

EMPLOYEES' PARENTAL LABOR STIMULATION IN RUSSIAN COMPANIES: SOCIOECONOMIC VIEW

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Abstract

The paper discusses the methods of estimation of employees' parental labor stimulation effectiveness. Involving companies in the processes of fertility and parental labor stimulation is relevant for modern Russia because of long-term depopulation tendency. The main purpose of the paper is to introduce the conception of economic and social efficiency of the measures that companies could realize. The study is based on the socioeconomic approach concerning interrelation between social and economic aspects of reproduction.

The methods are realized for the estimation of parenting stimulation policy in the largest Russian metallurgical company. The analysis of social efficiency revealed that the birth decision made by the employees was highly determined by parental labor support measures which had been realized at the enterprise. Social efficiency is also shown by positive dynamics of birth rate, decrease of perinatal mortality, number of complicated and premature births. The results of the analysis also show high economic efficiency of the realized measures.

The analysis which has been carried out using socioeconomic approach showed that social activity of business in the demographic sphere is profitable. It makes the policy of parental labor stimulation effective from both strategic and tactical points of view in company management.

Key words: parental labor, fertility, support for fertility, socioeconomics

JEL Code: J13, J28

Introduction

The existent demographical situation in Russia during last decades is going to result in a lack of labor forces. This fact makes the country and regional leadership find solutions for controlling demographical processes (first of all, fertility and migration). Against the background of demographical crisis the searching of new, nonstandard approaches becomes relevant.

One of such approaches is engaging Russian companies into solving demographical problems. The necessity of enterprise participating in these processes follows directly from the fact that the enterprises exactly are the main customers of human capital formed in the process of parental labor. They are particularly interested in getting its high quantitative and qualitative results. The parental labor refers to activities connected with childbirth, upbringing and children socialization during which parents form and develop their human capital. The works of Jantti and Danziger (Jantti and Danziger, 1994), Sotomayor-Peterson, De Baca, Jose and Smith-Castro (Sotomayor-Peterson, De Baca, Jose & Smith-Castro, 2013), Yamauchi (Yamauchi, 2012), and etc. are dedicated to studying problems of parental labor.

Employees' parental labor stimulation realized by top management of a company is aimed to solve both strategic and tactical targets at the same time. The strategic target is to provide high valuable labor force to the enterprise in the future. The tactical targets are: 1) realization of company's social functions by satisfying the number of workers' needs; 2) improvement of socio-psychological climate in the factory; 3) work motivation reinforcement and creating conditions for workers' labor activity both in the sphere of productive and reproductive labor; 4) improving personnel stability; 5) improving health level of the workers and their children and reduction of sickness absence.

In addition, realizing social policy, the company partly undertakes the liability of the state to its citizens what often results in lobbying company interests. It particularly displays in getting credits on easy terms in state banks; state regulation of natural monopolies activities; supporting the enterprise by state orders; protection against importation, etc.

We suppose that support for fertility and parental labor on the enterprise has not only social but also economical effect. Our hypothesis is based on that statement that the parental labor is a process connected both with economic and social reproduction; that is why while investigating we need to consider and analyze economic and social expenses and results at the same time. Similar socioeconomic approach developed in the works of Etzioni (Etzioni, 1986; Etzioni, 1987), Tittle (Tittle, 2013), Shabanova (Shabanova, 2013), Krier (Krier, 1999), Martin and Cuevas (Martin & Cuevas, 2010) allows investigating parental labor in a complex way considering interrelation between its economic and social aspects.

1 Data and Methods

We consider assessing employees' parental labor stimulation through social and economic efficiency of proper social programs. The concept of socioeconomic effectiveness refers to the

ratio of the effect of program realization to all kinds of enterprise expenses for forming and developing human capital of the employees and their children. These social programs may include: reduction of disability days of workers connected with their children's sicknesses, improving of socioeconomic climate of the team, rising personnel stability level, improving quantitative and qualitative indexes of childbirth of the employees.

We suggest the following sequence of the analysis of social and economic efficiency of workers' parental labor stimulation:

Block 1. Assessing economic effectiveness of parental labor stimulation. It was made on the base of counting and analysis of the dynamics of the following indexes:

- 1) Average number of disability cases a year for 1 worker having a child;
- 2) Average total duration of employee's disability a year connected with child sickness;
- 3) Average single-case duration of employee's disability a year connected with child sickness;
- 4) Average duration of employee's disability a year connected with sickness of a child of particular age;
- 5) Total average duration of employee's disability a year connected with sickness of a child of particular age.

These indexes should be calculated twice – before and after the beginning of realization of parental labor stimulation program.

Block 2. Assessing social effectiveness of parental labor stimulation. It can be shown by the following indexes:

- 1) Indexes of birth rate, the course of fertility and childbirth of women employees;
- 2) Assessing workers' opinion about expediency and effectiveness of parental labor stimulation programs;
- 3) Assessing the level of employees' awareness about actual events within the parental labor stimulation programs in the company;
- 4) Assessing factors determining employees' reproductive orientations.

The indexes of social effectiveness should also be calculated in progress – before and after realization of social programs focused on parental labor stimulation.

Block 3. Social and economic effectiveness indexes calculation

Indexes are calculated by dividing values we got after social programs realization by values which we got before the beginning of the programs. On the basis of these indexes the

economic and social indexes of effectiveness of parental labor stimulation programs can be calculated with the formulae (1) – (2):

$$I_e = \sqrt[l]{\frac{1}{i_{1e}} \times \frac{1}{i_{2e}} \times \dots \times \frac{1}{i_{le}}}, \quad (1)$$

where I_e – composite index of economic efficiency;

i_{1e}, \dots, i_{le} – indexes of particular values of economic effectiveness of parental labor stimulation programs;

$$I_s = \sqrt[l]{i_{1s} \times \frac{1}{i_{2s}} \times \dots \times i_{ms} \times \frac{1}{i_{ls}}}, \quad (2)$$

where I_s – composite index of social efficiency;

i_{1s}, i_{ms} – indexes of social effectiveness of parental labor stimulation programs whose increase indicates the improvement of conditions and the results of parental labor;

$\frac{1}{i_{2s}}, \frac{1}{i_{ls}}$ – indexes of social efficiency whose decrease indicates the improvement of conditions and the results of parental labor.

Block 4. Calculation of the integrated index of socioeconomic effectiveness of parental labor stimulation programs

It is calculated according to the formula:

$$I_{se} = \sqrt{I_e \times I_s} \quad (3)$$

The methods are realized for the estimation of parenting stimulation policy in the largest Russian metallurgical company “Magnitogorsk Iron and Steel Works” (MMK). There are more than 40 thousand workers in the company; different measures of fertility and parental labor support have been realized since 2005. Among these measures are: financial support for newborn families; monthly financial support for women workers having children under the age of 3; support for first-grader families; paid release from work for the women from the 13th to the 30th week of pregnancy with saving average monthly salary; Maternity center providing health protection for pregnant women and etc. (Bagirova & Vitik, 2011).

2 Results

Using of suggested methodology for the JSC “MMK” allowed getting the following results:

1) During the period of proceeding of parental labor stimulation program from 2004 to 2010 there was reduction of all disability indexes of workers connected with child sicknesses in JSC “MMK” (Table 1).

Tab. 1: The dynamics of worker’s disability duration indexes connected with child sickness

Indexes	2003 (before the implementation of the programs)	2010 (after the beginning of programs’ implementation)	Increase	Increase, %
Average number of disability cases for 1 worker having a child	0.23	0.17	-0.06	-26.1
Average duration of single-case disability period, days	9.10	7.05	-2.05	-22.5
Average total duration of worker’s disability period, days	11.80	9.30	-2.50	-21.2

Source: Own calculations based on MMK’ direct report

The indexes of employees’ disability connected with child sickness allowed determining the index of economic efficiency of parental labor stimulation programs (formula 1);

$$Ie = \sqrt[3]{\frac{1}{0.739} \times \frac{1}{0.775} \times \frac{1}{0.788}} = 1.304$$

2) For calculating the index of social efficiency we used the indicators of birth rate, course of fertility and childbirth of women workers of the enterprise. Table 2 shows its dynamics.

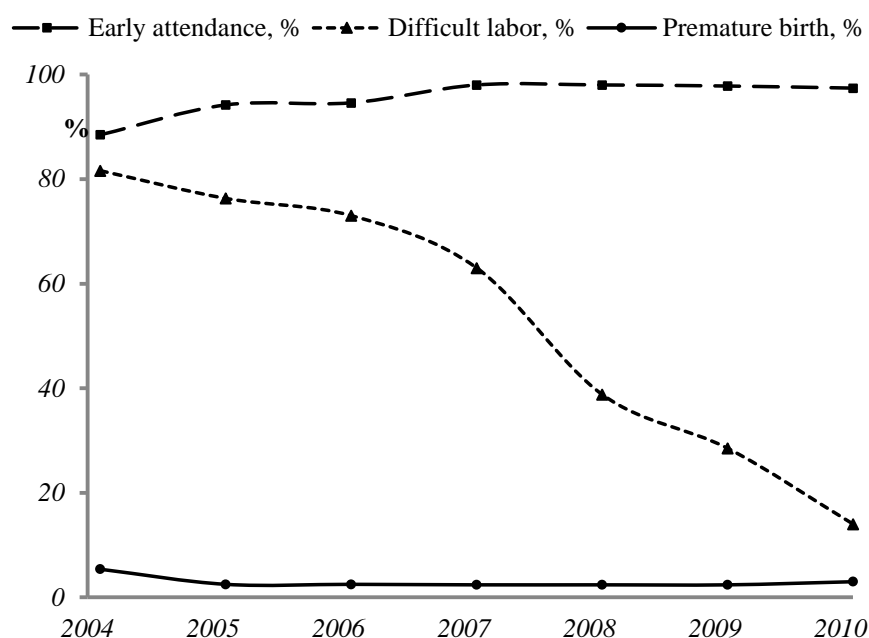
We should mention that as a result of the program realization aimed at childbirth stimulation there is a trend of fertility growth among women workers of JSC “MMK”, the indexes of pregnancy course and childbirth have improved. The dynamics of main indexes is shown on the Figures 1 and 2.

Tab. 2: Dynamics of reproductive programs effectiveness for the period of 2003-2010

Indexes	2003	2010	Increase, %
Perinatal mortality (per 1000 childbirths), %	6.4	2.2	-65.6
Obstructed (difficult) labor, %	88.7	14.0	-84.2
Early attendance, %	86.9	97.4	12.1
Premature birth, %	4.8	2.3	-52.1
Number of births	470	865	84.0

Source: Own calculations based on MMK⁷ Social report (Social Report, 2010)

Fig. 1: The dynamics of indexes of pregnancy course and childbirth among women workers of JSC “MMK”



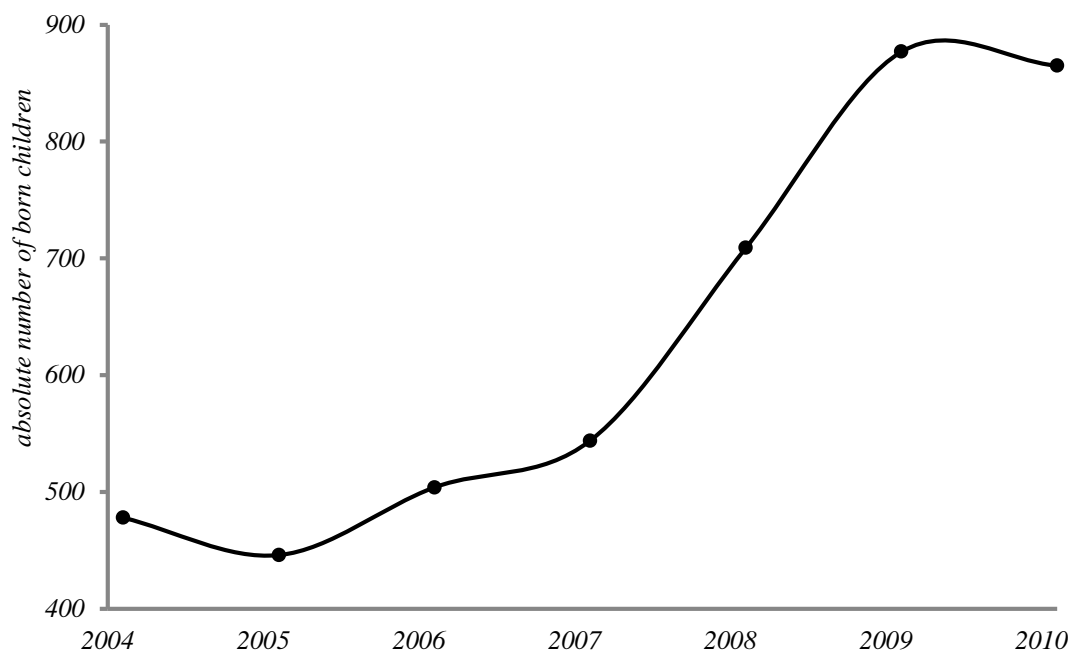
Source: Own calculations based on MMK⁷ Social report (Social Report, 2010)

The growth trend of absolute number of childbirths was registered in Magnitogorsk, Ural federal region and in Russia in whole. For the sake of comparing, we should say that the absolute number of childbirths in Russia from 2006 to 2010 has increased for 25.4%, in Magnitogorsk – for 29.3% and among workers of JSC “MMK” the growth of the same index figures up to 71.6%. This dynamics (comparing to the rate of 2006) is shown on Figure 3.

The index of social effectiveness calculated on the basis of the Table 2 amounts to:

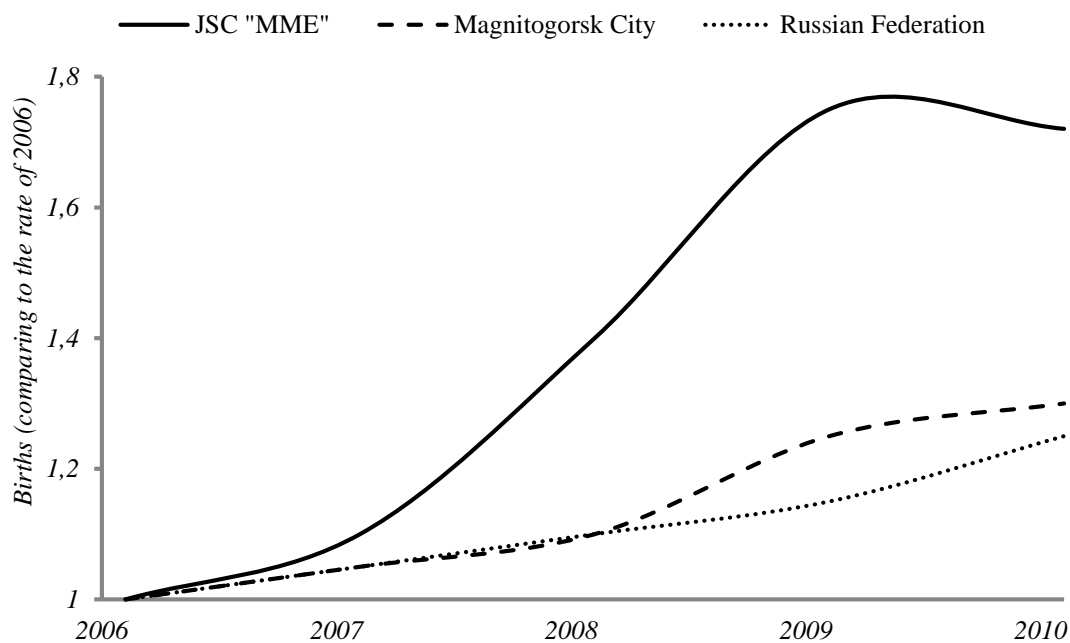
$$I_s = \sqrt[5]{\frac{1}{0.34} \times \frac{1}{0.16} \times 1.12 \times \frac{1}{0.48} \times 1.84} = 2.428$$

Fig. 2: The dynamics of absolute number children born by women workers of JSC “MMK”



Source: MMK³ Social report (Social Report, 2010)

Fig. 3: The dynamics of absolute number of childbirths for the period of 2006-2010 (comparing to the rate of 2006)



Source: Own calculations based on MMK³ Social report (Social Report, 2010), Russian official statistics

3) The integrated index of socioeconomic effectiveness of parental labor support programs of JSC “MMK” for 2003 – 2010 equals (formula 3):

$$I_{sl} = \sqrt{2.428 \times 1.304} = 1.78$$

Conclusion

The results of our study show that the support for fertility and parental labor has not only social effect but the economic one. The analysis of social efficiency revealed that the birth decision made by the employees was highly determined by parental labor support measures which had been realized at the factory. Our respondents consider these measures being not less important than the state activity in this field. Social efficiency is also shown by positive dynamics of birth rate, decrease of perinatal mortality, number of complicated and premature births. The results of the analysis also show high economic efficiency of the realized measures – it is confirmed with the decrease of different indicators of workers’ disability connected with diseases of their children. The value of integrated index of socioeconomic effectiveness of parental labor stimulation programs of Magnitogorsk metallurgical enterprise, which distinctly exceeds 1, shows the high effectiveness of particular measures from economic and social points of view.

The analysis which has been carried out using socioeconomic approach showed that social activity of business in the demographic sphere was profitable. Besides, there is a socio-psychological effect: employees’ parental labor stimulation is the way of labor incentives creation and strengthening workers’ motivation in their professional as well as parental labor. It makes the policy of parental labor stimulation effective from both strategic and tactical points of view in company management.

Acknowledgment

Our study was carried out with the financial support of the Russian Foundation for Humanity, project no. 12-03-00073a.

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