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Labour-employment independence and the economic value of unpaid labor; housewives example

La independencia laboral y el valor económico del trabajo no remunerado; el ejemplo de las amas de casa

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Resumen

En este artículo, a pesar de la hipótesis del pleno empleo en las teorías económicas, se evalúa el trabajo de las amas de casa que no tienen empleo, pero que realizan un trabajo no remunerado mientras satisfacen las demandas de sus familias, con el enfoque de la independencia entre trabajo y empleo. A partir de las estadísticas sobre las amas de casa en Turquía, se calcula el impacto del trabajo no remunerado de las amas de casa en la economía y el bienestar social en los años seleccionados. En el enfoque de la independencia trabajo-empleo, se acepta que las amas de casa que satisfacen las demandas de sus familias se alejan de la racionalidad y se convierten en "individuos racionales limitados" (Simon, 1997), su trabajo no remunerado está determinado por el fenómeno de la "igualdad laboral" (Kumcu, 2019) y existe un nuevo tipo de trabajo definido como "trabajo de ama de casa" (Kumcu, 2022 b). El hecho de que el trabajo de las amas de casa, que se cree que ha alcanzado un nivel notable con el crecimiento de la población, sea un factor de producción independiente del empleo se calcula utilizando el "Modelo del efecto del trabajo de las amas de casa en los cálculos del PIB", que permite un análisis normativo. Los resultados muestran que cuando se tiene en cuenta el valor económico del trabajo de las amas de casa, éste tiene un efecto creciente sobre el PIB y un efecto decreciente sobre la desigualdad de ingresos. Se cree que el estudio, que demuestra que el trabajo puede valorarse independientemente del empleo, contribuirá a las teorías heterodoxas necesarias en la solución de los problemas económicos en los esfuerzos por garantizar la desigualdad social y económica.

Palabras clave: trabajo no remunerado, trabajo del ama de casa, racionalidad limitada, independencia trabajo-empleo, PIB, Turquía

Abstract

In this article, despite the assumption of full employment in economic theories, the labour of housewives who are out of employment but provide unpaid labour while fulfilling the demands of their families is evaluated with the labour-employment independence approach. Using statistics on housewives in Turkey, the impact of unpaid housewives' labour on the economy and social welfare is calculated for selected years. In the labour-employment independence approach, it is accepted that housewives who fulfil the demands of their families move away from rationality and become "limited rational individuals" (Simon, 1997), their unpaid labour is shaped by the phenomenon of "labour equality" (Kumcu, 2019) and there is a new type of labour defined as "housewife labour" (Kumcu, 2022 b). The fact that housewives' labour, which is thought to have reached a remarkable level with population growth, is a factor of production independent of employment is calculated using the "Model of the effect of housewives' labour on GDP calculations", which allows for normative analysis. The findings show that when the economic value of housewives' labour is taken into consideration, it has an increasing effect on GDP and a decreasing effect on income inequality. It is thought that the study, which shows that labour can be evaluated independently of employment, will contribute to the heterodox theories needed in the solution of economic problems in efforts to ensure social inequality and economic welfare.

Keywords: unpaid labour, housewife labour, bounded rationality, labouremployment independence, GDP, Turkey

Introduction

The fact that subsistence work integrated with domestic life is mostly performed by women has caused women's labour to become invisible and dependent on employment since the agricultural period, which started with the transition of human beings from nomadic life to settled life. For this reason, the evaluation of the labour spent by housewives, who represent unpaid labour, for housework as a factor of production or economic input has turned into a wide debate.

In economic theories, labour is evaluated under the assumption of full employment. Full employment also means the payment of wages to all workers at home or outside the home. However, the fact that the Classicals evaluate labour supply and demand based on the real wage, Keynesians evaluate labour supply based on the nominal wage and labour demand based on the real wage, and Monetarists evaluate labour supply based on the expected real wage and labour demand based on the real wage shows the dependence between labour and employment. This dependence means the exploitation of labour by the segment of the society that provides unpaid labour despite being out of employment.

The indicator of the economic size of a country's economy, when calculated under ideal conditions such as full employment, a stable currency and low inflation, is expressed as potential GDP (Krugman, 2021: 5). In addition, with regard to real GDP, it is emphasised that real personal income and productivity cause growth rates to be understated and that there are problems with estimating real output in official government statistics (Feldstein 2017). Elaborating on the intersection of labour, gender equality (or inequality) and development; in a theoretical study analysing mainstream development concepts; drawing attention to the shift in the paradigm that determines the elements of a fair and effective development; it is explained with the concept of "labour equality" that the labour supply provided by housewives to their households contributes to the economy as much as regular employment (Kumcu, 2019: 45-50).

Drawing attention to the difficulty of showing how any reasonable process of aggregating individual welfare functions will affect social welfare, a literature study conducted in 2020 states that a social welfare measurement that includes the principles of equality in national accounts is proposed (Slesnick 2020).

In the ILO's labour force reports, while the work done by women is defined as worthless "domestic work", the definition of "domestic worker" for any person who performs domestic work in an employment relationship (ILO, 2020) provides a clear picture of the employment dependency in the world labour market and its inequality-creating consequences.

The ignored labour of housewives, who constitute a large part of the rapidly growing population in the last two centuries, causes the growth of the informal economy. The informality to which women, who are considered normal to work both in employment and at home, have been exposed for generations is reflected in the society as injustice signs such as inability to participate in governance, inequality and poverty. From this point of view, it is understood that scientific studies that will ensure gender equality and reveal the mathematics of unpaid labour should be increased as soon as possible.

In current economic theories and growth calculations, labour supply and demand are dependent on wages, i.e. employment; it shows that unpaid housewives' labour is ignored in the labour-employment dependency, despite the assumption of full employment. It is stated that the uncertainty of who will pay the right of the woman who provides labour for housework to be humanely compensated for this labour creates a contradiction in orthodox theories based on the labour - employment relationship (Kumcu, 2022-a; 51-54): Contradiction of full employment assumption: Keynesian theories, which advocate government intervention in the economy by increasing public expenditure to steer the economy towards full employment, ignore the impact of unpaid domestic labour relative to the population, which contradicts the assumption of full employment.

The contradiction of a perfectly competitive market: From a labour market perspective, women's production at home does not conform to the characteristics of a perfectly competitive market. The woman who works at home (the mother of the household) cannot produce where she wants, as much as she wants and as much as she wants; she creates an economy within the limited conditions of the home and only for the needs of her own household.

In economic growth policies focussing on full employment by increasing women's employment, all housewives are expected to work, albeit at low wages, and to take care of their children and husbands. However, in accordance with the concept of housewife, women prefer to employ themselves in their own homes rather than being employed in a job under these harsh conditions that limit their rationality.

Another contradiction is the fact that in an economy where all workers demand the same rights or where no woman as a housewife does housework, it would not be easy or possible for the employer to find a replacement for a worker (housewife) who disrupts (family) work. In order to purify the economic functioning from these contradictions, it seems necessary to define the labour of housewives as a new type of labour as a basic labour force that meets household needs and ensures continuity, unpaid and independent of employment.

When defining the labour of housewives, it is argued that the gender-based division of labour dating back centuries, the family's demand for continuous labour and the housewife, who makes decisions according to the conditions in which she lives in the family, have turned into a limited rational individual by moving away from rationality.

In this case, housewives' labour is defined as the labour that women use especially and primarily for all activities related to housework and motherhood, which is currently unpaid but creates an economic value (Kumcu, 2022-a; 56 - 60).

Veblen argues that rationality is an obstacle to human development in the economic sense and that at all levels of life, in all walks of life and at any stage of economic development, arduous tasks performed by the mistress or servants of the house, which ensure the physical efficiency or comfort of the master or household, should be considered productive work (Veblen, 1918). While the collection of scientific facts causes the old schools to gradually disappear, new paradigms that enable the formation of new theories and syntheses are accepted as an indicator of overcoming the scientific crisis and the development of that branch of science (Kuhn, 2008: 83-99). In efforts to solve economic problems or increase welfare, it has been deemed necessary to question the fact that labour, which is the most fundamental value of human beings, is not always dependent on employment in real life. The labour-employment independence approach is proposed as a new approach within heterodox economics, sprouting from the concepts of behavioural economics such as limited rationality, heterogeneous individual and unpaid labour, which constitute today's human profile (Kumcu, 2022-a; 26-39).

In this article, which aims to support the labour-employment independence approach, it is shown that labour is a factor of production independent of employment in the case of Turkey by using secondary data from TurkStat and empirical calculations based on the inequality sensitivity measure of society. It is attempted to theoretically calculate how the supply of domestic labour for household work, where individual preferences are experienced, affects the labour factor, which is one of the components of GDP.

Materials and Methods

In this article, the "Model of the Effect of Housewives' Labour on GDP Calculations" (Kumcu, 2022-b) created by Kumcu in his doctoral dissertation, where labour-employment independence was introduced and the first empirical calculations on the measurement of unpaid housewives' labour were made, is used.

In the Model, which will be referred to as the Labour-Employment Independence Model, the GDP is used as data and normatively selected as a tool to show the effect of the inclusion of unpaid labour in GDP calculations on income distribution.

The Model, which is based on the idea that the increase in social welfare depends on the elimination of income inequality, shows that labour can be evaluated independently of employment. The Model, which can measure unpaid labour defined for any selected year, is preferred because it is a normative inequality model using the Atkinson Inequality Scale, which is directly derived from welfare theory.

In the Atkinson Inequality Scale, which does not change according to linear transformations and has a very high sensitivity; I value varies between 0 (full equality) and 1 (full inequality). The Inequality Scale, which Atkinson, who introduced the concept of yEDE , which is the income level equivalent to the equally distributed income level as the per capita income level, gave a normative feature by using the parameterε , which shows the sensitivity of the society to avoid inequality in the social welfare function, is given in Equation 1 (Atkinson, 1970: 250):

$$I = 1 - [\ \Sigma_i \left(\frac{yi}{\mu}\right)^{1-\varepsilon} \quad f(y_i)\ ]^{1/(1-\varepsilon)} \qquad (1)$$

It is stated that the Atkinson criterion is more advantageous than the Gini coefficient since it can differentiate inequality within and between groups. The value ofε , which shows that the society avoids inequality as it moves away from zero, is used as 0.5, 1 or 2 according to the development levels of the countries as in the studies conducted on behalf of the United Nations (Harttgen and Volmer, 2011: 8).

The new measure of inequality, I, which takes social welfare into account, is defined in equation (2) as the mean of the distribution (μ) (Atkinson, 1970: 250- 257);

$$I = 1 - \frac{\mathrm{yEDE}}{\mu} \qquad (2)$$

In addition to being more advantageous than the calculations made with the Gini coefficient, Atkinson's approach of taking social welfare into account in order to eliminate economic inequalities is an approach that confirms the inconsistency of the results of traditional measurements that became widespread with Kuznets' exclusion of goods and services produced at home from national income calculations (Kumcu 2022-a; 80).

Labour - Employment Independence Model

In the Labour-Employment Independence Model developed by Kumcu by using the ability of the Atkinson Scale to measure income inequality between regions, two regions consisting of wage earners in employment and unpaid workers at home outside employment are designed and it is shown that the welfare effect created by unpaid workers at home can be calculated. In the Model, two inequality measures are calculated for the two regions. In the first stage, the inequality measure I_1, which is the inequality measure of the situation of the current region where national income accounts are made, consisting only of wage earners in employment, is calculated. In the second stage, the inequality measure I_2 is calculated for the normative region, which takes into account the labour of housewives as well as those in employment in national income calculations. By comparing the calculated I_1 with I_2, the impact of unemployed labour on the economy is evaluated.

The model reveals that unpaid labour groups in the population contribute to social welfare and indirectly to equality. The difficulty of measuring the value of labour, which is rendered intangible and invisible because it is unpaid, can be overcome by paying due attention to the integrity of the components that affect the average and constitute total income. The correct calculation of the whole affects the accuracy of the average. Therefore, the accuracy of the measurements made with reference to the same average to measure inequality requires the inclusion of different types of unpaid labour, such as housewives' labour as defined in this study (Kumcu, 2022-a).

The model shows that the economic input that is consumed as labour or labour force and that must be replaced by spending a certain income is human energy. Moreover, the Model, which argues that human energy, which ensures the continuity of the generation and is in constant demand, should be included in the social welfare function in the form of "housewife labour", is preferred because it allows to reveal the inequality created by labour-employment dependency and to measure the contribution of unpaid labour to equality.

First Stage: Calculation of Inequality Criterion I_1

In the first stage of the Model, the inequality coefficient I_1 is calculated for the selected years by using equation (3) derived from equations (1) and (2). The value of ε , which indicates society's sensitivity to inequality, is taken as 2 in this study in accordance with the literature, as stated in the Model. While calculating, I_1; the value y_i, the minimum wage (PA) defined as the income equivalent to the equally distributed income y_{EDE} and the average income per capita known as the average income per capita in the national income accounts of the relevant year μ calculated and used:

$$I_1 = 1 - \frac{PA}{\mu} \qquad (3)$$

$$\mu = \frac{(GDP)}{N} \qquad (4)$$

μ although calculated by TURKSTAT, here; It can be calculated by dividing the GDP data obtained with current prices and the income method by the total population for the selected years, first annually and then monthly, using equation (4).

Second Stage: Calculation of Inequality Criterion I_2

In the second stage of the model, the inequality coefficient I_2, which shows the social impact of unpaid labour supply, is calculated. For this purpose, housewives' labour is denoted by L_{HW} and the new average μ_{HW}. In order to calculate I_2, it is important to first calculate L_{HW}. L_{HW} is calculated using equation (5) as follows:

$$L_{HW} = (N_{HW})(P_A)(12 \text{ Months}) \qquad (5)$$

In case LHW is taken into account in national income calculations, the new total output is denoted by LGSYH and is calculated as shown in equation (6).

$$L_{GDP} = GDP + L_{HW} \qquad (6)$$

L_{GDP} represents the contribution of all paid and unpaid labor force in the country. The average income of all labor force that contributes to the formation of L_{GDP} is evaluated as μ_{HW} and is the same as the calculation logic of μ. In this empirical study; in order to make income inequality measurable; it is recommended to use μ_{HW}, defined as average income (Kumcu, 2022-a). In other words, μ_{HW}, as shown in Equation (7); is obtained by dividing the total product L_{GDP}, which is formed by including L_{HW} in GDP, by the total population:

$$\mu_{HW} = \frac{LGDP}{N} / (12 \text{ Months}) \qquad (7)$$

Assuming that L_{HW}, which is considered as female labour force, produces as much as the minimum wage; the reflection of its inclusion in the labour force involved in the formation of L_{GDP} on social welfare is interpreted.

In the Model, the value of unpaid labour is revealed according to the change in the values of I_1, which is calculated with a production approach focused on the ongoing labour-employment dependency of the current situation, and I_2, which proposes labour-employment independence. When calculating I_2; income equivalent to equally distributed income y_{EDE}; average income per capita μ using the equation given in (8) below; the new average per capita L_{GDP} obtained from the new L including L_{HW} calculated assuming the minimum wage μ_{HW} (Kumcu, 2022).

$$I_2 = 1 - \frac{\mu}{\mu HW} \qquad (8)$$

In order to be able to say that equally distributed income will increase social welfare by an amount equivalent to a certain increase, redistribution of income can be planned according to the equivalent increase rate. For this reason, it is understood that the μ value that Kumcu used as the y_{EDE} value when calculating I_2 is considered to be equivalent to the equally distributed average income per capita formed by including L_{HW} (Kumcu; 2022-a, 74-82)

GDP, as a measure of social welfare, will be affected by household production and similar unpaid production factors. These assumptions were determined due to the fact that rapid population growth has moved the meeting of individual needs from the micro scale to the macro scale and thus turned housework into a sector. The model's hypotheses are based on whether L_{HW} affects GDP and therefore sensitivity to inequality. In this article, in calculations made for two different years in order to monitor the continuity of unpaid labour from year to year, I_1 and I_2 values are compared according to years; L_{HW} is shown to affect GDP and therefore income distribution and social welfare.

Data set

Household, labor force and employment, GDP and income distribution data used in the calculations made in the case of Turkey are provided by TURKSTAT. In the study focusing on labour – employment independence; Employment data regarding employment policies and general problems experienced by employees in business life are excluded from the study. Within the scope of the study, data from 2015 and 2019 were used to determine the inequality resulting from the absence of L_{HW} in GDP and to compare the five- year data between 2015 and 2020 in Turkey. 2020 data was not preferred due to the impact of Covid-19. TUIK states that the labor force indicators were revised in the regulation made in 2014 and the numbers were rounded.

While processing the statistical data, in order to avoid double counting, the labour of women who are in employment, working unpaid in agriculture or in the process of job search, but who also do housework themselves, is excluded and limited only to the population of housewives who declare that they are not in employment due to being "busy with housework". There are no men for whom the reason for not being in employment is being busy with housework. Income and minimum wage information obtained from TURKSTAT data, together with the abbreviations of the variables used in the calculation model, are shown in Table 1:

Table 1: Data Used in Calculating the Inequality Measure I_1

Population, Income and Total Product Information		2015	2019
Total Population in Employment (male and female)	N_L	26,632,000	28,080,000
Population Not Participating in Employment Due to Housework	N_{HW}	11,498,000	11,359,000
Total Population	N	78,741,053	83,154,997
Gross Minimum Wage (*TL/Month*)	P_A	1,237	3,577
Current situation (not including L_{HW})(*Thousand TL*)	GDP	2,350,941,343	5,046,383,307

Source: Created using TurkStat, November 2020 data

The independent variable of the study is the labour of housewives symbolised by L_{HW}. L_{HW} shows the magnitude of the labour of women working unregistered at home as limited rational individuals, which shows the effect of their labour on GDP. The housewife population as the labor force used in the calculation of L_{HW} is denoted by N_{HW}. N_{HW}, as stated in the data source showing the reasons why individuals are not included in the labor force, consists only of women who do not work in another job due to being "busy with housework".

Table 2: Employment and Non-Employment Population and Reasons for Non-Labour Force Inclusion (Thousands)

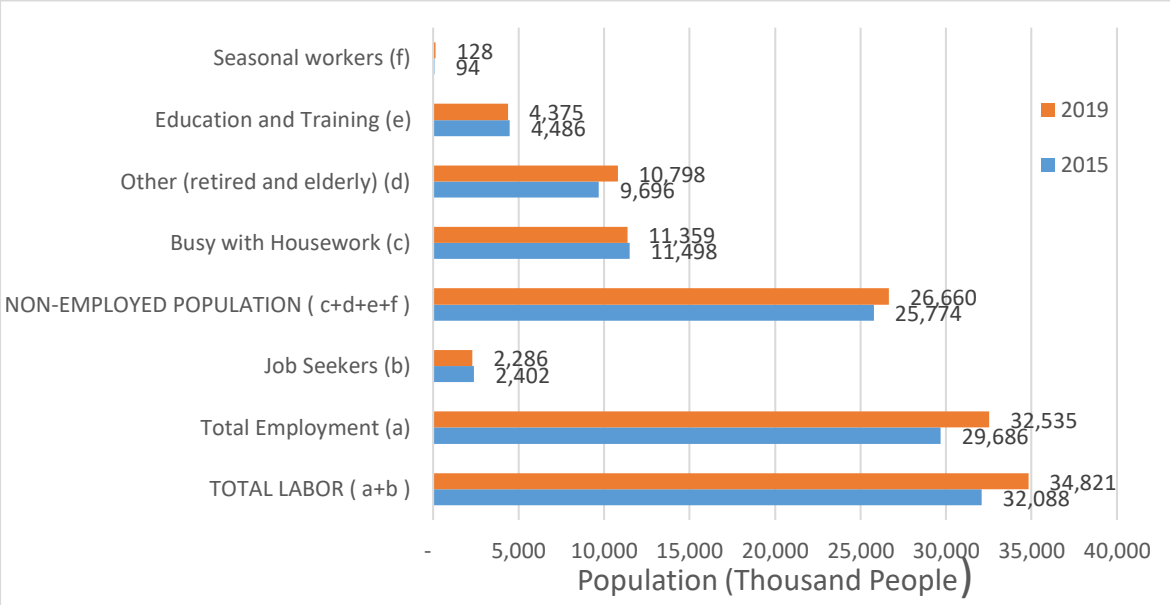
	2015	2019
TOTAL LABOR FORCE(a+b)	32,088	34,821
Total Employment (a)	29,686	32,535
Job Seekers (b)	2,402	2,286
NON-EMPLOYED POPULATION (c+d+e+f)	28,176	28,946
Busy with Housework (c)	11,498	11,359
Other (retired and elderly) (d)	9,696	10,798
Education and Training (e)	4,486	4,375
Seasonal workers (f)	94	128

Source: Created using TurkStat, November 2020 data

Information on employment and labor force population obtained from TURKSTAT data is shown in Table 2 below. It is noteworthy that the number of housewives who are not in employment due to being busy with housework is close to half 10 of the total labour force in employment. Moreover, when the basic employment data of TurkStat are analysed, it is understood that the total population constituting the labour force consists only of the employed and the unemployed and that housewives are not included in the labour force.

Figure 1, which is constructed by using Table 2, shows that housewives' labour is a magnitude that should be taken into account as an economic value:

Figure 1: Total Population in Employment and Reasons for the Population Not Included in the Labor Force



Source: Created using TurkStat, November 2020 data

The data set of the study; the labour of women who do housework part-time, who want to work but cannot find a job, who do domestic work, and who work outside the home as unpaid family workers is not included in the calculations to avoid double counting, due to the possibility that they may have earned income. TurkStat, as the data provider institution, states that there are minor differences in some data due to rounding. Tables of the data are given in the Appendix.

Result and discussion

In the first stage, I_1 was calculated for 2015 and 2019 and the results are given in Table 3. The I_1 value used in the positive analysis, which shows the current situation in which housewives' labour is not included in the calculation, was measured as 0.50 for 2015 and 0.29 for 2019. I_1 of 0.50 means that in Turkey, where the average income per capita in 2015 was 2,488 TL, only 50 per cent of the current national income is sufficient to ensure ongoing social welfare.

Table 3: Calculation of I_1 and Findings Obtained by Years

The current situation; L Calculated Values Excluding $_{HW}$		2015	2019
Average Per Capita Income (*GDP at Current Prices TL/Month*)	μ	2,488	5,057
Inequality Measure	I_1	0.50	0.29

In 2019, when I_1 is calculated as 0.29, it means that although the average income per capita in 2019 has increased to 5,057 TL, population growth, which also means an increase in the supply of housewives' labour, means that only 71% of the current national income is needed to ensure social welfare in Turkey.

The fact that μ, which shows the average income per capita in 2019, has increased compared to 2015 gives an idea about the effect of the increase in μ on moving away from inequality and increasing social welfare.

In the second stage, the value of I_2 was calculated for the normative analysis in which housewives' labour is included in income distribution calculations. L_{HW}, which is housewives' labour as labour force, L_{GSYH}, which is adjusted GDP, and μ_{HW}, which is average income per capita, were calculated using equations 5, 6, 7 and 8, respectively, and I_2 was measured. The results obtained are given in Table 4.

Table 4: Calculation of I_2 and Results Obtained

Normative Situation; Values Calculated Including L $_{HW}$		2015	2019
Housewife Labour (*Thousand TL/Year*)	L $_{HW}$	170,676,312	487,573,716
Normative GDP (*Thousand TL*)	L $_{GDP}$	2,521,617,655	5,533,957,023
Normative *μ* (L $_{GDP}$ *At Current Prices TL/Month*)	μ $_{HW}$	2,669	5,546
Normative Inequality Criterion	I_2	0.06	0.09

The fact that the value of I_2 is lower than the value of I_1 for both years shows that inequality can be reduced by taking into account the labour of housewives and welfare equivalent to the distribution of a larger portion of the current national income can be achieved.

Increasing the welfare of the society with the labour of housewives, which is calculated by assuming that they produce at least as much value as the minimum wage even though they are not compensated, means that they create an effect equivalent to the distribution of 94% of the 2015 revenue.

The fact that the value of I_2 is smaller than the value of I_1 confirms that this amount of 170.676.312.000 TL, which was not paid to 1_2 housewives, was identified as a deficiency in the calculation of output. This value, which creates a difference of approximately 180 TL gross per capita in the total population of 2015 when evaluated on a monthly basis, creates a significant difference when compared with the reference values given in Table 5.

The I_2 value of 0.09 calculated for 2019 means that the labour of housewives has an effect equivalent to the distribution of 91% of the annual output. The fact that the I_2 value is smaller than the I_1 value for 2019; the amount of 487,573,716,000 TL that has not been paid to housewives is considered as the missing amount that causes inconsistency in annual output calculations.

In an economy where the gross minimum wage is approximately TL 3,580, this value, which creates a difference of approximately TL 480 per person per month, is meaningful in today's conditions when compared with the reference values given in Table 5.

Table 5: Reference Prices of Some Basic Consumption Items in 2015

Reference Values	2015 Unit Price (TL)	2016 Unit Price (TL)
Bread	1.00	1.25
1 l milk	1.50	2.30
1 kg of meat	32.00	40,47
Dollar exchange rate	2.73	6.20
Net minimum wage	949.07	2,020.59
Gross minimum wage	1,237.00	3,577.00

Source: TurkStat, 2020, Market data

Inequality in national income and distribution accounts decreased from 50% to 0.06% in 2015 and from 29% to 0.09% in 2019; It shows that housewife labor, which is not employed only due to housework, corresponds to the distribution of 96% and 91% of the national income, respectively, over the years.

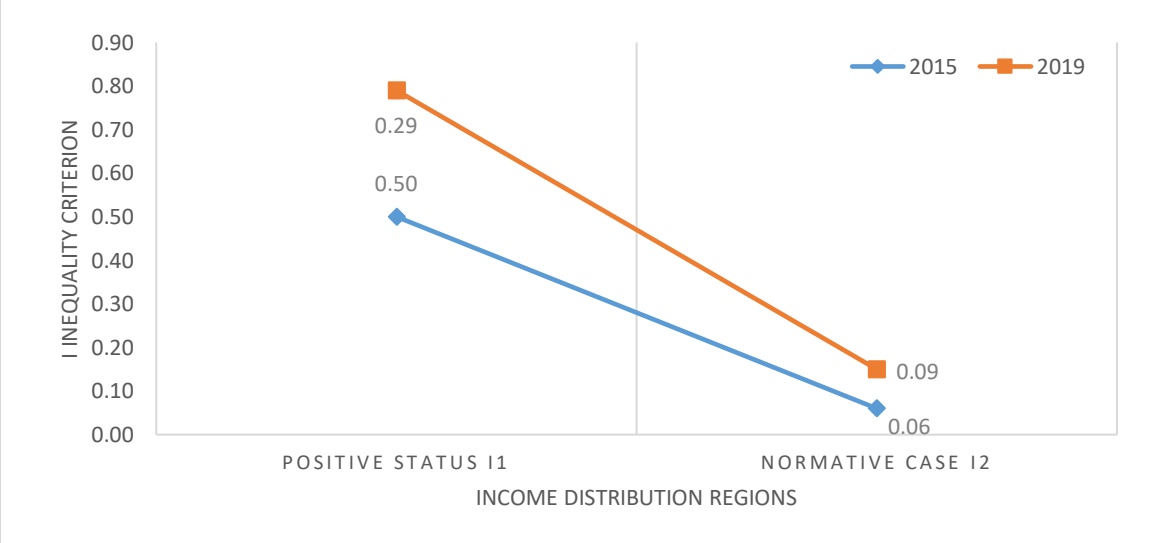
Table 6: Effect of L_{HW} on I_1 and I_2 by Years

Comparative Values	Column1	2015	2019
L Inequality Measure Calculated Excluding L_{HW}	Positive Status I1	0.50	0.29
L Inequality Measure Calculated with L_{HW} Included	Normative Case I2	0.06	0.09

As a result, when I_1 and I_2 values are compared; I_2 from I_1 It can be seen in Table 6 that it reached a small value and approached 0. In statistical data; Limited rational individuals who are not in employment because they prefer to be housewives, which make up nearly half of the total population in employment Even though they do not receive a wage like employees, the labour they provide shows that they increase L_{HW}, welfare and society's sensitivity to avoid inequality.

The normative analysis with the Labour-Employment Independence Model shows that for a more equal distribution of annual output, a normative L_{GDP} that is larger than the current GDP without considering L_{HW} as female labour force is possible only if L_{HW} is reasonably considered. Figure 2 shows as region I_2 where a more equal income distribution is possible in the normative case where L_{HW} is considered as labour force.

Figure 2_1 and I_2 values in Positive and Normative Situation



In this study, which aims to clarify how labour can be calculated as an economic value outside the condition of employment, it has been determined that the reason why limited rational individuals in the example of housewives do not have an economic value for their labour even though they work in domestic production independent of employment is that the concept of labour is evaluated as dependent on the condition of employment in the paradigm in which it was born and shaped.

According to the results of the study, it seems reasonable that women who are not included in employment because they are busy with housework supply labour and therefore should be considered within the scope of labour force, unlike the retired and elderly, those in education and training and seasonal workers who are not included in total employment.

Conclusion

Even if housewives are not currently paid for the labour they supply in response to the labour demand of the family, it is understood that they contribute to the real level of welfare experienced. Although it is thought that discussions on how or who will pay for unpaid labour will take time depending on the development of humanitarian understanding, what is wanted to be emphasised here is the new scientific meaning that the concept of labour has gained within the paradigm shift, which is a social reflection of population growth.

From the point of view of economic philosophy, the consistency of focussing on human needs forces us to take into account the high rate of population growth in the last two centuries. If the world population was still below one billion, as in the age when Malthus recommended strict population policies; Capital accumulation would not have increased so much, the distribution problem would not have grown so much, and undoubtedly, the debate about whether the unpaid labour of housewives contributed to economic growth would not have been as important from a macro perspective, as Samuelson thought. In the global world society, the continuity of the labour supply and capital accumulation of the workers employed by an employer is thought to be fed by the continuity of the unpaid labour supply of millions of housewives.

Since the classical economic theory, it has been understood that the assumption of "full employment" on which the labour-employment dependency is based can only be valid if the individual and social benefit provided by the labour of housewives working at home is taken into account. Otherwise, in the market, the goods and services produced by housewives at home should be defined as a surplus of production that reaches the employer through the labourer as a cost-reducing benefit and is consumed. Productive labour is not limited to the creation of capital accumulation; it is understood to include the labour of the housewife who meets the needs of the family at home in order for her spouse in employment to be able to do his/her job without interruption and for the birth and growth of human beings, which is defined as human capital in the literature.

The reason why this study focuses on the concept of "labour" and the evaluation of labour independently of employment is the scientific crisis in economic science. The issue of paradigm is open to broader evaluations in the field of sociology of science. However, here, in the paradigm chosen as the basis of economic theories, there is a need to question the labour-employment dependency in order to understand whether the labour of the limited rational individual in the housewife example actually contradicts the definition of "economic value" (Kumcu, 2019: 12).

In the calculations made with the proposed Model, it is shown that the GDP LGSYH generated by taking into account the production of housewives' labour in the household is larger than the GDP without taking into account housewives' labour. Inequality coefficients were calculated for the two cases where housewives' labour is not taken into account and for the two cases where housewives' labour is taken into account, and it was shown that by taking housewives' labour into account, inequality is eliminated and a more equal distribution is possible. This finding, which shows the degree of welfare created by the presence of housewives' labour in this distribution, is expected to shed light on the explanation of unemployment growth.

Associating labour supply and demand only with wages and employment in economic theories means associating social welfare only with money. Considering the responsibility and impartiality of economics in developing appropriate policies beyond measuring only the monetary equivalent of social welfare, it also has the responsibility to determine regulatory policies regarding the distribution of all inputs. Therefore, there is a need for scientific truths to develop the necessary policies on the evaluation of housewives' labour. Evaluating labour supply and demand by considering only the interests of the owner of capital seems to contradict the impartiality of science. The fact that women work both outside the home enough to ensure equality in employment and inside the home enough not to interfere with housework and child development responsibilities is seen as the reason for the inconsistency of GDP calculations, which attempt to calculate without double counting errors.

This study argues that the concept of labour should be taken into account in the long run, independent of employment, through the labour of housewives due to their role in ensuring the continuity of human capital. In this context, the "labour-employment independence theory" is proposed.

At this stage of humanity's efforts to increase welfare, the speed of discovering its own virtues is accompanied by the speed of scientific developments whose social reflections are needed. From the beginning when labour was accepted as a value to the present day; this study, which tries to remind that the labour of housewives, the inventor of subsistence work, is an economic value independent of employment; is expected to serve to provide the social and economic justice expected from science.

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Annexes

Data Appendix: TURKSTAT data

Table 7: Reasons for Non-Labor Force Participation (Age 15+, Thousands)

Years	Population not in the labor force	From where							
		Those who are not looking for a job but are ready to work		Seasonal Employees	Busy with Housework	Education	Retired	Unable to work	Other
		Those who have no hope of finding a job	Other						
Male									
2010	7 544	416	462	15	-	2 210	2 847	1 238	355
2011	7 453	406	446	13	-	2 175	2 844	1 232	336
2012	7 804	479	463	13	-	2 256	2 959	1 277	358
2013	7 814	401	485	13	-	2 244	3 006	1 307	359
2014	8 089	370	614	27	0	2 220	3 003	1 410	445
2015	8 120	416	582	26	0	2 211	3 156	1 351	377
2016	8 133	406	584	24	0	2 220	3 201	1 351	345
2017	8 166	370	535	28	0	2 204	3 322	1 317	390
2018	8 206	311	512	55	0	2 148	3 406	1 344	429
2019	8 509	368	512	35	0	2 089	3 710	1 279	517
2020	9 851	756	1 091	47	0	2 105	3 605	1 555	691
Woman									
2010	19 357	300	835	49	11 914	1 912	730	2 156	1 461
2011	19 414	271	821	50	11 872	2 043	772	2 174	1 410
2012	19 581	212	840	51	11 992	2 153	836	2 182	1 316
2013	19 523	237	956	37	11 463	2 221	831	2 360	1 419
2014	20 112	246	1 255	67	11 589	2 250	824	2 512	1 368
2015	20 056	260	1 144	68	11 498	2 275	926	2 527	1 359
2016	20 052	252	1 177	64	11 098	2 320	958	2 685	1 498
2017	20 085	267	1 092	58	11 133	2 263	1 045	2 692	1 535
2018	20 174	236	1 112	100	11 061	2 324	1 130	2 696	1 515
2019	20 411	259	1 147	68	11 359	2 286	1 250	2 626	1 416
2020	21 855	613	1 760	60	10 308	2 408	1 281	3 313	2 112

Note 1) Numbers may not total due to rounding.
2) The "employer and self-employed" series, which have a sample size of less than two thousand five hundred people, have been combined with the numbers of "wage, salaried and daily wage workers" to ensure adequacy for reliable estimates.

Source: TURKSTAT, Labor Force Statistics, 2020

Table 8: Gross Minimum Wage, 2014- 2020

Year	Fee* (TL)
2010	744.00
2011	816.00
2012	913.00
2013	1,000.00
2014	1,102.00
2015	1,237.00
2016	1,711.00
2017	2,293.00
2018	2,943.00
2019	3,577.00

Source: TURKSTAT, 2020

Table 9: Gross Domestic Product (Income Method, Current Prices)

Year	Annual Value (Thousand TL)
2014	2 054 897 828
2015	2 350 941 343
2016	2 626 559 710
2017	3 133 704 267
2018	3 758 315 621
2019	4 320 191 227
2020	5 046 883 307
2021	7 209 040 465

Source: TURKSTAT, 2022

Table 10: TURKSTAT Basic labor force indicators, (Age 15+, Thousands)

Years	workforce situation		
	Labor	Employment	Unemployed
2014	28 768	25 909	2 860
2015	29 686	26 632	3 054
2016	30 543	27 213	3 330
2017	31 642	28 191	3 451
2018	32 264	28 720	3 544
2019	32 534	28 079	4 455
2020*	30 901	26 836	4 065

Note 1) Numbers may not total due to rounding.
2) The "employer and self-employed" series, which have a sample size of less than two thousand five hundred people, have been combined with the numbers of "wage, salaried and daily wage workers" to ensure adequacy for reliable estimates. * Based on November 2020, 11-month data

Source: TURKSTAT, Labor Force Statistics, November 2020