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**DIGITALIZATION AND USING  
OF FINANCIAL RESOURCES OF THE COMPANY  
(by the example of Air Astana JSC)**

The article is devoted to the actual problem of the method of analyzing the state, security and efficiency of the use of financial resources of an enterprise under digitalization conditions. The article provides a classification of indicators characterizing the state and efficiency of using own and borrowed funds, the method of their definition and use in economic analysis. The purpose of the article is to analyze the factors influencing the development of resources, as well as the sources of financial resources of entrepreneurs. The scientific and practical significance of the work is due to the fact that at the moment enterprises are forced to pay more attention to the problems associated with the formation and improvement of the efficiency of their financial resources and to intensify the search for ways to improve their financial condition. In the research methodology, the principle of comprehensive analysis of indicators was chosen, which comprehensively characterizes the efficiency of the formation and use of financial resources. Summing up the main results, analysis and conclusions of the research work, it should be emphasized that the digitization of financial resources in an enterprise, which is the basis for ensuring its financial sustainability, will help to create all possibilities for further financial and economic activity with positive results. The theoretical and practical significance of the study lies in the fact that its conclusions and suggestions can be used in the formulation of the task of analysis and planning and the development of appropriate software by specialists of financial management companies, as well as in the educational process in preparing and lecturing for students of the specialty «Finance».

**Key words:** research and digitalization; resources of the company; intergenerational mobility; financial development; human capital investments; equality of opportunities.

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**Компанияның қаржы ресурстарын цифрлау және пайдалану  
(«Эйр Астана» АҚ мысалында)**

Мақалада цифрландыру жағдайында кәсіпорынның қаржы ресурстарын пайдаланудың жай-күйін, қауіпсіздігін және тиімділігін талдау әдістерінің өзекті мәселесіне арналған. Мақалада жеке және қарыз қаражатын пайдаланудың жай-күйі мен тиімділігін сипаттайтын көрсеткіштердің жіктемесі, оларды анықтау және оларды экономикалық талдауда қолдану әдісі қарастырылған. Мақаланың мақсаты – ресурстарды дамытуға әсер ететін факторларды, сондай-ақ кәсіпкерлердің қаржылық ресурстарының көздерін талдау. Жұмыстың ғылыми-практикалық маңыздылығы қазіргі сәтте кәсіпорындар өздерінің қаржы ресурстарын қалыптастыру мен жетілдіруге байланысты мәселелерге көбірек назар аударуға және олардың қаржылық жағдайын жақсарту жолдарын іздестіруді күшейтуге мәжбүр. Зерттеу әдіснамасында қаржы ресурстарын қалыптастыру мен пайдаланудың тиімділігін жан-жақты сипаттайтын индикаторларды кешенді талдау принципі таңдалды. Зерттеу жұмысының негізгі нәтижелерін, талдауларын және тұжырымдарын қорытындылай отырып, оның қаржы тұрақтылығын қамтамасыз ету үшін негіз

болып табылатын кәсіпорында қаржы ресурстарын цифрландыру оң нәтижелермен әрі қарай қаржы-экономикалық қызметтің барлық мүмкіндіктерін жасауға көмектесетінін атап өту керек. Зерттеудің теориялық және практикалық маңыздылығы оның қорытындылары мен ұсыныстарын қаржы менеджменті компанияларының мамандары тарапынан тиісті бағдарламалық қамтамасыз етуді әзірлеу және талдау, сондай-ақ, «Қаржы» мамандық студенттеріне дәріс оқу және дайындау кезінде оқу процесінде қалыптастыру кезінде қолдануға болады.

**Түйін сөздер:** зерттеу және цифрландыру; компанияның ресурстары; ұрпақаралық мобильділік; қаржылық даму; адами капиталды инвестициялау; мүмкіндіктердің теңдігі.

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### **Цифровизация и анализ эффективности использования финансовых ресурсов предприятия (на примере АО «Эйр Астана»)**

Статья посвящена актуальной проблеме методики анализа состояния, обеспеченности и эффективности использования финансовых ресурсов предприятия в условиях цифровизации. В статье дается классификация показателей, характеризующих состояние и эффективность использования собственных и привлеченных средств, методика их определения и использования в экономическом анализе. Целью статьи является анализ факторов, влияющих на развитие ресурсов, а также источников финансовых ресурсов предпринимателей. Научная и практическая значимость работы обусловлена тем, что в настоящий момент предприятия вынуждены уделять больше внимания проблемам, связанным с формированием и повышением эффективности использования своих финансовых ресурсов, и активизировать поиск путей улучшения своего финансового состояния. В методологии исследования был выбран принцип комплексного анализа показателей, всесторонне характеризующих эффективность формирования и использования финансовых ресурсов. Подводя основные итоги анализа и выводы исследовательской работы, следует подчеркнуть, что цифровизация финансовых ресурсов на предприятии, являющаяся основой обеспечения его финансовой устойчивости, будет способствовать созданию всех возможностей для дальнейшей финансово-экономической деятельности с положительными результатами. Теоретическая и практическая значимость проведенного исследования заключается в том, что его выводы и предложения могут быть использованы при постановке задачи анализа и планирования и разработке соответствующего программного обеспечения специалистами предприятий, занимающимися финансовым менеджментом, а также в учебном процессе при подготовке и чтении лекций для студентов специальности «Финансы».

**Ключевые слова:** исследования и цифровизация; ресурсы компании; межпоколенческая мобильность; финансовое развитие; инвестиции в человеческий капитал; равенство возможностей.

## **Introduction**

Digital transformation is the introduction of modern technologies in the business processes of an enterprise. This approach implies not only the installation of modern equipment or software, but also fundamental changes in management approaches, corporate culture, external communications. As a result, the productivity of each employee and the level of customer satisfaction are increased, and the company gains the reputation of a progressive and modern organization. Ford A. and Freeman V. (2015: 38-47) said: «Digitalization of processes is relevant not only at the level of individual enterprises: entire industries choose digital transformation in order to move with the times and to progress along with the

rest of society». Thus, the digital transformation of industry, retail, public sector and other areas is already changing the lives of every person and every company.

We have an expression from Samuel A.N. (2010: 65-68): «Companies are fast or dead». In the digital economy, this phrase is more than relevant: if the company does not use the capabilities of modern technologies, does not adapt to the crazy pace and features of business, it will not be able to compete with those who already do. «To be successful, you need to be fast and flexible» was noted by Douglas A. (2014: 217). Digital transformation of business processes is aimed at ensuring that companies make decisions promptly, quickly adapt work to the requirements of the current moment and meet

customer needs. Blundell R. (2004: 689) believes that «financial resources are a financial condition characterized by, firstly, the balance and quality of the combining financial instruments, technologies and services used by the enterprise, and secondly, the resilience to external and internal threats, third, the ability of the financial system of the enterprise to ensure the realization of its financial interests, goals and objectives with sufficient amounts of financial resources». The purpose of this article is to study the theoretical and practical aspects of the digitalization and analysis of the effectiveness using of financial resources. To ensure the sustainable development of Kazakhstani economy we need to resolve a number of urgent problems, among which one of the principals is to increase the economic entities' financial resources productivity, because of the fundamental change the rules for their operation in the market today. Therefore, with a view to the effective management of the financial resources of enterprises, it is necessary to improve and develop existing ones, as well as develop new methodological approaches that consider the particular economic situation.

Today, most enterprises in our country have a shortage of financial resources to finance their activities. Particularly acute shortage being felt in times of financial crisis, when the company could not provide funding for its activities and its obligations. By financial resources we usually mean cash of an enterprise that is at its disposal, on a permanent or temporary basis. Most scientists agree that a financial resource developing is implemented at the expense of internal fund and a cash equivalent, as well as the involved sources. Owned sources of financial resources include: charter capital, depreciation charges, stable liabilities, workforce earmarked contributions, revenue and profit from its activities. Also, these sources include fund of joint-stock companies, generated from equity funding and share premium, are intended to finance the costs of the company to increase its assets. State and communal enterprises may also involve State or local budget funds, invested in the company on a pro bono basis.

In case of lack of own and equivalent funds to finance its activities, the company may secure external debt funds. Attracted funds of the enterprise are derived from the loans obtained, fixed contributions and other ones, the funds rose at financial markets. The process of attracting external funding sources is influenced primarily the high cost of such resources, because today the cost of Bank lending in Kazakhstan is very high compared to that in Europe countries. Another limiting factor to

attract this kind of resources is the labor-consuming nature of their formalization, lack of knowledge and the limited capacity for their mobilization.

The purpose of this article is to study the theoretical and practical aspects of developing of financial resources of the enterprise and analysis of its productivity.

### **Materials and methods**

In this work were used methods of cognition, including methods of empirical (observation, comparison) and theoretical studies (analysis, synthesis, aggregation), scientific assessment. Modernization of the economy of the country, its regions and cities are inextricably linked with the state and development of enterprises. Results in any field of business depend on the availability and efficiency of use of financial resources, which are equal to the «circulatory system» that ensures the viability of the enterprise. Therefore, caring for financial resources is the starting point for the activities of any business entity. In a market economy, these issues are of paramount importance. The financial resources of an enterprise are a set of additional attracted and reinvested by its own and borrowed capital in cash, intended to finance its future development in a deterministic planning period, the formation and use of which is controlled by it independently in accordance with the intended purpose, considering the risk factor. In principle, everything sources of financial resources of the enterprise can be represented as follows sequences: own financial resources and on-farm reserves; borrowed funds; attracted funds.

### **Literature Review**

According to Berger A. (2010: 231), «the essence of financial resources of enterprises is the ability to independently develop and implement a financial strategy in accordance with the objectives of the overall corporate strategy, in an uncertain and competitive environment». From the standpoint of Khan H. (2011), «digitalization of financial resources can be defined as the state of the most efficient use of information, financial indicators, liquidity and solvency, return on capital, within its limits». I can also agree with the scientist Klomp J. (2014: 112), who believe that digitalization of financial resources represents a state of the enterprise that allows ensuring financial equilibrium, stability, solvency, and liquidity of the enterprise in the long run; satisfies the needs of the enterprise in financial

resources for the sustainable expansion; ensures sufficient financial independence; allows resisting existing and emerging dangers and threats that can cause financial damage to the enterprise, or undesirable change in the structure of capital, or forcing the company to liquidate; provides sufficient flexibility when making financial decisions; ensures the protection of the financial interests of the shareholders.

In the process of carrying out its financial and economic activities, the company carries out the formation of financial resources, which it then uses to meet its current operational needs, expand its activities, and investment activities.

The first step in the implementation of the financial mechanism for the formation of financial resources is the development of current production, investment and financial plans for the company in order to identify all sources of financial resources available to the company and to guarantee financial support for the company's activities with financial resources and fulfill the obligations of the company. In the process of formation and distribution of financial resources of the enterprise should be divided by their own and attracted sources of formation.

The use of attracted financial sources, along with its own, allows for a more rational use and preservation of the company's own working capital, to expand its activities, to implement investment projects in a timely manner. In the process of forming and distributing financial resources, one should not forget about creating financial reserves and special purpose funds in the form of highly liquid assets. This is especially relevant in a changing market environment. This will ensure the stable operation of the enterprise and fulfill its obligations even during periods of recession and crisis. An important step in ensuring the effectiveness of the formation and use of financial resources of an enterprise is the creation of an effective system of control over the observance of the financial and payment discipline of an enterprise. In implementing its financial and economic activity the enterprise carries out developing of financial resources, which further uses to ensure its ongoing operating needs, expanding its activities, investing (Burmistrova, 2016: 240). Enterprise Financial Resources Developing Mechanism is shown in Figure 1.

The aim of enterprise's financial resources development mechanism in addition to determining the available sources of development, is, above all, effective allocation under conditions of acute shortage of financial resources and ensuring the

sustainability and self-financing of the enterprise, organization of financial activity of the enterprise in such a way as to regain the funds, invested in the company at the expense of profit and other financial resources and to implement fully the liabilities to suppliers of resources, financial institutions and the budget and provision the company's development (Tusupbekov, 2016: 208).

The term «financial resources» is widely used in economics and in practice, its interpretation is different. In general, the content of the interpretation of the concept of «financial resources» was changed in stages in accordance with the development of the Soviet, and later the Russian economy. From our point of view, we can distinguish three stages of this development: 1) the first stage from the end of the 50s to the mid-80s of the last century, which was characterized by the centralization of financial resources in the administrative and economic economy; 2) the second stage from the mid-80s to the beginning of the 90s of the last century, when decentralization of financial resources clearly occurred; 3) the third stage from the beginning of the 90s of the XX century to the present, the specific features of which were due to the emergence of a market economy.

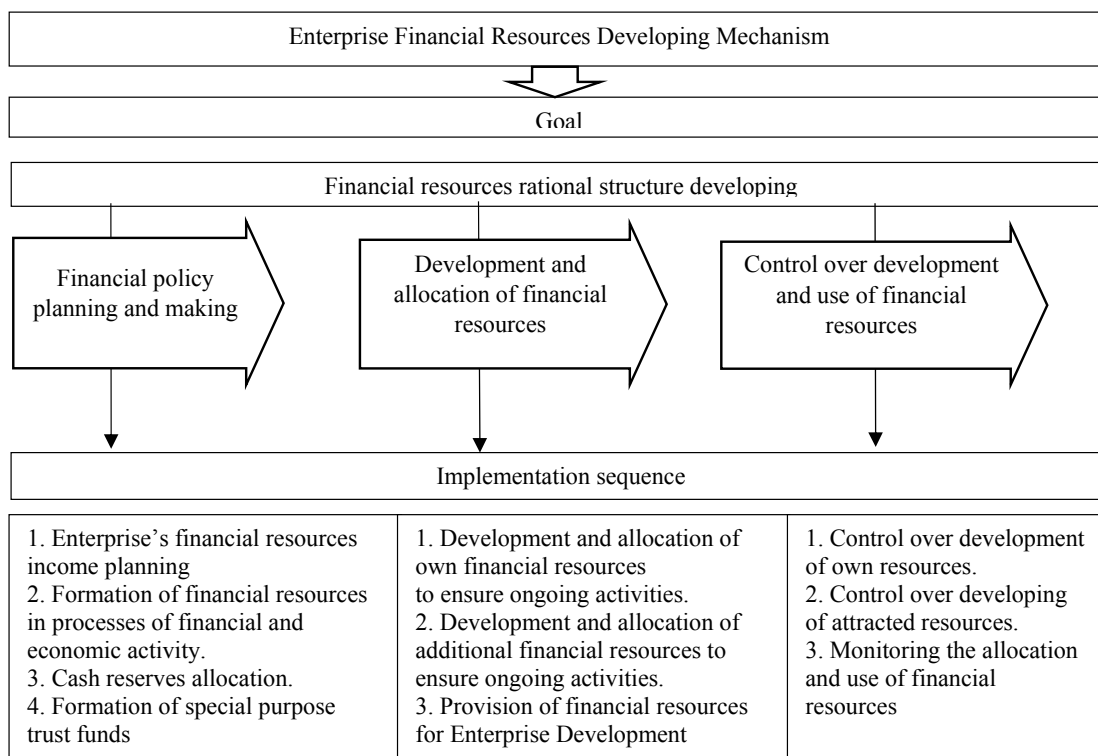
At the first stage, in the context of administrative and economic economics, which was characterized by the absence of private property and directive planning, financial resources were defined as a part of national income expressed in money, which can be used by the state (directly or through enterprises) for the purpose of expanded reproduction and for state expenses. Under extraordinary circumstances, working capital could act as financial resources as part of the national wealth created in the past. This definition excludes depreciation from financial resources and, at the same time, considers working capital of an enterprise as financial resources. It is obvious that at that time all financial resources were centralized in the hands of the state, which led to the formation, and, accordingly, the definition of financial resources only at the national level, while their use, of course, also occurred through enterprises.

## Results and discussion

The first step in implementation of the financial mechanism for developing of financial resources is formulation of current production, investment and financial plans for the enterprise in order to identify all sources of financial resources available to the enterprise and to guarantee funding for the

enterprise's activities and fulfill the enterprise's obligations. In the process of developing and allocation of the financial resources of the enterprise they should be divided according to the own and attracted sources of development. Use the attracted financial resources along with own ones allows you to more efficiently use and keep their own working capital of the enterprise, expand its activities, implement investment projects in a

timely manner. In the process of development and allocation of financial resources, one should not forget about creating financial reserves and special purpose trust funds in forms of highly liquid assets. This is particularly relevant in a changing market environment. This will ensure stable operations of the enterprise and fulfill its obligations even during periods of recession and crisis (Gilyarovskaya, 2016: 388).



**Figure 1** – Enterprise Financial Resources Developing Mechanism  
 Note – compiled by authors based on Financial Statements of Air Astana JSC

An important step in ensuring productivity of enterprise's financial resources is to create an effective system of control over the observance of the financial and payment discipline of an enterprise. Within this article the practice of developing financial resources of Kazakhstan's major airline company – Air Astana JSC shall be analyzed in detail. During the development of financing sources of the enterprise the peculiarities of functioning of the enterprises in the sector of aviation industry and the services provided by them should be considered. Aviation transportation activities associated with the implementation of a large number of works and services related not only to transportation of the passengers and freights, freight forwarding services,

maintenance of air vehicles, transport service security.

In modern conditions of globalization and high rates of technological modernization, companies increasingly have to focus on attracting borrowed capital, including its alternative forms, such as leasing and factoring.

For several years, the national airline Air Astana JSC has been expanding its own business and property through long-term leasing agreements. At the same time, the growth of the market and the development of the transportation network of Air Astana JSC require an increase in the efficiency of attracting and using available financial resources.



**Table 1** – Sources of formation of financial resources of the enterprise

Types of financial security	Sources of financial resources
Own funds	<ul style="list-style-type: none"> <li>- the income of the founders in the formation of the authorized capital;</li> <li>- the profit remaining at the enterprise for all types of activity;</li> <li>- depreciation deductions;</li> <li>- accumulated reserves;</li> <li>- additional capital generated in the revaluation of the value of the assets of the enterprise;</li> <li>- funds formed by the enterprise for the purposes of consumption and development;</li> </ul>
Borrowed funds	<ul style="list-style-type: none"> <li>- long-term bank loans;</li> <li>- short-term bank loans;</li> <li>- loans of different types from other sources;</li> <li>- accounts payable, constantly in circulation;</li> <li>- funds received from the placement of bills of exchange;</li> <li>- leasing;</li> <li>- factoring;</li> </ul>
Involved funds	<ul style="list-style-type: none"> <li>- additional contributions to the authorized capital;</li> <li>- funds received in the order of redistribution;</li> <li>- equity funds in current and investment activities;</li> <li>- funds from the issuance of debt securities;</li> <li>- share and other contributions of members of the labor collective, legal entities and individuals;</li> <li>- insurance compensation received in the event of an insured event;</li> <li>- receipt of payments for franchising, renting, etc.;</li> </ul>
Budget financing	<ul style="list-style-type: none"> <li>- budget investments;</li> <li>- budget loans;</li> <li>- state guarantees;</li> <li>- investment tax credits;</li> </ul>
Attraction of foreign capital	<ul style="list-style-type: none"> <li>- obtaining foreign loans;</li> <li>- issue abroad of debt securities;</li> <li>- placement of securities on international stock markets.</li> </ul>
Note – compiled by authors based on Financial Statements of Air Astana JSC	

Over the past 10 years, the volume of the air transportation market in Kazakhstan has doubled and in 2017 amounted to 7.4 million passengers (in 2007 – more than 2.7 million passengers). In relation to the general transportation market in Kazakhstan, air travel now provides a larger share of passenger traffic than five years ago. In addition, the International Air Transport Association (IATA) predicts a twofold increase in global demand for passenger services over the next 20 years.

The company currently operates a fleet of 32 turbojet aircraft, including 3 from the Boeing aircraft family, 9 from the Embraer aircraft family, and 20 from the Airbus family. But a new long-term leasing agreement for five Embraer E190-E2 aircraft has already been signed. Deliveries are expected at the end of 2019. Embraer E190-E2 offers increased range and operational efficiency that will support the company's growing network and open up new market opportunities for it.

In the structure of sources of financial resources of Air Astana, a large proportion of borrowed funds,

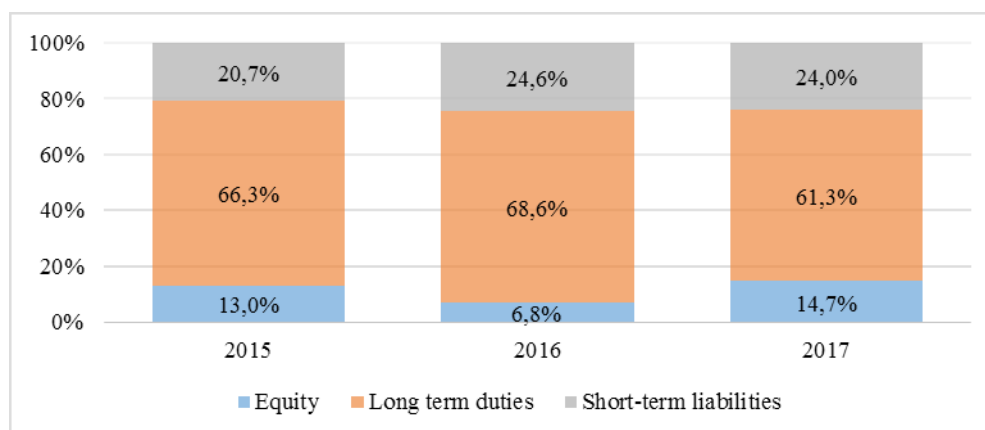
including long-term liabilities (61-68%), current liabilities (20-24%) (Figure 2). The share of own sources of financial resources in 2015 was 13%, in 2016 it significantly decreased and amounted to 6.8%. In 2017, the company increased the share of own sources of financing activities to 14.7%.

Despite changes in the structure of borrowed capital of Air Astana JSC in recent years, other long-term financial liabilities, formed under financial leasing agreements for the purchase of aircraft, occupy the maximum share in the structure of borrowed capital. Their share in 2015 was 70.4%, in 2017 it decreased to the level of 55.6% (Table 2).

In 2012-2014, the company acquired eleven aircraft under a fixed-rate financial lease. The lease term for each aircraft is twelve years. The company has the ability to purchase each aircraft at a nominal price at the end of the lease term. Loans issued by financial institutions to the lessor in respect of six Airbus aircraft that were delivered during 2012 and 2013 are under the guarantee of the European Export Credit Agencies, three Boeing

767 that were delivered in 2013 and 2014 are under the guarantee US Export Import Bank, and two Embraer, delivered in 2012 and 2013, are under the guarantee of the Brazilian Development Bank. The

Company's financial lease obligations are secured by the lessor's right to leased assets. These assets have a book value in 2017 – 68,671,498 thousand tenge (2016 – 74,352,809 thousand tenge).



**Figure 2** – Sources of financial resources of Air Astana JSC in 2015-2017, %.  
Note – compiled by authors based on Financial Statements of Air Astana JSC

**Table 2** – Analysis of the structure of borrowed capital of Air Astana JSC in 2015-2017

Sources of financing	2015	2016	2017	Changes	
				2016/2015	2017/2016
Long-term loans	0,0%	2,3%	2,1%	+2,3%	-0,2%
Other long-term financial liabilities (Financial leasing)	70,4%	62,9%	55,6%	-7,5%	-7,3%
Long-term reserves	5,9%	7,2%	12,0%	+1,4%	+4,8%
Deferred tax liabilities	0,0%	1,2%	2,2%	+1,2%	+0,9%
Short-term loans	0,0%	0,3%	0,3%	+0,3%	0,0%
Other current financial liabilities	7,6%	7,7%	7,9%	+0,1%	+0,2%
Short-term trading and other payables	6,9%	7,4%	7,7%	+0,5%	+0,3%
Short term reserves	3,1%	3,8%	2,6%	+0,7%	-1,2%
Other short term liabilities	6,2%	7,2%	9,6%	+1,0%	+2,4%
Total borrowed capital	100,0%	100,0%	100,0%		

Note – compiled by authors based on Financial Statements of Air Astana JSC

The company's liabilities in 2015 included the current value of financial lease obligations in the amount of 13,796 million tenge and the long-term part of the obligations in the amount of 127,569 million tenge. In 2016, the long-term part of liabilities decreased by 12.3% and in 2017 another 16.5%.

In 2017, the share of long-term reserves in the structure of borrowed capital, which are intended for the maintenance of aircraft acquired under

financial leasing contracts, increased by 1.5 times. In accordance with the terms of the operating lease, Air Astana JSC is obliged to conduct and pay for the standard repair and maintenance procedures for the aircraft as it operates and return the aircraft to the lessor in a satisfactory condition at the end of the lease term.

The share of other short-term liabilities of the company in the reporting period remained at the level of 7.6-7.9%. The share of short-term trade and

other payables increased from 6.9% in 2015 to 7.7% in 2017.

Thus, the main source of financing for the activities of Air Astana JSC are long-term financial obligations related to financial leasing agreements concluded for the purchase of aircraft. Their share in 2017 is more than 55% of the total financial resources.

We will analyze the effectiveness of the use of financial resources of the company by the method of analysis of financial ratios (table 3).

Analysis of the calculated indicators shows a satisfactory liquidity of the company in the period under consideration, with a rather high risk of losing financial stability. At the same time, in 2017, the company showed an increase in return on equity and return on assets compared to 2015.

In 2016, Air Astana JSC had a difficult financial situation due to impairment losses on financial assets.

Thus, the existing structure of financial resources of Air Astana JSC allows to increase the efficiency of financial resources management with skillful financial risk management.

Modern conditions of globalization and technological modernization of the domestic economy put at the forefront issues of efficient use and management of financial resources of enterprises and organizations of various spheres. Effective management of financial resources allows not only to identify their optimal sources of attraction, but also to distribute financial resources so that the company can improve the efficiency of its activities as a whole.

**Table 3** – Coefficient analysis of the efficiency of use of financial resources of Air Astana JSC

Indicators	2015	2016	2017	Changes	
				2016/2015	2017/2016
Absolute liquidity ratio	1,660	0,921	1,043	-0,739	+0,122
Total liquidity ratio	2,063	1,371	1,494	-0,692	+0,123
Capitalization ratio	6,706	13,652	5,820	+6,946	-7,832
Coefficient of independence (autonomy)	0,130	0,068	0,147	-0,062	+0,078
Financial tension ratio	0,870	0,932	0,853	+0,062	-0,078
Financial stability ratio	0,793	0,754	0,760	-0,039	+0,006
Return on assets	0,050	-0,067	0,065	-0,117	+0,132
Return on equity	0,383	-0,985	0,445	-1,369	+1,430
Return on sales	0,066	-0,064	0,055	-0,130	+0,118

Note – compiled by authors based on Financial Statements of Air Astana JSC

Also, the process of providing services by air entities is influenced destination network status, optimized speed, the ability to ensure continuity of service delivery, capacity of moving with specified parameters of flight personnel at any time of the year and under any weather conditions, level of services. Let's take a look at the trend and structure of assets of Air Astana JSC according to Table 4.

As shown in table, the assets of the company under consideration, Air Astana JSC, for the reporting period grew by 4.1 billion. tenge, or 1.96% amounted to 212.4 billion. tenge in the year 2017. The main increase is accounted for by current assets, increments of which for the period 2015-2017 were 3.87 %.

Trend in assets of Air Astana JSC is shown in Figure 3.

With regard to asset profile of Air Astana JSC, it should be noted that over the past three years it has hardly changed – throughout 2015-2017 years the largest relative share in the structure of assets of Air Astana JSC is constituted of current assets (51.23% in 2015 year, 52.19% in 2017).

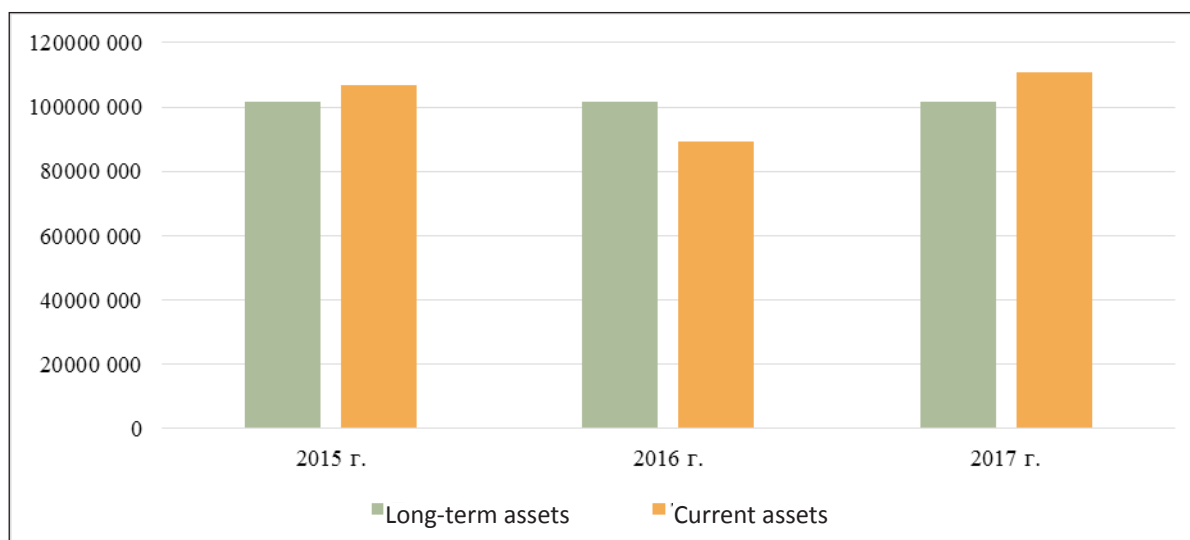
A high relative share of current assets can be explained by industry feature of JSC Air Astana, the presence on the company's balance sheet of a large amount of cash, inventories and accounts receivable. On long-term assets, a decrease in their relative share from 48.77% in the year 2015 down to 47.81% in the year 2017.



**Table 4** – Trend and structure of assets of Air Astana JSC for 2014-2016, million tenge

Article title	2015		2016		2017		Change 2017-2015	
	million tenge	%	million tenge	%	million tenge	%	million tenge	%
Long-term assets	101,610	48.77	101, 672	53.28	101, 553	47.81	-56	-0,06
Fixed assets	91, 604	43.97	90, 395	47.37	90, 359	42.54	-1,245	-1.36
Intangible assets	235	0.11	1,049	0.55	934	0.44	699	296.99
Prepayments for non-current assets	3,514	1.69	3,038	1.59	3,120	1.47	-394	-11.21
Guarantee deposits	5,227	2.51	5,133	2.69	5,937	2.79	710	13.58
Trade and other accounts receivables	326	0.16	2,058	1.08	1,202	0.57	877	269.39
Current assets	106,741	51.23	89,158	46.72	110,878	52.19	4,136	3.87
Inventories	10,267	4.93	13,761	7.21	12,593	5.93	2,326	22.65
Advances made	5,388	2.59	7,524	3.94	11,705	5.51	6,317	117.24
Income tax prepayment	257	0.12	261	0.14	261	0.12	4	1.59
Trade and other accounts receivables	7,088	3.4	7,349	3.85	8,395	3.95	1,307	18.44
Other taxes prepaid	2,536	1.22	5,435	2.85	6,387	3.01	3,851	151.84
Guarantee deposits	9,640	4.63	11,646	6.1	10,891	5.13	1,251	12.98
Bank deposits	53,722	25.78	33,187	17.39	2	0	-53,720	-100
Cash and cash equivalents	17,812	8.55	9,994	5.24	60,643	28.55	42,831	240.46
Total assets	208,351	100	190,830	100	212,431	100	4,080	1.96

Note – compiled by authors based on Financial Statements of Air Astana JSC

**Figure 3** – The dynamics of changes in assets of Air Astana JSC for 2015-2017, thousand tenge

Note – compiled by authors based on Financial Statements of Air Astana JSC

**Table 5** – Trend in shareholders' equity and liabilities of Air Astana JSC for 2015-2017, million tenge

Article title	2015		2016		2017		Change in 2017-2015	
	million tenge	%	million tenge	%	million tenge	%	million tenge	%
Equity	27,036	12.98	13,024	6.82	24,573	11.57	-2,464	-9.11
Share capital	2,502	1.2	2,502	1.31	2,502	1.18	0	0
Additional paid-in capital	49	0.02	49	0.03	49	0.02	0	0
Provision for hedging instruments, net of tax	-30,744	-14.76	-26,741	-14.01	-25,943	-12.21	4,801	-15.62
Retained earnings	55,230	26.51	37,215	19.5	47,966	22.58	-7,264	-13.15
Long-term liabilities	27,036	12.98	13,024	6.82	129,905	61.15	102,869	380.48
Loans	0		4,014	2.1	3,625	1.71	3,625	
Finance lease liability	127,569	61.23	111,818	58.6	103,994	48.95	-23,575	-18.48
Deferred tax liability	0		2,213	1.16	2,909	1.37	2,909	
Provision for aircraft maintenance	10,652	5.11	12,850	6.73	19,376	9.12	8,724	81.9
Current liabilities	43,093	20.68	46,910	24.58	57,953	27.28	14,860	34.48
Loans	0		544	0.28	541	0.25	541	
Finance lease liability	13,796	6.62	13,749	7.2	14,234	6.7	438	3.17
Deferred income	11,160	5.36	12,742	6.68	16,856	7.93	5,696	51.03
Provision for aircraft maintenance	5,600	2.69	6,747	3.54	5,831	2.75	231	4.13
Accounts payable	12,476	5.99	13,129	6.88	20,490	9.65	8,014	64.24
Total liabilities	181,315	87.02	177,806	93.18	187,858	88.43	6,543	3.61
Total Equity and Liabilities	208,351	100	190,830	100	212,431	100	4,080	1.96

Note – compiled by authors based on Financial Statements of Air Astana JSC

Further let us analyze changes in sources of asset formation – in equity and liabilities of JSC «Air Astana» for 2015-2017 according to Table 5.

The data in the table show that a significant reduction in the equity capital of Air Astana JSC for 2015-2017 – for three years, the capital of the company under interest decreased by 9.11%. Moreover, the main decrease is accounted for retained net profit, the amount of which has dropped from 55.2 billion tenge in 2015 to 48 billion in the year 2017.

Long-term liabilities over the past three years significantly increased by 102.9 billion tenge and at the end of the period totaled 129.9 billion tenge. Thus, over the past three years, there has been an increase in long-term liabilities by more than 4 times.

The amount of current liabilities also has risen from 43 billion tenge in 2015 to 58 billion tenge in the year 2017. These changes in short-term liabilities are mainly associated with changes in the item «Short-term trade and other payables», the amount of which for the last three years has increased by 8 billion tenge or by 64.24%.

Analysis of liabilities side of the balance-sheet showed changes in the structure, in terms of reducing the equity percent from 12.98 in 2015 to 11.57 with a significant increase in the relative share of long-term and short-term commitments.

The observed downward trend in relative share of equity and growth in debt capital reveals risk of solvency loss and financial difficulties, as well as the risk of further losses due to significant debt payments for the company (Kupeshova, 2014:480). In addition, exceeding growth of debt capital indicates whether the company depends from external financing. A high relative share of debt capital in the turnover of an organization is negative and suggests that the whole organization's working capital, as well as part of the non-current assets is based on sources of borrowed funds. Moreover, it should be noted a significant increase in accounts payable in the year 2017.

Thus, certain negative trends in the structure of the balance sheet of JSC «Air Astana», namely despite the growth in assets, a decrease in equity and growth in debt capital are observed. A significant

relative share of debt capital and its growth over the past three years showed that the company under interest has risk losing the financial stability during the reporting period.

To assess performance of Air Astana JSC according to Statement of revenues and expenditures, let us analyze the changes in the financial results

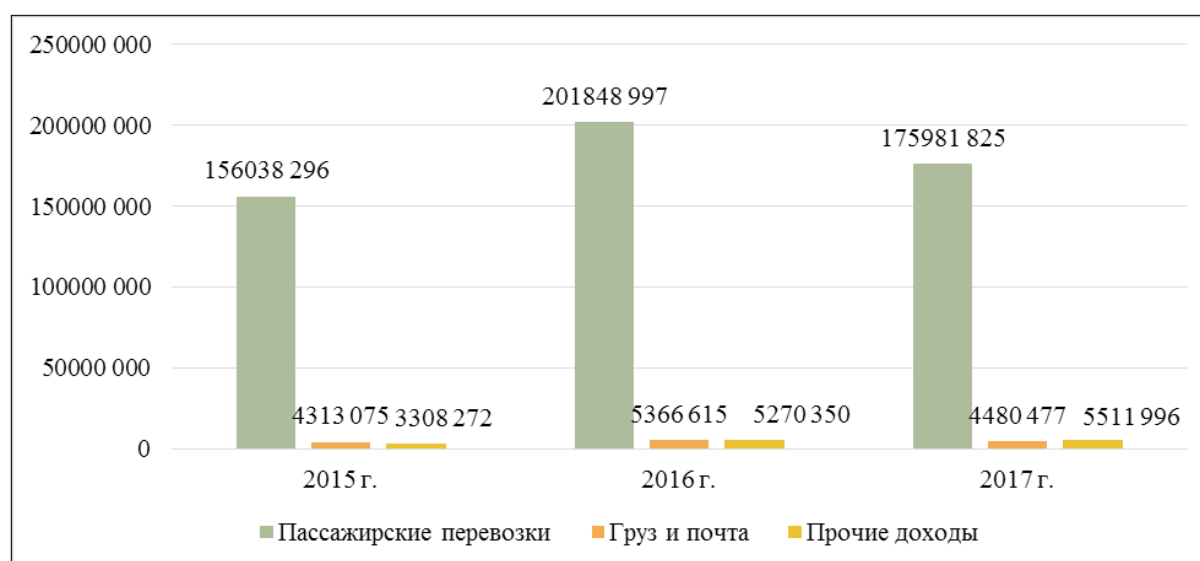
of the company JSC Air Astana for 2015-2017 according to data in Table 6.

As shown in table, operating profit of Air Astana JSC for last three years has risen to 13.63% and reached 186 billion tenge in the year of 2017. The increase was mainly due to an increase in passenger revenue (Figure 4).

**Table 6** – Trend in the financial results of JSC Air Astana for 2015-2017, million tenge

Line item	2015	2016	2017	Change in 2017-2015	
				million tenge	%
Income					
Passenger operations	156,038	201,849	175,982	19,944	12.78
Cargo and mail	4,313	5,367	4,480	167	3.88
Other income	3,308	5,270	5,512	2,204	66.61
Total income	163,660	212,486	185,974	22,315	13.63
Total operating expenses	158,862	199,524	169,914	11,052	6.96
Operating profit	4,798	12,962	16,060	11,262	234.73
Financial income	1,653	2,643	2,145	492	29.76
Financial expense	5,142	22,608	2,741	2,401	-46.69
Exchange gain/(loss), net	11,935	-3,916	1,700	-13,635	-114.24
(Loss)/profit before tax	13,244	-10,918	13,764	520	3.92
Income tax expenses	2,882	1,916	3,013	-132	4.56
(Loss)/profit for the year	10,363	-12,834	10,751	388	3.75
Other comprehensive income/(loss) for the year, net of income tax	-30,744	4,003	798	31,542	-102.59
Total combined loss for the year	-20,382	-8,831	11,549	31,930	-156.66

Note – compiled by authors based on Financial Statements of Air Astana JSC



**Figure 4** – Trend of Air Astana JSC incomes for the period of 2015-2017 thousand tenge  
Note – compiled by authors based on Financial Statements of Air Astana JSC

Over the past 3 years the income structure of Air Astana JSC has not undergone significant changes. Passenger operations amount to 95% of total revenue and remain the main source of income of the company. The remaining 5% are accounted for income from cargo and mail transportation (3%), as well as other ancillary income (2%).

Operating expenses of the Company, denominated in national currency, showed an increase of 6.96% from 158,861 million tenge

in 2015 to 169,914 million tenge in the year of 2017. Since the bulk of Company's costs is set up in foreign exchange, change in the average exchange rate of tenge to dollar compared with the previous year had an impact on the growth of costs denominated in tenge. Along with depreciation of national currency, the increase in operating costs of the company affected the Company's activities on implementation of projects related to business expansion.

**Table 7** – Operating statistics of Air Astana JSC for 5 years

Line item	2013	2014	2015	2016	2017	Change 2017-2013	
						Absolute	relative, as %
The passengers carried, million	3.25	3.68	3.77	3.86	3.75	0.5	15.4
Domestic	1.99	2.12	2.18	2.28	2.09	0.1	5.0
International	1.26	1.56	1.59	1.58	1.66	0.4	31.7
Transit	0.09	0.19	0.20	0.19	0.31	0.22	244.4
Passenger-kilometers performed, billion	6.40	7.45	7.55	7.78	7.81	1.41	22.0
Domestic	2.33	2.52	2.57	2.77	2.55	0.22	9.4
International	4.06	4.93	4.98	5.01	5.26	1.2	29.6
Limit of passenger-kilometers, billion	9.47	11.40	11.67	12.41	12.72	3.25	34.3
Domestic	3.28	3.55	3.71	4.17	3.95	0.67	20.4
International	6.19	7.85	7.96	8.24	8.76	2.57	41.5
Load factor, %	68%	65%	65%	63%	61%	-0.07	-10.3
Domestic	71%	71%	69%	66%	65%	-0.06	-8.5
International	66%	63%	63%	61%	60%	-0.06	-9.1
Cargo, mail and excess baggage, thous. tons	22.1	23.8	19.0	16.6	16.6	-5.5	-24.9
Tonne-kilometres performed, million	652	753	748	762	767	115	17.6

Note – compiled by authors based on Financial Statements of Air Astana JSC

The company's commitment to high standards and values such as security, providing high quality service requires continuous investment in innovation and development. Net profit for 2017 increased by 156.7% up to 11.5 billion tenge compared to 2015. Since the first flight of Almaty-Astana in 2002, Air Astana has been continuously developing and making every effort to become the best airline company in Kazakhstan and the CIS.

Impressive results over the past 15 years show that these purposes are achieved, because the company was able to establish a reliable airline carrier with high standards of security and an excellent level of customer service through a continuous commitment to ensure high efficiency.

During the year 2017 the company transported approximately 3.7 million passengers, that in an average makes more than 10,000 people a day. This figure shows a slight decrease to 3% compared to the year 2016, mainly as a result of the 8% reduction in passenger traffic for domestic flights.

This decline was due to several fundamental factors such as a decrease of 5% in the number of limiting passenger-kilometers for domestic flights, compared to the year 2016, the depreciation of national currency and the rate of development of Kazakhstani air transportation market. In recent years there has been an increase in competition in the domestic air service by local airline carriers as Air Qazaq, Bek Air and Scat, reducing the share of

Air Astana JSC in the domestic market, but it still remains the largest carrier in comparison with other Kazakhstani ones.

Thus, in general, the analysis shows positive trends in the financial condition of the company under investigation – there has been an increase in revenue and net profit for the last three years.

Investigation of interrelationship of structure financing sources of Air Astana JSC and its performance results showed a significant dependence of Company's performance from the structure of funding sources (Ghosh, 2016:58). The investigation found that:

- change the capital structure significantly affects the financial results; increasing the share of borrowed financial resources in the total amount of long-term sources leads to increased unpredictability of net profits change; at high values of the effect of the financial leverage the relationship between net profit and earnings before interest and taxes has become increasingly non-linear;

- capital structure optimization problem cannot be solved by building models of indifference points (equilibrium). Such models are based on operating

rates of past activity of enterprises and only reflect the dependence of profit and profitability and the methods of financing used. The result of their analysis is to identify the capital structure, providing a condition in which financing options to compare the activities are of equal benefit.

For the enterprise attraction of a funding source for investment projects is associated with certain costs: issue of new shares requires dividend payments to shareholders; issue of bonds-interest payments; taking out a loan – paying interest on them, use of leasing – paying remuneration to the lessor, etc.

Therefore, to carry out its investment activities Air Astana JSC must choose the optimal financing option (Table 8).

Solution of the task on developing structure of financing sources for of investment activity of Air Astana JSC with regard to requirements to optimality involves the development and implementation of finance and investment approach, which, unlike the traditional ones, considers maximizing the investment value of an enterprise as an optimization criterion (Malady, 2016: 389).

**Table 8** – Comparative characteristics of external financing sources for funding investment activity of the enterprise

Type of funding	Advantages	Disadvantages
1	2	3
Public placement of shares	<ul style="list-style-type: none"> <li>- Obtaining significant equity</li> <li>- Assets liquidity provision</li> <li>- No need to pay debts</li> <li>- No additional collateral (guarantees) required</li> </ul>	<ul style="list-style-type: none"> <li>- Significant issue costs and placement provision are required</li> <li>- Regulations on emissions by the control bodies of the securities market.</li> </ul>
Corporate bonds	<ul style="list-style-type: none"> <li>- Interest rate is usually fixed</li> <li>- Percentage is deducted from taxable income</li> <li>- Can be perceived as an additional Owners' equity</li> </ul>	<ul style="list-style-type: none"> <li>- Availability to use by large companies</li> <li>- Regulations on emissions by the governing bodies of the securities market</li> <li>- High interest rates are possible</li> </ul>
Credit line for banks	<ul style="list-style-type: none"> <li>- Independence in the use of funds received</li> <li>- Efficiency of the process of cash receiving</li> </ul>	<ul style="list-style-type: none"> <li>- Lending period rarely exceeds 3 years</li> <li>- Need to provide collateral;</li> <li>- Limitation for a loan and possible high interest rates</li> </ul>
State funding	<ul style="list-style-type: none"> <li>- Smaller amounts of sum payable in satisfaction with longer periods;</li> <li>- Percentage is deducted from the taxable profit</li> </ul>	<ul style="list-style-type: none"> <li>- Limitation of the funds provided</li> <li>- funds received must be spent for the intended purpose.</li> </ul>
Leasing	<ul style="list-style-type: none"> <li>- It does not require immediate payment and allows to develop a convenient financing scheme</li> <li>- It allows an enterprise that does not have substantial financial resources to launch a major project</li> <li>- does not increase the debt in the balance sheet and does not affect the leverage ratio.</li> </ul>	<ul style="list-style-type: none"> <li>-In rare cases additional collateral is required.</li> </ul>
Project financing	<ul style="list-style-type: none"> <li>- Receipt of substantial funds</li> </ul>	<ul style="list-style-type: none"> <li>- Primarily large-scale projects are funded</li> </ul>
Note – compiled by authors based on Financial Statements of Air Astana JSC		



In the course of its activity the enterprise may use different sources of financing for investment processes and use the known formula for calculating the value of their use. But there is a fairly new method of providing investment projects such as IPO. As a rule, the IPO refers to primary (in the public market the company's

shares at the time of placement do not circulate) public (among an indefinitely large number of institutional and private investors) placement of shares.

Advantages of IPO over other sources of financial resources developing are presented in Table 9.

**Table 9** – Advantages of IPO over other sources of financial resources developing

Funding source	Advantages of IPO
Retained earnings	Large one-time equity inflow. Independence from future economic conditions (business outlook)
Budget funds and government loans	Efficiency of resource flows without time-consuming bureaucracy.
	Lack of commitment (including social programs)
Bank loans	Independence from a specific financial institution. Lack of future payments
Bonded loans	No obligation to service the loan. for an unlimited period for equity raising
Note – compiled by authors based on Financial Statements of Air Astana JSC	

Speaking about indisputable advantages of IPO, it should be noted that, in addition to attracting capital, IPO provides the issuing company a number of other unique opportunities for further business development:

- It significantly improves the financial reliability of an issues body
- It creates conditions for more profitable placement of debt equity securities, as well as for attracting loans secured by shares
- It promotes effective instrument for assessing the fair market value of the company and beneficial mechanism for mergers/acquisitions;
- It allows the company to strengthen its lobbying capacity through inclusion of influential financial institutions in the membership of shareholders;
- It enhances the prestige of the company as a partner and counterparty when working with domestic and foreign firms (Roodman, 2014: 249-255).

### Conclusion

Summarizing the above, it should be emphasized that digitalization of financial resources at the enterprise, which is the basis for ensuring its financial stability, will facilitate the creation of all opportunities for further financial and economic activity with positive results. At the same time, it should be based on the use of a number of measures: increase of the innovative and intellectual potential of

the enterprise; introduction of advanced international experience in the management of material, labour, and financial resources of the enterprise; raising the skills of employees of the enterprise, etc.

Further research should be aimed at developing and implementing an effective innovation policy that can provide long-term competitiveness of domestic enterprises and increase their financial resources.

The availability of sufficient financial resources, their effective use, determine the good financial position of the company, solvency, financial stability, liquidity. In this regard, the most important task of enterprises is to find reserves to increase their own financial resources and their most effective use in order to improve the efficiency of the enterprise as a whole (Mathieson, 2004).

The article showed that for effective not only economic, but also financial activity of the enterprise as a whole, each business entity must form its own financial management strategy. Practice shows that, as a rule, this strategy is to create financial plans: long-term (more than 1 year), medium-term (annual, quarterly), short-term (monthly).

Management of financial resources of an enterprise is reduced to a continuous process of financial information, its analysis and further development and adoption of management decisions based on the results of analysis. The continuity of the process is determined by the presence of: organizational, methodological, personnel, information, technical and regulatory support. One of the most important directions of the financial

policy of enterprises in modern conditions is the formation of a strategy for the formation of financial resources, which should be aimed at overcoming unprofitability, reducing financial risks, ensuring the required liquidity, and increasing the efficiency of using their financial potential.

Effective management of the formation and use of financial resources of the enterprise will ensure the growth of wealth of shareholders (owners) of the enterprise as the fundamental goal of financial management, which is manifested in the growth of the value of the enterprise and the creation of added cash value (Nickell, 2013).

The investigation performed has shown that for effective not only economic, but also the financial activity of the enterprise as a whole, each entity must form their own financial management strategy. Practice shows that, as a rule, this strategy is to create financial plans: long-term (over 1 year), medium (annual, quarterly), short-term (monthly). Management of financial resources

of an enterprise is reduced to a continuous process of processing financial information, its analysis and further development and adoption of management decisions based on the results of the analysis. The continuity of the process depends on organizational, methodological, personnel, information, engineering and regulatory support. One of the most important directions of the financial policy of enterprises in modern conditions is the formulation of a strategy for development of financial resources, which should be aimed at overcoming unprofitability, reducing financial risks, ensuring the required liquidity, and increasing the efficiency of using their financial strength. Effective management for developing and using the financial resources of the enterprise will ensure the growth of wealth of shareholders (owners) of the enterprise as the fundamental goal of financial management, which is manifested in the growth of the value of the enterprise and creation of added cash value.

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