INCOME DISTRIBUTION PECULIARITIES OF HOUSEHOLDS WITH CHILDREN: A CASE STUDY*

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Abstract. The article explores family income indicators in the context of the transformation of the family model in Kazakhstan in terms of large families- households with children. The purpose of the article is to assess the level and dynamics of families’ incomes with children in Kazakhstan to develop recommendations for improving the support policy, that will provide new consumption patterns and sustainable growth of entrepreneurship activities, including social entrepreneurship. The methodology for studying the income level of families with children was based on economic and statistical methods for assessing the inequality of incomes of families with children based on a comparison of the characteristics of the distribution series and quintile groups. An income structure assessment within population is presented in the quintile groups, and the dynamics of the proportion of children in the first quintile group. The authors substantiated the use of the children share indicator of child poverty in the absence of a corresponding indicator in official statistics in the first quintile group. An analysis of favorable dynamics related to number of children living in low-income families within the first quintile group makes possible to assess current trend as negative. An assessment is made of the differentiation of income within a group of households (HH) with children: the parameters of the distribution series by the indicator of income used for consumption are compared; the ratio of income used for consumption with a living wage is estimated as well. There is estimated uniformity and asymmetry of the distribution series of families with children. To identify common and special characteristics, the distribution series were compared with the similar characteristics of the distribution series for all households. The most significant substantive result identified by the authors is the growing inequality in the distribution of income between small families (1-2 children) and large families (3 or more children) while maintaining a high proportion of children in the first quintile. The authors developed a number of recommendations towards social policy, the introduction of an official indicator of child poverty in official statistics to adequately assess measures taken by the state, and the development of social entrepreneurship as an effective tool to empower children from low-income families.

Keywords: households; children; income; quintile groups; characteristics of a number of distributions; purchasing power of the population, social entrepreneurship


JEL Classifications: I38, J19, L31

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1. Relevance

Modern society considers the family one of the main institutions for forming of the human potential of the country. There are especially factors acting on the side of the family, to a large extent determine individuals’ possibilities to realize their genetic inclinations and accumulate the human capital during the growing up period. (Nikolskaya 2006).

G. Becker, one of the founders of the theory of human capital, proved the direct connection between the value of human capital and the well-being of the household, the most important proxy of which is determinate the level of personal income. (Becker, 1994)

Studies of human capital in modern economic science use the concept of the household as a basic economic unit with its characteristics as corresponding incomes, expenses and consumptions are.

It can be noted that the understanding of the household as a group of people living together, and partially or fully combining their income and expenses, better corresponds to the empirical picture of society and provides more effective state support for the group. (Bekteleeva 2012)

The Republic of Kazakhstan managed to overcome the negative trends of the transformation period, given in decrease in the birth rate, especially in urban households. Over the past ten years, a significant structural shift in the structure of families with children has been recorded in favor of a large family with three or more children. At the same time, large families significantly differ from small families (1-2 children) with lower incomes and purchasing power, which undoubtedly affects their ability to form human capital.

International studies of households (HH) with children and child poverty identify the problem as one of the most urgent in the modern world. Researchers from different countries and international organizations provide a lot of convincing evidence on the relationship between family incomes with children and the subsequent social and economic risks that occur in their lives of adults. (Schouten 2019)

In this regard, the assessment of the dynamics and structure of the income of large families is an urgent task, including for state regulation of employment and the standard of living of the population. At the same time, the redistribution of society's incomes in the context of positive dynamics of the number of children in large households is a prerequisite for the growth of domestic demand for goods and services, that is, a sustainable driver of entrepreneurship.

2. Review of recent research

Family policy issues are considered as a set of measures in the state social policy system.

Interesting research results on the dependence of the human capital of children on family incomes are presented in the works of many foreign authors, such as (Harding 1996), (Halpern 2000), (Arriaga et.al., 1998), (Ridge 2007), (Ferguson et.al., 2007), (Rothman 2007), (Cahn et.al., 2018).

Many studies confirm the impact of income distribution in society on the development of entrepreneurship, as large low-income families have a significant deferred demand for goods and services. (Lévesque, Minniti 2011), (Ribeiro, Fonseca 2018), (Tvaronavičienė 2019)
A considerable body of research has been formed in the post-Soviet space by such authors as (Kolosova 2016), (Elizarov, Zvereva 2018), (Sidorov 2015), (Pivovarova, Artyukhov 2011), (Gribovsky 2019) and others. Family policy measures are considered in the context of the formation of human capital by such authors as (Sinyavskaya 2011), (Potapova 2016), (Tyumentseva 2018), (Pritvorova, Bektleeva 2014) and others. These and many other authors talk about the significant impact of family income on the human capital of children.

The research results confirm that the formation of the human capital of children in low-income families’ proceeds with difficulties and is characterized by a lower progress compared to families with higher incomes. Thus, the problem of the formation of socially acceptable family incomes in connection with their influence on the development of the human potential of children remains an urgent topic in the world economic literature.

Another important aspect of overcoming income inequality between different classes of households with children is the impact of their consumer models on the development of entrepreneurship in general and social entrepreneurship in particular. The results of many studies point to a high level of dependence between the smoothing of income inequality and the dynamics of entrepreneurial activity in a variety of fields. (Sasongko et al., 2019; Tvaronavičienė, Gatautis, 2017)

The purpose of the article is to assess the level and dynamics of families’ incomes with children in Kazakhstan to develop recommendations for improving the support policy, that will provide new consumption patterns and sustainable growth of entrepreneurship activities, including social entrepreneurship.

The methodology for studying the income level of families with children was based on economic and statistical methods for assessing the inequality of incomes of families with children based on a comparison of the characteristics of the distribution series and quintile groups. A comparative analysis of the parameters of the distribution series for the groups “all households” and “households with children” was also used. To assess the structure of children living in families of different types, the paper compiled a model according to which the number of children in households of the corresponding type is calculated as the product of the proportion of families, taken together the number of children in one household of the specified type.

3. The results of the study

A study of the level, dynamics and income inequality in the households sector with children was carried out according to the following analytical sections:

1) The number of children in the family;
2) Quintile groups of the population: income structure, share of children in accordance with groups by consumption expenditures;
3) Differentiation of income within a group of households with children: parameters of the distribution series, the ratio of income used for consumption with a living minimum wage;
4) Comparative analysis of households incomes with children in the group of “all households”.

For the period 2009-2018, the family model in Kazakhstan has noticeably transformed in the direction of large families. (Figure 1)

This vector of changes is observed together in the context of the city / village. As in 2009, 49.2% households, that are almost half, raised one child, so in 2018 their share decreased to 41.1% in favor of all other groups. Structural shift in families with three children (4%) is remarkable and with four children (3%) is more significant.

Structural changes in the direction of large families continue in rural areas: the share of families with three children increased by 3% and with four children by 4%.
The most noticeable shift in the increasing reproduction model has occurred in urban families. The households with three and four children significantly doubled in 2018 in comparison with the year 2009. The proportion of families with three children increased from 7% to 14%, and with four children increased from 3% to 6%. The share of households with two children increased by 4% and this led to a decrease of single-parent families by the share of 14%. The urban model of reproduction during ten years has undergone the most significant changes in the direction of large families.

We have compiled a model according to which the number of children in families of the corresponding type is calculated as the product of the proportion of all families together (Figure 1) by the number of children in one family of the specified type. According to this calculation model, the number of children living in families is presented in columns 3-8 (Table 1).

In columns 9-14, there is a calculation of the children’s structure, according to 46% of children live in large households in 2018. Moreover, the proportion of large households’ children increased by 10% comparing to 2009.

### Table 1. Structure of children living in households according to corresponding types

<table>
<thead>
<tr>
<th>Type of family</th>
<th>Nº of chldn</th>
<th>Number of children in HH, persons</th>
<th>The structure of children in HH, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Together</td>
<td>Village</td>
</tr>
<tr>
<td>1 chldn</td>
<td>1</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>2 chldn</td>
<td>2</td>
<td>2</td>
<td>66</td>
</tr>
<tr>
<td>3 chldn</td>
<td>3</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>4 and more</td>
<td>5*</td>
<td>5</td>
<td>30</td>
</tr>
</tbody>
</table>

* The average number of children in a family is given empirically

** Source: compiled by authors according to official website of the Ministry of National Economy of the Republic of Kazakhstan Statistics committee http://stat.gov.kz/
At the same time, 56% of children come from large families in rural areas. The urban model of reproduction has undergone, as we indicated above, the most radical changes. The proportion of children from large families has increased by 16% and amounts to almost 40%.

**Quintile groups of households with children: structural changes in income, share of children in the first quintile group**

Over a period of 10 years, the structure of cash income per 1 household member in 20% of the poorest households with children has undergone dramatic changes. The labor income share increased by 25.1%, and social transfers increased by 4.8%. At the same time, the share of income from the sale of agricultural products decreased by 28.5% and the share of other cash receipts by 1.4%. (Table 2)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from work</td>
<td>75.9</td>
<td>84.2</td>
<td>50.8</td>
<td>83.1</td>
<td>25.1</td>
</tr>
<tr>
<td>Agricultural products revenues</td>
<td>2.4</td>
<td>1.9</td>
<td>30.8</td>
<td>2.1</td>
<td>-28.5</td>
</tr>
<tr>
<td>Social transfers</td>
<td>18.1</td>
<td>8.3</td>
<td>30.8</td>
<td>5.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Other cash receipts</td>
<td>3.5</td>
<td>5.6</td>
<td>5.0</td>
<td>9.1</td>
<td>-1.4</td>
</tr>
</tbody>
</table>


There are not very significant changes in the income structure related to 20% of the richest households with children. The share of social transfers in this group increased, but structurally it amounted to a lower value of 2.6%.

Despite some positive trends that indicate the social policy of the state, we revealed a tendency to increase the level of children in the first quintile, i.e. the poorest group of households.

The lack of data on Kazakhstan's statistical indicators does not allow an analysis of its dynamics in the visible period. For this purpose, we have used the indicator of population distribution by age calculated in domestic statistics in the first quintile group, as Kazakhstan researchers T.Pritvorova and D. Bekteleev did earlier. (Pritvorova, Bekteleeva 2014)

The concentration of children under 14 years of age in the first quintile group was gradually increasing: this group had 35.4% of children in 2009, 36.8% in 2012, and 39.2% in 2018. We can say that if in 2009 in every third quintile group there was already a child age under 14 years, and then in 2018, the representativeness of children has increased and is approaching 40%.

Thus, along with the positive trend of increasing the share of labor incomes and social transfers among the low-income population group, more and more children from 0 to 14 years are concentrated in this group. A similar trend is observed in many European countries. (Guio et al., 2018) This allows us to conclude that the absolute and relative income growth of households with children is lagging, especially households with three or more children, as they are studied in details below.
Income within a group of households with children

Within the group of households with children, there is a clear differentiation in terms of per capita income used for consumption.

Distribution curves for small households are shifted to the right, which characterizes their level of consumption as higher compared with the whole group as a whole. Distribution curves for large households are shifted to the left, indicating a lower consumption level for one household member. The curve for all households with children is shifted to the right, because these households numerically dominate the aggregate.

The basic parameters of the distribution series are presented in table 3.

**Table 3.** Basic parameters of the general population of households with children under 16 in terms of average per capita income used for consumption per month in 2018, thousand tenge

<table>
<thead>
<tr>
<th>A type of family households</th>
<th>Mode</th>
<th>Median</th>
<th>Arithmetic mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute value</td>
<td>Deviance from group value &quot;All households with children&quot;</td>
<td>Absolute value</td>
<td>Variance from group value &quot;All HH with children&quot;</td>
</tr>
<tr>
<td>All with children</td>
<td>45,6</td>
<td>0</td>
<td>37,0</td>
</tr>
<tr>
<td>with 1 chld</td>
<td>43,6</td>
<td>0,6</td>
<td>42,4</td>
</tr>
<tr>
<td>with 2 chldn</td>
<td>44,1</td>
<td>0,2</td>
<td>37,1</td>
</tr>
<tr>
<td>with 3 chldn</td>
<td>43,7</td>
<td>-15,2</td>
<td>32,0</td>
</tr>
<tr>
<td>4 and more chldn</td>
<td>28,4</td>
<td>-17,91</td>
<td>27,9</td>
</tr>
</tbody>
</table>


All calculated characteristics of the distribution series for households with three, four or more children show a negative deviation from group indicators. So, if the average group value of the median income was 37.02 thousand tenge, then for households with three children the median is 32.02 thousand tenge, and for households with four or more children 27.98 thousand tenge. Comparison of distribution curves with similar curves of 2009 allows us to conclude that the parameters for households with two children are improved. Mode and median for this subgroup are characterized by greater values than for the entire group of households. In 2009, only one-child households had better general distribution parameters than group-wide ones. (Kaydarova 2011)

Based on the calculated values of the distribution parameters, it is possible to determine the values of the coefficient of variation and asymmetry. (Table 4)

**Table 4.** Assessment of the degree of homogenity and symmetry of the distribution

<table>
<thead>
<tr>
<th>All households with children</th>
<th>Households with 1 chld</th>
<th>Households with 2 chldn</th>
<th>Households with 3 chldn</th>
<th>Househ.with 4 and more chldn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of variation,%</td>
<td>45, 1</td>
<td>39, 24</td>
<td>43, 28</td>
<td>41, 8</td>
</tr>
<tr>
<td>Asymmetry coefficient</td>
<td>0, 47</td>
<td>0, 27</td>
<td>0, 29</td>
<td>0, 36</td>
</tr>
</tbody>
</table>

The coefficient of variation is defined as the ratio of the standard variation to the arithmetic mean and characterizes the homogeneity or heterogeneity of the population (formula 1).

\[
\frac{\sigma}{\bar{x}} \times 100\% = V
\]

(1)

- \( \sigma \) – the mean quadratic variation of distribution series;
- \( \bar{x} \) – arithmetic mean. (Shmoylova et al., 2014)

According to the values of the coefficients of variation, all groups of households with children can be considered heterogeneous, because the upper limit of the coefficient at which the aggregate is recognized as homogeneous is 33%. Closer than others, a group with 4 or more children approaches the threshold value of homogeneity. The coefficient for this group is 35.1%.

The asymmetry index is determined by the formula 2:

\[
A_s = \frac{(\bar{x} - Mo)}{\sigma}
\]

(2)

\( \sigma \) – the mean quadratic variation of distribution series;
\( \bar{x} \) – arithmetic mean;
Mo – Mode

As for the asymmetry coefficient, according to statistical canons, with a value above 0.5 (regardless of the sign), it is considered significant, and less than 0.25 insignificant. According to this criterion, for the distribution of households with one child, the value of the asymmetry coefficient is closest to the norm and is 0.27. The most significant asymmetry is characteristic for households with four or more children and for all households with children.

Characterizing the different sets of households with children, we can draw the following conclusions:
- Households with three and four children are characterized by a right shift limit in the distribution of per capita income used for consumption relative to the distribution representing a group of households with children as a whole. Both types of households are heterogeneous, but the coefficient of variation for households with four children is closer to the boundary of homogeneity, i.e. the aggregate is almost homogenous. Moreover, the group has a more expressed asymmetry. In fact, this means that most of the group consists of homogeneous low-income households, the distribution of which by level of income used for consumption has significant right-side asymmetry.

- Households with one child and two children are characterized by a left-side shift, as the entire group of households with children is. These groups have a higher level of income used for consumption by groups as a whole compared with the distribution representing the group of households as a whole. Households with one child and two children have an asymmetry coefficients of 0.27 and 0.29, respectively, it means that the distribution is close to the normal statistical distribution. Moreover, the coefficient of variation is high, which indicates the heterogeneity of this group by income.
The ratio between the cost of living and the main indicators of income used for consumption, as a rule, is used to assess the real purchasing power of the population. (Yakovleva et al., 2017)

It should be noted that in this case the cost of living is a measure representing the minimum consumer basket, in our case, for the physiological survival of a person. (Malaeva 2009)

The cost of living is currently determined by a very controversial method, in which a food basket of 48 products is calculated and equated to 55%. The rest of consumer spending is determined as the other 45%, despite the fact that even the first quintile group has this the value is 55%.

At the same time, these indicators can be used to measure the differentiation between the purchasing power of intragroup incomes.

In this regard, we have adopted the following prerequisites for determining the differentiation of purchasing power:
1) Determination the ratio of the main characteristics of the distribution series (mode, median, arithmetic mean) with the value of the cost of living in the corresponding year or the ratio of income to a living wage minimum;
2) Determination of the absolute difference between the coefficient values for households with one child and all other groups of households;
3) Determination of the absolute difference between the values of the coefficients for the households of neighboring groups, i.e. households with one and two children, two and three children, three and four or more children.

Household purchasing power, measured as the ratio between income indicators and the cost of living, i.e. the minimum consumer basket has increased. (Table 5)

Table 5. Purchasing power of households with children in 2009 and 2018

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2009</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode, thous. tenges</td>
<td>8,9</td>
<td>43,5</td>
</tr>
<tr>
<td>Median, thous. tenges</td>
<td>11,3</td>
<td>37,0</td>
</tr>
<tr>
<td>Arithmetic mean (AM), thous. Tenges</td>
<td>13,6</td>
<td>21,2</td>
</tr>
<tr>
<td>Living wage (LW), thous. Tenge</td>
<td>1,4</td>
<td>23,8</td>
</tr>
<tr>
<td>Mode/LW, coefficient</td>
<td>0,7</td>
<td>1,8</td>
</tr>
<tr>
<td>Median/LW, Coefficient</td>
<td>0,9</td>
<td>1,6</td>
</tr>
<tr>
<td>AM/LW, Coefficient</td>
<td>1,0</td>
<td>0,9</td>
</tr>
</tbody>
</table>

Source: compiled by authors according to official website of the Ministry of National Economy of the Republic of Kazakhstan Statistics committee http://stat.gov.kz/

The ratio between the living wage value and the main indicators of consumption income has improved and characterizes the growth of living standards of households with children in terms of income.
If in 2009, only 5 out of 15 indicators were more than the living wage, i.e. the coefficient was more than one; in 2018 only 4 coefficients have a value less than one. That is, the main group of coefficients is in the “white” zone.

According to all the characteristics, only households with one child had the consumption per person higher than the living wage in 2009 but in 2018, there are more households with 1 child in the “white” zone.

Only arithmetic mean values are below the living wage value, which indicates a significant differentiation within the groups, because its value markedly depends on the extreme values of the distribution series. At the same time, the differentiation in incomes between small and large families, correlated with the living wage level, has been increasing (Figure 2).

According to calculations, the difference between the group with one child and the group with two children decreased; for example, for mode it was 0.2 in 2009, and became 0.1 in 2018; for the median it was 0.2, and it became 0.18, respectively. It is obvious, that groups have become closer in terms of incomes. At the same time, the difference in the arithmetic mean between the groups increased, that indicates an increase in heterogeneity within the group, because the arithmetic mean value strongly depends on the extreme values of the distribution series.

In 2018, a group with three children differs from a group with two children in the greater difference in the value of the coefficient characterizing the ratio of modal income and the living wage. The groups became closer by the coefficient for the arithmetic mean and median income.

![Figure 2](http://stat.gov.kz/)
Thus, the assessment of income differentiation within a group of households with children allows to draw the following conclusions:
- The composition of all four groups is not homogeneous, as the coefficient of variation in all four cases is more than 33%.
- The curves for small households (1-2 children) are shifted to the right relative to the distribution curve for all households, which characterize their consumption level as higher compared to the whole group as a whole. Distribution curves for large households (3-4 children) are shifted to the left, which indicates a lower level of consumption for one member of the household.
- The ratio of the main distribution parameters (mode, median, arithmetic mean) with the living wage in 2018 has improved significantly. If in 2009 only a group with one child was characterized by coefficients of more than one, then in 2018 the ratio is less than one for the arithmetic mean of groups with two, three and four children. At the same time, the value of the living wage itself remains, in our opinion, underestimated, because not consistent with the structure of consumption of the first quintile.
- Within groups, especially the groups with two and three children, there is significant heterogeneity, which shows the coefficient of variation.

**Comparative analysis of household incomes with children with the group “all households”**

In Figure 3 distribution of the statistical population of all households, households with children under 16 years old, households with 4 children by average per capita income used for consumption per month is presented.

![Figure 3](image-url)
The distribution of the statistical population of all households is closer to the uniform distribution and their bulk is concentrated in the central part of the graph.

The distribution of households with four children has a clear left-side shift and most of the households are in the lower-income zone compared to all households.

An analysis of the main characteristics of the distribution series allows us to conclude that households with children to varying degrees but lag behind the standard of living from the group “all households”. The difference between the absolute values of mode, median and arithmetic mean is negative in all cases. (Table 6)

Table 6. Main characteristics of the general aggregates of all households and different types of households with children under 16 years old by average per capita income used for consumption per month, 2018, thous. tenge

<table>
<thead>
<tr>
<th>Distribution characteristics</th>
<th>Groups of households (HHs)</th>
<th>All HHs w/children</th>
<th>HHs w/1 child</th>
<th>HHs w/4 children</th>
<th>Deviations from the group of households 'All'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>HHs w/1 child</td>
<td>HHs w/4 children</td>
<td>group 3-group 2</td>
</tr>
<tr>
<td>I</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Arithmetic mean</td>
<td>28289</td>
<td>21243</td>
<td>26601</td>
<td>16435</td>
<td>-7046</td>
</tr>
<tr>
<td>Mode</td>
<td>46813</td>
<td>43520</td>
<td>44120</td>
<td>25614</td>
<td>-3293</td>
</tr>
<tr>
<td>Median</td>
<td>45361</td>
<td>37015</td>
<td>42360</td>
<td>27981</td>
<td>-8346</td>
</tr>
</tbody>
</table>

Source: compiled by authors according to official website of the Ministry of National Economy of the Republic of Kazakhstan Statistics committee http://stat.gov.kz/

The smallest deviation is demonstrated by households with one child, where deviation from the “all households” group indicators is a small, economically insignificant value.

The deviation for households with four children is -42% for mode, -45% for the median, -38% for the arithmetic mean.

The most significant deviation is observed for median income. Since the median income indicator better reflects the essence of the distribution series than the mode and arithmetic mean (which strongly depends on the frequency of the extreme values of the distribution series). The difference between median incomes for households with four children and all households is 90% of the living wage value.

In connection with the foregoing, it is advisable to evaluate the purchasing power of all households and households with children by the ratio of the main characteristics of the distribution number and the minimum wage (or minimum wage, since since 2010 they have been equal). (Figure 4)
Figure 4. Purchasing power ratios for all households and different types of households with children, 2018.
Source: compiled by authors according to official website of the Ministry of National Economy of the Republic of Kazakhstan Statistics committee http://stat.gov.kz/

Conclusions

Thereby, in the socio-economic situation of families with children in Kazakhstan, there are both positive and negative trends that must be taken into account to develop measures for improving the family policy.

Positive trends in terms of population reproduction and household income dynamics are as follows:
- For the period from 2009-2018, the family model has noticeably transformed in the direction of large families. In 2009, 49% of households raised one child under 16 years old, then in 2018 their share decreased to 41%, and the proportion of large families with 3 or more children increased to 25%. The urban model has undergone the most significant shifts in the direction of large families, as the share of such families increased from 10% to 20%;
- According to calculations and to our model, the number of children in households of the corresponding type is calculated as the product of the proportion of households in total to the number of children in one household of the specified type. In 2018, 46% of children live in large households, and 56% children in rural areas. The proportion of children from large households in the city is 39%;
- Over a period of 10 years, the structure of cash income per 1 household member in 20% within the poorest households with children has undergone dramatic changes. The share of labor income increased by 25.1%, and the share of social transfers increased by 4.8%, amounting to 18%.

The negative characteristics of the socio-economic situation of households with children are represented by the following phenomena:
- The concentration of children under 14 years old in the first quintile group consistently increased: in 2009, this group had 35.4%, in 2012 - 36.8%, in 2018 - 39.2%. Since there is no official indicator of child poverty in the
statistics of Kazakhstan, it is possible only estimate its extent by the proportion of children in 1 quintile (the poorest) group of households.

- There are existence of two groups, according to the indicators of per capita income used for consumption, related to the households with children. Households with one and two children in all respects of the distribution series have the opportunity to implement a more progressive consumption model than the whole population. Comparison of distribution curves with similar curves of 2009 allows to conclude that the parameters for households with two children are improved. Distribution curves for large households are shifted to the left, indicating a lower consumption level for one household member. All calculated characteristics of the distribution series for households with three, four or more children show a negative deviation from group indicators. The curve for all households with children is shifted to the right, because these households numerically dominate the aggregate.

- At first glance, an analysis of the relationship between the living wage and the basic parameters of the  distribution incomes series used for consumption represents extremely positive trends in increasing the purchasing power of households with children. At the same time, it is generally and officially recognized, that the cost of living has been underestimated for more than five years, and the ratio of food and non-food expenses needs to be clarified.

- The ratio of the main distribution parameters (mode, median, arithmetic mean) with the cost of living in 2018 has improved significantly compared to 2009. Considering that in 2009 only a group with one child was characterized by coefficients of more than one, then in 2018, the arithmetic mean ratio of groups with two, three and four children is less than one. At the same time, the value of the living wage itself remains, in our opinion, underestimated, because it does not correspond to the structure of consumption of the first quintile.

- An analysis of the main characteristics of the distribution series allows concluding that households with children to varying degrees but lag behind the standard of living from the group “all households”. The difference between the absolute values of mode, median and arithmetic mean is negative in all cases.

- The smallest deviation is demonstrated by households with one child, whose deviation from the indicators of the “all households” group is a small, economically insignificant value. The deviation for households with four children is -42% for mode, -45% for the median, -38% for the arithmetic mean.

In connection with the foregoing, the following suggestions can be made to increase the income level of households with children:

- Bringing the size and structure of a living wage in accordance with the structure of consumption of the first quintile. Since some allowances for children from low-income families and households are tied to the subsistence level, this will lead to their increase. It is necessary to introduce a special allowance for children from large families (4 or more children), it depends on their financial situation.

- The introduction of a profiling procedure at the Employment Centers with provision of clients from the target group of low-income households with children with an targeted package of measures developed taking into account the specific needs of employment for this social group. This measure will be aimed at increasing the absolute value of labor income.

- Stimulating the development of social entrepreneurship with the participation of target groups in difficult life situations as clients or employed in this business. The development of social entrepreneurship creates the conditions for expanding the capabilities of households with children both on the basis of social services provided to such families free of charge or at economically reasonable prices.

- It is necessary to introduce in Kazakhstan an official statistical assessment of the level of child poverty, since in the system of regulatory instruments this is the first in importance, since all measures of family and social policy must take into account its value in dynamics. It is this assessment that will allow us to adequately assess the efforts undertaken by the state to improve the standard of living of children and expand their social capabilities.

- Successful family policy with a high level of natural demographic dynamics will increase consumer activity of households with children and will be a sustainable impetus for the development of entrepreneurial activity. Even a
small increase in the income level of large households, the number of which is growing rapidly, will stimulate the development of social entrepreneurship, which in Kazakhstan works mainly with children.

References


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