Counterparties’ Influence on an Enterprise’s Social Capital Formation

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Abstract: The purpose of this study is to determine the influence of counterparties on the formation of an enterprise’s social capital, which is a component of measuring its value. The size of social capital is the result of the synergistic effect of all its components, namely, trust, social networks, and social norms. In this research study, the components of social capital in an enterprise are estimated to be part of the relationship with the stakeholders of the enterprise, including counterparties. Liquidity and financial stability are the criteria for choosing counterparties and for assessing cooperation prospects with them. Additionally, there are rating organizations such as Transparency International Ukraine, whose 2016 results were taken as a basis for the selection of research objects. Organizational transparency and disclosure of data indicate the intention of a company to be open to stakeholders at all levels to increase their confidence. Thus, the level of transparency of activity and the stability of the social network are interdependent. This study examines and analyzes the cooperation of enterprises with other stakeholders to determine its impact on the formation of the social capital of enterprises. The results will provide a basis for the development of a social capital assessment method.

Keywords: social capital, social networks, social norms, social responsibility of business, trust.

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INTRODUCTION

Over the past 30 years, the terms “social capital” and “trust” have become increasingly popular in economic and accounting literature (Guiso et al., 2004, pp. 526–556; Knack & Keefer, 1997, pp. 1251–1288, La Porta et al., 1997, pp. 333–338; Putnam Robert, 1993, p. 280, Putnam, 2000, p. 217).
For example, Putnam (Putnam, 2000, p. 217) considers social capital as “the predisposition of people in society to collaborate to produce socially effective results” (La Porta et al., 1997, pp. 333–338) and covers “reciprocity and reliability norms” that arise in the connection between individuals.

Various aspects of social capital, the influence of social networks on enterprise development and its interaction with counterparties were studied by F. Adam, D. Podmenik (Adam & Podmenik, 2010, pp. 35–48), J. Coleman (Coleman, 1988, pp. 95–120).

Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectivity-owned capital, a “credential” which entitles them to credit, in the various senses of the word (Bourdieu, 1986, p. 21).

Unfortunately, the concept of social capital was complicated by the existence of many-sided abstract definitions distinguished by theoretical views and inconsistent operationalization (Payne et al., 2011, p. 492). As a rule, it seems that the concept of social capital cannot be empirically differentiated from the point of view of resources and the nature of relations that constitute resources that are likely to exist, since social capital is not open to self-measurement (Gedajlovic et al., 2013, p. 459). Lin (Lin, 1999, p. 30) defines social capital as an investment in social relations with expected revenues in the market, insisting that social capital is created through social relations and the expectation of future social resources that they can generate. Nahapiet and Ghoshal (Nahapiet & Ghoshal, 1998, p. 243) considered social capital as the sum of actual and potential resources embedded, available and derived from the network of relationships that a physical or social unit possesses. Thus, social capital relations, understood as benevolence, can be organized to create resources that enable them to carry on their activities (Adler & Kwon, 2002, p. 17).

Fukuyama F. (Fukuyama, 1995, p. 457) investigated trust as an element of social capital, the main factor in its formation and as a criterion for creating a network of enterprises. However, the empirical identification of the impact of trust and, in general, social capital on the firm’s performance is a complex task. First, social capital is a broadly defined concept that often covers trust and cooperative norms, and therefore measurement is not straightforward. Hilary and Huang (Hilary & Huang, 2018, p. 47) note that companies operating in regions where trust is more widespread (using a general social trust survey), are less afflicted with agency problems, are more profitable and have higher rates, while Hasan et al. (Hasan et al., 2016, pp. 1017–1047) found that firms operating in regions with a higher level of social capital have moderately better conditions in private lending transactions. Social networks as an element of social capital are the subject of individual research. Networks with more trust than other types of networks tend to share and exchange more complete and confidential information through solidarity (Adler & Kwon, 2002, pp. 17–40). The process of reproducing new and creative high value-added products is rated as important in the value chain (Hartley, 2004, pp. 323–333). On the other hand, the strategic combination of knowledge and the exchange of information and additional resources allows the group to gain competitive advantage (Dyer & Singh, 1998, pp. 660–679). When specific assets accumulate, for example, an increase in the length of relationships or trade between organizations, the competitive advantage between enterprises rises (Perry, 1989, pp. 183–255).

Castells M. (Castells, 2001, p. 304) stresses that the merger of enterprises that form a network is a new organizational form. The network can exist only if there are established relationships between enterprises that arise because of the implementation of joint projects.

Despite the research of the above-mentioned authors, the issues of the degree of influence of social capital on enterprise development and the assessment of social capital remains open.
Social capital as an object of research in economic science is important to investigate not only at the macro level, but also at the enterprise level. First, the high level of social capital of an enterprise guarantees employees, management, counterparties, and society access to qualitative information, which allows to reduce transaction costs.

This paper investigates whether social capital has an economic payoff. The paper focuses primarily on the influence of counterparties on the formation of the social capital of an enterprise, as authors feel it is the most important indicator of social capital. The empirical measure that uses is based to form a company rating using the distance method to determine the relationship between the transparency of the enterprise and their ability to a partnership. The results of Knack and Keefer point to a statistically significant effect of partnership on growth. Trust—again measured by the “generally speaking” question—has a positive and significant impact on economic growth (Knack & Keefer, 1997).

METHODS

This paper discusses scientific methods such as systematization, comparison, generalization, analysis, synthesis, and distance. The information base of the study consists of papers of Ukrainian and foreign scholars and materials of international organizations. The distance method is a method of comprehensive assessment, which consists in assessing the results of activities in comparison with the standard to which the company seeks. It is based on determining the degree of proximity of the objects under study to the object that acts as a standard. In general, the reduction of a certain number of indicators into a single integrated indicator makes it possible to determine the qualitative difference (improvement or deterioration) of the achieved state from the base of comparison.

For the evaluation of partnership interaction, the level of trust between enterprises, the following indicators are used: the ratio of total liquidity, the ratio of rapid liquidity, the ratio of absolute liquidity, the ratio of receivables and payables, the coefficient of autonomy, and the coefficient of financial stability. Based on the indicators, it is suggested to form a company rating using the distance method to determine the relationship between the transparency of the enterprise and their ability to partner interaction.

This study uses data from the international organization Transparency International (Transparency International Ukraine, 2018). In their report for 2016, 50 private Ukrainian companies and holdings and 50 state-owned enterprises were considered. The list of private companies was taken from the Forbes’ rating “The largest companies of Ukraine,” in 2016 the list of state-owned enterprises was taken from those announced by the Ministry of Economic Development and Trade information.

The top five companies were selected from this list (SE NNEGC “Energoatom,” PJSC “Ukrtelecom,” PJSC “ArcelorMittal Kryviy Rih,” PJSC “Mykolayivoblenergo,” PrJSC “Philip Morris”), five enterprises in the rating from 6 to 15 place (PJSC “Ukrhydroenergo,” PJSC “Khmelnytskoblenergo,” PJSC “Ternopiloblenergo,” LCC “Ferrexpo,” NJSC “Naftogaz of Ukraine”), and five enterprises in the rating from 40 to 50 places (PJSC “Tsentrrenergo,” PJSC “Sumykhimprom,” PJSC “Konti,” PJSC “Ukrzaliznytsia,” PJSC “Interpipe NTRP”).

In general, the algorithm for determining the rating of business units of the corporation based on the distance method has the following sequence:

Step 1. The output data is presented in the form of a matrix \( (a_{ij}) \), in which vertically the numbers (names) of business units are written \( (j = 1, \ldots, m) \), and horizontally are numbers (names) of indicators \( (i = 1, 2, \ldots, n) \).
Step 2. For each indicator is its best value \( a_{ij}^{\text{standard}} \), which is the maximum or minimum (depending on the economic essence of the indicator) among the investigated enterprises.

Step 3. Output data of matrix \( a_{ij} \) are standardized in relation to the corresponding indicator of the reference object by the following formula

\[
x_{ij} = \frac{a_{ij}}{a_{ij}^{\text{standard}}}
\]

where \( x_{ij} \) is the standardized indicators of the state of the \( j \)th object.

Step 4. For each analyzed object the value of its rating assessment is determined

\[
R_j = \sqrt{\left(1 - x_{1j}\right)^2 + \left(1 - x_{2j}\right)^2 + \ldots + \left(1 - x_{nj}\right)^2}
\]

\( R_j \) is the rating for \( j \)th object; \( x_{1j}, x_{2j}, \ldots, x_{nj} \) are the standardized indicators of \( j \)th analyzed object, and \( n \) is the number of indicators.

RESULTS AND DISCUSSION

The formation of social capital is affected by the relationship with various stakeholders, counterparties. The company’s rating reflects its credit reputation as well as is an indicator of the trust of counterparties, in turn, high confidence increases the availability of loan capital and allows it to reduce its value.

Thus, trust in an enterprise depends on the level of management of accounts payable and accounts receivable. The balance between them and the absence of delinquencies in their repayment testifies to effective financial management. For Ukrainian business, we consider it necessary to additionally reveal the role of anti-corruption policy and anti-fraud policies in the reporting to build trust in the business and improve management efficiency.

Step 1. The output table is formed. Based on the above six analytical indicators characterizing liquidity, financial stability reference values are defined (Table 1).

Below the process of building a business unit ranking based on their reliability as a counterparty for 2016–2017 is presented.

Step 2. In 2017 PJSC “Ternopiloblenergo” is the leader with the following indicators: liquidity and financial stability, in 2016 PJSC “Ukrhydroenergo” is the leader by liquidity ratio and PJSC “Ukrzaliznytsya” is the leader by financial stability ratio (Figure 1). Table 2 shows the reverence values of indicators.

Analyzing the change in the indicators of liquidity and financial stability of the selected enterprises during the 2016–2017 period, there is a positive trend. Such dynamics indicate improvement of the economic condition of enterprises and improvement of resource management. Thus, enterprises are weakly dependent on external sources of funding and are fully financially sustainable. As for the indicators of liquidity, they all exceed the normative values, which indicates the availability of highly liquid assets.

Step 3. The standardization of the output indicators carried out by dividing each indicator into the corresponding standard is presented in Table 3.

Step 4. Determination of the rating of enterprises based on the distance method allows obtaining a generalized rating that characterizes the state and dynamics of financial and economic activity of the comparable enterprises.
The value of its rating is determined for each business unit (Table 4).

For example, for SE NNEGC “Energoatom” the value of the rating indicator is determined as follows:

For 2017:

$$R_l = \sqrt{(1 - 0.7)^2 + (1 - 0.43)^2 + (1 - 0.04)^2 + (1 - 1.75)^2 + (1 - 0.43)^2 + (1 - 0.87)^2} = 1.238 \quad (3)$$

For 2016:

$$R_l = \sqrt{(1 - 0.89)^2 + (1 - 0.64)^2 + (1 - 0.02)^2 + (1 - 1.93)^2 + (1 - 0.14)^2 + (1 - 0.90)^2} = 1.322 \quad (4)$$

By the value of a complex rating index (from min to max), the rating of business units based on the reliability of counterparties is built (Table 4).

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### Table 1 Output Matrix of Indicators for 2016–2017

| No | Enterprise                          | OLR  | QLR  | ALR  | ARAPR | FSR  | AR  |
|----|-------------------------------------|------|------|------|-------|------|-----|
| 1  | SE NNEGC “Energoatom”               | 1.61 | 0.93 | 0.02 | 2.31  | 3.06 | 0.75|
| 2  | PJSC “Ukrtelecom”                   | 0.71 | 0.67 | 0.09 | 1.88  | 2.35 | 0.70|
| 3  | PJSC “ArcelorMittal Kryvy Rih”      | 1.99 | 1.46 | 0.10 | 2.13  | 2.74 | 0.73|
| 4  | PJSC “Mykolayivoblenenergo”         | 0.36 | 0.28 | 0.01 | 0.40  | 0.39 | 0.28|
| 5  | PJSC “Philip Morris”               | 0.84 | 0.71 | 0.0040 | 1.32 | 0.07 | 0.03|
| 6  | PJSC “Ukrhydroenergo”               | 1.55 | 1.47 | 0.52 | 0.53  | 3.49 | 0.78|
| 7  | PJSC “Khmelnitskoblenenergo”        | 1.00 | 0.79 | 0.17 | 0.68  | 3.33 | 0.77|
| 8  | PJSC “Ternopiloblenenergo”          | 2.31 | 2.14 | 0.02 | 0.64  | 7.05 | 0.73|
| 9  | LCC “Ferrexpo”                      | 0.66 | 0.30 | 0.01 | 0.28  | 0.17 | 0.14|
| 10 | NJSC “Naftogaz of Ukraine”          | 1.15 | 0.66 | 0.15 | 0.80  | 2.95 | 0.75|
| 11 | PJSC “Tsentrenergo”                 | 1.62 | 0.77 | 0.41 | 0.54  | 2.16 | 0.68|
| 12 | PJSC “Sumykhimprom”                 | 0.24 | 0.12 | 0.0014 | 1.36 | -0.44 | -0.78|
| 13 | PJSC “Konti”                        | 0.80 | 0.70 | 0.01 | 3.26  | 0.53 | 0.35|
| 14 | PJSC “Ukrzaliznytsia”               | 0.84 | 0.58 | 0.29 | 0.19  | 6.22 | 0.86|
| 15 | PJSC “Interpipe NTRP”               | 1.15 | 0.95 | 0.03 | 3.37  | 0.37 | 0.27|

OLR, overall liquidity ratio; QLR, quick liquidity ratio; ALR, absolute liquidity ratio; ARAPR, receivable to accounts payable ratio; FSR, financial stability ratio; AR, autonomy ratio

Source: Own Calculation Based on Data from Public Reporting: https://smida.gov.ua/ (accessed February 13, 2019); http://www.ferrexpo.ua/shareholders-and-investors/information-disclosure/ (accessed February 13, 2019)

Bold values are the highest and are taken into account in the calculations as benchmarks.

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Comparison of ratings and dynamics of change for 2016–2017 period is presented in Figure 2.

By the level of liquidity and financial stability both in 2017 and in 2016 the leader is PJSC “Ukrhydroenergo.” In general, in 2017, the following business units, such as SE NNEGC “Energoatom,” PJSC “Mykolayivoblenergo,” PrJSC “Philip Morris,” PJSC “Ternopiloblenergo,” LCC “Ferrexpo” and PJSC “Tsentrenergo,” improved their rating. The rating of other companies in 2017 got worse or remained unchanged compared to 2016.

Thus, the activities of business units that got worse the rating should be aimed at identifying strategic opportunities, ways to improve liquidity, financial stability and reserves of resource potential that can increase their competitiveness.

It is worth paying attention to the fact that PJSC “Mykolayivoblenergo” and PJSC “Philip Morris” are among the top 5 most transparent enterprises (4th and 5th place in the TIU rating), while simultaneously occupying 11th and 10th place of the formed business units rating on the basis of their reliability as a counterparty, respectively. This is primarily due to the fact that the enterprise for the analyzed periods has low financial sustainability indicators (PJSC “Philip Morris” owner’s equity is only 3% in the total assets) or liquidity (the ratio of overall liquidity of PJSC “Mykolaivoblenergo” is only 0.36 (at the normative value of the indicator 2). However, these enterprises have good organizational transparency, present relevant and complete information.

Source: Own Calculation Based on Data from the Public Reporting as Table 1

**Figure 1** Dynamics of Reference Values of Liquidity and Financial Stability Indicators for 2016–2017

**Table 2** Reference Values of Liquidity and Financial Stability Indicators

| Year | Overall Liquidity Ratio | Quick Liquidity Ratio | Absolute Liquidity Ratio | Accounts Receivable to Accounts Payable Ratio | Financial Stability Ratio | Autonomy Ratio |
|------|-------------------------|-----------------------|--------------------------|-----------------------------------------------|--------------------------|---------------|
| 2017 | 2.31                    | 2.14                  | 0.52                     | 1.32                                          | 7.05                     | 0.86          |
| 2016 | 1.95                    | 1.70                  | 0.49                     | 1.011                                         | 6.26                     | 0.86          |

Comparison of ratings and dynamics of change for 2016–2017 period is presented in Figure 2.
about their activities, present to the society their own development programs, socially responsible projects and have qualitative anticorruption programs that enhances public trust and business to them and provides them additional competitive advantages in the long run.

The reverse situation refers to PJSC “Tsentrenergo” and PJSC “Ukrzaliznytsia,”. The data of enterprises for the analyzed periods showed high indicators of liquidity and financial stability, as a result they occupy 2 and 5 places in the formed rating. However, in the TIU transparency rating, they do not rank at the highest positions (45 and 48, respectively). We associate this asymmetry with the fact that these enterprises have a state ownership, they can be considered as monopolists of the market, they have sufficient resources, but the level of transparency of such enterprises still remains at a rather low level.

The formed rating of business units characterizes the degree of influence of the indicators of liquidity and financial stability of the counterparty on the formation of social network and trust from counterparty as

Table 3 Matrix of Standardized Ratios (According to the Reference Value)

| No | Enterprise                                | OLR  | QLR  | ALR  | ARAPR | FSR  | AR  |
|----|-------------------------------------------|------|------|------|-------|------|-----|
|    |                                           | 2017 |      |      |       |      |     |
| 1  | SE NNEGC “Energoatom”                     | 0.70 | 0.43 | 0.04 | 1.75  | 0.43 | 0.87|
| 2  | PJSC “Uktelecom”                          | 0.31 | 0.31 | 0.17 | 1.42  | 0.33 | 0.81|
| 3  | PJSC “ArcelorMittal Kryiy Rih”            | 0.86 | 0.68 | 0.19 | 1.61  | 0.39 | 0.85|
| 4  | PJSC “Mykolyaktivbenergo”                 | 0.16 | 0.13 | 0.02 | 0.30  | 0.06 | 0.33|
| 5  | PrJSC “Philip Morris”                     | 0.36 | 0.33 | 0.01 | 1.00  | 0.01 | 0.03|
| 6  | PJSC “Ukrhydroenergo”                     | 0.67 | 0.69 | 1.00 | 0.40  | 0.50 | 0.91|
| 7  | PJSC “Khmelnystsoblenenergo”              | 0.43 | 0.37 | 0.33 | 0.52  | 0.47 | 0.90|
| 8  | PJSC “Ternopilobenergo”                   | 1.00 | 1.00 | 0.04 | 0.48  | 1.00 | 0.85|
| 9  | LCC “Ferrexpo”                            | 0.29 | 0.14 | 0.02 | 0.21  | 0.02 | 0.16|
| 10 | NJSC “Naftogaz of Ukraine”                | 0.50 | 0.31 | 0.29 | 0.61  | 0.42 | 0.87|
| 11 | PJSC “Tsentrerenergo”                     | 0.70 | 0.36 | 0.79 | 0.41  | 0.31 | 0.79|
| 12 | PJSC “Sumykhimprom”                       | 0.10 | 0.06 | 0.00 | 1.03  | −0.06 |−0.91|
| 13 | PJSC “Konti”                             | 0.35 | 0.33 | 0.02 | 2.47  | 0.08 | 0.41|
| 14 | PJSC “Ukrzalintysia”                      | 0.36 | 0.27 | 0.56 | 0.14  | 0.88 | 1.00|
| 15 | PJSC “Interpipe NTRP”                     | 0.50 | 0.44 | 0.06 | 2.55  | 0.05 | 0.31|

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|----|-------------------------------------------|------|------|------|-------|------|-----|
|    |                                           | 2016 |      |      |       |      |     |
| 1  | SE NNEGC “Energoatom”                     | 0.89 | 0.64 | 0.02 | 1.93  | 0.14 | 0.90|
| 2  | PJSC “Uktelecom”                          | 0.35 | 0.37 | 0.10 | 1.00  | 0.40 | 0.83|
| 3  | PJSC “ArcelorMittal Kryiy Rih”            | 1.00 | 0.85 | 0.41 | 1.89  | 0.46 | 0.86|
| 4  | PJSC “Mykolyaktivbenergo”                 | 0.22 | 0.19 | 0.02 | 0.38  | 0.06 | 0.34|
| 5  | PrJSC “Philip Morris”                     | 0.37 | 0.34 | 0.00 | 1.09  | 0.00 | −0.05|
| 6  | PJSC “Ukrhydroenergo”                     | 0.90 | 1.00 | 1.00 | 1.00  | 0.62 | 0.93|
| 7  | PJSC “Khmelnystsoblenenergo”              | 0.45 | 0.42 | 0.14 | 0.71  | 0.48 | 0.87|
| 8  | PJSC “Ternopilobenergo”                   | 0.35 | 0.38 | 0.12 | 0.68  | 0.42 | 0.85|
| 9  | LCC “Ferrexpo”                            | 0.27 | 0.18 | 0.10 | 0.25  | −0.01 |−0.05|
| 10 | NJSC “Naftogaz of Ukraine”                | 0.59 | 0.39 | 0.31 | 0.80  | 0.47 | 0.87|
| 11 | PJSC “Tsentrerenergo”                     | 0.50 | 0.29 | 0.37 | 0.38  | 0.25 | 0.71|
| 12 | PJSC “Sumykhimprom”                       | 0.10 | 0.05 | 0.00 | 0.57  | −0.07 |−0.84|
| 13 | PJSC “Konti”                             | 0.59 | 0.57 | 0.04 | 2.19  | 0.10 | 0.45|
| 14 | PJSC “Ukrzalintysia”                      | 0.32 | 0.26 | 0.39 | 0.23  | 1.00 | 1.00|
| 15 | PJSC “Interpipe NTRP”                     | 0.62 | 0.65 | 0.00 | 3.01  | 0.07 | 0.34|

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Source: Own Calculation Based on Data from the Public Reporting as Table 1

Bold values are the highest and are taken into account in the calculations as benchmarks.

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The reverse situation refers to PJSC “Tsentrenergo” and PJSC “Ukrzaliznytsia,”. The data of enterprises for the analyzed periods showed high indicators of liquidity and financial stability, as a result they occupy 2 and 5 places in the formed rating. However, in the TIU transparency rating, they do not rank at the highest positions (45 and 48, respectively). We associate this asymmetry with the fact that these enterprises have a state ownership, they can be considered as monopolists of the market, they have sufficient resources, but the level of transparency of such enterprises still remains at a rather low level.

The formed rating of business units characterizes the degree of influence of the indicators of liquidity and financial stability of the counterparty on the formation of social network and trust from counterparty as

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elements of social capital. To assess the social capital, it is necessary to analyze the relationship of the enterprise with all stakeholders, to determine the dependence of the activity on their influence and interest. Thus, the situation indicates that according to the formed rating, the direct dependence between the TIU transparency

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**Table 4 The Rating of Business Units Based on Their Reliability as Counterparties for 2016–2017**

| No in TIU Rating | Enterprise                        | Complex Rating Index | Business Units Rating |
|------------------|-----------------------------------|----------------------|-----------------------|
|                  |                                    | 2017  | 2016  | 2017 | 2016 |
| 1                | SE NNEG C “Energoatom”             | R₁    | 1.238 | 1.322 | 8    | 9 |
| 2                | PJSC “Uktelecom”                   | R₂    | 1.323 | 1.287 | 9    | 8 |
| 3                | PJSC “ArcelorMittal Kryvy Rih”     | R₃    | 0.968 | 0.788 | 3    | 2 |
| 4                | PJSC “Mykolaivoblenergo”           | R₄    | 1.822 | 1.731 | 11   | 12 |
| 5                | PrJSC “Philip Morris”              | R₅    | 1.664 | 1.710 | 10   | 11 |
| 6                | PJSC “Ukrhydroenergo”              | R₆    | 0.553 | 0.124 | 1    | 1 |
| 7                | PJSC “Khmelnitskoblenenergo”       | R₇    | 1.118 | 1.188 | 6    | 5 |
| 10               | PJSC “Ternopiloblenergo”           | R₈    | 0.973 | 1.278 | 4    | 7 |
| 11               | LCC “Ferrexpo”                     | R₉    | 1.872 | 1.919 | 12   | 13 |
| 14               | NJSC “Naftogaz of Ukraine”         | R₁₀   | 1.143 | 1.025 | 7    | 3 |
| 45               | PJSC “Tsentrenergo”                | R₁₁   | 0.869 | 1.206 | 2    | 6 |
| 46               | PJSC “Sumykhimprom”                | R₁₂   | 2.515 | 2.508 | 15   | 15 |
| 47               | PJSC “Konti”                       | R₁₃   | 2.010 | 1.646 | 13   | 10 |
| 48               | PJSC “Ukrzaliznytsia”              | R₁₄   | 1.069 | 1.172 | 5    | 4 |
| 50               | PJSC “Interpipe NTRP”              | R₁₅   | 2.021 | 2.281 | 14   | 14 |

Source: Own Calculation Based on Data from Table 3

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**Figure 2 Rating of Business Units on the Basis of Their Reliability as a Counterparty for 2016–2017 Period**

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*Indonesian Journal of Sustainability Accounting and Management, 2020, 4(1), 64–77*
rating and the business unit rating, due to their reliability as a counterparty, is not observed. Taken into consideration the above-mentioned peculiarities of rating formation and factors that objectively influenced the final result of the analysis, we can assert that only the influence of the financial stability and liquidity indicators is essential for the formation of the social network as a criterion for the relationship between counterparties under conditions that: counterparties should be key stakeholders, with high influence as well as high interest; the enterprise should not be a monopolist; an enterprise should disclose information not only about its financial performance, but also about its organizational transparency.

The paper investigates the influence of the level of transparency of the enterprise, the degree of its corporate social responsibility on its relationship with counterparties as well as the social network formation.

The analysis carried out is important during the formation of social networks since they are formed because of a stable partnership interaction. Partner interaction in a hybrid war has a significant impact on the stabilization of the economy and contributes to the growth of investment attractiveness. Such networks are characterized by associations of enterprises pursuing common goals and working to solve common problems, but do not necessarily have joint activities or belong to one industry.

Castells M. (Castells, 2001, p. 304) emphasizes: Sustained partnership interaction with counterparties is a prerequisite for building and maintaining a network. Network structures are a new organizational form of interaction between enterprises in the current conditions of economic development. Network enterprises are created around business projects that were the result of the interaction between the structural elements of different companies, demanded the establishment of a network between them during this business project and each time reconfigure their networks to implement each individual project.

Enterprises that are united by the network do not lose their independence, but the network itself expands the boundaries of interaction. Considering the peculiarities of cooperation between enterprises in the network, it should be understood that “cooperation is seen as a by-product of trust, not a source of trust, and, moreover, lack of cooperation can be the result of other factors (such as lack of sufficient information) than lack of trust” (Misztal, 1996, p. 17).

Such a social network is one of the three components of social capital at the level of trust and social norms. Despite the research in terms of reflecting social capital in accounting, at the present stage, it is not qualified as an accounting object. The reasons for non-recognition are the non-compliance with the requirements of both the International Financial Reporting Standards and the Ukrainian Accounting Standards (UAS) because of the inability to accurately determine the value.

Today, in the study of networks, two approaches are used: content and structural. Thus, the content is aimed at analyzing the quality of relations between the participants in the network: the formation of trust, common values, norms, identities (Granovetter, 1973, pp. 1360–1380). In turn, in the structural approach, the network is considered in terms of its configuration, structural characteristics (network size, density, centralization, etc.), i.e., through the exchange of information and the ability to control such an exchange (Burt, 1922).

The structural approach is the most widely used. According to this, the priority in the study is to consider the categorization of links between nodes of the network, which allows to assess the significance of what is happening in the network to achieve certain goals, for example, to improve the efficiency of employees. Such bonds may be direct or indirect, strong or weak, one-sided, or two-sided. Determining the characteristics of bonds in the network allows you to evaluate the network, which uses the following parameters: network size, network density, centralization, bond strength, network rank.
When conducting research on the content aspects of network interactions, it is necessary to consider their features. First, the blurriness of self-identification of network participants. This problem is due to the following factors: uncertainty, complexity, and constant change in the membership of the networks which are common for the networks. Even network organizers cannot accurately determine the boundaries of such communities, due to the multi-layered networks and frequent cross-membership.

The structure of business networks is constantly changing. The composition of the network is largely influenced by personal relationships between individual participants, therefore, together with one of the members of the network several others may leave the network. However, the community can be sustained after the project’s goal has been achieved, and further new goals are being formed. In business networks, a lot of attention should be paid to effective interaction, which strengthens the trust among the participants, which in turn leads to more and more stabilization of the network.

Second, there is the ambiguity of the role of various networks in the formation of social capital. It is worth noting that not all networks contribute to the fact of entering new participants to them. However, only such networking that promotes development (i.e., confidence building, identity formation, access to previously inaccessible resources) can be considered as significant for the formation and development of social capital.

Social bonds also affect the personality of the firm and the trust between firms. The identity of the firm is largely determined by its colleagues, which in turn means that individuality will be treated differently in different firms (Bäckström & Lind, 2005, p. 38).

The extent and structure of individuals’ social networks affects the magnitude of transaction costs they face, the possibility of implementing innovative (but risky) ideas in cooperation with others, and hence the individuals’ overall cooperativeness and thrift (Inglehart & Baker, 2000, pp. 19–51; Klapwijk & van Lange, 2009, pp. 83–103).

As due to the expansion of the sphere of network activity the dependence of the participants increases, the virtual financial markets’ influence on the stability of the economic system becomes particularly important. The purpose of such financial markets is to generate profits out of real production processes. If formal institutions, such as the state do not fulfill their role, then the degree of trust grows in the main social groups that are built and exist only in internal interaction.

Hasan and Yun (2017) in the study conclude that CSR is one of the important drivers for corporate reputation as the findings indicate that there is a positive relationship between CSR and corporate reputation.

Lins Karl V. et al. (Lins et al., 2015, p. 52) as a result of the study identified: during the 2008–2009 financial crisis, firms with high social capital, as measured by corporate social responsibility (CSR) intensity, had stock returns that were four to seven percentage points higher than firms with low social capital. High CSR firms also experienced higher profitability, growth, and sales per employee relative to low CSR firms, and they raised more debt. This evidence suggests that the trust between a firm and both its stakeholders and investors, built through investments in social capital, pays off when the overall level of trust in corporations and markets suffers a negative shock. Saha et al. (2019) contribute in detail the analysis of the mainstream studies in the social and environmental accounting research.

Martin et al. (2018) note that firms with poor reputations are unlikely to reap any immediate benefits (in terms of shareholder value creation) from engaging in CSR. In fact, such activities may appear disingenuous and may well have the opposite effect. In the long run, the engagement in and dissemination of such activities could create value if they change the customers’ perceptions of the firm.

According to marketing agency Cone/Roper (1994), 78% of adult consumers are more likely to buy goods from a company whose product is associated with a “good cause.” More than 86% of European consumers tend to buy products from companies that are involved in socially significant projects.
Thus, they protect themselves from the influence of the state. Sometimes the “density” of trust in groups grows to such an extent that they harm society, transforming into a secret conspiracy (the growth of the shadow economy, the action of criminal groups).

Social networks as a structural element of social capital are a means of obtaining access to certain, including material, resources. Hence, networks can be considered at the enterprise level and as a goal, and as a means of social interaction in the process of using social capital. Individual expectations and interests of network participants at the level of the network structure, on the one hand, reproduce the total systemic effects of social capital of the community/society, such as norms and trust, but, on the other hand, the participation of individuals in the process of their reproduction involves regulating their expectations, positions and interests based on already legitimated system of norms and a certain level of trust. Thus, using existing norms, accepted expectation models and a certain level of trust in society, individuals thereby reproduce, reinforce, and legitimize them.

Trust as a qualitative criterion for the state of social capital is a prerequisite for the development of economic cooperation. Increasing the level of trust and, ultimately, the formation of conditions for successful public and corporate cooperation may be facilitated by various factors. In particular, the development of structural social capital, i.e. the formation and functioning of branched social networks, groups and associations, in which confidence and reciprocity appear and extends, which in turn contributes to the improvement of the ability of various networks to self-organization, has a significant impact. The formation between individual enterprises or enterprises of the network system, which has a trusting relationship, consists in transferring the high level of internal corporate trust to cooperation partners, with which there was no experience of reciprocity and trust. Thus, a high level of intra corporate confidence can be transferred from the outside and spread to trust between the enterprise and suppliers, consumers. Formation of a kind of “trust culture” in the network system helps to minimize the risks in the situation of economic cooperation, at the expense of formal and informal value-normative consolidation of observance of values, norms and standards of mutual trust, which minimizes the risks caused by hybrid warfare. The experience of mutual trust between the parties of social interaction gives grounds to rely on fulfillment of the rules of mutual obligations in the future as “strategies of response,” to accumulate trust and to provide credibility for both employees and business partners.

Stukalo N. and Simakhova A. (Stukalo & Simakhova, 2018, pp. 11–18) pay attention to: thus, in the post-crisis period, the social economy will have a positive effect on the social and economic growth of Ukraine. Social economy facilitates the acceleration of the process of material and non-material goods production, and, in some way, restricts access to traditionally accessible social benefits. First, such benefits are education and health. The development of the social economy affects, on the one hand, their commercialization, and on the other, the increase of consumers.

In the post-industrial economy, the expansion of network activity between the interacting groups that is based on trust is of great importance. The virtual economy produces, distributes, exchanges, and consumes not real objects, but their models. Thus, a special area of information penetration into the economy is created: e-commerce, creation of new business forms, banking, advertising, investment. However, despite the dynamic development of the virtual economy, it has a small share of buyers who prefer network trading. We can assume that the dynamics of the electronic market is affected by security and trust issues that are not regulated by the norms of national legislation. Especially this problem is getting worse during the hybrid war.

The influence of counterparties on the formation of social capital of the enterprise is highly dependent on the partner network. The study of social capital requires the study of multidisciplinary sources: economics,
sociology, psychology, behavior, and management. In a business network, the efficiency of the enterprise largely depends on the relationship of trust between individuals and groups (Zakharov et al., 2020).

It is advisable for a modern enterprise to pay much more attention to social capital as an object of investment. Because its formation through the policy of corporate social responsibility is only a basic factor of growth. Thus, non-financial and integrated reporting rarely contains information about the tools used by the company to generate social capital. However, almost every business is to some extent involved in charity, volunteering, social work with the community, etc. Socio-economic development requires companies to fully disclose the flows that form value addition.

**CONCLUSION**

The formation of social capital is causally related to the influence that the enterprise has on its stakeholders and how much they trust it. One of the key stakeholder groups for companies that are not monopolists in the market are counterparties. In determining the relationship between the position of the enterprise in the TIU rating and the position of the enterprise in the rating of business units on the basis of their reliability as a counterparty, the method of calculation of which was proposed in the paper was determined: (1) the TIU rating includes both non-state and state-owned enterprises, including monopolists in their market; (2) liquidity and financial stability indicators may be selected to form a business unit rating based on their reliability as a counterparty; (3) the desired rating of business units on the basis of their reliability as a counterparty characterizes the influence of liquidity and financial stability indicators on the formation of its social network and the trust of counterparties, which is a component of social capital; (4) the direct relationship between the TIU’s rating level and the rating of business units on the basis of their reliability as a counterparty is not observed due to the fact that the reliability of the company as a counterparty is not a determinative factor in determining the stability of the social network; counterparties must be key stakeholders with high influence and high interest; the enterprise should not be a monopolist; an enterprise should disclose information not only about its financial performance, but also about its organizational transparency.

After all, it is much more difficult to analyze and evaluate social capital if comparing to other types of capital, but its significance to create value exceeds the value of material capital, since it is considered as a reserve of growth in the value of the enterprise in the long run. This predetermines the development of appropriate methods for its evaluation. The study determined that when selecting a counterparty as a social networking entity, the following components are important: financial stability and liquidity indicators and the level of social capital. Counterparties are just one group of stakeholders the relationship with which forms social capital. Therefore, for the comprehensive assessment of the stability of the social network, its ability to generate economic benefits, it is necessary to analyze the relationship with all stakeholders. It is important that during the analysis of factors that forms social capital relations with personnel, shareholders, investors, public organizations and state bodies, society were taken into consideration. It will be the prospect of further research and the basis for social capital assessing.

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