

ПЕРЕДУМОВИ ГАРМОНІЙНОГО РОЗВИТКУ ЕКОНОМІКИ УКРАЇНИ

<http://doi.org/>

© Харчук В. Ю., Зіміна Є. С., 2020

Питання гармонійного розвитку стали предметом гострих дискусій та обговорень протягом кількох останніх десятиліть, основна увага яких зосереджується на важливості формування політик, процедур та цілей для імплементації ініціатив такого розвитку. Останнє уможливується за умов наявності передумов та потенціалу на макрорівні. З огляду на зазначене, актуалізується необхідність у дослідженні окресленої проблематики на вітчизняному просторі. Основна мета статті – виявлення основних передумов гармонійного розвитку української економіки на підставі аналізуванні макроекономічних індикаторів на кінець 2019 р. З метою досягнення поставленої цілі виокремлено такі завдання. По-перше, визначити й окреслити фактори, що сприяють розвитку української економіки чи стримують його. По-друге, використовуючи теорію Елкінгтона про існування трьох проєкцій гармонійного розвитку, проаналізувати макроекономічні показники національної економіки на кінець 2019 р. Основна увага зосереджується, власне, на економічній та соціальній проєкціях гармонійного розвитку, оскільки, на думку авторів, саме макроіндикатори цих сфер найбільшою мірою свідчать про існування передумов для упровадження ініціатив такого розвитку. В роботі проаналізовано такі макроекономічні показники: валовий внутрішній продукт, розмір зовнішньої торгівлі, рівень інфляції, безробіття та корупції. Окремо досліджено соціальну складову, яка впливає на гармонійний розвиток економіки, а саме доступ до освіти та відповідно рівень освіченості населення. Крім цього, проаналізовано обсяги інвестицій в країну і найпривабливіші галузі для іноземних інвесторів. На основі аналізування динаміки зазначених показників на кінець 2019 р. здійснено узагальнення про наявність у вітчизняній економіці передумов забезпечення її гармонійному розвитку. По-третє, в статті визначено галузі, які можуть зробити найбільший внесок у розвиток української економіки. За результатами аналізування індикаторів стану та розвитку галузей економіки виокремлено три сфери бізнесу, які, на думку авторів, володіють найбільшим потенціалом для гармонійний розвитку, а саме: підприємства малого і середнього бізнесу, галузь інформаційних технологій та аграрний сектор. Саме окреслені види підприємницької діяльності можуть стати вихідними пунктами для якісної перебудови національної економіки, що в підсумку приведе до гармонізації економічного, соціального аспектів та турботливого ставлення до навколишнього природного середовища. Результати проведеного дослідження будуть цікавими як для дослідників, так і для практиків, а саме для розуміння сучасних можливостей України щодо імплементації цілей, політики та стратегій забезпечення гармонійного розвитку та для поступу наукової дискусії на предмет трактування та упровадження концепції гармонійного розвитку на національному рівні.

Ключові слова: гармонійний розвиток; передумови; аспекти; макроекономічні індикатори; малі та середні підприємства; агробізнес; ІТ.

Problem statement

Sustainable development becomes an object of heated debates for the last decade. Especially, when it comes to national economies, in particular to supporting and maintaining of the existing clear circumstances for sustainable development. It is very important to identify and analyze the current conditions of the Ukrainian economy, in order to distinguish prerequisites for its harmonious development. These prerequisites build confidence and demonstrate the benefits of the state in the international arena, which in turn helps to ensure effective development, overcoming the disadvantages that stop potential investors from contributing to the development of the country.

Analysis of recent research and publications

Sustainable development (SD) concept has caused a significant shift in the attitude towards usage of natural resources, reacting to social demands and maintaining business performance. World Commission on Environment and Development offered the notion of “sustainable development” in 1987 [1]. The definition stressed the necessity of harmonizing the needs of the current generation as well as needs that will occur in the future. These circumstances lead to increased scientific attention to the given topic. One of the biggest contributions to SD theory made by John Elkington [2, 3]. The scientist offered a triple-bottom-line approach (TBL) which acknowledge sustainable development within three main dimensions. According to this approach, sustainable development considers as harmonizing economic prosperity, environmental integrity and social equality [2]. Hill and Bowen (1997) [5] develop TBL and offered “four pillars” for SD – social, economic, biophysical and technical dimensions for sustainable development. An interesting insight into a given issue is offered by Giddings et al. (2002) [4] who states that the definition of “sustainable development” might be interpreted in myriad ways, depending on philosophical believes and particular situations. The authors agree with different approaches for determining such phenomenon as “sustainable development”, but in order to analyze the Ukrainian economy on availability prerequisites for sustainable development, we rely on the TBL idea.

Aim of the article

The purpose of this paper is to analyze macroeconomic indicators in order to identify prerequisites for the sustainable development of the Ukrainian economy, based on the TBL approach. Research is conducted mostly on economic and social dimensions analysis with a view to understanding roots and tendencies that reflect the current Ukrainian situation.

Research objectives

Firstly, to outline the factors that expose the prerequisites for the harmonious development of the Ukrainian economy. Secondly, using Elkington’s theory regarding the existence of three dimensions of harmonious development and based on analysis of statistical indicators of the national economy, make a conclusion about the availability of prerequisites for such development. Finally, to identify the spheres that can make the greatest contribution to the development of the Ukrainian economy.

Main part (Results)

As of the end of 2019, Ukraine is demonstrating the following positive factors that have contributed to its economic growth:

- Strengthening of the Ukrainian currency [6];
- Reducing inflation [7];
- Continued cooperation with the IMF [8].

These factors are the starting points of sustainable development. At the same time few factors restrain such development in particular:

- Usage of borrowed securities – domestic government loan bonds, as the main source for supporting national currency;

- Huge amount domestic government loan bonds (both in UAH and EUR) [9];
- High interest rate of domestic government loan bonds [10];
- Distrust of the judicial system;
- Corruption [11];
- Emigration of labor [12].

Nevertheless, the Ukrainian economy is growing for the last 12 quarters until the end of 2019. Moreover, positive economic trends and major signs of macroeconomic stability continued. Figure 1 represents the main indicators that determine the current situation of the Ukrainian economy and in general have an impact on its development.

Overview	Last	Reference	Previous
GDP Growth Rate (%)	0.1	Dec/19	0.6
GDP Annual Growth Rate (%)	1.5	Dec/19	4.1
Unemployment Rate (%)	7.3	Sep/19	7.8
Inflation Rate (%)	3.2	Jan/20	4.1
Interest Rate (%)	11	Jan/20	13.5
Balance of Trade (USD Million)	-1313	Dec/19	-923
Current Account (USD Million)	590	Jan/20	2395
Current Account to GDP (%)	-3.6	Dec/18	-2.2
Government Debt to GDP (%)	60.9	Dec/18	71.8
Government Budget (% of GDP)	-1.9	Dec/18	-1.4

Figure 1. Indicators that determine the current situation of the Ukrainian economy [13]

Ukraine is considered one of the largest countries in Europe, however, it has one of the lowest GDP per capita. Comparing this indicator to the neighboring countries (Poland and the Russian Federation) and the United Kingdom, it can be seen that Ukraine is far behind (Figure 2). Even though GDP growth picked up by 3.5 % in 2019 (concerning 3.3 % in 2018), the same year investment growth remained weak [14]. This is due to the unstable economic situation, the conflict in eastern Ukraine and the slow adoption of reforms.



Figure 2. Dynamics of GDP per capita (current US\$) – Ukraine, Russia Federation, United Kingdom, Poland in 2007–2018, USD [15]

The next indicator, which reflects the prerequisites of the economic dimension of sustainable development, is core consumer prices, which increased 3.30 percent in January of 2020 over the same month in the previous year. At present, consumer inflation, in addition to the seasonal factor (food prices), has also been influenced by the administrative component of pricing (tariffs for individual utilities, transport, and communications have increased) [16].

According to the Ministry of Economic Development [17], the Nominal Average Monthly Salary of Full-time Employees in January–February 2019 increased by 20 % to UAH 9,326 (in January–February 2018 – UAH 7,770), with the wage adjusted to the Consumer Price Index – by 10,1 %. The dynamics of foreign trade, in general, was positive due to the rise in prices on certain markets of Ukrainian exports in world markets. Thus, in January-February 2019 the value of exports of goods and services (according to the National Bank [18]) increased by 9.4 %.

Also, there was an upward trend in foreign trade volumes to EU countries: the value of exports of goods to EU countries increased by 6.1 % (share in the total volume of exports of goods – 39 %). Imports of goods and services (by the National Bank) increased by 2 % compared to January 2018. At the same time, the value of imports of goods from EU countries increased by 15.9 % (share in the total volume of imports of goods – 38.5 %) [19].

The positive dynamic of highlighted indicators led to the situation, that Ukraine is ranked 64 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings. The rank of Ukraine improved to 64 in 2019 from 71 in 2018 (Figure 3) [20].

As judged by data, provided in Doing Business 2019 rating [21], Ukraine has risen up by +5 points and took 71st place among 190 countries. The country has shown the largest growth in such categories as taxation (increase by 110 points, 54th place), international trade (+70 points, 78th place) and protection of investor's rights (+56 points, 72nd place).

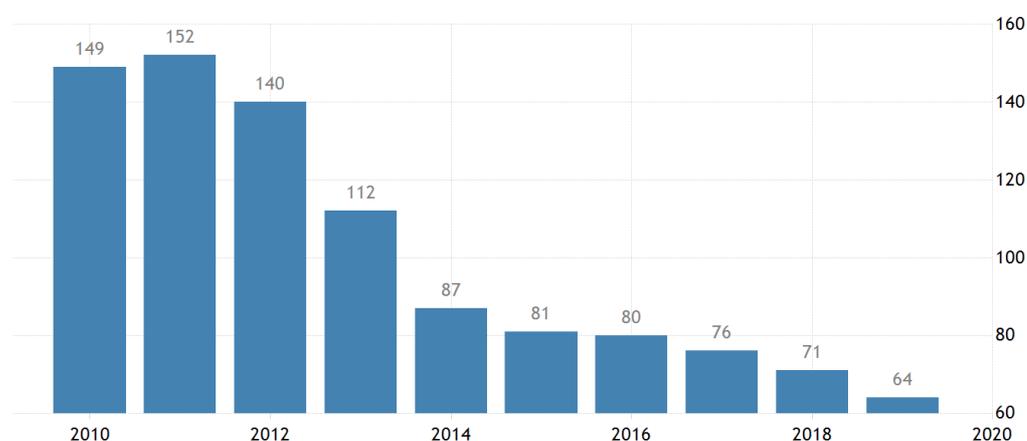


Figure 3. Ease of doing business in Ukraine during 2010–2019 [20]

Therefore, the change of rating was associated with the beginning of a new loan program of the International Monetary Fund. Besides, Ukraine ranked 81st place among 137 countries in the Global Competitiveness Index rating and raised its position in terms of technology adaptation (from 81st to 77th place) and infrastructure level (from 78th to 57th place) [22].

Notwithstanding, the social dimension also contributes a lot to maintaining Ukrainian sustainable development. Education is one of the strengths and advantages of Ukraine. There are 652 higher education institutions in Ukraine with 1.5 million students graduated annually [23]. According to this, almost 70 % of the population have secondary or higher education. Ukraine is one of the countries with the highest literacy rate reaching 100 %. Its adult literacy rate has increased from 99.4 % in 2001 to 99.8 % in 2015 [24]. The major portion of universities is public and some of the entrants have access to free education. The government is also

helping people in need and with a disability to get knowledge without paying. These are the main advantages of the Ukrainian education system, which would help the country to rise economically.

An indicator of the Unemployment Rate also shows the stability of the economy. In the past few years, this indicator had jumping dynamic, due to particular economic and political obstacles. It decreased to 7.30 percent in the third quarter of 2019 from 7.80 percent in the second quarter of 2019 (Figure 4) [25].

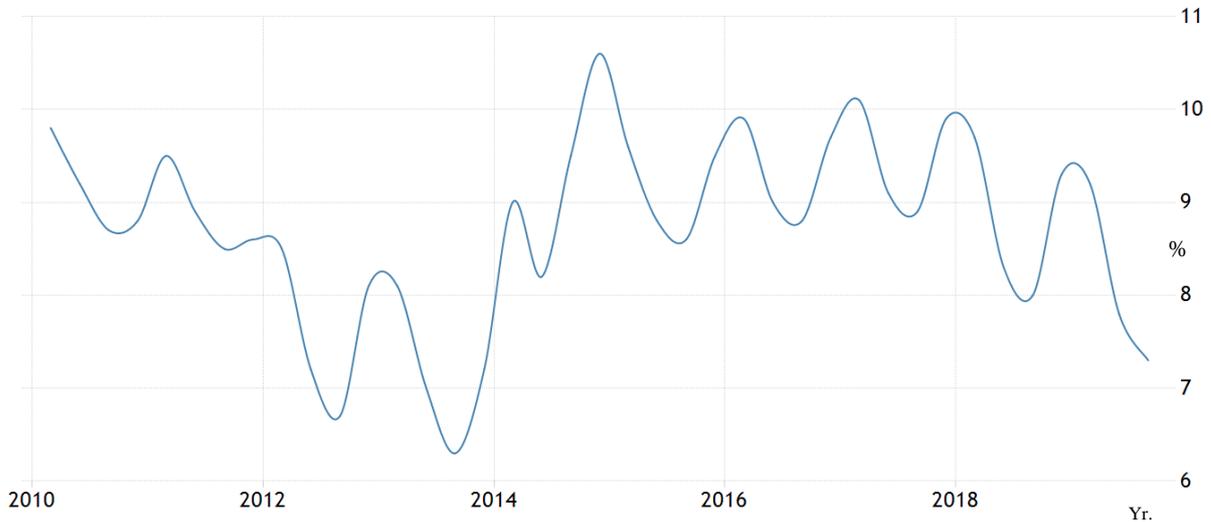


Figure 4. The unemployment rate during 2010–2019, % [25]

As stated above, the unemployment rate decreases, so the SME sector develops and as a result and it pushes economic development is increasing of investment. The largest investors in the Ukrainian economy in 2019 (as of October 1) [26]: Cyprus – \$ 761 million, the Netherlands – \$ 438 million, the Russian Federation – \$ 220 million, Switzerland – \$ 133 million, Germany – \$ 89.9 million. In total, the State Statistics Service has accrued \$ 34.7 billion in foreign investments in Ukraine's economy. 78 % of them (\$ 27.2 billion) goes to EU countries. Among the top spheres where foreigners invest in Ukraine [12]: industry – 32.9 %, wholesale and retail trade – 16.2 %, financial and insurance activities – 12.9 %, real estate operations – 12.9 %, professional, scientific and technical activity – 6.5 %. The number and dynamic of direct foreign investment in the Ukrainian economy represented in Figure 5.



Figure 5. Ukraine Foreign Direct Investment during 2010–2019, USD Bn [27]

A significant decrease in the investment observed in 2014, due to the political situation in the country. However, after this amount increases every year and shows a positive dynamic. However, the correlation between the amount of investment also depends on changes in the discount rate. The National Bank's official discount rate is one of the main instruments by which it sets the benchmark for the financial market. The rate affects the cost of loans that the National Bank provides to commercial banks. The higher it is, the more expensive it is for banks to refinance loans and bank loans for borrowers, the less they make loans.

As inflation and risks of macroeconomic instability in the country intensify, the central bank must take steps to stabilize it. Then the NBU raises the discount rate and pursues a rigid monetary policy. This means that lending is already riskier, so the cost of money in the economy is rising. As inflation decreases and the macroeconomic situation improves, the interest rate is usually reduced and this leads to a gradual fall in deposits and loans.

According to the ICU Financial Group, both nominal and real rates in Ukraine are among the highest in the world. The real rate remains one of the highest in the world along with Egypt and is equal to 13,5 % [28].

As judged by giving an analysis of the current situation of the main prerequisites of sustainable development is hard to state. However, there are sectors that represent a growth dynamically, as a result, these areas might be triggers for sustainable development of the national economy. The agricultural sector continues to hold the position of the most attractive sector for investment. This is partly since Ukraine's exports are displacing the Russian market in Europe. Currently, investments in the agricultural sector are focused more on the acquisition of assets, corporate rights, leased land rights. However, the practical impossibility of acquiring agricultural land into private property is repelled by most foreign investors, as it is a great risk according to the political situation in the country.

Manufacturing is another attractive area in Ukraine for foreign and domestic investors. In Ukrainian manufacturing, investors are attracted by the cheap labor and geographical proximity to the European market. Today, investors pay much attention to the manufacturing industry. Out of \$0.8 billion investment made in early 2019, 60 % went to the mining industry, glass manufacturing, and processing, proving interested in these sectors [28].

The third attractive industry for investors is the IT sector, which has grown incredibly fast over the last 8 years. Last year, Ukraine ranked 31st in the global ranking of startup ecosystems. Kyiv ranked 34th among thousands of cities in the StartupBlink ranking, rising 29 positions in 2 years. In other words, the capital has overtaken the startup ecosystems of cities such as Helsinki, Munich, Shenzhen, etc. in a year [29]. Furthermore, the main investment attractive sectors include manufacturing, retail, energy and defense and aerospace (Figure 6).

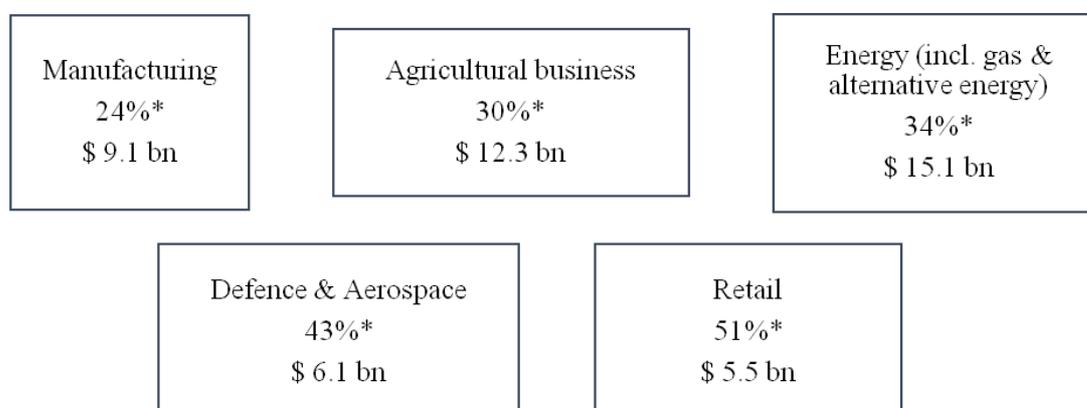


Figure 6. Five Sectors Driving Growth [30]
 *Growth of capital investments (3-year average, %)

Another driving force for the development of the Ukrainian economy is small and medium-sized enterprises (SME). All highlighted factors had an impact on the entrepreneurship environment and development of SMEs within the country. The predominant part of Ukrainian firms is SMEs, which represent almost 99 % of all enterprises and account for 61 % of the total business employment. According to the OECD (2018a) overview [31], of the business sector in Ukraine, 89 % of all enterprises operate in the services sector and generate 58 % of GDP. Developing SMEs plays a significant role in increasing the GDP of the country and the employment rate. The level of unemployment already decreased from 9.9 % in 2018 to 7.8 % in 2019 and achieved the lowest level since 2013 [32]. However, this fact can be connected to the migration of the unemployed labor force abroad.

As previously stated, the major part of Ukrainian firms is SMEs. Their number increases annually, nevertheless, 2014 was a year of changes. Political and economic instability, the Revolution of Dignity and the beginning of the war in the eastern part of the country undermined the business climate and public trust. These problems become crucial for almost 200,000 firms between 2014 and 2017, as demonstrated in table [33].

Recent trends of the number of enterprises, business economy during 2013–2017 yr. [33]

Types of enterprises	2013	2014	2015	2016	2017
Micro enterprises	1,444,100	1,646,691	1,687,910	1,586,480	1,506,916
Micro enterprises	66,122	53,825	45,632	48,258	52,125
Micro enterprises	11,774	10,070	9,497	9,412	9,500
Micro enterprises	2,965	2,564	2,384	2,316	2,347
Total	1,524,916	1,713,150	1,745,423	1,646,466	1,570,888

In 2017, the majority of enterprises were located in Kyiv, Kharkiv, Dnipro, Odesa, and Lviv (Figure 7) [34]. They are the largest and most populated in Ukraine, therefore more attractive for startups. Moreover, the largest amount of working force is located in those cities. For this reason, the government should create projects and activities to attract investors and consequently improve the economic situation of these cities.

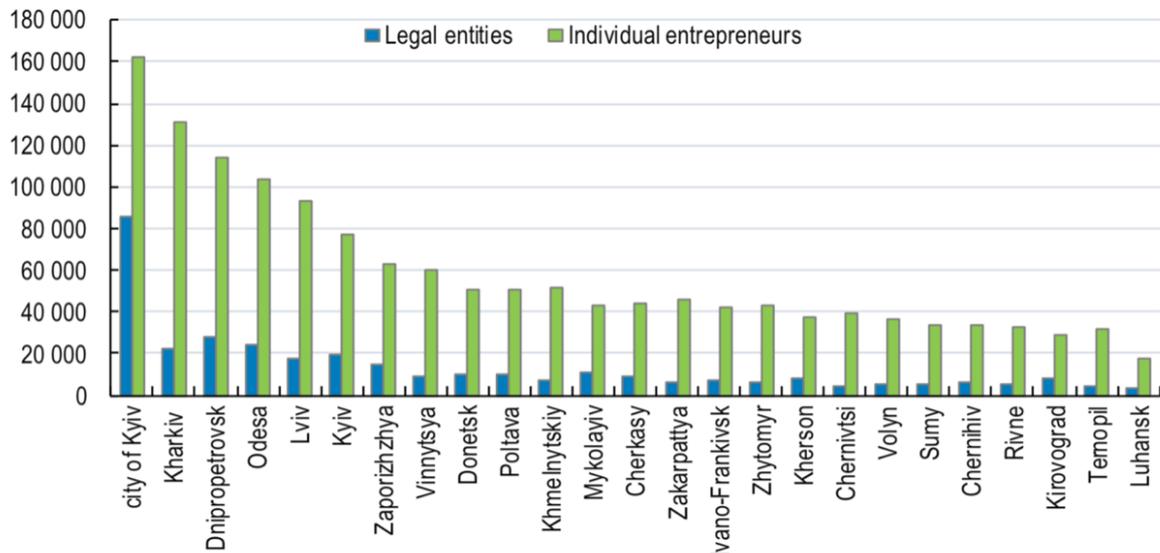


Figure 7. Number of enterprises by region in 2017 [34]

The fastest developing and one of the most invested sectors in Ukraine is IT. Since many well-educated people are involved in IT, international companies are encouraged to locate their R&D offices within the country. An example is Samsung R&D Institute Ukraine (SRK) that was established in Kyiv in 2009. The company is working on the study of intelligence security, computer vision, and context-aware

intelligent service. Moreover, it collaborates with local universities and schools intending to create high-level education activities [35]. As well as attracting foreign partnerships, Ukraine independently developed world-range products, such as Grammarly, PetCube, and Readle [36]. Increasing the number of successful products will lead to attracting investments into the country.

In total, there are 405 startups, 21 co-working spaces and 15 accelerators in Ukraine. As figure 5 points, the majority of startups are located in the capital of Ukraine – Kyiv. High population, many international companies, higher security levels, and bigger opportunities contributed to making the city enter into the top 50 cities with high impact startups around the world [29]. One of the biggest projects is “UNIT.City” – the first Ukrainian innovation park established by the investment group “UFUTURE” and “UNIT.City” in 2017. It is predicted to become the largest innovation hub in Central and Eastern Europe in 2020, which will include 5 coworking space, 10 accelerators, 8 laboratories, and 5 investment funds [37]. This is a direct opportunity for different startups, SMEs and corporations to invest in Ukraine and to become a part of the creative economy and technology development environment.

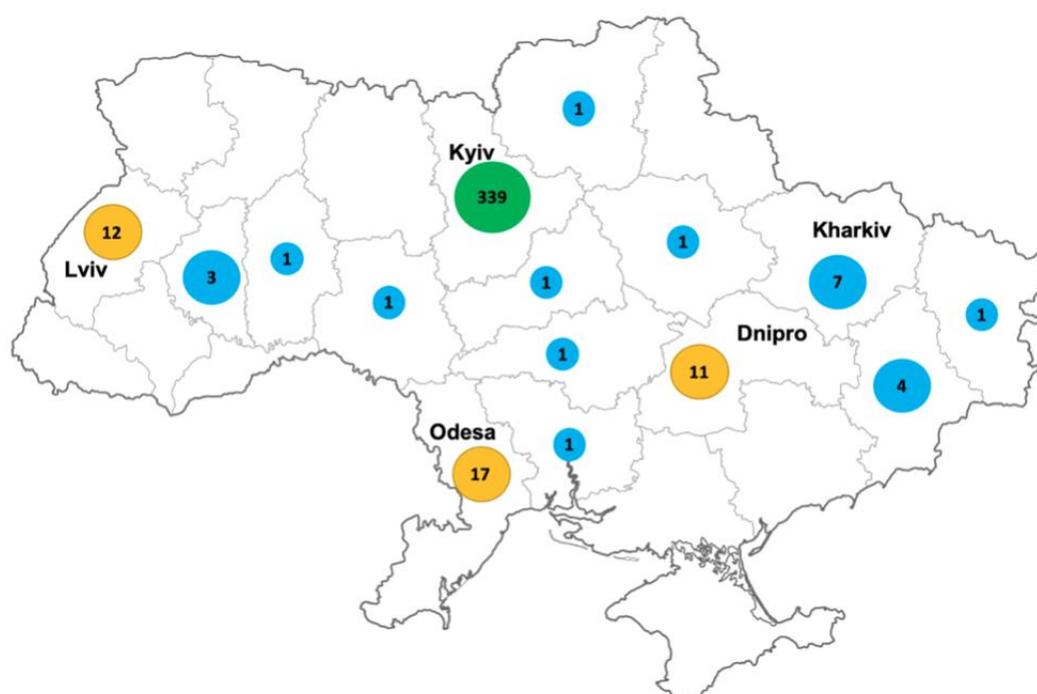


Figure 8. Number of startups by region in 2019 [29]

The government is also involved in the attraction of investments into the country. In July 2019, the Prime Minister of Ukraine announced the launch of a national foundation named “Startup”. This will provide funds for \$15 million and will issue grants of \$25,000 and \$75,000 for startups development [38]. This campaign demonstrates that the government will support startups transparently and effectively and will enhance the country’s competitiveness. Moreover, in September, Ukraine became a part of the Global Network of Accelerator Labs [39]. This partnership will help to identify local innovations and accelerate the development of the country. Slow, but noticeable government step together with the growth of networking spaces and attraction of large international companies will increase public confidence and entrepreneurial development.

Despite the positive aspects which influenced the development of the IT sector and SMEs, entrepreneurial ventures are still facing a variety of problems. The significant issue is the lack of qualified employees since Ukraine has obtained a visa-free regime. Many young people moved abroad, because of a higher quality of life and new opportunities [40]. Furthermore, corruption is a crucial problem too. According to the Corruption Perceptions Index reported by Transparency International (2018), Ukraine

ranked 120th among 180 countries with a score of 32 (zero – highly corrupted, 100 – very clean). All the underlined problems encourage many SMEs to move their ideas abroad, where it much easier to start the business (for example Georgia or Estonia) [41].

The next rapidly developing field is agriculture, which is one of the most important branches of the economy. The agriculturally used areas take 69,1 % of Ukrainian territory. More than half of all planted areas consist of cereal crops – wheat, corn, rye, oat, barley, buckwheat, etc. Furthermore, the main specialization field of Ukrainian agriculture is plant production, particular production of industrial and feed crops: sugar beets (63 % of sugar beets in CIS is cultivated here (the 1st place)) and sunflowers (Ukraine takes the 2nd place in CIS according to its harvest). Ukraine is the biggest region of essential oil plant production: roses, lavenders, sages, etc. in CIS. Other agricultural fields, such as gardening, vegetable, melon, and wine-growing are also well developed in Ukraine. Nowadays the agricultural industry is the base of the Ukrainian economy and provides 12 % GDP [42].

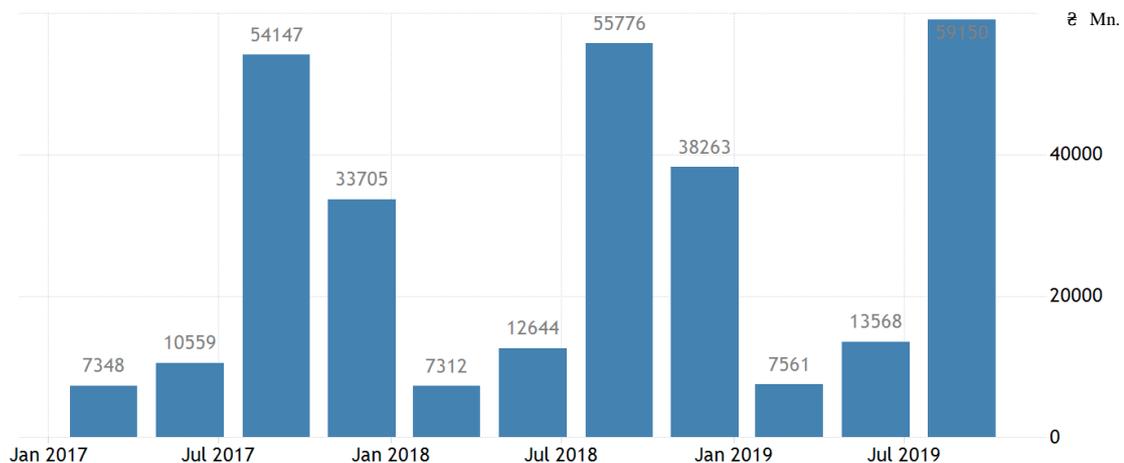


Figure 9. Ukraine GDP from agriculture during Jan. 2017 – Jul. 2019, UAH, Mn [43]

Annual European Commission data [41] released in late June confirmed that Ukraine is now the third-largest exporter of agricultural products to the EU. Ukrainian food exports to the European Union rose by 14 % during the one year ending on 1 May 2019 to reach a new high of EUR 6.3 billion [44]. This increase allowed Ukraine to climb from fifth to the third position among the EU's primary foodstuffs partners, highlighting the free trade benefits of the 2014 EU–Ukraine Association Agreement and helping the country to reclaim its reputation as the breadbasket of Europe.

According to European Commission figures, the United States is currently the number one agricultural exporter to the European Union with an annual volume of EUR 12.9 billion. America is followed by Brazil (EUR 11.7 billion), with Ukraine (EUR 6.3 billion) ahead of China (EUR 5.9 billion) in the number three spot [44]. Nor is Europe the only place where Ukrainian foodstuffs are gaining market share. Over the past five years, the geographical distribution of Ukraine's agricultural exports has expanded significantly, as the country's agribusinesses have looked beyond the traditional markets of the former Soviet Union and sought to expand their presence in Asia, Africa and beyond.

The geographical scope of Ukraine's agricultural exports in early 2019 highlights the country's broadening international horizons. China was Ukraine's top market, accounting for 8.9 % of total agricultural exports worth USD 795 million. India was in second place (8.3 %, USD 741 million), followed by Egypt (8.2 %, USD 737 million), Turkey (7.6 %, USD 684 million) and the Netherlands (7.1 %, USD 641 million). Other major EU markets included Spain (USD 503 million), Italy (USD 333 million), Poland (USD 301 million) and Germany (USD 250 million) [44].

At the end of 2019, 42 % of Ukraine's exports are agricultural products [44]. This demonstrates how important our country is in the international context, and it is also easy to say that as of today, many

foreign investments are being made in this field, especially in crop production and animal households. For instance, Continental Agro Holding, which has more than 250,000 hectares of land at its disposal, making them one of the major players in the market.

Investments in the Ukrainian economy, namely in the agrarian sector come from the United Arab Emirates. Moreover, one of the main players in the market are representatives from Denmark, for them a significant factor of existence in our market is more animal husbandry. For example, the following companies “Good Valley” and “Halychyna-West”, whose investments originate in Denmark, introduce their technologies and provide transparent operations in their businesses and serve as an example of imitation for such national economies. The reason for investing in good natural resources and huge areas for doing business, low rent per hectare of land and favorable conditions for the purchase of equipment, seeds and more.

Land reform, which has been announced, but the conditions and process have not yet been demonstrated, hinders future investments and puts potential investors in a state of shock as they cannot fully invest without understanding the market situation. Creating a clear plan and highlighting it for citizens and entrepreneurs will ensure significant growth of the Ukrainian economy because when selling land, the state receives taxes paid by the customers.

Nowadays the Land Bank of Ukraine is 42 million hectares and ranks 20th in the world [45]. One of the conditions for opening the land market will be a fixed area, in which one person (entrepreneur) will have the right to own. This will allow increasing the number of farms and people involved in agriculture. As a result, tax channels are being increased, export operations are being carried out, and the purchase of Ukrainian agricultural machinery is increasing. This will strengthen the economic situation in the country, but it will negatively affect potential investors.

As the Land Reform does not provide for the possibility of buying land for foreign residents. This, in turn, is negative, as there will be a reduction in foreign investment in the agricultural sector of Ukraine. Also, the experience of foreign companies has a positive effect on doing business in Ukraine and brings it out of the shadows, which is positive for both the economy and the business itself [46].

The major factor restricting agricultural development is access to credit and working capital. Domestic loans are expensive, and Ukraine's challenging business climate prevents local companies from attracting cheaper international funds. Therefore, the competition among suppliers of agricultural machinery in Ukraine is not only about quality, but also about a supplier's financial terms. A major trend in the agricultural banking industry is operational capital financing for the purchase of plant protection products, seeds, fertilizers, and fuels. Bankers are more willing to offer credit to agricultural commodity producers of grains, cereals, and oilseeds [47].

Conclusion

The analysis above given statistic data clearly shows that Ukraine has a strong potential for sustainable development as for the end of 2019. The main prerequisites for this development are the strengthening and growth of the Ukrainian economy, stabilizing the national currency and continued cooperation with the IMF. These preliminary steps enhance the sustainable development of the most potential and important industries of the economy.

There are three main sectors for sustainable development of the Ukrainian economy: development of the SMEs, startups in the IT sector and the agricultural sector. The inclination for growth of the Ukrainian economy is the labor force, social prerequisites, literacy level of population, investing resources and legislation. Nevertheless, there are few pitfalls for sustainable development: inflation, ease of doing business and corruption index, which prevent investors from investing in Ukraine.

The evaluation of the Ukrainian entrepreneurial environment demonstrates that the role of SMEs in the economy of the country is crucial. Also, Ukraine is a major player in the international market and influences the pricing of certain products, which proves the importance and potential of the agricultural market in our country.

As far as SMEs generate a significant part of GDP in different sectors, the government should focus on improving the environment where enterprises operate and encourage their advancement. High educated

population, a large amount of young and initiative people, an opportunity to cooperate with other countries and share experiences give a possibility to Ukraine to prosper and to be competitive among other successful countries. Furthermore, there is a need to focus on keeping young talents inside the country through higher involvement and active cooperation with international organizations. This allows to bring, share and implement new knowledge within the country.

Major limitation factors for sustainable development of the Ukrainian economy can be taken political instability, financially dependent on international organizations and weak regulation base for SMEs and startups.

To sum up, based on macroeconomic indicators analysis until the end of 2019, we may state that Ukraine had minor conditions and prerequisites for sustainable development. However, the beginning of 2020 brings new challenges and obstacles that might alter the whole situation and rise goals that are more essential. The findings of the study would be useful for both researchers and practitioners in the profound understanding of current Ukrainian possibilities for applying SD goals, policies, and strategies and to develop scientific discussion regarding SD implementation at the national level.

Prospects for further research. Given analysis describes frames, shortages and possibilities for Ukrainian sustainable development at the end of 2019. The future research goal is to analyze key factors, which has the most significant impact on such a development.

References

1. Brundland G. H. (1987) *Our Common Future: The World Commission on Environment and Development*; Oxford University Press: Oxford, UK.
2. Elkington J. B. (1997). *Cannibals With Forks: The Triple Bottom Line of 21st Century Business*. Oxford: Capstone Publishing.
3. Elkington J. B. (2001). *The Chrysalis Economy: How Citizen CEOs and Corporations Can Fuse Values and Value Creation*. Oxford: Capstone/John Wiley & Sons.
4. Giddings B., Hopwood B. and O'Brien G. (2002). Environment, economy and society: fitting them together into sustainable development, *Sustainable Development*, Vol. 10. No. 4, 187–196.
5. Hill R. C. and Bowen P. A. (1997). Sustainable construction: principles and a framework for attainment, *Construction Management and Economics*, Vol. 15 No. 3, 223–239.
6. Trading Economics (2020). Ukrainian Hryvnia. Retrieved from: <https://tradingeconomics.com/ukraine/currency> (Accessed: 9 January 2020).
7. The World Bank (2020). Inflation, consumer prices (annual %) – Ukraine. Retrieved from: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?locations=UA> (Accessed: 11 January 2020).
8. IMF (2019). Ukraine. Retrieved from: <https://www.imf.org/en/Countries/UKR> (Accessed: 11 January 2020).
9. MOF (2019). Domestic Bonds. Retrieved from: <https://mof.gov.ua/en/ovdp> (Accessed: 17 December 2020).
10. The World Bank (2019). Ukraine: Building the domestic debt market for local currency issuances. Retrieved from: <https://www.worldbank.org/en/news/feature/2019/11/04/ukraine-building-the-domestic-debt-market-for-local-currency-issuances> (Accessed: 24 December 2020).
11. Trading Economics (2020). Ukraine Corruption Index. Retrieved from: <https://tradingeconomics.com/ukraine/corruption-index> (Accessed: 14 December 2020).
12. IOM (2019). Ukraine. Retrieved from: <https://www.iom.int/countries/ukraine> (Accessed: 11 January 2020).
13. Trading Economics (2019). Ukraine – economic indicators. Retrieved from: <https://tradingeconomics.com/ukraine/indicators> (Accessed: 6 January 2020).
14. The World Bank Ukraine (2019a). Overview economy of Ukraine 2019. Retrieved from: <https://www.worldbank.org/en/country/ukraine/overview#3> (Accessed: 29 October 2019).
15. The World Bank Ukraine (2019b). GDP per capita (current US\$) – Ukraine, Russian Federation, United Kingdom, Poland 2019. Retrieved from: <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2018&locations=UA-RU-GB-PL&start=2008> (Accessed: 29 October 2019).
16. Trading Economics (2019). Inflation. Retrieved from: <https://tradingeconomics.com/ukraine/core-inflation-rate> (Accessed: 29 December 2019).

17. Ukrinform (2019). Average monthly salary in Ukraine. Retrieved from: <https://www.ukrinform.net/rubric-economy/2696059-average-monthly-salary-in-ukraine-reaches-381-economic-development-ministry.html> (Accessed: 29 December 2019).
18. National bank of Ukraine (2020). Value of exports of goods and services. Retrieved from: <https://bank.gov.ua/> (Accessed: 6 January 2020).
19. Ukrinform (2019). Ukraine – 2019. Retrieved from: <https://www.ukrinform.ua/rubric-economy/2680599-ukraina2019-ekonomichnij-rozvitok-zagalom-pozitivnij.html> (Accessed: 19 January 2020).
20. Trading Economics (2019). Ease of doing business in Ukraine. Retrieved from: <https://tradingeconomics.com/ukraine/ease-of-doing-business> (Accessed: 10 January 2020).
21. Doing business (2019). Training for Reform. Retrieved from: https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (Accessed: 10 January 2020).
22. Ministry for Development of Economy, Trade, and Agriculture of Ukraine (2019). Investment activities in Ukraine. Retrieved from: <http://www.me.gov.ua/Documents/Detail?lang=en-GB&id=14fdd5c9-70b6-4f46-b2f2-842dfc4a7b3f&title=InvestmentActivityInUkraine> (Accessed: 19 January 2020).
23. Ukrstat.org (2018). Institutions of tertiary education. Retrieved from: https://ukrstat.org/en/operativ/operativ2005/osv_rik/osv_e/vuz_%20rik_e.htm (Accessed: 29 October 2019).
24. UaTribune (2019). Literacy and education in Ukraine. Retrieved from: <https://uatribune.com/en/literacy-and-education-in-ukraine/>.
25. Trading Economics (2019). Ukraine Unemployment rate. Retrieved from: <https://tradingeconomics.com/ukraine/unemployment-rate>.
26. Epravda (2019a). How discounting will affect personal finances. Retrieved from: <https://www.epravda.com.ua/rus/publications/2019/12/13/654827/> (Accessed: 18 January 2020)
27. Trading Economics (2019). Ukraine Foreign Direct Investment Retrieved from: <https://tradingeconomics.com/ukraine/foreign-direct-investment> (Accessed: 20 January 2020)
28. Epravda (2019). The State Statistics Committee published the rating of the largest investors in Ukraine. Retrieved from: <https://www.epravda.com.ua/news/2019/11/29/654294/> (Accessed: 23 January 2020).
29. Startup Blink (2019). Startup Ecosystem Ranking Report 2019. Retrieved from: <https://report.startupblink.com/> (Accessed: 21 October 2019).
30. Kyivpost (2018). Ukraine`s Most Promising Sectors for Investors. Retrieved from: <https://labs.kyivpost.com/ukraine-investment/>.
31. The OECD (2018a). Overview of the business sector in Ukraine, p. 14. Retrieved from: <https://www.oecd.org/eurasia/competitiveness-programme/eastern-partners/Compendium-Entreprise-Statistics-Ukraine-2018-EN.pdf> (Accessed: 21 October 2019).
32. Trading Economics (2019). Ukraine Unemployment Rate. Retrieved from: <https://tradingeconomics.com/ukraine/unemployment-rate> (Accessed: 5 November 2019).
33. The OECD (2018b). Number of enterprises, p. 16. Retrieved from: <https://www.oecd.org/eurasia/competitiveness-programme/eastern-partners/Compendium-Entreprise-Statistics-Ukraine-2018-EN.pdf> (Accessed: 21 October 2019).
34. The OECD (2018c). Regional statistics on enterprises in 2017, p. 30. Retrieved from: <https://www.oecd.org/eurasia/competitiveness-programme/eastern-partners/Compendium-Entreprise-Statistics-Ukraine-2018-EN.pdf> (Accessed: 21 October 2019).
35. Samsung Research (2019). Samsung R&D Institute Ukraine. Retrieved from: <https://research.samsung.com/srk> (Accessed: 16 October 2019).
36. Medium (2018). 16 Unicorn Startups with R&D Offices in Ukraine. Retrieved from: <https://medium.com/x1group/16-unicorn-startups-with-r-d-offices-in-ukraine-6243cd0ddd61> (Accessed: 16 October 2019).
37. Unit.city (2019). The first Ukrainian innovation park – the gateway to UA tech scene. Retrieved from: <https://unit.city/en/home/> (Accessed: 16 October 2019).
38. BioUkraine (2019). The Ukrainian government launches the National Startup Fund. Retrieved from: <https://bioukraine.org/news/ukrainian-government-launches-national-startup-fund/>. (Accessed: 21 October 2019).
39. UNDP (2019). Ukraine joins the Global Network of Accelerator Labs. Retrieved from: https://www.ua.undp.org/content/ukraine/en/home/presscenter/pressreleases/2019/launch_of_accelerator_lab.html (Accessed: 16 October 2019).
40. Bloomberg (2019). Eastern Europe Feeds on a Shrinking Ukraine. Retrieved from: <https://www.bloomberg.com/opinion/articles/2019-02-20/eastern-europe-feeds-on-a-shrinking-ukraine> (Accessed: 16 October 2019).

41. Daria Prokaza (2019). What to expect and fear for Ukrainian business in 2019? Retrieved from: <https://hromadske.ua/posts/chogo-chekati-ta-boyatisya-ukrayinskomu-biznesu-u-2019-roci>. (Accessed: 15 October 2019).
42. Tema 2000 Ltd (2018). Agriculture in Ukraine. Retrieved from: <http://tema2000.com.ua/ukraine-in-detail/agriculture-in-ukraine.html>. (Accessed: 14 January 2020).
43. Trading Economics (2020). Ukraine GDP from agriculture Retrieved from: <https://tradingeconomics.com/ukraine/gdp-from-agriculture>. Accessed: (14 January 2020).
44. Business Ukraine (2020). UKRAINE IS EMERGING AS THE WORLD'S NEXT AGRICULTURAL SUPERPOWER. Retrieved from: <http://bunews.com.ua/economy/item/ukraine-feeds-the-world>. Accessed: (7 January 2020).
45. Wikipedia (2020). Silskohospodarski uhiddia. Retrieved from: https://uk.wikipedia.org/wiki/Сільськогосподарські_угіддя Accessed: (9 January 2020).
46. Vox Ukraine (2019). Land Reform Strategy in Ukraine Until 2024. Retrieved from: <https://voxukraine.org/en/land-reform-strategy-in-ukraine-until-2020>. Accessed: (28 January 2020).
47. Export.gov (2020). Ukraine – agricultural sector. Retrieved from: <https://www.export.gov/article?id=Ukraine-Agricultural-Machinery>. Accessed: (4 January 2020).

V. Y. Kharchyk, Y. S. Zimina
Lviv Polytechnic National University

PREREQUISITES FOR THE SUSTAINABLE DEVELOPMENT OF THE UKRAINIAN ECONOMY

© *Kharchyk V. Y., Zimina Y. S., 2020*

The article describes the main prerequisites for the sustainable development of the Ukrainian economy, based on statistical data analysis. Firstly, the authors examine three dimensions of sustainable development (according to the TBL approach) based on official macroeconomic indicators. Secondly, the authors offer to consider three areas of the national economy as the main potential for sustainable development of the national economy. Based on it, the authors elaborate recommendations for boosting most attractive areas and harmonizing all aspects of sustainable development.

Key words: sustainable development; prerequisites; macroeconomic indicators; small and medium-sized enterprises (SME); agricultural sector; IT.