Financial Strategy Formulation and Implementation under Economic Uncertainty: Ukrainian companies’ case

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Received: June 13, 2020 | Revised: June 22, 2020 | Accepted: June 30, 2020

JEL Classification: G01, F65.
DOI: 10.38188/2534-9228.20.2.04

Abstract
Factors of economic uncertainty are considered. Economic uncertainty factors’ effect on financial managerial decisions is studied. Financial strategy matrix is proposed on the basis of a sample of Ukrainian companies. The proposed financial strategy matrix covers both financial and market goals – according to the BSC methodology. Thus, in the proposed tool, financial goals are reflected by the level of leverage A/E (Assets-to-Equity), market goals in turn are represented by ROA level; combination of the financial goal (A/E) and market goal (ROA) produces ROE, i.e. level of value creation for stakeholders. Within the proposed methodology financial strategy uses an analytical tool that combines financial and market goals of the enterprise, where the abscissa axis plots ROA level, the ordinate axis plots A/E level. The algorithm of making managerial decisions on financial strategy is described on an example of a company from selected sample – PJSC “Carlsberg Ukraine” – over 2014-2018. A set of managerial decisions targeted at further financial and market position is proposed.

Keywords: financial strategy, uncertainty, capital structure, return on equity.

Introduction
Under conditions of economic uncertainty, which in Ukraine is characterized by a state of financial and socio-economic crisis, combining both cyclical (in the context of global economic dynamics) and permanent features (in terms of national economic dynamics), companies face a challenge of creating value for stakeholders. These cyclical phenomena are superimposed on the process of increasing global competition, which forces companies to compete for limited resources. In this context, the problem of improving strategic and financial management’s quality at the company level comes to the fore, namely in the component of financial strategy formulation and implementation. Endogenous and exogenous factors influencing company’s financial strategy should be considered, as well as developing innovative approaches towards financial strategy formulation and implementation under economic uncertainty. Therefore, there is a direct relationship between company’s management decisions on financial strategy and value created for stakeholders.

Material and methods
For this research the following scientific methods were used: analysis – scientific developments in the field of economic uncertainty and micro-level finance statistics were studied; systematic approach – systematization of existing achievements in studying effects of economic uncertainty; synthesis – studied ways of taking managerial decisions on financial strategy to form appropriate conclusions; generalization and grouping – systemic view of possible directions for financial strategy formulation and implementation on the basis of past research.

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Results and discussion

Any company at any time period operates under conditions of economic uncertainty, however, level of economic uncertainty would be different – depending on exogenous and endogenous environmental conditions. Thus, the study (Bloom, 2013) says that the level of uncertainty is different in developed and emergent economies, in particular in developing countries, the level of micro- and macro-volatility is one third higher comparing to developed countries.

Researchers are trying to quantify economic uncertainty. In particular, in (Stein, Kashyap, 2000) macroeconomic uncertainty is defined as a change in the level of central bank intervention in the money supply. Another approach is proposed in the study (Pesola, 2001), where macroeconomic uncertainty is expressed in economic shocks. Researchers (Baum et al., 2005) study uncertainty through fluctuations in industrial production and consumer inflation. Another practical development in the field of uncertainty is the Macro Uncertainty Index by Federal Reserve Bank of Philadelphia. The paper (Bloom, 2013) offers another indicator – the Global Economic Policy Uncertainty Index.

Study (Quagliariello, 2007) distinguishes between macroeconomic uncertainty and specific economic uncertainty at the meso- and micro-levels. In particular, the growth of specific economic uncertainty gives a competitive advantage to companies that are better informed, and these companies in turn have a different nature of action compared to competitors who are less oriented in the current situation. It should be noted that the consequences of uncertainty flow from the macro- to the micro-level with a certain delay. Research (Bernanke, Gertler, 1995) indicates a delayed response in the context of decisions on capital expenditure and stocks of real sector enterprises in response to tighter monetary policy. Research (Bloom, 2013) highlights the behavioral aspect of managerial decisions in the context of uncertainty, in particular, the first reaction of managers to the growth of uncertainty is a reduction in, and in the long run – on the contrary, increase in R&D investments due to growth of expected returns.

Rising uncertainty affects real sector enterprises’ financing decisions. In particular, paper (Baum, 2005) discusses the potential tendency to replace non-bank sources of financing with bank loans, which is considered by a company’s management as a more reliable financing option under increased uncertainty.

For research purpose there is a need to consider in more detail uncertainty factors in Ukraine’s economy. V. Geyets in (Geyets, 2012) identifies more than a dozen exogenous factors of destructive influence on the state of the national economy, i.e.: national economy’s excessive exposure to external environment, high dependency on global commodity fluctuations, limited foreign currency reserves, unfavorable energy commodities prices fluctuations, unbalanced household finance and debt burden, non-performing loans dynamics, squeezed access to bank financing, unbalanced state budget, low economic growth dynamics, limited access to external financing, high dependency on external providers of loan financing, etc.. The problem of exogenous factors influencing the national economy in its various aspects is developed in other works by V. Geyets, in particular, the problem of institutional transformation (Geyets, 2018), the problem of institutional support for structural adjustment (Geyets, 2016a), the problem of value chains’ limitations, depreciation of fixed assets and lack of innovation, the problem of the institutional environment (antitrust policy, rule of law) (Geyets, 2016b).

In general, as a result of analyzing Ukrainian researchers’ papers on the factors of uncertainty in the national economy, we could conclude that, firstly, the significant importance of exogenous factors in the deployment and further support of crisis processes in Ukraine and, secondly, the high degree of deformation of the national economy.

Macro-level deformations tend to trickle down to the micro-level, which is embodied in the distortions on intersectoral and sectoral levels. In particular, we could outline the trend of falling net
savings (Geyets, 2012), deteriorating state of Ukrainian financial sector due to unfavorable macroeconomic conditions and excessive risks for suppliers of banking resources (Geyets, 2012), over-lending to the real sector economy, payment crisis and credit dysfunction (Geyets, 2012). The relationship between distortions at the macro- and micro-levels leads to further escalation of crisis and post-crisis phenomena, dragging on into a tight knot of mutual distrust in the interconnection “state – households – financial corporations – non-financial corporations”, lack of funding, squeezed consumer demand, growing role of state in matters of running the national economy, inflation growth and stagnation, Ukraine’s low attractiveness as a destination for foreign direct investments.

The relationship between the deformation of macro-level and micro-level finance is studied in the works of A. Danylenko, V. Zymovets, N. Sheludko, etc. In particular, the problem of money washout from the real sector of Ukraine (Danylenko et al., 2015), decapitalization and debt burden of real sector enterprises (Zymovets et al., 2019), the problem of credit dysfunction, reducing the effective demand for bank loans, growing distrust of financial institutions to real sector enterprises and weakening ties between the real sector and financial of the national economy (Zymovets, Sheludko, 2017).

Researchers describe this situation as “financial degradation” and among its main features are the rapid growth of the debt burden, financing through quasi-debt (in the form of accounts payable and transfers from shadow reserves) while reducing the weight of equity of real sector of Ukraine. V. Zymovets and N. Sheludko describe the mechanism of real sector enterprises’ decapitalization in Ukraine, which has lasted over previous years (Zymovets, Sheludko, 2017). According to the paper main reasons for the real sector enterprises’ decapitalization are the macro-level causes (financial losses due to reduced earnings in foreign currency, business’ cessation and assets’ loss in the occupied territories) and micro-level (significant growth of real sector debt with squeezed bank loan access, working capital deficit, deterioration of mutual settlements between counterparties), which in the complex resulted in systemic credit risk growth and formation of persistent distrust in the interconnection “financial institutions – real sector enterprises” (Zymovets, Sheludko, 2017).

Thus, Ukrainian companies for a long time period are forced to operate under conditions of significant economic uncertainty. This market situation requires development and application of a non-standard set of responses in order to protect the value created for stakeholders. That is confirmed by a study (Bernanke, Gertler, 1995), which found that the companies’ actions are more homogeneous under conditions of growing macroeconomic uncertainty, while under conditions of decreasing macroeconomic uncertainty, the companies’ actions become more heterogeneous. Accordingly, companies need a mechanism for reactive and proactive response to macro-level challenges, covering both purely financial management decisions (i.e. decisions on capital structure) and managerial decisions related to a company’s market position.

Accordingly, the developed financial strategy should correlate with the company’s Balanced Scorecard (BSC). Thus, the "Finance" perspective directly covers financial strategy goals, namely achievement of the target ROE level and achievement of the target capital structure. Other three perspectives (”Customers”, “Internal Processes”, “Organizational Capacity”) indirectly correspond to the financial strategy goals, in particular, “Customers” perspective – market share growth, growth of consumer satisfaction – contributes to profitability growth; “Internal Processes” perspective – increased efficiency of new products launch process, information support process, cost control process – contributes to profitability growth; “Organizational Capacity” perspective – improved quality of staff training, new technologies adoption, improved supply chains – contributes to increased profitability, which ultimately affects achievement of the target ROE level and the target capital structure.
We propose an example of a financial strategy template based on selected Ukrainian companies’ data. This data sample is comprised of real sector companies, characterized by different operating cycle length and intellectual capital contribution, in particular: brewing industry (short operating cycle, moderate intellectual capital contribution (due to marketing)), engineering industry (long operating cycle, high intellectual capital contribution (due to R&D)), iron ore industry (short operating cycle, lower intellectual capital contribution). That allows a more accurate assessment of exogenous and endogenous factors’ impact on financial strategy. An additional argument in the choice of these three industries is generally low level of disclosure by Ukrainian corporate sector, which is not typical for the above three industries, where vast majority of companies timely and sufficiently submit their financial statements to government agencies and regulators. We intentionally dropped companies from services sector and financial sector while forming this data set. Selected companies hold significant positions in the above mentioned industries, which is determined by the weight of the company’s assets in the total industry assets; the studied sample does not include state-owned companies due to specifics of dividend policy and other features of managerial decisions dictated by legislation. This data sample consists of 9 Ukrainian companies that conducted business over 2014-2018, 3 of which represent brewing industry (PJSC “Carlsberg Ukraine”; PJSC “Obolon”; PJSC “AB InBev Efes Ukraine”), 3 – engineering industry (PJSC “AutoKrAZ”; PJSC “Motor Sich”; PJSC “Sumy NPO”), 3 – iron ore industry (PJSC “Ingulets GOK”; PJSC “Poltava GOK”; PJSC “Central GOK”).

Proposed financial strategy template covers both financial and market goals – according to BSC methodology. Thus, in the proposed template, financial goals are reflected by the level of leverage A/E, namely the ratio of assets-to-equity, market goals in turn are represented by the level of ROA; the combination of financial objective (A/E) and market objective (ROA) produces ROE, i.e. level of value creation for stakeholders. Methodology of the proposed financial strategy template employs an analytical tool combining financial goals and market goals, where the abscissa axis plots ROA level, the ordinate axis plots A/E level (Fig. 1).

![Fig. 1. Financial strategy matrix](image)

Source: author’s analysis.

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Based on the data of the studied sample, we formed ROA level and A/E level gradation, which is embedded in the scale “low – medium – high”; gradation with values is given in table 1. Accordingly, on the basis of ROA level and A/E level gradation, the quadrants of financial and market goals matrix are formed (Fig. 1).

The matrix quadrants describe managerial decisions’ trajectory concerning financial strategy in terms of the possibility of ROE level increase and bankruptcy risk level. Thus, a comprehensive set of market situations and potential managerial decisions in terms of financial strategy is formed, which are designed to create value for stakeholders. The description of the quadrants of the matrix is given in table 2.

| Indicator | Range of values | Gradation |
|-----------|----------------|-----------|
| ROA, %    | negative values – ≤60% | low       |
|           | >60% – ≤130%     | moderate  |
|           | >130%            | high      |
| A/E, times| negative values – ≤0.2 times | low       |
|           | >0.2 times – ≤4 times | moderate  |
|           | >4 times         | high      |

Table 1 – ROA and A/E level gradation for Ukrainian companies’ data set for financial strategy matrix

Source: author’s analysis.

| Quadrant                | ROA level | A/E level | ROE growth opportunities | Bankruptcy risk |
|-------------------------|-----------|-----------|--------------------------|-----------------|
| 1. “Crisis”             | low       | high      | limited                  | higher          |
| 2. “Squeezed market growth” | moderate | high      | limited                  | higher          |
| 3. “Aggressive market position” | high     | high      | moderate                 | higher          |
| 4. “Crisis beginning”   | low       | moderate  | limited                  | higher          |
| 5. “Healthy market growth” | moderate | moderate | moderate                 | lower           |
| 6. “Value maximization” | high      | moderate  | significant               | lower           |
| 7. “Restructuring”      | low       | high      | moderate                 | higher          |
| 8. “Activating market growth” | moderate | high      | significant               | lower           |
| 9. “Conservative position” | high     | high      | significant               | lower           |

Table 2 – Financial strategy matrix quadrants’ description

Source: author’s analysis.

Thus, the matrix quadrants can be formed into groups in terms of the possibility of ROE growth and the risk of bankruptcy. We outline the following quadrants due to the specific ROA level and A/E level: 1. “Crisis”, 2. “Squeezed market growth”, 4. “Crisis beginning” are characterized by limited ability to grow ROE; 3. “Aggressive market position”, 7. “Restructuring” are characterized by moderate ability to grow ROE; 6. “Value maximization”, 8. “Activating market growth”, 9. “Conservative position” are characterized by significant ability to grow ROE. In turn, in terms of bankruptcy risk, the quadrants are divided into the following groups: 1. “Crisis”, 2. “Squeezed market growth”, 3. “Aggressive market position”, 4. “Crisis beginning”, 7. “Restructuring” are characterized by higher bankruptcy risk; 5. “Healthy market growth”, 6. “Value maximization”, 8. “Activating market growth”, 9. “Conservative position” are characterized by lower bankruptcy risk. An illustration of these groups is given in Fig. 2 and Fig. 3.
Due to the combination of these factors, more attractive and less attractive areas of financial strategy development and implementation in terms of matrix quadrants are formed. So Quadrant 5 “Healthy market growth” is one of the most attractive areas – ROE growth opportunities are moderate, while bankruptcy risk is lower; this position reflects the most attractive value creation conditions for the vast majority of stakeholders. Quadrant 6 is on a parity position with Quadrant 5. Quadrant 8 “Activating market growth” and Quadrant 9 “Conservative position” characterizes companies that either need additional funding to strengthen their market position (Quadrant 8), or are conservative in their vision of market prospects (Quadrant 9).

In turn, other quadrants describe situations in which companies may find themselves and may be a priority for individual market cases. Thus, for companies that consider it appropriate to take an aggressive approach towards growth, direction of Quadrant 3 “Aggressive market position” may be chosen, which is characterized by a high ROA level and A/E level; at the same time, increased risk of bankruptcy has to be taken into account. Under condition, which led to inability to maintain company’s market and financial position, Quadrant 7 “Restructuring” may be chosen, which is characterized by a lower ROA level and A/E level. After successful restructuring, direction towards further stakeholders value creation may be chosen – plotted “right – north” within the matrix.

For companies that find themselves in Quadrant 2 “Squeezed market growth”, namely with a high debt burden, yet not high enough ROA, in order to prevent the movement towards a crisis, it is necessary to take a set of measures to increase profitability and reduce debt pressure. In companies, which indicate movement towards Quadrant 1 “Crisis” and Quadrant 2 “Squeezed market growth” should also look for ways to improve its financial and market position. The algorithm of actions in the context of the proposed matrix is summarized in table 3.

With outlined financial strategy direction in terms of ROA level and debt burden, company gets the way towards ROE target level. Company has to determine ROE target level as part of its market strategy (usually for a period of 3-5 years) and design plan supporting company’s movement towards the ROE target level. Practical solution is provided by a tool of strategic market growth matrix developed by G. Hawawini and C. Viallet (Hawawini, Viallet, 2010). Thus, company, with a determined movement trajectory towards ROE target level, determines optimal need for cash within the market growth rate; as a result, a map for movement towards the target quadrant is produced, describing a number of financial managerial decisions.
We will describe the algorithm for making financial managerial decisions within the proposed financial strategy template on example of PJSC “Carlsberg Ukraine” over 2014-2018. Over analyzed period key inputs of company’s financial strategy sustainably improved: ROA level increased by +83.0 p.p. up to 168.2% in 2018; A/E level grew by +23.6 p. up to 1.55 times in 2018; which resulted in ROE level growth by +149.0 p.p. up to 261.2% level in 2018.

It should be noted that PJSC “Carlsberg Ukraine” relied more on managerial decisions in terms of growth by market objectives (represented in ROA dynamics) and maintained its strategic focus on creating value for stakeholders in terms of financial goals (represented A/E level dynamics). Thus, Net Sales grew steadily at a significant rate during the analyzed period (except for 2014) and its annual growth was at 25.7% level in 2018. Net Profit also was positive over analyzed time period, annual increase in Net Profit was at 50.3 % level for 2018. In turn, level of Net Profit Margin over analyzed time period was at 2-digit level and increased by +3.9 p.p. – compared to the pre-crisis 2013 – up to 21.8% level in 2018. Asset Turnover level almost doubled as of 2018 compared to pre-crisis 2013 – namely grew by +80.7 p.p. up to 168.2% (in 2018); Asset Turnover growth occurred both due to stable growth of Net Sales and a moderate reduction in Assets (over 2017-2018).

Table 3 – Movement algorithm in terms of financial strategy matrix

| Quadrant | Current | Target |
|----------|---------|--------|
| 1. «Crisis» | | 1 → 7 → 8 → 5 |
| 2. «Squeezed market growth» | | 2 → 3 → 5 or 2 → 5 |
| 3. «Aggressive market position» | | 3 → 4 → 5 or 3 → 5 |
| 4. «Crisis beginning» | | 4 → 1 → 7 → 8 → 5 or 4 → 2 → 3 → 5 |
| 5. «Healthy market growth» | | position maintenance or 5 → 6 position maintenance; right |
| 6. «Value maximization» | | position maintenance |
| 7. «Restructuring» | | 7 → 8 → 5 north-right |
| 8. «Activating market growth» | | 8 → 5 north-right |
| 9. «Conservative position» | | 9 → 6 north |

Source: author’s analysis.

Considering managerial decisions regarding purely financial goals, A/E contribution to ROE creation is indicated as a moderate movement towards growth – both due control over Assets growth (after rapid growth over 2015-2016, Assets level was reduced over 2017-2018), and control over Equity level. Equity weight in Liabilities decreased by – 11.6 p.p. over 2014-2018 from 76.0% level in 2014 to 64.4% level in 2018 (Equity weight decrease occurred in favor of Current Liabilities weight, which increased by +11.6 p.p. up to 35.6% level in 2018). Favorable dynamics is indicated also in terms of dividend payments – namely dividend payments were stable over 2014-2018, and “Dividends Paid / Net Income” indicator exceeded 1.0 during 2017-2018.
and grew significantly during this period, which was marked by significant ROE level growth by +149.0 p.p. (compared to 2014) up to 261.2% level in 2018.

In terms of the proposed financial strategy methodology PJSC “Carlsberg Ukraine” moved the following way (Fig. 4): over 2013-2015, the company moved towards a certain improvement in ROA without significant changes in A/E (movement “right”); over 2016, there was a significant increase in A/E (movement “north”); over 2017, there was an adjustment of A/E level and ROA level – in the direction of decrease (A/E) and growth (ROA) respectively (movement “south-right”); over 2018, there was a significant improvement in ROA with a stable A/E level (movement “right”). Thus, over 2013-2017, the company was in Quadrant 5. “Healthy market growth”, which is characterized by an average ROA level and A/E level and, accordingly, moderate ROE growth opportunities and lower bankruptcy risk.

![Financial strategy matrix of PJSC “Carlsberg Ukraine” over 2013-2018](https://via.placeholder.com/150)

In 2018, the analyzed company moved to the right in Quadrant 6 “Value maximization”, which is characterized by a high level of ROA and medium level of A/E and, accordingly, towards significant opportunities for ROE growth and lower bankruptcy risk. The described direction of movement within the financial strategy matrix over analyzed time period is summarized in table 4. According to the proposed methodology, that position reflects the most attractive conditions for value creation for the vast majority of stakeholders, when the company is able to create additional value for stakeholders through sound decisions on capital structure – to increase the weight of debt financing and return on assets. Such financial strategy was made possible by a set of measures in terms of market and financial goals aimed at ROA growth supported by moderate A/E growth by increasing the level of Net Profit Margin and Asset Turnover (which was made possible by stable growth in Net Sales and Net Profit in combination with a moderate reduction in Assets), optimization of Liabilities structure (towards a moderate reduction in Equity weight in favor of sources of Current Liabilities (Accounts Payable)) and stable payment of dividends.
Table 4 – Movement description of PJSC “Carlsberg Ukraine” in terms of financial strategy matrix over 2013–2018

| Indicator Description                                         | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------------------------------------------|------|------|------|------|------|------|
| Direction movement – end of year result                      | right| right| right| north| south-right | –    |
| Quadrant number                                              | 5    | 5    | 5    | 5    | 5    | 6    |
| ROA, %                                                       | 87,5%| 85,22%| 92,1%| 89,0%| 125,5%| 168,2%|
| A/E, times                                                   | 1,22 | 1,32 | 1,34 | 1,91 | 1,54 | 1,55 |
| ROE, %                                                       | 107,1%| 112,1%| 123,9%| 170,3%| 193,8%| 261,2%|

Source: author’s analysis.

In terms of strategic market growth matrix by Hawawini-Viallet, which considers ROE level and cash needs, the analyzed company was consistently in Quadrant A “Moderate growth” over 2014–2018, which reflects the best position in the proposed methodology (Fig. 5).

Thus, PJSC “Carlsberg Ukraine” moved in the direction of “north-right”, which is characterized, for example, by increasing ROE level while reducing the need for cash due to a moderate position on the growth market rate. In that position, the analyzed company creates value and does not grow too fast, there is no shortage of cash. The most acceptable actions for a company in this position are to increase the value created and search for opportunities to use surplus cash. According to the proposed methodology for such a position we propose the following recommendations: 1. use excess cash reserves (investment in organic growth, inorganic growth (mergers and acquisitions, M&A)); 2. distribute excess cash reserves (increase in dividend payments, repurchase of shares). In general, company in such a position needs a clear long-term sustainable plan to improve its financial and market position, balancing financial and market decisions, having a clear and sustainable investment program, making informed decisions about the payment of funds to shareholders.

Fig. 5. Strategic market growth matrix of PJSC “Carlsberg Ukraine” over 2014–2018
Source: author’s analysis.
Conclusions

Ukrainian companies for a long time period are forced to operate under conditions of significant economic uncertainty. Companies in such market situation require formulation and implementation of a non-standard set of managerial decisions in order to protect the value created for stakeholders. Accordingly, companies need a mechanism for reactive and proactive response to macro- and micro-level challenges, covering both purely financial managerial decisions (i.e. decisions on capital structure) and managerial decisions related to a company’s market position. Such tool is proposed in a form of financial strategy matrix. That tool encompasses both financial goals (A/E) and market goals (ROA). Based on mapping company is offered a set of managerial decisions on further movement direction in terms of financing mix, investment decisions, dividend distribution.

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