solve an optimization problem using linear programming methods. Such optimization methods do not bring quick additional profit. It serves as a necessary condition for stopping crisis phenomena, preparing conditions for further implementation of innovative activities.

Innovations in state and municipal management. Innovations in the field of management of the state and municipal apparatus are considered as the choice of the most promising approaches in all areas of activity to achieve the best results. They are considered as a departure from the established norms and stereotypes that have developed in solving the tasks assigned to the political system. Therefore, the introduction of innovations in this area requires complex preparatory work among managers at all levels of state and municipal government. The use of innovative technologies will make it possible to achieve the optimal solution to the problems of state and municipal administration. One of the ways to accelerate innovation processes is to improve the "Electronic Government" system. It allows effective solution of many problems of management at various levels of government.

Innovations in process control. The existing multiplier effects force modern manufacturers to constantly look for new approaches to management in the field of development and improvement of technical progress. As a result, innovations lead to an increase in labor productivity, and consequently, to an increase in the well-being of workers. In turn, this causes an increase in requirements and requests for new technologies, which entails a new round of technology development. The whole process requires constant innovation in technological progress management.

Therefore, due to many discoveries in the future, a progressive future awaits us in science, work and other areas of life. Innovation makes our life easier and that is why it's more relevant now than ever.

References

1. Поняття та види інновацій. Поняття інноваційної діяльності та її предмет - Бібліотека BukLib.net. Бібліотека BukLib.net. URL: https://buklib.net/books/37223/ (date of access: 04.05.2022).

- 2. Валентин Фречка научился делать бумагу из опавших листьев. Как изобретатель пытается сделать из этого бизнес Forbes.ua. Бізнес, мільярдери, новини, фінанси, інвестиції, компанії. URL: https://forbes.ua/ru/innovations/valentin-frechka-navchivsya-robiti-papir-z-opalogo-listya-yak-vinakhidnik-namagaetsya-zrobiti-z-tsogo-biznes-09072021-2022 (дата звернення: 04.05.2022).
- 3. Prokopishin L. Management Innovation and features of their use at Machine-building enterprises in modern conditions management. Lviv: Lviv Polytechnic National University, 2008.

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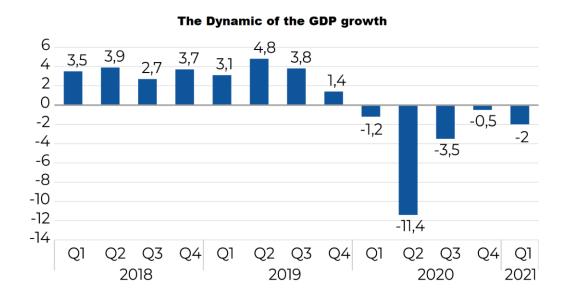
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GDP CHANGES DUE TO COVID-19 PANDEMIC IN UKRAINE

The COVID-19 pandemic shook the economy not only of Ukraine, but also of many countries with more stable positions. At the same time, the banking system proved to be quite stable in the face of the challenges associated with the pandemic - lockdowns, declining GDP growth and others.



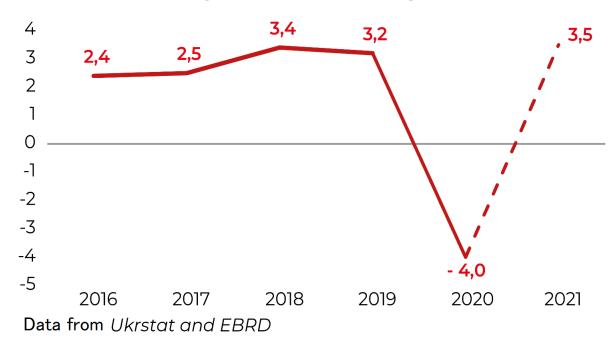
Prior to COVID-19 from the beginning of 2020, Ukraine was characterized by a stable macroeconomic situation, which was the result of successful macroeconomic management and cleansing in the banking system in previous years.

Despite this, it should be noted that the decline in annual GDP growth was observed before the pandemic. In particular, in the IV quarter of 2019 the increase was only about 1.4%, and in the first quarter of 2020 it was completely negative. Of course, in March 2020, the COVID-19 pandemic came to full force, but in January-February the economy began to slow down. However, in the fourth quarter of 2020, we hoped that the economy could return to positive balance in the near future.

It is worth noting that the position of Ukraine in 2020 was better than in other European countries, where the GDP indicator decreased to -10%.

However, at the beginning of this year, one could observe an increase in inflation due to rising food and oil prices. Already in April 2021 this indicator was fixed at the level of 8.4%. But, fortunately, the NBU acted in a timely and professional manner and raised the discount rate from 6% to 7.5%.

The Dynamic of the annual GDP growth



The financial situation in Ukraine, in contrast to the external economic situation, has worsened, which is logical on the whole. Most countries, including Ukraine, responded to the crisis by increasing spending, which led to an increase in the deficit to 5% of GDP against 2% of GDP a year earlier and, accordingly, an increase in public debt. If between 2016 and 2019 public debt was reduced from 80% to 50% of GDP, then last year this figure began to rise and reached 61%.

It is interesting to note that the banking system of Ukraine was characterized by high stability, moreover, during the crisis period it showed good performance. The level of capital adequacy leveled off last year, while the number of non-performing loans and bank loans decreased. This contributed to the fact that profit was fixed at a good level, although it was inferior to the indicator in 2019. And, very importantly, the banking system maintained high liquidity and a stable position, which means the ability to support the recovery of the Ukrainian economy.

We can note that in Ukraine not only domestic demand decreased, but also external demand, which had a negative impact on the country's economy, however, the terms of trade in this year act in the interests of Ukraine. Looking at commodity prices on the world market, iron ore prices have almost doubled, and prices for corn, soybeans and even wheat have also risen. This gives a certain advantage to Ukraine, since the above goods are an extremely important export product of the country.

In addition, Ukraine is eager to reform the land market in the near future, which will be an excellent opportunity for the country's agricultural sector.

References

1. Богов Д. Украина до COVID-19, во время и после: ключевые изменения в экономике и перспективы. URL: https://www.apk-inform.com/ru/exclusive/opinion/1520670 (Last accessed at 15.02.2022)