6

Labor Value Dilemma: Value-Based Concept Application Towards Sustainable Development Goals

Olexander Zaitsev¹, Shvindina Hanna²,³,*
and Medani P. Bhandari¹,⁴

¹Finance and Entrepreneurship Department, Sumy State University, Ukraine
²Department of Management, Sumy State University, Ukraine
³Purdue University, USA
⁴Akamai University, USA
E-mail: shvindina.hannah@gmail.com
*Corresponding Author

This chapter deals with the indicator 8.5.1 “Average hourly earnings of female and male employees, by occupation, age and persons with disabilities” for target 8.5 “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value” for Goal 8 “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (Sachs et al., 2016; Resolution, UN, 2018).

6.1 Introduction

“Decent work and economic growth” were proclaimed as a Goal 8 within SDGs Framework aimed to promote sustained economic growth, higher levels of productivity and technological innovation (United Nations, 2015).

“Goal 8. Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All

8.1 Sustain per capita economic growth in accordance with national circum-
stances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training
8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms
8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries
8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labor Organization”.

Source: United Nations 2015
Despite the facts that over the past 25 years the poverty declined (Beltekian and Ortiz-Ospina, 2018), and labour productivity since 2001 has consistently grown (Decent work... ILO Report, 2018), the disproportions in the development remain. For instance, the growth was faster in middle-income economies than in high-income economies (ILO, 2018).

6.2 Literature Review

The disparities in regional development in EU and globally became one of the urgent topics in a sphere of labor productivity assessment and social policy making. The interrelations between hourly costs, hourly salary in different parts of the countries led to internal migration, e.g. from rural areas to cities (Lipton, 1980), and disproportions hourly salaries and standards of living between countries became one of the causes of to international migration (Gorter et al., 2018), as waves of migration can be perceived as typical movement from one area to another seeking better social an economic prospects. At the same time, the disproportions in labour costs remain one of the most interesting phenomena to investigate considering the recent changes in education and knowledge production, and most importantly in labour productivity due to innovations. The access to technologies and labour productivity are interrelated (Jones, 2016), and therefore, the labour costs differ from region to region. The study of Bosetti and his co-authors (Bosetti et al., 2015) is concentrated on high-skilled foreigners’ contributions into innovative capacity of the host countries. Meanwhile Filippetti and Peyrache (2015) consider technology gap in Europe as the main concern for policymakers. The shifts in economic development (and therefore in labour costs) can be explained by difference in R&D activities and technological capabilities of different regions. However, given research is aimed to detect the main disparities and disproportions in economic development in terms of labour value difference in different regions, and to offer some new insights for understanding of ‘equal value’ related to Goal 8 of SDG 2030 Agenda.

6.3 Progress and Challenges in Sustainable Development Goal 8

According to the Sustainable Development Goals Report (The Sustainable Development Goals Report, 2018), labour productivity has increased globally in 2018, but at the same time there are still the problems with labour market inequality, safety and security of work environment, inclusiveness and
“decent work for all”, as it is mentioned by 8th SDG goal. There are some serious improvements, which should be mentioned as follows:

- Labour productivity at the global level, presented as output produced per employed person grew by 2.1 per cent in 2017 (measured in constant 2005 US dollars), this is the fastest growth observed since 2010.
- The global unemployment rate decline (from 6.4 per cent in 2000 to 5.6 per cent in 2017).

At the same time, ‘informality worldwide’ stays as a trend, as more than 61 per cent of all workers were engaged in the informal economy (SDG, 2018) globally, and it should be noted that the highest rate of informal employment is in emerging and developing countries.

The gender inequality in earnings is still pervasive: the hourly wages of men are, on average, higher than those of women, with a median pay gap of 12.5 per cent (89 per cent of countries out from 45 observed countries, ILO 2018). The same lag exists for having an account at a bank – women are behind men in this regard, as well as youth are behind adults (especially in low-income countries). “The gender gap in pay has narrowed since 1980, but it has remained relatively stable over the past 15 years or so. In 2018, women earned 85% of what men earned, according to a Pew Research Center analysis of median hourly earnings of both full- and part-time workers in the United States. Based on this estimate, it would take an extra 39 days of work for women to earn what men did in 2018. By comparison, the Census Bureau found that, in 2017, full-time, year-round working women earned 80% of what their male counterparts earned. The 2018 wage gap was somewhat smaller for adults ages 25 to 34 than for all workers 16 and older, our analysis found. Women ages 25 to 34 earned 89 cents for every dollar a man in the same age group earned” (Graf 2019-PEW).

It is still big youth unemployment rate, 13 per cent in 2017 which means that youth is three times more probably to be unemployed. As it’s observed, the informality problem, labour market inequality remain to be a challenge towards sustained and inclusive economic growth. The difference in salary between countries is huge, especially if to compare proportions of low-wage earners in total number of employees, the best positions are belonged to Sweden and the highest gap in earnings is observed in Latvia (see Figure 6.1).

The disproportions and disparities in regional development between different EU and non-EU countries are obvious when labor costs are considered. It can be explained by number of hours spent for work, difference in technologies, productivity of the country in terms of national competitiveness level, and specialty of the country.
6.3 Progress and Challenges in Sustainable Development Goal 8

Figure 6.1 Low-wage earners as a proportion of all employees, 2014.

Source: EUROSTAT Database.

The disproportions and differences may be presented through the efficiency indexes, for example, the global competitiveness index (GCI) or labour productivity can be taken as an indicator which can be evaluated as efficiency of resources using and quality of the work. Not only the output of the labour is measured to perform the efficiency, but the value added per hour worked. In this case if we compare extreme situations of low-earners disproportions, or low average salary (Latvia) with the one of most favorable regions in terms of living standards and high average wage (Luxemburg), we may see the explanation: (i) the difference in gross value added (GVA), (ii) specialization of the region, for instance, the highest share of financial and insurance activities in total gross value added (27.5%) is registered in Luxemburg, while in Latvia the only leading sphere in terms of GVA is real estate activities.

As we may assume the specialty of the country, which we understand as a dominance of certain sectors, can explain the differences and disproportions in the development, such for instance, Romania has the highest share of employment in agriculture and the second highest low-earners proportion in total employment. The link between GVA, GDP per capita and labour market inequalities should be further investigated, given previous findings in this field, considering the labour productivity as an indicator influenced by multiple interrelated economic, political, institutional factors which act simultaneously, and which dynamic is unpredictable.
Figure 6.2  Data on estimated hourly labor costs, 2018 and relative change costs 2018/2017.  
Source: EUROSTAT Database.
Figure 6.3  Gross Value Added (GVA) and Employment by the economic activity as % of total, in (a) Latvia, and in (b) Luxemburg.

Source: EUROSTAT Database.
6.4 Development of the Labor Value Based on Civil Society Evolution

“Civil society is the plethora of private, nonprofit, and nongovernmental organizations that have emerged in recent decades in virtually every corner of the world to provide vehicles through which citizens can exercise individual initiative in the private pursuit of public purposes. If representative government was the great social invention of the eighteenth century, and bureaucracy – both public and private – of the nineteenth, it is organized, private, voluntary activity, the proliferation of civil society organizations that may turn out, despite earlier origins, to represent the great social innovation of the twentieth century”.

(Salamon and Anheier, 1996:1 as cited in Bhandari and Oli, 2018:71)

The origin and evolution of the category “civil society” has four scientific and at the same time historic periods.

1st Period. There appears a problem to define a civil society because the civil society has three different aspects – social, economic and political. Since the greatest of the Greeks Aristotle and up to the Englishman John Locke (1632–1704) only two spheres, social and political, have been dealt with in the unity and considered to be parts of the state system. There was no civil society as a separate category. The society in the unity of political and social forms was regarded as the category “state”. Societies, according to their structure, were, firstly, political societies and, secondly, social societies, and such understanding prevailed until the middle of the XVII century when John Locke wrote his “Second Treatise of Government” (1662). In one of the chapters titled 1890–1907 “Political or Civil Society”, J. Locke said that a society is a more complicated system, it differs from a patrimonial, tribal, feudal or monarchic political union, moreover, it differs significantly from a family. One of the aspects of a state was called a civil society by John Locke. Besides, according to J. Locke, a civil society is incompatible with the absolute monarchy. Besides it is a “body” to build a political state. Locke also advocated governmental differentiation of powers and believed that revolution was not only a right but an obligation in some circumstances. These ideas would come to have a profound influence on the Declaration of Independence and the Constitution of the United States (Locke and Kelly, 1991).
A century later the terminology changed. The work by the Scottish Adam Ferguson (1723–1816) “An Essay on the History of Civil Society” (1767) marked the gap between the political and social spheres of a state. Approximately at the same time James Madison (1751–1836) who was an American statesman and the fourth President of the United States emphasized the role of a civil society as a counterbalance to a state in his articles in the magazine “Federalist”. He thought different groups of the society that have versatile interests to be the guarantee from the majority tyranny. The concept of the civil society was thoroughly elaborated in the works of scientists and enlighteners of XVII–XIX centuries. They included the English philosopher Thomas Hobbes (1588–1679), the Dutch philosopher Baruch Spinoza (1632–1677), the French writer Charles-Louis de Montesquieu (1689–1755), the French philosopher Jean-Jacques Rousseau (1712–1778), the German philosophers Immanuel Kant (1724–1804) and Georg Wilhelm Friedrich Hegel (1770–1831) (Sartori, 1987, 1991; Rienner, 1989; Linz, 1978; Fromm, 1942; Rawls, 1971; Bhandari and Oli, 2018).

Summary of 1st Period. There appear and evolve new principles of state system that should replace a feudal-monarchic state. The main idea of these researches consists in the fact that an old state “should be replaced with a new state system”, and the “new state system” is described as the one that is bound to be a civil society. This is the period of the formation of ideas about a civil society for the future. Such a civil society is a unified integrity of all society aspects. Such a civil society is an inseparable unity of the social, political and economic fields of the state. Such a civil society is a just social society from the very beginning, and both politics and economy operate according to this principle of justice. The definition of a civil society in the field of Period 1 is exclusively societal, initially social, but without any economic specificity. A civil society is a union of individuals, individual atoms, united by a society. But at the same time, a state does not prevail over a civil society, since the state and the civil society are the same thing.

2nd Period. A civil society, according to Adam Smith (1723–1790), is a developed capitalist society in its maturity. The civil society, according to Adam Smith, is the goal of development, a type for a future state system based on new liberal principles. A. Smith suggested a logical scheme that explained the work of the free market based on inner economic mechanisms, but not on the external political government. Up to now this approach has been the basis of the economic education. The free market forms a new society. This is the society in which the leading role is played by economic relations based
on human labor. A. Smith saw the new civil society built on the principles considering the laws of labor value. These laws act disregarding the desires of people, that is why they could not be neglected, but they should be considered in the life of the society.

The Scottich A. Smith as well as the French economist Jean-Baptiste Say (1767–1832) and the Swiss Jean Charles Léonard de Sismondi (1773–1842) supporting his doctrine in a quarter of the century, the Englishman David Ricardo (1772–1823) successfully developing his doctrine forty years later and many other supporters are considered the founders and developers of the economic trend that is called the classical political economy now.

At that period the classical notions of a civil society were based on the ideas of the free market economy that, in fact, began to act in the economic relations of some European countries (Netherlands, Great Britain, France and Denmark). However, speaking about the new societal system, the new societal system of a state was often mentioned (as in A. Smith’s works) disregarding the term “civil society” itself. Its essential characteristics, in political economy classics’ opinion, is the society with the distinct private activity, different from the family and existing apart from the state. A. Smith, D. Ricardo and a lot of their followers equated the new capitalist relations with the new civil society which Hobbes and Spinoza, Locke and Ferguson, Madison, Montesquieu and others implied.

**Summary of 2nd Period.** Here the emerging economic aspect was substantiated as one of the three aspects of a civil society.

**3rd Period.** The well-known representative of the German philosophical school G. W. F. Hegel based his notion of a civil society on two fundamental principles: individuals pursue only their private interests, that is, they behave like isolated atoms, and, herewith, the social connection among them is formed when everybody depends on each other. Here “the system of atoms” is an accordance with the doctrines of Hobbes and Spinoza, Locke and Ferguson, Madison and Montesquieu, etc. On the other hand, Hegel realizes the social connection through the economic interactions of individuals, like A. Smith and D. Ricardo. The civil society as an economic structure represents the system of market relations. The civil society in G. Hegel’s interpretation is the system of needs mediated by labor which rests on the dominance of private property and universal formal equality of people. G. Hegel dealt with the civil society as the form of people’s community which is generated by the constant connection between the family and the state and which provides the viability of the society and application of civil rights of every of its members (Hegel, 1990).
Hegel suggests such logic of the human society development sequence. The social being exists: (1) as immediate, i.e. the natural interaction of people that is a family; (2) as attitudes of certain people and independent individuals to each other, (and the family is one person) within some formal community, and this is a civil society; (3) as a state when it is a combination of principles of a family and a civil society, §517 (Hegel, 1830). Certainly, it is the philosophical vision of the statehood evolution by G. W. F. Hegel, the representative of the German philosophy of the beginning of the XIX century. It should be noted that it is not the definition of a state (Item 3) in this Hegel’s construction but the place of the civil society with regard to the state (Item 2) that matters for us. The civil society in its historical evolution appears and functions earlier than the state appears. G. Hegel gives the following definition of a civil society. “A civil society is a kind of universal, stable social connection that unites the interests of members of society. The developed totality of this connection is the state as a civil society”, §523 (Hegel, 1830).

The civil society in Hegel’s interpretation is historically a forming element of building a state. It should be noted again: “The developed totality of this connection is the state as a civil society”, §523 (Hegel, 1830). Therefore, such a regularity is evident. If a state suppresses its own civil society inside itself, it will destroy itself with such actions as it destroys its own foundation. The vivid example of the self-destruction in the modern history is the internal policy of the Russian Federation at the end of the twenties of the XXI century. The disintegration of the USSR at the end of the XX century has also one of the reasons – the struggle of the state ideology against the self-consciousness of the civil society that is wider than the official state ideology. To suppress and struggle against the civil society existing in the state is the same thing as to cut off the twig on which this civil state “has been settled” and “has been developing”. The example of contradictions between the civil society and the old-fashioned statehood is the Civil war in the USA (1861–1865) between the industrial North and the slave-holding South. By the beginning of the 60s of the XIX century the civil society of the USA had outgrown the slavery foundations in its development and, as a result, destroyed such a state.

Karl Marx (1818–1883) “turned over” the structure of Hegel’s civil society model and put labor, production and exchange into the foundation of the civil society functioning. K. Marx did it in this way because he followed the principles of the economic doctrine of the classical political economy by A. Smith and D. Ricardo. Relying on such an economic model, K. Marx
developed the new opinion concerning the place and role of a civil society in the system of public and state relations. Marx’s point of view is formulated in the following excerpt.

Speaking briefly about the general state order, Marx criticizes the statement that the universal state order must hold together the individual self-seeking atoms. The members of the civil society are not atoms. It is the natural necessity, the essential human properties and interest that hold the members of a civil society together; a civil, not political life is their real tie. Thus, it is not the state that holds the atoms of civil society together, but the fact that they are atoms only in imagination, and in reality they are living beings tremendously different from atoms as they are human beings. It is the political superstition that can still imagine today that the civil life must be held together by the state, whereas in reality, on the contrary, the state is held together by the civil life (Marx, 1955).

Summary of 3rd Period. According to Hegel, on the one hand, a civil society is a constructive element of developing a state and its functioning, i.e. a civil society is a part of a state. On the other hand, a civil society is a system of economic (market) relations. From the economic point of view, a civil society is a state. That is why, a civil society has an immanent economic constituent, it is the basis of state development and the factor of its vital activity, at the same time it is, in fact, a state itself. According to Marx, relations (according to G. Hegel – connections) among people are based on the material life relations (property relations, production relations, exchange relations, distribution relations). Hegel called the combination of such life relations, using the example of English and French writers of the XVIII century, “a civil society”. Thus (according to Marx), the essence of a civil society and mechanisms of governing it should be viewed through the economic relations.

4th Period. The modern interpretation of the term “civil society” in Ukraine and the Russian Federation will be considered. In Ukraine the term “civil society” is used by specialists from the sphere of law, political science and sociology. The typical definition of a civil state from the textbook that was most popular in Ukraine at the beginning of 2000’s is given as “the civil society is the system of interrelations among individuals and their groups in which the individual and collective interests are realized. It is based on the autonomous principles protected from the excessive intervention on the part of the state, on the freedom of self-realization, the pluralism in all the
spheres of public life and the priority of human rights” (Volynka, 2003). But in the next sentence of the text there are words refuting this definition immediately. The refutation says: “Certainly, such relations between a state and a civil society appear when both a state and a society are on the high level of economic, political, cultural and spiritual development” (Volynka, 2003). It is interesting to know how one is to define the height of this level and in which modern state such relations are on the high level of economic, political, cultural and spiritual development at present. The given definition only declares something desirable abstracted from reality. The things are not better with the understanding of the civil society essence in the Russian Federation as well. We will illustrate it with the definitions of the two famous Russian scientists, K. S. Gadzhiyev and Z. T. Holenkova.

In Gadzhiyev’s opinion, a civil society is the system supporting the life activity of the social, cultural and spiritual spheres, their reproduction and transmission from generation to generation, the system of autonomous public institutions and relations independent of the state that are to provide the conditions for the self-realization of separate individuals and groups, the realization of private interests and needs no matter whether they are individual or collective (Gadzhiyev, 1991). In the definition there is not a hint at the economic aspect of the civil society. The whole economy is neither “in the hands” nor “under the control” of the civil society. But if the economy is neither “in the hands” nor “under the control” of the civil society, which instruments and mechanisms does the civil society support systemically the life activity of the social, cultural and spiritual spheres with? In K. S. Gadzhiyev’s interpretation a civil society is fully separated from the state in political and economic aspects and allegedly autonomous from the state. So, in Holenkova’s opinion, a civil society is a specific combination of social communications and social connections, institutions and values, whose main subjects are a citizen with his/her civil rights and civil (neither political nor state) organizations: associations, unions, public movements and civil institutions (Holenkova, 1997).

Both Holenkova and Gadzhiyev think a civil society to exist not into a state, but separately from it. On the other hand, a civil society is a specific combination of social communications and social connections, institutions and values, but not political or state ones. The economic social communications are not mentioned at all. The definition of a civil state is put into the plane of moral and subjective (in Holenkova’s definition) and spiritual and cultural (in Gadzhiyev’s definition) values. Such a notion of a
civil society was characteristic for the medieval Europe before the works of Hobbes and Spinoza, Locke and Ferguson, Madison and Montesquieu.

**Summary of the 4th Period.** In such understanding the term “civil society” is confined to general public and to a multitude of public organizations autonomous from the state, it makes this view senseless.

Thus, we can generalize the notion of a civil society as the system of the society vital life aiming at the state regulatory mechanism, but not as the autonomous system in relation to the state power, expressing private individual, group, corporative interests of citizens, regulating and protecting these private interests. Hypothetical analogy is appropriate to explain further. For instance, some building materials, construction machinery and tools are necessary to build a house, qualified workers, a brigade of builders, are also needed. If the house that is being built may be hypothetically called a state, the building materials – the elements from which the state is “constructed”, the brigade of builders’ activity with the use of the construction machinery and tools is nothing but the analogy of the civil society. Moreover, such an activity never stops! In other words, a civil society is an immanent process, an activity which “creates” the state by means of public and state activities of independent people and families. The real productive relations, or economic relations that are the same, “build” the state, not vice versa. The economic relations are public relations, that is why they are peculiar of a civil society. It is in such a way how Hegel understood it. This was the way in which the developers of the classical economy who developed economic theories in the second half of the XIX century understood it. From this perspective, a civil society was viewed as a constantly proceeding social process of building the statehood from the bottom to top according to the scheme: social individuals and/or families (households) → civil society → state. But not vice versa, this not creation of the state at the beginning which the state in its turn as the organizer and the controller creates the civil society.

“The advantage that NGO have over the public sector is the freedom from fixed administrative procedures or standard operating procedures. This led Donor enthusiasm to a proliferation of NGO, many of them not all that motivated by altruism [because the motives of NGO leaders may be exactly the same as those of a for-profit firm – requiring the same monitoring and care in contract enforcement].”

(World Bank, 1995)
6.5 Development of Classical Economy Towards the Civil Economy

The need to produce commodities and the production means, the subsequent exchange of these commodities has been taking place, but not because these processes were initially centralized and purposefully organized by a state. Rather the opposite. The production of goods and their exchange appeared long before the appearance of the state as a political form of society organization on a certain territory. Before the appearance of the state, there had already been such social forms as family (household), clan, tribe, union of tribes, and they had their own economic forms. The formation and development of economic forms of social development had existed before the emergence of the state. It is the development of economic forms of relations among people that caused a state to appear.

The forms of commodity production, benefits, consumer values to maintain the lives of society members, i.e. the economic forms of arrangement and organization of social life, precede the state historically. Therefore, they are the basis on which the political, legal, religious, artistic and philosophical forms of social interaction develop, and generally they are the ideological forms of the state, by means of which people recognize themselves as citizens of their society-state.

We assume that a civil society was “born” out of the vital activity of the human society. Then, in its development, the civil society is the preceding basis in relations to the state. These are such civil relations that build, change and strengthen the state. The civil society is inseparable from the state. The civil society does not separate itself from the state but forms it actively, according to its values and interests. Such a civil society has an economic constituent. The economic relations were said to be public relations. Thus, a civil society has a specific civil economy of its own and the basis for the civil society.

For the last three hundred years, all the classical political economy has been targeted on the search for such an economic state model that would correspond with the goals and interests of the civil society. That is why the classical economic theory, from A. Smith to K. Marx, can be understood as a scientific way of elaborating the economic theory for the civil society. The task of the civil economy is finding out the laws and regularities in economy which are independent of human desires and tricks, and if there are such ones, then to build a society according to them and use these regularities for the benefit of people. For instance, all the objects and people on the
Earth that move or that are in the state of rest are affected by the force of gravity. If the gravity effect is neglected, the buildings and facilities will break down, airplanes and people will fall. The entire world will be an ever-lasting catastrophe. So are the things in economy. If the law of value is neglected, all the economy will have periodic catastrophes that are called economic crises.

Marx’s elaboration of economic ideas of A. Smith and D. Ricardo within the framework of G. Hegel’s philosophical views caused him to perform labor as the measure of social value. The universal economic connection among the members of the society is labor that is spent on the production of goods, namely, its quantitative characteristics with respect to some goods. The amount of labor spent on the commodity production in the developed capitalist society influences the quantitative proportions during the exchange of goods and services. Moreover, it influences them so strongly that it acts as an economic law. In the economic theory that studies it this is the law of value. The use of value indicators in economy alongside with money indicators is the development of the economic thought towards the civil economy.

The measurement of value which is not measured in money but has another indicator will be discussed below. Nowadays value indicators have money measure, and the money indicator of value results from selling commodities or after payment of the delivered services. If the fact of selling a commodity or a service took place it means that that their value at that time in a certain place is equal to the money sum that was paid for them. It is the essence of forming (the appearance of) the value measure.

Let us have a more attentive look. When the commodities and services are sold there are people near them – sellers and buyers. It is they who agree upon the value quantity in the form of money. Therefore, in the first place, money value is the result of agreement among people at the moment of purchase/sale of commodities or services. No doubt, this agreement is influenced by a lot of other factors but, as a result, it is the agreement between a seller and a buyer that is the factor determining the money value quantity finally. That is why, we will call such a value of commodities and services the subjective value.

However, there is another assessment of value of commodities and services that does not depend on the human agreement, that does not depend on the convention among people, that is abstracted from human desires. Let us call such a value the objective value.

Such value assessment was mentioned by William Petty (1623–1687) (Martin et al., 2009). He distinguished the so-called “political” and “natural prices”. Under “political prices” Petty understood constantly changing market prices, and under “natural” ones a certain amount of labor is meant
6.6 Labor Input as an Indicator of Value Measurement

That is spent on producing commodities. Then Petty’s term “political prices” is a subjective value, and his term “natural prices” is an objective value, in our formulation. According to Faccarello (1999), at the same time with Petty and independently of him French scientist Pierre Boisguillebert (1646–1714) differentiated a market price and “true price” in his works. He thought that the true value is natural, determined by labor spent on the commodity production while “market prices” are random. Boisguillebert determined its quantity by labor time. “A true value” was assumed as a basis of the balanced exchange by Boisguillebert. So, we may resume that Boisguillebert’s “market price” is a subjective value and his “true value” is characteristic of the objective value.

Both Adam Smith and David Ricardo considered that commodities form their exchange value from two sources – their scarcity and amount of labor that are necessary for their assumption. There are commodities whose value is determined exclusively by their scarcity (sculptures, pictures, rare books, coins). The value of these commodities is not determined by the amount of labor spent on their production, it changes depending on tastes, desires and financial assets of a consumer. But their amount is slight in the general mass of commodities. According to Smith and Ricardo the exchange value of the major mass of commodities is determined by the amount of labor. It should be mentioned that Smith and Ricardo have another point of view. In their opinion, during the exchange the price of commodities is formed by two factors: both by scarcity, i.e. demand and supply, and amount of labor spent on their production. In other words, subjective value and objective value participate together in forming the money price.

Marx in his book “Capital” (Marx, 1867, 1887) presented the value that is measured by the amount of labor (objective value – our explanation) to be a basis, a core of economic processes. Hence, Marx stated that market prices (subjective value – our explanation) increase or recede as a result of being influenced by the objective value. Afterwards the followers of K. Marx’s economic doctrine began to call his economic concept the labor theory of value. The major question an answer to which was sought both by opponents and supporters of the labor theory of value remains and has always been the following one. How should the labor value of commodity be measured quantitatively?

6.6 Labor Input as an Indicator of Value Measurement

The overwhelming majority of calculations in different spheres of economy are connected with calculations of value indicators. Currently the value
assessment of products, commodities, material objects and services are measured by money indicators. Now the term “value” denotes the indicator in form of the sum (quantity) of money, and no other numeric indicators are implied with respect to this term in economy and finance. However, together with money assessment which has historically evolved as the one that is expressed quantitatively, i.e. numerically, for four centuries or so the economic science has been paying attention to the notion of value as the indicator measured by money. Starting with the works of A. Smith, D. Ricardo, the basis of value of any object made by people, anything produced by them is labor that is regarded to be human efforts necessary to produce a certain object or thing. The value interpreted as human labor costs underlies the assessment of commodities and services in the theory that is called classical political economy. The economic doctrine of A. Smith and D. Ricardo served the basis of K. Marx’s economic theory. Further, the economic literature began to call the researches of K. Marx and his supporters the theory of labor cost. At the same time, neither A. Smith, D. Ricardo, K. Marx nor any of their supporters suggested the indicator to measure spent labor in the form of the numeric indicator measurer.

In Volume 1 of “Capital” K. Marx defines that labor costs are measured by the amount of working time hours. Relying on the surface interpretation of the phrase “working time hours” (reference), the followers of the classical political economy think that value is measured by labor costs in astronomic hours, i.e. the number of hours which are counted by mechanical or electronic clocks. But the amount of the astronomic time during which a worker (an employee, a manager) works does not indicate labor costs. See more details about it in (Zaitsev, 2004, 2010, 2016). There is another functioning mechanism which does result in the numeric indicator of the amount of spent labor. The observation of a worker while he/she is performing some working functions provides a range of reliable indicators characterizing the labor amount. They are described in more detail in (Zaitsev, 2004). In order that we might identify the indicator describing the quantity of labor we choose one of them, namely, the heart rate or pulse rate (which is the same) of a worker for a certain period of his work, as a rule, per minute. The observations show that the more labor a worker (an employee, a manager) puts in, the more beats his pulse makes. Such a directly proportional dependence of the number of pulse beats on the amount of labor has been fixed many times, for instance, (Vinogradoff, 1969; Scherrer, 1967, 1973). The concrete types of labor can be divided into groups according to the workload, using the pulse rate as an indicator. In 1963 in England Brown
and Growden investigated the outcomes of industrial workers connected with Slough Industrial Health Service and published such data in “Slough Scales” – dependence of pulse rate (heartbeats per minute) on workload: an easy work – 60–100, moderate work – 100–125, hard work – 125–150, very hard work – 150–175 heartbeats per minute (Vinogradoff, 1969). In 1967 a group of scientists from France, Switzerland and Belgium published a book “Physiologie du travail (ergonomie)” (Scherrer, 1967). In this book Monod and Pottier give such a classification of works according to heart rate: very easy work – up to 75, easy work – 75–100, moderate work – 100–125, hard work – 125–150, very hard work – more than 175 heartbeats per minute (Scherrer, 1973). In the investigations of the Soviet period (1981) there are such data in (Shybanoff, 1983): very easy work – 70–80 heartbeats per minute, easy work – 80–90, moderate work – 90–100, medium work – 100–125, hard work – 125–150. We choose the easy work as the unit of labor inputs which is characterized by 75 pulse beats per minute, i.e. an hour of labor inputs is equal to 4500 pulse beats. The figure 45000 is calculated as multiplying 75 pulse beats per minute by 60 minutes. So, we can put it down: 1 hour of labor inputs = 1 hour of value = 4500 pulse beats.

The unit we have chosen to measure labor value has got such a dimension: 1 hour of value is equal to 4500 pulse beats of a workman (a worker, an employee, a manager). Then, correspondingly, 2 hours of value are equal to 9000 pulsebeats, 3 hours of value are equal to 13500 pulsebeats, 8 hours of value are equal to 36000 pulsebeats of a workman. Thus, if the indicator of the total number of pulse beats per working day, for instance, on an eight-hour work day makes in total 63000 pulse beats for a particular worker, then we have 14 value hours (63000/4500 = 14). It means that for 8 astronomic working hours a worker (an employee, a manager) has transmitted 14 value hours on the labor product (commodity or service) or the labor of such a worker has produced the value amounting 14 value hours for 8 astronomic hours. Such a “discrepancy” between the number of astronomic working hours and the number of value hours of work is caused by the fact that such worker’s quantity of labor takes into consideration his pulse rate that makes, on average, more than 130 pulse beats per minute, i.e. it was a hard work in comparison with the easy one with 75 pulse beats per minute. That is why, such a work has produced higher value in comparison with an easy work for the same period of work during the astronomic time. Such indicators have been widely used in measuring the sport work and characterizing the quantity of labor in space medicine for a long time (Baevskyi, 2003; Volkov et al.,
As a result, a new economic indicator is suggested that characterizes the quantity of spent human labor or, in other words, an indicator of the value that differs from the traditional money value: 1 hour of value = 4500 pulse beats of a working individual or 1 value hour = 4500 pulse beats of a workman (a worker, an employee).

6.7 New Value Indicator as a Tool Measure for Goal 8 Progress

This subchapter is devoted to “Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development”. Let us consider “Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. The indicators presented in 8.5 “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value” are in the correspondence with Indicator 8.5.1. “Average hourly earnings of female and male employees, by occupation, age and persons with disabilities” (Resolution, UN, 2018).

Here are some critical remarks on this indicator. It is a purely monetary indicator. It shows how many banknotes a workman gets for an hour of his work. This hour is astronomic, and it is measured in hours in a day. There are drawbacks of the indicator “Average hourly earnings of female and male ...”. The indicator can show growth, but, in fact, it can be decline. The reasons are as follows.

*Firstly.* Let the indicator of average hourly earnings has grown. It is defined in the following way. Average hourly earnings are being compared with the preceding average earnings, for instance, last January and this January. However, it is not conspicuous in the indicator at whose expense the indicator has grown. It could increase either because of the labor productivity or increasing the working hours, for instance, from 8 to 14 hours per day or depending on the growing work intensity, or of three variants together, but in different proportions.

*Secondly.* The growth of this indicator shows the growth of incomes for the receiver of earnings in one case only, when the inflation rate does not rise. In fact, economies of all the states have inflation. If inflation grows faster than the earnings do, the growth of earnings in money indicators is a fake.
Thirdly. The correction of this indicator to inflation has its drawbacks. Every state has its methodology of determining inflation and its own list of commodities and services to calculate the inflation rate.

We offer another indicator for 8.5.1. All the above-mentioned drawbacks are removed if the new indicator is comparison of two new value sub-indicators. Let us call the new indicator “Average value earnings ...”. The first new value sub-indicator shows how many banknotes are paid to a workman for the unit of working time put in by him or, which is the same, how many banknotes are paid to a workman for his one value hour. (It should be mentioned that the working time and the time of work are different indicators. The working time is measured in value hours, and the time of work is measured in diurnal hours). Let us call it an earning sub-indicator. The second new sub-indicator shows how many banknotes are paid for goods at the market in calculating per hour of value. Let us call it a price sub-indicator. After that the first earning sub-indicator is compared with the second price sub-indicator, and that is the new indicator “Average value earnings ...”. If the result of dividing the first sub-indicator by the second one has numerically increased, “Average earnings ...” correspondingly grows, but if the result of their division is numerically falling, then the indicator “Average ...earnings of female and male employees ...” falls.

The indicator “Average value (highlighted by the author) earnings of female and male employees, by occupation, age and persons with disabilities” has no above-mentioned drawbacks that are pertaining in Indicator 8.5.1 “Average hourly (highlighted by the author) earnings of female and male employees, by occupation, age and persons with disabilities” accepted in the UNO.

There are some difficulties existing in Ukraine and in other countries, perhaps. (1) There is some statistics of the time of work in hours but there is no subdivision of the time of work for female and male employees, as well as for persons with disabilities. (2) There is some statistics, as far as the earning is concerned, however there is no such classification, as for female and male employees and persons with disabilities. (3) There are price expenditures according to consumer goods, but there is no subdivision according to female and male employees. However, this problem is easily solved, namely, all the purchases of food products are conventionally divided depending on the proportion of men and women, all the public payments – in the same proportion. The manufacturing products should be divided depending on the gender destination for men and women.
6.8 Conclusions

“The End of our Foundation is the knowledge of Causes, and secret motions of things; and the enlarging of the bounds of Human Empire, to the effecting of all things possible”.

(Francis Bacon, The New Atlantis)

United Nations have been playing very important role to overcome the world problem from its inception. “The United Nations was founded in 1945 with the mission to maintain world peace, develop good relations between countries, promote cooperation in solving the world’s problems, and encourage a respect for human rights. It provides the nations of the world a forum to balance their national interests with the interests of the global whole” (PBS 2014). With the main goals of (1) Maintain international peace and security; (2) Develop friendly relations among nations; (3) Achieve international cooperation in solving international problems; and (4) Be a center for harmonizing the actions of nations in the attainment of these common ends (UN, 2009). Its roles and responsibilities have been criticized because it can only execute its program through governments. However, it has very important role on peace and security, health, economic growth of developing world, human, women, child rights and since 1972 environmental management. In relation to labor related issues UN agency ILO is playing important role about the equality of labor related issues among men and women labor. However, there is very big difference between men and women’s labor payments, both in developed and developing nations. This chapter tried to present some of basic facts of such variations.

In 2015 (United Nations General Assembly), in transforming our world: the 2030 agenda for sustainable development adopted 17 goals and 169 targets among them goal 8, deals with the “Decent work and economic growth” were proclaimed as a Goal 8 within SDGs Framework aimed to promote sustained economic growth, higher levels of productivity and technological innovation (United Nations 2015). This goal also related to Goal 1 – No poverty; Goal 2 – Zero hunger; Goal 4 – Quality education; Goal 10 – Reduced inequalities; Goal 14 – Life below water and Goal 16 – Peace and justice; strong institutions. The achievement of the goals depends on how the governments are or will implement these goals and targets in their national plans and how they execute. This chapter also discussed about the role of civil society organizations related labor issues with historical account. Civil societies are playing critical role in minimizing the gender gap in the labor force, however, the scenario so far does not show significant development.
It is essential to empower women and marginalized population to bring to the equality. There are many studies on Labor Value Dilemma: Value-Based Concept (Blau and Kahn, 2017; Goldin, 2014; Goldin and Katz, 2016; Lundborg et al., 2017; Blau et al., 2017; Neumark et al., 1996; Waldfogel, 1998; Olivetti and Petrongolo, 2017); and there are also many initiatives, however, the scenario shows miles to go to achieve the desired outcome.

References


