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A Different Approach to Wages: Digital Primitive Economy Model

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Abstract

Wage is an issue that has been studied and debated by many schools of economic thought and economists for centuries. The debates are usually on the level of wages and its effects on the economy. However, high and low wage levels have various advantages and disadvantages on the economy at micro and macro levels. The aim of this study is to bring a different approach for the basic needs, which play a key role in determining wages, in the framework of a model we have newly developed and named as the Digital Primitive Economy Model (DPEM), thereby reducing living costs and thus providing a different theoretical solution to the wage-related problems up to now. The Digital Primitive Economy Model also aims to combat climate change and contribute to a sustainable economy that is compatible with ecological balance, to provide equal opportunities in education and to help eradicating poverty, and to create economies that have healthy functioning and are resilient to crises today and in the future.

Keywords

Wages, Living Costs, Basic Needs, Poverty, Sustainable Economy, Combat Climate Change

1. Introduction

Wage is one of the most important issues in the economy. Wages have a huge impact on the economy, so many issues that fall within the research area of macroeconomics are related to wages. (Bowles & Boyer, 1995) Wages are a component of aggregate demand and contribute to GDP through expenditure. Household spending is about 60% of gross domestic product (GDP) and is therefore a key variable for economic analysis of demand. (OECD, n.d.-b) Today, wage earners constitute the majority with a ratio of close to 60%. (ILO, 2022) There-

fore, it has a great impact on income distribution and thus determines the living standards of the majority of the society. For this reason, wage is one of the most fundamental issues of the economy and has a key role affecting all areas of the economy. Wages have a significant impact on the main issues of macroeconomics such as, income and employment level, price stability, economic growth and development, production and consumption, income distribution. In addition to all this importance, wages are still a controversial issue. Discussions are mostly regarding the level of wages. High and low wages have different economic advantages and disadvantages. Economists and certain segments of society advocate low or high wages for various reasons.

The reason for the defense of living wages is economic justice and a fair economy. However, the typical economist today opposes the living wage on the grounds that justice and equity are not economic concepts and that wages are a concept related to the value that a worker adds to the production of goods and services in a free market economy. According to these economists, paying workers a higher living wage than their value added degrades the productivity of a value-added economy. (Stabile, 2016)

On the other hand, the level of wages is an element of conflict between employees and employers and employers may be reluctant to reduce wages even if labor is in short supply. (Katz, 1986) Wages, which mean costs for firms (Murphy, 2020), are a tool for employees to make a living. (ILO, 2014) In this sense, firms whose aim is to make a profit want costs and therefore wages to be low, while employees demand higher wages in order to obtain more welfare.

Unlike mainstream macroeconomic models, post-Keynesian/post-Kalecki models (such as the model developed by Bhaduri and Marglin (1990)) have a dual nature of wages. Wages are assumed to affect both costs and demand. They compare the negative effects of high profits, which directly positively affect investment and net exports, on consumption and aggregate demand. Therefore, besides the supply side of wages, the demand side is also included in the analysis. (Onaran & Galanis, 2012) Since investment depends on the profit margin, a higher real wage increases consumption but decreases investment. (Bhaduri & Marglin, 1990) The Bhaduri-Marglin model is the widely used model in heterodox macroeconomics, but two dozen or so empirical studies have produced conflicting results for this model. (Stockhammer, 2017)

Another area where wages affect and are affected is international trade. Governments cannot determine their wage policies by isolating themselves from the outside world. However, increasing international trade also has some advantages and disadvantages. Wage policy is effective in foreign trade competition between countries and in attracting foreign direct capital flows. Foreign capital flows to the country have important contributions to the development of countries. China, India and Eastern bloc countries, which made reforms and political changes with the integration of labor markets with the globalization process, gained an advantageous position compared to other countries in attracting labor-sensitive

foreign investors after their economic transformation. (IMF, 2007) Empirical results show that FDI contributes significantly positively to exports and economic growth in China (Yao, 2006) and that FDI to China in the 1990s stimulates the R&D activities of Chinese firms in various ways and, as a result, making them more capable of innovating on their own. (Cheung & Lin, 2004)

On the other hand, labor who are a cost factor for firms, are at risk of being harmed by the increase in international trade. With the increase in international trade, companies are able to more easily substitute workers in different countries through trade and foreign investment and gain more bargaining power by taking advantage of the cost of trade and moving in the open sea, against wage increase demands or improving working conditions and so it has increased the demand flexibility faced by labor. The weakening of labor standards and local institutions by international trade and the costs of higher labor standards have increasingly created the risk that they may be borne by the workers themselves. There is a threat-likelihood of acceleration to the bottom in terms of less regulation and protection for workers. (Rodrik, 1998)

In summary, discussions on the level of wages and solutions to the wage-related conflicts and problems continue today, depending on the advantages and disadvantages of high or low wages. In our paper, unlike others, we are not concerned with what the wage level should be. Instead, we are developing a model that will not cause a decrease in the welfare of the workers and not reduce the aggregate demand while reducing the wage-based firm costs in order to gain advantages in terms of profitability, employment, capital accumulation and foreign trade. In order to perform this, we argue that the subsistence level, which we accept as the lower limit of wages, should be reduced and thus the wage area that causes conflict should be narrowed and to achieve this, we focus on living costs and basic needs that determine the level of subsistence.

In this paper, we divide the wage into its components through the **Digital Primitive Economy Model (DPEM)** we have newly build and identify the inefficiencies we call as "leaks", which cause frictions in the wages share-aggregate demand business cycle, magnifying the conflicts between the worker and the employer within the scope of the wage. Then, we resolve these leaks by dealing with them item by item.

Digital Primitive Economy Model; It brings a new perspective to the subject of basic needs according to today's conditions and by making use of today's technology, it reveals the approach of meeting certain basic needs permanently and thus eliminating the leaks that have entered the wage area. Thus, it aims to lower the subsistence level, to reduce labor costs without loss of welfare of workers and in this way to find solutions to wage-related problems. In addition, we believe that the Digital Primitive Economy Model will contribute to reducing poverty and improving income distribution, fighting against climate change, expanding education and ensuring equal opportunities in education, making health services more effective, building sustainable and crisis-resistant economies in harmony

with nature.

Our study not only offers a theoretical solution proposal, but also provides appropriate micro foundations. Solution suggestions are shown in detail in Section 6. In this paper, the issues under the subheadings of housing, education, health, transportation, education, communication, as well as cultural activities, nutrition and clothing, which we have reclassified, are discussed one by one and solution suggestions are offered.

2. Literature Search

DPEM is based on narrowing the wage area by reducing living costs. In this respect, it is related to classical economics, which is associated with wages and living costs in the literature. In the classical economics, natural wage and 'subsistence consumption' concepts are intertwined. Therefore, basic consumption is historically and socially determined, not biologically determined, and is regarded as a minimum below which the real wage rate cannot be permanently lowered. The concept of "subsistence" includes the amount of food, necessaries and conveniences that have become habitually necessary to the worker. The concept of subsistence therefore offers a minimum level of wages. The second is the central or average wage rate, at which the market wage rate can fluctuate constantly due to temporary and incidental disturbances in the economy. (Stirati, 1992) Adam Smith, in his book "The Wealth of Nations"; he argues that due to the institutional unity of employers and workers, wages do not occur at the natural level. Wages tend to come down as employers come together more and act together to bring down the wages. However, this also has a limit. This limit is the amount that can support the worker and his family, even for the lowest type of labor. And it is even slightly above this amount. (Smith, 1977)

According to Ricardo, labor, like everything else that can be bought and sold and whose quantity can be increased or decreased, has a natural and market price. The price necessary to enable the laborers to coexist with one another and to maintain their existence and race without any increase or decrease determines the natural price of labour. The natural price of labor therefore depends on the price of food, necessaries, and conveniences for the subsistence of the worker and his family. With the increase in food and necessities' prices, the natural price of labor will increase and with the fall in the price of labor, the natural price of labor will also fall. (Ricardo, 1911) According to Marx, labour-power needs a certain amount of means of subsistence to make a living, and the value of labor-power is the value of the means of subsistence necessary for the subsistence of its owner. These means of subsistence include natural needs such as food, clothing, fuel and shelter and vary according to the climatic and other physical characteristics of the countries. Moreover, Marx added to this subsistence level the conditions, habits and expectations created by the historical, cultural, civilizational level of the country. (Marx, 1992) There is a difference between Marx and Ricardo regarding the reasons why wages depend on subsistence level. Based

on Malthus' theory of population, Ricardo believed that the price of labor would be determined by the labor supply curve. In Marx's theory, the reason for this situation is that at any given time the supply of labor—the number of workers seeking paid employment—tends to exceed the demand for labor, so the wages will remain at the subsistence level. The existence of an unemployed segment - the "reserve army of labour", prevents wages from rising above the minimum wage that workers must be paid to do the job. (Kaldor, 1955) The idea that wages will always tend towards the lowest amount necessary to sustain the workers needed by a given society is expressed as the "iron law of wages". The expression "iron law of wages", the idea of which was also evident much earlier in the studies of David Ricardo and Thomas Malthus, is often attributed to the German socialist Ferdinand Lassalle. The reference to coherent rules as "iron laws" can be found in Goethe's "Das Göttliche" as early as 1783. (Wolf, 2014)

In our paper, we argue that for various reasons, wages will not fall below the subsistence level in the long run, that is, the lower wage limit is the subsistence level. Considering that it was observed that wages would not fall below the subsistence level even in the years when workers' rights and democratic rights were not so developed, and it was called as the 'iron law of wages', it is clear that they will not remain below the subsistence level in today's modern world. When we look at the literature, Ricardo says that the natural price of labor depends on the living costs of the worker and his family and argued that with the decrease in living costs, wages will decrease. According to Ricardo, on the other hand, with the development of society, the natural price of labour always tends to rise, because one of the main commodities that regulates its natural price tends to become more expensive because it is more difficult to produce. However, developments in agriculture, the discovery of new markets where provisions can be imported, may for a while resist the upward trend in prices of basic necessities and even cause their natural prices to fall. The same causes produce corresponding effects on the natural price of labour. (Ricardo, 1911) Mill, on the other hand, using the subjective definition of subsistence, argued that if the worsening of subsistence conditions turns into a habit in the long run, a new level of subsistence will be created for workers. John Stuart Mill reinterpreted the doctrinal structure evolved by Smith and Ricardo. Any disadvantageous change in the conditions of the workers—that is, the reduction of actual wages below natural wages—may permanently lower the living standard of the class, if new habits for the people are stronger than previous habits for society, and this permanently worsening condition may set a new minimum level which tends to perpetuate itself. (Giddings, 1887)

According to the Wage Fund Theory, wages are distributed according to a certain fund allocated for the purchase of labor from a part of the capital in the country. Fees are determined by the size of this fund and the population. (Mill, 1871) The power of workers to increase general wages at the expense of profits in the short term is limited, and since the fund is fixed, an increase in wages de-

pends on the reduction in the number of workers, that is, some workers become permanently unemployed. (Donoghue, 1997)

Another view about wages is the marginal wage theory. In his marginal wage theory, Clark establishes a direct connection between the wage of this marginal part of the labor force and the product specifically attributable to it. According to marginal wage theory; It is the marginal part of the labor supply that will determine the market wage rate for all labor. (Clark, 1908)

By the law of diminishing returns, an increasing amount of labor applied to a fixed amount of other resources will yield a decreasing marginal product. If the employer hires so many workers that their marginal product is not worth the wage, he sees that this number is excessive and resorts to reducing the number he employs and his total production. Therefore, under competitive conditions, it will reduce their gross revenues. In this case, when the wage is higher than the marginal product, he will reduce his expenses by more than his income and thus increase his profit. (Hicks, 1963)

According to Hicks, the wage is the price of labor, and in a free labor market it is determined at the intersection of labor supply and labor demand, and the only wage for which equilibrium is possible is a wage equal to the value of the marginal product of workers. (Hicks, 1963)

Dunlop also focused on the cause of wage differences and argued that the speed and degree of industrialization created wage differences in the long run. Labor supply and the speed and form of industrialization are very important factors affecting wage differences. A country with a shortage of labor is likely to have larger wage differentials for skill than a country with an abundant supply of labor. The order in which industries develop in the process of industrialization will to some extent affect the structure of wage rates, as differences are used to attract labor into these industries from agriculture or other industrial activities. These traces of the path of economic development can be seen in a comparative examination of the wage structures of various countries today. (Dunlop, 1957)

Explaining wage differences within a neoclassical theoretical framework, Becker hypothesized a direct link between an individual's level of education and the wage he or she can obtain in the labor market on this basis. The hypothesis that there may be wage differences between workers with identical skills and productive abilities was initially developed by G. Becker, with the only neoclassical antecedent being F.G. It was Edgeworth. (Brunetta, 1991)

Efficiency Wage Theories; It is based on the hypothesis that firms will not hire unemployed workers at lower wages (even though unemployed workers are willing to work for lower wages rather than remain unemployed) because they assume that any reduction in their wages will reduce the productivity of all workers, thus establishing a link between wages and productivity. According to this approach, labor productivity depends on the real wage paid by the firm. Efficiency wage models can explain the persistence of involuntary unemployment in competitive markets and why unemployment changes in response to aggre-

gate demand shocks.

In summary, these models provide a new, consistent and plausible microfoundation for the Keynesian model of the cycle. Accordingly, higher wage payments have four benefits: identifies four benefits of higher wage payments: reduced employee turnover due to higher job loss costs; lower turnover; an improvement in the average quality of job applicants and improved morale. (Yellen, 1984)

Efficiency wage theory has several microfoundations.

A) Shirking Model: In a competitive environment where all workers receive market wages and there is no unemployment, being fired is not a punishment for the worker - since he can immediately find another job. Therefore, with imperfect monitoring and full employment, workers will choose to avoid work. For this reason, companies pay a wage higher than the market equilibrium wage to prevent workers from slacking, so that if a worker is caught slacking and is fired, he pays a penalty. But if it pays one firm to raise its wages, it will pay all firms to raise their wages. Once they all raise their salaries, the incentive to never defect again disappears. However, as all firms raise their wages to prevent shirking, labor demands decrease and unemployment occurs. (Shapiro & Stiglitz, 1984)

B) The Labor Turnover Model: Labor turnover has both indirect and direct costs to the company. Direct costs include costs such as formal orientation programmes, while indirect costs include costs such as reduced productivity during the onboarding process as well as outlays on foremen for 'Induction' of new employees. As a result, companies want to get rid of the costs caused by labor turnover and reduce labor turnover. They use fee policy for this purpose and may offer fees that exceed market clearing. (Salop, 1979)

C) Adverse Selection: Adverse selection establishes a relationship between productivity and wages, but the reasons are different. Under the assumption that performance in a job depends on "talent" and that workers are heterogeneous in ability, if talent and workers' reservation wages are positively correlated, higher-wage firms will attract more skilled job candidates. In such a model, each firm pays a productivity fee and turns away applicants who offer to work below that wage. An individual's willingness to work for less than a fixed wage puts an upper limit on his ability, increasing the firm's estimate that he is a lemon. (Yellen, 1984)

D) Sociological Models: According to the sociological model, employees gain feelings towards each other and the company in their interactions. Thus, workers receive benefits for a "gift" exchange with the firm. The gift given by the company to the workers is the part of the wages that exceeds the market price and that the workers perceive as a 'gift'. Gifts given by the worker to the company are works that exceed the minimum working standard. Thus, workers work harder in return for the gift they receive. (Akerlof, 1982)

In Akerlof's partial gift exchange model, the firm may succeed in raising group work norms and average effort by paying workers a gift above the re-

quired minimum wage in exchange for their effort above the required minimum. The sociological model can answer questions that seem inexplicable in neoclassical terms, such as why firms do not lay off workers who turn out to be less productive, why they avoid piece wages even when possible, and why firms set labor standards that are exceeded by most workers. Akerlof's article in this issue is explores alternative sociological foundations for the efficiency wage hypothesis. (Yellen, 1984)

E) Threat of Collective Action: although only a small percentage of the workforce is organized by unions, conditions of employment in the union sector can affect conditions in the non-union sector through a threat effect, and employers who want to keep unions out may have to It means that they must pay a fee of or close to this amount. Workers acting collectively exercise more bargaining power than individuals. The threat of unionization can affect only employment or both wages and employment. (Dickens, 1986)

Bargaining model: It links the determination of the wage to the existence of an exchange that will occur as a result of the supply forecast and demand forecast. It assumes that there are lower and upper limits in determining the wage and that the actual wage is formed within these limits. The upper limit of wages is the employer's estimate of how valuable the worker is to him. Between these two limits, that is, between maximum and minimum, the value of labor is determined by estimating the forces affecting exchange. (Davidson, 1899)

Post Keynesian wage theories: Wages have an important place in the Post-Keynesian movement. Kalecki argued that a decrease in the real wage level would not increase the profits of firms, on the contrary, it would decrease them. In parallel, when wages rise, aggregate demand increases, which increases profits. In other words, for cases where demand increases sufficiently as a result of the rise in wage level, the higher wage level increases profits. This situation is known as the "cost paradox" in the literature. (Jespersen, 2011)

Advocacy of a wage-based economic strategy was discussed under the heading of underconsumption in 19th-century economics. The benefits of a wage-based growth strategy were later revived by several post-Kaleckian or post-Keynesian authors. (Lavoie & Stockhammer, 2012)

The basis of Kaleckian growth models comes from Bob Rowthorn. According to Rowthorn, the basic premise of Kaleckian models is that growth is wage-driven. In an economy operating below full capacity, it is the increase in real wage participation in total income, achieved through nominal wage increases, that creates the demand necessary to generate higher levels of output. This encourages companies to invest by increasing the level of capacity utilization and therefore the profit rate on the existing capital stock. In Rowthorn's model, rising wages create extra profits, which are then realized by capitalists through subsidized spending on consumption and investment. Additionally, it is important to note that the increase in capacity utilization results in economies of scale that offset the impact of the increase in labor costs (higher real wages) on profits

(Caldentey & Vernengo, 2013)

Bhaduri (1986) combined the theory of effective demand and the problem of profit realization. (Lavoie & Stockhammer, 2012) Higher real wages imply a downward shift in the investment function, as they imply, all else constant, lower profit margins and lower profitability at the normal rate of capacity utilization. These profitability effects are formalized by Bhaduri and Marglin (1990), whose article is famous for describing the dichotomy between wage-driven and profit-driven demand regimes. (Lavoie & Stockhammer, 2013)

If the income distribution in a country changes in favor of those who make profits, and if this alone has positive consequences on total demand in the short term and on economic performance such as the growth rate of total demand or the growth rate of the country in the long term, then we can say that this economy is in a profit-oriented economic regime. . If increasing dividends have a negative impact on the economy, then the economy is wage-driven. From the opposite perspective, we can argue that economies experiencing increasing wage shares that produce a positive outcome are part of a wage-based regime, while increasing wage shares that produce a negative outcome indicate the existence of a profit-oriented regime. (Lavoie & Stockhammer, 2013)

Dunlop and Ross, on the other hand, studied unions and wages, the wage policy of unions, and sought answers to the questions of how a union would decide on the wage to be demanded in bargaining and what the probability of a wage demand would be. In the 1940s, John Dunlop and Arthur Ross gave two very different answers to these questions. Dunlop's approach analyzed the union as if it were a business firm and drew on the profit maximization analogy from the theory of the firm. Dunlop identified several possible union goals, such as maximization of the wage bill or members' economic rents, and in this model the union uses the firm's labor demand curve to choose the optimal wage rate to demand in bargaining. A few years later, Ross rejected Dunlop's model and put forward a new political model. According to this model, wage policy is not based on any maximization principle. It is determined by the union leadership and is a political process. The union leadership tries to choose a wage that tries to increase the welfare of its members, thus ensuring the growth and continuity of the union leadership and, more importantly, trying to gain an advantage in order to be re-elected. Additionally, Ross denied that the firm's labor demand curve has a significant impact on union wage policy. (Kaufman & Martinez-Vazquez, 1987)

Many articles have been written on the employment impact of the minimum wage (Clemens & Wither, 2019). While many studies have found null results on whether the minimum wage actually has a significant effect on unemployment, many studies have also found a negative employment effect of minimum wages of varying intensities. (Azar et al., 2023)

When we look at studies on wages, the level of minimum wages has an important place. A more comprehensive examination, including the effects of em-

ployment and working hours on the levels and distributions of incomes and human capital accumulation, as well as an evaluation of alternative policies, indicates that despite being good economic policy, it has negative employment effects for many countries. (Neumark & Wascher, 2006) We find that increases in the minimum wage significantly reduce the employment of low-skilled workers. (Clemens & Wither, 2019) Therefore, increasing wages for a better life has negative effects on employment and therefore welfare in the long term. For this reason, we did not examine wage increases or decreases in our model.

We combine the basic needs approach with the wage issue with this model, which will both eliminate the disadvantages of the increase in wages and ensure the provision of basic needs not only for the wage earner but also for all subgroups. We contribute to the solution of problems in the field of wages based on meeting basic needs. We place human rights and economics, which have emerged as two separate fields, on a common ground so that they do not conflict with each other. In this way, we aim to create economies that are both fair and efficient.

Basic Needs Approach: The Basic Needs Approach is a strategy that emerged from the work of the ILO World Employment Program (WEP) in the 1970s. It is based on Maslow's Hierarchy of needs. It includes an economic model in which creating employment is not an end in itself and will be a means of meeting people's basic needs. (Emmerij, 2010)

The basic needs approach to development argues that the minimum basic needs that will ensure the survival of everyone in society should be met immediately and suggests meeting basic needs by reallocating resources to be obtained by increasing the productivity of the poor. (Sharif, 1986)

However, our study differs from The basic needs approach to development as it is based on the permanent resolution of basic needs and is not dependent on employment and wage levels.

When we searched the literature on wages, we could not find an idea similar to our model. As far as we know, narrowing the wage area by classifying basic needs and ensuring that some basic needs are met permanently, thus reducing firm costs and thus eliminating certain leaks in the economy, is unique to our model. DPEM offers a general model to eliminate the disadvantages of excessive specialization in economic research and to see the whole, and makes a very important contribution to the literature in filling the gap in this field.

3. Method

Firms want their costs to be reduced to maximize profits and therefore they do not want the wages which are the measure of labor as a factor of production to be high. (Murphy, 2020) Workers, on the other hand, want more welfare and since their only income is their wage, the way to increase their welfare is to increase the wages. For this reason, there is a conflict between the employee and the employer about wages. In wage bargaining, when the employee and the em-

ployer are mentioned, it is understood that two parties gain profits against each other and one's gain is the other's complete loss. This is partly true, however, are incomplete. The right side is that for one side to gain the other side must lose. The missing side, on the one hand, is that the entire loss of one party does not reflect as a complete gain to the other party. When the employer pays for labor costs, the operating costs increase by the full amount of that payment however, the welfare of the workers does not increase as much as the wages paid. The reason for this is the existence of other stakeholders for of the wages share between the worker and the employer. These stakeholders receive a share of the wage incomes between the employee and the employer, and some of these shares are directed to unproductive areas. We call these shares, which tend towards unproductive areas, as "leaks" in our model. These leaks cause worker-employer conflict and also have negative effects in terms of their macroeconomic effects. Leaks cause reductions in the return of wages as effective demand to firms, and therefore disrupt the wages share-aggregate demand-driven business cycle between the worker and the firm, directing the country's resources to inefficient areas. These leaks are included in social security contributions and labor taxes, and living costs such as house rent and energy expenses. The reason for the inefficiency is that although it is possible to fix these leaks to be resolved permanently, they continue to be paid as an expense every month.

The living costs of workers and their families play an important role in determining wages. (Lawton & Pennycook, 2013) Therefore, when the employer makes a payment for the worker, he not only pays for his labor, but also covers the living costs of the worker. In this sense, the employer pays the rent to the owner of the house where the worker lives, pays the energy bill to the establishments that supply the worker's electricity, covers the education expenses of the worker's children, and pays for the health expenses of him and his family. Therefore, labor costs may increase depending on the subsistence level. On the other hand, the amount that workers can spend in disposable personal income after paying for basic needs is very small. Thus, wages are a high cost for employers to bear and too low for workers to spend, excluding the basic needs. This is because the amount of disposable income remaining after the cost of workers to the employer, social security contributions and expenses for basic needs are separated is very small. There is a shared wage area between the worker and the employer. The cost of the worker to the firm constitutes the size of this area. The larger the wage area, the larger the wage conflict between the worker and the employer. The reason for the growth of this field is the living costs and tax wedge, which form the basis of wages.

Worldwide private final consumption expenditures represent around 55% of GDP overall and are the largest component of GDP's final uses. In OECD countries, this rate is close to 60%. (The World Bank, n.d.) As long as there are leaks within the wage area, wages, which constitute an important part of the aggregate demand in macroeconomic terms, will never completely create effective de-

mand, that is, they will not be directed towards efficient consumption. This is because: (a) transfer of wealth from segments with high marginal propensity to consume to segments with low marginal propensity to consume, (b) inefficient use of resources at lower costs or paying higher prices for living costs that can be covered permanently (c) the transfer of resources to the government budget, where resources are used more inefficiently, with policies such as energy sales and high wage taxes, which turn into taxes. Directing resources to inefficient areas and the deterioration of the business cycle between the worker and the employer prevents the healthy functioning of the economy and constitutes an obstacle to full employment. In addition, economies become prone to crises in the long run as basic needs are not met permanently. Increasing wages at the expense of leaks will lead to price increases or reduced profits and consequent reduced investment. On the other hand, this situation reveals the households who spend a large part of their wages only for basic needs.

As shown in Figure 1, when final household consumption expenditure of households by item is analyzed, housing-related expenditures constituted the highest single household expenditure item in OECD and EU countries in 2019, with an average of approximately 22% of final household consumption expenditures. The two most important expenditure items after housing are food and non-alcoholic beverages (13.8%) and transportation (12.7%). In household consumption expenditures, the ratio of various Goods and services is (11.0%), entertainment and culture (8.4%), restaurants and hotels (8.7%), furniture, household appliances and routine maintenance of the house (5.2%), health (5.0%), clothing and footwear (4.5%), alcoholic beverages, tobacco and narcotics (4.3%), communication (2.6%) and education (1.6%). (OECD, n.d.-d)

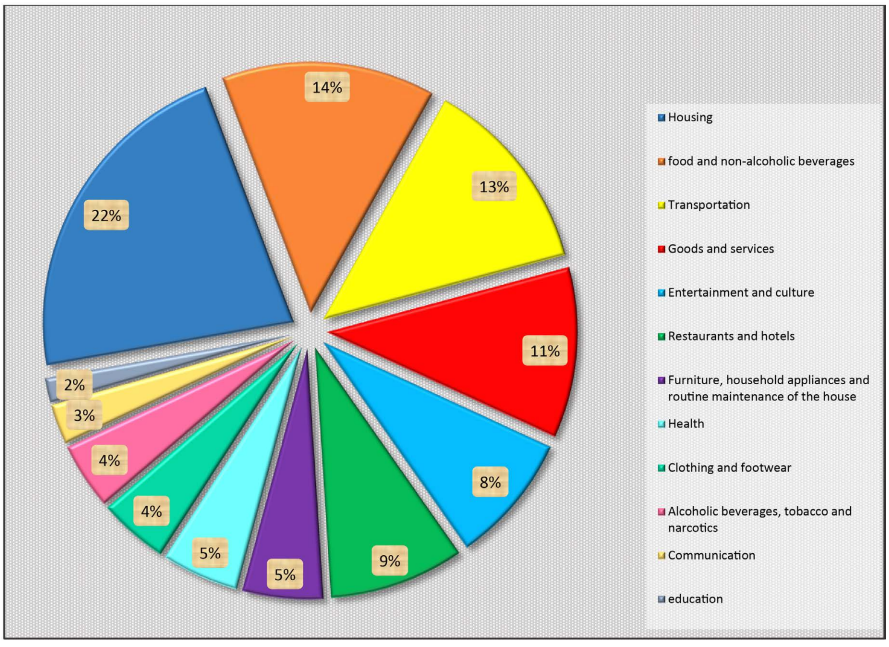

Figure 1. Final household consumption expenditure of households in OECD and EU countries in 2019.

Rent is the largest expense for most households, it must be paid on a fixed schedule. Therefore, rent comes first among the expenditure items. Because high housing costs consume a significant portion of household income, there is often little money left in income to meet other basic needs. Even before the COVID-19 pandemic, a housing affordability crisis already existed for tenants in the United States. About a quarter of the tenant households spent more than half of their income on rent each month, thus leaving very little of their disposable income to cover other expenses. The findings reveal that both high housing costs and insufficient income prevent many American households from meeting their basic needs. At America's Rental Housing 2020, the Center found that the median tenant earning less than $15,000 per year is only left with as little as $410 each month for all other expenses after paying for rent and utilities and these households spent the remaining small amount on other basic needs such as food and health. As more share is allocated to rent and utilities, the share spent on food, health and other necessities decreases, indicating insufficient amount of income. On average, tenant households need more than $40,000 annually to cover non-residential expenses alone (Airgood-Obrycki et al., 2022).

Low-income households devote a larger portion of their budget to basic needs, and a smaller portion of household income expenditures is allocated to meet basic needs. Data from the Consumer Spending Survey (CES) collected by the U.S. Census confirms this analysis. According to this survey, the money spent on basic needs in household budgets is 82 percent for low-income households and 78 percent for high-income households. High-income households were only two-thirds of their budget for basic needs. Low-income households spend more on food and shelter from their budgets than high- and middle-income households. Housing accounts for 41 percent of expenditures and 30 percent of subsequent expenditures are split evenly between food and transportation, which are also other basic needs for low-income households. The spending of middle-income households for housing is one-third of their budget. Some of the categories excluded from the "basic needs" group are actually basic expenses. Because the neglected categories include basic needs such as education expenditures, as well as personal insurance and retirement expenditures. Excluded categories include personal care and entertainment among other expenses. While it is not surprising that low-income households spend more of their spending on basic needs than that of high-income households, it is a not so well-known fact that changes occur in the composition of these expenditures over time. Real consumption of low-income households has declined over the past three decades, but the amount spent from their budgets on basic needs has increased. (Schanzenbach et al., 2016) According to these results, a large part of the household's income is spent on basic needs, and as a result, as the share of basic needs in disposable personal income increases, the share that can be spent on other needs becomes less. Does living only to meet basic needs satisfy people? In ancient times, the answer to this question could have been yes. However, it is very

difficult for people who have reached a higher standard of living thanks to increasing prosperity and economic development and are among the countless products to choose from, to be satisfied by spending only enough to sustain their lives.

Today, people are in a fantastic consumption and abundance caused by the proliferation of objects, material goods and services. While people were surrounded by people in ancient times, in the age of prosperity they are surrounded by objects which indeed gives the impression of a proliferating vegetation. Objects have replaced people in daily relationships due to professional activities, celebration of the object in advertisements, the influence and manipulation of mass media and disseminated messages. (Baudrillard, 2018) Thanks to global trade and the diffusion of technology, consumers can purchase products and services from traditional stores through mobile phones, Internet, TV or catalogues. This has created countless opportunities for consumers to buy impulsively. However, even if consumers buy goods and services to meet their needs, most of these purchases are made unplanned and instantaneously. (Czarnecka & Schivinski, 2019) Therefore, due to the high rate of basic needs in disposable personal income expenditure, a very small amount of disposable personal incomes remains for other needs, goods and services. For this reason, households become indebted in order to maintain their increasing welfare level and to continue their consumption.

Household indebtedness has increased significantly in most developed countries over the past 25 years. By this way, consumption growth continued and the household savings rate decreased. In many countries, debt service as a share of household income in the first half of the current decade reached near historic highs, despite the decline in household borrowing rates since the second half of the 1990s. Due to increasing income inequality, households, in the face of continuous changes in income distribution in favor of higher income households, (as economists such as Veblen and Duesenberry have pointed out), have substituted their low wages with debt in order to sustain their relative consumption standards for as long as possible, maintain acquired social positions, and maintain rising consumption levels, in the face of continuous changes in the income distribution in favor of higher-income households. (Barba & Pivetti, 2008) The ratio of household debt to GDP in OECD countries is 78 percent as of 2021. (IMF, 2022c) The ratio of household debt to GDP in the euro area was approximately 58% in 2022, and the household debt-to-income ratio was approximately 95 percent. (European Central Bank, 2022)

Since most of the basic needs of workers will be met permanently with the Digital Primitive Economy Model (DPEM), the living costs, which are the basis of the subsistence wage, will be permanently reduced ang by in this way, workers will have reached their current status – spending almost nothing from their wage income. In other words, since the expense items that workers spend almost all of their income on will disappear to a large extent, workers will not be in a worse

situation than their current situation, and by this way, workers' welfare losses will be prevented. Even living wages, which are criticized as a high level of wages, are essentially based on meeting basic needs. Therefore, workers whose basic needs are met permanently will have the opportunity to spend their wages for their needs other than their basic needs and this will increase the welfare of the workers. In addition, workers will be protected from downward wage pressures brought about by globalization and international competition, crises, unemployment and mechanization. With the disappearance of leaks, this bargaining wage area will narrow and conflicts between workers and employers will decrease.

With the elimination of inefficiencies, the surplus share in the wage area can be distributed in 4 ways all other things being equal. The first is used by the employer for reduced costs and turned into profits. In this way, it contributes to the increase of savings and investments. Second, decreasing costs are reflected in prices, and decreasing prices increase exports and output. Third, the worker's share is allocated to efficient consumption and increases aggregate demand. Fourth, it is transferred to the workers, and the workers' basic needs are met and their welfare increases and they tend to save more and as a result, an increase in the worker savings occur. In this last option, as we will explain in the following sections, within the integrity of the DPEM, household savings will be directed more towards financial markets as a supply of funds, as housing investment to generate rental income will disappear. In order to permanently reduce living costs and redirect resources to productive areas, we will introduce two new concepts in our article: leaks and efficient consumption. Later, we will reconsider living costs in the light of these concepts. As a method, we will proceed with the following stages:

1) Identify and explain leaks and active consumption

2) Reclassifying basic needs by taking into account today's conditions

3) Eliminate leaks by providing material solutions to certain classified basic needs and thereby permanently reducing living costs.

Living costs consist of people's basic needs and their livelihood. We presented microfoundations in Chapters 4 and 6 of our article to reduce a significant portion of the amount people spend to make ends meet. In addition, people do not only spend on their basic needs. However, today there is no product that does not contain human and electrical energy. In our model, cheaper human livelihoods and electricity will reduce production costs and therefore the goods and services purchased by consumers. The decrease in production costs will make human livelihood less costly.

Leaks

Leakage is commonly used in the Keynesian economic model and is the non-consumption use of income, including savings, imports, and taxes, in a system called the circular flow of income and expenditure. (Kenton, 2023) In our model, leakage assumes a function in accordance with its general definition. However,

we defined the concept of leakage as a concept that disrupts the flow in the wages share-aggreate demand business cycle in our model, unlike the income and expense concepts in the general economy, and we used the concept of Leaks to be distinctive.

Consumption is defined in economics as the use of goods and services by households. (Britannica, n.d.) Productivity is defined as the efficiency of the production of goods or services expressed in a measure. (Wikipedia, 2024) As can be understood from the definition of productivity, it is a concept related to production. However, by using the term Efficient Consumption in our model, we created a new concept similar to the concept of efficiency in production and argued that consumption can also be efficient.

Leaks: It consists of expenses such as rent and energy expenses, which are spent on some basic necessities and increase living costs, and labor taxes included in the government budget through taxation. Basic needs expenditures and high labor taxes create leaks that can be resolved permanently. Since it can be solved permanently with the effective use of the country's resources, although it seems to contribute to the aggregate demand it directs the resources in the economy to inefficient areas. It increases the severity of wage-based worker-employer conflict by enlarging the wage area.

Efficient Consumption: Consumption expenditures that are excluded from the leaks within the wage area, directed directly to goods and services, generally to companies in the market economy, and which are an element of effective demand for goods and services, reflecting the tastes and preferences of workers more. While workers spend their wages on consumption, a large part of it is used for leaks, so the share of efficient consumption in disposable income is not very large.

In order for the wage area to be reduced without loss of workers' welfare, the leaks within the expenditures of wages must be eliminated. The way to do this is to reduce the gap between the labour cost for the employer and their wage earnings, while at the same time lowering the level of living costs that workers set as the lower limit for their wages and form the basis for calculating the minimum wage. DPEM aims to reduce the subsistence level by preventing leaks in the wages share-aggreate demand business cycle. (Digital Primitive Economy Model is provided in **Figure 2**) In order to reduce these costs, it will break the problem into parts; we will first handle the difference between labor cost and labor gain. Secondly, we will consider the basic needs that are effective in determining the base price in wages and examine them item by item. In this article, we will identify the leaks in the worker's cost to the employer and the amount that the worker spends on his essential needs. Finally, we will introduce a new economic model within the framework of the Digital Primitive Economy Model by bringing concrete solutions to eliminate leaks.

All the other conditions being fixed, the wage share is split between leaks and efficient consumption.

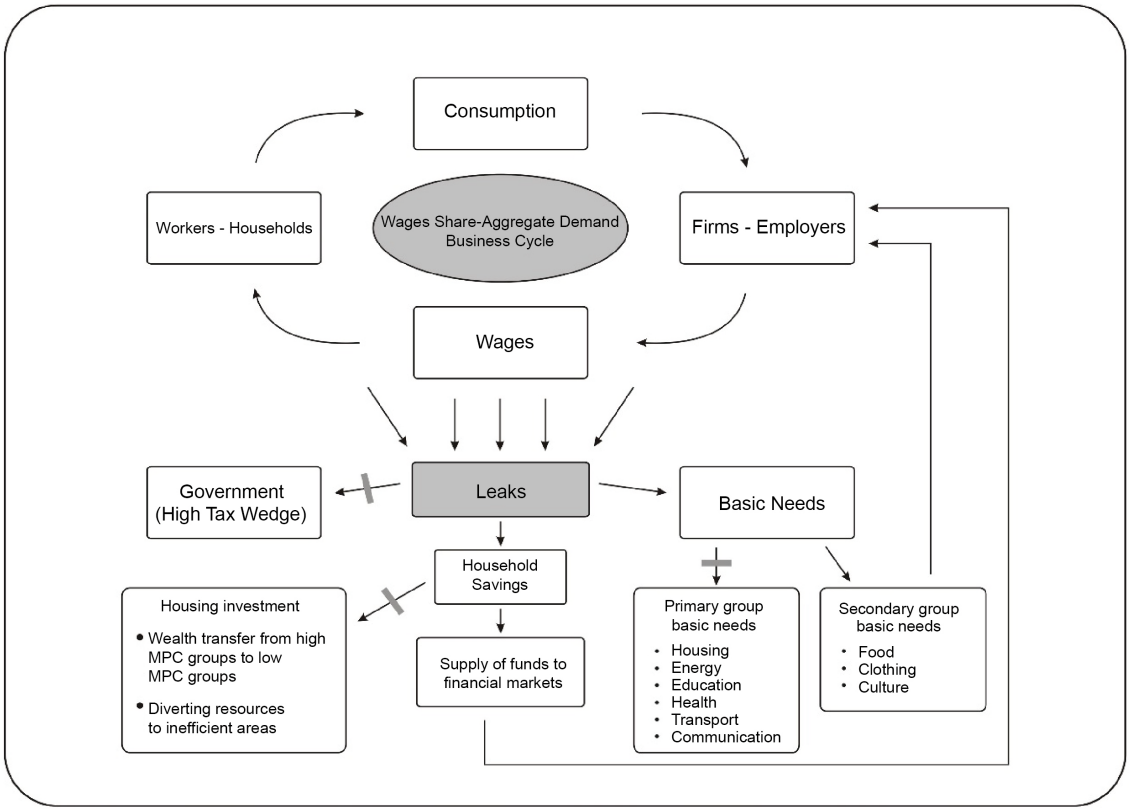

Figure 2. Digital primitive economy model.

Labor cost incurred by the employer – leaks = Efficient consumption

Leaks = high tax wedge + basic needs (can be met permanently)

We aim to permanently reduce living costs, especially housing and electrical energy, by weeding out leaks. Thus, we anticipate that the reduced living costs will also reduce production costs by benefiting from the homogeneous structure of labor and electricity compared to other raw materials and the fact that all production goods and services are production inputs. Leaks are unproductive expenditures embedded in the tax wedge and cost of living. Our method is to reduce living costs and increase efficiency in the economy by preventing resources directed to inefficient areas. In the following, the leaks will be examined one by one.

4. Tax Wedge

The net salary received by the worker (wage earning) and the cost to the employer are different from each other. One of the stakeholders between the worker and the employer is the government. With the labor tax, governments directly intervene in the wages share-aggregate demand business cycle between workers and employers through taxes and expand the wage area. Therefore, rising labor costs increase production costs and affect the employment and new investments negatively. On the other hand, by reducing the disposable income received by workers, they prevent it from diverting to aggregate demand.

Labor taxes are also a type of tax and, like all taxes, their purpose is to finance the budget. (Burggraeve & Du Caju, 2003) However, high-rate labor taxes increase the costs of production, which is the main dynamo of the economy, cause problems in the functioning of the economy and disrupt the business cycle. If we make a comparison, it is very difficult for the government to compensate for the damage it has created with the taxes it collects at the expense of increasing labor costs, by spending it on more productive areas. These taxes are levied in the most economically dynamic part of the country and are often lost in the unproductive areas of government budgets. Therefore, we consider the high tax wedge to be a leak in our model.

The tax wedge formed as a result of the labor taxes used used to finance the budget by the government has negative effects on employment. There are many empirical studies that reveal a negative relationship between the tax wedge and employment. Empirical studies revealed a negative relationship between the tax wedge and employment in EU-27 countries. Empirical estimates show that the EU-27 should continue its trend of reducing the tax wedge as it will increase employment growth and employment rate and reduce unemployment, especially in Member States with high tax wedges. (Dolenc & Laporšek, 2010) Earlier empirical results in some of the theoretical models and predominantly from OECD countries revealed a negative relationship between the size of the tax wedge and employment. In Colombia, it was found that a 10% increase in payroll taxes led to a 1.4% - 2.3% decrease in net wages and a 4% - 5% of reduction in the employment in the late 1980s and early 1990s. (Kugler & Kugler, 2003)

Labour tax reductions will have a negative financial impact on the government budget and will not by itself constitute a solution to the problem. Labour tax reductions can be a tool to increase employment compared to competitors. However, job creation is limited as there is no positive cost impact if there is a wage increase equivalent to a tax cut. The deterioration in the government budget as a result of these tax cuts is not sustainable. A production tax or indirect taxes such as VAT to compensate for the loss of social insurance tax in the government budget cause inflation, increase costs and put a strain on households and take back some of the gains of the tax cut. (Burggraeve & Du Caju, 2003)

There are other difficulties for regulation in favor of labor. In addition, the mobility of companies and international capital with globalization poses a danger to the gains of labor. With international integration and globalization, while labor cannot move, as companies and capital become more mobile in the international arena and the capital gains the opportunity to across national borders, the cost of the social net has started to shift from capital to labor. As companies and capital become more mobile internationally, the tax base of nation-states tends to erode. Because of this, governments' ability to finance social safety nets and, by extension, social insurances are jeopardized. (Rodrik, 1998)

Both the decrease in labor flexibility against capital and the burden of de-

creasing social security discounts on the budget make the regulations in favor of labor more difficult. However, in this article, we will handle the government deficits that will occur as a result of a reduction in the labor tax and social insurance contribution together with DPEM as a whole. With DPEM, together with the decreasing living costs according to the distribution of the residual share in the wage area, production costs will decrease, output will increase thanks to increased production and exports, which will increase production taxes and indirect tax revenues without an increase in tax rates and thus social security contribution share reduction and the resulting government budget deficit will be compensated. In addition to these, with DPEM decreasing governments' education, health, personnel wages and social benefits will also make a positive contribution to the government budget. Parallel to this, a reduction in transfer payments to retirees due to reduced living costs will compensate for a reduction in social security contributions. In this article, we are not advocating that there should be no tax on labor. However, the high taxes on labor and social security contributions turn into a leak. It is not easy to determine the "reasonable rate" here. The country's infrastructures, development, natural resources, population densities, and societies' expectations from the government are different, it becomes more difficult to determine this ratio, as there are many variables. The tax wedge is an element that increases labor costs and reduces the disposable personal income of workers and it increases the roughness on the wages share-aggregate demand business cycle. For this reason, we argue that there should not be a high-rate tax wedge. While determining the reasonable rate for the labor tax, it should not be forgotten that this tax, levied from the components of production, which is the most dynamic element of the economy, sometimes appears as investment expenditures, sometimes as corruption, and sometimes as unproductive expenditures in the more inefficient government budget.

5. Costs of Living and Basic Needs

Today, living costs play a key role in wages and minimum wage policies have been developed accordingly. Included in the 1944 Declaration, also known as the Philadelphia Declaration, he recommended establishing a living minimum wage for all to keep workers out of poverty, as well as establishing appropriate minimum wage standards sufficient to meet reasonable human needs, adopted in 1945 to assist workers. Convention No. 131 and Recommendation No. 135 sought to ensure that the minimum wage was set at a certain level that could meet the needs of workers and their families. However, the fact that it does not provide precise indicators on the amount of the minimum wage gives the states that recognize the convention the authority to determine the minimum wage rates according to the conditions and economic conditions of each country. However, there is no guarantee that the world's countries meet this requirement when setting minimum wages. Therefore, other concepts such as living wages and fair wages help us better understand minimum wages. (ILO, 2014)

Living wage and minimum wage are not the same concepts. Living wages vary over time, advocating a level of wages that will provide workers and their families with an acceptable standard of living and not excluding social goals. Living wages hardly consider the impact on employers and employment and demand a wage rate that ensures workers do not have to work excessive hours. (Lawton & Pennycook, 2013) The size of the family and regional differences are taken into account when calculating living wages. In the United States, there are several prominent formulas for measuring the cost of living. The most widely used in the United States, are the Basic Family Budget Calculator developed by the Economic Policy Institute, and the Self-Sufficiency Standard, developed by Diana Pierce and the Wider Opportunities for Women. The common point in the formulas is the calculation of minimum costs for housing, food, shelter, transportation, health, taxes and child care, where basic needs come to the fore. Both formulas give the total annual revenue needed to cover baseline costs, based on these criteria. (Luce, 2012) As can be seen, the minimum wage and living wage are basically based on the concept of subsistence and the concept of subsistence is based on meeting the basic needs.

The standard of living, which is formed according to the level of consumption, is the most important and most discussed subject of the concept of subsistence. Accordingly, subsistence is a standard of living that will provide the consumption of goods and services that will meet physical and traditional basic needs. The poverty level and the basic need level of consumption are concepts that are often used to explain subsistence status as a standard of living. (Sharif, 1986) The concept of poverty, to which the concept of subsistence is related, based on meeting the basic needs. According to World Bank, poverty is defined as the lack of meeting vital needs such as food, shelter, education and health which are expressed as the basic freedoms of people. According to this definition, poor people are vulnerable to disease, economic disruption and natural disasters.' (The World Bank, 2001)

According to the United Nations: "Poverty entails more than the lack of income and productive resources to ensure sustainable livelihoods. Its manifestations include hunger and malnutrition, limited access to education and other basic services, social discrimination and exclusion as well as the lack of participation in decision-making." (UN, 2022a) The goal of Sustainable Development Goal 1 is to end poverty in all its forms, everywhere. The Global Multidimensional Poverty Index (MPI) is used to measure acute multidimensional poverty in more than 100 developing countries. To calculate global multidimensional poverty, UNDP has identified 10 indicators from three areas. These indicators are: school attendance and years of schooling in education, child mortality and nutrition in health, and electricity, cooking fuel, drinking water, sanitation and housing assets in living standards. (UNDP, 2021)

Nobel Prize-winning economist Amartya Sen of the 20th Century proposed a different approach, arguing that social assessments of people's advantages and

disadvantages should be made on the basis of "capabilities" rather than the satisfaction of their desires. Accordingly, institutions, policies and actions should be evaluated according to the opportunities they provide people for valuable lifestyles. Sen's capability approach advocates evaluating institutions and policies according to the opportunities they create for people to live worthwhile lives. The capabilities approach has more complex goals than either version of the utility theory view. Its emphasis is on opportunities rather than results. It helped revive the concern about poverty and deprivation that had been lost in the new view of utility theory. (Goodwin, et al., 2008) Amartya Sen never offered a list of important capabilities because he argued that people should decide for themselves in the political process which capabilities are important to them. Sen defines abilities as being able to take part in social life, respecting oneself, and even living a long life, and these abilities include many 'being and doing' such as nutrition, avoiding preventable diseases, sheltering, dressing, getting an education, and being able to travel. (Knech, 2012)

5.1. Difficulty Defining Concepts

Workers focus on a living wage rather than the nature of the work they do and their contribution to the firm and demand a living wage. The unions utilize the calculations of living cost when determining the wage rate they demand, for employers, a wage that the workers can live on is considered reasonable. Wage earners are also voters and the governments do not want minimum wage laws to fall below their subsistence wages. However, the concept of subsistence is ambiguous and therefore the definition of subsistence may be different for each segment. Therefore, even if the discussions are made under the name of living wage, the main point is on the concept and definition of subsistence.

The living wage is a difficult concept to define and measure. Concepts such as social justice, a reasonable standard of living, a reasonable wage, social minimum, and economic security were used. Proponents of the living wage sometimes - as in the Bill of Rights that Roosevelt presented in 1944 - did not use any term to describe it. (Stabile, 2016) The Preamble to the 1919 ILO Constitution states that "an adequate living wage should be provided" in order to improve working conditions, but there is no universally accepted definition of living wage. (ILO, 2014)

Like the concept of livelihood, the concept of poverty is also an indeterminate concept and changes according to time and conditions. Under an absolute standard of poverty, the poverty line is fixed (in deflated dollars). According to the absolute poverty standard, almost no one is poor in today's United States compared to the standard a century ago. Under a relative poverty standard, if the relative income distribution is constant, the poverty line changes at the same rate as the average income. In terms of relative standard of poverty, it concludes that if the pattern of income distribution today is the same as it was a century ago, the problem of poverty is no less now. The evidence that the poverty line increases with average income is very strong. (Kilpatrick, 1973) Compared to

higher consumers, three-fifths of the global population can be seen as poor. However, this situation will change if this comparison is made with their ancestors who lived 200 years ago. Healthy eating opportunities, comfortable homes and advanced transportation and accessible education are very high compared to living standards 200 years ago. (Goodwin, et al., 2008)

In our paper, the concepts such as poverty, subsistence wage and fair wage do not have precise definitions, but when the common points of the definitions are examined, they are basically all based on meeting the basic needs. Basic needs can be met through various methods and using different resources. As a result, we argue that certain basic needs should be met on a permanent basis. With the permanent satisfaction of the basic needs, the level of welfare that a subsistence wage can provide will be achieved to a large extent, and the level of wages will increase the welfare level of the workers. In general, absolute poverty will be eliminated to a great extent by meeting the basic needs of the households. However, the basic needs on which the concepts of livelihood and poverty are based have also changed over time. Therefore, in our article, we will focus on the subject of the basic needs. First we will examine the basic needs and other needs, then we will reclassify basic needs within themselves.

5.2. Reclassification of the Basic Needs According to Today's Conditions

Basic needs have gained different meanings today. In addition to physiological needs, other needs have emerged as basic needs. In ancient times, basic needs were predominantly physiological needs and could be met free of charge from nature. People needed the wood they cut from nature to obtain heat energy, the natural materials in their surroundings to build houses and the yarn they produced from animals they raised themselves to weave clothes. Over time, with industrialization and urbanization, the distance between man and nature has increased. However, with the developments in production, trade and transportation; the diversification, free movement and cheapening of goods and services, the physiological needs necessary for the continuation of life, other goods and services have turned into a consumer preference that can be easily purchased in the same market. This situation gave people a wide flexibility in consumption and over time caused the hierarchy of needs to deteriorate and the illusion of consumption.

The dizzying progress that mankind has made in science and technology has put man in a powerful position against nature. Thanks to this trust brought by power, even the most basic needs such as shelter were underestimated. For example, people who have solved their housing problem through rent may not feel the need for a permanent solution to the housing problem or they may have the illusion that they have solved the housing problem completely. Despite all this level of development, people are still helpless against nature when they are deprived of technology and modern equipment. Considering that we still live in the world conditions of ancient times and are subject to the same laws of nature

-as in the first ages- the most basic needs of human beings, such as shelter, heating, food and clothing still come first. Although the priorities in the list of needs have changed for consumers, basic needs constantly remind their hierarchical position.

Consumers can use their preferences to meet their non-vital needs that prioritize pleasure and satisfaction and are defined as economically utility for them, and therefore they can give up on their most vital needs. The common point of the old utility theory and the new utility theory was that the purpose of economic activity was to satisfy consumer desires. Unlike in the new utility theory, the view that utility cannot be compared among individuals comes to the fore, based on the fact that individuals behave rationally. Accordingly, there is no clear distinction between the concepts of need, desire, necessity and luxury. Although the idea of a 'sovereign consumer' implies individuals who make independent decisions, can these decisions be said to be independent if consumer decisions are influenced by the society, environment or aggressive marketing methods? Then, who manages consumer choice becomes complex. (Goodwin, et al., 2008)

It is a complex and controversial issue what consumer preference depends on and what is affected by it, but it is clear that consumers do not always act rationally regardless of the motivation they make their choices for. It can be seen as a natural consumer choice in economics that the consumer prefers to consume with a utilitarian approach, without solving the vitally important housing problem, spending big money for travel activities or video games and mobile games that he enjoys more, or preferring to buy a luxury vehicle instead of buying a house. However, today, human still struggles to exist and survive against nature, and physiological needs are essential for the continuation of the life. It cannot be considered as a rational consumer choice to use the consumption preference in favor of products that are not at all necessary for their vital functions in the face of the option to solve the housing problem permanently. How rational is it for someone who has not bought his house yet to fill all parts of his rented house with cups -as a hobby activity-? This person meets his needs in the definition of economics and provides 'benefit' by purchasing new products for the cup collection every month. However, when he lost his job and became homeless, the consumer choice he made in the past will be nothing but regret. In addition, the problem that arises is not just individual. A permanently unresolved housing problem – as mentioned in our article-– also causes macroeconomic problems. However, it is impossible to argue that consumer preferences consist of purely functional and useful ones, both in terms of human structure and in terms of consumption control. It is also contrary to the natural flow of life. In terms of poverty or wages, the basic needs are constantly emphasized and it is based on the fact that this situation of the individual who couldn't meet the basic needs results from the necessity. However, today, due to deterioration of the perception of the hierarchy of needs in consumer preference, the failure to meet the basic needs may not be due to a lack of income, but may arise from the consumer

preference made by going out of the hierarchy of needs.

A study conducted among families in the bottom 20th percentile in Brazil gives us an idea that food consumption is not just about getting the nutrients necessary for the body, and casts doubt on people's perceptions of basic needs. Due to cultural factors and personal attitudes, it has been seen that poor people spend their income on necessities that can be considered luxury at that time, instead of getting the necessary nutrients for their bodies and closing the calorie deficit. A significant portion of low-income urban families have durable goods such as televisions, refrigerators and blenders, which were considered luxuries at the time, although they are insufficient to meet their calorie needs. It turns out that for at least a portion of the poor population, having a television is a higher priority than meeting their caloric needs. Therefore, the attempt of the public to support these families will be a cost-increasing situation. (The World Bank, 1979) Someone who eats a lot of fat and develops heart disease may prefer the pleasure of a high-fat meal to the inconveniences of illness. (Goodwin, et al., 2008)

It is not possible to determine a policy according to the concept of "subsistence", which everyone defines according to himself. For example, it is impossible and at the same time unnecessary to ensure that every consumer in the world consumes only useful foods and buys only clothes that can warm and protect them, and to determine who needs how much, to adjust the amount of foods to be bought accordingly, to know which foods are consumed and which are thrown away. Such an effort, considering all the product types in the world, is impossible to determine who needs what and how much, and dragging consumer choice and the modern economy into an inextricable swamp. We do not defend this view in this article. In our above views, two conflicting views on the basic needs seem to have emerged: first, that people are not always rational in their consumption preferences and therefore, the need to meet the basic needs should be prioritized and secondly, the impossibility and unnecessaryness of intervening in consumers' consumption preferences regarding basic needs. We will categorize the basic needs and thereby clarify this seemingly contradictory situation. While meeting the basic needs, which we will define as the primary basic needs, they will not be left to the consumer preference to a large extent, while the secondary basic needs will be left to the consumer preference, but will be supported by certain methods.

Individuals spend from their budgets for basic needs and other needs. The number and variety of goods and services are increasing, and expenditures for other needs may outweigh basic needs. These expenditures made without meeting basic needs - such as floors in a building with an unstable foundation - are not sustainable. So, what are the basic needs today and how should they be met? In the modern world, with the technological, economic and commercial development and the consequent increasing prosperity, there has been a change in the number and degree of meeting the basic needs. For example, clothing was a very strong need and vital function outweighed because people worked mostly out-

doors in previous times. However, nowadays, transportation to clothing has become easier for many reasons such as the industrial revolution and the development in the textile industry, the development of world trade, and thanks to the change in working conditions and the development of transportation and housing opportunities, there have been changes in the functions of clothing compared to the early ages. Although clothing protects us from external factors, just like a shelter against nature, spending on clothing only for protection corresponds to a very low amount of disposable income. Education, on the other hand, has gained importance today and has become the prerequisite for people to have a profession and thus to meet their basic needs. The way to earn income that can be spent to meet the other basic needs in the future (such as food and clothing) is largely through today's education expenditures. For this reason, the need for education for individuals can precede food and clothing and people can spend for their own and their children's education by deducting from clothing and kitchen expenses. Therefore, the need for education has become a basic need. For this reason, we will subject the basic needs to a different classification, taking into account today's conditions. We think that the technology revolution and globalization are bringing societies closer and more similar to each other. For this reason, while adapting the basic needs to the present, we do not discriminate in terms of geographical differences. Basic needs still cover our needs in primitive times and meeting our physiological needs is, of course, a prerequisite. However, while the variety of our basic needs has increased, on the other hand, with the development of science and technology, it has become easier to meet these needs. Therefore, taking into account today's economic, technological and digital development, we will make a distinction in terms of the satisfaction degree and methods of meeting basic needs while classifying them. Accordingly, we will divide basic needs into primary and secondary basic needs.

5.3. The First Group of Basic Needs (Housing, Education, Transportation, Energy, Health and Communication)

The characteristics of the basic needs in this group are as follows: in many countries, the resources of the country are sufficient to permanently meet the primary needs of everyone. Therefore, the share of leaks in these needs is great. Government support is needed to fully meet the primary group needs of the entire society. With the Government intervention by taking advantage of technological developments, the first group of basic needs can be met permanently. In this sense, unlike the current recurring costs, it is more predictable and easier to meet by governments in terms of meeting basic needs, and it is convenient for planning and controlling the consumption of these needs. Failure to meet such needs will cause economic crises and structural problems in the long run. In today's modern world, it is difficult to deduct from these needs, and the primary group of basic needs takes precedence within disposable personal income. Therefore, the degree to which other needs are met varies depending on the ratio of primary group needs within the budget. Today, housing is the largest con-

sumption item for households and cannot be easily resolved. Therefore, we place the need for shelter first in the hierarchy of primary needs.

5.4. The Second Group of Basic Needs (Clothing, Food and Culture)

It varies greatly from person to person, from country to country, according to tastes and preferences, and they are flexible expenditures in disposable personal income, so budget cuts can be made when necessary. (For example, only necessary nutritional values and an amount sufficient for the body can be returned) In today's modern world, it is almost impossible to save on education, housing, energy and health. However, the situation is different for items such as food and clothing. Because clothing now means more than protecting body temperature, protection from the sun and covering. While clothing was a tool to protect people against nature in the early days, it has gained many new functions today. Therefore, the share of clothing expenditure in disposable personal income is beyond its basic function.

Just like clothing, the food culture is very developed and many consumers spend on food to get the necessary nutritional values for the body and to satisfy their palate rather than being healthy. Therefore, a consumer may not use his monthly income optimally to get the nutrients he needs for his body. Food expenditures are more flexible than housing expenditures and can be manipulated according to available income sources. (Kirkpatrick & Tarasuk, 2007) Clothing and culture expenditures, unlike housing and energy, are flexible expenditures.

In addition, food, clothing and cultural expenditures have a wide range of prices and products, and they include a consumption behavior far beyond the basic needs functions and they are continuous. Secondary group basic needs are easier to meet than primary group basic needs and in cases where disposable personal income decreases, these expenditures can be cut back and come closer to their basic function. Therefore, state intervention is not required for these to be met permanently for the whole society. Individuals will have more resources for secondary basic needs than disposable personal income, by permanently satisfying primary basic needs that are beneficial to them and are difficult to meet. Therefore, in this article, we will handle the primary group of basic needs from a 'functional' perspective and advocate for intense government intervention until these needs are permanently met. We will consider the secondary group basic needs in terms of 'utilitarianism' and leave it to the rational choice of the consumer. However, in the following sections, we will re-evaluate secondary basic needs from a different perspective.

6. Factors That Make Living Costs

We will consider the factors that make up the living costs item by item, reveal the leaks, and offer solutions by making use of today's opportunities and technologies. We will approach the issue from two aspects while dealing with the subject of meeting the basic needs. The first of these will be the human and moral aspect of the issue and the other will be the economic aspect. We will present

an understanding in which these two perspectives do not conflict with each other. Thus, we will both increase productivity in the economy and reach the level of welfare provided by a livable wage.

"Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." (UN, 2022b)

6.1. Housing

Shelter is the primary need of human beings. So much so that the person staying in nature first solves the shelter problem. The climatic conditions are still quite dangerous for the person who is deprived of any shelter. Today, people who do not own a home rent housing in order to solve the housing problem. Although renting a house temporarily meets the need for shelter, it does not provide a definitive solution. Because housing depends on an amount to be paid each month. Earnings depend on many variables and involve risk.

When spending personal disposable income, priority is given to paying rent and housing, with the remainder being spent on other needs. Housing costs are typically fixed, at least in the short run, and must be paid in full each month to avoid the threat of eviction. Housing spending is the largest component of the budget for most households, putting pressure on other basic needs of low-income households. (Kirkpatrick & Tarasuk, 2007) In terms of basic needs, housing rent is not flexible like other basic needs and is not paid according to usage. The monthly rent cannot be tampered with, so no deduction can be made from the rental expenditure.

Housing, which is the most basic need and shelter of human beings against nature, has become an investment tool besides its shelter function over time. A once stagnant industry aimed at a specific social purpose has been replaced by one in which profit, as opposed to own property and security, has become increasingly important. (Hannsgen, 2007) Deregulated mortgage securitization in the 1980s caused the interconnectedness of global capital and local housing markets to widen. Local and tangible property assets were converted and liquidated into globally tradable financial Mortgage Backed Securities (MBS) products. This transformation facilitated lending and borrowing on property in the late 1990s and 2000s and then the spectacular increases in housing prices. (Ronald & Dewilde, 2017)

The real estate owner, like other owners of factors of production, obtains a rent income based on this property from the rented house. The sources from which the rent income is gained has increased and diversified. House rent has a difference from the rent income obtained as a result of the use of a resource such as land, equipment, intellectual and patent rights, financial instruments and money. Other factor owners contribute to the production of the factor they

lease, and a part of the share of the income obtained above the cost is paid to the factor owner. It is almost as if the factor owner receives a profit share from the production. However, the main function of housing is shelter. Tenants pay rent not from the profit of a commercial activity, but from the content of meeting the housing need, which is essential for life. For example, firms may terminate their contract with the leased workplace due to bankruptcy or cost-profit expenses and an eviction decision may be taken. This situation is one of the natural consequences of economic activities. However, the residence is not originally a commercial purpose area. Even if working from home becomes common in the future, the main function of the house is shelter. Evacuating their homes as a result of the loss of income experienced by individuals may lead to the possibility of being homeless. This situation could mean being deprived of the most basic life functions and disruption of the whole order of life. In this sense, owning a housing as a basic need today is the most conservative need and, accordingly, the need with the most devastating effects in case of its deprivation.

6.1.1. Housing Investment for the Purpose of Earning Rent Causes Some Problems

Landlords are wealthier than tenants and have lower marginal propensity to consume and this reduces effective consumption. In addition, the fact that housing is an investment option causes household savings to be directed mainly to the housing sector. In the US, only 36% of the population earning less than $30,000 per year between 2010 and 2017 were homeowners. The rate for home ownership of households earning more than $150,000 annually is 84%. As income groups increased, so the rate of home ownership increased. Descriptive statistics on the home ownership rates are provided in **Figure 3**. (Statista, 2024)

Marginal propensity to consume is higher in low wealth households than in high wealth households. (Fisher et al., 2020) Considering especially the wage

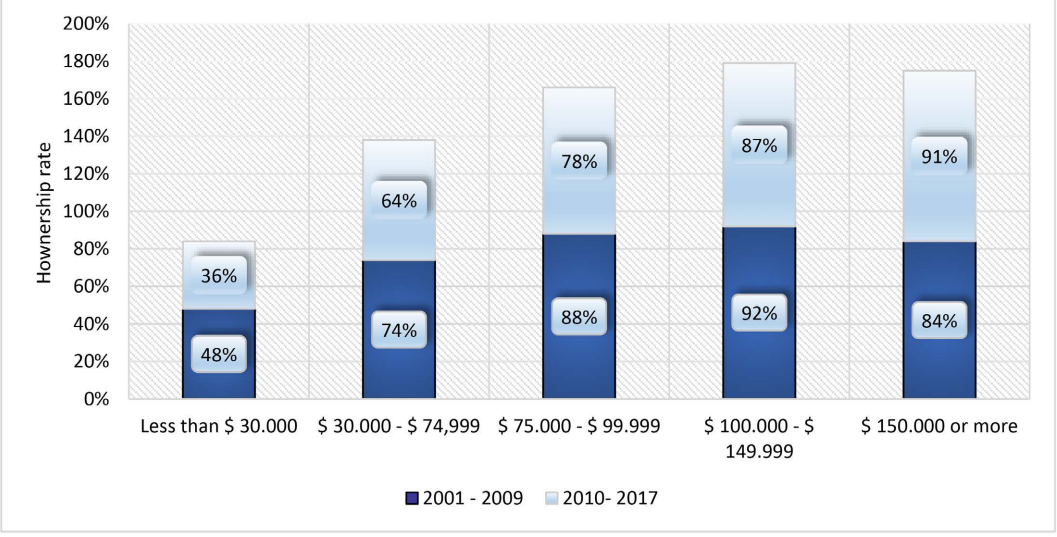

Figure 3. Homeownership rate in the Unites States between 2001 to 2009 and 2010 to 2017, by income.

earners and the poor, it results in income transfer from groups with a high marginal propensity to consume to those with a low marginal propensity to consume. This leads to a decrease in consumption and therefore in aggregate demand. If the money transferred from the households in the lower income groups to the households in the upper income groups is directed towards savings, these savings usually appear as housing investments.

Currently, housing is a non-financial investment instrument for households, and in practice, housing is by far the most important component of assets. (OECD, 2016) The fact that housing is a favorite investment for households directs the household consumption and savings to housing, thus reducing the investment of households' savings in financial assets. Even the high-yield periods of the stock market could not dethrone housing for households. The fast-growing stock market in the 1990s was a favorite investment and the situation revealed that corporate equity holdings were the primary asset in the portfolio of the majority of the American public. However, when the evidence was examined more carefully, it was obvious that the share of real estate in the portfolio of most households exceeded the share of stocks. Real estate investments accounted for about two-thirds of household assets and more than half of all households did not own a corporate equity capital. Housing retained its importance despite attractive stock investment in the 1990s and remained the cornerstone of household investment. (Tracy et al., 1999) Real estate still accounts for the lion's share of household wealth today, this is more obvious for those at the bottom of the wealth distribution share. While the main residence accounted for 61% of gross assets for the bottom 40% of households, this share is only 34% for the top 10%. This means that households with lower wealthy can rely less on financial wealth. Financial assets, which are generally more easily liquidated, are much more common in the upper quintiles: they represent 40% of gross assets for the wealthiest 10% of households while it is only 18% for the bottom 40%. (OECD, 2021)

The housing sector competes with more productive sectors in terms of the use of national resources in the long run. Much discussed in the development literature in the postwar years, housing has been variously defined as a "resource absorber", a "consumer good" and a "social overhead". For this reason, housing investment regarded as an unproductive sector was not seen as a meaningful development strategy. Compared to other sectors, it has been argued that housing investments increase inflation, use valuable foreign exchange resources and negatively affect the balance of payments. It was a common view to use scarce resources not for investment in housing, but in the sectors such as industry that increase the productive capacity of the economy and provide rapid feedback. (Arku, 2006)

We agree with the view that the housing sector is an inefficient sector and that scarce resources should not be constantly spent on housing. But on the other hand, we argue that everyone should have a shelter and therefore the source should be directed towards the construction of the housing. We explain this situation which seems contradictory as follows: we advocate for everyone to own a

house and thus, in the long run, the removal of the housing from the economy agenda and transfer of the country's resources to tradable sectors. However, as we will explain in the chapters in more detail, we argue that not everyone should have luxury housing, the housing stock in the country should be fairly distributed, and that the majority of government spending should be spent on housing until everyone has a shelter. With the solution of the housing problem and the decrease in living costs, a tendency to increase in household savings can be seen. However, in our model, as the house ceases to be a rent-earning investment for the household, most of the household savings will be more integrated into the financial system and will be directed to firms as a source of funds. In addition, the households predominantly using their savings on housing causes housing prices to rise, which creates a disadvantageous situation for those who will buy their first house for shelter. In order for the consumption to increase and the savings to be directed to productive areas, it is necessary to stop the rental income from being an investment instrument. Let's put forward other reasons for solving the housing problem.

6.1.2. Why Should the Housing Problem Be Solved?

Shelter is one of the most basic human right. In January 2016, the United Nations sustainable development goals entered into force. 11.1 of the Sustainable Development Goals, under the title of Sustainable Cities and Communities, is expressed as 'making cities and settlements inclusive, resilient and safe'. In this context, it is aimed to ensure that everyone has access to adequate, safe and affordable housing and basic services and to upgrade slum areas by 2030. (UN, 2022c) It cannot be expected that a person who cannot meet the housing needs of himself and his family will adapt to business and education life.

Household housing expenditure is the largest leak within the household budget. Housing rent and housing expenditure has the largest share in household consumption distribution. People in OECD countries now, on average, spend about 22% of their disposable income on housing costs. About 1 in 3 low-income tenants spend more than 40% of their income on housing and they have less to spend from their resources for other basic needs such as food, health and education. Access to affordable housing is more difficult for the elderly and young. (OECD n.d.a) The share of housing in household consumption has increased over the years. On average across OECD countries, people spend more of their household budgets on housing than before. Based on estimates of consumption data in 20 OECD countries, the share of housing in household budgets that covers housing costs such as rent, regular maintenance and repairs and utilities, increased by about 5 percent between 2005 and 2015. As the share of housing expenditures in household budgets increased, the relative share of household expenditures on food, clothing, entertainment, communication and other consumption items decreased on average across all income levels in this period. Therefore, as housing costs rise, access to food for some low-income households is jeopardized. (Kirkpatrick & Tarasuk, 2007) With the disappearance of the

housing problem, the amount spent on housing will be allocated to efficient consumption, especially in the budgets of low-income households with a high marginal consumption tendency and this will increase the aggregate demand.

The housing sector causes crises and deepens existing crises. The reason for the financial crisis in the USA in 2008 is the housing bubble. The wealth that increased with the stock bubble in the 90s led people to consumption. With low interest rates, housing purchases increased and housing prices rose. Housing prices began to decline in 2007. As default rates began to rise in 2006 and 2007, banks tightened their standards. The continued flow of housing for sale, combined with a sharp cutback in demand, has resulted in rapid declines in home prices in many markets. As a result, the housing bubble deflated and financial turmoil ensued. (Baker, 2008) The role of the housing sector in the 1997 Asian economic crisis is also great. The extreme expansion in the real estate market in the Southeast and East Asian economies contributed significantly to the 1997 financial crisis in Asian economies. Part of this fiasco can be attributed to a combination of outdated banking practices and an immature real estate market. The bubble in Asian real estate markets burst long before other dominoes fell and the blatant currency crisis developed. (Quigley, 2001)

The banking crisis of 2007-08 revealed how important the institutional structures of housing, home ownership and mortgage markets became for the welfare state. The securitization of mortgages created a new circuit of global capital, and homeowners were connected to this wave of globally sourced capital thanks to national mortgage markets. As a result, homeowners began to use their homes not only for consumption but increasingly as a 'bank', using them as a financial safety net, a money box for bad days, a security to maintain their private consumptions, and a means of supporting their family's welfare needs throughout their lives. (Lowe et al., 2012) Also, in the real estate wealth-consumption relationship, although the increases in real estate wealth increase the additional consumption, the depreciation of real estate wealth is significantly larger in the down market than in the up market. (Leonard, 2010) In conclusion, the fact that the house is regarded as an investment tool such as deposits, stocks, land and foreign currency for the savers and especially the households and the housing problem is not resolved, causes speculation and housing bubbles.

The solution of the housing problem requires serious costs and resources, it takes time. Since the housing sector requires serious investment and resources, the problem of housing cannot be solved immediately. Therefore, the burden of this problem increases in times of economic crisis. In addition, when the housing problem turns into a nationwide crisis, solving this crisis is not as easy as other crises.

Houses can be the workplaces and schools of the future. With the rise of working from home and distance learning, housing may become more functional places in the future. In this case, the solution of the housing problem may appear as a factor that affects not only the cost of living but also the cost of the

workplace. Although the functions of the house increase, the main function of the house is as shelter. The effects of being homeless become even more staggering if the house becomes a workplace alongside its shelter function. In addition, as everyone owns a house and household savings increase, rental housing investment is discontinued, the use of these savings in financial will also reduce income and wealth inequality.

Financial assets are much more unequal than non-financial assets. In the 28 OECD countries covered by the OECD WDD, the difference between upper-income households and lower-income households is 72 times greater in financial wealth and 23 times in real estate wealth. The gap between the top and bottom quintiles for financial assets is even wider in some countries. For example, the difference between the bottom quintile and the top quintile in the US is 525 times and 405 times in the UK. The main factor affecting overall wealth inequality is the ownership of financial assets. The level of home ownership is another important influence on OECD general wealth inequality. Real estate wealth is more evenly distributed, but the inequality-reducing effect of this real estate is lessened if the purchase is made with high leverage through mortgages. As the number of households directly owning their homes increases, wealth inequality will decrease. (Balestra & Tonkin 2018) Housing creates vulnerabilities, especially for low-income households. Low-income households still struggle to own a home in many countries. Mortgages make up the largest portion of household debt. In contrast, housing is the main source of household wealth in most countries and home ownership has a wealth leveling effect. While residences constitute 50.37% of the total assets of households on average in OECD countries, the share allocated to deposits is 16.6%; other financial assets 6.88%; other real assets 17.48; other real estate investment is 8.67%. (OECD, n.d.-c)

6.1.3. The Solution to the Housing Problem

The most effective solution to the housing problem is to have a safe and livable shelter in which everyone in the country can reside. Even if the majority of the society owns a house, the cost of living that is taken as a basis when calculating the minimum wages includes accommodation and therefore non-homeowners are not ignored, the rent is added to the living costs and plays a role in determining the amount of wages demanded. Therefore, the minimum wage amount is determined according to all wage earners and minimum wages are determined according to the most disadvantaged group (tenant). Therefore, in order to reduce the rent and housing costs from this amount while calculating the living costs, the housing problem of everyone in the society should be resolved permanently. Overall, home ownership rates have increased every decade since 1950—except that they remained unchanged in the 1980s. The home ownership rate rose from 55 percent in 1950 to 66 percent in 2000. (United States Census Bureau, 2022) For example, for the EU-28 country, the home ownership rate for 2019 is 69.2% and the tenant rate is 30.8%. (Eurostat, n.d.) Based on these statistics, what is needed for everyone in the society to own a home is to make the

remaining 30 percent of the population homeowners. While doing this, the available resources and the housing stock in the country should be evaluated in the most efficient way. While addressing the housing problem -especially in the first place, it should be seen as a shelter problem rather than a housing problem. While doing this, the main goal should be to create livable, clean, aesthetic, social and safe spaces for individuals. Resources and facilities may not be enough to reach the luxury residences of everyone's dreams, but smaller houses can be built that are suitable for everyone's income and social (marital status) low cost and people's status. In addition, cities consisting of prefabricated houses can be established for families with very low incomes. For those who live alone in big cities, hotel type settlements can be built. The most cost-effective solutions should be developed, varying according to regions and social situations. In order to finance the solution of the housing problem, governments need to step in both with legal regulations and with government spending for social housing. Most of the government investment spending made each year should be diverted to social housing projects until the housing problem is resolved. Housing supply should be increased by building houses and shelters within the scope of social housing projects.

As demand-side policies to the housing problem, governments provide financial support to homebuyers and homeowners through grants, loans, mortgage guarantees, and other similar mechanisms. On the one hand, this support aims to support households in purchasing a house, on the other hand, it is policies aimed at ensuring that homeowners in financial distress stay at home. In response to the negative effects of the COVID-19 pandemic, governments have offered a range of support for homeowners and homebuyers, including low interest rates, loans and grants, and temporary deferral of mortgage payments for homeowners. In many OECD countries, home buyers or home owners benefit from favorable tax treatment in addition to grants and credit support to home buyers. This tax deduction basically consists of a mortgage interest deduction as well as tax exemptions for costs associated with buying a home such as property transfer tax, stamp duty, legal fees. (OECD, n.d. -e) Existing investment housing owned by households can also be used to increase the housing supply, to enable homeless households to become homeowners. It can be ensured that high tax is collected from the second or more houses for investment purposes and this tax is transferred to the housing fund, and it can be provided as a support for the narrow incomes to own a house.

Most households have only one home and live in their own home. Housing represents the main source of pledged capital that households can borrow. (Davis & Nieuwerburgh, 2015) Therefore, apart from the fact that the house is an investment instrument with annuity, its pledge for credit should also be prevented, and the sale of the residence must be prevented without the purpose of purchasing another residence. As a result, existing gains in housing need to be preserved. Considering the importance of housing as a shelter function and its

size in consumer expenditure; Governments should also step in to prioritize consumption for home ownership in consumer preferences. While the households are provided to own a house according to their income, housing payments should be the priority consumption and the remaining amount should be spent for other consumption. In addition, high rates of luxury consumption expenditures (for example, luxury cars) of an individual who has not purchased a residence should be prevented. One of the issues to be considered is that the residential investment does not turn into a leak. The decision to purchase housing is different from other consumption preferences. It is usually the most expensive consumer good for households and the payback is usually long-term. For example, if someone who has the economic power to buy a house wants to own a house that is way above his/her financial power, this may disrupt the long-term consumption balance and reduce the share in the budget for other consumer goods. In such a case, housing payments turn into a leak, thereby reducing efficient consumption. For this reason, a housing scale suitable for everyone's budget should be created, and people should be able to buy houses with prices commensurate with their income. Governments should develop digital systems integrated with financial systems and make legal arrangements in preventing the sale of the residence without buying another residence, and in mortgaging it, prioritizing the consumption of the residence within the consumption expenditures, purchasing the affordable housing for the income. In addition, government regulations may be required in case individuals do not accept voluntary conversion, both in energy conversion and the transition to renewable energy, and in obtaining affordable housing. As a result, the functions of the house should be reduced and it should not be used for rental income investment. Housing is a long-term investment, and when it has a definitive solution, it creates a long-term resource for countries when inefficiency disappears.

6.2. Energy

Energy is becoming more important day by day and its consumption is increasing. The population has grown sharply since the beginning of the 19th century, and the world's human population has grown from 1 billion in 1800 to about 7.7 billion today. Energy has been at the center of economic development. Total worldwide primary energy use increased by 45% in 2019 compared to 2000 and this increase is estimated to be 16 times higher compared to that in 1900. (IEA, 2020) There has been a rapid increase in urbanization rates throughout the world in the last 50 years, and this increase is expected to continue in the next 30 years. Evidence from empirical studies shows that as the share of the urban population increases, energy use rises in parallel. (The World Bank, 2021b) Energy is important in terms of national and global energy efficiency and nature pollution. Today, cities account for two-thirds of global energy consumption and more than 70% of greenhouse gas emissions. By 2030, 1.2 million km^2 of new urban housing is expected to be added to the world. This type of spread poses a threat

to land and natural resources and has undesirable consequences. (The World Bank, 2022) Electricity is playing a more central role in consumers' lives than ever before, and the number of households using electricity for all their daily needs such as mobility, cooking, lighting, heating and cooling is increasing. The share of electricity in the world's final energy consumption has increased steadily in recent years. Currently at 20%, electricity will account for around 50% of final energy use by 2050, according to the IEA's Net Zero Emissions Scenario (NZE) to 2050, published in May 2021. (Approx. 30% on Announced Pledges Scenario (APS)) (IEA, 2021)

Besides all this importance, energy is affected by natural events, economic crisis and geopolitical events. Hurricane Ida, which occurred in 2021, caused supply disruptions in the United States. The biggest drop was in the US, where total oil production fell 4 percent in September compared to July, due to the impact of Hurricane Ida on production in the Gulf of Mexico. (The World Bank, 2021a) Europe, on the other hand, is heavily dependent on hydrocarbon resources mainly from outside the EU and on Russia. In 2020, the EU was -dependent on foreign resources at a rate of 84% for natural gas. Russian Federation is Europe's largest supplier of natural gas, oil and coal. The Russian Federation's invasion of Ukraine has created risks to Europe's energy supply. Russia's pipeline exports to the EU have now fallen by about 60 percent compared to June 2021. (IMF, 2022a) With the Russian invasion of Ukraine, gas prices in Europe have more than quadrupled since 2021. The global economy has destabilized strongly. This led to rising inflation (with the effect of rising food prices due to the war) and a cost-of-living crisis, especially for low-income households. (IMF, 2022b) Most countries in the world are also heavily dependent on imported oil and gas and have to buy these products from a small number of exporting countries. (UNEP, 2022)

Energy in terms of globalization. Today, globalization is based on two basic elements. One of them is technology and the other is energy. Technology has formed the infrastructure of globalization and in this respect, it is the stock variable. However, the energy must be continuous for this technology to work, so it can be defined as flow variable. Therefore, all these development, welfare and gains depend on the continuity of energy. Since the whole system is connected to electricity and is built according to electricity, the disappearance of electricity means the collapse of the whole system in the world.

Energy in terms of household cost of living. Households also use energy with increasing functions such as heating, cooking, lighting, as well as cooling, security, communication, shopping and entertainment. As the functions of the Internet increase, the importance of electrical energy will increase in parallel. This increase in the functions of energy has loaded the function of ensuring the continuation of current life, especially reducing the flexibility of human beings to electricity. This means more living costs.

Energy in terms of production input. Energy, and in particular electrical

energy, is a production input and has a more homogeneous structure -compared to other raw materials, just like labor. For example, many different raw materials are required for textile production or automobile production, and many raw materials required for one product are useless for the production of another product. For this reason, lower cost of labor due to both chepaer electrical energy directly and the decrease in the living costs of households will mean a decrease in the cost of goods and services produced.

6.2.1. Household Solution for Energy

In 90 minutes, enough sunlight strikes the earth to supply the entire planet's energy needs for one year. Although solar energy is abundant, it represents a very small part of the world's current energy mix. (IEA, 2011) Ironically, Bastiat came up with the idea of shading the sun so that candle makers would not lose revenue. (Roche, 1971) With the reduction in tax revenues and other sectoral concerns, not benefiting from this existing solar energy and continuing to import energy is like bringing Bastiat's ironic scenario to life. We argue that electrical energy should be the only source for households in all areas of heating, cooling, cooking, lighting and energy needs, and should be met independently from the center, via homes that produce their own electricity through renewable energy sources.

Today, renewable energy has started to be used more widely in various parts of the world for electricity use with the decrease in wind and solar energy costs. The share of variable renewable energy sources such as wind and solar in the global electricity mix exceeded 10% for the first time in 2021. The annual share of wind and solar energy rose above 30% in Ireland, Spain and Uruguay, and over 50% in Denmark. (UNEP, 2022) We will consider renewable energy in terms of households and living costs. Our primary priority is to reduce living costs by permanently reducing the energy requirements of residences. Therefore, we advocate that priority should be given to households, namely residences, in renewable energy investments. Households should produce their own energy and all their energy needs such as heating and cooking should be met with electrical energy. In other words, the dependence of households on central energy should be ended. For this, emphasis should be placed on renewable energy systems and the development and dissemination of electric heating systems and devices. In this way, houses that produce their own energy without being connected to a certain center will also have their own heat source.

Heating and cooling technologies such as heat pumps, thermal storage technologies and heating and cooling technologies such as air conditioners help renewable resources have a higher share in the heating and cooling sector. Technological advances and increased capabilities in the electrical grid or heating system have led governments to integrate heat pumps into their climate action plans as a key tool to decarbonize heating in buildings. Thanks to changing building regulations along with purchase subsidies such as grants, loans or tax credits, the upfront costs of heat pumps can be offset, especially during building

renovations. In addition, heat pumps can be an economical solution in new buildings. (UNEP, 2022) House is the basic unit of electricity consumption, so reducing electricity consumption per household will reduce electricity consumption of the whole society. (Filippini & Pachauri, 2004)

In addition, in the future, along with working from home and with the spread of distance education, residential energy consumption will increase, which is important both in terms of living costs, in terms of the energy stock to be used in production and in terms of the economic stability of countries dependent on foreign energy. The fact that electricity is the bottom brick of the whole system and becomes the prerequisite for humanity to exist in an orderly manner will keep households away from the risks of its distribution from a single center and the risks posed by geopolitical events on energy. In this respect, it is important for households to have decentralized electricity. Promoting thermal insulation together with renewable energy will contribute to energy efficiency.

Households should produce the electricity they use in their homes, whether through solar panels, wind turbines, whether by pedaling at home or by another method of technology. The important thing is that energy (and especially electrical energy), which is an increasingly necessary need that plays a key role in today's world, becomes free of charge, and this is achieved with renewable and clean energy. Thus, labor costs, production and transportation costs will reduce. Although initially central electricity prices increase due to fixed investment costs (Kaschub et al., 2016), energy demand will decrease as households produce their own electricity, and electricity prices will become cheaper in the long run. In order to reduce production costs, the use of electricity in the manufacturing industry should also be increased. The manufacturing industry accounts for about a third of total energy use worldwide, and electricity accounts for about a quarter of this energy. It is necessary to improve the efficient use of electricity by increasing the share of solar and renewable energy, which will replace fossil fuel uses. Today, there are many alternative technologies that can replace fossil fuels to provide the necessary energy for the manufacturing industry. In many cases, electric heating applications are more energy efficient than their alternatives, especially at higher temperatures. (IEA, 2011)

6.2.2. Evaluation of Housing and Energy Together

We think that housing and energy investments should be handled together as two high-cost primary groups of basic needs that need government support. The houses and the solar panels to be built on the houses should be considered together in terms of financing and investment. Therefore, government expenditures for financing of houses that can produce their own energy, resources to be used for renewable energy and to combat climate change and rescue packages for crises should be used together.

Directing government investment expenditures to housing. When we consider the digital primitive economy model as a whole, the resource that will be created by the decrease in health expenditures and education expenditures can be spent

on this area until everyone has houses that can produce their own energy. Since labor and energy are more homogeneous than other production factors in goods and services, the decrease in the prices of these inputs will reduce the costs and thus production will increase. In this case, increased tax revenues make a positive contribution to government budgets. If the surplus share is reflected in the wages, the increased consumption and the increase in indirect tax revenues also contribute to the government budget. In this way, housing investments and energy investments for housing will finance themselves. For this reason, we think that government investment expenditures should be used, first of all, in the construction of houses that produce their own electrical energy.

Directing the resources spent for crisis costs to housing and energy. The contraction in production and consequent fall in revenues as a result of the COVID-19 pandemic has pushed government deficits and debts above the levels recorded during the global financial crisis. Global financial support totaled approximately $14 trillion, with $7.8 trillion in additional spending or lost income and $6 trillion in equity injections, loans and guarantees. (IMF, 2021) In the bailout program implemented in 2008, so many government bonds were sold in a short time, resulting in additional and macroeconomic risks throughout the system. The $1.7 trillion debt ($250 billion deficit + $700 billion bailout + $800 billion stimulus package at the beginning of 2009) is the largest one-year government debt ever, and proportionally the largest since World War II. (Congleton, 2009) In addition to the burden imposed on government budgets by the fiscal policy, coping with the crises may have negative effects such as inflation on the economy. The Pandemic has clearly shown that the financial space is essential to deal with the crises. Countries with more fiscal space were better able to protect households and businesses. However, coping with the crisis, formulating appropriate fiscal policy proved to be not easy due to cost of living, energy and food crises. The implemented fiscal policy should not conflict with the inflation targets. Rising costs of living place greater responsibility on policy makers to protect the most vulnerable from higher prices. Food, heating and fuel, the categories with the highest price increases, are the categories in which more expenditures are made by the poorer segments. Food, heating and transportation are essential basic needs for the people, the prices of which are usually determined by the fuel costs, and it is not easy to reduce the consumption of these needs. (IMF, 2022b) The resources required to meet the permanent housing and energy needs of households can be used instead of an ex ante or ex post rescue package to create crisis-resilient economies, and to prevent inefficiency and poverty. Thus, the necessary support can be provided to the households without being exposed to the side effects caused by the bailout program.

Producing houses that produce their own energy with the resources allocated to combat climate change. In order to slow climate change and limit global warming above 1.5 degrees, greenhouse gas emissions must be reduced to zero by 2050. To support climate action in developing countries, developed countries

have committed to mobilizing at least $100 billion by 2020. It is estimated that this figure will be in the range of 280 billion to 500 billion dollars annually by 2050. (UN News, 2021) Renewable energy investment reached an estimated US$366 billion in 2021 despite the adverse effects of the COVID-19 pandemic. In 2021, more than 1,400 institutional investors and institutions with more than US$39 trillion in assets committed to a partial or total divestment from fossil fuels continued the divestment trend. (UNEP, 2022) Today, 30% of the final energy consumed worldwide, or almost 55% of global electricity consumption, is made up of the buildings sector – which includes residences, offices, shops, hotels, schools and other public and commercial facilities. Buildings contribute approximately 37% of today's global CO_2 emissions if both the construction and usage phases are taken into account. (IEA, 2020) We advocate that households with houses that can produce their own energy with renewable resources will contribute to the fight against climate change, and therefore, resources should be allocated to build houses that can produce their own energy from the funds allocated for climate change and that households should be given priority in renewable energy conversion.

6.3. Education

According to Universal Declaration of Human Rights education is a basic human right. "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit." (UN, 2022b, article 26/1) Article 4.1 of the UN sustainable development goals is to ensure that, by 2030, all girls and boys complete free, equitable and quality primary and secondary education. Education enables upward socioeconomic mobility, hence the key to getting out of poverty (UN, 2022c) OECD countries spend an average of 3% of their GDP on education as of 2019, and this expenditure does not include household expenditures.

In the distribution of household expenditures, the share of education (1.6%) in OECD and EU countries in 2019. (OECD, n.d.-d) However, this does not include the hidden costs of education. Education costs have explicit costs for households such as tuition fees, textbooks and other materials, and there are also hidden costs such as uniforms. Despite SDG (Sustainable Development Goals) 4 promises to provide 12 years of free education, there are concerns that education costs are preventing the poorest children and the young from going to school. The new UIS data show that while out-of-pocket expenditures for families are high even at primary education level in many countries, household expenditures for secondary school students generally show a large increase compared to the expenditure on primary education. In terms of education expenditure, households in developing countries spend more on their children's education than in developed countries. This raises concerns about the prospects for achieving the

global education goal where households bear the bulk of the costs for their children's education. For example, household expenditure on secondary education is 20% - 25% of average GDP per capita in Benin, Chad, Ivory Coast, Guinea and Niger and more than 30% in Togo, while this share does not exceed 5% in almost all rich countries. (2017) Even before the coronavirus crisis, more than 200 million children were unable to go to school, with only 60 percent of young people completing high school, demonstrating that all this spending on education was not enough. In 2016, more than 85 percent of children in sub-Saharan Africa and nearly 750 million adults worldwide were illiterate. (UN, 2022a)

The inequality between the rich and the poor in society gives the rich more advantages in taking advantage of economic opportunities. Poor families may have to borrow money to pay for their education. This situation, which affects living costs, also slows economic growth. Empirical studies have found consistent evidence that income inequality slows growth in the long run in most OECD countries. (OECD, 2015)

Since the benefits and harms of education are compared in human capital analysis, the benefits of education must exceed the costs of education. Human capital analysis is a cost-benefit analysis and deals with acquired capacities developed through formal and non-formal education at school and at home and through education, experience and mobility in the labor market. Accordingly, educational activities have a benefit and a cost. Costs include direct expenditure on education and forgone earnings and consumption for workers, students and trainees. While more gains in education leads more education,, the opposite deters it. (Mincer, 1981) However, there are some barriers to the return on investment in education. Contrary to expectations, the majority of students who complete nine years of education are not competitive in terms of international skill levels. Simple approaches to improving quality in schools are not enough, so increasing access to school is seems than increasing quality. According to the researches, providing more resources to schools is not enough to increase the quality alone. Scarce resources are dispersed between the goal of improving access to school and the quality of education. Therefore, the focus of funds on improving quality carries less risk of achieving the goal of school access. (Hanushek, 2013) In our model, we aim to minimize costs and maximize benefits for all students. In addition, the return of reform processes in education takes many years. Changes such as adapting students to the new education system and changing the teaching staff require a certain process. The impact of education reform on the economy will initially be limited, as graduates of the new education system will gradually join the workforce. Although it is not easy to predict exactly how soon the results of the education reform will be realized for the whole nation, it is likely that the effects on the economy will be noticed in a period of 20 - 30 years. For a 75-year time frame, a 20-year education reform yields a 36% higher real GDP without any change in the quality of education. (Hanushek & Woessmann, 2008) To summarize, education requires high costs and

education investments take a long time to produce results. In addition to access to school, quality of school is also very important and it is not possible to increase access and quality to school at the same time with limited funds.

6.3.1. An Alternative Model for Education

In addition to all these problems of education, the classical school system has its own handicaps. The school system contains inequality at its core. For equality of opportunity to occur, the channel, the message and the source must be homogeneous. However, in the current school system, due to the teacher who is the source of information and opens the code, the human element comes into play and the information differs even if it comes from the same source, and it is also impossible for everyone to access a good source and a teacher at the same level. There are also cases where the source is not the same. While schools that want to provide a good education compete to work with good teachers, families who want to give their children a good education want to send their children to good schools. This is subject to geographical and financial constraints. Therefore, the classical school system essentially creates inequality of opportunity. In our article, we develop a model that reduces education costs, makes quality education accessible to all students, and provides equal opportunities in education. For this, information sources are required and these information sources must be made available and explained to students. In the modern age, this task has been done by printed information sources, schools and teachers. With today's technological development, the traditional school system is not the only alternative for educational activities. Schools should be replaced by distance education and digital technologies should be used to transfer information.

However, distance education also has some handicaps. COVID-19 has caused school closures worldwide, affecting nearly 1.6 billion students. Distance learning during the pandemic has failed, and evidence shows that schools urgently need to be reopened (UNESCO, 2017). Even a short interruption in a child's school life can have lasting effects on learning. This report showed that distance education, which is compulsory during the pandemic process, cannot replace schools. Although digital learning and virtual classrooms provide opportunities with interactive and engaging content, two-thirds of the world's children, or approximately 1.3 billion children, do not have an internet connection at home. (UNICEF & ITU, 2020) In addition, expensive internet access in some countries creates a barrier to online learning. (UNICEF, 2021) The reason for the failure of the distance education attempt during the Covid-19 pandemic period is not only the lack of infrastructure. It is an attempt to adapt the old school system to the digital environment rather than accessing the Internet. Creating digital classrooms, assigning a school teacher to each of these classrooms, and trying to make teachers and students meet in virtual environment instead of school at the same time may fail even if there is no internet access problem. Instead of building a modern system over an old system, it is necessary to develop a system suitable for new technologies. What needs to be done here is not to adapt the

digital environment to the school, but to adapt the school to the digital environment. The elimination of the space limit by technology and the transfer of the teacher-student relationship directly to the digital environment as a version of the school also do not create equal opportunities and do not eliminate the disadvantages of the school system. Everyone should have equal access to the right and effective resources.

6.3.2. Information Supply and Demand and Perfect Competition Market in Education

Information is a good that can be produced and consumed, and like other goods, it has supply and demand. However, information differs from other goods: Information does not decrease with consumption. Thanks to the developing technology, it is easy and costless to increase the supply and meet the demand. With today's technological development, it is no longer necessary to produce a certain number of resources for a certain number of buyers, with the possibilities of copying and duplicating the audio and video and making it accessible to everyone from digital platforms. A single source can be copied billions of times or viewed on digital platforms at no extra cost. The solution to this is to present the information spreading from a single center through the same channels and tutorials. This is both cost-reducing and equal-opportunity. Therefore, instead of many sources and specific recipients and different messages connected to them; delivering the same message to all recipients from a single center, the limitation of a certain number of teachers and information resources for a certain number of students is eliminated. In this article, we argue that education should be transformed into distance education and that a single source should be reproduced with the help of technology and homogeneous information should be delivered to the recipients. A model similar to a perfectly competitive market is formed in education, as the problem on the supply side of the information is solved on the supply side and it becomes accessible to everyone and turns into a homogeneous good. Thanks to national and international training centers, professional trainers and resources are made accessible to all people of the world, and everyone is provided with unlimited and equal access to information. Due to the development and geographical differences between countries, educational differences caused by the human factor are eliminated and equal opportunities in education are provided.

6.3.3. Digital Libraries and the Social school model

Digital libraries. In order to ensure equality of opportunity in education, information must have the characteristics of being accessible and free of charge. Digital libraries should be established and information resources should be made accessible to everyone in order to remove barriers to science and ensure that everyone can access information free of charge. However, this should not constitute an infringement of copyrights. Because in order to encourage the production of new products, the price of these information products must be paid to

the knowledge producer. Free digital libraries with written and visual resources where copyrights are covered by governments, foundations, international organizations and volunteers will contribute to the solution of the problem of access to information on the supply side of information. Providing free internet nationally and globally will also facilitate access to information and will largely remove the limits of distance education. It will also reduce communication costs. However, we do not consider distance education only as internet-based and online. In regions where the Internet and online education are limited, video-based distance education can also be implemented by duplicating and distributing educational videos.

Social school model. We argue that schools should switch to a new model and gather in certain centers by grouping them according to their fields of activity in order to eliminate the problems that will arise with the transition of schools to distance education and the transfer of education to the digital environment, to increase the quality of education, to ensure monitoring and control in remote education. With this project, which we call 'Social Schools', separate training centers will be established for training in different branches. In these training centers, student groups will receive face-to-face training on certain days (for example, 4 times a month) both for the development of their scientific abilities and for the feedback of the courses taken in distance education. In addition, training centers to be established for each of the branches such as scientific practices, social activities, art and music, sports and social sciences will provide activities that will ensure the socialization and scientific development of students will be created.

We argue that distance education and the social school model should not include primary school for two reasons: firstly, in terms of the social development of children and the necessity for them to receive basic education and secondly, in terms of women's participation in business life and the effect of nurseries on increasing living costs. Childcare costs negatively affect the workforce. Women who have children are more likely to work part-time. In countries where childcare costs are significantly higher, part-time work has a higher share of total female employment. Due to the difficulty of trying to fulfill both work and family responsibilities at the same time, many women either had to work part-time or left the workforce altogether. (OECD, 2015)

DPEM recommends working from home as long as circumstances allow. In this way, we think that the costs of caring for children who are educated from home and daycare for preschool children will decrease. According to the estimates of the ILO, the number of those working from home in 2019 was 147 million for women and 113 million for men. While 11.5% of women tend to work from home, this figure is 5.6 for men. Therefore, the majority of those working from home are women. All over the world, they still bear the burden of unpaid care work and that is why women tend to work from home. Working from home is also welcomed by workers with disabilities who have fewer opportunities. (ILO, 2021) In this sense, we recommend that local organizations and workplac-

es provide free or low-paid nursery services for the care of preschool children in order to reduce the living costs of women and families who cannot find the opportunity to work remotely and for the healthy development of children.

With the transition of schools to distance education, since the training costs will decrease in human capital investment, the positive contributions of the increase in the quality of human capital on the society and economy will be advantageous especially for the development of underdeveloped countries and closing the gap with developed countries. Moreover, since there is no need for human and physical infrastructure investments such as long-term and permanent buildings and qualified labor, decreasing education expenditures will reduce the burden on government budgets. In addition, free internet can reduce the expenses spent on communication, which is one of the living costs. Distance education is a dynamic model open to change. With the developing technologies, the transfer of knowledge can be achieved without the need for a physical school, with metaverse and virtual reality, hologram technology and similar applications. Efficiency in learning and teaching can be increased with the availability of the internet and the tools that can be accessed to the internet for everyone and the internet becoming free and widespread with the economic and technological development. The efficiency of the information source can be increased with artificial intelligence and algorithms.

6.4. Health

Health can contribute to economic outcomes in high-income countries, both at the individual and country level, through four main channels: higher productivity, higher labor supply, greater savings for education and training, and investment in physical and intellectual capital. (Suhrcke et al., 2006) The disease negatively affects the economic well-being of individuals. When economists and public health experts try to quantitatively explain this loss of well-being, they usually divide it into three parts. These are the reduction in market income caused by the disease, the reduction in longevity caused by the disease, the reduction in psychological well-being caused by the disease, often referred to as "pain and suffering," even if there is no reduction. (CMH, 2001)

In the distribution of household expenditures, the ratio of health expenditures in OECD and EU countries in 2019 was 5%. (OECD, n.d.-e) Global health expenditures have more than doubled in real terms over the past two decades, reaching US$8.5 trillion and 9.8% of global GDP in 2019. However, the share of high-income countries in health expenditures constitutes approximately 80% of total health expenditures and in this sense, there is an unequal distribution with low-income countries. Health expenditures in low-income countries are mainly financed by out-of-pocket expenditures (OOPS; 44%) and foreign aid at 29%. Government spending is dominant in high-income countries, accounting for 70%. In both normal times and times of crisis, governments' health financing is becoming more and more important. In terms of the future, countries will need

to use the resources they use for health more efficiently. (WHO, 2021a) In 1984, health care – including out-of-pocket expenses for health insurance, medical services, drugs and medical supplies – made up a relatively small portion of household budgets. Thirty years later, spending has increased by a full 60 percent for middle-income households and 28 percent for low-income households. (Schanzenbach et al., 2016)

We will approach the issue of health both as a health system and as a method. In the health sector, labor is intensively employed and qualified workforce is used. In the classical hospital system, there are buildings, medicine, equipment, machinery and labor. It is not easy to increase the supply because it is based on human resources and requires a good education to create a qualified workforce, and because of high costs. The spread of digital technologies will contribute to increase the supply in the health sector. Instead of the systems based on the human factor and physical hospital system that slow down the increase in supply, we foresee that the density of health can be reduced through technologies where tests and even diagnosis are made from home. However, until these technologies become widespread and have a legal basis, there are two ways to increase the supply of health services. One of them is to increase the existing capacity, that is to invest in new hospitals and more qualified personnel; the other is to increase the speed within the existing capacity. Until digital technologies for home testing and diagnostics are available to everyone, we propose a way to increase the speed and thus reduce the density in the health sector, in order to increase the supply in health by using the available technological infrastructure. Thus, we will try to reduce both government expenditures for health and household health expenditures. First of all, we suggest that primary health care services should be expanded and made accessible to all. Even if the health system is a mixed system with both public and private hospitals, a general health insurance covering everyone should be established in return for a very low contribution share for the costs of drugs and treatment in order to reach primary health care services. As a method, we propose the use of telemedicine applications for primary health care services in order to expand primary health care services and reduce their costs.

According to SDG indicator 3.8.2, almost 2 billion people face devastating or impoverishing health expenditures. To build a better healthy future, WHO's recommendation is to focus health systems on primary care (PHC). Primary care can deliver 90% of key UHC interventions and 75% of predicted health gains from SDGs. (WHO, 2022) It was found that supply of primary health care physicians was associated with lower all-cause mortality rates, while an oversupply of specialist physicians was associated with higher mortality. (Shi et al., 2003) Consistent with findings across countries, international comparisons of primary health care have shown that costs rise significantly in countries with poorer primary care. (Starfield & Shi, 2002) The research conducted by the Commonwealth Foundation, which was established for the development of the health system in the USA, focused on 11 countries with high welfare in 5 different cat-

egories, including access to the health system, treatment process, administrative efficiency, equality and health care outcomes. Successful countries have also been found to invest more in community-based primary health care, such as family doctors and thus they have been able to reduce the administrative burden of complex financing systems placed on both patients and healthcare professionals. According to the report, while the countries providing the best healthcare services are Norway, the Netherlands and Australia, respectively, the USA has the worst healthcare performance despite being the top spender by GDP. It remains the only high-income country without universal health insurance coverage. The only high-income country not covered by health insurance is the United States. About 30 million people in the United States do not have health insurance, and 40 million are underinsured. Out-of-pocket healthcare costs continue to negatively impact U.S. healthcare performance. It has four characteristics that distinguish top-performing countries from the United States: providing universal coverage and removing cost barriers, investing in primary care to ensure high-value services are provided equally to all people in all communities, and reducing time-wasting administrative burdens investing in social services (especially for children and working-age adults) (Schneider et al., 2021) Although per capita health expenditures in the United States are much higher than in other countries, its underperforming is a concern for policy makers and taxpayers. Primary health care offers a more effective and efficient approach to achieving higher performance at lower cost. There is ample evidence for the benefits of a health system with a strong primary care base. Primary health care is also helpful in reducing deaths and morbidity, as well as reducing health inequalities in population subgroups. (Starfield et al., 2005)

The realization of WHO's own strategies depends on the availability of appropriate PHC capacity at the local level. It is unrealistic to expect achieving the Millennium Development Goals without an organized PHC (Primary Health Care). (WHO, 2003) UN Sustainable Development Goals article 3.8: "Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all." (UN, 2022c)

An Alternative Model for Health

The expansion of primary health care services, which we recommend to be accessible to all, will put a burden on the government's budgets in its current state. Primary health care (PHC) expenditures accounted for more than half of total health expenditures in the country. It accounted for an average of 3.1% of GDP in 2019. Higher income countries would spend more PHC per capita. In contrast, low-income countries were found to allocate a larger portion of their total health expenditure to PHC. (WHO, 2021b) The expansion of primary health care means that the cost of health care increases significantly. We argue that digitalization should be used more widely in order to eliminate this burden, increase the speed in health and therefore increase the supply in the health system,

and in this sense, telemedicine should be widely used in primary health care services.

Telemedicine, meaning "remote healing", is a term that originated in the 1970s. Telemedicine aims to improve patient outcomes by using ICT (Information and communication technologies (ICTs). World Health Organization adopted the following broad definition: 'The provision of health care where distance is a critical factor by all health professionals using information and communication technologies for valid information exchange, research and evaluation for the diagnosis, treatment and prevention of disease and injury, and for the continuing education of health care providers, all to improve the health of individuals and their communities, in the interests of healthcare professionals.' Telemedicine practices improve the quality and accessibility of medical care in the evaluation, diagnosis, treatment and follow-up processes of patients, especially in less developed countries. Increased accessibility to medical care through telemedicine can enable patients to seek treatment earlier and better adhere to prescribed treatments, and improve the quality of life of patients with chronic conditions. In some cases, it is the only way to access specialist doctors for both doctors and patients. (WHO, 2010)

We argue that telemedicine should serve as a priority and prerequisite in primary health care not only in economically underdeveloped countries but also in developed countries. In order to reduce the density in hospitals, we suggest that primary health care services should be a prerequisite for entry to secondary care services. In other words, primary health care services should be divided into stages, telemedicine applications and pre-polyclinic services should be provided, and when necessary, they should be referred to polyclinics from telemedicine centers. Patients should be directed to test centers to be established by telemedicine organizations when deemed necessary. In this way, the necessary data for outpatient services will be prepared in advance and the time spent in the hospital and the workload will be reduced. In this respect, telemedicine will create a preliminary data pool for diagnosis and reduce waiting times.

Telemedicine programs directly and indirectly reduce the number of referrals to offsite facilities and also reduce the need for patient transfer. Remote care and diagnosis via telemedicine in less economically developed countries therefore provide benefits for both patients and the healthcare system by reducing the distance traveled for specialist care and the associated expenses, time and stress. (WHO, 2010) As the ultimate goal, we aim to reduce the dependency of households in health and reduce living costs, with the introduction of digital health in order to reduce dependence on hospitals and human factors in health and the use of artificial intelligence that can test in certain centers and even at home, interpret the results and prescribed.

In the context of the global strategy, digital health is defined as "the field of knowledge and practice related to the development and use of digital technologies to improve health". The concept of digital health is a concept that covers e-Health. It extends the concept of e-Health to include digital consumers with a

wider range of smart and connected devices. It also covers other uses of digital technologies for health, such as the Internet of Things, advanced computing, big data analytics, artificial intelligence including machine learning, and robotics. The global strategy aims to act together in the field of digital health among all Member States and to create a digital health ecosystem. The creation of information technology infrastructure can provide testing, verifying and benchmarking artificial intelligence solutions and big data analyzes in various parameters and settings, and ensure the continuity of patient care. (WHO, 2021b) IT infrastructure can provide testing, validation and of artificial intelligence solutions and big data analytics in various parameters and settings, and continuity of care for patients.

As a result, with the introduction of digital health technologies, we propose a transition from human-centered medicine approach to a human-controlled medicine approach. While discussing the risks of digital transformation in health, the risk factors faced by deprived groups and those who cannot reach treatment and the risks of today's health system should also be taken into consideration. With the development of the application, countries can cooperate between countries can be made and as global telemedicine centers can be established in coordination with local governments, especially for the benefit of vulnerable groups. Thanks to big data and artificial intelligence, human-controlled examination can be performed. In this way, the speed of health services and therefore the supply of health services will increase.

1) Activation of diagnostic possibilities with rapid test and artificial intelligence diagnostic applications (Home or hospital)

2) Establishing a universal health insurance that covers primary health care for all

3) Making primary health care services a prerequisite for secondary health care services and dissemination of telemedicine applications in primary health care services.

4) Establishing test centers integrated with telemedicine centers and hospitals and accelerating the diagnosis time by establishing test centers integrated with telemedicine centers and hospitals.

Universal healthcare (UHC) is a global movement that ensures all people have access to all the quality healthcare they need, anytime and anywhere, without incurring a financial burden. (WHO, 2022) While this is an initiative that will benefit particularly vulnerable groups, policies to secure health cannot be sustained without eliminating inefficiencies in the health system. In addition, with regard to primary health care services, we recommend expanding preventive health services in order to reduce the demand for health care services.

6.5. Transportation

In the distribution of household expenditures, an average of 12.7% of final household consumption expenditures in OECD and EU countries in 2019 was

spent on transportation. Transportation is one of the two highest expenditure components after housing. (OECD, n.d.-d) Existing technologies should be used to reduce transportation costs for households. First, we argue that mobility should be reduced as much as possible with the help of digital technologies. With the spread of working from home and distance education tested in the Covid-19 pandemic, household transportation costs will decrease. For this reason, the implementation of remote working and distance education systems should be encouraged. The widespread use of working from home not only reduces household transportation costs, but also has the effect of lowering operating costs.

Industrial home work and home-based digital platform work allow businesses to quickly respond to changes in product demand and reduce costs. Housework continues anytime and anywhere, In this sense, it provides flexibility to businesses. Thanks to working from home, the production process can divided into separate tasks and capital required for production – such as sewing machines or personal computers – is a labor force available and accessible at a relatively low cost. The availability of this workforce – often women who combine housework with household and caring responsibilities – is highly dependent on gender roles, both at the home and in the society. (ILO, 2021) McKinsey's survey in the third edition of the American Opportunity Survey shows that when people have the opportunity to work flexibly, 87 percent agree. (McKinsey & Company, 2022)

The reason why we included transportation in the first group needs list in our model is that governments and local governments should contribute to the transformation in transportation, alternative routes for new alternative transportation vehicles, and appropriate infrastructure investments. With smart roads suitable for electric cars, adaptation of renewable energy to transportation and smart homes producing their own electricity, new technologies will also reduce transportation costs. New roads and cities should be built to accommodate new individual means of transport. Ensuring that people can commute to work with individual solar-powered transportation vehicles or their bicycles depends on governments and local organizations providing the appropriate planning and infrastructure for this transportation system. When households have the opportunity to charge their transportation vehicles free of charge in their own electricity-producing homes, transportation costs will decrease, the transition to electric vehicles will accelerate and environmental damage caused by fossil fuels will be reduced.

6.6. Communication

In our model, we accept communication as a basic need. Today, thanks to the developing technology, communication has become effective in every field as the world has become integrated with each other. Communication is of vital importance not only for the social activities of people but also for the uninterrupted

continuation of life. The uninterrupted continuation of activities in economic activities, transportation, education, health and all areas of life depends on the uninterrupted continuation of communication. Communication has also become a basic need for households. With the increasing functions of communication, education, entertainment and the internet, communication activities not only connect people but also connect households to the modern world and have become indispensable in this sense. Therefore, in our model, we consider communication and especially internet access as a basic need. In 2019, communication has a share of 2.62% in the distribution of household expenditures in OECD and EU countries. (OECD, n.d.-d) In this sense, we advocate making the internet accessible to everyone and free of charge. We include communication in the primary group basic needs category in our model, as this requires the support of governments and international organizations to achieve this.

6.7. Food and Clothing

The main function of clothing in ancient times was to keep us warm and dry. However, when we came to the 21st century, the functions of clothing increased and the function of protection became one of the functions such as identification, modesty, status and adornment. Today, clothes have many functions such as reflecting our image, contributing to socialization, giving information about ourselves and our socio-economic status, gaining prestige in the society, being a symbol of identity, a form of decoration and an expression of personal taste or style, and providing hygiene. (Kodžoman, 2019)

In addition, individuals can use clothing to change their mood and increase their self-confidence. (Kang et al., 2013) A striking example of clothing going beyond its functions as basic needs is people spending money on clothes of avatars or digital game characters that they believe represent themselves in the virtual environment.

Food expenditures are functionally similar to clothing. The well-being of people depends on their ability to meet the demands imposed by society and the environment, as well as on all other energy-demanding activities that meet individual needs. Energy requirement is the amount of food energy required to maintain body size, body composition and to balance energy expenditure to maintain the required level of physical activity. (FAO, 2001) However, food expenditure, just like clothing expenditure, has gone beyond its basic functions and spending too much onfood may not mean that a person gets the necessary vitamins and proteins for his body. For example, it is possible for a family to spend the necessary amount of money for one month's basic needs for one meal in a restaurant.

In the distribution of household expenditures, food and non-alcoholic beverages (13.8%) final household consumption expenditures constituted the second expenditure item in OECD and EU countries in 2019, on average, while the share of clothing was lower. The share of clothing and shoes in final consump-

tion expenditure is 4.5%. (OECD, n.d.-d) Food expenditures are more flexible than other expenditures such as housing, transportation and childcare and can be manipulated according to available financial resources. (Kirkpatrick & Tarasuk, 2007) Evidence suggests that consumption patterns in low-income households are more sensitive to changes in housing spending: adults in low-income households reduce their food consumption to offset increased spending on utilities during the winter, while high-income households increases spending on their utilities and food. (Schanzenbach et al., 2016) In general, low-income countries are more sensitive to changes in income and food prices. (Muhammad et al., 2011) Parallel to this, expenditures on clothing are also flexible like food. Within disposable personal income, it can be increased or decreased more easily, unlike spending more on household rent or paying for needs such as energy, which we define as primary basic needs in our model. The reason why food and clothing expenditures are flexible within disposable personal income is that they can serve different purposes far beyond their basic functions. Contrary to rent and house payments and energy bills, as income decreases, the share of food and clothing expenditures in the personal budget can be reduced.

In our article, although, food is classified into the category of secondary basic needs and left to consumer choice, horticultural agriculture can be encouraged in order to reduce living costs, contribute to the formation of independent households and encourage the intake of beneficial nutrients for the human body. In addition, fruit cultivation in the gardens, consuming and drying these fruits and storing them with various methods will benefit the body in terms of consumption of necessary nutritional values since it does not require too much burden for maintenance. The spread of this practice throughout a district can expand the exchange of nutrients and thus facilitate the intake of different foods. Planting of fruit trees can be expanded not only in the gardens of households, but also in public areas, and these nutrients can be processed and distributed to deprived areas by authorized public institutions. Maybe it's time to replace some of the landscape plants in the gardens and parks of the houses with fruit trees. Moreover, the fact that a person allocates part of his income for food expenditure does not mean that he has given preference to foods useful for his body. But in order for individuals and workers to remain healthy and maintain their vital energy, they need to receive the necessary nutritional elements.

Some of the efficient wage models suggest the existence of a positive relationship between a worker's physical health and productivity and the actual wage paid. According to this formulation developed by Leibenstein to highlight the links between wages, nutrition and health in less developed countries; firms get healthier and, more productive workers if firms pay higher wages. (Katz, 1986) Nowadays, the meals produced for workers in the factories are adjusted to meet the monthly calorie needs of workers. This situation is more favorable for the interaction between effective wages and nutrition, as it is not known and cannot be controlled how much of the disposable income is used for beneficial nutrients

for the body. Likewise, the expansion of horticultural and home agriculture will contribute to the workers and households getting useful nutrients without paying any fee, just like the meals given to the workers in the factories.

Clothing, like food, has become cheaper and more accessible compared to previous years. Since the beginning of the 21st century, the clothing industry has developed so much. Falling costs, simplified operations and increased consumer spending contributed to increased apparel production and consumption. Clothing production doubled from 2000 to 2014, while the number of garments purchased per capita increased by nearly 60 percent between 2000 and 2014. (Remy et al., 2016) In addition, food and clothing are included in the secondary group basic needs in our model and their consumption is left to market conditions for households since food and clothing needs they change according to tastes and preferences and culture, cannot be followed by the state in its consumption as a basic need and there is no final and long-term permanent solution, their current consumption is continuous, it gains functions far beyond its primary functions and can return to its main element according to the conditions, they are flexible expenditures within personal and budgetary conditions, and they do not not have a high share in disposable personal income.

However, developing textile technology and increasing consumption as a result of cheaper prices also have negative environmental effects. Fast fashion has been a source of increased consumption and growth for some clothing companies. In almost every apparel category, consumers hold about half as much clothing as they did 15 years ago. It is estimated that consumers treat the lowest-priced garments as almost disposable and throw them away after wearing them only seven or eight times. (Remy et al., 2016) Criticism of the fashion industry has increased for its lack of consideration of social and environmental issues. The environmental impacts of the fashion industry are widespread and significant. It is estimated that the fashion industry produces 8% - 10% of global CO_2 emissions. The fashion industry consumes 79 trillion liters of water per year and is responsible for 20% of water pollution. It also contributes to 35% of ocean primary microplastic pollution. (Niinimäki et al., 2020) Every stage of the clothing production process carries the potential for an environmental impact. Traditionally grown cotton, one of the most popular clothing fibers, is one of the crops most dependent on water and pesticides, and at the factory stage, wastewater can contain a number of toxic substances. Fast fashion leaves a pollution footprint creating potential environmental and occupational hazards with every step of the clothing lifecycle. Polyester, the most widely used fiber, is made from petroleum. The increase in production in the fashion industry has almost doubled and the demand for synthetic fiber, especially polyester in the last 15 years. In addition to its production, clothing also harms the environment in terms of waste. Clothing and textiles and clothing and other textile products account for around 4% of municipal solid waste, and this figure is growing rapidly. (Claudio, 2007)

When clothes are used for their basic function – for protection from nature – they do not take up much of the disposable income. However, a sustainable fashion and reuse of clothes can be made use of in order to use our planet's resources more sustainably. By reusing clothing, the environmental damage of clothing can be significantly reduced. (Farrant et al., 2010) In our model, clothing is in the secondary group basic needs category and is left entirely to consumer preference, but we think that the projects should be supported for reuse or longer use of clothing due to environmental effects and damage to nature in clothing production. This will both reduce living costs and contribute to a sustainable economy.

6.8. Culture and Entertainment

Culture and entertainment have always been the needs of individuals and households. Art has traditionally been an integral part of human life. In ancient Athens, art represented a rich cultural, intellectual and aesthetic value. After the Revolutionary War in the 18th century, the focus was on the importance of arts, entertainment, and culture in American society. Americans began to work intellectually, artistically and creatively in literature, music and poetry which allow them to increase their intellectual enjoyment in their spare time and quality of life. Art, entertainment and culture are essential elements of people's lives. According to many studies, arts, entertainment and cultural activities are equally important to individual, social and economic well-being. In particular, the arts were significantly linked to the business, social welfare, and the general welfare of society. The field of art exerts a significant influence on the consumption, synthetically important connections and, by extension, on the general well-being of the society. The presence of artistic and creative businesses, including the not-for-profit arts, has been consistently recommended as vital to promoting well-being. (Syahrial & Dalim, 2021)

Cultural activities, going out of routine and socializing are motivations that people need in their lives. For example, people participate in festivals with motivations such as socialization, family togetherness, novelty, excitement and curiosity. Research on festivals and the events shows that younger participants place more emphasis on socialization and loyalty to the event while escapism and excitement are a common source of motivation in all age, income and occupational groups. (Yolal et al., 2009) Cultural and artistic activities are helpful in reducing stress and relaxing. As digital technology has evolved, the creation, distribution, and access to all forms of art has become significantly easier for individuals over the past decade. Studies have found that performing art at lower cortisol levels for 45 minutes is beneficial in reducing human stress. There are also studies showing that expressive writing, music and art have enhanced emotional and therapeutic benefits for long-term health improvements, reducing negative mood and reducing stress and anxiety in patients with significant health problems. Art also gives students the opportunity to explore creativity and the

route they have chosen. (Syahrial & Dalim, 2021)

In Maslow's Hierarchy of Needs, there is the need for love and belonging at the 3rd rank, which includes close ties, recognition, affection and compassion for other people. Cultural participation between communities also falls at this level of the hierarchy. (Syahrial & Dalim, 2021) While these needs were met with traditional cultural activities in the past, cultural and entertainment activities are now very diverse and monetized to a great extent. In 2019, entertainment and culture as a basic need have a share of 8.4% in household expenditures in OECD and EU countries. (OECD, n.d.-d)

Although we include cultural and entertainment activities in the second group of basic needs in our article, especially for low-income families, local institutions can contribute a certain amount of monthly tickets for cultural and artistic activities such as theater and concerts, and organize free festivals and events. Thus, it provides a psychological contribution to households as well as helps reduce living costs. It also helps especially low-income families close the cultural gap between their contemporaries.

7. Discussion

According to Ricardo, with the development of society, the natural price of labor always tends to rise, because one of the principal commodities which regulates its natural price tends to become more expensive, because it is more difficult to produce it. However, improvements in agriculture and the discovery of new markets into which provisions can be imported may for a time counteract the upward trend in the prices of basic necessities and even cause their natural prices to fall. The same causes produce corresponding effects on the natural price of labour. (Ricardo, 1911) According to John Stuart Mill, any disadvantageous change in the conditions of the workers - that is, the reduction of the actual wages below the natural wages - "if the former habits of the people are stronger than the former habits of the society, the life of the class He argued that the standard could be permanently lowered, and that this permanently worsened situation would become a new minimum that would tend to perpetuate itself (Giddings, 1887)

However, our thesis is not about reducing living costs through cheap imported rice, like Ricardo, or about a new level of subsistence that will occur as workers get used to worse conditions as Mill's living costs decrease. In this article, we aim to reduce the cost of living and lower the level of subsistence without reducing the welfare of workers, but to do this not by any means, but by eliminating the inefficient elements in the basic needs purchased by the wage income. In doing this, we create a new model that takes advantage of today's technology to meet the new basic needs that arise in today's conditions. Unlike the studies, in this paper while we will reduce the cost of living, we will not do so in any way, for example by reducing import duties or indirect taxes on certain products, or by shifting the burden of existing costs to the government or

another sector. (Such as government subsidies to households) In this respect, our study is also different from the basic needs development approach. The basic needs approach to development argues that the minimum basic needs that will ensure the survival of everyone in society should be met immediately and suggests meeting basic needs by reallocating resources to be obtained by increasing the productivity of the poor. (Sharif, 1986) We will present a different perspective for a permanent solution to some basic need classes that make up the cost of living. In this way; we aim to find solutions to wage-related problems, reduce friction between workers and companies in the wage-share-total demand business cycle, and prevent conflict between workers and employers.

Wages have an important place in the post-Keynesian movement. Kalecki argued that a decrease in the real wage level would not increase the profits of firms, on the contrary, it would decrease them. In parallel, when wages rise, aggregate demand increases, which increases profits. (Jespersen, 2011)

Unlike mainstream macroeconomic models, post-Keynesian/post-Kalecki models (such as the model developed by Bhaduri and Marglin (1990)) have a dual nature of wages, and accordingly wages are assumed to affect both costs and demand. They compare the negative effects of high profits on consumption and aggregate demand, which directly positively affect investments and net exports. Therefore, in addition to the supply side of wages, the demand side is also included in the analysis. (Onaran & Galanis, 2012) Since investment depends on the profit margin, a higher real wage increases consumption and reduces investment. (Bhaduri & Marglin, 1990) That is, if wages rise, costs will increase, and if wages fall, total demand will decrease. However, this problem has not reached a clear solution. The Bhaduri-Marglin model is the widely used model in heterodox macroeconomics, but some two dozen empirical studies have produced conflicting results for this model. (Stockhammer, 2017) Thanks to the model we put forward, the decrease in wages will not cause a decrease in the welfare loss of workers, or the increase in wages will return demand to companies as higher demand, as leakages will be eliminated in the DPEM model.

Similarly, there is a similar problem in the international economy. According to Rodrik, workers, who are a cost element for companies, are at risk of being harmed due to increased international trade, demands for wage increases or improvements in working conditions. There is a threat that labor standards and norms may be undermined by international trade, and that the costs of higher labor standards will increasingly be borne by workers themselves, and that there will be an acceleration to the bottom for less regulation and protection for workers. (Rodrik, 1998) However, in our model, this threat will disappear in working life and retirement, as costs (such as labor, energy) and living costs for companies will decrease.

8. Conclusion

Households make up society. Today, even at this point where technology has come, there is almost no sector in which labor is not involved in its production.

In other words, the human element is included in all product and service costs in the economy. The existence of people depends primarily on meeting their physiological needs, and this subsistence level is taken into account when determining wages. Since wages are a cost of production, they also have an effect on prices. In this article, we aim to meet some basic needs permanently with the Digital Primitive Economy Model (DPEM) that we have just created. In this way, the subsistence cost of the households will decrease and the wage bargaining lower limit will be reduced. In our model, we do not reduce the level of subsistence by any means, but by eliminating what we call "leaks" embedded in the cost of living and the expenditures on unproductive resources. In order to reduce living costs, we reclassify basic needs according to today's conditions and offer new alternatives to meet certain basic needs by taking advantage of technological development and digitalization.

In addition to our physiological needs, we accept new needs such as education, health, culture and transportation as basic needs in line with the literature. In addition to these, we consider communication as a basic need in our model. We classify these needs according to today's conditions and degree of affordability and divide them into two classes as "primary basic needs" and "secondary basic needs". Primary basic needs are expenditures such as housing, energy, education, health, transportation, communication, which are costly and can be resolved with the help of governments for the whole society that are relatively easy to control as a consumption expenditure preference and offer long-term solutions. The share of leaks in primary basic needs is great. Secondary basic needs, on the other hand, are basic needs such as food and clothing, which, although maintaining their basic functions, but their usage have exceeded their basic functions over time and are more flexible according to their income level. In addition, we include the culture in the category of secondary basic needs. It is impossible and unnecessary for governments to determine the needs of each individual on the secondary group basic needs expenditures and to ensure that they are met accordingly. For this reason, we argue that such basic needs are included in "efficient consumption" and that their fulfillment should be left to individual consumer preference. We argue that municipalities should plant fruit trees instead of landscape plants in areas where they make garden arrangements, such as roads and parks, and process these crops and distribute them to citizens and schools for free. According to our model, second-hand clothes should also be re-evaluated in order to prevent excessive consumption of clothes due to the damage caused by textile production to the environment.

Basic needs will be met permanently with distance education, e-health, houses that can produce their own energy, with everyone owning a house and thus living costs will decrease. As households achieve to produce their own electricity and their energy problems are solved, the prices of electrical energy will decrease as the households are drawn by the demand side of the energy in the long run.

Like labor, electrical energy is a more homogeneous input in the production

of goods and services compared to other inputs. Labor and electrical energy are involved in the production of all goods and services produced, unlike other inputs. In other words, given the diversity of the variety of the products and the variety of the raw materials used to produce them, labor and electricity are more homogeneous inputs. The cheapening of these two raw materials, which are included in all production costs, will reduce production costs in all goods and services.

We argue that inefficiencies, which we call 'leaks', must be eliminated through the permanent satisfaction of primary basic needs. With the elimination of leaks within the wage area, the demand of households for goods and services, which is a component of aggregate demand in the economy, will increase. As leak-free wages tend to higher effective demand, namely firms, the roughness in the business cycle between wages share-aggregate demand, which is the most dynamic element of the economy, will decrease. By meeting basic needs and reducing living costs, wages will directly contribute to the welfare of workers, as workers can maintain their current status a large extent without loss of welfare even if wages decrease. By sharing the surplus share that will arise with the elimination of leaks between the employee and the employer, both cost reduction and wage increase can be realized simultaneously. This will also contribute to the solution of the wage based-profit oriented regimes problem. With the disappearance of leaks, the permanent decrease in living costs will also reduce the wage conflict by narrowing the wage area that is the subject of bargaining between the employee and the employer. Decreasing costs leading to decrease in prices or relative increase in disposable income due to decreasing living costs of households will create more resources for household saving and consumption. With the housing no longer an investment tool in our model, household savings will be directed more towards financial markets.

While minimum wages are determined by sector or occupation category, it is necessary to comply with the principle of equal pay for work of equal value. Wage discrimination against migrant workers and workers with disabilities should also be avoided. Some countries have a single minimum wage that applies to all workers in the country. In some countries, there is more than one minimum wage application depending on the sector of activity, occupation or geographical region. (ILO, 2016) The permanent satisfaction of basic needs will reduce the discrimination created by minimum wage differences and contribute to the formation of a fair wage. Another benefit of meeting basic needs permanently with DPEM is the reduction of inequality in society. Because poverty is not a concept valid only for the wage earners and therefore poverty cannot be reduced by wage policies alone. The idea of tackling poverty through wages alone carries the danger of being both inefficiency and being 'temporary'. That is, when the economic conjuncture and accordingly economic policy changes, high wage levels may not be maintained and in this case the gains for the wage earners may be lost. With DPEM, the burden of living costs will be minimized

and the wage earners and wage other lower income groups will have reached the existing subsistence level with little expenditure. In this way, a great step will be recorded in the fight against poverty.

Poverty analysis focuses on determining an aggregate index to measure the extent and magnitude of poverty. This requires drawing attention to three aspects of poverty: identifying the poor, determining the extent of their poverty, and the distribution of income among the poor. (Sharif, 1986) Therefore, struggling with poverty only through wages—in case rising wages cause price increases—puts the vulnerable groups who are deprived of wages in greater trouble and distorts the income distribution among the lower income groups against the more vulnerable segments and widens the gap between lower income groups. With DPEM, this income gap will be permanently reduced.

In terms of the future. The wage earners and the poor are in danger of losing welfare today and in the future. However, due to the increasing population and developing technology, the need for labor is gradually decreasing.

The high labor costs may lead firms to capital-intensive production. In addition, with the development of digitalization and computer technologies, the share of labor is gradually decreasing. (Karabarbounis & Neiman, 2014) The robotic revolution is accelerating thanks to rapid technological advances in automation, engineering, energy storage, artificial intelligence and machine learning. The number of robots used worldwide has tripled in the last two decades to 2.25 million. As robots become more advanced, they will increasingly replace human workers, and tens of millions of existing jobs will be lost as a result. By 2030, 20 million manufacturing jobs—8.5 percent of the global manufacturing workforce is projected to be displaced by industrial robots. Each new robot displaces nearly twice as many jobs in low-income regions as in high-income regions of the same country. (Oxford Economics, 2019)

While these dangers for labor are evident, increasingly diversified goods and services, parallelly increasing needs and consumption will further increase the cost of living. Increasing labor cost with the increasing cost of living will accelerate the process of mechanization and automation. In this sense, the financial independence of households becomes more prominent not only for the existing labor force, but also for the households that face the danger of being unemployed at a higher rate in the future.

In addition to being a source of labor, another feature of households is that they are citizens of a country and voters in democratic countries. With the development of democracy, social state and human rights, societies demand support and services from governments such as better quality health care, better transportation service and social assistance. On the one hand, technology and automation create more unemployed and needy individuals and families, on the other hand, the gap is widening due to increasing consumption and expectations from governments and this forces governments to make more borrowing and financial expansion in order to close this gap. This is forcing governments to

take more borrowing and financial expansion to fill this gap. The total external debt stock of low- and middle-income countries increased by an average of 5.3 percent in 2020, reaching $8.7 trillion. (The World Bank, 2022) Societies, on the other hand, do not want to make concessions from their level of development. Therefore, in parallel with government debt, household indebtedness also increases. In addition to these, to labor, retirement may also bring burdens from the point of view of governments in the future, for similar reasons. The definition of the elderly-working-age demographic ratio is the number of individuals aged 65 and over per 100 people of working age, defined as those aged 20 - 64. According to the forecasts of OECD analysts, there have been long-term increases in life expectancy. This means that the number of older people and most likely pensioners is increasing. (OECD Data, n.d.) DPEM offers solutions to the labor costs today and to the problems that the unemployed masses, pensioners which will be a burden on the governments and therefore the taxpayers in the world of tomorrow, without causing any loss to the parties.

Another factor that will make a positive contribution to the government budgets in DPEM is the decrease in education costs with the return of schools to distance education, in addition, the decrease in the living costs of households, reductions in social assistance and transfer payments. Via to DPEM, the borrowing pressure on the government budgets will decrease thanks to the decreasing government expenditures and increasing tax revenues thanks to the decreasing living costs, and it will contribute to the formation of a sustainable social policy without taking a step back from the level of prosperity achieved. At the same time, aid to vulnerable groups will be used more effectively. In addition, it will create more resilient households and societies against economic crises, the danger of famine and unexpected social and natural events.

The Digital Primitive Economy Model consists of two parts. The primitive part expresses that man has always lived in natural conditions, faced the same dangers as people in ancient times, and therefore had the same basic needs. Failure to meet these basic needs can have fatal consequences in human life and cause long-term imbalances in both individual life and the economy. The Digital part of our model, on the other hand, refers to the effective use of digital technologies in meeting our traditional basic needs and our new basic needs emerging in today's conditions. DPEM aims to create households that can live independently, with most of their basic needs met permanently. We envision households whose housing problem has been completely solved, which can meet its own energy without a central system, whose mobility has decreased with the spread of working from home and distance education, and which can provide transportation by using individual vehicles working with renewable energy in urban transportation, in cities and roads designed accordingly, with digital technologies in primary health care services. which have access to treatment and are largely not dependent on a physical hospital, have unlimited access to information and the Internet, and thus communication, which have nutritional sup-

port through horticulture and home agriculture, and have public support for their culture, arts and entertainment needs.

Understanding and getting to know people is a very difficult process because the number of variables that motivate people is very high. Social sciences make an intense effort to understand society, social events and the people at the center of them, and scientists continue to make valuable contributions in this sense. However, this situation also brings with it excessive specialization and its disadvantages. In this sense, the need for more general theories and models is increasing. Our study fills the gap in this field and offers both theoretical and practical implications for policymakers. It offers a brand new model in terms of wage theory and reclassifies basic needs. It also offers unique contributions to equality of opportunity and expansion of education in education, ending absolute poverty and multidimensional poverty, combating climate change, making health services more effective and cheaper, and creating sustainable and crisis-resistant economies.

9. Limitations and Future Directions

The leaks specified in our DPEM model are not the only leaks in the economy. Like other theoretical models in economics, it has some handicaps. Therefore, when adapted to real life, a completely smooth business cycle cannot be talked about. But like other models in this particular economics, we made some abstractions and created a model. Thanks to our model, leakages in the economy will be largely eliminated and the business cycle will become smoother. In addition, it is a fact that by largely eliminating living costs, our model will reduce company costs without reducing the welfare of workers.

Secondly, the DPEM model aims to create economies that are resilient to economic crises. In parallel with the first point, the leaks in our model are not the only leaks in the economy, and economic crises cannot be explained only by the variables used in this model. However, it is clear that it will create economies that are more resistant to crises compared to the current economic structure and will make a great contribution to reducing poverty.

Thirdly, planning, infrastructure investments and resources are required for our model. It is stated where the financing in question will be met in detail in our model. However, only the source was cited and the cost-coverage rate and capacity of the financing was not calculated. This paper is a guide for future research in this sense and a guide for future research in this sense presents.

Fifthly, democratic processes, economic crises arising from leakages in the economy, and the increase in household expenditures with the increase in the level of development increase the amount of indebtedness. However, there are other variables that increase the amount of debt. Naturally, not all of these variables were included in our model.

Finally, projects and models on how to apply the theory on issues such as the transition to renewable energy, the transformation of the healthcare system,

working from home, education and transportation are presented. However, although they are covered in detail, naturally our article could not go into all the details of all these issues. Configuring these models in full detail requires expertise. Relevant experts can conduct future research on these issues. All these limitations provide new areas of study for both the author of this article and expert researchers.

The DPEM model is dynamic and is open to new methods in order to reduce living costs with the developing technology. It is possible to develop health systems, distance education, transportation, energy and agriculture and other basic needs in accordance with new technologies. However, while doing this, the following should not be forgotten. DPEM aims to reduce living costs through basic needs and to shift the resources in the economy from inefficient areas to productive areas, thus enabling the market economy to work more effectively. It should not shift to a socialist economy.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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