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DEVELOPMENT OF THE POLYGRAPHIC INDUSTRY IN THE CONDITIONS OF INDEPENDENCE

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Abstract: The article conducts a study of the development of the printing industry of the Republic of Tajikistan in the post-independent period. In connection with the realities of the modern world and the constantly changing state of demand for printed products, structural changes in the printing market have been identified, namely, greater demand is for short-run printed products. In this regard, a promising solution when the cost of basic materials, which includes paper, and the components of consumables increases, is the reconstruction of existing or the creation of new enterprises with the introduction of contactless digital technologies that help expand the range, ensure efficiency, reduce costs without reducing the quality of printed products.

Keywords: printing industry, enterprises, printed products, production volume, circulation, paper

Introduction. Development of the economy of the Republic of Tajikistan in accordance with official data is carried out in accordance with the national strategy under the Government Resolution of 27 November 2019 585 [1]the main objective of which is to improve the living standards of the population through sustainable economic development.

Number of operating enterprises such as mining, processing, electricity, road, aviation infrastructures, etc. is reflected in Figure 1. As shown in Figure 1, industrial production has increased between 2018 and 2020. 8.1% on average and 24 % for the entire post-independent period [2].

The printing industry plays an important role in the development of the economy, engaged in the production of a wide range of printed products used in almost all industries and become an indispensable part of them. The range of products, works and services produced by printing enterprises is very wide (fig.2), which is the main factor in the formation of a complex intra-branch structure.

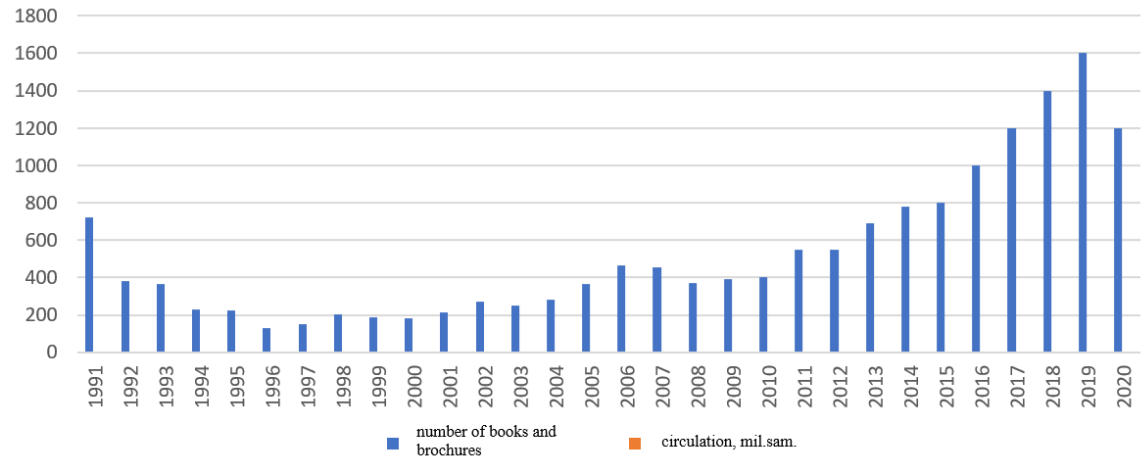

Figure 1. Growth of output (mil. of somoni) and number of enterprises in the post-independent period.

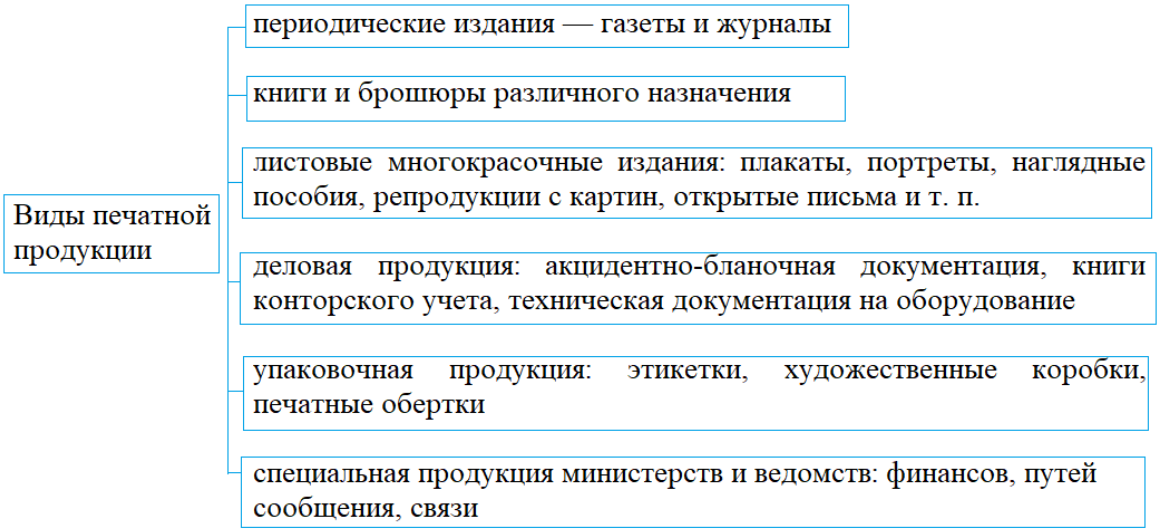

Figure 2. Types of printed products.

Dynamically developing needs of the modern market determine the pace and scale of printing production. Consider separately how the printing industry is reflected in other sectors of the economy.

Pulp and paper and printing industries account for 182 million tons of paper and cellulose paper, which represents a small share (0.5%) of the total output, which indicates that the needs of the population of the republic are being met (fig.3). These are mainly «commercial products of general purpose», which include business (leaflets, brochures, catalogues), promotional (posters, posters, tickets, price lists, etc.), newspaper-magazine, book and advertising products.

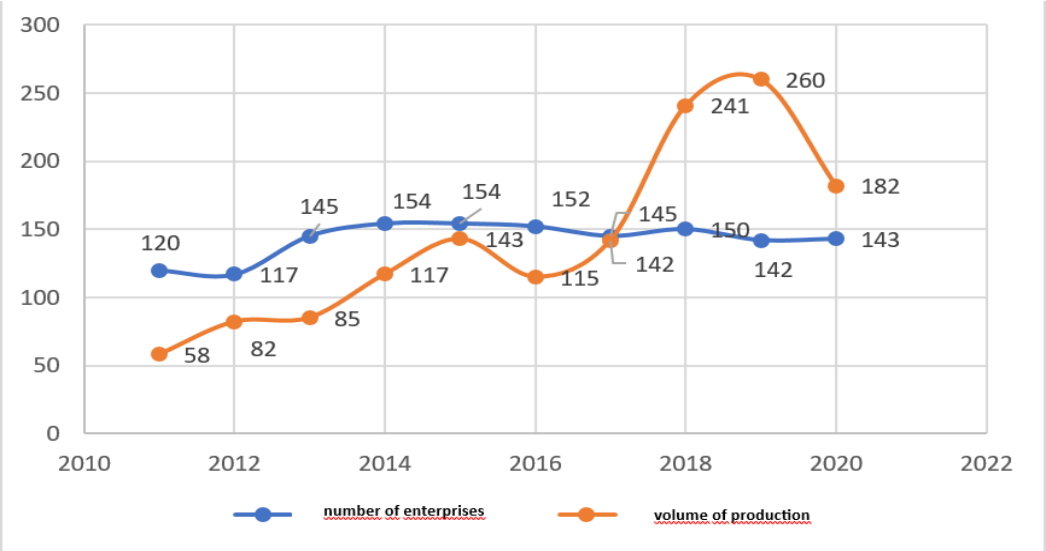

Figure 3. Number and volume of existing pulp and paper and printing enterprises.

As shown in Fig. 3, the number of operating enterprises increased by an average of 19% between 2010 and 2022. However, if we compare the number of enterprises with 2018, we can see a decrease of 4.6%, which indicates a decrease of organizations in connection with the consolidation of enterprises, the cessation of activities of small firmsoffices, reorganizing companies to ensure a common economic policy and increase profitability.

One of the main tasks of the printing industry is the development of society and the education of the younger generation. Print products, among which educational literature, in addition to teaching and education, performs other important functions such as coordination, integration, self-control, systematization, transformation, information provision, stimulation, etc. In this connection, there has been a significant increase in paperback and hardcover (Fig.4). According to the analysis of the post-independent period, the increase in the number of printed publications in paperback and hardcover was 66%. However, such a print-out parameter as circulation, which directly affects the cost and profitability of production, decreases by 67% (Figure 5), which can be explained by the availability and sufficiency of electronic versions, more convenient for use in different conditions (transport)in the fast search of necessary information. The prevailing circumstances and high cost and time requirements for the production of printed publications have contributed to the replacement of traditional technology and technology with modern digital equipment.

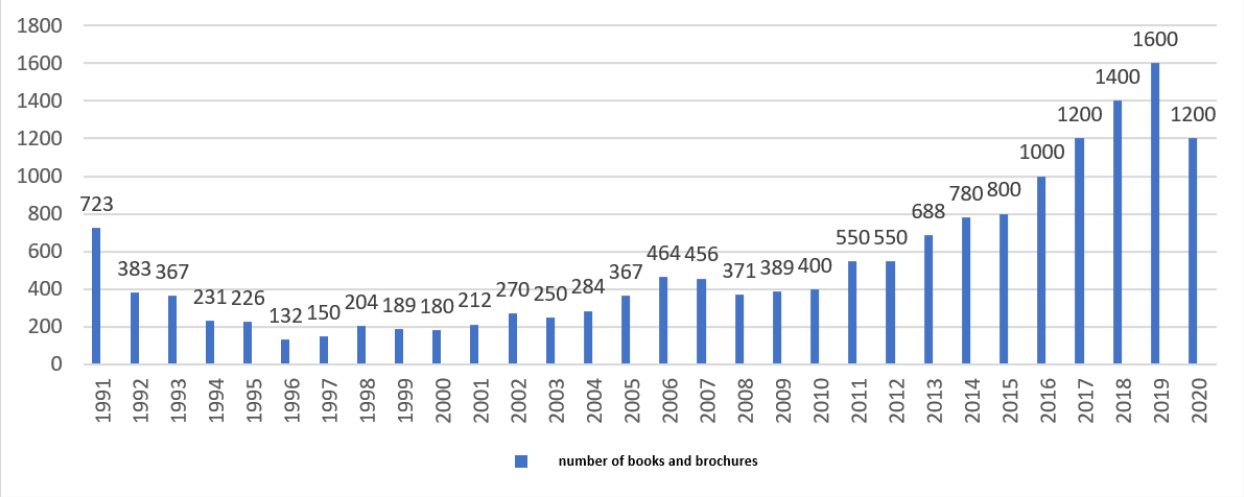

Figure 4. Diagram of the change of titles in paperback and hardcover.

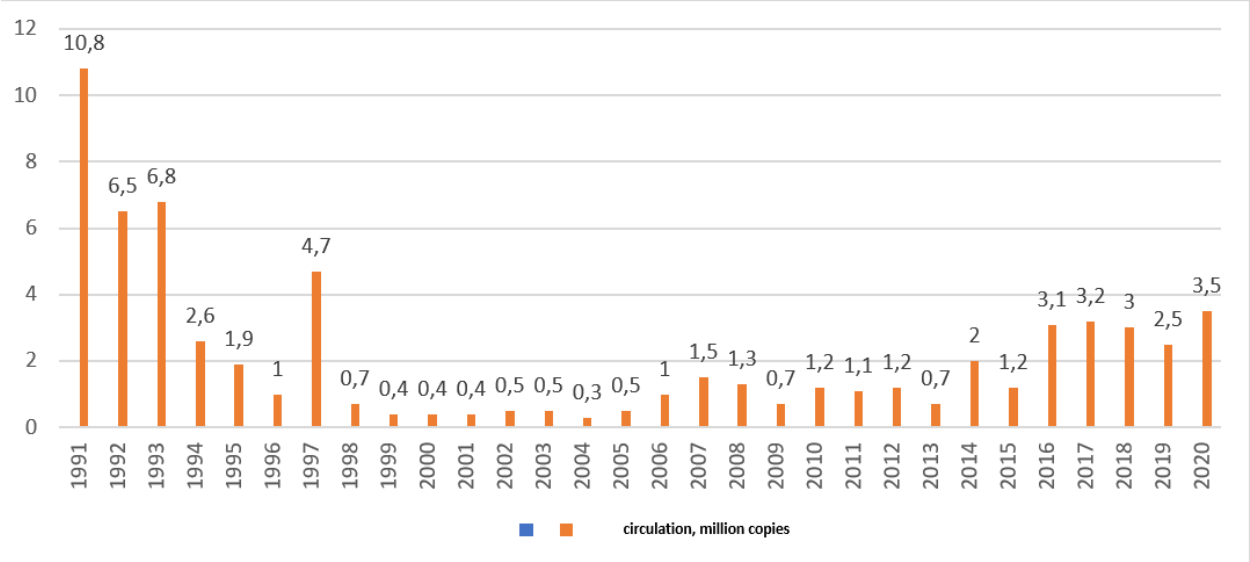

Figure 5. Chart of the change in the circulation of soft and hard cover publications.

One type of publication is the periodical (newspapers and magazines), the systematic use and study of which enhances the competence of the specialist, It is an important source of information culture and education. According to P.S.Lernger, periodicals provide information for the general public on contemporary problems of education, based on practical experience and scientific and theoretical knowledge [3]. In this regard, the author claims that the popularization of pedagogical publications allows for an in-depth analysis of any activity. At the moment, according to statistical data, the number of periodical names in the republic is 90, which is 2.5 times more than in 1991, which indicates the demand for and demand for this product (fig.6).

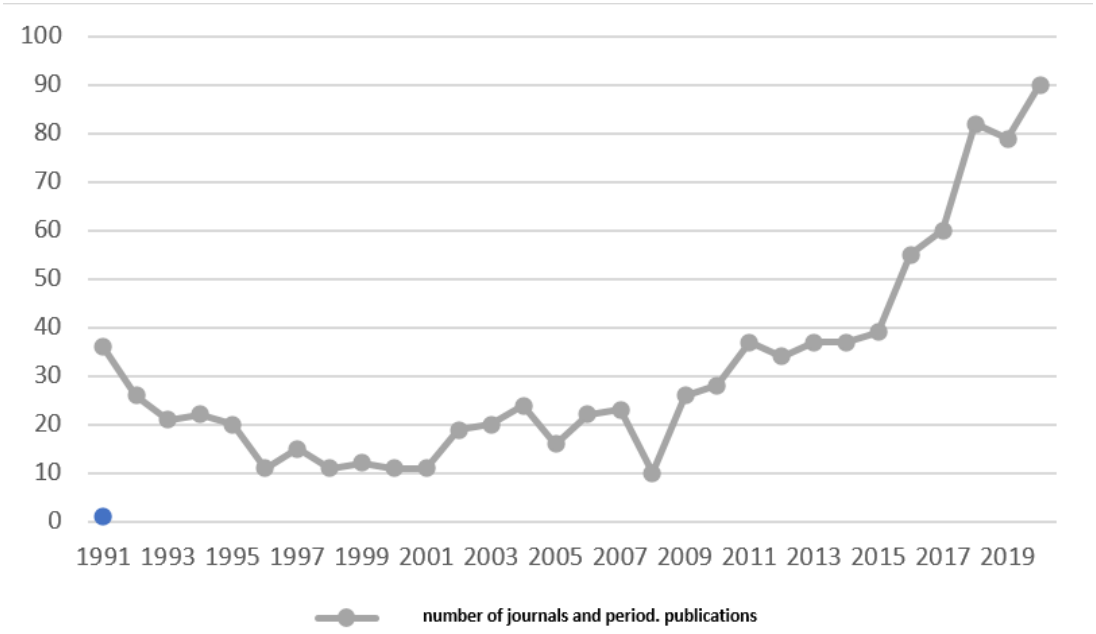

Figure 6. Chart of changes in journal and periodical titles.

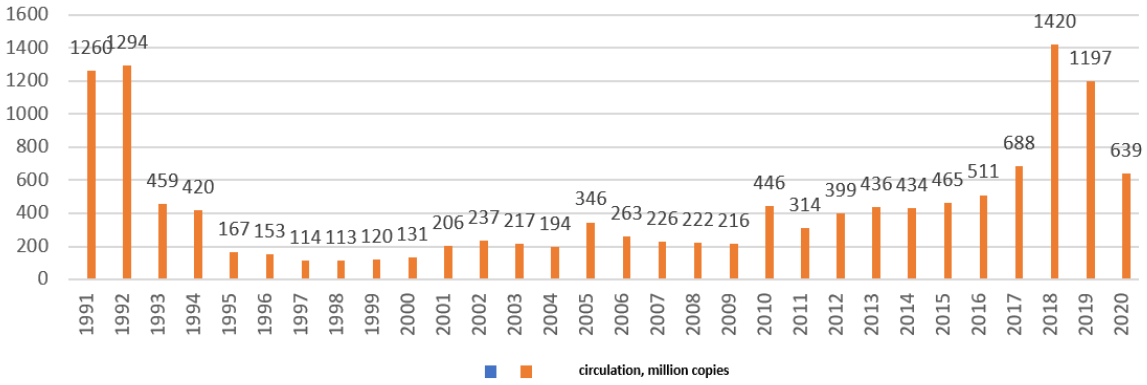

Figure 7. Graph of circulation of periodicals.

As shown in Fig.7, since the beginning of the post-independent period, the circulation of the publication has decreased by 2.7 times. For ten years, stability has been maintained, without sharp jumps. From 2015 to 2018, there is a significant growth of 3.05 times, then there is a decrease to 640 million copies.

One of the main materials used in printing is paper and paperboard, which is made of various raw materials and produces 500 million of them worldwide. tons. According to statistics, 85% of paper and paper production is accounted for by 10 leading countries. The top three are the United States of America (60 million tons/year), Brazil and Canada (18 million tons/year each) [4]. The traditional raw material for paper and paper products is cellulose from natural wood resources and recycled raw materials. The scarcity of natural wood resources and environmental degradation contribute to the development of recycling - the process of processing waste products for semi-products, products or secondary raw materials [5]. In this regard, the world is paying special attention to the

development and improvement of secondary fibre paper technology to reduce the consumption of scarce wood pulp and improve the environmental situation [6-11].

The article provides data on the import of paper products according to the commodity nomenclature of CN EurAsEC (table.1) [12-13].

Table 1

Import of paper products to the republic (mln. dollars)

1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
0,7	2,4	1,2	1,2	2,1	2,4	2,3	27,5	3,1	3,0	9,1	19,2	33,4	8,6	9,6
2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
10,1	107,1	47,4	26,7	28,2	50,0	49,0	37,3	46,9	40,9	54,5	51,6	48,9	44,0	40,3

Conclusion. These data show the development of printing industry, modernization and creation of new joint ventures. Due to the realities of the modern world and the ever-changing state of demand for printed products, the use of contactless digital technologies is a more promising solution in the production of single and multiracial small-circulation printed products. The invention makes it possible to extend the assortment, speed and reduce the cost of production by increasing the cost of the main materials, including paper, and the components of consumables without reducing the quality of printed products.

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CONTENTS

PRIMARY PROCESSING OF COTTON, TEXTILE AND LIGHT INDUSTRY