Accounts Receivable Management in Selected Enterprises of Uzbekistan: Financial Stability Analysis

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Abstract: Attempts of enterprises to avoid the accounts receivable problem often fail in meeting the expected target volume, which eventually brings about the implication on financial stability. Nowadays global business community proposes to apply diverse receivables management methods with restricted efficiency rate, although the problem took roots from ignoring the financial obligations fulfillment discipline by the buyer/consumer of the produced goods or services. This paper examined the impact of the accounts receivable on financial stability in case of two large companies in Uzbekistan. Results showed that accounts receivable have a significant influence on financial stability and asset structure. Furthermore, this paper traced the roots of the existing problems related to the origin of incurred receivables. Findings and analysis suggested that inappropriate payment system and soft financial obligation policy caused the regular growth of accounts receivable.

Keywords: Accounts receivable, Financial stability, Uzbekistan

1. Introduction

Despite the development of business relations and corporate financial linkages, a great number of areas is remaining unsolved, even untouched. Enterprises are still coping with particular issues in ensuring the financial stability due to the lack of a comprehensively developed system of financial relations between businesses. Especially, accounts receivable has become the most problematic point in boosting the financial soundness of enterprises. Regardless of how successful an enterprise is operating, accounts receivable has been deteriorating the overall profitability level. Regular fails in meeting the financial stability indicators are often caused by the underperformance of financial obligation fulfillments with key buyers of produced goods and services (Akhmedov, 2017). Therefore, running the appropriate accounts receivable management policy has been one of the key issues in corporate structures.

'It is commonly agreed that accounts receivable can be a source of financial difficulty for firms when they are not efficiently managed and are underperforming' (Zeng et al, 2007). The latest trends in the global business environment are witnessing the particular forward steps in regulating the financial obligations of enterprises and direct/indirect consumers. In the practices of some countries, business relations were structured around a strict but flexible corporate code, which enables enterprises to manage accounts receivable and payable effectively. Although incurrence of accounts receivable is unavoidable, enterprises attempt to manage the indebtedness of consumers by setting stricter financial obligation discipline in order to keep the profile stable.

Being one of the dynamically growing and opening economies of Asia, Uzbekistan is paying an inherent attention to the development of large businesses to enhance the production capacity of the domestic economy (Nasritdinova, 2018). Development-oriented reforms had started giving the preliminary effect in the stable functioning of enterprises. However, enterprises regularly face unpaid accounts receivable due to the low level of consumer discipline and the presence of the postpaid system in the country. The existing problems possess a temporary character and do not cause systemic risks for the financial stability of the selected enterprises. Admittedly, a corporate environment in Uzbekistan is in the development phase and lacks several elements of the advanced business climate of developed economies. Enterprises are passively adapting to the corporate environment in spite of progressive market reforms. Corporate psychology and
innovative approach have already become the engine of business growth, which some enterprises also lagging behind in introducing these components to the business conduct policies.

In this paper, the research focus was concentrated on two large companies "Uzbekenergo" JSC and "Uztransgaz" JSC, which have a unique power in the national energy market of Uzbekistan. In contrary, the monopolistic power obscures their financial stability due to the large amounts of receivables from the consumers. The low level of consumer discipline, poor organization of payment collection system and weak financial obligation fulfillment has been fueling the engine of financial instability. In this paper, the effect of accounts receivable on financial stability was comprehensively studied and theoretically-proven recommendations were proposed.

2. Literature Review of a Factor in Meaning and Component

Ensuring the financial stability through an effective receivables management has been a hot and mostly discussed topic among business and academic rounds. Accounts receivable sparked the concern of both parties from corporate and scientific standpoints due to its impact on the profitability of an enterprise in the corporate level and on the economic stability in national level. Scientists investigated different aspects of receivables – financial stability linkages.

Mian and Smith Jr (1992) studied the methods of accounts receivable management model by applying a cross-sectional explanation of determinants. Their studies suggested that captive formation allows more flexible financial contracting and expropriates bondholder wealth. Michalski (2008) examined the consequences that could result from operating risk, related to purchasers using payment postponement for goods and/or services. He proposed a method that used the portfolio management theory to determine the level of accounts receivable in a firm. As he found, if the level of accounts receivables increases in a firm, net working capital and the costs of holding and managing accounts receivables go up. García - Teruel and Martínez - Solano (2010) investigated whether the accounts receivable decisions follow a model of partial adjustment. They observed the linkages between unobservable heterogeneity and potential endogeneity problems and found that sales growth, the size of the firms, their capacity to generate internal funds and get short-term financing.

3. Methodology

In setting the methodology of research, applied in this paper, cause-results principal relations were taken into account. In case of selected large national corporations, accounts receivable originated from the disobedience of consumers in following fulfilling the payment obligations for consumed electricity and natural gas. Both companies earn revenues from the sale of energy products for households and firms, and it accounts for around 95-99 percent of annual receipts. In turn, accounts receivable are directly linked to the profit and assets of the enterprises. Therefore, we specify the model as follows:

\[ OPM_t = \alpha_0 + \alpha_1 ACR_t + \alpha_2 NPF_t + \alpha_3 RVS_t + \alpha_4 AST_t + \varepsilon_t \]

Here OPM – operational margin from sales
ACR – accounts receivable
NPF – net profit
RVS – revenue from sales
AST – assets
\( \varepsilon \) – error term

The model is built on the OLS method, which evaluates the level of impact and interconnectedness between dependent and independent variables.

4. Result and Discussion

Econometric analysis is based on the ordinary least square model with several pre-estimation test methods to monitor the linkages and impact between the financial stability of the selected enterprises with accounts receivable. At the first stage, we conducted descriptive statistics to investigate the basic characteristics of the data (Table 1 & 2).

As shown in Table 1, data were normally distributed. Skewness, kurtosis, Jarque-Bera coefficients are applicable for continuing the analysis further.
Table 1: Descriptive statistics (Uztransgaz JSC)

|        | ARC     | AST     | NPF     | OPM     | TNV     |
|--------|---------|---------|---------|---------|---------|
| Mean   | 1.34E+10| 1.87E+10| 8.21E+08| 0.232772| 3.53E+09|
| Median | 1.45E+10| 1.95E+10| 5.83E+08| 0.234911| 3.10E+09|
| Minimum| 1.02E+10| 1.53E+10| 8609386 | 0.018837| 1.70E+09|
| Std. Dev.| 1.99E+09| 2.29E+09| 7.09E+08| 0.091440| 1.97E+09|
| Skewness| -0.559516| -0.393391| 1.578289| -1.136945| 0.823260|
| Kurtosis| 1.762211 | 1.759562 | 4.499421 | 4.221903 | 2.316137 |
| Jarque-Bera | 1.160147 | 0.902774 | 5.088437 | 2.776510 | 1.324456 |
| Probability | 0.559857 | 0.636745 | 0.078534 | 0.249510 | 0.515701 |

Table 2: Descriptive statistics (Uzbekenergo JSC)

|        | ARC     | AST     | OPM     | NPF     | RVS     |
|--------|---------|---------|---------|---------|---------|
| Mean   | 4.33E+09| 2.05E+10| 0.134319| 4.93E+08| 3.45E+09|
| Median | 3.90E+09| 2.24E+10| 0.131133| 4.24E+08| 3.33E+09|
| Maximum| 6.44E+09| 3.34E+10| 0.190165| 1.19E+09| 6.27E+09|
| Minimum| 2.49E+09| 9.02E+09| 0.049085| 6099618 | 1.24E+09|
| Std. Dev.| 1.32E+09| 8.27E+09| 0.040563| 3.15E+08| 1.62E+09|
| Skewness| 0.349626 | 0.049245 | -0.536019| 0.785121 | 0.279827 |
| Kurtosis| 1.735349 | 1.932010 | 2.823132 | 3.045302 | 1.971885 |
| Jarque-Bera | 1.044148 | 0.575152 | 0.590274 | 1.233856 | 0.685116 |
| Probability | 0.593289 | 0.750800 | 0.744430 | 0.539599 | 0.709952 |

Table 2 revealed that data on Uzbekenergo JSC is normally distributed. Other criterions, such as skewness, kurtosis, Jarque-Bera coefficients are also normal for moving to the next stage.

In the next stage, the correlation test is run for assessing the linkages among variables (Tables 3 & 4). It is clear from the Table 3 that assets volume had the largest impact on the operational margin. Accounts receivable had the highest level of interconnectedness with operational margin, net profit, and asset volume, while revenues from the electricity supply had a negative effect, which gives the preliminary view of negatively influencing factor on financial stability.

Table 3: Correlation matrix (Uzbekenergo JSC)

|      | ARC     | AST     | NPF     | OPM     | RVS     |
|------|---------|---------|---------|---------|---------|
| ARC  | 1       |         |         |         |         |
| AST  | 0.973522| 1       |         |         |         |
| NPF  | 0.022666| -0.047760| 1       |         |         |
| OPM  | 0.060231| -0.131225| 0.597863| 1       |         |
| RVS  | 0.110966| 0.158745| 0.788677| -0.00693| 1       |

Having the preliminary evaluation interconnectedness analysis, the impact test is conducted in the OLS model. Using the EViews 9.0 analysis tool, impact levels of accounts receivable, net profit, revenue from sales and assets on financial stability (operational margin) were examined. OLS test for Uzbekenergo JSC revealed that accounts receivable and
revenues from sales were negatively influenced on the financial soundness indicators. Net profit and asset volumes had a positive effect in the financial stability of the company.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 0.107385    | 0.038888   | 2.761390    | 0.0280|
| ARC      | -2.67E-13   | 5.99E-12   | -0.044566   | 0.0657|
| NPF      | 2.32E-10    | 6.73E-11   | 3.453670    | 0.0106|
| RVS      | -3.02E-11   | 1.28E-11   | -2.358596   | 0.0504|
| AST      | 8.70E-13    | 8.80E-13   | 0.989381    | 0.0554|
| R-squared| 0.792742    | 0.038520   | 2.761390    | 0.0280|
| Adjusted R-squared | 0.67408  | 0.038520   | 2.761390    | 0.0280|
| S.E. of regression | 0.23419    | 0.038520   | 2.761390    | 0.0280|
| Sum squared resid | 31.39638   | 0.038520   | 2.761390    | 0.0280|
| Log likelihood | 6.93571    | 0.038520   | 2.761390    | 0.0280|
| Prob(F-statistic) | 0.01529    | 0.038520   | 2.761390    | 0.0280|

Uztransgaz JSC experienced differentiating effect: supportive effect of net profit and accounts receivable, and deteriorating effect of asset structure and revenues from sales.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 0.272590    | 0.075405   | 3.615027    | 0.0153|
| ARC      | 3.78E-11    | 1.97E-11   | 1.918737    | 0.0131|
| NPF      | 1.81E-10    | 2.10E-11   | 8.621750    | 0.0003|
| RVS      | -5.07E-11   | 7.45E-12   | -6.808868   | 0.0010|
| AST      | -2.76E-11   | 1.79E-11   | -1.544604   | 0.0831|
| R-squared| 0.982783    | 0.075405   | 3.615027    | 0.0153|
| Adjusted R-squared | 0.969009   | 0.075405   | 3.615027    | 0.0153|
| S.E. of regression | 0.016097   | 0.075405   | 3.615027    | 0.0153|
| Sum squared resid | 30.56740   | 0.075405   | 3.615027    | 0.0153|
| Log likelihood | 71.35286   | 0.075405   | 3.615027    | 0.0153|
| Prob(F-statistic) | 0.000134   | 0.075405   | 3.615027    | 0.0153|

The conducted econometric tests suggested the origins, impact status and linkages between accounts receivable and financial stability of the selected enterprises.

5. Conclusion

Studies in the origin, composition, and dynamics of accounts receivable revealed that a low level of consumer's payment discipline, which is resulting in the late payment for natural gas and electricity consumption. On the other hand, the postpaid system allows consumers to overuse the electricity and natural gas for household and corporate needs without paying the advance payments. In-depth quantitative analysis of accounts receivable of the selected two giant companies, who own the absolute power in the domestic energy market, quantitatively expressed the level of interconnectedness and effect between selected variables. Multistage quantitative analysis revealed that the financial stability of the selected enterprises was negatively influenced by accounts receivable, revenues from sales and asset profile.

Considering the abovementioned conclusions, the following recommendations are proposed to improve the accounts receivables management practices in selected enterprises:
To establish a strict financial obligation fulfillment system with consumers with clear-cut terms and conditions, which clearly illustrates the rights and responsibilities of both parties.

It is identified that payment system and applied payment methods lead to the disobedance of payment discipline. Therefore, payment system must be rethought and developed using the modern technologies. It is recommended to launch a pre-paid system to transact and supply with consumer energy products.

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