tax Service of Russia.

The main tasks of the Ministry of Finance:

- 1. to develop and implement strategic directions of state financial policy;
- 2. to prepare the estimates;
- 3. to provide the stability and perform federal budget of public finances and their effects on social and economic development of the country, efficiency of economic management and also to take measures toward the development of financial market;
- 4. to concentrate financial resources on priority directions of socio-economic development of the Russian Federation and its regions and also special-purpose funding of public needs;
  - 5. to improve the methods of fiscal planning;
- 6. to execute fiscal control over rational and appropriate expenditures of budgetary and extrabudgetary funds.

The subjects of finance management are: Federal Assembly, Audit Chamber, Department of Treasury, and Federal Agency for State Property Management, Bank of Russia Financial Market Service, and Federal Customs Service.

### 8. Finance management bodies

Planning plays a very important role in the system of finance planning. Planning any business entity thoroughly evaluates financial standing and identifies the opportunities of its increase and the most efficient ways of its use.

The object of finance planning is financial activity of business entities and the state, which result in financial plans development. Every plan includes the calculations of incomes and expenses for a certain period, established relations with the sectors of finance and credit systems (social insurance contributions, assignments to budget, interest on a loan payments etc.).

Financial plans combine all the sectors of the financial system upon that the form of a finance plan and its figures show the specific character of the certain sector of the financial system. For example, commercial enterprises and organizations calculate the balances of incomes and expenses; non-commercial enterprises develop estimates; collective farms, cooperatives, non-governmental organizations and insurance companies develop financial plans; public authorities develop budgets of various levels.

Target tasks of finance management planning are set by the fiscal policy. They are:

- to determine the volume of monetary means and their sources, necessary to fulfill the tasks planned;
  - to identify the opportunities of income growth and saving of expenses;
  - to set optimal proportions of finance distribution between centralized and decentralized funds.

Both forecasting and planning calculations of financial figures are based on the usage of different methods. The most important of them are: the method of extrapolation, the normative method, the mathematical model method.

The method of extrapolation includes the calculation of financial figures revealing their dynamic character. In this method financial figures of the accounting period are used adjusting them toward relatively stable rate of change.

The normative method uses established standards and economic norms.

The mathematical model method is based on designing financial models simulating real economic and social processes.

The balance method is used to coordinate the directions of finances used with the sources of their formation, matching all the sectors of the financial plans with one another.

In market economy countries, the soft-based method dominates over planning, but in Russia programs and forecasts only supplemented the plan until a few years ago.



#### 9. Conclusions

The control over the state of the economy and the development of socio-economic relations in society is of great importance for the process of national economy management. One of the sectors of control system is fiscal control. Its aim is to contribute to successful realization of governmental financial policy.

Fiscal control is a set of specific actions and operations aimed at the control of the financial aspect of a business entity activity applying specific forms and methods.

Fiscal control is a specific field of control, which is connected with value categories, obtains the goal and a certain field of application. The object of fiscal control is monetary and distribution processes during formation and application of financial resources.

The immediate subject matter is such financial figures as profit, tax and contributions to funds, cost effectiveness, production costs and circulation costs.

As these financial figures are synthetic in nature the control of their dynamics and trends covers all aspects of the activity of enterprises and establishments and also the mechanism of financial credit interconnection.

The field of fiscal control comprises practically all the monetary and non-monetary (barter agreements etc.) transactions. It proceeds from the provision that it is possible to exclude the direct or indirect interrelation between the formation and the use of financial resources and funds for any kinds of activity or inactivity. All enterprises and organizations are subject to inspection, even those that provide adequate performance.

Fiscal control covers: fiscal laws observation, the balance of distribution and redistribution of the value of gross domestic product (GDP) and national income; budget processing and budget implementation (budgetary control).

It also includes the inspection of financial state and efficient resource utilization (labor force, materials and financial) by enterprises and organizations and budgetary institutions, tax surveillance etc.

Fiscal control completes the following tasks:

- 1. to maintain the balance between financial resources demand and monetary income levels and national economy funds;
- 2. to provide timely execution and complete performance of financial obligations of the government budget;
- 3. to estimate hidden industrial reserves to provide financial resources increase, production costs decrease and cost effectiveness rise.
- 4. to provide reasonable consumption of material assets and monetary resources and also adequate accounting and reporting; compliance with current laws and regulations;
- 5. to contribute to effective foreign-economic activity of the enterprises including currency transactions.

The choice of form of fiscal control depends on the subject of fiscal control. There distinguished the following forms of fiscal control: state, internal, social and third-party (audit) control. There is also preliminary, running and follow-up control.

Preliminary fiscal control is carried out at the stage of planning, consideration and approval the enterprise financial plans, income and expenditure budget, draft budgets, the texts of contract agreements, foundation documents etc.

Running fiscal control is carried out within the process of financial plans realization and business transactions, during the inspection of the observance of material consumption norms and regulations, compliance of the appropriations made and the expenditures plans, use of the resources provided earlier.

Follow-up control is carried out on the completion of the accounting period or at the end of the financial year on the whole.

As for the methods of fiscal control, they are: inspections, surveys, analyses and audits. An inspection is carried out on the basis of accountable receipts, balance and expenditure papers. It covers



some certain aspects of business activity. In the course of the inspection, revealed financial improprieties and the measures to remediate negative effects are being planned.

A survey covers certain aspects of enterprise activities and is carried out with a wider range of indicators. The survey estimates financial state of business entities, prospects of their development and the necessity of redeployment or reorientation of their production.

The analysis as a method of fiscal control must be systematic and based on facts of periodic or annual reports. It shows the level of the plan completion, observance of expenditure norms, financial discipline.

Audits can be detailed, partial, thematic and comprehensive, and also scheduled and unscheduled.

If all kinds of documents and material assets are checked, then it is a total audit. If only a part of the documents is checked, it is a sampling audit.

On the category basis there are field audits (accounting reports and write up in accounting registers are checked) and physical audits (availability of monetary means and material assets in a storage area are checked).

Budgetary control assists the development of optimal financial and budgetary policy, providing maximum growth of state budget revenues and economic development.

Fiscal control is carried out by legislative authorities through committees and commissions. Chambers of Control and Controller and Auditor Offices are also established.

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