The burden in the social insurance system on business entities in Ukraine and the EU

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Abstract
The article considers the burden in the social insurance system on business entities of Ukraine and EU countries. A comparison of northern European and continental models of social insurance is made. The system of social insurance in terms of payment of contributions by economic entities of Ukraine and EU countries is analyzed and a comparative description is made. An analysis of the reform of insurance rates for business entities for compulsory state social insurance in Ukraine, as well as the dynamics of the single social contribution from businesses. The influence of the load in the social insurance system on economic entities on the level of shadowing of the state economy is substantiated. The article defines the dynamics of the integrated indicator of the level of the shadow economy in Ukraine and the growth / decrease of real GDP. The factors that contribute to the growth of the shadow economy in the EU countries are identified and the shadow sector in these countries is analyzed. An approach to reduce the burden in the social insurance system on business entities of Ukraine is proposed.

Keywords: burden, social insurance system, business entities, shadow economy, contribution to the obligatory state social insurance.

Introduction
Favorable conditions for doing business are one of the main tasks for both developing and developed countries. Wages and contributions to compulsory state social insurance play a crucial role in the world economy, and Ukraine is no exception. Wages, their level and the contributions paid from them are an important component of ensuring the development of economic entities. The single social contribution is considered one of the main factors influencing the level of shadowing of the economy of Ukraine and the EU. The reform of the single social contribution in Ukraine was designed to reduce the level of shadowing of the economy and the burden on the social insurance system on economic entities and brought some positive results.

Material and methods
The methodological basis of the study is the methods of theoretical comparison (comparison of the load in the social insurance system on business entities of Ukraine and EU countries); methods of economic and statistical analysis (analysis of the payment of the single social contribution by economic entities and identification of trends; study of the level of the shadow economy in Ukraine and the growth / decrease of real GDP); abstract-logical (construction of the structure of work and generalization of theoretical and practical provisions); graphic and tabular (visual representation of theoretical and practical provisions).

The information base of the study is the
fundamental scientific works of domestic and foreign scientists on the burden in the social insurance system on economic entities, laws and regulations, official materials of the State Statistics Service of Ukraine, the State Treasury Service of Ukraine, the National Bank of Ukraine, the Ministry of Economy, Trade and of Agriculture of Ukraine, open information resources of the Internet, expert assessments, results of own researches.

**Results and discussion**

In Western Europe, social insurance is used to reduce the burden and provide social assistance to people living below the poverty line. According to the financing of social expenditures, the Northern European and continental models are distinguished (Table 1), and according to social orientation - the US social insurance system, the main characteristic of which is maintaining a minimum standard of living, and the social insurance system of the European Union, and preventing a significant decline in income due to social risk factors.

| Table 1 – Comparison of northern European and continental models’ social insurance |
|---------------------------------|-----------------|----------------|
| **Indicator**                   | Northern European model | Continental model |
| Share of social expenditures in GDP | ≈ 40%          | ≈ 30%          |
| The share of social contributions in GDP | ≈ 15% and above (significant) | insignificant |
| The share of financing social expenditures at the expense of the social insurance system | up to 50% | ≈ 65% and above |
| The share of financing social expenditures from the budget | more than 50% | less than 50% |

Source: compiled by author based on [Kunditsky O. O., 2017].

The total amount of social insurance contributions in Ukraine is in line with the practice of most EU countries. In some countries, insurance premiums are fixed, while in others they depend on the employee’s income. However, in our country the share of employees in the payment of insurance premiums is much smaller, which increases the burden on business entities (Table 2).

| Table 2 – Load on business entities in the social insurance systems of Ukraine and EU, % |
|---------------------------------|-----------------|----------------|
| **Indicator**                   | Year            | |
|                                | 2009 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Germany                        |       |      |      |      |      |      |
| Insurance premiums, all paid including: | 39,98 | 39,56 | 40,21 | 40,21 | 39,06 | 40,01 |
| business entity                | 19,60 | 19,33 | 19,43 | 19,38 | 19,44 | 19,88 |
| employee                       | 20,38 | 20,43 | 20,78 | 20,78 | 19,63 | 20,13 |
| Italy                          |       |      |      |      |      |      |
| Insurance premiums, all paid including: | 42,59 | 40,49 | 40,49 | 39,49 | 39,49 | 39,49 |
| business entity                | 32,10 | 30,00 | 30,00 | 30,00 | 30,00 | 30,00 |
| employee                       | 10,49 | 10,49 | 10,49 | 9,49  | 9,49  | 9,49  |
| France                         |       |      |      |      |      |      |
| Insurance premiums, all paid including: | 55,30 | 65,80 | 68,00 | 68,00 | 68,00 | 68,00 |
| business entity                | 41,60 | 43,40 | 45,00 | 45,00 | 45,00 | 45,00 |
| employee                       | 13,70 | 22,40 | 23,00 | 23,00 | 23,00 | 23,00 |
### Table 3 – Insurance rates for business entities for compulsory state social insurance in Ukraine in 2005-2020, %

| Year     | In case unemployment | In connection with temporary loss efficiency | Pension insurance | From unhappy cases on production | Together |
|----------|----------------------|---------------------------------------------|-------------------|----------------------------------|----------|
| 2005     | 1,6                  | 2,9                                         | 32,3              | 1,73                             | 38,53    |
| 2006     | 1,3                  | 2,9                                         | 31,8              | 1,5                              | 37,5     |
| 2007     | 1,5 (-1,4)           | 33,2 (+1,4)                                 |                   | 1,51                             | 37,51    |
| 2008     | 1,5                  |                                             |                   | 1,41                             | 37,61    |
| 2009     | до 13.01.09 - 1,3     | до 13.01.09 - 1,5                           | 33,2              | 1,41                             | 37,61    |
|          | з 13.01.09 - 1,6     |                                             |                   |                                  |          |
| 2010     | 1,6                  | 1,4                                         |                   |                                  |          |
| 2011-2015| the only contribution to the obligatory state social insurance | | | 36,3-49,7 | |
| 2016-2021| the only contribution to the obligatory state social insurance | | | 5,3-22* | |

Source: compiled by author.

*22% for all employers, except employers where there are disabled workers (5,3-8,41%).
The single contribution was set as a percentage of the statutory base for accrual of the single contribution in accordance with the classes of occupational risk of production to which the payers belonged, taking into account their economic activities (since 2016, occupational risk classes were abolished). There were 67 occupational risk classes, and the contribution rate for economic entities ranged from 36.76% for the first class to 49.7% for the 67th occupational risk class. For budgetary institutions, the single contribution was set at 36.3% of the defined accrual base.

When determining the amount of the single social contribution for economic entities, funds for four existing types of social insurance are taken into account, which are distributed among the relevant funds (Gorna M. O., 2016).

Analysis of fig. 1 indicates an increase in revenues of the single social contribution during the study period (in 2020 there was also an increase in hryvnia equivalent).

These revenues could be much higher given that most Ukrainian businesses operate in the shadows. In fig. 2 presents the results of the assessment of the level of the shadow economy using two methodological provisions.

Analysis of fig. 2 gives grounds to claim that the downward trend in the shadow economy has persisted, despite the negative consequences of the COVID 19 pandemic and the decline in Ukraine’s real GDP.

In developed countries, the shadow economy is, according to various estimates, 12-16% of GDP, in developing countries – 23-25% of GDP, in countries with economies in transition – 30-50% of GDP. However, developed countries are also heterogeneous, among them there are countries with fairly high rates of shadow activity (Dyachenko O. 2018). For example, in Austria the shadow sector accounts for 8.2% of GDP, in France and the United Kingdom – 11%, in Germany 13.7%, in Italy – 21.2%, in neighboring Poland – 25%, and in Bulgaria – more than a third (Gmyrin A., 2020).

Exploring the factors that contribute to the growth of the shadow economy in developed countries, in particular in the EU, F. Schneider identified 7 factors and determined the degree of their influence (Schneider F., 2015).
According to his research, the growth of the tax burden and the size of social security contributions has the maximum impact on the shadowing of economic relations in the EU with a share of 35-52%.

In Ukraine, as mentioned above, there has been a reduction in the burden on the amount of social insurance contributions. According to the calculations (Raynova L. B., 2020), the growth of the wage bill in the private sector was extremely low compared to the results of the year compared to the savings received by economic entities due to the reduction of the level of workload from the payment of SSC. In fact, these "savings" by economic entities were aimed not so much at increasing the wages of legally employed workers, but at meeting the current needs of business (Korolkov V., Barannyk O., 2017). However, perhaps the biggest problems were related to the financing of the domestic social insurance system (a significant increase, especially in the budget deficit of the Pension Fund). In particular, the fact that the latter's losses from the reduction of SDRs in 2016 amounted to more than UAH 96 billion is noteworthy, while only UAH 0.16 billion was actually received from legalization. That is, the implementation of the reform to radically reduce the level of the burden on SSC has not managed to at least slow down the decline in the fiscal efficiency of the contribution, which was observed in previous years. The share of SSC in GDP during 2012-2015 decreased from 12.7 to 9.3%, and in the following 2016 - to 5.5% of GDP (Raynova L. B., 2020).

According to some researchers, even the reduction of SSC revenues due to a significant reduction in its rate cannot be considered as a lack of de-shadowing effect, as further positive trends in wage dynamics were observed, in particular, exceeding their growth rates over inflation rates and increasing PIT revenues and number of insured persons [Shemyatkin O., 2019].

Conclusions

The reform of the social insurance system has reduced the burden on businesses and led, albeit not to a high, but the effect of de-shadowing the economy. In the future, to reduce the burden on the social insurance system of Ukrainian businesses, it is necessary, taking into account the experience of developed EU countries, to pay special attention to the distribution of social insurance contributions between employees and businesses in the direction of reducing the latter. In addition, it is necessary to introduce in Ukraine a social insurance contribution for all categories of workers depending on their income and thus integrate into the social insurance system of the European Union.

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