The Economic Contribution of Copyright-Based Industries in Russia

Moscow 2007

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The authors of the present report would like to offer their sincere thanks and gratitude to the World Intellectual Property Organization (WIPO) for initiating a research project of such importance for Russia, and for the methodological assistance provided.

The authors would particularly like to express their gratitude to Mr. Dimiter Gantchev and Mr. Steven Siwek for their comments and recommendations offered in the course of carrying out the research and writing the report, which were of material significance in achieving the goals defined.

Introduction

With societal development and the growth in the importance of information, intellectual property, including copyright, has gradually become firmly established as one of the most valuable intangible assets of the economy of the information society. It forms the basis for the development of many industries, ensuring growth in value added, jobs and foreign trade.

Looking at the economic impact of copyright on the economy on a wider scale, its role should be noted in the increase of wealth, growth and economic development, as these categories are directly connected with the use of creative potential.

The analysis presented helps to underline the distinctive features of copyright and to evaluate the degree of its influence on the economy of the Russian Federation.

This research was based on the methodology elaborated by the World Intellectual Property Organization (WIPO) in the *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*.[1]

Many countries carry out regular research into the contribution of the copyright-based sector of the economy, e.g. Finland, the Netherlands, the UK and the US.

According to statistics for 2004, the contribution to the economy of the core copyright industries equaled: 4.8 per cent of gross domestic product (GDP) in Finland, 5.8 per cent in the Netherlands and 7.75 per cent in the US. In Russia, according to our research, this indicator was equal to 6.06 per cent of GDP.
In spite of the fact that some of the methods used differ in the scope of research, the indicators studied and the research mechanism applied, all the results demonstrate the following trends:

- a significant and increasing contribution to the creation of value added and new jobs, which often proved to be higher than initially expected;
- dynamic development of the cultural and information sectors, which was usually higher than in other sectors of the economy.

The above trends have also been observed in Russia. However, because this is the first time such research has been undertaken in Russia, it does not reflect the dynamics of the contribution indicators in copyright-protected industries over a period of time.

The study of the economic significance of copyright was carried out by the Russian State Institute of Intellectual Property on the instructions of the Federal Service for Intellectual Property, Patents and Trademarks in the framework of the agreement between the Federal Service and WIPO.

The organizations which participated in the research were the Russian Copyright Society, the State Unitary Enterprise (Rus.GUP), INFORMZASHCHITA and the Russian Federal Service for Statistics (Rosstat).

The authors of the interim reports and the final report were as follows:

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[1] Guide on Surveying the Economic Contribution of the Copyright-Based Industries, WIPO, Geneva, 2003.

– Ivan A. Bliznets, Professor of Law, Doctor of Law, Head of the Copyright and Private Rights Department, Rector of the Russian State Institute of Intellectual Property;
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Major assistance in the preparation of the present report was provided by the translators: Z. Kh. Albegonov and E. A. Moiseeva, Ph.D. (Linguistics). The data used in the analysis was from the official statistics of the Federal Service for Statistics (Rosstat) for 2004 and previous years.

Within the scope of state statistics gathering there has never been a comprehensive evaluation of the GDP generated by the copyright-based industries. At the same time, it was not possible to obtain all the relevant data for evaluating the influence of copyright on the Russian economy for the present research from the results of statistical observation.

Therefore, some figures may seem to be lower than they really are, owing to underestimated data on some groups of enterprises which use copyright in their business activities.

Section I. Economic Significance of Copyright and Related Rights Material

General Characteristics of the Methodology Applied

In the course of our research, the economic significance of the respective industries for the Russian economy was studied, along the following basic parameters:

- evaluation of the volume of production and sales of goods and services in relation to the countrywide total;
- contribution to GDP;
- number of employees in the respective industries and their share in the total employment;
- contribution of industries to foreign trade (imports and exports).

All industries were grouped according to their copyright factor in the four specific areas.

Calculations were made for each group for all the parameters. Data on exports and imports for the partial copyright and the non-dedicated support industries were not studied, as there are no statistics for such data in view of their limited importance.

Certain statistical indicators, including Gross Value Added (GVA), are provided only for the larger groups, so our calculations were made on the basis of traditional correlation between turnover, output and gross value added in groups taken as a whole. These correlations were then applied to each industry (sub-sector).

Another feature of our statistical observations was the separation between the sectors covering large and medium-sized enterprises and small enterprises. Thus the data were computed separately for the two sectors, followed by an overall figure. For the interdependent industries (support industries) the evaluation of results for small enterprises was deliberately omitted because of their insignificance in this sector of production.

All calculations are given in basic prices without applying price deflators as this is the first time such research has been carried out in Russia. The data analyzed refer to 2004. The analysis was carried out for the most significant natural indicators of product manufacturing.

The methodology of the present research was based on the principles and approach laid down by WIPO as a foundation for a series of similar studies, carried out under its auspices in Canada, Hungary, Latvia, Singapore and the US.

Beside the main methodological provisions set out in the *Guide on Surveying the Economic Contribution of the Copyright-Based Industries,*[2] the methods developed in the course of the above studies were also used in the present work.

In particular, evaluation of the role of the core, interdependent, partial and non-dedicated support industries were used in the present research.

[2] WIPO, Geneva, 2003.

To analyze the GDP, as this indicator is present in the larger sectors of the national economy and types of businesses taken as a whole (without being broken down into classes and subclasses), we used the method of recalculating output figures for individual classes and sub-industries taking account of the actual economic efficiency of manufacturing different kinds of products and services and the wider measures (for corresponding industries) of the weight of material and equal costs, which is similar to interim consumption in GDP calculations in 2004. This is why it was not possible to provide detailed data on the generation of GDP for all types, classes and sub-classes of economic activities.

Considering the fact that it was impossible to analyze the dynamics of a whole set of indicators needed to calculate the specific weight values of the economic significance of certain industries, activities and types of production, many of which were not covered by official statistics, it was decided and agreed with WIPO to use the specific weight values of the economic significance of certain industries, activities and production types elaborated in the course of similar research carried out in other countries. The most complete description of the above-mentioned specific weight values was provided in the Singapore study. That is why these values were taken as a basis for calculating the share of turnover, employment and GDP generated by the industries and sectors of the economy related to copyright to a variable degree.

Instead of the factors given in the table, the values of the factors used underwent significant changes, namely:

Clothing manufacture	0.40
Footwear manufacture	0.40
Textiles	0.40
Wholesale and retail of textiles and other associated goods	0.40
Communications	5.80

other factors adjusted to Russian conditions were used:

Clothing manufacture	4.50
Footwear manufacture	4.50
Textiles	4.50
Wholesale and retail of textiles and other associated goods	4.50
Communications	40.60

Substantiation for these values is provided further in this publication.

Section II. Evaluation of the Influence of Copyright on the Russian Economy

With the aim of ensuring transparency of the groupings used in this survey and also to ascertain their compliance with those used in the surveys conducted under the WIPO methodology, tables of comparisons are provided on pages 310 to 312.

The economic analysis carried out within the framework of the present study and aimed at evaluating the actual contribution of each group of copyright-based industries, allows us to draw certain conclusions.

In 2004, the volume of production, sales of products and services in this group of industries in Russia was equal to 8.66 per cent of the total volume in the economy as a whole. At the same time the total share of the copyright-based industries in Russia was 7.03 per cent.

The contribution of the core copyright industries was taken to constitute 100 per cent, since the industries in this group cannot function without copyrighted material. This is why, in relation to statistical data on employment, turnover and GDP generation, the correlation factors 1.0 (100 per cent) were used.

The copyright-based contribution in the second group of copyright-based industries (interdependent industries) amounted to a smaller percentage as for the primary group, because these industries are not completely dependent on copyright. The contribution of the second group could not be taken to be 100 per cent, so correction factors ranging from 20 per cent to 36 per cent were applied.

In the third group of industries, a relatively small part of the output was related to copyrighted materials, and they typically included a significant service component. This is why to calculate the influence of copyright on the data evaluation in this group of industries we used correction factors ranging from 0.40 per cent to 42 per cent depending on the degree of the influence of copyright on production and sales.

Copyright in the fourth group of industries (non-dedicated support industries) affects only a small part of their business. However, the total volume of goods and services in this sector can be quite large and, even considering the correction factors applied, this group of industries makes a significant contribution to economic development based on copyright. At the same time, the wholesale and retail trade, not being directly connected with copyright, significantly affects the promotion of products providing access to copyright materials. It is for this reason that for the purposes of the present research we chose only those sectors of the wholesale and retail trade which ensure the promotion of products in core and interdependent industries to the end user.

2.1. General Evaluation of the Main Indicators of the Russian Economy

2.1.1. Principal Indicators Showing Economic Development in the Russian Federation

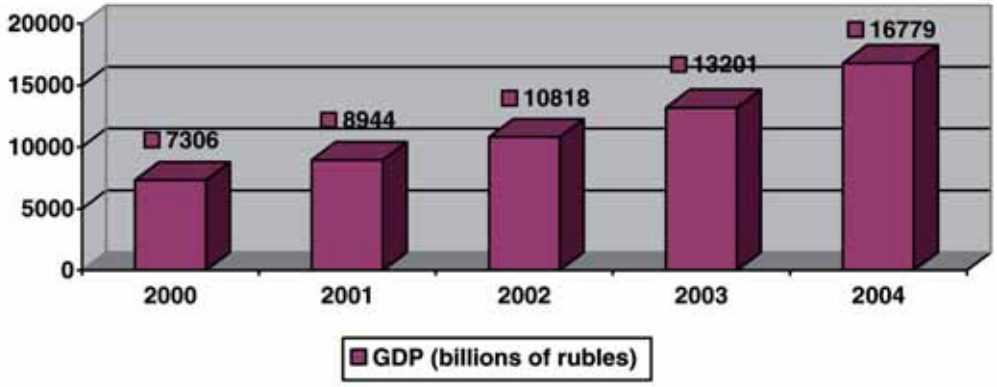
The level of economic development of a country can often be generalized on the basis of a few principal indicators. For the purposes of the present research the following indicators were included in the analysis:

- average annual number of workers employed in the economy (in thousands of workers);
- total GDP (billions of rubles);
- turnover of foreign trade with countries outside the CIS (billions of US dollars);
- turnover of foreign trade with CIS countries (billions of US dollars).

2.1.2. General Outline of the Growth of GDP

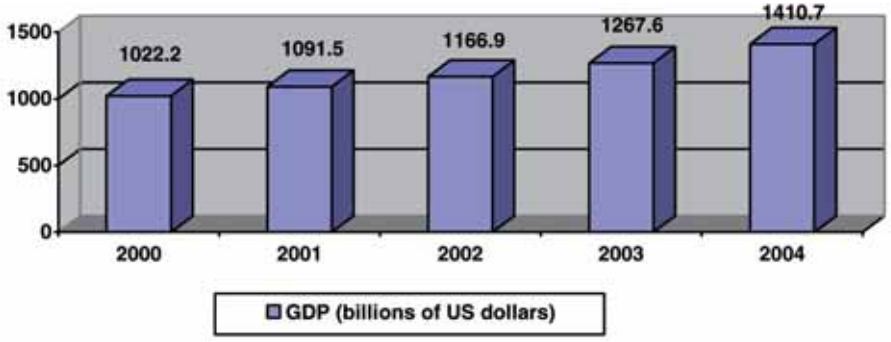
In 2004, national GDP amounted to 16,779 billion rubles (1,410.7 billion US dollars) and exceeded the level of 2000 by practically 2.3 times.

Figure 2.1.2.1. Growth in GDP in the Russian Federation in 2000-2004 (billions of rubles)



However, the comparison with the GDP calculated in US dollars showed that the increase of this indicator, adjusted for the purchasing power of the ruble to the US dollar, accounted for no more than 40 per cent.

Figure 2.1.2.2. Growth in GDP in the Russian Federation in 2000-2004 (billions of US dollars)



The industry composition of GDP was calculated according to types of business, which corresponds to the international classification.

From 2002 to 2005 the volume of GDP practically doubled and covered such industries as manufacturing, construction, transport and communications, education, provision of other utilities, social services and some others.

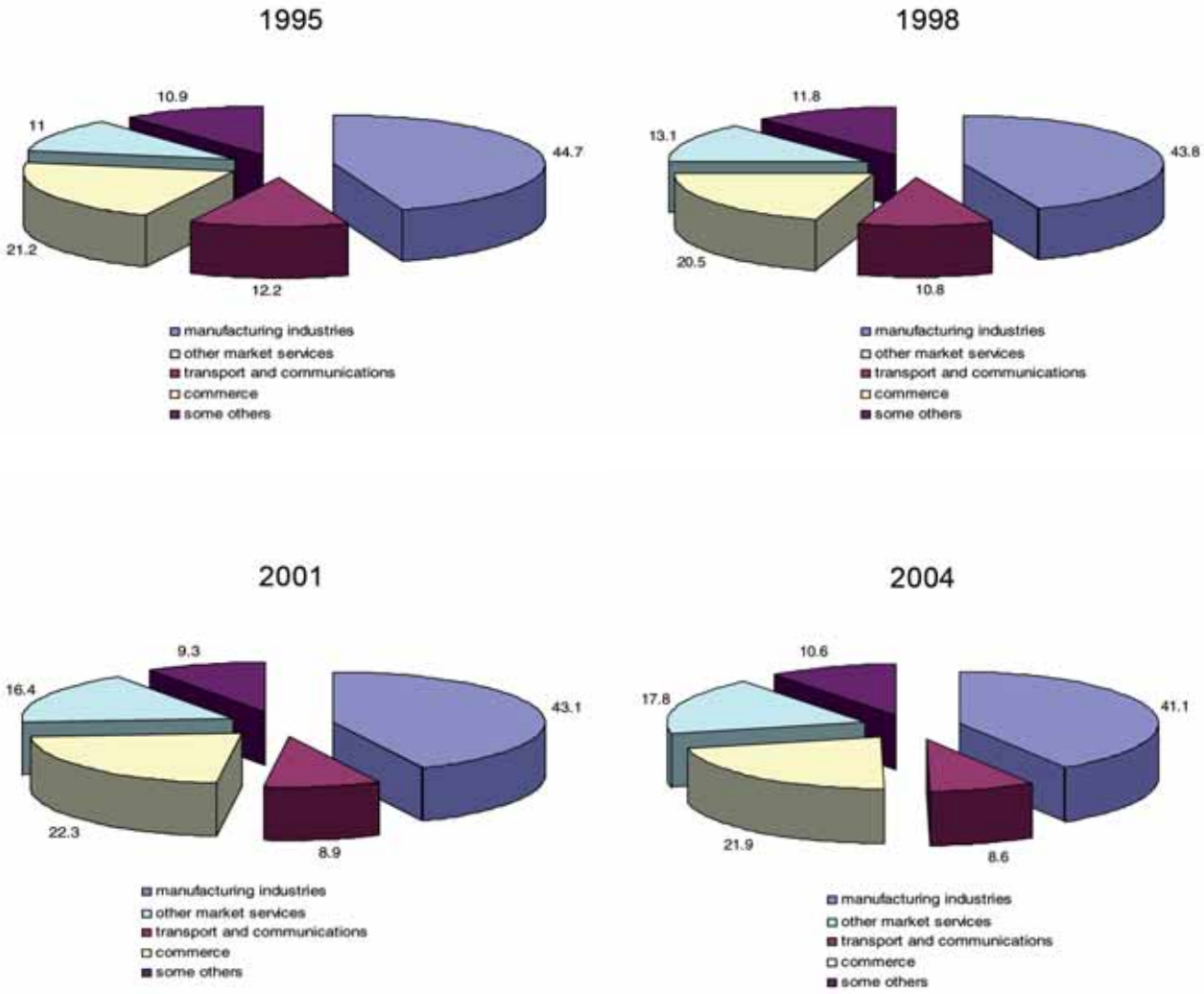
Until now, statistical observation has not classified such industries as a subject for individual consideration; however, the trends revealed suggested that it was other, non-traditional industries that have emerged as a result of introducing market mechanisms and general intellectualization of economic activities and which will henceforth make a major contribution to the development of the Russian economy.

In comparison with 1995, the contribution of services to GDP grew from 51.6 per cent to 52.4 per cent in 2004, with the share of the manufacturing industries equaling 26 per cent in 1995 and 24.9 per cent in 2004.

The analysis of the changes having taken place in the structure of GDP since 2000 is illustrated in figure 2.1.2.2. The structure of GDP was calculated as a percentage of the amount of GDP in basic prices, i.e. without taking into account indirectly measurable intermediary financial services.

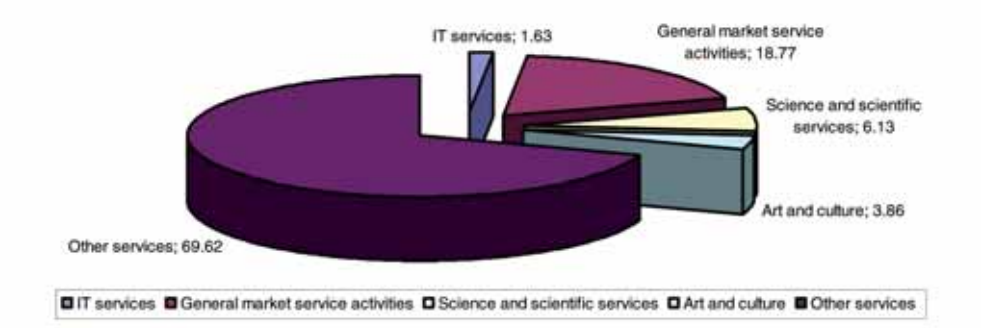
The figure below shows that the share of manufactured products shrank from 44.7 per cent to 41 per cent; transport and communications from 12.2 per cent to 8.6 per cent; non-market services from 10.9 per cent to 10.6 per cent. Against this background the share of other market services gradually increased from 10.9 per cent in 1995 to 17.8 per cent in 2004.

Figure 2.1.2.3. Change in the Structure of GDP in Basic Prices (without intermediate financial services) by Industry (%) (1995, 1998, 2001 and 2004)



The main contribution to GDP in 2004 was made by the service industries, especially trade and catering.

Figure 2.1.2.4. Contribution of GVA in the Other Market Services Sector in 2004 (% of total)



In figure 2.1.2.4 we can see that, in 2004, in the total volume of other market services the following acquired great significance: general commercial services, science and science services, art and culture and IT services.

2.1.3. Analysis of Employment in Russia

The average annual number of workers in the economy as a whole changed little in the period between 2000 and 2004. The actual increase in the average annual number of employees did not exceed one per cent.

Thus, the average annual number of workers in the manufacturing industry and agriculture was steadily decreasing; in science and science services it remained practically unchanged (amounting to 0.8 per cent for the whole period), and in the other services industries it was increasing. The most noticeable growth was observed in trade and catering (+20.32 per cent), art and culture (+12.94 per cent) and communications (+5.8 per cent).

Figure 2.1.3.1 contains the data on the structure of the average annual number of workers in the Russian economy in 2004, with amendments made in 2005 in the course of conversion to the new system of statistics, namely by types of business activities.

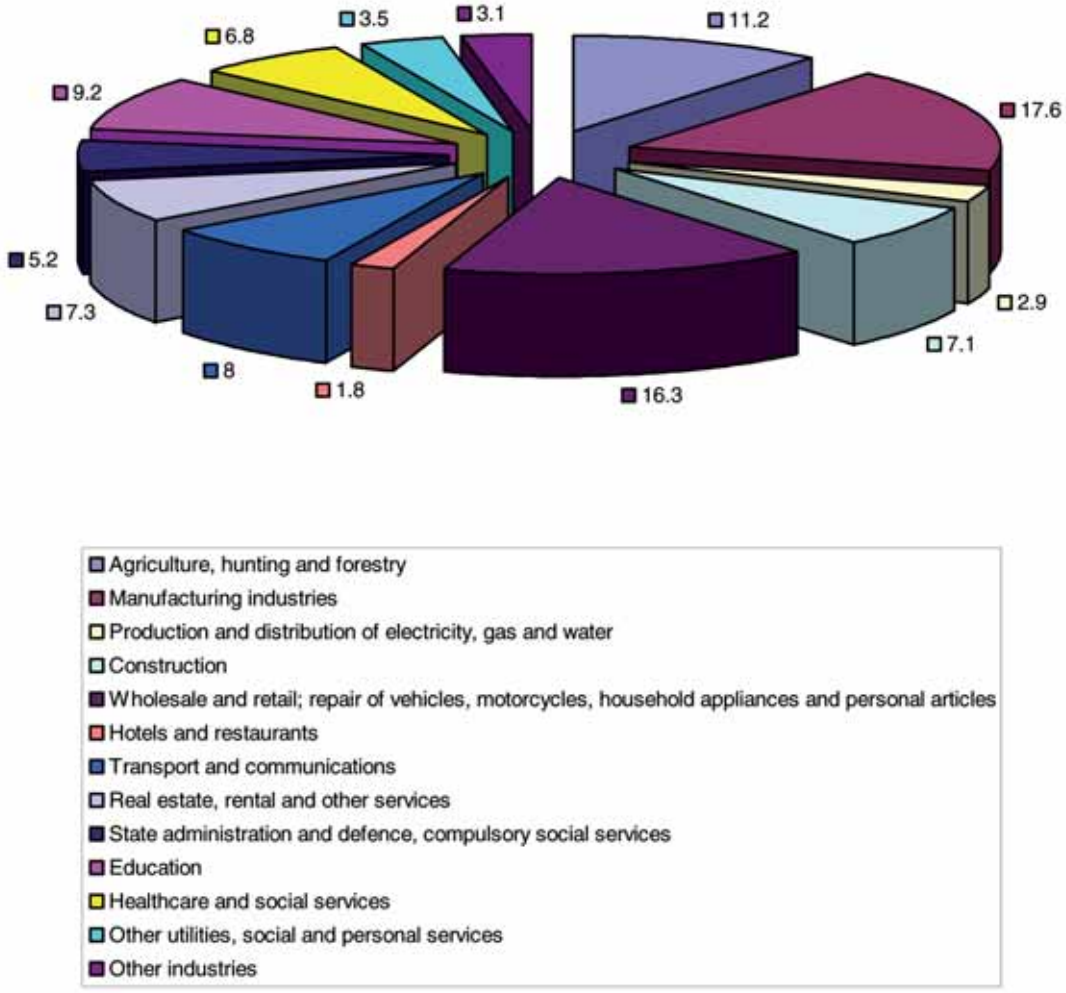
The structure of employment is projected as a pie chart in figure 2.1.3.1. It is evident that the following traditionally labor-intensive industries predominate: agriculture, hunting and forestry (11.2 per cent): the manufacturing industries (17.6 per cent); the wholesale and retail trade (16.3 per cent).

A less significant share, but still within the range of 6 to 10 per cent, includes such industries as construction, transport and communications, real estate operations, education, healthcare and provision of other utilities, social and personal services.

In the employment structure by branch of the economy, art and culture in 2004 came to 2 per cent; science and science services 1.8 per cent; education more than 9 per cent. In 2000 the share of these sectors was 1.7 per cent; 1.86 per cent and 9.1 per cent respectively.

On the basis of the data provided, it can be inferred that in the period from 2000 to 2004 there was a certain progression (+ 0.3 per cent) in the growth of employment in art and culture, against a stable share for science and science services and education.

Figure 2.1.3.1. Employment Structure in 2004



2.1.4. Analysis of the Number of Enterprises and Organizations in the Russian Economy

An important aspect characterizing general changes in the economic situation and structural trends in the economy was the number of enterprises and organizations, as well as changes in their composition.

From 1996 to 2004 the total number of large and medium-sized enterprises increased significantly by more than 1.8 times.

Where a leap in growth took place (by between 1.9 and 2.7 times), the number of enterprises and organizations grew sharply in such sectors as transport, wholesale and retail, education, art and culture, and IT services. At the same time the share of these industries in the total number of enterprises remained the same or grew only slightly.

The industry in which major growth in the number of enterprises took place (by 93 times) was communications, the share of this sector having increased from 0.009 per cent to 0.5 per cent.

As a result, in 2004 the large and medium-sized enterprise sector developed and its make-up is shown in figure 2.1.4.1.

However, as a result of market reforms in Russia, another important sector of the economy was formed and showed significant growth year on year: small enterprises. These small enterprises not only led to an increase in the total number of enterprises at the time of this study they accounted for no less than one quarter of the total but also exerted a noticeable influence upon the industry composition of enterprises and organizations.

The above data are illustrated in figure 2.1.4.2. Changes in the number of small enterprises and their industrial affiliation were not as dramatic as those for large and medium-sized enterprises. The number of small enterprises in science and education fell noticeably, i.e. more than double; in the manufacturing industry their number fell slightly (only by 0.03 per cent); in the other industries their number grew: by 1.23 times in wholesale and retail ; 1.43 times in art and culture and IT services; 1.5 to 1.9 times in transport, agriculture and communications. Maximum growth in the number of small enterprises was observed in communications.

Figure 2.1.4.1. Number of Large and Medium-Sized Enterprises by Sector in 1996 and 2004 (% of total)

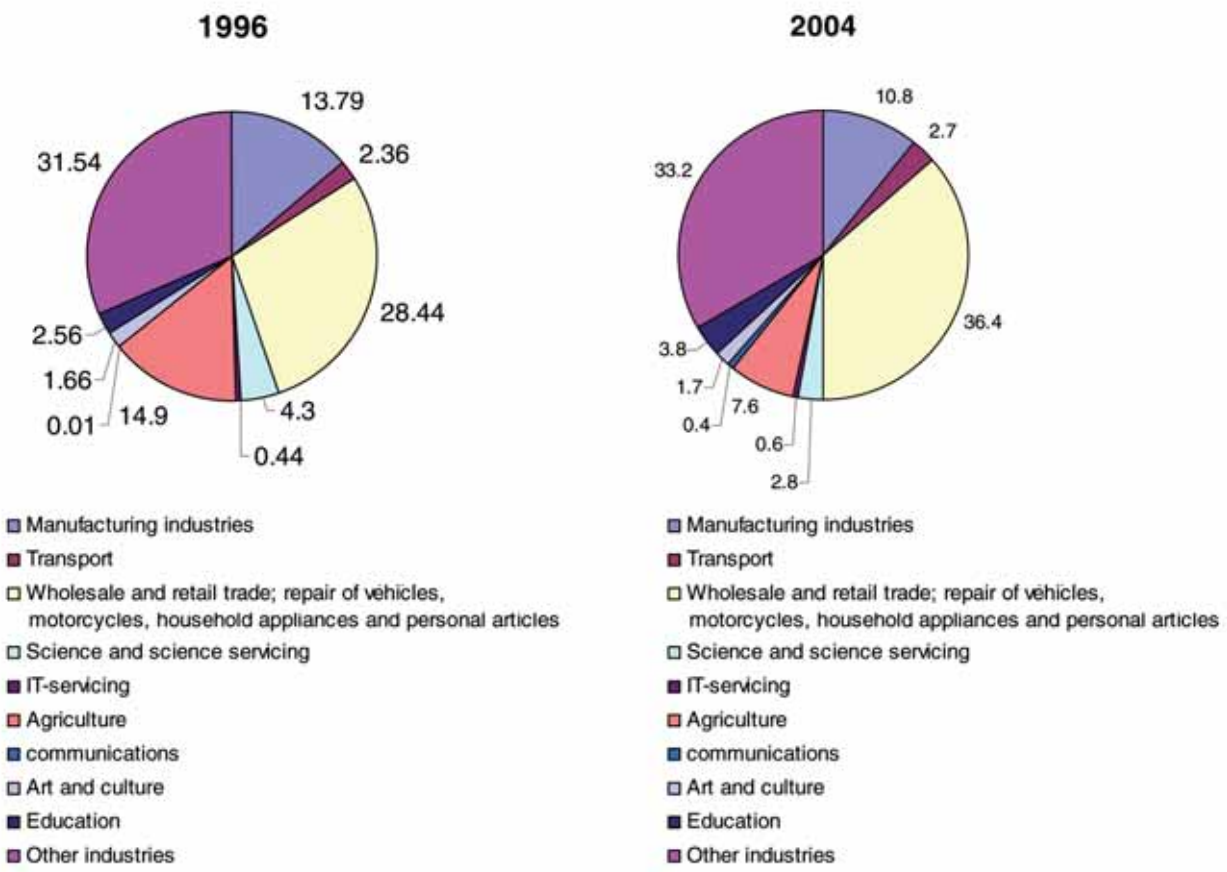
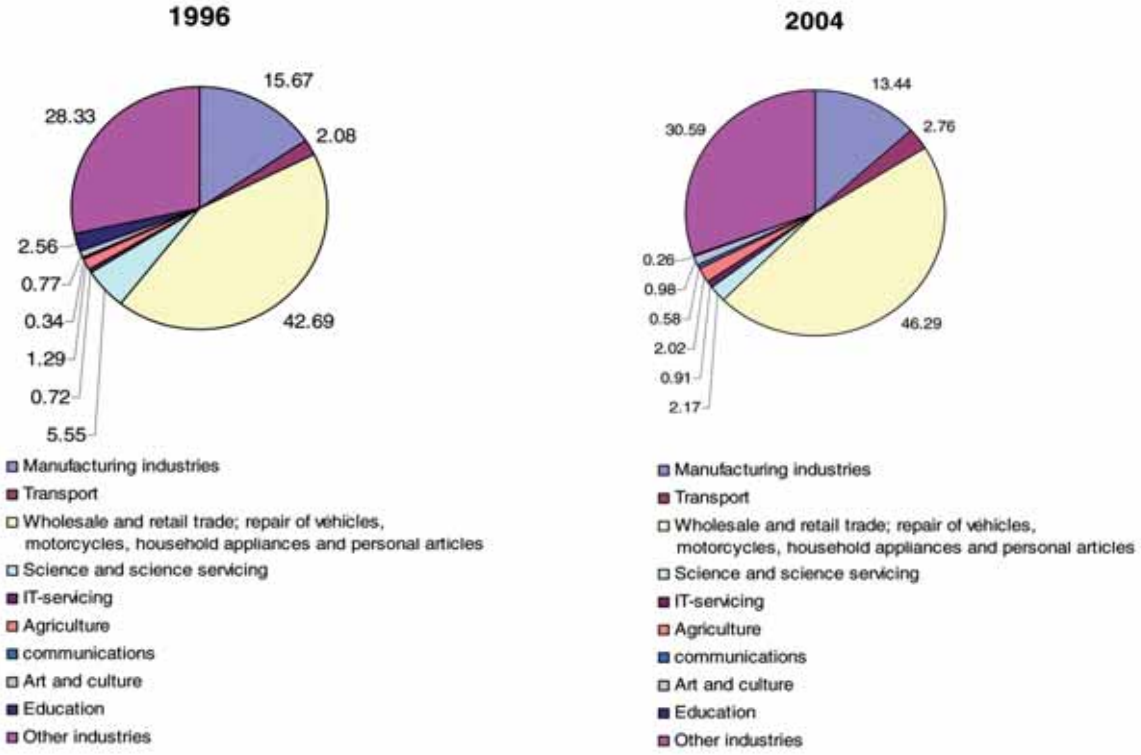


Figure 2.1.4.2. Number of Small Enterprises by Sector in 1996 and 2004 (% of total)



Thus, changes in the number of enterprises and organizations also demonstrated the increasing importance of branches based on the exploitation of materials protected by copyright and related rights.

2.1.5. Analysis of Household Consumer Spending

Of no small importance for the research was the study of household expenditures. Data on the structure of such expenditures obtained by Rosstat for 2000-2004 as a result of random surveys are presented in table 2.1.5.1 and in figure 2.1.5.1.

Table 2.1.5.1. Structure of Household Consumer Spending (% of total)

Indicator	*2000*	*2001*	*2002*	*2003*	*2004*
Total consumer expenditure	100	100	100	100	100
including:					
Purchase of foodstuffs for home consumption	47.6	45.9	41.7	37.7	36.0
Purchase of radios and televisions, other goods for leisure and entertainment	3.2	3.2	3.4	4.4	4.6
Purchase of vehicles	2.8	3.6	4.6	4.3	5.1
Expenditure on cultural activities	0.5	1.0	1.1	1.4	1.7
Expenditure on communications	1.2	1.2	1.5	1.9	2.2
Expenditure on education	1.2	1.4	1.7	1.6	2.0

The data shows that from 2000 to 2004 there was a significant decrease in household spending on food products leading, against the general growth in real earnings, to the growth in direct or indirect expenditure connected with copyright and related rights.

It can be seen that these expenditures increased substantially between 2000 and 2004.

Figure 2.1.5.1. Breakdown of Household Spending in 2000 and 2004 (% of total)

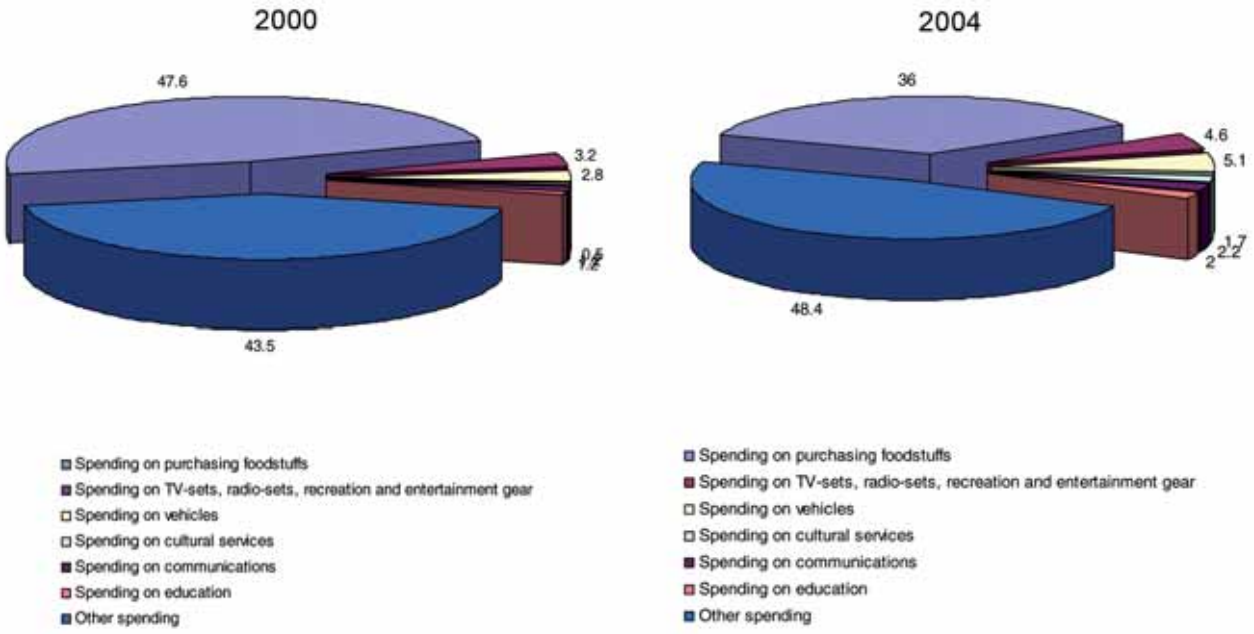


Table 2.1.5.2. Breakdown of Actual Household Consumption of Individual Types of Goods and Services in 2002 (at 2004 prices, billions of units of national currency)

Type of consumption	Russia		Germany		Finland		France		UK		Sweden	
	total	% of total	total	% of total	Total	% of total	total	% of total	total	% of total	total	% of total
Actual household consumption	6,404.3	***100***	1,479.6	***100***	90.8	***100***	1,057.1	***100***	819.3	***100***	1,601.9	***100***
Foodstuffs and non-alcoholic beverages	1,700.5	***26.5***	143.1	***9.7***	8.8	***9.7***	122.5	***11.6***	61.2	***7.5***	138.9	***8.7***
Alcohol, tobacco, drugs	463.1	***7.2***	47.2	***3.2***	4.0	***4.4***	28.5	***2.7***	26.0	***3.2***	45.7	***2.9***
Clothing and footwear	679.8	***10.6***	71.7	***4.8***	3.1	***3.4***	39.3	***3.7***	39.3	***4.8***	62.7	***3.9***
Household goods and electric appliances	285.6	***4.5***	79.2	***5.4***	3.3	***3.6***	51.2	***4.8***	40.0	***4.9***	55.7	***3.5***
Transport	581.1	***9.1***	169.5	***11.4***	8.4	***9.3***	125.1	***11.8***	94.9	***11.6***	143.1	***8.9***
Communications	196.9	***3.1***	33.1	***2.2***	2.3	***2.5***	19.6	***1.9***	14.7	***1.8***	36.1	***2.3***
Leisure and culture	305.4	***4.8***	119.1	***8.1***	8.8	***9.7***	86.3	***8.2***	86.6	***10.6***	161.3	***10.1***
Education	479.7	***7.5***	83.7	***5.7***	7.6	***8.4***	73.2	***6.9***	45.7	***5.6***	160.4	***10.0***
Restaurants and hotels	146.8	***2.3***	55.8	***3.8***	4.4	***4.8***	64.4	***6.1***	76.7	***9.4***	56.4	***3.5***
Other expenditures		***24.4***		***45.7***		***44.2***		***42.3***		***40.6***		***46.2***

Expenditures on consumer durables (furniture, carpets, housing), clothing, textiles and footwear, as well as bank deposits were included in "other expenditures."

It is clear from this table that expenditure on food products in the Russian Federation was practically two and a half times higher than similar indicators of specific weight of similar expenditure in other countries. As a result, the structure of consumer expenditure of households in Russia differed materially from other relevant data. In the above table the section "other expenditures" includes the following:

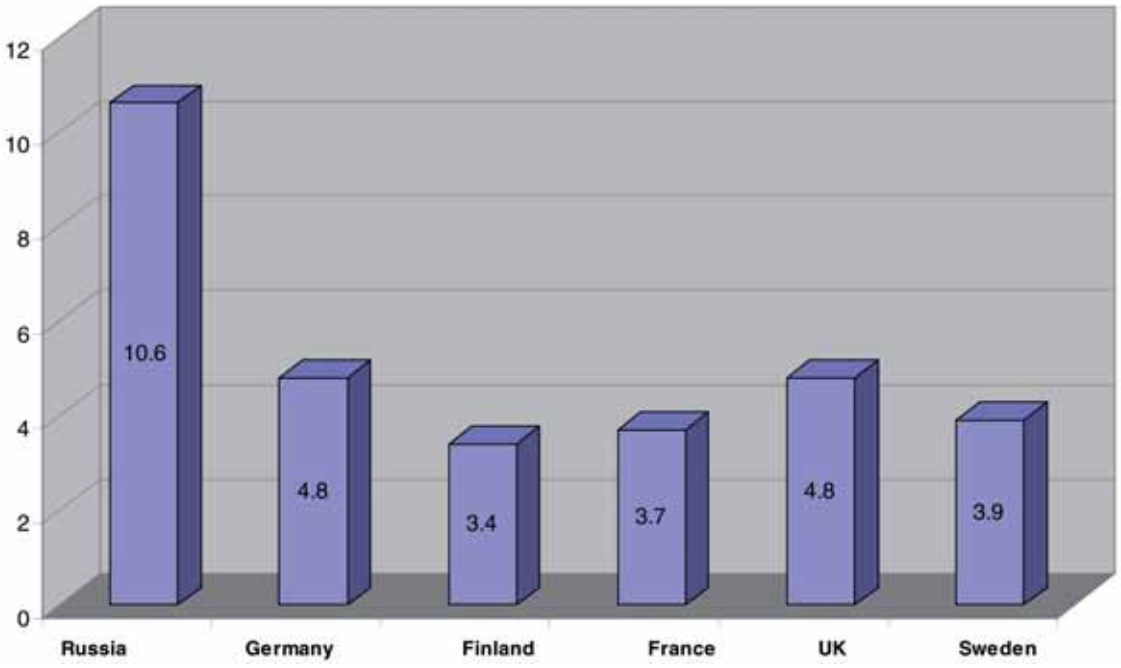
- housing and utility services, water, electricity, other types of fuel;
- spending on healthcare;
- other purchases, including net purchases abroad.

Figure 2.1.5.2. shows the share of spending on clothing and footwear in the total expenditure of households in Russia (10.8 per cent) compared with other countries (Finland – 3.4 per cent; France – 3.7 per cent, Germany – 4.8 per cent, Sweden – 3.9 per cent and the UK– 4.8 per cent). Thus, the share of spending on clothing and footwear in Russia equaled 225 per cent of the European average (4.8 per cent).

Comparing the data shows that the weight of spending on clothing and footwear was practically double that of similar indicators in the developed European countries. It is apparent that Russian conditions result in higher prices for this particular class of commodity which, in turn, results in a higher contribution to GDP from the industries manufacturing and selling these commodities.

Taking account of this, the correction factor establishing the share of a particular industry output in the generation of GDP used in the calculations should be adjusted for the industries related to the manufacture and sale of clothing, footwear and other similar commodities, for example, textiles. According to the WIPO methodology the correction factor used is equal to 0.40. After adjustment by 225 percent, this factor should amount to 0.90.

Figure 2.1.5.2. Comparison of the Share of Expenditure on Clothing and Footwear with Total Household Expenditure (%)



However, this adjustment seems to be insufficient, because the comparison was made on the basis of final household expenditure in national currencies, without taking into consideration their purchasing power parity.

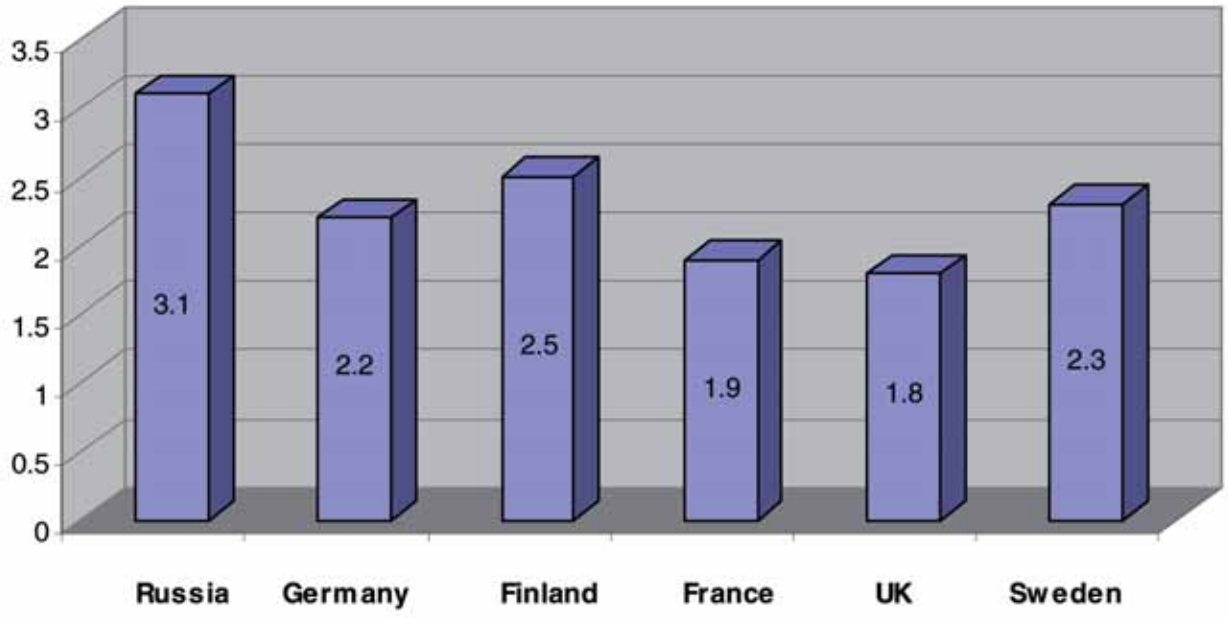
Based on the purchasing power parity ratio of the ruble and other national currencies to the US dollar, we can define the following correlation between the total volumes of GDP: Finland – 106; France – 104; Germany – 104; Russia – 22; the UK – 105; the US – 100.

Thus we can assume that the total spending by household in Russia was equal to approximately one-fifth of the corresponding indicators for European countries. This means that to be able to compare the data, the GDP correction factor needs to be adjusted upwards by about five times. As a result of this adjustment the correction factor magnitude will be 4.5. This value more accurately reflects the actual contribution of a given industry to GDP and the influence of the price factors expressed in excess of the profitability standard normal for European countries in industries related to manufacture and sales of clothing, footwear and textiles.

Similar differences were demonstrated in spending on communications services.
On average, the share of spending on communications services in Russia exceeded the average European indicator by 1.4 times. This cannot be explained by the high volume of services provided: the causal factor was also the higher rates of profitability in this industry in Russia and, as a consequence, higher average prices for its services and a higher contribution to GDP.

In a similar manner it was possible to recalculate the ratio reflecting the communication industry's contribution to GDP as follows: 5.8 * 1.4 * 5 = 40.6.

Figure 2.1.5.3. Share of Expenditure on Communications Services in Total Household Consumption (%)



When applied to Russian conditions, the following adjusted correction factors should be used:

Clothing manufacture	4.50
Footwear manufacture	4.50
Manufacture of textiles and other goods	4.50
Wholesale and retail in clothing, footwear, textiles and other similar goods	4.50
Communications	40.60

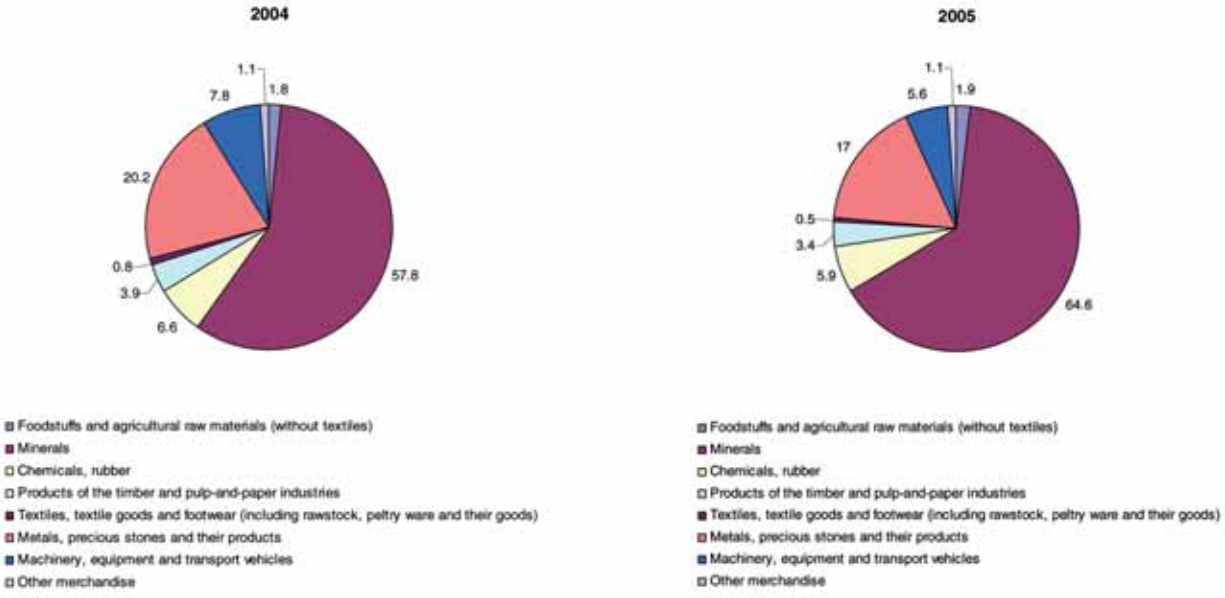
2.1.6. Analysis of Foreign Trade Operations in Russia

Data on the indicators characterizing foreign trade for the period from 1995 to 2005 are given in figure 2.1.6.1 and show not only substantial changes in the volume of exports and imports, but also considerable changes to the export and import structure.

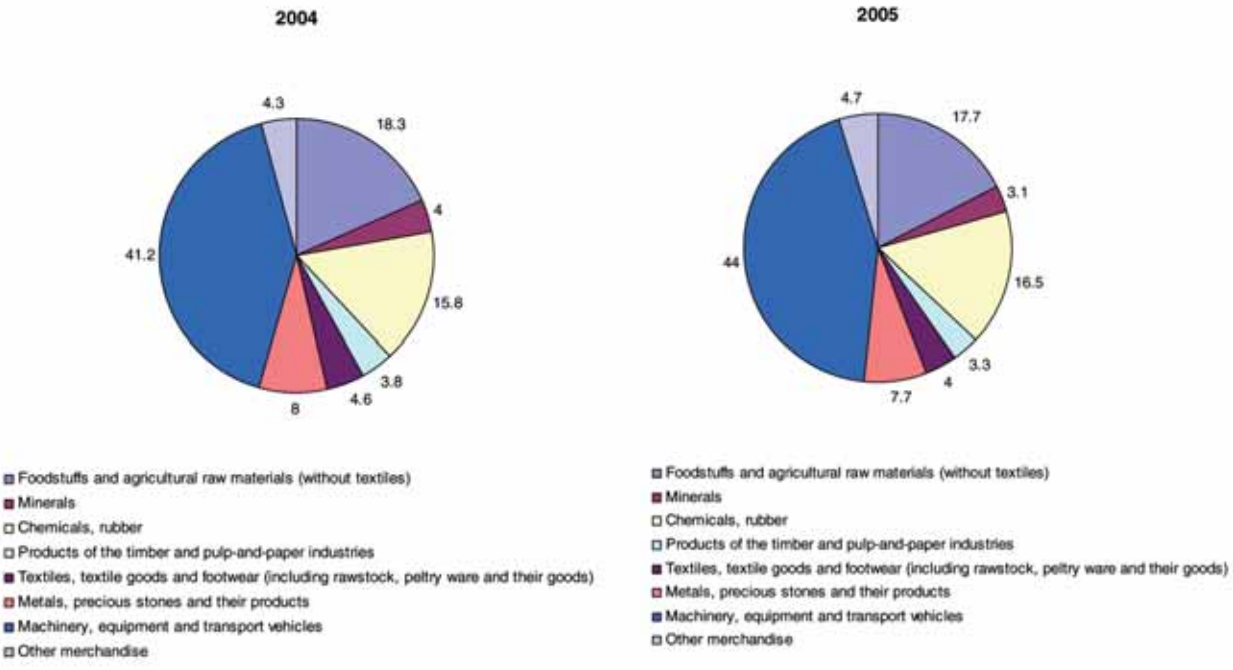
As can be seen from the data, Russian exports continue to be oriented to the export of minerals, metals, precious stones and articles made from precious stones. Imports consist of such commodities as machines and equipment including vehicles, chemical products, as well as food products and agricultural goods.

Exports

Figure 2.1.6.1. Exports and Imports for 2004 and 2005 (%)



Imports



2.2. Overall Score of the Copyright-Based Industries in the Russian Economy

2.2.1. Major Indicators Characterizing the Contribution of the Copyright and Related Rights-Based Industries to the Russian Economy

Table 2.2.1.1 demonstrates that the copyright contribution to the Russian economy by major indicators was as follows:

- turnover - 8.66 per cent;
- employment (average annual number of workers in the economy) - 7.3 per cent;
- GDP - 6.06 per cent;
- foreign trade turnover - 7.21 per cent.

Table 2.2.1.1. Contribution of Copyright to the Russian Economy in 2004

	Turnover		Employment		GDP		Foreign trade turnover	
	Billion rubles	%	Thousand people	%	Billion rubles	%	Million US dollars	%
Overall indicator	**29,201.30**	**100**	**67,134**	**100**	**16,778.8**	**100**	**280 600**	**100**
including:								
Core copyright and related rights-based industries	821.25	32.48	2,882.43	58.82	400.11	39.38	3,450.20	17.06
Interdependent copyright industries	419.20	16.58	502.98	10.26	127.39	12.54	14,619.23	72.27
Partial copyright industries	137.67	5.44	376.31	7.68	45.43	4.47	2,158.72	10.67
Non-dedicated support industries	1,150.58	45.50	1,138.53	23.23	443.13	43.61		0.00
Grand Total	**2,528.70**	**8.66**	**4,900.27**	**7.30**	**1,016.1**	**6.06**	**20,228.15**	**7.21**

Table 2.2.1.1 illustrates the contribution of some groups identified according to the WIPO methodology. Figures 2.2.1.1-2.2.1.4 describe the composition of the contribution of some sub-industries related to copyright, by each of the overall indicators given in Table 2.2.1.1.

The total turnover of the Russian copyright-based industries totaled 2,528.70 billion rubles (at the rate of 27.75 rubles per one US dollar[3] = 73.99 billion US dollars) comprising 8.66 per cent of the turnover of all industries in Russia.

The contribution of the copyright industries to the Russian economy is comparable with the contribution of many other major industries.
Figures 2.2.1.1-2.2.1.4 show the comparisons with other industries.

[3] The official exchange rate of US dollar/ruble is given at the end of 2004: Russia in Figures: Krat.Stat. Sb./Rosstat-M., 2006, - 462 S., p.455.

Figure 2.2.1.1. Turnover of Some Industries in 2004

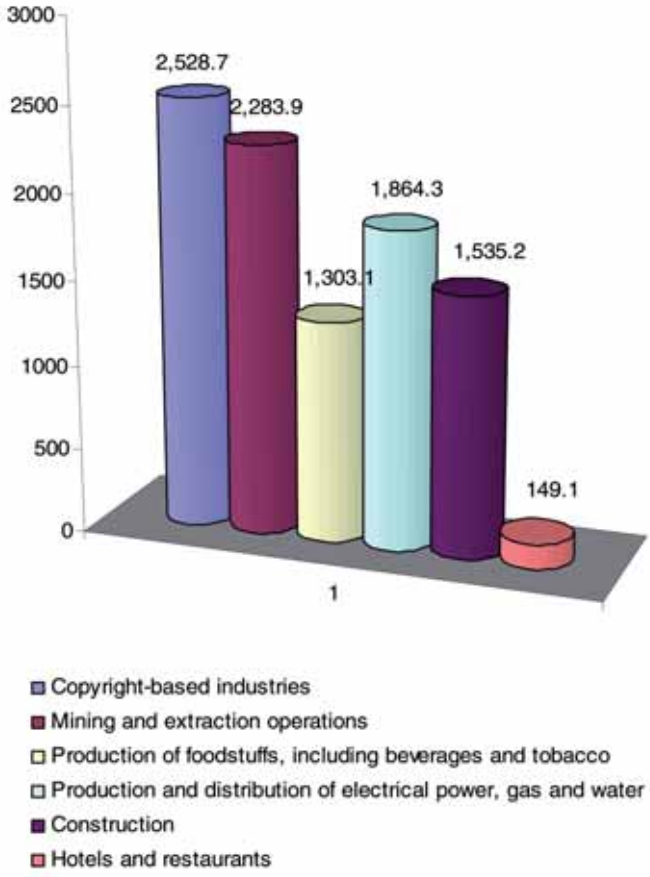
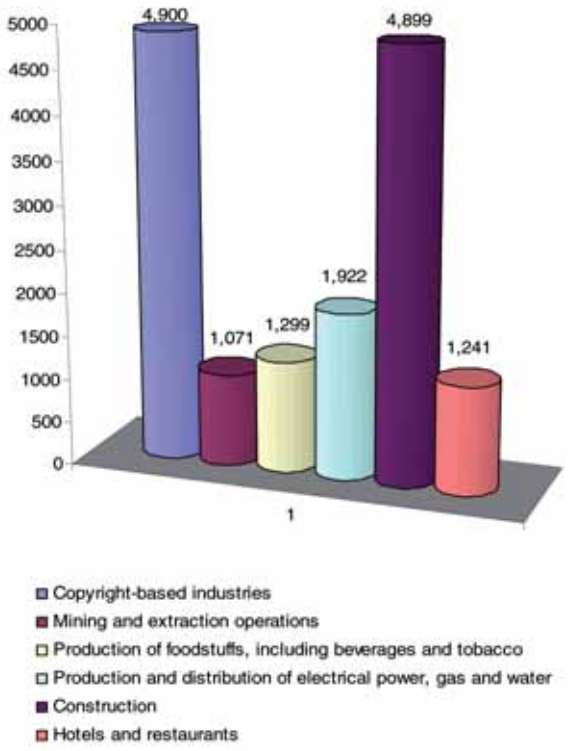


Figure 2.2.1.2 shows that the turnover of such industries as mining operations, production of foodstuffs (including beverages and tobacco), production and distribution of electric power, gas and water, construction, hotels and restaurants contribute less, and in some cases substantially less, than the copyright-based industries. Mining operations, as well as the production and distribution of electrical power, gas and water were shown to be comparable by the volume of turnover. The wholesale and retail and manufacturing sectors were the only ones with higher indicators.

Figure 2.2.1.2. Employment Levels in Some Industries in 2004



Regarding the number of workers, the copyright-based industries were comparable only with mining operations. Even such a labor-intensive industry as the production and distribution of electrical power, gas and water did not account for the same high level of employment.

Figure 2.2.1.3. Volume of GDP in Some Industries in 2004

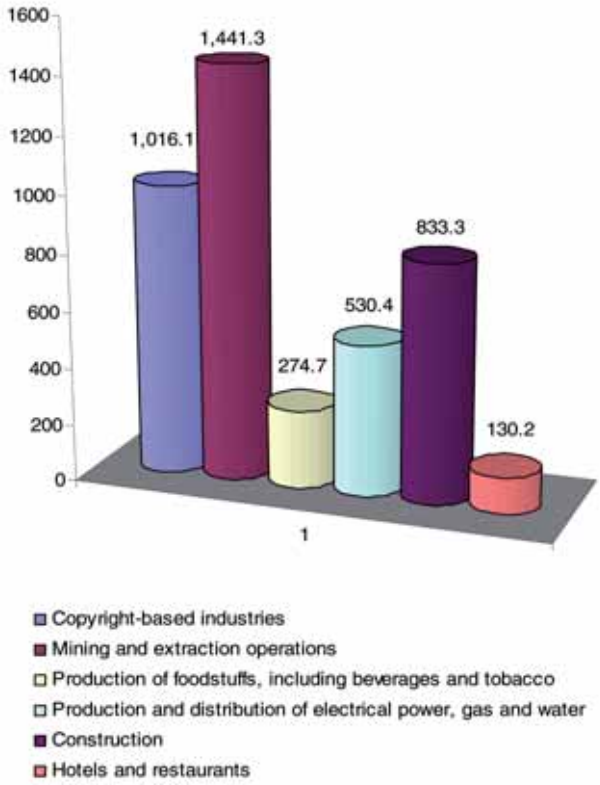
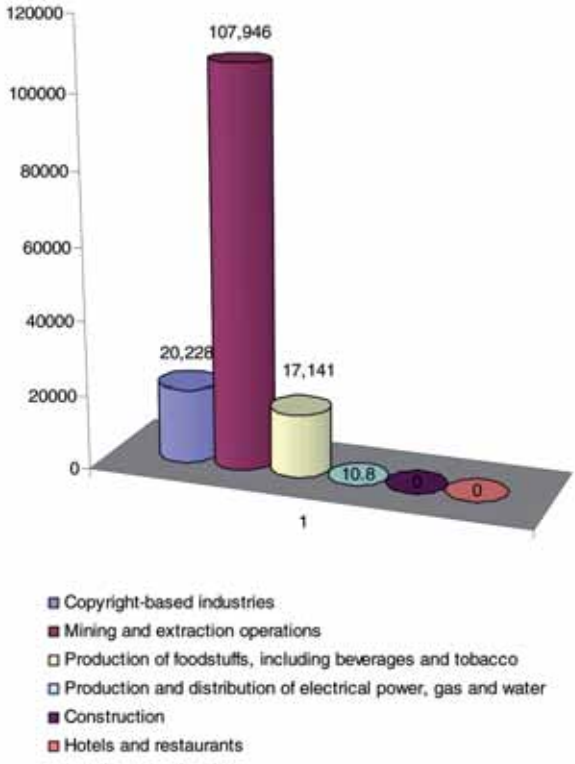


Figure 2.2.1.3 reveals that mining operations alone made a bigger contribution to GDP than all the other copyright-based industries. This meant that close attention to these industries, protection of authors and rights holders and greater awareness by the population of IP issues were capable of providing for further growth in their contribution to GDP.

As shown in figure 2.2.1.4, the mining industry and the production of foodstuffs and electric power provided the advanced and most important contribution to foreign trade. This phenomenon can be explained not only by the low level of contribution to foreign trade of the copyright industries, but primarily by the country's priorities in the export of minerals.

Figure 2.2.1.4. Foreign Trade Turnover in Some Industries in 2004

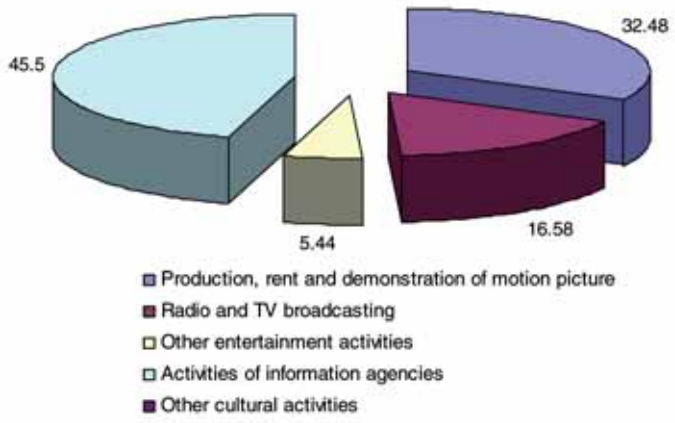


Thus the comparison with some leading industries (sub-industries) vividly demonstrated the importance of copyright to the Russian economy. Bearing in mind the trends in the creation and development of certain parameters of the Russian economy identified earlier, we concluded that there was a positive trend towards a further increase in the importance of copyright to the Russian economy.

2.2.2. Contribution of the Copyright-Based Industries in 2004

The total contribution to the turnover of the Russian economy added more than 2,5 trillion rubles, providing a share of more than 8.6 per cent in total turnover. Figure 2.2.2.1 demonstrates the impact of the industries and types of activity dependent on copyright and related rights.

Figure 2.2.2.1. Contribution of the Copyright-Based Industries to Total Turnover in 2004 (% of total)



In figure 2.2.2.1 the major share (more than 45 per cent) of the turnover of the copyright and related rights industries was provided by the core copyright industries. A significant role was played by the interdependent copyright industries which contributed around 32.5 per cent.

The non-dedicated support industries, which provided general support to business and product promotion, contributed about 17 per cent. A significant part (about 5 per cent) was accounted for by partial copyright industries.

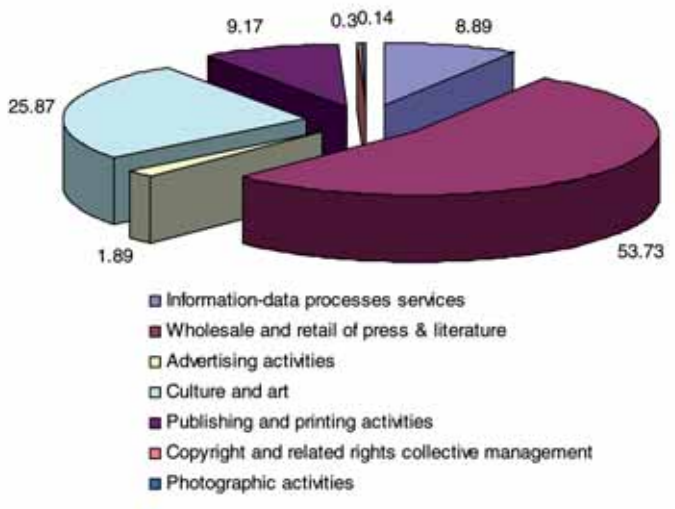
2.2.2.1. Contribution of the Core Copyright Industries in 2004

The total volume of turnover of the core industries was one billion rubles accounting for 821.3 billion rubles, or almost 45 per cent of overall turnover related to copyright in all branches of the economy.

The main role was taken by such industries as the wholesale and retail of press and literature and other printed matter (53.73 per cent).

Culture and art contributed 25.87 per cent (212.5 billion rubles); publishing and printing – 9.17 per cent; information and data processing services – 8.89 per cent. The composition of the core industries is presented in figure 2.2.2.1.1.

Figure 2.2.2.1.1. Composition of the Core Copyright Industry Turnover in 2004



Thus the contribution of the core industries comprised almost half of the turnover of all copyright-based industries. Turnover indicators of the core industries for determining the copyright contribution to the national economy were applied with a correction factor of 100. This is why statistical data on the turnover of each sub-industry were included in full without any correction in the turnover indicators for the main group of core industries.

Figure 2.2.2.1.2. shows the composition of the culture and art sector. TV and radio broadcasting with a share of more than 62 per cent (132.6 billion rubles) took the lead in the total volume of this sector's turnover. The share for theatrical and other entertainment activities was 16,66 per cent (35.4 billion rubles).

Figure 2.2.2.1.2. Turnover of the Culture and Art Sector in 2004

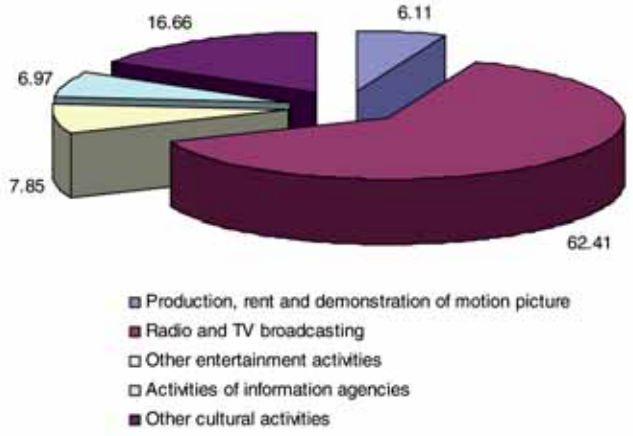


Table 2.2.2.1.3 shows the development of cultural agencies from 1995 to 2004. This period was characterized by stable growth in the number of professional theaters and museums.
There was a continuous downturn in the total number of libraries and the reduction in their stock.

Table 2.2.2.1.3. Development of Culture and Leisure Agencies in 1995-2004

Indicator	*1995*	*2000*	*2001*	*2002*	*2003*	*2004*
Total number of libraries ('000)	54.4	51.2	51.2	51.0	50.6	49.9
Total library stock ('000,000) copies	1,104	1,027	1,022	1,014	1,007	988
Total number of professional theaters	470	547	556	571	568	579
Total number of museums	1,725	2,047	2,113	2,189	2,229	2,269
Number of cultural and leisure agencies ('000)	59.9	54.8	54.8	54.2	53.6	52.9

Major Russian libraries, i.e. the Russian Federal Library (RFL), whose total volume of stock goes beyond 44 million copies of publications, accounted for 4.5 per cent of all library stock.

It should be noted that despite market reforms, the use of libraries is free, which accounted for the high volume of budget funding for this sector and other similar institutions (including children's theater), somewhat understating the sector's contribution to the total volume of the sector.

Turnover volume in IT services accounted for a total of 73 billion rubles.

The major share in this was contributed by such activities as:

- software development and consultancy (45.29 per cent or 31.5 billion rubles);
- other activities using IT (21.96 per cent or 16.1 billion rubles);
- activities in the development and use of databases and information (18.18 per cent or 13.5 billion rubles).

As can be seen from the data, the leading role in the IT sector was that of software and consultancy. This was forecast to actively develop as well, as there was a steady growth in demand for such services caused by the increase in the number of organizations using IT and communications in their activities.

In 2003 the number of organizations using IT and communications exceeded 102,000, including those in the government and municipal sector with more than 30,000 organizations; the wholesale and retail trade, repair and maintenance of vehicles, motorcycles, household appliances and personal use articles, more than 13.5 thousand organizations; transport and communications, approximately 7.5 thousand organizations; construction around 6,000 organizations; higher professional education with 1.4 thousand organizations; other fields of activity with more than 20,000 organizations.

That same year, practically all these organizations used personal computers, more than half of them using local computer networks; more than 60 per cent using access to global networks in their work and about 17 per cent using dedicated communication channels.

In 2004 the number of organizations using IT and communications technologies reached 107,000. Most of these organizations used personal computers; more than 60 per cent used local computer networks; around 70 per cent used access to global networks; more than 20 per cent used dedicated communication channels.

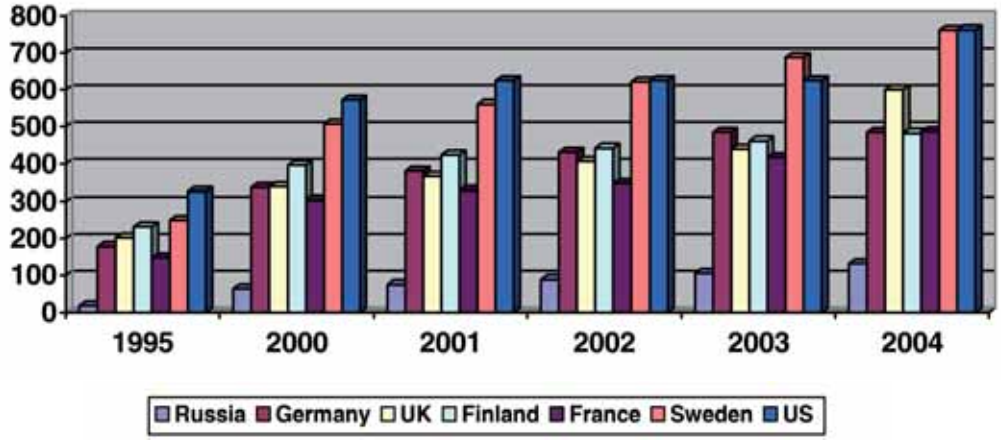
The number of organizations using the Internet in their activities grew from 11.6 per cent of the total number of registered organizations in 2002 to 14.4 per cent in 2004. Over the same period this growth was significantly higher in some other sectors of the national economy.

For example, in the chemical industry, it equaled 39.4 per cent and 49.4 per cent; the manufacture of electrical equipment, electronic and optical equipment – 39.6 per cent and 44.9 per cent; scientific research and development - 37.2 per cent and 38.7 per cent; higher professional education – 48.4 per cent and 52.3 per cent, respectively.

The total volume of expenditure on IT and communications grew from 164.5 billion rubles in 2003 to 168.4 billion rubles in 2004, or by 2.38 per cent.

However, international comparisons showed that the market capacity still had huge growth potential: the number of personal computers per 1000 people in Russia materially lagged behind the level of the developed European countries and the US, and this can clearly be seen in figure 2.2.2.1.4.

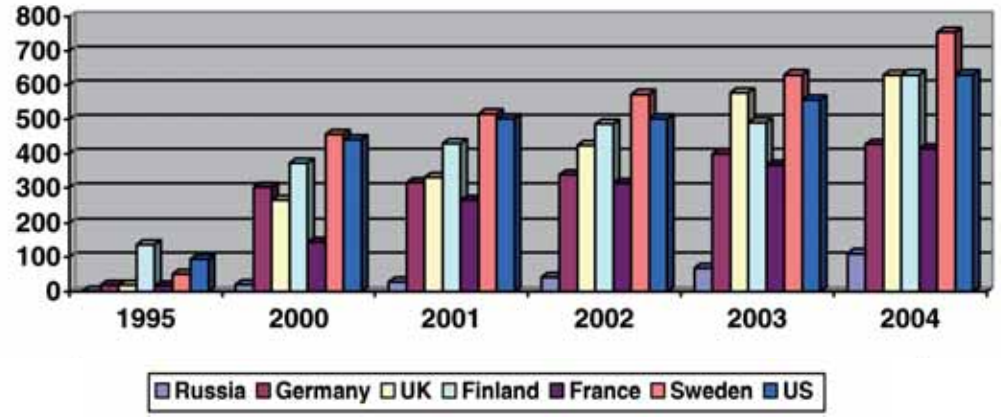
Figure 2.2.2.1.4. Number of Personal Computers per 1000 People



The data show that by 2004 the number of personal computers per 1000 people in Russia was somewhat above 100 units (i.e. 134 units), while in the US and Sweden the figure was above 700 units; in the UK it reached 600 units and in Finland, France and Germany it was nearly 500 units.

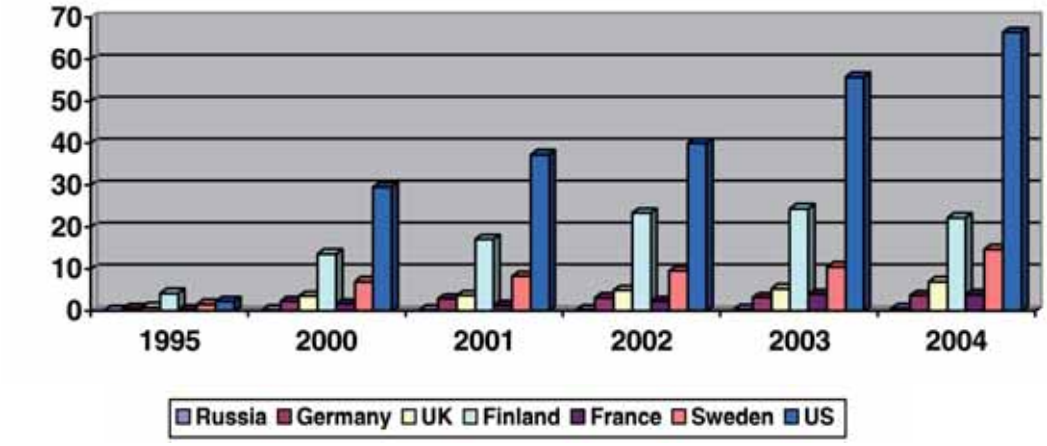
Similarly, a noticeable lag was demonstrated by the number of Internet users per 1000 people and the number of Internet servers (hosts) per 100 people, shown below in figures 2.2.2.1.5 and 2.2.2.1.6, respectively.

Figure 2.2.2.1.5. Number of Internet Users per 1000 People



In Finland, the UK and the US the number of Internet users per 1000 people was above the 600 level; in France and Germany – the 400 level. In Russia this indicator was at the time of the study much lower, and equaled 111 per 1000 of the population in 2004. At the same time the rate of growth in Internet users in 2003 and 2004 rose significantly and amounted to 65.8 per cent and 63.2 per cent respectively compared with the previous year. In Sweden, in the same period, the growth rate amounted to 9.9 per cent and 19.8 per cent, respectively.

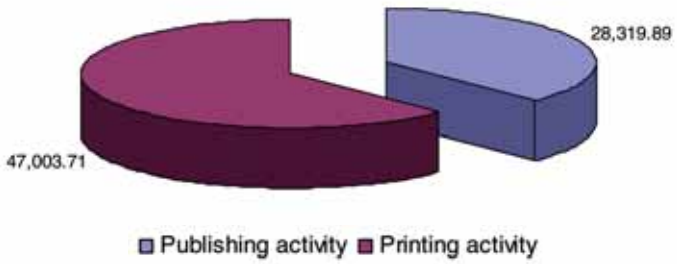
Figure 2.2.2.1.6. The Number of Internet Servers (hosts) per 100 people



As can be seen from the chart, the number of Internet servers (hosts) per 100 people demonstrates a growth figure surpassed only in the US, which had left all the other countries far behind and was reaching a level of 70 hosts per 100, and Finland, which led when compared with the other countries, but had still only been able to go above 20 hosts per 100 of the population. In Russia this indicator had not reached the level of one unit per 100 of the population.

Figure 2.2.2.1.7 shows the composition of the turnover for printing and publishing activities in 2004.

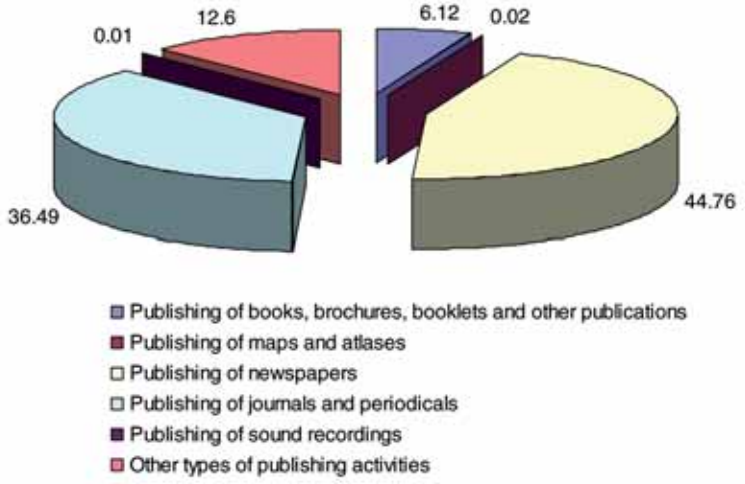
Figure 2.2.2.1.7. Turnover of the Printing and Publishing Sector in 2004



These data show that printing activities prevailed, their share amounting to 60 per cent of the total turnover for these industries.

Figure 2.2.2.1.8 illustrates the turnover of the publishing sector.

Figure 2.2.2.1.8. Turnover of the Publishing Sector in 2004



These data show that newspaper publishing (44.76 per cent or 11.6 billion rubles) and magazines (36.49 per cent or 9.4 billion rubles) prevailed in the publishing sector, whereas the publishing of books and brochures contributed slightly more that 6 per cent (for each type of publication).

Figure 2.2.2.1.9. Annual Print Runs of Books and Brochures (millions of copies)

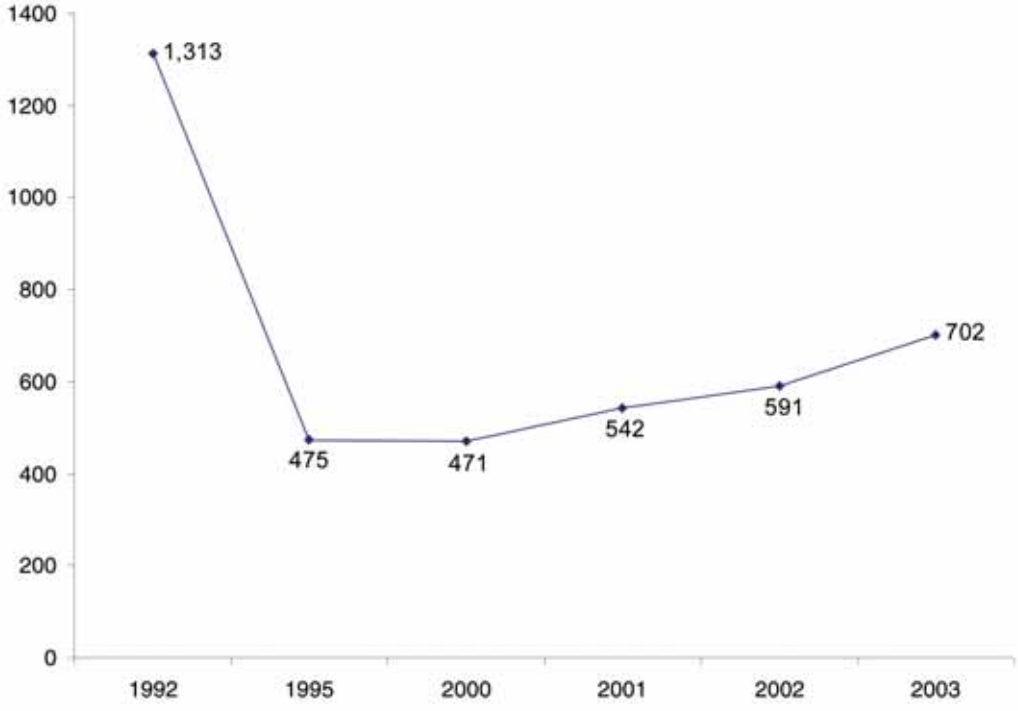
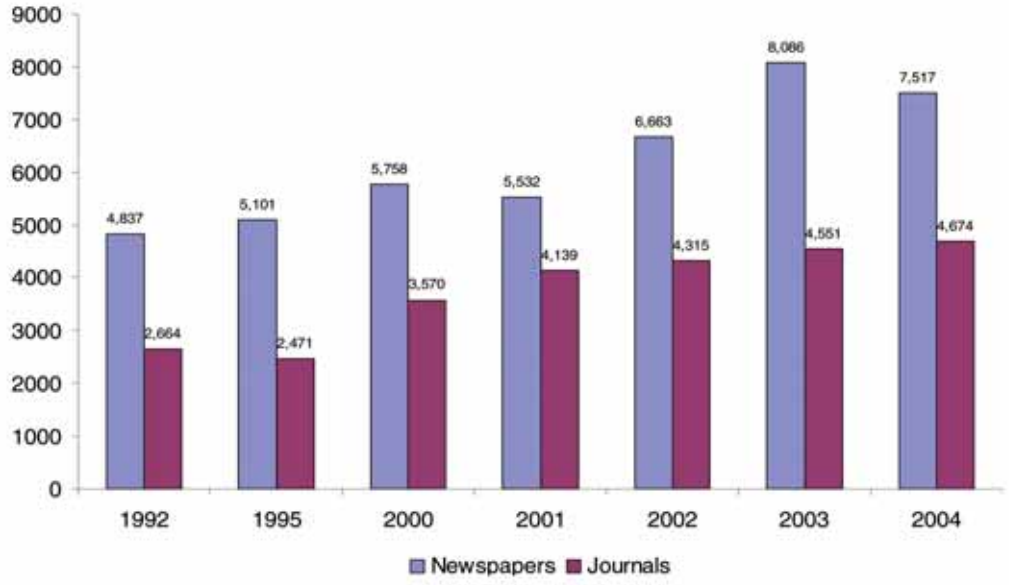


Figure 2.2.2.1.9 illustrates the annual print runs for books and brochures. There was a marked decrease compared with 1992 when annual print runs dropped virtually threefold. By 2003, annual print runs of books and brochures rose to 702 million copies with 686 million copies in 2004.

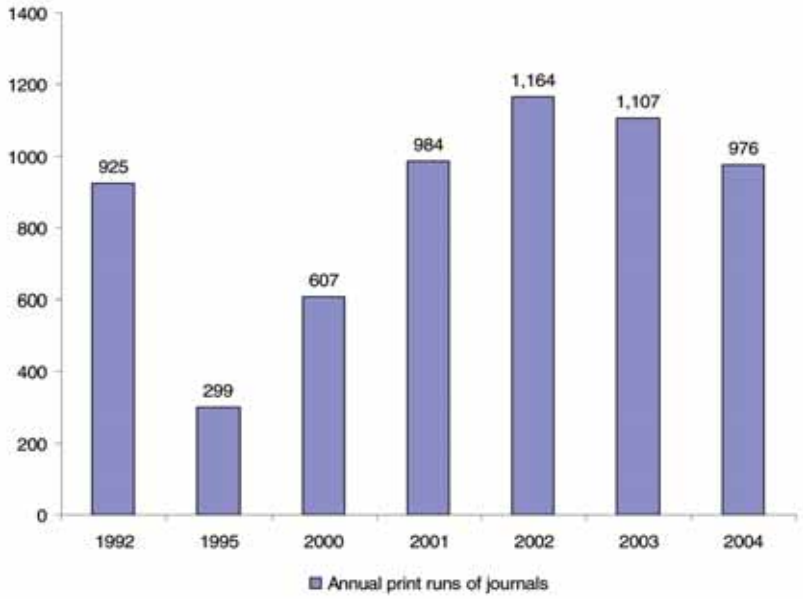
Figure 2.2.2.1.10. Numbers of Magazines and Newspapers Published from 1992 to 2004



Figures 2.2.2.1.11 and 2.2.2.1.12 show the number of publications and annual print runs of magazines and newspapers.

From 1992 to 1995, annual print runs of magazines and other publications reduced threefold. However, they later increased at a faster rate than book publishing. There was a certain reduction in print runs of magazines from 2002.

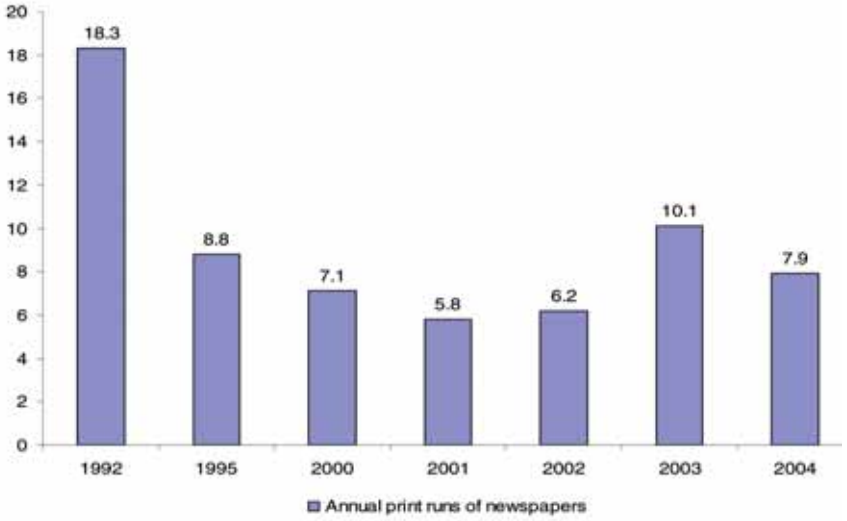
Figure 2.2.2.1.11. Annual Print Runs of Magazines from 1992 to 2004 (millions of copies)



Annual print runs in Russia were always measured in billions of copies. The reduction of print runs of newspapers by two and a half times from 1992 to 1995 was somewhat lower than the print runs of books and magazines. Reductions continued up to 2001.

The highest number of print runs—more than 10 billion copies—was registered in 2003 and in 2004 this dropped again to 7.9 billion copies.

Figure 2.2.2.1.12. Annual Print Runs of Newspapers from 1992 to 2004 (billions of copies)



Newspaper publishing dropped by almost 500 titles. This drop is explained by competition and supply and demand. It was with print runs of one billion that newspaper publishing came back to prominence in the overall turnover of the publishing industry.

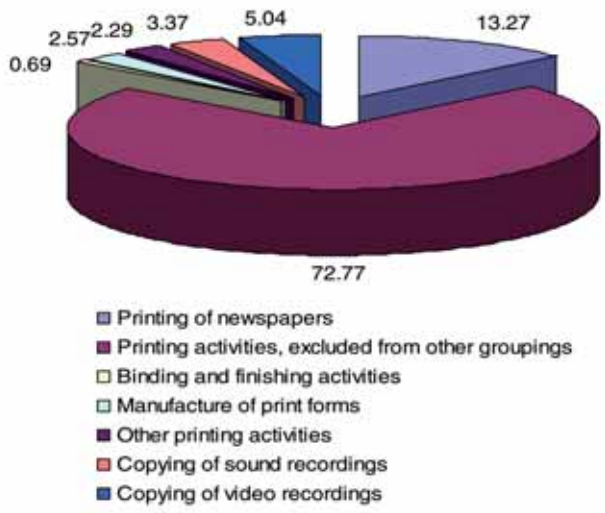
In 2005 the number of newspaper titles amounted to 769 and the volume of one-off print runs grew by more than double, exceeding 16 million copies. As a result, the number of newspaper copies per 1000 of the population amounted to 114.

It should be pointed out that in the UK, for example, the number of newspaper titles amounted to 108, while one-off print runs exceeded 19 million copies, giving a total of 326 copies per 1000 of the population. In Germany similar indicators were 382, 23.9 million copies and 291 copies, respectively[4].

Printing occupied virtually two thirds of all publishing and printing activities from 1992 to 1995, exceeding by 1.5 times the turnover of the publishing industry.

Figure 2.2.2.1.13 shows the turnover of the industry.

Figure 2.2.2.1.13. Turnover of Printing Activities in 2004



[4] The figures are given for 2000, more recent information was not available at the time of the study.

Printing activities not included in other groups amounted to more than 72 per cent or 34.3 billion rubles in the overall composition of printing activities. They included magazines, books and other printed matter. Newspapers accounted for only 13,27 per cent or 6.2 billion rubles of the turnover of the sector. This appeared to be due to the low prices for the preparation of newspapers for printing, the most easily affordable type of publication.

Figure 2.2.2.1.14 shows the sales of printed products.

Retailing accounts for the highest share in the sales of printed products.

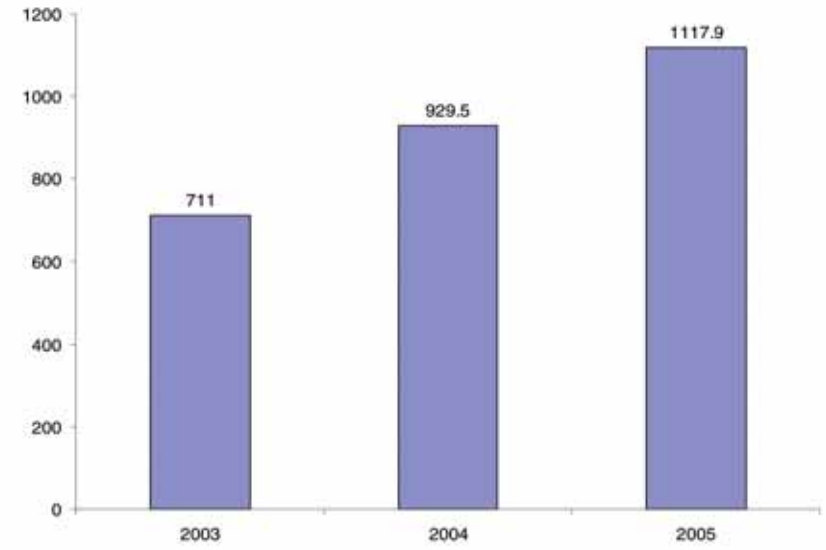
Figure 2.2.2.1.14. Sales of Printed Products in 2004

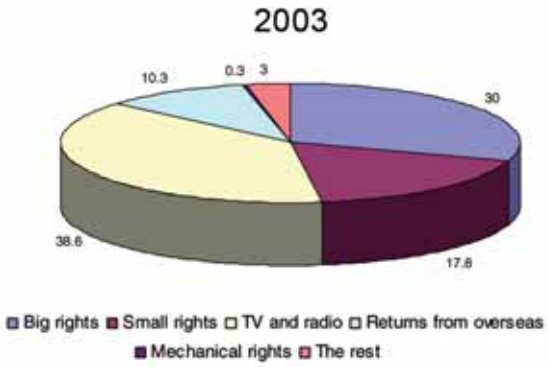
Such a high specific weight for retail printed products can be explained mostly by the presence of stable ties between retailers and the leading publishers, as well as by direct long-standing business relations.

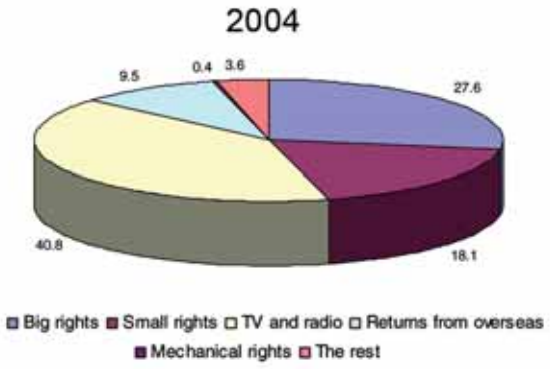
The activities of copyright and related rights collective management societies had been gaining momentum. This was a new phenomenon in Russia, since remuneration in the years before the study rested on somewhat different parameters than is customary elsewhere in the world. Much attention of late has been paid to the legal and organizational aspects of collective management in Russia. An in-depth study promoted the development of a theoretical basis for this type of activity.

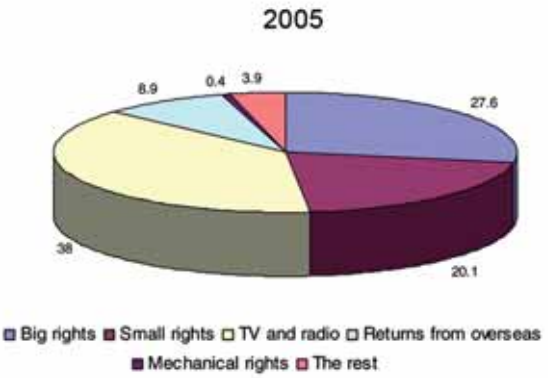
The Russian Copyright Agency is the largest and the oldest in Russia. It is known not only at home, but also overseas. Figure 2.2.2.1.15 illustrates the dynamics of collection and composition of fees for the use of copyright and related rights by this agency.

Figure 2.2.2.1.15. Earnings for Copyright and Related Rights in 2003-2005 (millions of rubles)









As can be seen in the above figure, in the period from 2003 to 2005 the total growth in earnings from copyright and related rights use in Russia accounted for more than 157 per cent.

In the earnings structure, the most important sector (accounting for 38 to 40 per cent) related to earnings from radio and television, as well as major rights, the share of which fell somewhat, from 30 per cent in 2003 to 27.6 per cent in 2005.

On the contrary, the share of minor rights grew: from 17.6 per cent in 2003 to 20.1 per cent in 2005. A decreasing tendency in earnings from overseas sources was evident, falling from 10.3 per cent in 2003 to 8.9 per cent in 2005.

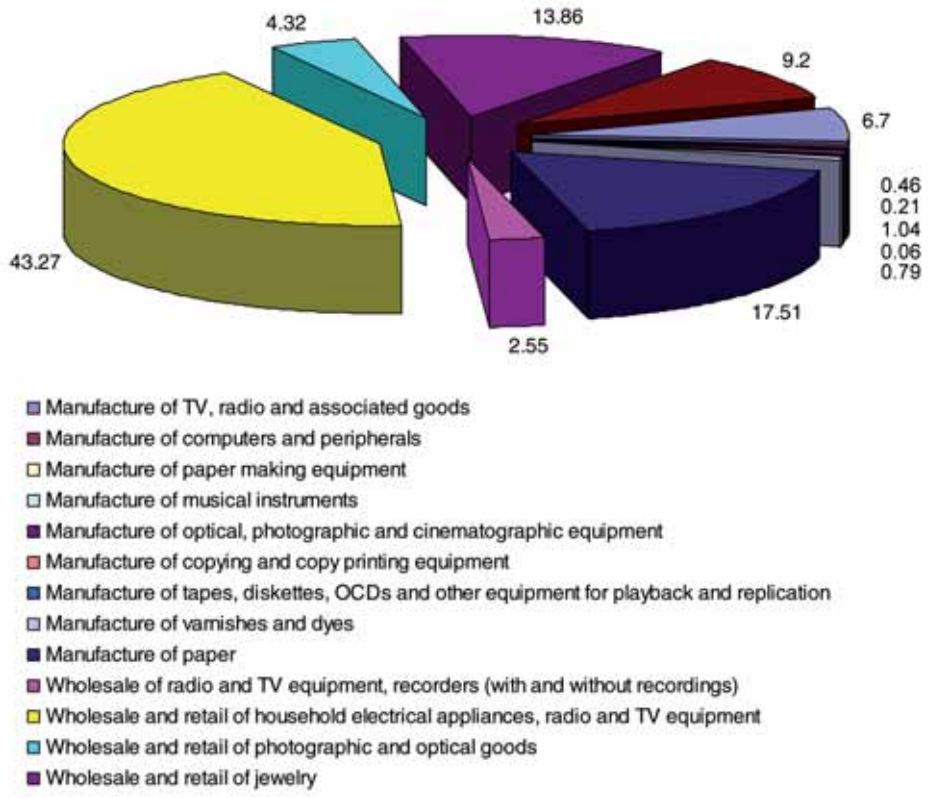
2.2.2.2. Contribution of the Interdependent Industries in 2004

The interdependent copyright industries contributed about 420 billion rubles, or around 23 per cent to the overall turnover of all copyright-based industries. Figure 2.2.2.2.1 illustrates the composition of this contribution.

The above data show that the leading players in the interdependent copyright industries were:

- wholesale and retail of household electrical appliances, radio and TV equipment (43.27 per cent or 181.4 billion rubles);
- paper manufacture (17.51 per cent or 73.4 billion rubles);
- wholesale and retail of jewelry (13.89 per cent or 58.2 billion rubles);
- wholesale and retail of glass products and pottery (8.85 per cent or 37.1 billion rubles);
- manufacture of radios, TVs and associated goods (6.7 per cent or 28 billion rubles).

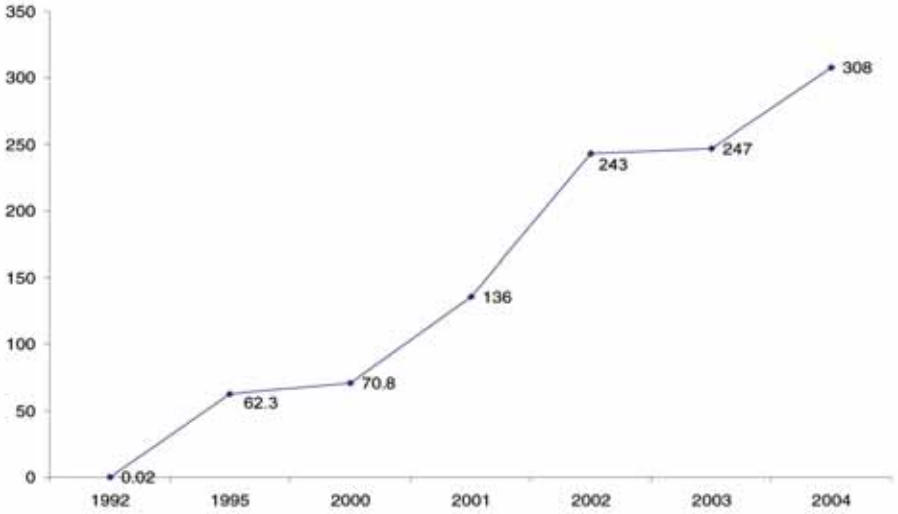
Figure 2.2.2.2.1. Turnover of the Interdependent Copyright Industries in 2004



Figures 2.2.2.2.2 to 2.2.2.2.5 show the share for manufacture of the main goods produced by the interdependent copyright industries. Let us consider the individual contribution of the industries to the overall turnover in more detail.

The following figures demonstrate that the manufacture of PCs grew unevenly from 1992 to 2004, with their output stepping up to 308,000 pieces by 2004. This indicator was quite low compared with other countries, but it reflected certain positive trends in the output of high-tech products, which are always in great demand in the IT sector.

Figure 2.2.2.2.2. Manufacture of PCs ('000 pieces)



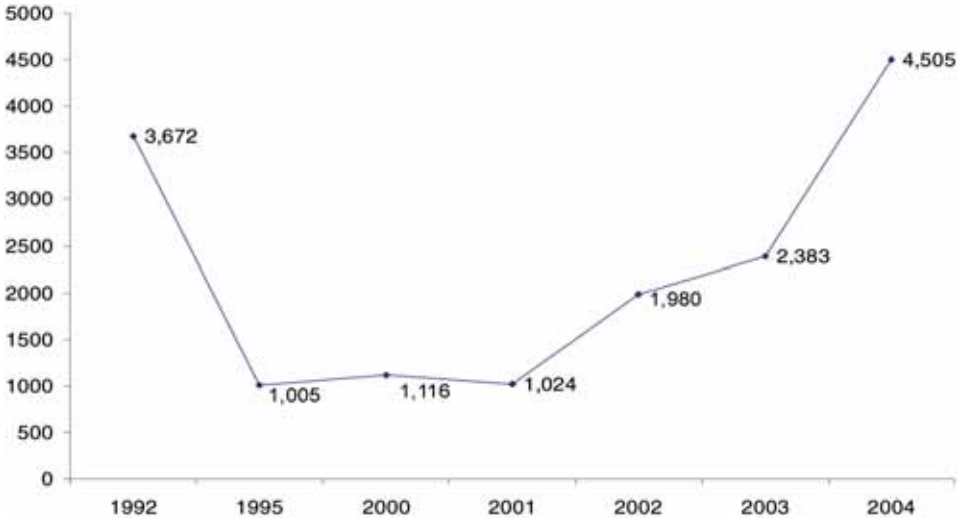
Compared with 1995, total PC production grew from 62.3 thousand units to 308,000 units in 2004, or approximately fivefold.

Compared with 1995, total manufacture of TV sets grew by almost 4.5 times and, in 2004, reached a level of 4.5 thousand units, which exceeded the corresponding indicator for 1992.

The manufacture of video-tape recorders grew by more than 6.7 times in the period from 1995 to 2004, having reached an annual figure of 150,000 units. The manufacture of means of communication and other radio-electronic equipment was developing fast.

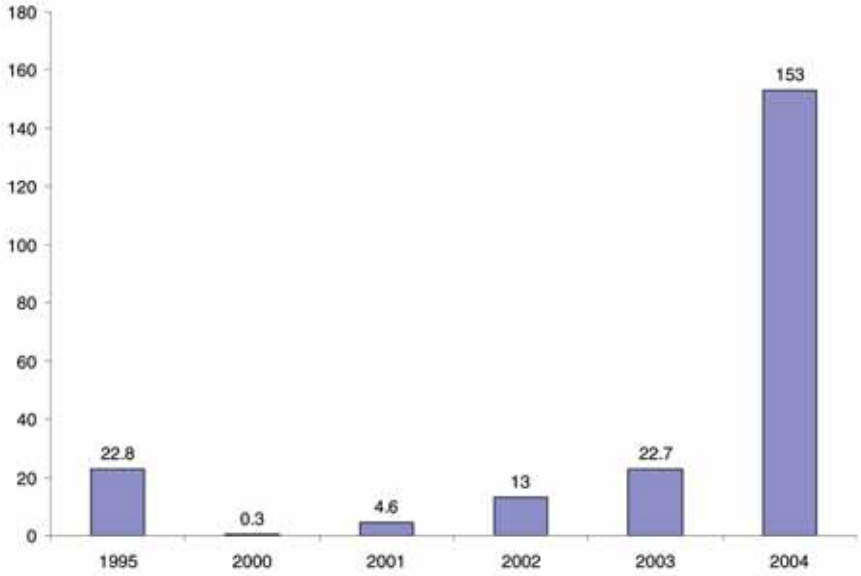
Automatic telephone station production increased by 3.3 times from 1995 and in 2004 amounted to 428.3 thousand telephones.

Figure 2.2.2.2.3. Manufacture of TV Sets ('000 pieces)



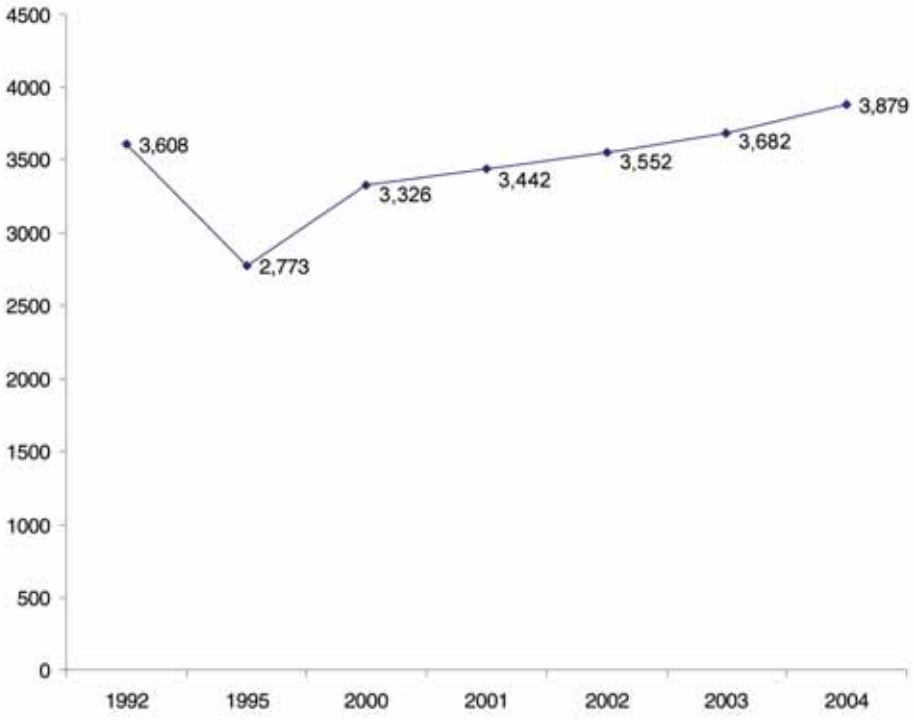
The production of computer-controlled telephone stations grew in the same period by 6.9 times and amounted to 574.3 thousand telephones in 2004.

Figure 2.2.2.2.4. Manufacture of Video-Tape Recorders ('000 pieces)



The production of radio-relay stations increased almost sevenfold and amounted to 872 units in 2004. The production of telephone cables amounted to 245,000 km, having exceeded by 4.6 times the 1995 level; the manufacture of radio wires increased by 2.6 times, amounting to 17.3 thousand km in 2004.

Figure 2.2.2.2.5. Paper Manufacture ('000 tons)



These figures show that by 2004 the volume of TV sets and video-tape recorders manufactured grew rapidly, although imports were, as before, high and the demand had still not been met.

2.2.2.3. Contribution of the Partial Copyright Industries in 2004

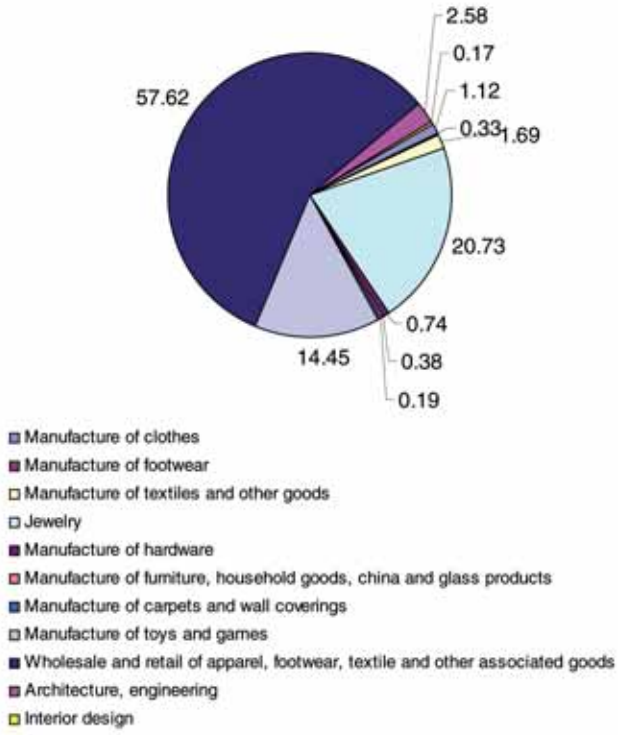
The partial copyright industries are less essential for the economy. Nevertheless, they play an important role, since their share of the turnover was more than 137 billion rubles and comprised more than 7.5 per cent of the total volume of all national copyright-based industries. The turnover of the partial copyright industries is given in figure 2.2.2.3.1.

These data show that the major share was taken by:

- wholesale and retail of clothing, footwear, textiles and other associated goods (57.62 per cent or 79.3 billion rubles);
- jewelry (20.73 per cent or 28.5 billion rubles);
- manufacture of toys and games (14.45 per cent or 19.9 billion rubles).

The manufacture of clothing, textiles and footwear, as well as some other industries did not unduly influence turnover volumes, since these goods were replaced mainly with imports.

Figure 2.2.2.3.1. Turnover of the Partial Copyright Industries in 2004

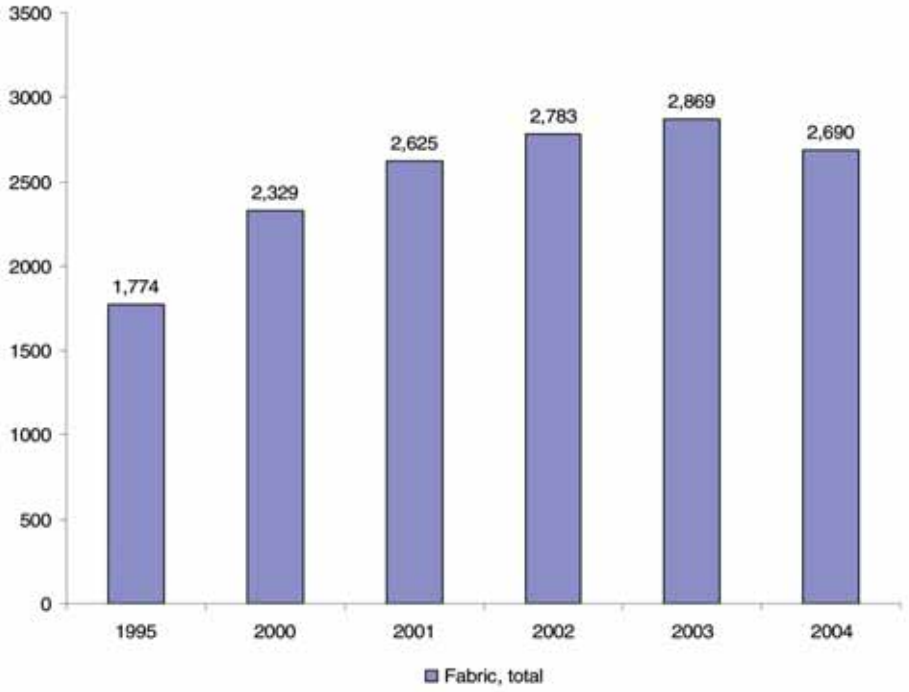


The data analyzed for this group of industries were obtained in the course of calculations applying correction factors to the statistical data on the turnover of the corresponding industries.

The correction factor for such industries as manufacture and sales (wholesale and retail) of clothing, footwear and textiles, taking account of the conditions in Russia, was used and determined to equal 4.5. Such correction was mainly based on price factors and higher levels of profitability which substantially changed the volume of GDP in these sectors.

Figures 2.2.2.3.2 to 2.2.2.3.4 provide data on the output volume of the main types of textiles, clothing and footwear.

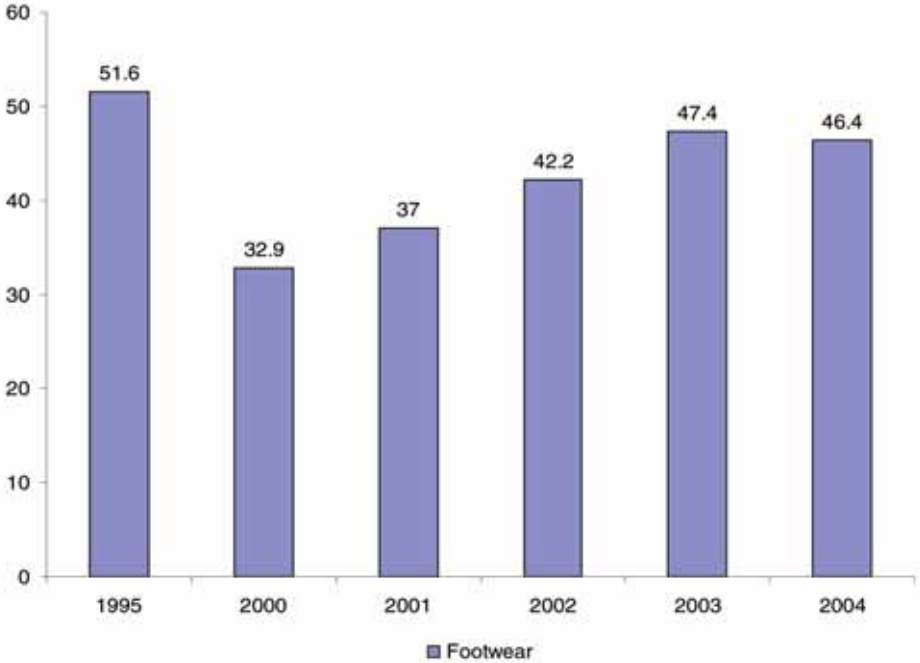
Figure 2.2.2.3.2. Manufacture of Fabrics 1995-2004 (millions of square meters)



This figure clearly demonstrates that fabric manufacture increased steadily from 1995 to 2003, although there was a slight recession in 2004. From 1995 to 2004 it increased by more than 1.5 times.

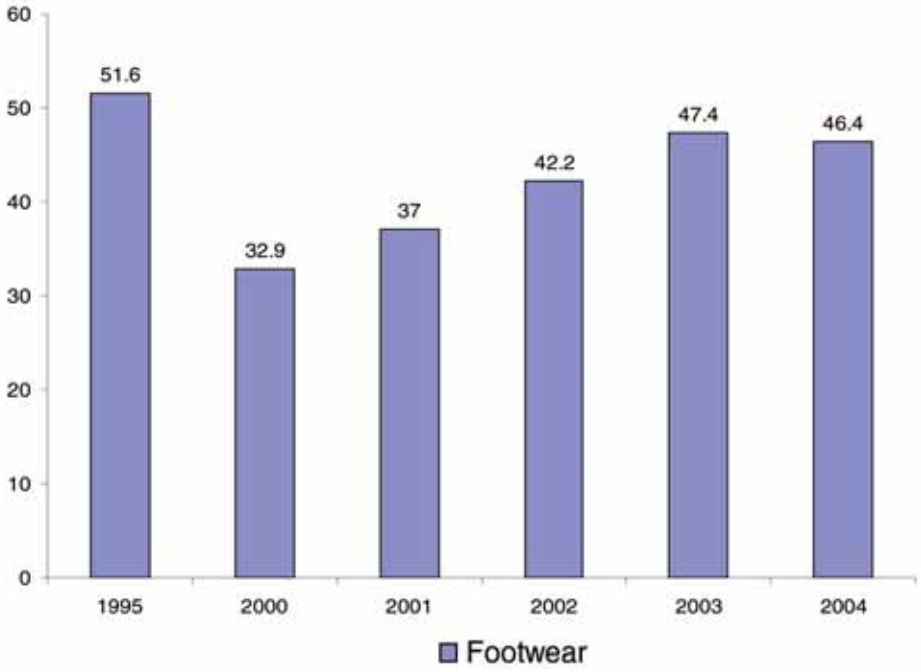
The manufacture of carpets and wall coverings reduced substantially (almost twofold) from 2001 to 2003. In 2004 manufacture increased unevenly as a result of the growing demand, and out-performed this level in 1995.

Figure 2.2.2.3.3. Manufacture of Carpets and Wall Coverings 1995-2004 (millions of square meters)



Footwear manufacture witnessed a substantial drop in output up to 2000. This gradually reversed, reaching its height in 2003, whereas 2004 was characterized by a slight downturn.

Figure 2.2.2.3.4. Footwear Manufacture 1995-2004 (millions of pairs)



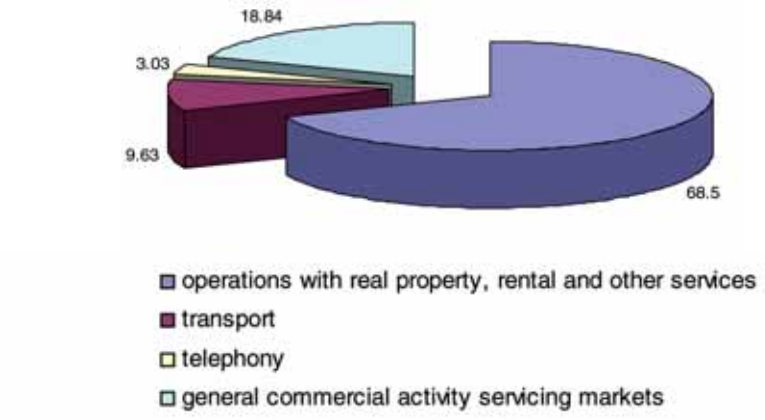
Despite a noticeable trend in growth, the 1995 level had not been surpassed at the time of the study, since the demand for this type of product was mainly met by imports.

2.2.2.4. Contribution of the Non-Dedicated Support Industries in 2004

The turnover volume of the non-dedicated support industries yielded more than 1,150 billion rubles or 45.5 per cent of the overall turnover of the copyright-based industries in 2004.

This is shown in figure 2.2.2.4.1.

Figure 2.2.2.4.1. Turnover of the Non-Dedicated Support Industries in 2004



These data show that the main role in the turnover of the non-dedicated support industries was played by real estate operations, rental and other services (68.5 per cent or 788.1 billion rubles); communication services (18.84 per cent or 216.8 billion rubles) and transport services (9.63 per cent or 110.8 billion rubles).

The analysis was carried out taking account of the calculations applying correction factors to incorporate the influence of copyright in the development of these industries.

For the communications sector, the correction factor of 40.6 was used, which was determined by the specific character of its development and its contribution to the national economy as a whole, and to GDP in particular. More detailed comments are given in each appropriate section.

We noted the following:

- the industry was characterized by high development growth;
- it showed a low level of material expenditure (interim consumption) in the structure of the output produced;
- the industry had a higher level of profitability compared with all the other industries, including the group under analysis;
- the industry paid a higher level of average salaries compared with all the other industries in the national economy.

The development of the communications industry is characterized by the following main features.

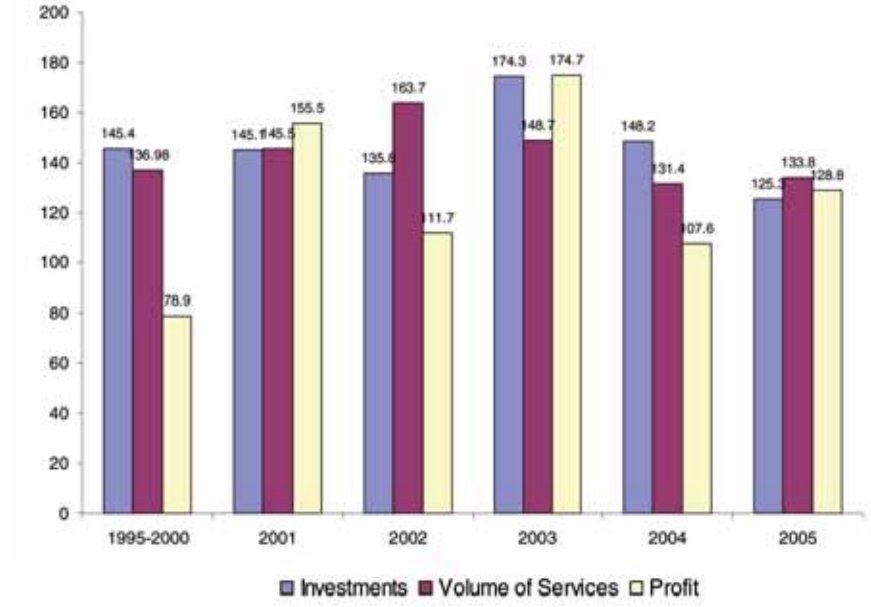
Table 2.2.2.4.3. Main Indicators of Development of the Communications Industry 1995 to 2005 (billions of rubles at actual prices)

Indicators	*1995*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2005 to 1995, %*
Investment in fixed capital	3.7	30.6	44.4	60.3	105.1	155.8	195.2	52.8
Profit and loss balance (profit minus loss)	7.0	34.6	53.8	60.1	105.0	113.0	145.6	20.8
Volume of paid services provided	8.6	67.5	98.2	160.8	239.1	314.2	420.3	48.9
Profit on investment in fixed capital ratio (%)	189.2	113.1	121.2	99.67	99.90	72.53	74.59	0.39
Profit on volume of paid services provided ratio (%)	81.3	51.2	54.7	37.4	43.9	35.6	34.6	0.42

The fastest growth rate in the given period was by the total volume of investments in fixed capital in the communications industry and, although by 2005 the annual growth of investment accounted for 25.3 per cent on the previous year, the annual growth rate in the 10-year period never dipped below the 100 per cent level. The maximum rate was achieved in 2003 with 174.3 per cent over the previous year.

The growth rate of the total volume of paid services provided was steadier and fluctuated between 133.8 and 163.7 per cent. The maximum rate of 163.7 per cent was achieved in 2002, which resulted from the expansion of a material base for the provision of communications services as a consequence of earlier investments which, in their turn, showed high growth rates before 2002.

Figure 2.2.2.4.2. Growth Rates for the Development of the Communications Industry 1995 to 2005 (% of the previous year)

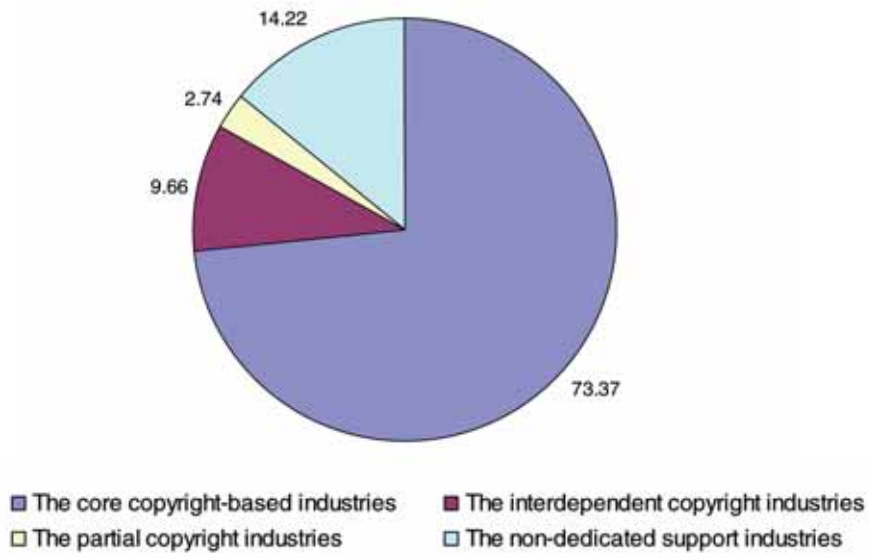


The growth rate of net profits was the most dynamic, and it could be concluded that the decrease in the rate was connected to a certain extent to the growth rate of investments in the preceding period. Falls in the growth of profits could be closely connected to the growth of advertising costs which, in accordance with Russian legislation, were included in the cost of services and costs decreasing the taxable base for the calculation of profit tax. Throughout the period 1995 to 2005, the total volume of investment in fixed capital grew by more than 52 times. In this, investment from abroad comprised 3,287 million US dollars in 2005, compared with 88 million US dollars in 1995. The volume of foreign investment grew in this period by more than 37 times.

2.2.3. Contribution to Employment of Copyright-Based Industries in 2004

The contribution of the copyright-based industries to the Russian economy as regards employment was 5,397.32 thousand workers in 2004 or 8.04 per cent. The influence of various types of economic activity on this indicator and their contribution are shown in figure 2.2.3.

Figure 2.2.3. Contribution of the Copyright-Based Industries to Employment in 2004 (% of total)



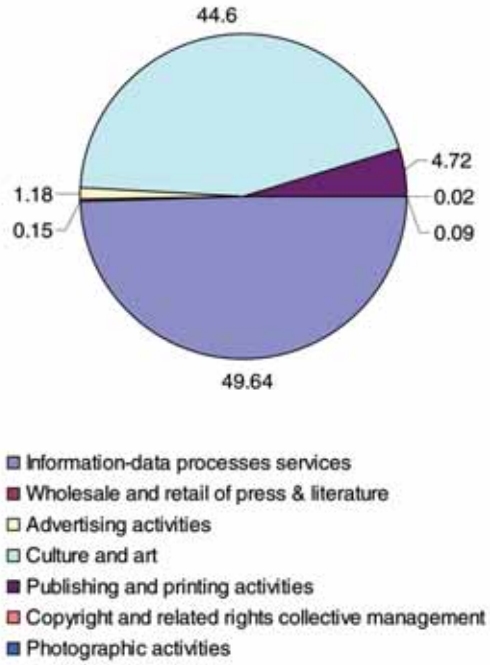
The main contribution to employment was made by the industries directly related to copyright, their influence being measured as 73.7 per cent.

This high figure demonstrated that the policy aimed at the development of the industries and types of activity such as culture and art would result in additional jobs and further modification of the employment figures.

2.2.3.1. Contribution of the Core Copyright Industries to Employment in 2004

The core copyright industries provided jobs for 2.9 million people, or nearly 58.9 per cent of the total number of those employed in the copyright-based industries. The composition of employment in various subsectors and by type of economic activity is given in figure 2.2.3.1.1.

Figure 2.2.3.1.1. Employment in the Core Copyright Industries in 2004



These data show that the main providers of employment in the core industries were:

- information-data processing services (49.64 per cent or 1,480,000 people);
- culture and art (44.2 per cent or 1,274,000 people);
- publishing and printing (4.72 per cent or 136,000 people).

The share of the other industries at the time of the study had only just exceeded one per cent. That was why they did not have a substantial impact on employment either in the core industries or in the Russian economy. This was primarily the result of the backwardness of the appropriate market mechanisms.

Features of the age composition of employees in the culture and art sector are shown in figure 2.2.3.1.2.

As can be seen, people in the 40-49 age group comprised the major share of those employed, with 27.9 per cent. The 20-29 and 30-39 age groups gave rise to significant and virtually equal shares (22.8 per cent and 22.9 per cent respectively).

Figure 2.2.3.1.2. Ages of Employees in the Culture and Art Sector in 2004 (% of total)

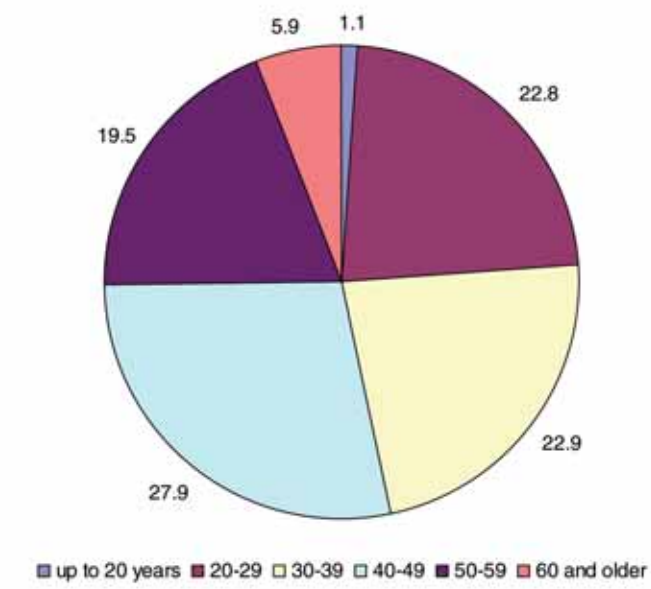


Figure 2.2.3.1.3 shows the employment figures in this industry by gender. In the culture and art sector the number of men employed barely exceeded 30 per cent.

Figure 2.2.3.1.3. Employment by Gender in the Culture and Art Sector in 2004 (% of total)

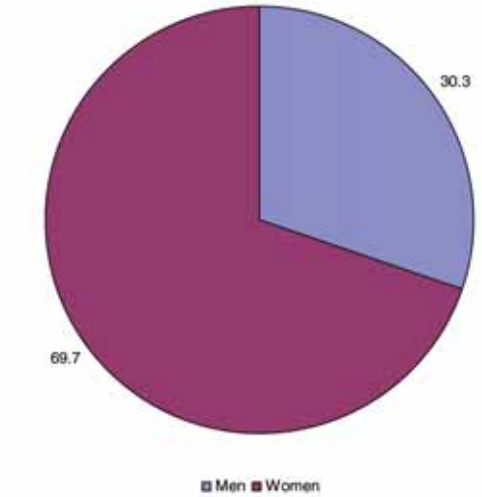


Figure 2.2.3.1.4. Employment in the Printing and Publishing Sector in 2004 (% of total)

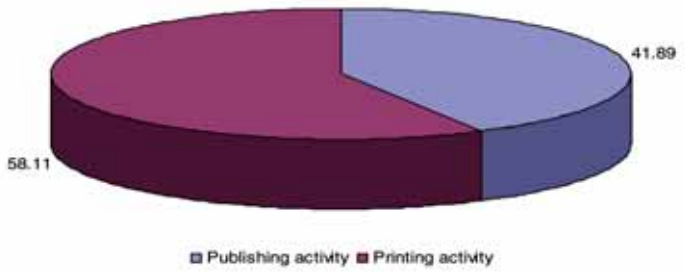
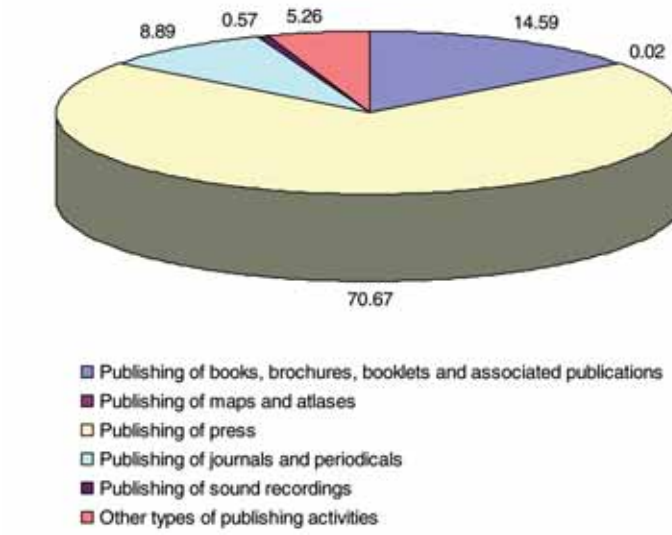


Figure 2.2.3.1.4 shows that printing was the major employer in this sector, providing more than 58 per cent of jobs in the industry.

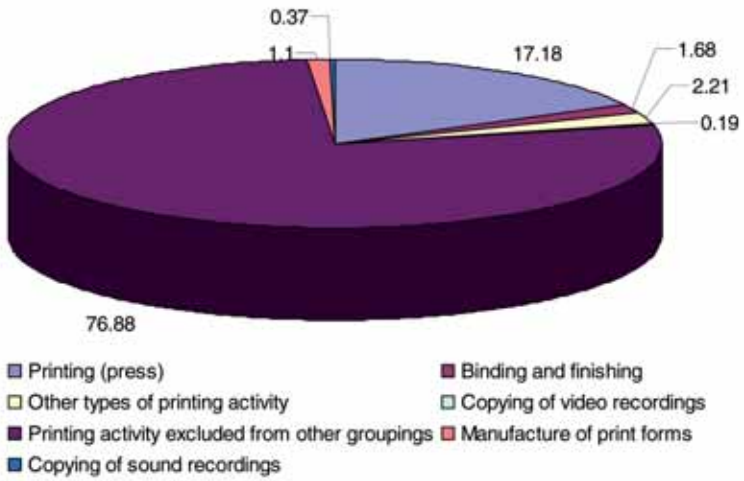
Data on the employment composition of the publishing activity is given in figure 2.2.3.1.5.

Figure 2.2.3.1.5. Employment in the Publishing Sector in 2004 (% of total)



It can be seen from the above data that most of the jobs were in press and publishing (7.067 per cent). The publishing of books, brochures, booklets and other types of associated products accounted for less than 15 per cent, and magazine publishing about nine per cent.

Figure 2.2.3.1.6. Employment in the Printing Sector in 2004 (% of total)



Information on the make up of employment in the printing sector is given in figure 2.2.3.1.6.

The printing of newspapers accounted for only 17.18 per cent: the major share of jobs in this industry was found in the printing sector not included in other groups (more than 61,000 jobs), accounting for 76.88 per cent of all jobs in the printing industry.

Other types of printing activity and replication of information carriers had, up to the date of the study, been insignificant in the generation of jobs and the assurance of future employment in the industry.

2.2.3.2. Contribution of the Interdependent Industries to Employment in 2004

In 2004, 502.9 thousand jobs were created in the interdependent industries, exceeding by 10 per cent the total number of jobs in all copyright-based industries.

Figure 2.2.3.2.1 illustrates the employment composition in this sector.

It has been seen that about 55 per cent or 279,000 of all jobs were provided by the manufacture of optical, photographic and motion picture equipment. A sizeable role was also played by:

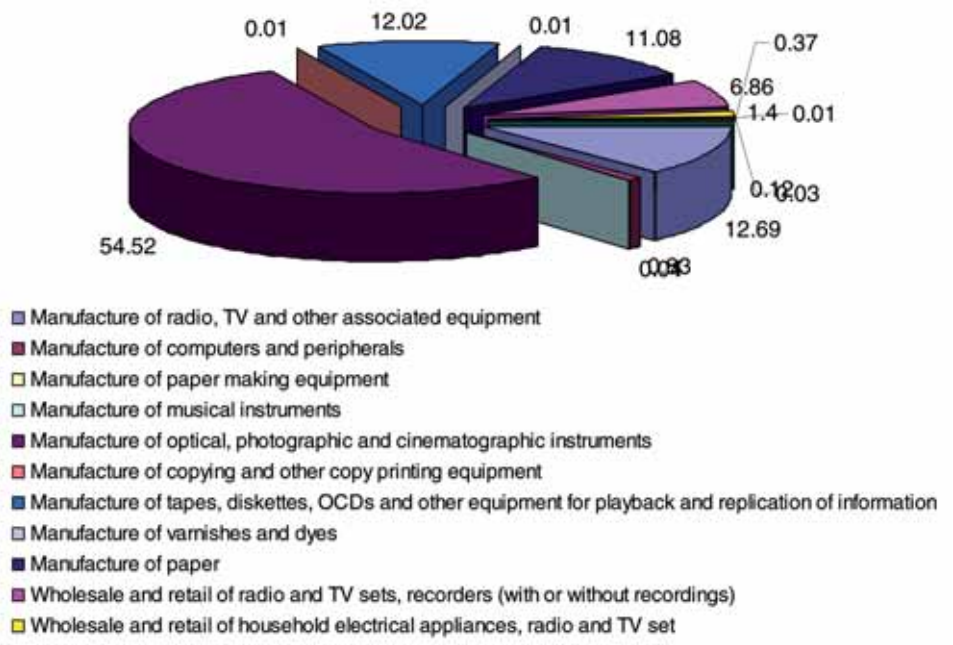
- the manufacture of radios, TVs and other associated equipment (12.69 per cent or 64,000 jobs);
- the manufacture of tapes, diskettes, CDs and other equipment for playback and replication of information (12.02 per cent or 60,000 jobs);
- the manufacture of varnishes and dyes (11.08 per cent or 56,000 jobs);
- paper manufacture (6.86 per cent or 35,000 jobs).

The employment share of other industries and types of activities in the interdependent industries did not exceed 2 per cent.

It is important to point out that during the research it was not possible to obtain all the required data on employment composition, in particular the number of jobs in the sector relating to manufacture of copying and other copy printing equipment.

Figure 2.2.3.2.1 gives the shares of the individual subsectors in the total number of jobs for this group.

Figure 2.2.3.2.1. Employment in the Interdependent Industries in 2004



Until the date of the study, no significant role had been played by such industries as:

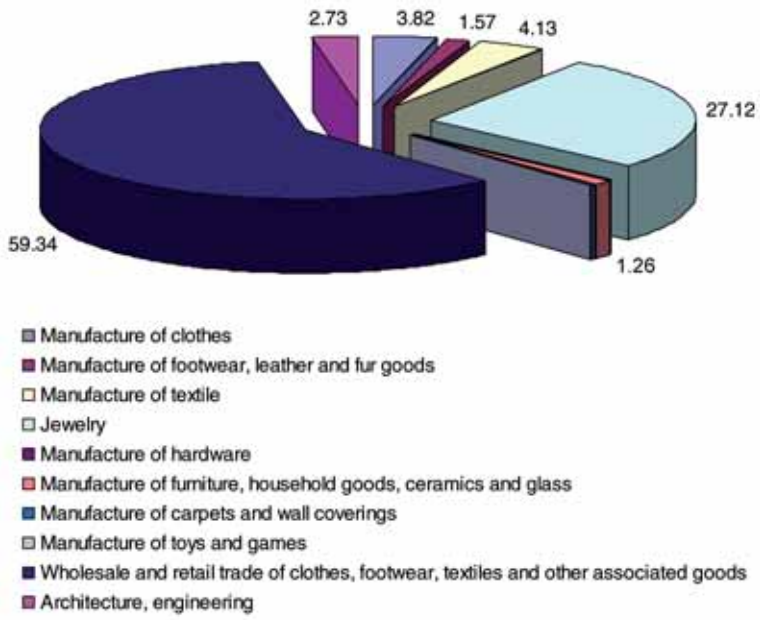
- the manufacture of computers and peripherals;
- the manufacture of paper-making equipment;
- the manufacture of musical instruments;
- wholesale activities in radio and television equipment, carriers of information (with or without recordings);
- wholesale and retail in household electrical appliances and electronics;
- wholesale and retail in photographic and optical goods;
- wholesale and retail in jewelry;
- wholesale and retail in ceramics and glass;
- wholesale and retail in stationery and office accessories.

However, low values can sometimes be due to the incomplete statistics covering employment and not included in the corresponding reporting.

2.2.3.3. Contribution of the Partial Copyright Industries to Employment in 2004

The partial copyright industries provided more than 376,000 jobs, which comprised about 8 per cent of employment in the copyright-based industries. The contribution of different types of activity and industry, especially the employment factor, is shown in figure 2.2.3.3.1.

Figure 2.2.3.3.1. Employment in the Partial Copyright Industries in 2004



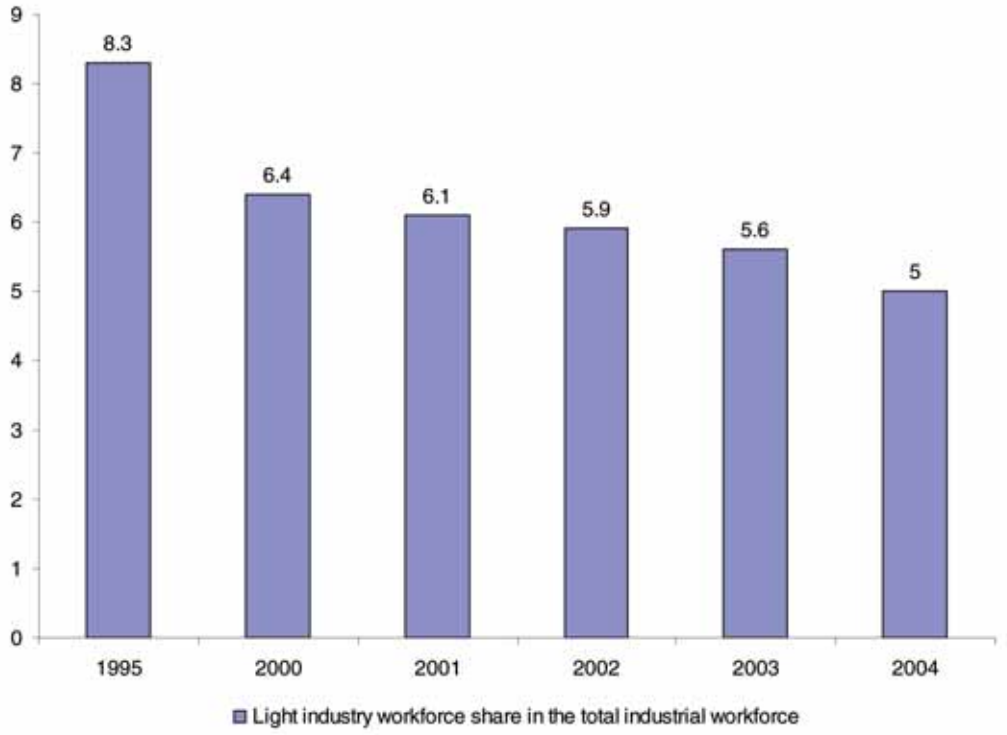
The following industries were the most significant in the partial copyright sector:

- the wholesale and retail of clothing, footwear, textiles and other associated goods (59.36 per cent or 223.38 thousand jobs);
- jewelry (27.12 per cent or 102.06 thousand jobs);
- the manufacture of textiles and other goods (4.13 per cent or 16.53 thousand jobs);
- clothing manufacture (3.82 per cent or 14.39 thousand jobs);
- architecture, engineering (2.73 per cent or 10.28 thousand jobs);
- the manufacture of furniture, household goods, ceramics and glass (1.26 per cent or 4.76 thousand jobs).

The share of each industry such as the manufacture of clothing, footwear, leather and fur goods, textiles and other goods did not exceed 5 per cent.

Bearing in mind the total reduction of the light industry share in the number of workers employed in the core industries (see figure 2.2.3.3.2), it should not be assumed that the role of these industries would substantially increase and exert greater influence on employment in the partial copyright industries in the short term.

Figure 2.2.3.3.2. Changes in the Light Industry Workforce in the Total Industrial Workforce 1995 to 2004 (% of total)



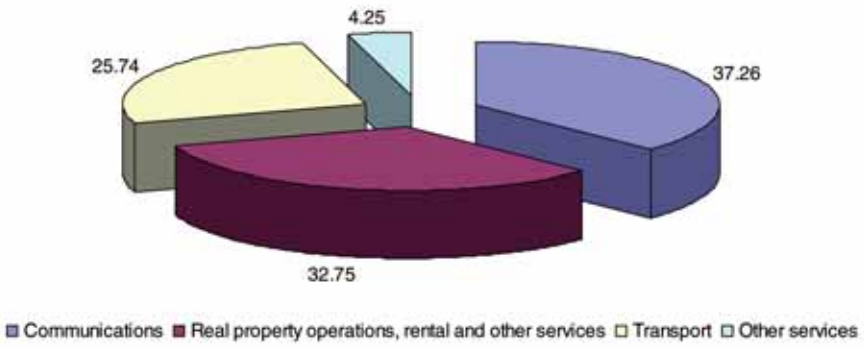
2.2.3.4. Contribution of the Non-Dedicated Support Industries to Employment in 2004

The non-dedicated support industries also noticeably contributed to employment in this sphere of the economy and generated more than 1,138 thousand jobs, comprising more than 23 per cent of all jobs in the copyright industries.

The employment composition of the non-dedicated support industries is illustrated in figure 2.2.3.4.1.

These data show that communications (37.26 per cent or 424.27 thousand jobs), real estate, rental and other services (32.75 per cent or 372.82 thousand jobs) and transport (25.74 per cent or 293.07 thousand jobs) were the main providers of employment.

Figure 2.2.3.4.1. Employment in the Non-Dedicated Support Industries in 2004

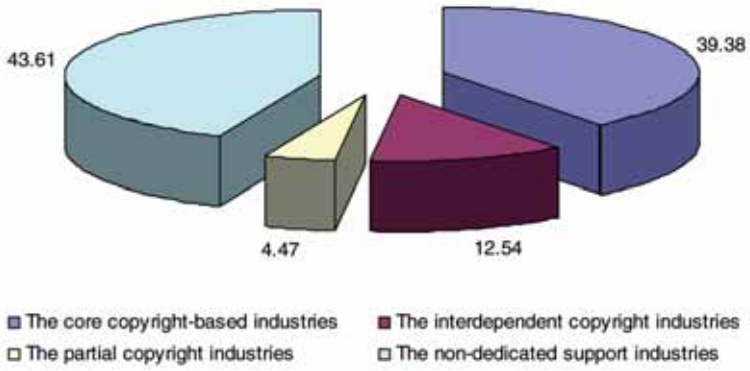


The correction factor applied to the communications industry was 40.6. This was justified by earlier remarks and by the fact that the average monthly salary in this industry exceeded the Russian average by more than 33 per cent. Since labor remuneration accounted for a significant share of GDP, it was obvious that this factor should be considered as specific to Russia when compared with other countries.

2.2.4. Contribution to GDP of Copyright-Based Industries in 2004

7.47 per cent of GDP or 1253,63 billion rubles overall in 2004 came from the copyright-based industries. Contributions from various types of activity, corresponding to the WIPO classification, are shown in figure 2.2.4.

Figure 2.2.4. Contribution of the Copyright-Based Industries to GDP of all Industries in the Russian Economy in 2004 (% of total)



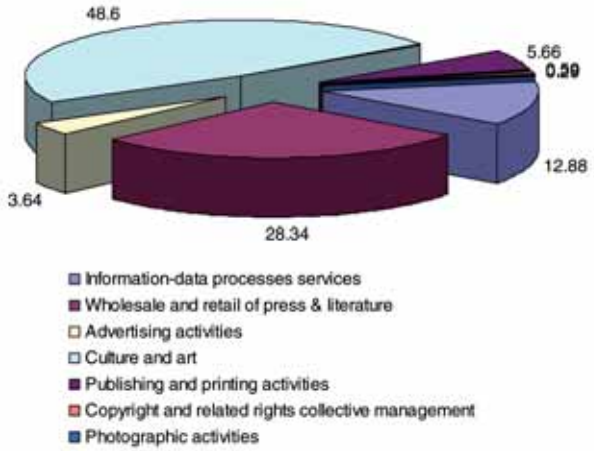
The results of the activity of the core copyright industries significantly influenced the volume of GDP (39.38 per cent). In particular, the non-dedicated support industries (43.61 per cent) substantially influenced GDP in the sector, principally the communications industry.

2.2.4.1. Contribution of the Core Industries to GDP in 2004

It was in the core industries that the most substantial share of GDP—more than 400 billion rubles—was generated, which was more than 39 per cent of the total GDP produced by all the copyright-based industries.

The GDP generated in 2004 by the core industries is represented by the main trades and types of activity in figure 2.2.4.1.1

Figure 2.2.4.1.1. GDP Generated by the Core Industries in 2004



These data show that the leading contributors to GDP were:

- culture and art (48.60 per cent or 194 billion rubles);
- wholesale and retail of books and press (28.34 per cent or 113 billion rubles);
- information–data processing services (12.88 per cent or 56 billion rubles);
- publishing and printing (5.66 per cent or 23 billion rubles);
- advertising (3.64 per cent or 15 billion rubles).

Other core industries and types of activity did not play an essential role in generating GDP, since their share did not exceed two per cent.

Since the values of indicators for this group of core industries were included in the calculations (the correction factor was 100), the total figure for GVA generated was taken into account in order to determine their effect on GDP.

Overall the amount of GVA generated by the group of core industries was more than 400 billion rubles.

2.2.4.2. Contribution of the Interdependent Copyright Industries to GDP in 2004

The interdependent copyright industries formed a substantial part of the GDP generated by the copyright-based industries. The GDP of the interdependent copyright industries comprised 127.4 billion rubles in 2004, which accounted for approximately 12 per cent of the total GVA generated in all copyright-based industries.

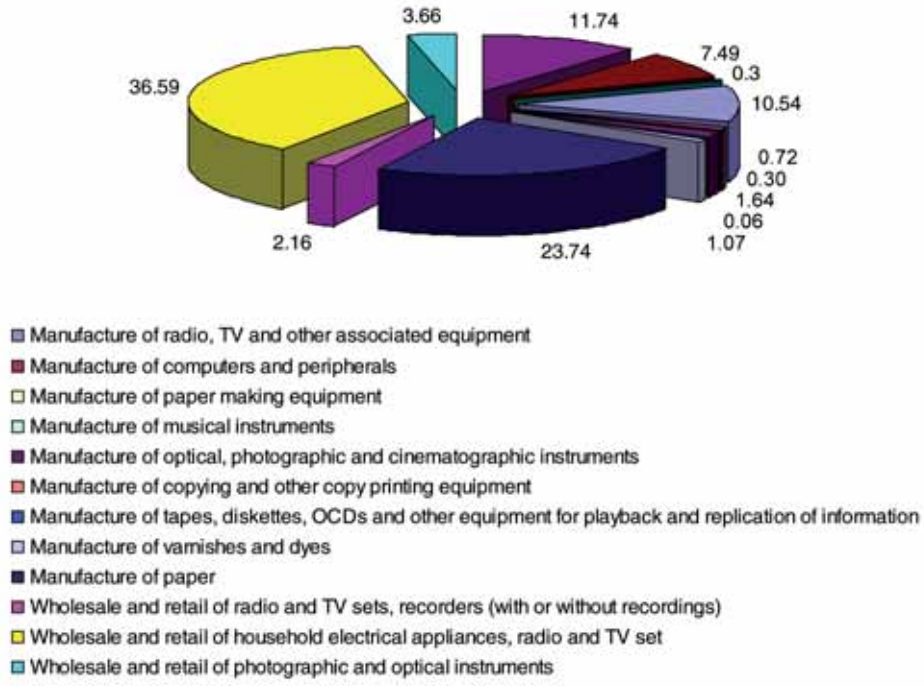
The GDP generated by the interdependent copyright industries is illustrated in figure 2.2.4.2.1.

These data show that the main contribution to GDP by the interdependent industries was:

- wholesale and retail of household electrical appliances, radio and TV sets (36.59 per cent or 46.6 billion rubles);
- paper manufacture (23.74 per cent or 30.7 billion rubles);
- wholesale and retail of jewelry (11.74 per cent or 14.9 billion rubles);
- manufacture of radios, TVs and other associated equipment (10.54 per cent or 13.4 billion rubles);
- wholesale and retail of ceramics and glass (7.49 per cent or 9.5 billion rubles).

GDP generation in other subsectors contributed 5 per cent or less and did not have a substantial impact on production and the total growth of GDP in the economy.

Figure 2.2.4.2.1. GDP Generated by the Interdependent industries in 2004

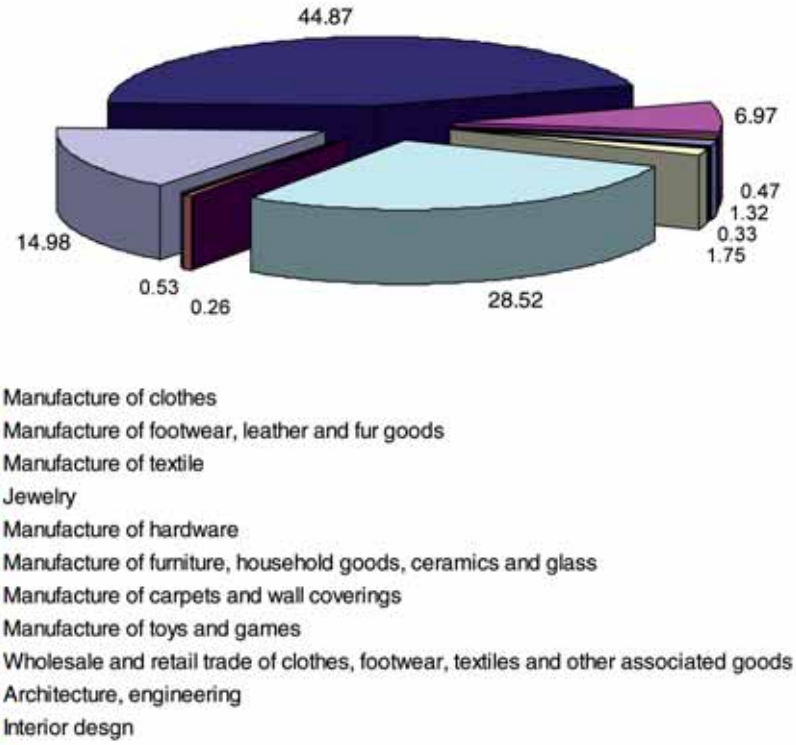


2.2.4.3. Contribution of the Partial Copyright Industries to GDP in 2004

The GDP generated by the partial copyright industries was more than 45 billion rubles and amounted to about 4.5 per cent of the total GVA generated by all copyright-based industries.

Figure 2.2.4.3.1 shows the composition of GDP in this sector of the economy.

Figure 2.2.4.3.1. GDP Generated by the Partial Copyright Industries in 2004



These data show the contribution of this sector to GDP:

- wholesale and retail of clothing, footwear, textiles and other associated goods (44.87 per cent or 20.4 billion rubles);
- jewelry (28.52 per cent or 12.9 billion rubles);
- manufacture of toys and games (14.98 per cent or 6.8 billion rubles);
- architecture, engineering (6.97 per cent or 3.2 billion rubles).

The share of the other industries included in this group was slightly above one per cent and was not considered significant.

The share of other types of economic and manufacturing activities was not substantial, since it did not exceed a one per cent contribution to the total volume of GDP in this sector.

2.2.4.4. Contribution of the Non-Dedicated Support Industries to GDP in 2004

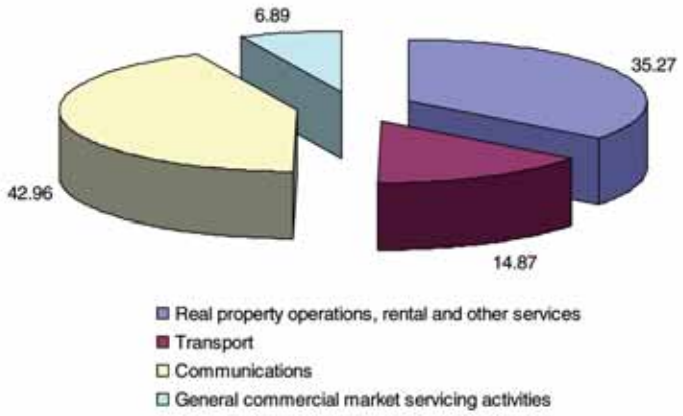
The contribution of the non-dedicated support industries to GDP in 2004 was higher than that of the partial copyright industries: over 443 billion rubles, which exceeded by 43 per cent the total volume of the GDP generated by all the copyright-based industries.

Figure 2.2.4.4.1 shows the contribution of the non-dedicated support industries to GDP.

The most important contribution to GDP in the non-dedicated support industries came from communications and real estate operations, rental and other services.

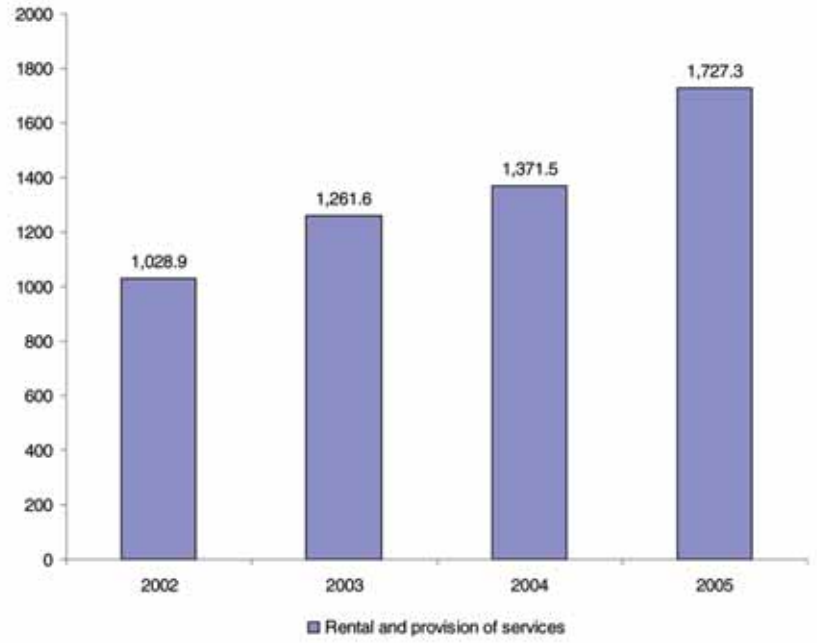
The main contribution was provided by communications (42.96 per cent), real estate operations, rental and other services (35.27 per cent) and transport (14.87 per cent).

Figure 2.2.4.4.1. Contribution to GDP of the Non-Dedicated Support Industries in 2004



This situation was fully justified due to the permanent growth of GDP produced through real estate operations, rental and other services and the transport and communications industries (figures 2.2.4.4.2 and 2.2.4.4.3).

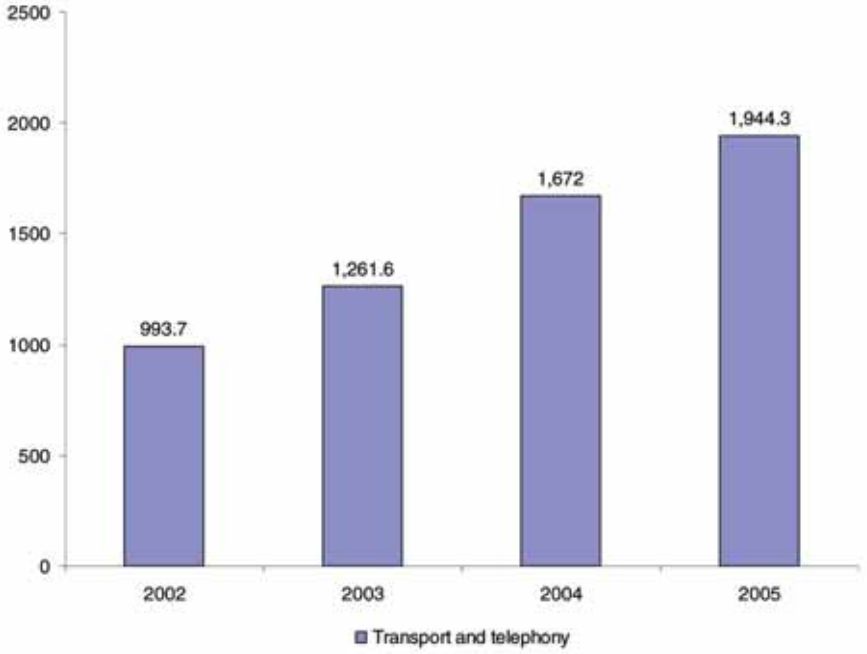
Figure 2.2.4.4.2. GDP Contribution of Real Estate Operations, Rental and Other Services in 2002-2005 (billions of rubles)



This figure shows that the GDP generation in real estate operations, rental and provision of services industry increased almost 1.7 times in 2002-2005.

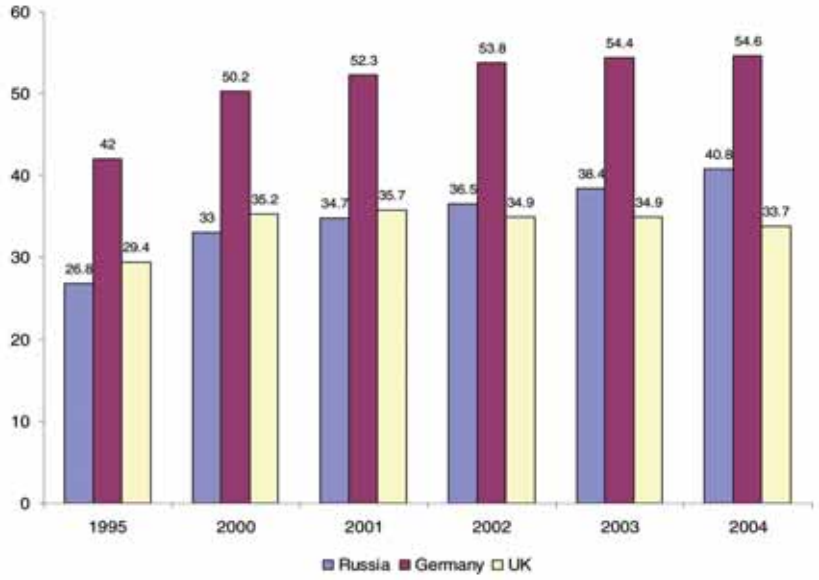
A higher growth rate of GDP was registered in such activities as transport and communications, where it increased almost twofold compared with 2002.

Figure 2.2.4.4.3. GDP Contribution from Transport and Telephony in 2002-2005 (billions of rubles)



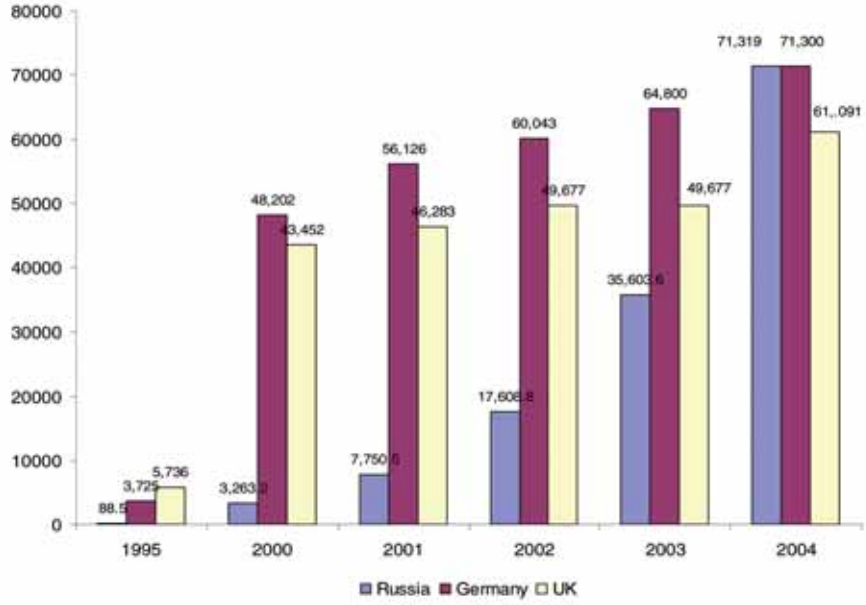
Data on the development of the communications industry compared with the developed countries of Europe (Germany and the UK) are given in figure 2.2.4.4.4.

Figure 2.2.4.4.4. Telephones Installed or Access to Them 1995-2004 (millions of units)



From the chart it can be seen that, while in Germany and the UK growth in the total number of telephones had practically stopped in 2001, in Russia it continued and showed a tendency to increase.

Figure 2.2.4.4.5. Number of Subscribers to Mobile Communication Services ('000)[6]



Even higher rates of growth were demonstrated by the mobile phone industry (see figure 2.2.4.4.5).

It is clear that the number of mobile telephone network subscribers increased in Russia during the period under analysis more than 800-fold, while in Germany it was 19-fold and in the UK 11-fold.

[6] All data except those for Russia were supplied by the International Telecommunication Union.

At the same time the number of mobile phone subscribers per 1,000 of the population in 2004 was equal to 864 in Germany, 1,022 in the UK, and only 497.1 in Russia. This showed that market growth in mobile communications was likely to double.

Besides showing strong growth, the communications services market was the most profitable, which is seen in table 2.2.4.4.2.

The average level of profitability in the communications industry in 2004 was more than 32 per cent, which determined the recalculation of the correction factor. It is clear that the share of material costs (interim consumption) in this sub-sector did not exceed 20 per cent. It was the low level of interim consumption that gave rise to such a high level of profits in this sub-sector. The level of profitability in the communications sector was practically eight times higher than the average for this group of industries. This is why the recalculation of the correction factor for the communications sector, taking account of conditions unique to Russia, appears justified.

The substantial contribution of the sub-sector relating to the real estate operations, rental and other services to GDP within this group was connected to the generally high level of GDP generated in the given sector. It should be pointed out that the high growth rate of production of services in this sub-sector was noted, with individual types of services (such as consultancy services) being closely associated with copyright. In view of the lack of data to confirm this, no recalculation of the correction factors was made.

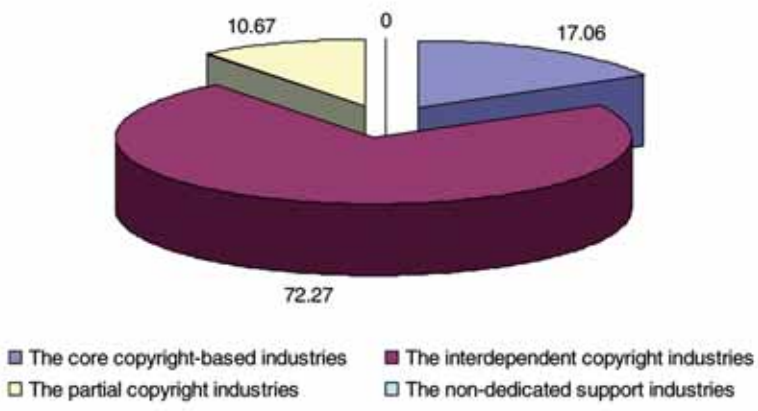
2.2.5. Contribution to Foreign Trade of Copyright-Based Industries in 2004

The contribution to foreign trade in 2004 was 7.21 per cent or 20,228.15 million US dollars. Not all industries influenced the level of this indicator since, due to the absence of data, our calculations did not take into account the export and import operations of the non-dedicated support industry.

The figure shows that the interdependent copyright industries most substantially contributed to foreign trade turnover indicators (72.27 per cent). The contribution of the partial copyright industries was 10.67 per cent, and the contribution of the core industries was 17.06 per cent.

This demonstrated that goods and services in the category of exports and imports provided by the core industries had not had a substantial influence, and that development of this sector would promote a significant increase to this effect.

Figure 2.2.5. Contribution of the Core Copyright Industries to Foreign Trade in all Sectors in 2004 (% of total)



The following analysis of the contribution to the Russian economy by each of the four groups (core, interdependent, partial and non-dedicated support industries) shows which subgroups, in accordance with NACE, were analyzed, and the way their contribution to the Russian economy was made up.

2.2.5.1. Contribution of the Core Copyright Industries to Foreign Trade in 2004

The total volume of foreign trade for the core industries in 2004 was 3,450.2 million US dollars, consisting of exports of 1,025.8 million US dollars and imports of 2,424.4 million US dollars.

Figures 2.2.5.1.1 to 2.2.5.1.2 show the make-up of exports and imports for the core copyright industries.

The following types of economic activities are included in the exports of the core copyright industries, based on customs statistics: export of photographic and cinematographic instruments; books, newspapers and magazines; musical instruments and their parts; services in the sphere of information and computer technologies; royalties or other payments; services in the sphere of culture and leisure, and also exported artistic creations.

Figure 2.2.5.1.1. Exports of the Core Industries in 2004 (millions of US dollars)

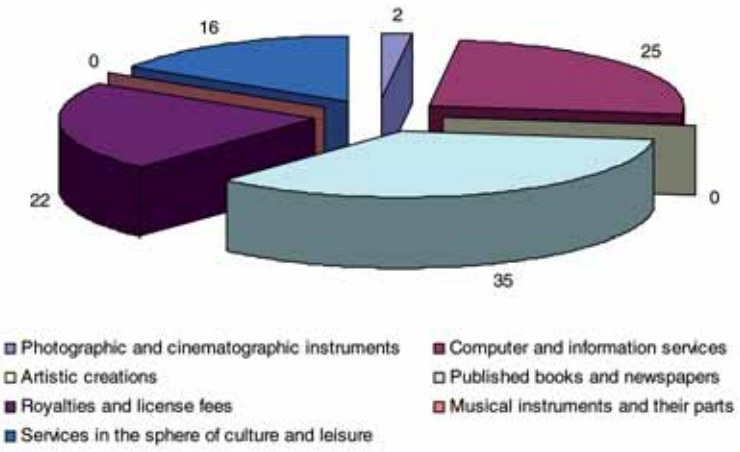


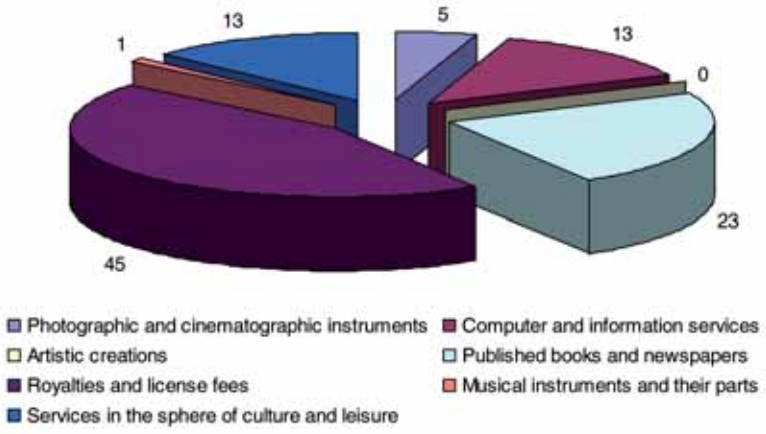
Figure 2.2.5.1.1 shows that the main exports of the core group in 2004 were printed products (34.85 per cent) and provision of computer and information services (24.96 per cent). Royalties and license fees (22.22 per cent) and services in the sphere of culture and leisure (15.98 per cent) also played an important role.

Exports of artistic creations, musical instruments and photographic and cinematographic products in 2004 were not significant, since their share did not exceed two per cent of the total volume in this sector. Imports for the core industries accounted for almost twice the volume of exports.

There is only one similarity between exports and imports for the core industries: the share of musical instruments and artistic creations did not exceed one per cent of foreign trade in this sector.

The most important role in the imports of the core industries was that of royalties and license fees paid on the acquired copyright and related rights (45.12 per cent), and also by imported printed publications (22.94 per cent).

Figure 2.2.5.1.2. Imports for the Core Industries in 2004 (millions of US dollars)

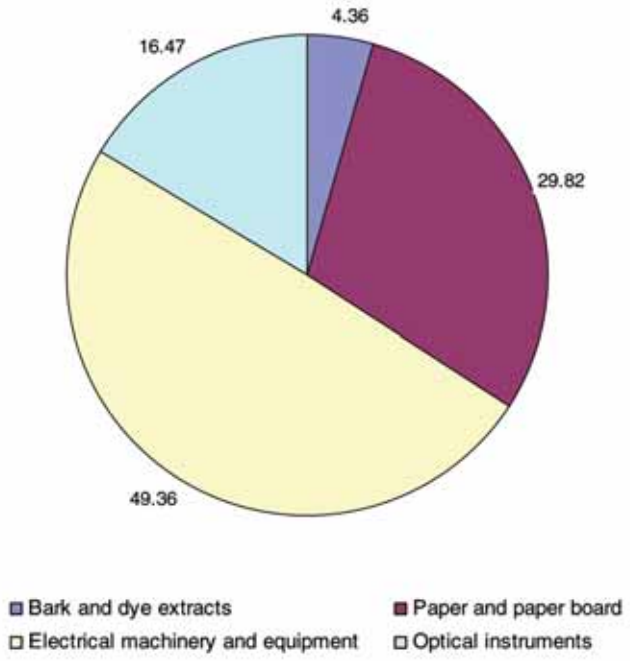


2.2.5.2. Contribution of the Interdependent Copyright Industries to Foreign Trade in 2004

The total contribution of the interdependent industries to foreign trade was 14.6 billion US dollars, including exports of the interdependent industries – 4,095.69 million US dollars, and imports – 10,523.5 million US dollars.

Figure 2.2.5.2.1. gives the export contribution of the interdependent industries.

Figure 2.2.5.2.1. Exports of the Interdependent Industries in 2004

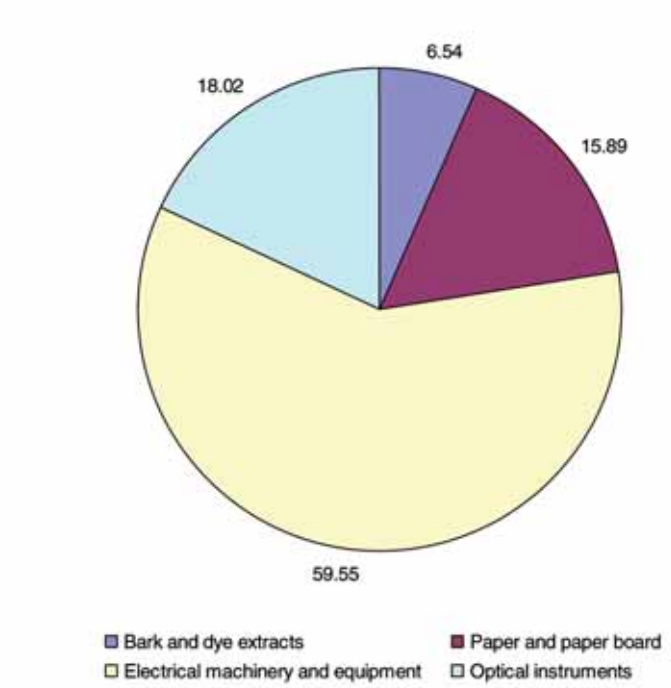


This figure shows that the main contribution to foreign trade exports was made by the following:

- electrical machinery and equipment (related to the products of the interdependent industries) – 49.36 per cent;
- paper and paperboard – 29.82 per cent;
- optical instruments – 16.47 per cent.

Figure 2.2.5.2.2 shows the contribution of the interdependent industries to foreign trade in 2004.

Figure 2.2.5.2.2. Contribution of the Interdependent Copyright Industries to Foreign Trade in 2004



This figure shows that the main contribution to foreign trade imports was as follows:

- electrical machinery and equipment (related to the products of the interdependent industries) – 59,55 per cent;
- paper and paperboard – 15.89 per cent;
- optical instruments - 18.0 per cent.

Section 3. International Comparisons

This research would be incomplete if it did not include international comparisons for all or some of the figures used. Such comparisons within the framework of this report have been limited, as this is the first research of its kind to be carried out in Russia, whilst in many other countries this has been done on a regular basis since 1998.

Comparisons in the present report were made using the results of similar research carried out in 2006 in the US (data for 2004). As shown above, based on similar research in different countries carried out under the guidance of WIPO, in 2004 the contribution to the economy made by the copyright industries amounted to 4.8 per cent of GDP in Finland; 5.8 per cent of GDP in the Netherlands and 7.75 per cent of GDP in the US. According to our research this index is equal to 6.06 per cent of GDP in Russia.

However, detailed computations and estimates made in the US for 2004 enabled us to significantly adjust the estimates obtained on the basis of preliminary evaluations. According to the 2006 annual report on the influence of copyright industries on the US economy, the contribution of the copyright industries to GDP in the US equaled 11.09 per cent, which was nearly twice as high as the corresponding figure for Russia.

Research on the significance of copyright for the US economy is carried out on a regular basis by Economists Incorporated for the International Intellectual Property Alliance, and the results are published in the form of reports.

The 2006 report on similar research in the US seems to be commensurate with this research in terms of the period studied. Data from other countries carried out earlier are given to illustrate the growth rates of certain copyright-based industries.

Table 3.1. Comparison of the Weight of Copyright Industries in GDP in 2004 (Russia and the US)

	Index	Russian Federation		US
		(billion rubles)	(billion US dollars)	(billion dollars)
1	Total GDP	16,779.00	1,410.70	11,734.30
2	GDP for copyright-based industries	1,016.10	85.46	1,300.77
3	Share of GDP for copyright-based industries as % of the total	6.06	6.06	11.09
4	GDP in core copyright industries	400.11	33.65	760.49
5	Share of GDP created in primary copyright industries as % of the total	2.38	2.38	6.48

As can be seen from Table 3.1, the share of GDP contributed by the copyright industries constituted 6.06 per cent of the Russian total, whilst in the US it was above 11 per cent.

The share of GDP created in industries directly related to copyright and included into the core industries was only equal to 2.38 per cent in Russia, whilst in the US this figure amounted to 6.5 per cent.

The above shares in absolute figures (calculated in billions of US dollars) clearly demonstrate the difficulty in comparing the volume of value added produced in these industries. It should also be noted that Russian GDP calculated in billions of US dollars was virtually 10 times lower than of the figure for the US.

Table 3.2. Comparison of the Weight of Copyright Industries in Employment in 2004 (Russia and the US)

	Index	Russian Federation ('000 workers)	USA ('000 workers)
1	Total employment	65,900.00	131,435.00
2	Employment in copyright-based industries	4,900.27	11,206.60
3	Share of employment in copyright-based industries as % of total	7.43	8.53
4	Employment in core copyright industries	2,882.43	5,344.00
5	Share of employment in core copyright industries as % of total employment	4.37	4.07

Comparing the respective shares in the total volume of employment of the two countries showed a more favorable ratio: the numerical values of the share of employment were not only close, but sometimes the figure for Russia was even higher than that for the US. Thus, in Russia the share of employment in the core industries was equal to 4.37 per cent of the total, whereas in the US this share was only slightly higher than four per cent.

However, the comparison of GDP per employee evidences the low productivity and the inefficiency of labor in Russia.

Thus, in Russia, each worker created 254.6 thousand rubles or 21.39 thousand US dollars of added value, whereas in the US this figure amounted to 89.3 thousand US dollars.

In Russia, labor productivity calculated as GDP per employee in the copyright-based industries was equal to 270.3 thousand rubles or 17.4 thousand US dollars. The same calculation in the US was 116.1 thousand dollars.

In key copyright industries, labor productivity totaled 138.8 thousand rubles or 11.7 thousand US dollars; in the US it was 142.3 thousand dollars.

Table 3.3. Comparison of GDP per Employee in Copyright-Based Industries in 2004 (Russia and the US)

	Index	Russian Federation		US ('000 US dollars)
		('000 rubles)	('000 US dollars)	
1	GDP per employee for the economy as a whole	254.6	21.4	89.3
2	GDP per employee in copyright-based industries	270.3	17.4	116.1
3	GDP per employee in copyright-based industries as % of the total economy	1.06	0.81	1.3
4	GDP per employee in core copyright- industries	138.8	11.7	142.3
5	GDP per employee in core copyright- industries as % of the total economy	0.54	0.54	1.6

From the above data one can see that GDP in the US per employee in the copyright-based industries was 1.3 times higher than for the economy as a whole, and in key copyright industries it was 1.6 times higher.

In the Russian Federation the situation was significantly worse: while GDP per employee calculated in rubles in the copyright industries relative to the economy as a whole was 1.06, its dollar equivalent was only 0.81. In key copyright industries the above index was only 0.54.

These ratios may be interpreted as illustrating not only low productivity in the industries studied, but also their high level of involvement in the informal economy.

As a rule, in the case of concealment of real production volumes and tax earnings, the numbers employed were reflected correctly in the statistical reports, whereas data on the wages paid, tax on wages paid and the volume of products manufactured and sold were invariably underreported.

If we assumed the ratio of GDP per employee in the copyright industries in the US to be an objective and valid co-efficient, we could assume that in the Russian Federation the GDP produced per employee in the copyright industries was equal, not to 17.4 thousand dollars, but to 27.82 thousand dollars (21.4*1.3=27.82), and accordingly, in the key copyright industries equal to 34.24 thousand dollars (21.4*1.6=34.24).

Taking into account that the number employed in the copyright industries was 2.882.43 thousand people, and the total for the given sector was 4,900.27, we can determine the total volume of GDP, which in estimated figures could amount to 136.3 billion US dollars in the copyright-based industries, including 98.7 billion US dollars in the key copyright industries.

Table 3.4 illustrates the comparison between GDP in various sectors of the economy in Russia and the US.

Table 3.4. Comparison between GDP in Copyright-Based Industries and Other Core Industries in 2004 (Russia and the US)

	Index	Russian Federation		USA
		(billion rubles)	(billion US dollars)	(billion US dollars)
1	Total GDP	16,779.00	1,410.70	11,734.30
2	GDP of copyright-based industries	1,016.10	85.46	1,300.77
3	GDP of core copyright industries	400.11	33.65	760.49
4	Construction	833.33	70.08	549.50
5	Healthcare and social services	466.20	39.21	802.70
6	Finance and insurance	509.10	42.81	927.40

The above data clearly demonstrate the established difference between economic potential and the efficiency of its exploitation. The data also confirm comparability of GDP volumes in the key copyright industries and major economic sectors. Table 3.5 contains figures characterizing the structure of exports in some copyright-based industries in Russia and the US.

The data in this table show significant differences between Russia and the US in the export structure. The most optimistic estimate shows that the contribution of the copyright-based industries to the total volume of exports in the Russian Federation was five times lower than in the US. It can clearly be seen that in the

US exports of copyright-based industries occupied a leading place, as they significantly—by more than double—exceeded the exports of other leading US industries (1.57 times for machine-building, and for chemical and pharmaceutical industries –more than fourfold).

Table 3.5. Comparison between Exports from Copyright-Based Industries and Certain Core Industries in 2004 (Russia and the US)

	Index	Russian Federation (billion US dollars)	US (billion US dollars)
1	Some copyright-based industries	20.23	106.23
2	Chemical industry	12.0[7]	23.98
3	Medicine and pharmaceuticals	No data	23.98
4	Machine-building (engines, machine parts and accessories)	14.1[8]	67.64
5	Aircraft and related equipment	No data	42.09
6	Metallurgy	36.7[9]	41.98
7	Food products and livestock	3.3[10]	45.48

As regards the contribution of GDP from the copyright-based industries, the core industries occupied a dominant position, contributing more than 58 per cent of GDP.

Table 3.6. Comparison of GDP in Copyright-Based Industries and Other Core Industries in 2004 (Russia and the US)

	Index	Russian Federation		US	
		(billion US dollars)	%	(billion US dollars)	%
1	Total for industries based on copyright, including:	85.46	100	1,300.77	100
2	Core industries	33.65	39.38	760.50	58.46
3	Interdependent industries	10.71	12.54	248.59	19.11
4	Partial industries	3.82	4.47	47.23	3.63
5	Non-dedicated support industries	37.27	43.61	244.46	18.79

In Russia, the share of the core copyright industries was somewhat lower as it did not exceed 40 per cent of the GDP contributed by the copyright sector. The share of the interdependent industries (manufacture of equipment, raw materials, components, etc.) was significantly lower than in the US. This is why the development of this sector which at the time of the study was directed towards imports, could make a further impact on the growth of output in the core industries and in general all the industries in this sector. On the contrary, in Russia the share of the partial copyright industries and the non-dedicated support industries remained quite high. This phenomenon was likely to be temporary and it could be assumed that the high weight of these industries was caused by the continuing boom of the infrastructure industries in Russia. At the same time, this is a prerequisite for the future growth of GDP in the core copyright industries.

[7] Exports to countries outside the CIS = 9.1 billion US dollars; to CIS countries = 2.9 billion US dollars.
[8] Imports to countries outside the CIS = 8.4 billion US dollars; to CIS countries = 5.7 billion US dollars.
[9] Imports to countries outside the CIS = 33.1 billion US dollars; to CIS countries = 3.6 billion US dollars.
[10] Imports to countries outside the CIS = 1.4 billion US dollars; to CIS countries = 1.9 billion US dollars.

Section 4. Estimate of Trends of Copyright Use in Other Industries: Recommendations Aimed at Increasing its Significance to the Economy

4.1. Estimate of Trends in Copyright Use in Other Industries

The analysis of the significance of copyright in the Russian economy and the main results provided in the previous section of this study show that in spite of the recession that took place from 1995 to 2000, most copyright-based industries received a strong stimulus to development and were gradually recovering their position in the economy, demonstrating growth in output, employment and contribution to GDP.

It is important to note that some new industries and sub-sectors had emerged which at that time had not gained substantial weight in the economy, but would obviously do so in the future.

The trends appeared steady, so it was possible to assume that in the future a steady growth in the significance of copyright would be observed, which tendency was verified by structural changes in the economy.

Thus, growth in the number of enterprises and organizations as well as other economic indicators demonstrated a steady upward trend of economic significance for the copyright-based industries.

The prospects for significant growth in this sector were also determined by its contribution to GDP.

Figure 4.1. Specific Weight of Employees' Remuneration in GDP (%)

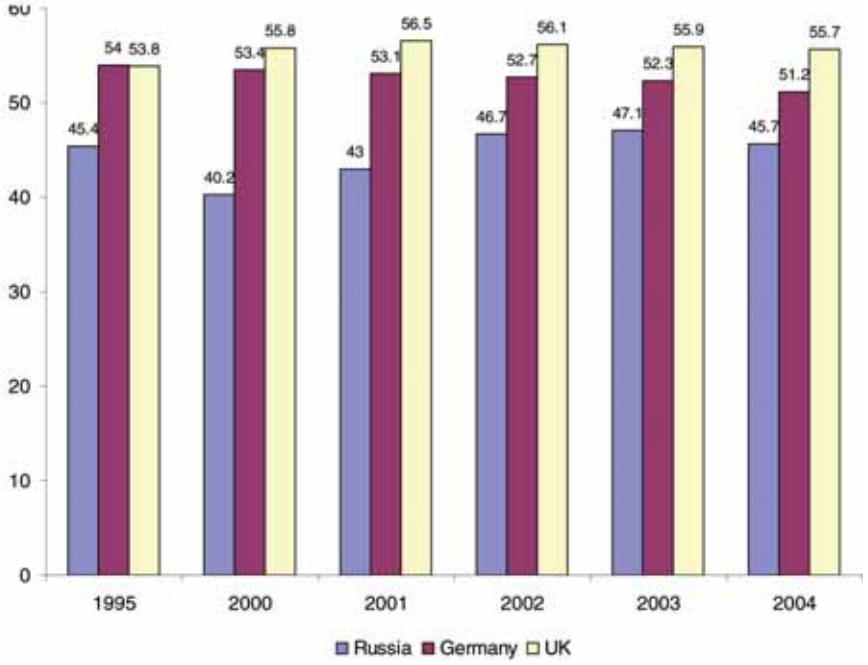


Figure 4.1 illustrates changes in the share of employees' remuneration in GDP including salaries and social insurance costs.

Taking into account that the share of labor remuneration in the overall volume of GDP in Russia was on

average 10 per cent lower than in the developed European countries, such as Germany and the UK, it can be said that consumption will play an essential part in the growth of the influence of copyright on the development of Russia's economy.

An increase in the share of labor remuneration by 10 per cent (on average) would generate additional demand for goods and services amounting to around 1,600 billion rubles, resulting in growth in the goods and services markets, and above all those related to copyright.

4.2. Recommendations for Increasing the Significance of Copyright in the Russian Economy

The results of our research gave grounds to believe that copyright in Russia is highly significant. Economic development trends allowed us to state with confidence that in the future the influence of copyright on the total growth of core indicators would increase.

Together with the above, the authors of the research offer some general recommendations aimed at increasing the significance of copyright to the Russian economy.

First, taking into consideration the importance of this research which was carried out in Russia for the first time, the unique character of the data provided in the present report and the significance of the economic development trends uncovered, the results of the research should be communicated to the general public as well as to the legislative and executive bodies including the government, president and federal assembly of the Russian Federation.

Second, based on the results of the present research and the existing methodology, it is necessary to continue studying the significance of copyright to the Russian economy to include a wider time span, namely, to carry out retrospective analyses for the period before 2004, to pursue such studies annually, and to carry out a prospective analysis which could provide significant results and recommendations for the long- and medium-term planning of the country's economic development.

Third, based on WIPO methodology, it is necessary to continue development and adaptation to Russian conditions, including for the purposes of discovering multiplying effects that could affect the significance of the results.

Fourth, in view of the need to develop research methods, it will be necessary in the future to engage in research on a permanent basis with specialists from the Federal Service for Statistics (Rosstat), and to work out a joint proposal for the Federal Service for IP, Patents and Trademarks (Rospatent) and Rosstat on the inclusion of the appropriate research into the federal statistics program with the approval of both parties.

Fifth, considering that the present research covers various aspects of economic development in general and determines the significance of copyright in particular, it is necessary to produce a manual and use the present research and its results in teaching courses at higher educational institutions in Russia, both within the framework of IP and that of economics.

Sixth, taking into consideration the high social and scientific value of the present research and its results, we suggest including it in the plan of activities of the Rospatent and WIPO preparations and the holding of an international scientific and practical conference to demonstrate the significance of copyright to the Russian economy and evaluating the prospects of its use in specific industries.

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