

## Socio-Economic Mechanism of Reproductive Labor Management Revisited

*Tatiana Vnukovskaya*

Ural Institute of Economy, Management and Law, Lunacharskiy str,  
109-409, Yekaterinburg, 620049, Russia

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**Abstract:** The article deals with the problem of reproductive labor non-inclusion into – the national economy- the process of human capital nurturing,- care, education, training, object of reproductive labor socialization and professionalization (professional development), - human resources and accounting risks ignoring reproductive labor. It was found out that ignoring the accounting risks of reproductive labor in the economy leads to deformation of the labor humanization principles, reduces the quality and quantity of human resources, as a result, reduces the competitiveness of the country and the welfare of society. The concept of socio- economic mechanism of reproductive labor risk management has been suggested.

**Key words:** Human resources • Reproductive labor • The risks of reproductive labor • Social and responsible parenthood • Socially responsible business • Socially responsible state

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### INTRODUCTION

The study revealed a contradiction that arises when crossing continue social and economic risks in absence of risks identification in reproductive activity. The objects of social risk are social groups, the research subjects are the risks arising in the course of social and labor relations: industrial injury, illness, death of human resources and rise in mortality. The target of the economic risks research are material resources, the subject - risks arising in the course of employment related to lost profits, potential economic damage in the industrial sector. The analysis showed that non-economic, not social risks do not take into account the risks associated with reproductive activities: care, education, training, professionalization (professional development) and socialization of human resources [1]. An important consequence of reproductive activity risk neglect is the demographic collapse, both in quantitative and qualitative terms: population decline (negative natural increase); geopolitical situation worsening, deterioration of national security, fertility reduction, rise in mortality, especially working-age population, changing the demographic structure of the population, reducing the proportion of children, the growth of older citizens (22%, in 2010 to 28% in 2030 - the

natural aging of the population) [2], the predominance of the working-age mortality from violence, injury and poisoning with the dominant role of alcohol in its immediate causes, sharp increase of rejuvenation and mortality; institution of family crisis: reducing the number of marriages, increase in the number of divorces and the high probability of accidental pregnancy and the birth of unwanted children even exceeded twice the number of abortions over the number of live births, increasing the level of disability. Another negative consequence of reproductive activity risks dropping is the impossibility of economic transition in the sixth technological way of development, which ultimately reduces the competitiveness of the country, reducing the quality of human resources, leading, in particular, to the fall of the intellectual component due to migration processes, physical health (sick parents give birth to sick children), spiritual component (lack of national ideas, centered on the family). The above arguments suggest that to solve the problems of innovative development of the country and the demographic problem we should update risk identification reproductive activity, as the country's competitiveness depends on the qualitative and quantitative status of human resources - the results of reproductive activity [3].

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**Corresponding Author:** Vnukovskaya, Ural Institute of Economy, Management and Law, Lunacharskiy str,  
109-409, Yekaterinburg, 620049, Russia.

**Practical Contribution:** Non- inclusion of reproductive labor into the national economy of Russia, increases reproductive risks, which in turn affect the quality of productive work. Ignoring the effect of reproductive labor risks distorts the implementation of labor humanization principles, dehumanizing labor, reduce the quality of life and the realization of the employees labor potential, as a result, reducing the efficiency of labor in the productive sector of the economy. Policy priority is to accelerate the development of spheres determining the quality of people's life, primarily - education and health care, culture and science, housing and communal services and social welfare. The state must create conditions for the protection of the rights of every citizen in Russia, so that everyone can provide a decent standard of their families living due to their work, to maximize their potential and realize it. Everyone should have a free choice while freedom should be based on social justice. Human content and social dimension of social, economic, commercial, scientific, technical, cultural, educational, reproductive and all other socially important processes must be recognized and accepted by the main priority and the main criterion for the functioning of the social system at all levels, from the global to the primary economic and socio-cultural level. It is necessary to carry out this process taking into consideration the risk of reproductive labor as reproductive labor ultimately determines the efficiency of labor in the productive sector of the economy.

**Review of the Literature:** In accordance with modern views the risk is usually interpreted as a probability measure of the possible dangerous losses arising from the specifics of certain man-made or natural phenomena and human activities, accompanied by the appearance, formation and action of the dangers and damage with social, economic, environmental and other types of damage and harm. In the case of the aforementioned events three possible options of economic results are possible: negative (loss, detriment, damage), zero, positive (gain, profit, benefit). Adam Smith believed that the owner takes the economic risks for the implementation of any business idea and profit [4] A. Marshall based neoclassical theory of risk on the statement that the risk was oscillation amplitude of potential profit [5].

Common questions of theory and methodology for the risk study were developed mainly by German and English scientists in the works that reflect the ideas about the nature of risk as a phenomenon, affecting various aspects of human life. We should note such authors as W. Beck, E. Giddens, N. Luhmann, J. Habermas [6-8].

Actualization of the "risk society concept", where the problems associated with the deepening of the crisis of modern industrial society were the basis for the emergence of new uncertainties and risks of globalization has caused a further deepening of the study of the phenomenon of risk. In the works of U. Beck, E. Giddens, N. Luhmann, G. Ritzer, P. Sztompka risk is considered as a particular stage of development of society associated with the crisis of modernization where the production of goods and services displaced production risks.

M. Armstrong, S. Bru, G. Becker, J. C. Galbraith, P. Drucker, T. Malthus, A. Marshall [9-12] researched the issues of professional risk management. Contribution of Russian scientists in the study of these issues became noticeable since the mid-90s in the last century. The essence of professional risk was investigated by E.I. Denisov, N. F. Izmerov, V.D. Royk. Important principles and methodology of work were discussed in the works of N. A. Volgin, R. P. Kolosova, V.V. Kulikov, A.A. Nikiforova, J.G. Odegov, T.O. Razumova, G.E. Slezinger, A. V. Solovyov The works of M. Weber, E. Durkheim, C. Lombroso, V.V. Radaev, K. Rogers, M.N. Rutkevich, G.N. Sokolova, F.R. Filippov, M. Foucault, O. I. Shkaratan and several other scientists are dealt with individual types of risks, as well as various aspects of the manifestations of social risk in social reality. V.V. Radaev made a great contribution in the sphere of the household [13]. The works of W. Bek, K. Devis, D. Bleyk are devoted to family economy. Problems of human capital were considered in the books of T. Shults, G. Becker, O. Toffler, S. A. Dyatlov, E.D. Tsyrenova, A.I. Dobrynin, S. Y. Roschin, T.O. Razumova, V. M. Halperin, I.V. Ilinsky [14, 15].

The category "reproductive labor" was introduced and developed by the Ural scientists economists in 2000. The Founders of the "reproductivistics" scientific schools were A.M. Ilyshev and I.V. Lavrenteva they interpret reproductive labor as "activities related to the reproduction of human capital in social institutions and households, consisting in the comprehensive care of the future, the existing labor force and mankind as a whole" [16].

#### **Research Methodology**

**Data:** According to the authors, reproductive labor is productive activity aimed at forming (cultivation) and human resource development (a harmoniously developed personality) to create conditions for the growth of his values, taking into account the interests of the object of reproductive labor, subjects of reproductive labor (parents, family, clan, delegated parental labor

(reproduction centers, maternity homes and other institutions of education, health, school development)), the business community, government and society as a whole.

Consequently, the risks of reproductive labor in the author's interpretation is a quantitative measure of danger (a potential source of damage) during the reproductive work at all stages of the production cycle of human resources (from socially responsible parenthood to incorporative stage inclusive), understood as a combination of two elements: 1) the frequency or risk probability (dangerous, harmful or adverse) event associated with subjects and objects and processes of reproductive labor in the course of their life as in the manufacturing and non-manufacturing sectors and 2) seriousness of its implications for all participants of reproductive process (object of reproductive labor, subjects of reproductive labor delegated reproductive labor, the business community, the state and society).

**Theory Model:** Then, the risk of reproductive labor (RRT) can be described as the usual product of frequency risk event P on the severity of its consequences S:  $RRT = P * S$ .

The concept of gravity (seriousness) effects in a certain sense and may include the effects of this damage, expressed in monetary terms. However, several outcomes take place for each event, they may occur with a certain probability. Then the probability of a risk event (the risk that it happens) is the sum of products of outcomes probabilities on the outcome itself, summed over all possible outcomes.

$RRT = \text{sum of the products } P * S \text{ for all possible outcomes}$

Taking into account the likelihood of risk for all elements of the system at all stages of reproductive labor we can calculate the total cost to prevent economic damage from all kinds of reproductive labor risks at all stages of the reproductive process and evaluate the effectiveness of interventions.

The main participants in the reproductive process are subjects of reproductive labor (mother, father) to reproductive labor (formed personality); the subjects delegated reproductive labor (family, health, education at all stages of the formation of human resources), the business community, the state, society. Each of them provides the creation of conditions for the humanization of work and personal development through social and responsible parenthood, social responsibility and

personal development in the spheres of education and health, socially responsible business, socially responsible state and society.

Risks of reproductive labor record keeping both in manufacturing and non-manufacturing sectors will guarantee the growth of the value of human resources, so popular in the modernization of the Russian economy. Otherwise, it is possible to achieve maximum critical values of world practice without Russian society development: the decline in GDP of up to 30-40%, the conditional factor of depopulation - 1 (as a consequence, the extinction of the population), the total fertility rate - 2.14 (no replacement of generations), according to the Police Academy of the crime - 5-6 thousand people per 100 thousand population (criminalization of society), according to the WHO alcohol consumption of 8 liters of pure alcohol per person per year (physical degradation of the population), according to the Russian Federal Research suicide medical center - 3 per 1000 population, according to the Ministry of Health the prevalence of psychological pathologies - 284 per 1000 population (psychological degradation) [17].

The most appropriate, in our opinion, is the selection of key fundamental attributes - bases having the following chain of causality (Figure 1):

For Russia - having problems with population density and tendency of residents' further catastrophic reduction, it is especially relevant to conduct both fundamental research and its immediate implementation in practice for an effective reproduction policy.

Humanization (humanization of labor) of purposeful basic ways, immediate conditions and forms of most people life are required, especially in the sphere of economy, production, labor, exchange, distribution, consumption. Human content and social dimension of social, economic, commercial, scientific, technical, cultural, educational, reproductive and all other socially important processes must be recognized and accepted by the main priority and the main criterion for the functioning of the social system at all levels, from the global to the primary economic and socio-cultural level. It is necessary to carry out the process of reproductive labor risk as reproductive labor ultimately determines the efficiency of labor in the productive sector of the economy. International Labor Organization recognizes the problem of labor humanization as the dominant part in the development of social and labor relations.

**Estimation of the Model:** We suggest the following concept of socio - economic mechanism of reproductive labor risk management (Fig. 2).

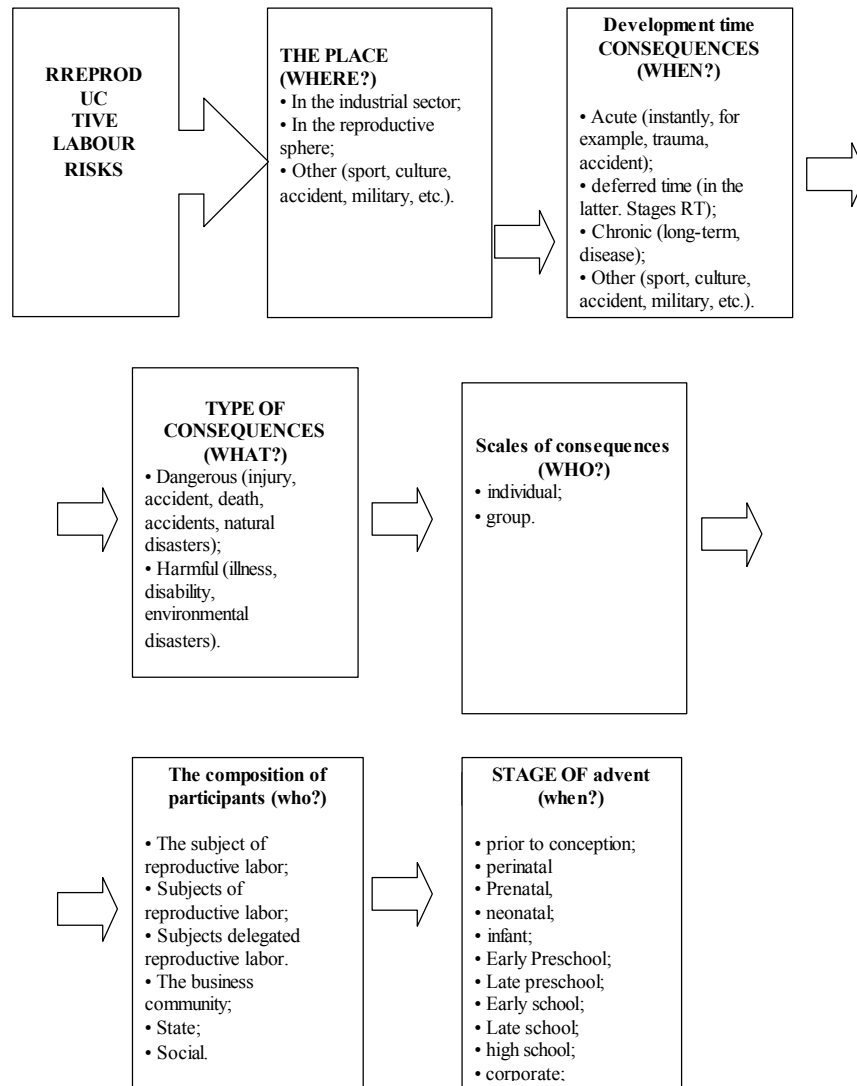


Fig. 1: Risk Classification of reproductive labor on fundamental grounds

Each participant in the reproductive process contributes to the formation and development of human resources at all stages of the development. The author proposes to allocate the following steps: preparation for socially responsible parenthood (before conception); perinatal period (conception - 28 weeks of gestation) prenatal period (28 weeks - 168 hours after birth), neonatal period (168 hours after delivery - 7 days) infancy (7 - day year) early preschool (1 year - 4 years), late preschool (4 years - 6-7 years), early school (6- 7years - 10 - 12years (girls), 12-14 (boys), according to the physiological characteristics of puberty); school youth (10 - 12years (girls), 12-14 (boys) - 15-16 years (9 classes, NGOs)); Late school (9th grade, NGOs - Grade 11, before enrolling in the ACT, university); early professional (11 class, NGOs -

STR University (BA, MA)); late professional (STRs University – competitor degree (postgraduate, doctoral)); incorporative period (self-development and self-actualization for their lives); after corporate period (from the date of retirement until the end of life) [18].

The main participants in the reproductive process are subjects of reproductive labor (mother, father), the object of reproductive labor (formed personality), the subjects delegated reproductive labor (family, health, education at all stages of formation), the business community, the state, society. Each of them provides the creation of conditions for the humanization of labor through socially responsible parenthood, social responsibility and personal development in the spheres of education and health, socially responsible business, socially responsible

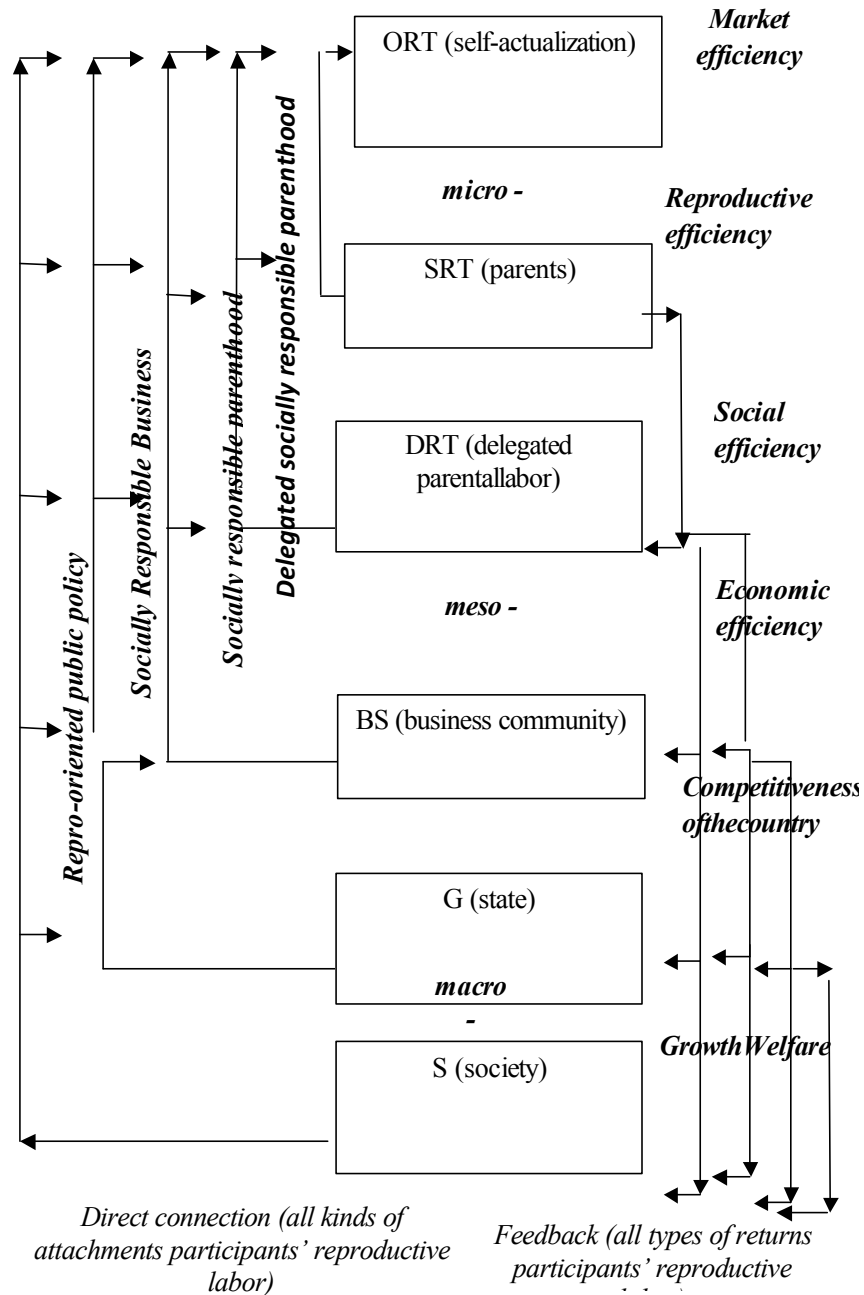


Fig. 2: The concept of socio-economic mechanism of reproductive labor risk management

state and society. Each person in his own way contributes to the systematic development of highly intelligent, physically fit, morally mature person, what ultimately leads to the improvement of human resources in the qualitative aspects and their increase. The scheme shows that all the processes of reproductive labor aimed at the formation and development of the object of reproductive labor, which further provides benefits to all participants in the reproductive process as productive (mainly) and

reproductive spheres, which eventually leads to an increase in the country's competitiveness and growth welfare of society.

In our view, to evaluate the effectiveness (performance) of reproductive labor risk management, it is advisable to compare the degree of change (increase or decrease) in the value of the loss of human resources (due to a change in health, intelligence, level of spiritual development, quality of life), that is equivalent to

Result / Costs	$C \geq 0$	$C \leq 0$
$RRL \leq 0$	<p>3 ACCEPTABLE REGULATION Maximum reduction in risk of reproductive unit labor costs (the practice of developed countries)</p>	<p>4 OPTIMAL REGULATION Despite the reduction in costs of measures to reduce the risk, the risk of reproductive labor is reduced by optimizing the control (the practice of advanced countries)</p>
$RRL \geq 0$	<p>2 CRISIS MANAGEMENT Despite the increase in costs of measures to reduce the risk, the risk of reproductive labor costs increased by one (current situation in the Russian Federation)</p>	<p>1 POOR MANAGEMENT Lack of funding leads to a loss of human resources (lack of socially-oriented policies and humanization of labor in SRT)</p>

Fig. 3: Possible developments in the of reproductive labor risk management (authoring)

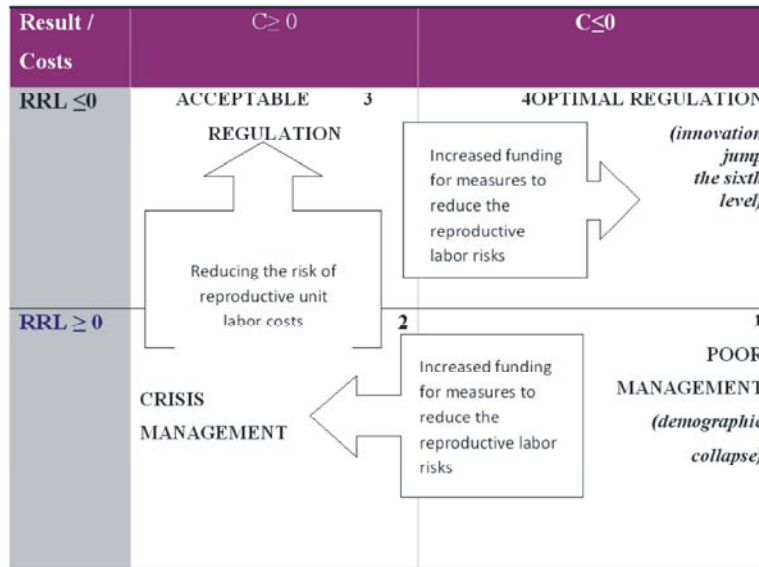


Fig. 4: The trends of the reproductive labor risk management development

comparing the degree of change in risk reproductive work with changing resources expended on it by all the participants in the reproductive process.

**Interpretation:** We denote C (costs) - integrated increment costs of measures to reduce the risk of reproductive labor (relative to each participant in the process of reproductive health, education, culture and sports, social protection and other measures to change the quality of life).

RRL - integrated increment of reproductive labor risk on the above parameters. Possible management options and author names are shown in Figures 3 and 4. At the current stage, according to the survey the Russian Federation is on its second phase. In order to overcome

the demographic collapse and a breakthrough for the sixth innovative way we need to move to the third stage of reproductive labor risk management for each component, for each participant in the reproductive process, at the stage of formation of human resources and risk of reproductive labor in general.

## CONCLUSIONS

Introducing the concept of socio- economic mechanism of reproductive labor risk management, which is based on the account of exogenous and endogenous factors responsible for the implementation of reproductive attitudes to family life and the realization of the labor potential in the productive sector of the economy, taking

into account the risks of reproductive labor at micro-, meso- and macro- levels, as well as the comprehensiveness of coverage, the reproduction cycle of human resources will improve the efficiency of labor in the manufacturing sector of the economy to achieve a high level of productivity, education and training of a new type of worker; specialist - professional - an intellectual with a strong margin of spirituality.

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